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HEARINGS

BEFORE THE

SUBCOMMITTEE ON TRANSPORTATION AND AERONAUTICS

OF THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

HOUSE OF REPRESENTATIVES

EIGHTY-EIGHTH CONGRESS

SECOND SESSION

ON

THE PRESENT STATUS AND FUTURE ROLE OF THE FEDERAL AVIATION AGENCY'S DOMESTIC FLIGHT SERVICE STATIONS

MAY 12, 13, 14, 26, AND 27, 1964

Printed for the use of the
Committee on Interstate and Foreign Commerce

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U.S. GOVERNMENT PRINTING OFFICE

36-942 WASHINGTON : 1964

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FLIGHT SERVICE STATIONS

TUESDAY, MAY 12, 1964

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND AERONAUTICS
OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to call, in room 1334, Longworth Building, Hon. John Bell Williams (chairman of the subcommittee) presiding.

Mr. WILLIAMS. The committee will be in order please.

This morning the Subcommittee on Transportation and Aeronautics, acting on a request from the parent committee is meeting to consider the present and future status of flight service stations.

At present, the Federal Aviation Agency operates 297 flight service stations within the 48 contiguous States. These stations have a personnel complement of approximately 3,800. The staffing ranges from a low of 6 employees at a station to a high of 80 employees at a station, with a median of 9 employees.

At one time—1949—the flight service stations numbered 464, with some 425 of these within the 48 States. Since then, through consolidations with other stations, and through termination, the number has declined to the present level.

On February 4, 1964, the Federal Aviation Agency announced that an additional 42 stations are to be "converted." The FAA's press release described the historical role of the flight service station as providing air-ground communications for en route aircraft.

But the stations have provided weather observations, which serve not only the Weather Bureau, but also the general aviation community, and its individual pilots. The communication services, the pilot briefings, flight plan handling, airport advisory service, and the contact and orientation of the "lost" pilot are some of the valuable services with which we are concerned here.

We understand that the FAA is attacking the problems inherent in a reduction of the total number of stations with a dual objective: (1) To reduce its costs, and (2) to achieve savings without downgrading its service or derogating from safety requirements.

It must be recognized that the FAA has been urged to reduce the number of flight service stations by the Appropriations Committees of both Houses as well as by the President—House Report 824, 88th Congress, 1st session; Senate Report 641, 88th Congress, 1st session.

On the other hand, the general aviation interests rely heavily on the services provided by flight service stations, and regardless of the original intent that they provide en route communications, many of them provide the terminal briefing service for fixed base and itinerant

aircraft. Here the person-to-person contact is deemed by many to be extremely valuable—if not, indeed, essential.

No doubt, through the considerable number of interested parties who have indicated their desire to appear before this subcommittee, the pros and cons will be explored in detail. This is a complex and an important subject.

Let me say at this point that the committee in setting up these hearings is not seeking to pass judgment on the action of the Administrator in closing these stations without first having full and complete information incident to the conducting of these hearings.

The committee will be very happy to receive written statements for the record which I assure witnesses will be fully considered. Those of you who have common interests are urged to select one individual to present your testimony in order to avoid repetition and in order to avoid an endless dissertation on individual stations.

We want a full and complete record, but judging from the number of organizations and persons who have contacted the committee and expressed interest in this matter, it is essential that we work insofar as we can to avoid repetition in testimony. Therefore, the committee respectfully solicits your cooperation in this respect.

We have a lot of ground to cover in the few days that we have to conduct these hearings. We will hear from interested Members of Congress, both House and Senate. Then following that, I think perhaps we will call the Administrator of the Federal Aviation Agency and any members of the staff that he might wish to call on to assist him.

Then we will proceed with the Weather Bureau, then representatives of the domestic aviation interests and the States and communities which will be affected by the FAA proposal. At the close of direct testimony, we will try to afford the Federal Aviation Agency, if it so desires, an opportunity for rebuttal.

I notice this morning that we have a very distinguished guest from over on the Senate side, one of our former colleagues in the House, Senator Keating, of New York. In the interest of accommodating him in view of the fact that there is some unfinished business on the Senate side, which I hope will stay unfinished, Senator Keating, it is very good to have you with us and good to have you back over on the House side.

STATEMENT OF HON. KENNETH B. KEATING, A U.S. SENATOR FROM THE STATE OF NEW YORK

Senator KEATING. Thank you, Mr. Chairman and members of the committee. I appreciate your solicitude about the pending business on the Senate side, and calling upon me in this way is very courteous of you and in accordance with the attitude which you always displayed when I served here in this body, despite our differences of opinion.

At the outset let me express my gratitude to you and to the membership of this subcommittee for holding these hearings.

The FAA flight service station consolidation program has stirred up conflicting claims between the FAA, which is commendably striving for a "lean and clean" operation to save the taxpayers' money,

and those among general aviation users groups who fear that any economies—and there is a dispute as to whether there are any real economies at stake—would be achieved only at the cost of impairing essential safety services and other important public benefits.

As with almost all such conflicts, the true public interest probably lies somewhere in between the polar extremes of the dispute. I know that this distinguished subcommittee, with its wealth of experience in the fiscal and technical aspects of the FAA flight safety program, is singularly equipped to resolve the opposing contentions with findings of solid fact.

The hearings are therefore serving a most useful public purpose, and again, we in Congress who are deeply concerned with the future of general aviation are grateful for your giving all the parties involved a fair opportunity to be heard.

Let me say, as one who has had a longstanding and abiding concern for safety in air commerce, that if advances in communications technology make it possible to render the same safety services and to keep pace with the growing demand for these services due to the expansion of general aviation activities, with fewer manned flight service stations, and if substantial savings will result from eliminating selected stations, then by all means a program of consolidation and merger of functions should go forward.

After all, the flight service station has as its reason for existence the promotion of air safety. If any particular station is not needed for this purpose or if machines can be counted upon to replace personnel with added safety and efficiency, or if a station's functions can be transferred elsewhere without impinging on air safety in the slightest, and if net savings can be realized from such moves, there can be no legitimate objection, in my judgment, to following that course.

Indeed, the FAA would be open to serious criticism if it failed to engage in a continual review of its safety program to determine both where additional facilities might be warranted and where, on the other hand, existing facilities could be safely dispensed with.

It is not so much the overall plan for station consolidation that I have come this morning to discuss—for I know that other witnesses are much more qualified than I am to speak on that score—but rather the criteria which the FAA has applied for weeding out stations which it says are no longer needed, and the odd results that seem to have been reached on the basis of these crriteria.

Let me take the Elmira flight service station, at the Chemung County Airport, as the first case in point. This is one of a limited number of facilities slated to be closed that the National Aviation Trades Association, which has engaged in an intensive study of the entire program, feels should be given serious reconsideration by the FAA.

In a letter dated March 24, 1964, from Lee Warren, Director of the FAA Air Traffic Service, it was indicated to me that the selection criteria for stations to be consolidated were generally based on such considerations as volume of flight services, weather service requirements, various cost factors affecting both the FAA and the Weather Bureau, and geographical spacing without regard for State or other political boundaries.

Yet, on all these counts, the Elmira flight service station should meet the requirements for retention rather than elimination. There are 35

aircraft based at the Chemung County Airport and 145 based within its advisory area. The flight service station there serves a total of 14 airports in the region other than the Chemung County Airport, involving a total of 155 local pilots, a total of 250 pilots in the advisory area, plus and indeterminate number of other pilots who pass through this region.

The Chemung County Airport is located in an area of rugged terrain and experiences the temperamental weather conditions of New York's Finger Lakes. Weather is the largest single contributor to aviation accidents, but there is no existing Weather Bureau facility at Elmira. The closest Weather Bureau facility is at Binghamton, 65 miles away. The flight service station at Elmira, as a consequence, has taken on a key role in on-the-spot weather observation and reporting for general aviation in that region.

I have been advised that if the Chemung County Airport flight service station were to be consolidated, consolidation would take place at either Wilkes-Barre, Pa., or Binghamton, N.Y. But both of these locations enjoy Weather Bureau services so that the net result would be the transfer of weather services from a location, Elmira, which would be shorn of any first-class weather facility, to locations which have not demonstrated a need for more weather services.

On the basis of flight service station activity, Elmira easily surpasses other stations in the region. Elmira experienced an activity growth of 11 percent in 1962 over 1961, 16 percent in 1963 over 1962, and from preliminary reports, more than 30 percent in the first quarter of 1964 over the first quarter of 1963.

On a comparative basis, Elmira in 1963 logged a total of more than 34,000 functions as contrasted with about 25,000 at Williamsport, Pa., and only 22,000 at Wilkes-Barre, Pa., the latter of which has been mentioned as a possible consolidation point for the Elmira station.

It is difficult for me to understand why a heavy activity station such as Elmira, with a record of persistent annual growth in its functions, and with a potential for even more explosive growth in general aviation activity in future years, should have been selected for merger into a station with a lower level of activity and already endowed with on-the-spot weather observation and reporting facilities.

Both the FAA and the Weather Bureau have agreed on the continued necessity of providing on-the-spot weather services in Elmira, and I have been informed by the Weather Bureau that FAA air traffic control personnel in the control tower at the Chemung County Airport will become responsible for taking detailed weather observations from new equipment in the tower and disseminating this information to the necessary parties. At present, weather duties in the tower are limited to taking field visibility observations at the airport as can be determined from the tower.

I know from firsthand experience, for I have visited airport control towers on many occasions, that air traffic control is perhaps one of the most nerve-wracking and ulcer-producing professions that exists today—with the possible exception of being a Member of Congress.

Air traffic controllers are extremely loath to take on an increased workload not directly connected with traffic control around the airport.

The Air Traffic Control Association, whose membership includes tower personnel in the Elmira area, has written me and has gone on record as being opposed to the assumption of additional duties by control tower personnel as not being in the best interest of air safety and the rendering of basic traffic control services. Mr. Chairman, I ask that the Air Traffic Control Association's letter to me be made a part of this record.

Mr. WILLIAMS. We will be glad to receive it.

(The letter referred to follows:)

AIR TRAFFIC CONTROL ASSOCIATION, INC.,
Washington, D.C., March 27, 1964.

Hon. KENNETH B. KEATING,
U.S. Senate,
Washington, D.C.

DEAR SENATOR KEATING: The Air Traffic Control Association has coordinated with its members in the Elmira, N.Y., area to determine their views on the consolidation of flight service stations at Elmira, Utica, and Poughkeepsie. They are in general agreement that the remoting of these facilities to a central location is not in the best interest of air safety and the provision of ATC services to the flying public, particularly to the general aviation and business type flying groups.

The major concern to air traffic controllers in control towers is the increase in workload for tower personnel that is not directly connected with the provision of controlling traffic around their respective airports under visual flight rules and instrument flight rules. While detailed information on the Agency plan is not available, it does appear that teletype circuits and printers, one or more, will be located in the tower cabs and tower personnel will be required to give attention to this equipment. Additionally, it appears that tower personnel will become responsible for taking detailed weather observations and the dissemination of this information to the necessary parties. At present, their weather duties are limited to taking field visibility observations at the airport and its vicinity as observed from the tower. It is expected that when the remoting occurs and the tower personnel assume basic weather observer responsibility, that they will receive numerous telephone calls from local activities desiring weather information, which will further interfere with the basic duties of tower personnel, which is the observation of the airport area and the control of air traffic.

The Air Traffic Control Association goes on record as being opposed to the assumption of additional duties by personnel in control towers regarding the gahering, transmission, and dissemination of weather information.

From the standpoint of whether or not economy will be effected by the plan for consolidation of FSS facilities, we have neither the staff nor the basic information on Agency plans to make a positive determination. We do believe that it is questionable whether or not a substantial saving will be made when the costs of remoting long lines, the increase of staffing in the centralized facility and the additional staffing that should be allowed tower facilities assuming additional duties regarding weather. We sincerely feel that if the plan is accomplished, at least one additional individual should be on duty to handle the weather function to leave the other personnel free to accomplish the air traffic control activity. On the surface, there does not appear to be a substantial savings involved.

When you weigh the inconveniences to the flying public against the economy factor, we sincerely doubt that the consolidation is worthwhile. The fact that the Agency has been evasive about making specific plans and cost estimates available sheds some doubt on the expected economy. In our own thinking, we cannot see any increase in efficiency and certainly expect a derogation of service now available to the pilots in the area.

In the FAA Project Beacon study of 1961 (copy enclosed), the task force on page 3 in their summary estimated that general aviation and air carrier flying are expected to increase almost 80 percent by 1975. I think you will find this study of educational benefit in studying this proposal. Additionally, I have enclosed a copy of the March issue of the "Journal of Air Traffic Control." On page 4, you will note an article written by one of our members that graphically

illustrates some of the problems created in a control tower by the installation of teletypes and related FSS duties.

At the ATCA national meeting in Dallas, October of 1963, this problem was thoroughly discussed by tower controllers from around the Nation and I have enclosed a copy of the discussion that may prove of interest to you.

There was little if any coordination in the development of the new FSS plan with industry users to gather their valuable ideas and opinions prior to making the decision and I wouldn't be at all surprised if the Administrator acted on poor advise from staff personnel and sincerely doubt if the action could be successfully defended from an economy standpoint if all the factors were made available. A parallel to this was the consolidation of the San Antonio and New Orleans Centers, based on economy, which discarded two new buildings, one of which was completely equipped, in favor of a new building and Center operation at Houston, Tex. The economy that was claimed for this move, in my opinion, has never been proven.

Sincerely yours,

EDWARD H. COCKERHAM,
Executive Director.

Senator KEATING. In short, the selection of the Elmira flight service station for consolidation raises disturbing problems of air safety. It raises also the effect of such a move on the industrial growth of the area. For general aviation users do not intend to lower their own safety standards in the face of downgraded safety services. If adequate weather and preflight planning facilities are lacking at Elmira, the result will be fewer takeoffs, fewer landings and more overflights.

I am not saying that with the equipment that has been installed and which is operational at the Elmira flight service station, there could not be some personnel savings. Automatic equipment is cheaper than manpower. Perhaps there could be a transfer of some personnel who are not needed; I do not know.

But I do know that every general aviation user in the Elmira area is unalterably opposed to the removal of the station, lock, stock, and barrel, out of fear that this would be a major setback for the safety of operations in the region.

Another case, that of the Poughkeepsie flight service station, located at the Dutchess County Airport, illustrates, in my judgment, a disregard for the FAA selection criterion of geographical spacing. Poughkeepsie is strategically located in what otherwise would be a void in the flight service station system between New York City and Albany in the north-south direction and between Hartford and Wilkes-Barre in the east-west direction.

Again, by and large, the Poughkeepsie region, like Elmira, originates and develops much of its weather locally, putting a premium on accurate on-the-spot weather reporting. Yet, the Poughkeepsie flight service station is slated for consolidation with the Teterboro flight service station in the New York City metropolitan area.

I can think of nothing which would better demonstrate the absolutely essential nature of the Poughkeepsie flight service station facility than to recite in detail a case of accident prevention which would have been impossible from a remote position at Teterboro. This example was furnished to me by a pilot who lives in the Poughkeepsie area.

An Air Force Convair entered the area of Poughkeepsie airport. It was observed by POU FSS personnel who made a broadcast in the blind over their navaid frequencies to all aircraft in the area. They were heard trying to con-

tact the Convair without success. FSS personnel then observed the Convair on the downwind leg for runway 33 and gave this advisory over all navaids.

The Convair landed and taxied to the Poughkeepsie Air Service Terminal, unloaded, and again was observed by FSS personnel to be taxiing to the departure end of runway 24. Local traffic was using the northwest runway at the time due to a strong gusty wind which favored northwest.

The FSS personnel observed the Convair in a takeoff position on the southwest runway apparently running up his engines for takeoff, which from his position on the runway could be commenced at any time. Another advisory was made over all navaids giving the above information.

There were five aircraft lined up for a northwest takeoff at the time and they were listening on the navaid frequencies. Due to this observation and the subsequent broadcast, these aircraft held their positions. The Convair departed within 2 minutes of the broadcast. The departure advisory was given and the other aircraft resumed normal operation.

The very important point to be brought out is that from the takeoff end of runway 24, the takeoff end of runway 33 is not visible and vice versa. This was an accident that was prevented only by the presence of an alert FSS crew on the field who were able visually to observe. No remote station could possibly have done this. They would not have known of the existence of the Convair either in the air or on the ground since no contact was ever made by radio.

From the example I have just given, it is impossible to reckon the future of the flight service station system solely in terms of dollars and cents. A price tag cannot be put on human life. I know that other witnesses before this subcommittee will provide fuller disclosures of the thousands of "saves" which can be attributed to the functioning of flight services stations. I am confident that this record of accident prevention will weigh very heavily in the consideration of this entire problem by this committee.

In closing, Mr. Chairman, I have carefully studied various alternatives to the FAA program which have been put forward by the interested user groups in a spirit of genuine cooperation and with a healthy regard for the indisputable fact that the resources of the Federal Government are not unlimited and that it is to everyone's interest to attempt to reconcile the needs of air safety with the public purse.

I am confident that had there been a greater degree of consultation and cooperation between the FAA and user groups before instituting the program announced this past February, a more balanced program could have been arrived at and the selections for elimination could have been made on a sounder basis of agreement.

One of the useful byproducts of these hearings, I hope, will be a closer meeting of the minds between the Congress, the FAA, and the affected user groups on the future course of air safety planning so far as the flight service station system is implicated.

As a final note, the committee should be advised that my able colleague, Senator Javits, and I have jointly written the Comptroller General of the United States for a report on the financial aspects of the FAA program, requesting a detailed analysis of the basis for the economies which the FAA contends will be realized from its program.

I shall be glad to make the Comptroller General's report available to this committee when it is received.

Again, I am grateful for this opportunity.

Mr. WILLIAMS. Senator Keating, thank you for a very fine statement. There may be some questions on the part of members of the committee.

Mr. Friedel, do you have any questions?

Mr. FRIEDEL. No; I have no questions. I just want to compliment the Senator for a very fine statement.

Mr. WILLIAMS. Mr. Devine?

Mr. DEVINE. No questions, Mr. Chairman.

Mr. WILLIAMS. Senator Keating, your statement mentioned the possibility of combining, I believe as you put it, adding responsibility to tower personnel. Do you have reference to suggested consolidations of tower operations with flight service station operations?

Senator KEATING. Yes, in general.

Mr. WILLIAMS. Let me say this. It has been suggested that in some of these places it might be possible for the tower personnel to do double duty where the traffic level would permit so as to furnish services now furnished by the flight service station personnel. I presume that that is what you had in mind.

Senator KEATING. Yes; in any tower that I have ever been in they were pretty busy on their own. But I assume that there may be towers where that is not true. At the busy towers I have been just amazed at how they could keep things straight with all the noises in their ears and all the gobbledygook going on. I have been strongly impressed by the responsibility they have for the lives of so many people. I would hate to add any weather duties.

Mr. WILLIAMS. I certainly agree with you that these people are skilled and they do a magnificent job. Is there a tower at Elmira?

Senator KEATING. Yes; there is a tower there.

Mr. WILLIAMS. I believe you said they had some 22,000 operations a year at Elmira; is that right?

Senator KEATING. No; the letter I had put it at 34,000 functions.

Mr. WILLIAMS. Do you know, by any chance, how many people they have in the tower?

Senator KEATING. No; I do not know the answer to that. The airport manager from Elmira is here and can answer that question for you.

The answer is seven but that is on the basis, of course, of around-the-clock staffing in the tower.

Mr. WILLIAMS. It would seem to me that if the situation permitted, it might be better in some cases to combine tower operations with flight service station operations than it would be to lose the flight service station all together. That, of course, would have to be determined on an individual basis as it relates to individual cases.

Senator, I have no further questions. We do appreciate your coming over here to give us your views. We assure you that the committee will give very serious consideration to the matters which you have presented.

Senator KEATING. Thank you very much, Mr. Chairman.

Mr. WILLIAMS. Are there any other Members of the Senate here.

Several Members of the House have indicated a desire to testify this morning. The first one on the list is Congressman Ken Hechler, of West Virginia.

STATEMENT OF HON. KEN HECHLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA; ACCOMPANIED BY JOHN E. JENKINS, JR., CHAIRMAN, LEGISLATIVE ACTION COMMITTEE, HUNTINGTON CHAMBER OF COMMERCE, HUNTINGTON, W. VA.; AND CHARLES F. DODRILL, PRESIDENT, TRI-STATE AIRPORT AUTHORITY, HUNTINGTON, W. VA.

Mr. HECHLER. Mr. Chairman, with your permission, I have two representatives from Huntington, W. Va., that I would like to have sit with me at the table. I will introduce them at this point. They will submit statements for the record.

Mr. John E. Jenkins, Jr., chairman of the Legislative Action Committee of the Huntington Chamber of Commerce, and Mr. Charles F. Dodrill, the president of the Tri-State Airport Authority, in Huntington, W. Va.

(The prepared statements of Mr. Jenkins and Mr. Dodrill follow:)

STATEMENT OF JOHN E. JENKINS, JR., CHAIRMAN OF THE LEGISLATIVE AFFAIRS COMMITTEE, HUNTINGTON CHAMBER OF COMMERCE

Anyone who lives in West Virginia is immediately impressed by the nature of its terrain. It is particularly suited to air travel. The State has been likened to Switzerland with respect to its mountains and other geographical features. With road and rail transportation thus limited and difficult, the need for adequate commercial transportation and also general aviation facilities is a matter of prime concern to all of its citizens.

In order to improve the general economic development of the State, and with the limited air facilities available, business has had to resort to general aviation to a greater extent than normal since general aviation depends a great deal on the facilities offered by the FAA flight service stations. Any reduction in the scope of flight service operations is of particular concern.

The committee is going to have to weigh in the national interests the balance between the proposed savings which the FAA says will be realized by curtailing stations and the needs of general aviation, on the other hand, for personal on-the-spot flight briefings.

Weather conditions in the Ohio River Valley where the Tri-State Airport is located are exceedingly difficult and unpredictable. The story of flying in this area is the dodging of thunderstorms in the summer, problems of icing in the winter, and severe air turbulence and limited visibility all year round. These conditions dictate the need for personal briefings of general aviation pilots, particularly those of limited experience.

The flight service station personnel at Huntington serve as personal consultants to general aviation, discuss in detail the problems of the area with all pilots, have an intimate knowledge of the local terrain, and render related services, which of necessity, must be done personally, rather than by telephone.

There are numerous instances of aircraft being lost and found with the assistance of the FAA personnel at Huntington because of their knowledge of the area.

It is hoped that the committee will consider the foregoing personal factors involved in determining whether or not the questionable savings in dollars are not more than overbalanced by the savings in lives under the present flight service station arrangement.

STATEMENT OF CHARLES F. DODRILL, PRESIDENT OF THE TRI-STATE AIRPORT AUTHORITY, HUNTINGTON, W. VA.

Mr. Chairman, on behalf of the Tri-State Airport Authority, which is the managing local agency operating the Tri-State Airport at Huntington, W. Va., I respectfully submit the following statement in opposition to the closing of the flight service station at Huntington:

The elimination of the Huntington station came as a complete surprise to us and is pointed up by the fact that procurement and installation of direct-finding

equipment had been authorized for Huntington prior to the shutdown announcement. This lends credence to our belief that the decision to include Huntington on the list was a spur-of-the-moment decision taken without any prior discussions with local interested groups. Further weight to this assumption is the fact that a representative from the Washington office of FAA was at the Tri-State Airport within 3 days after the public announcement of the shutdown program to attempt justification to interested users of the flight service station facilities.

I refer to a document entitled "Estimated Annual FAA Savings Due to Consolidation of Bluefield and Huntington Flight Service Stations with Charleston, W. Va." This document was furnished by the Federal Aviation Agency. You will note that there is little or no detail, and that the "savings" expected to be achieved at Huntington will run somewhere between $26,400 per year and $36,700. We do not agree that the alleged savings are valid estimates for the following reasons:

(1) The program envisaged by the Federal Aviation Agency contemplates no personnel eliminations. Therefore, any alleged savings in personnel costs are fictitious.

(2) By the Federal Aviation Agency's own admission, an increase in communications costs ranging from $7,000 to $10,400 per year will immediately result from the changeover. This will be an actual increase in cash disbursements to cover the cost of additional leased lines between Huntington and Charleston.

(3) In addition to the annual communications costs admitted by the FAA, it is also admitted by them that there will be a one-time capital outlay to accomplish the changeover in communications equipment necessary to remote Huntington to Charleston.

(4) The position vacancies which will be allegedly filled by FAA with the personnel from the Huntington station will be without question more position vacancies created by FAA in the centralized control stations such as Charleston. Further, FAA's statement that they intend to stop recruiting personnel and depend on "normal attrition" to cut down the total number of personnel systemwide, does not seem sensible to us since a total cessation of recruitment would eventually wreck the entire FAA establishment.

(5) Tri-State Airport is classified by the FAA as a small hub. The FAA Administrator, N. E. Halaby, made the following statement in his preface to the 1963 supplement of the "National Airport Plan":

"Aviation's profoundly beneficial influence on the Nation's economy has been amply demonstrated and deserves substantial encouragement. It is not only at airline stops where inadequacies must be remedied; the aviation community must focus attention on the increasing needs of that rapidly growing segment of its economy, general aviation.

"To satisfactorily pursue our objective, we need the help of all concerned, particularly the airport community. It is still the responsibility of the community to develop, operate, and maintain its airport. We will offer our services in the form of financial and technical aid. Moreover, we intend to embark on a program to indicate the value of the airport as an obvious community asset."

(6) We believe that the proposed action of the FAA does nothing more than penalize Huntington. It accomplishes, in our honest judgment, no effective savings of the taxpayers' funds. It discourages local general aviation users and prospective general aviation users. This is being done in the face of FAA's own prediction that general aviation flying will increase from approximately 14 million hours per year being flown at the present time to 18½ million hours per year by 1970.

(7) We also disagree emphatically with FAA's statement that "neither service nor safety will be jeopardized." It is difficult for a nonpilot to understand the difference between the over-the-counter type of briefing presently obtained from the flight service station and the remotely controlled service proposed to be substituted by the FAA. Whereas a pilot presently receives pilot reports, weather briefing and enroute data from the station, FAA proposes to substitute merely a telephone connection with Charleston. The fact that this will not be satisfactory to aircraft owners and pilots is clearly demonstrated by the vehement objections voiced to this program by individual local pilots and owners.

(8) From the standpoint of Tri-State Airport, the proposed cutback service available there will seriously inhibit the airport authority's present policy of attempting to encourage general aviation development in this area. The FAA

recognizes that a small hub air carrier field, such as Tri-State Airport, must serve in a dual capacity, as both an air carrier field and a general aviation field. In the past, the emphasis at Tri-State Airport has been principally on air carrier facilities. We are now attempting to encourage the development of general aviation at Tri-State Airport in accordance with the FAA's own concept. However, this effort will be seriously hampered, as I stated, by the proposed cutback.

(9) Finally, I refer you to a statement contained in a letter which Administrator Halaby made in a letter dated May 29, 1964: "While we regret the economic impact of the station program on any community, we feel unqualified and unauthorized to base our planning and programs on any considerations other than those of aeronautical nature."

While we recognize the desirability of FAA basing its planning "considerations of an aeronautical nature" we regret the apparent unwillingness of the agency to give any consideration to the economic impact on local communities of its planning. We further regret the unwillingness of the agency to discuss these matters with the affected parties before putting them into effect. The proposed program will do the following to this community:

(*a*) It will eliminate the livelihood in this community of seven Federal employees. One of those has lived in Cabell County for 11 years, is a homeowner, and anticipated sending his children to Marshall University. Another has lived in Huntington for 15 years, has a wife and two daughters. A third is a native of Wayne County and owns his own home in this community. A fourth is a native of Wayne County, owns his farm home at Prichard, W. Va., is married and has two children. Two others have lived in Huntington for 2 or three years, are married and have children.

(*b*) These men are desirable members of this community and have planted their roots firmly in the area. One of the most unfortunate aspects of the cutback program is the blithe assumption that merely because, in Mr. Halaby's words "all displaced FAA personnel at Huntington and Bluefield will be offered assignments elsewhere in the air traffic system without loss of grade or salary," completely loses site of the destructive effect of the cutback on the lives and fortunes of the individuals who are personally involved.

Mr. HECHLER. Mr. Chairman, I want to compliment you personally and also the members of the committee for initiating these hearings which I believe will be in the public interest. I think it is going to be very healthy development for the relations with the Federal Aviation Agency and I am sure that this committee will thoroughly examine the cost figures, the safety figures and all related considerations pertaining to this drastic announcement.

I might say parenthetically, Mr. Chairman, that as evidence of our keen interest in this issue, today is the day of the West Virginia primary and some of us voted absentee ballot in order to be able to present our case personally here before this committee.

Mr. WILLIAMS. Let me say for the sake of the record, Mr. Hechler, in response to what you have just said, that it was due to the pleading or request or whatever you have, of you and a number of other colleagues who have expressed such an intensive interest in this subject that the committee felt that hearings would be warranted in this case. We appreciate the fine spirit of cooperation which you have brought to this committee, and the wonderful help you have given us already, even prior to your testimony.

Mr. HECHLER. I appreciate that, Mr. Chairman. I am very pleased that the Administrator of the Federal Aviation Agency, Mr. Halaby, is in the audience because I believe he has, as Administrator of the FAA, exhibited vision, determination, and courage as the Administrator of that Agency.

I say this not only as a Member of Congress, but as a former professor of public administration. I believe he has done an excellent job as an Administrator of FAA. I would like to echo also what Senator Keating has said, that if FAA and this committee conclusively demonstrate that genuine economies without loss of safety will be achieved by this action in closing these flight service stations, I would be the first to applaud the action as in the public interest.

But let me be specific about what the effects of this proposal are and will be. The Tri-State Airport at Huntington, W. Va., serves a population of about a quarter of a million people in southwestern West Virginia, eastern Kentucky, and eastern Ohio. This is in the heart of the Appalachian region.

In fact, President Johnson when he made his first tour of the Appalachian States week before last chose the Tri-State Airport as his center operations, landed his Air Force plane there, took off and returned by helicopter, conferred with seven State Governors at the airport, and effectively demonstrated the value of the airport to the entire Appalachian area.

At a time when so much stress is being placed on the development of an Appalachian program, we can ill afford a step which could slow down the economic development of the Appalachian region.

The FAA has estimated that the closing of the flight service station at Huntington would result in savings of between $26,400 and $36,700 per year. One human life could not be calculated in terms of the figures that I just cited, yet safety would be threatened by this move.

Some people might contend that it would be just as easy for a pilot to pick up a telephone to some remote center and get the same type of information he now gets personally across the counter. The general aviation pilots to a man say that their safety is threatened when you take away the flight experts who know our mountainous terrain in the locality, and substitute instead a remote and impersonal briefing far removed from the immediate scene.

I might interject here to say that Mr. Jenkins, in addition to representing the chamber of commerce, is a private pilot and has had many experiences in utilizing this flight service information which has helped him out of potentially dangerous situations.

The Federal Government and the local authorities together have invested about $6 million in Tri-State Airport. The Tri-State Airport Authority has spent over a half million dollars for the improvement of general aviation facilities, and in the next few years expects to spend additional funds for improvements. The proposed cutback in service would seriously injure our efforts to encourage the development of general aviation in the Appalachian area.

Mr. Chairman, I would like consent to put my entire statement in the record and to summarize and hit the high spots as I go through the rest of it, if that is agreeable.

Mr. WILLIAMS. Let it be received.

Mr. HECHLER. There are approximately 87 general aircraft served in the immediate vicinity of this flight service station and its services are used by hundreds of others in transit through this region of rough terrain and changeable weather. Many pilots in transit have been helped out of emergency situations which might have resulted in disaster had they only had a remote installation to dole out information.

I hope, Mr. Chairman, that this committee will get its teeth into specific figures to see whether genuine dollars and cents economies will be achieved. All I can do is raise some questions on the basis of the data which FAA has been able to make available to support its contention that this will result in economy.

As I understand it, FAA plans to relocate the personnel now assigned to the flight service stations being eliminated. Does this mean that there will be no overall saving in personnel costs nationwide? What about the cost of relocating all these personnel, the cost of shipping their household goods, not to mention the disruptive personal effect on the individuals and their families involved?

Even assuming that FAA can come up with some cost justifications on the personnel side, let us look at this proposal from the standpoint of equipment costs. With your permission, Mr. Chairman, I would like to focus on Huntington for the time being and try to get some concept here of what economies are hoped to be achieved.

The FAA itself has stated that there will be an immediate increase in communication costs ranging from about $7,000 to $10,000 per year, resulting from the changeover. You can't really expect to set up a remote station with telephone lines without a great increase in the cost of setting up and maintaining those telephone lines. Presumably, the remote station would be in Charleston, W. Va., and this would result in the cost of additional lines between Huntington and Charleston.

Mr. WILLIAMS. How far apart are these?

Mr. HECHLER. Fifty miles. It could hardly be termed "remote" but that, of course, is the general word that is used. I might say, also, Mr. Chairman, that this would mean certainly the construction of a new building, new facilities, at Charleston, which are not currently available for housing this new equipment which would be necessary in Charleston.

There would also be certain nonrecurring costs or one-time costs involved in purchasing and installing the equipment at the remote station. Our local people, using FAA statistics, tell me this cost would amount to about $30,000 as a one-time capital outlay for the changeover of communications equipment.

A few days ago the FAA supplied me a figure of $11,000 as its revised estimate of the cost of purchasing and installing the equipment. I hope the committee will go into such discrepancies in figures and also examine in some depth what economies are hoped to be achieved.

Mr. Chairman, I have with me a letter dated May 7, 1964, from the Federal Aviation Agency. This letter arrived over the weekend while I was out campaigning in our West Virginia primary, therefore, I have not been able to do a thorough job of analyzing the figures involved.

But certain statements in the letter are highly significant. As soon as this notice hit us about the closing of the flight service stations I immediately asked the Administrator for supporting statistics to justify his contention that economies would be achieved. I respect Mr. Halaby as a very good personal friend and I wish to pay tribute at this point also to his able and understanding associates who work with him. They have been most cooperative in every respect.

During February and March I asked for figures and finally on March 30, 1964, I wrote a letter to FAA asking for the figures I needed in order to determine whether future economies would be achieved.

Meanwhile we have been carrying on very friendly discussions on the nature and impact of these changes.

After I wrote a letter on March 30, FAA personnel said they would like to talk this thing over and fill me in with the background, which they did. Finally on May 7 the letter was forthcoming. Now, the letter states:

DEAR MR. HECHLER: Thank you for your letter of March 30, 1964, addressed to Mr. R. V. Reynolds, concerning the proposed remoting of the Huntington flight service station to Charleston, W. Va. This also refers to recent discussions on the same subject between yourself and FAA representatives.

I would like to call the committee's attention to a key sentence in this letter of May 7:

Because some of the operational details of the Huntington/Charleston project have not been finalized, we are unable to furnish you with firm cost-saving data at this time.

However, the figures listed below are at or near what we expect, based on current plans for accomplishing the project. I would emphasize that these estimates, which cover cost savings at both Huntington and Charleston, are subject to change when final program determinations are made.

The point I wish to make is that even in this statement which took about 6 weeks to prepare it is indicated that firm cost-savings data have not been finalized. I think that is quite significant in this whole context. So, I believe that the case simply has not yet made on exactly how you are going to achieve economies by closing this and the other 41 flight service stations.

Finally, Mr. Chairman, in conclusion, we have been carrying on very extensive efforts to attract new business and industry into the Appalachian area. We have been using the selling point that the Federal Government is really interested in the economic improvement of the area and is interested in encouraging general aviation.

Many of the new concerns interested in our area are aviation oriented. Naturally they inquire about our facilities for general aviation. The knowledge that the flight service station is being eliminated would seriously hurt the expansion of the economy in our area of West Virginia, eastern Ohio, and eastern Kentucky.

Mr. Chairman, I hope and I am confident that your committee will go into the questions such as those I have raised, and I am confident that these hearings will prove beneficial for the development of general aviation throughout the country.

Thank you, Mr. Chairman.

(The complete statement of Mr. Hechler follows:)

STATEMENT OF HON. KEN HECHLER, REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA

Mr. Chairman, approximately 3 months have elapsed since the Federal Aviation Agency dropped its bombshell announcing the closing of 41 flight service stations throughout the country. I hope that this committee will thoroughly examine the cost figures, the safety factors, and all related considerations pertaining to this drastic announcement.

To begin with, I want to make it absolutely clear that if the FAA and this committee conclusively demonstrate that genuine economies without loss of safety will be achieved by this action, I would be the first to applaud the action as in the public interest. Blacksmiths and harnessmakers are people and need jobs, but the automobile represented progress. If FAA's automated plans for remoting flight service information would really do the job more efficiently and

effectively, there would be little quarrel with phasing out the flight service stations now facing the ax.

But let me be specific about what the effects of this proposal are and will be. The Tri-State Airport at Huntington, W. Va., serves a population of about a quarter of a million people in southwestern West Virginia, eastern Kentucky, and eastern Ohio. This in in the heart of the Appalachian region. In fact, President Johnson when he made his first tour of the Appalachian States week before last chose the Tri-State Airport as his center of operations, landed his Air Force plane there, took off and returned by helicopter, conferred with seven State Governors at the airport, and effectively demonstrated the value of the airport to the entire Appalachian area. At a time when so much stress is being placed on the development of an Appalachian program, we can ill afford a step which could slow down the economic development of the Appalachian region.

The FAA has estimated that the closing of the flight service station at Huntington would result in savings of between $26,400 and $36,700 per year. One human life could not be calculated in terms of the figures that I just cited, yet safety would be threatened by this move. Some people might contend that it would be just as easy for a pilot to pick up a telephone to some remote center and get the same type of information he now gets personally across the counter. The general aviation pilots to a man say that their safety is threatened when you take away the flight experts who know our mountainous terrain in the locality, and substitute instead a remote and impersonal briefing far removed from the immediate scene.

The Federal Government and the local authorities together have invested about $6 million in Tri-State Airport. The Tri-State Airport Authority has spent over a half million dollars for the improvement of general aviation facilities, and in the next few years expects to spend additional funds for improvements. The proposed cutback in service would seriously injure our efforts to encourage the development of general aviation in the Appalachian area.

In his preface to the 1963 supplement of the "National Airport Plan," FAA Administrator Najeeb Halaby stated: "The aviation community must focus attention on the increasing needs of that rapidly growing segment of its economy, general aviation." The FAA has predicted that general aviation flying will increase from approximately 14 million hours per year being flown at the present time to 18½ hours per year by 1970. In the face of national encouragement from FAA, local encouragement in the Huntington area, and the increased interest and activity generated in local aviation, it just does not make sense to give general aviation a sock in the jaw by eliminating the flight service station.

Mr. Chairman, there are approximately 87 general aircraft served in the immediate vicinity of this flight service station, and its services are used by hundreds of others in transit through this region of rough terrain and changeable weather. Many pilots in transit have been helped out of emergency situations which might have resulted in disaster had only a remote installation been doling out information.

I hope this committee will get its teeth into specific figures to see whether genuine, dollars and cents economies will be achieved by this proposal. All I can do is raise some questions based on the skimpy data which FAA has been able to make available to support its contention that this would result in economy.

As I understand it, FAA plans to relocate the personnel now assigned to the flight service stations being eliminated. Does this mean that there will be no overall saving in personnel costs nationwide? What about the cost of relocating all these personnel, the cost of shipping their household goods, not to mention the disruptive personal effect on the individuals and their families involved?

But even assuming that FAA can come up with some cost justifications on the personnel side, let's look at this proposal from the standpoint of equipment costs. As I stated, the FAA has estimated that savings at Huntington, W. Va., would run somewhere between $26,400 and $36,700 per year. But the FAA itself has stated that there will be an immediate increase in communication costs ranging from $6,960 to $10,380 per year, resulting from the changeover. You can't expect to set up a remote station with telephone lines without a great increase in the cost of setting up and maintaining those telephone lines. Presumably, the remote station would be in Charleston, W. Va., and this would result in the cost of additional lines between Huntington and Charleston.

There would also be certain nonrecurring costs, or one-time costs, involved in purchasing and installing the equipment at the remote station. The changeover in communications equipment will be expensive. Our local people, using FAA statistics, tell me that this cost would amount to about $30,000 as a one-time capital outlay for the changeover of communications equipment. After some weeks of effort, FAA a few days ago supplied me with a figure of $11,000 as its revised estimate of the cost of purchasing and installing equipment. There is some discrepancy in these figures which I hope the committee will go into. I hope the committee will also go into the question of how a Government agency can make the bald statement that these flight service stations will be closed, that economies will be achieved, and then spend weeks without being able to supply the specific figures to support the contention that real economies will be achieved?

Mr. Chairman, I have a letter here from the Federal Aviation Agency dated May 7, 1964—5 days ago. This letter arrived over the weekend while I was out campaigning in our West Virginia primary, which takes place today. Therefore, I have not been able to do a thorough job of analyzing the figures involved in this letter. But certain statements in the letter are highly significant. As soon as this bomb hit us, Mr. Chairman, I immediately asked the Administrator for supporting statistics to justify his contention that economies would be achieved. I respect Mr. Halaby as a good personal friend, and I wish to pay tribute to the able and understanding associates who work with him. They have been most cooperative in every respect. But still they went through great agonies in trying to supply me with the figures I asked for.

During February and March, I kept asking for these figures, and finally on March 30, 1964, I wrote a letter to FAA asking for the figures I needed in order to analyze whether economies would in fact be achieved. Meanwhile, we had been carrying on very friendly discussions of the nature and impact of these suggested changes. After I wrote the letter of March 30, FAA personnel said they would like to talk this thing over and fill me in with background, which they did, and they were very useful conversations carried on in a sympathetic and cooperative spirit. But they still did not answer all of my questions in a hard and specific fashion. So I asked for an answer to my letter in writing.

The answer was a long time forthcoming. I called several times, and each time I received very prompt responses over the phone, and some more very amiable conversation but no letter. Finally, last week I became more insistent and stated I wanted a letter by the end of the week, and so over the weekend came the letter dated May 7.

There are several very significant sentences in this letter of May 7 from FAA. It starts out: "Dear Mr. Hechler: Thank you for your letter of March 30, 1964, addressed to Mr. R. V. Reynolds, concerning the proposed remoting of the Huntington flight service station to Charleston, W. Va. This also refers to recent discussions on the same subject between yourself and FAA representatives."

Now comes a key sentence to which I would like to call the committee's particular attention: "Because some of the operational details of the Huntington/Charleston project have not been finalized, we are unable to furnish you with firm cost-savings data at this time. However, the figures listed below are at or near what we expect, based on current plans for accomplishing the project. I would emphasize that these estimates, which cover costs/savings at both Huntington and Charleston, are subject to change when final program determinations are made." The letter is signed for Clifford P. Burton, with the named typed at the bottom Lee E. Warren, Director, Air Traffic Service.

The point I wish to make is that it took about six weeks to get a written statement from FAA and even then the statement indicated that the firm costs/savings data had not been finalized.

Mr. Chairman, once again I wish to state that I have the greatest admiration for Administrator Halaby and his associates. But the case simply has not been made that you will achieve economies by closing this flight station.

We have been carrying on extensive efforts, Mr. Chairman, to attract new business and industry into the Appalachian area. We have been using the selling point that the Federal Government is really interested in the economic improvement of the area, and is interested in encouraging general aviation. Many of the new concerns interested in our area are aviation-oriented. Naturally they inquire about our facilities for general aviation. The knowledge that the flight service station is being eliminated would seriously hurt the expansion of the economy in our area.

Mr. Chairman, I hope that your committee will go into questions such as those which I have raised, and I am confident that these hearings will prove beneficial for the development of general aviation throughout the country.

Mr. WILLIAMS. Mr. Hechler, you have given the committee a splendid statement. I think you have issued a real challenge to the Federal Aviation Agency to furnish the definite figures on which they base their claim of savings in each of these stations that is scheduled for closing.

You have given us a clear example of a station which certainly seems to me to be on the borderline, at least. Perhaps this might result in the Agency giving reconsideration to their proposed action on this particular station. I think your statement clearly shows that the FAA did not think out all of the phases and aspects of the problem before issuing their statement that this station would be closed.

I have had a little bit of experience in flying over Huntington and Charleston on several occasions. The thing that always amazes me is how much smoke and haze usually hangs around over those two towns. I believe most of the people over there burn coal, do they not?

Mr. HECHLER. I would like the chairman to come back to West Virginia. I think the conditions are far better than he describes. Coal is a prime and good source of fuel. However, it is true, that we have ground fog, mountains and hazardous flying conditions.

Mr. WILLIAMS. Both of these towns lie in valleys, do they not?

Mr. MECHLER. The cities themselves do. But all airports in West Virginia have to be built by shaving the tops of mountains.

Mr. WILLIAMS. I have been over these towns several times. I don't think I have ever been over them when there was more than one-half to 2 miles visibility, which would indicate to me that some kind of local weather information would certainly be needed for pilots and particularly for inexperienced pilots in general aviation.

Mr. HECHLER. This is correct.

Mr. WILLIAMS. Mr. Friedel?

Mr. FRIEDEL. I have no questions.

Mr. WILLIAMS. Mr. Devine?

Mr. DEVINE. Thank you, Mr. Chairman.

Mr. Hechler, just as a matter of information, what is the specific location of your Tri-State Airport, is it at or around Huntington?

Mr. HECHLER. Very close to Huntington. It is about 8 miles from the city.

Mr. DEVINE. In which direction.

Mr. HECHLER. It is located southwest of the city.

Mr. DEVINE. I flew in to make a speech at your Marshall University there. I was landed at a short strip airport on the Ohio side of the river.

Mr. HECHLER. That would be the airport located at Chesapeake, Ohio, which is actually called the Huntington Airport, and is really closer to Huntington since it is right across the Ohio River bridge. That is the private plane airport. But the commercial airport utilized by Eastern, Allegheny, and Piedmont Airlines is the Tri-State Airport southwest of the city of Huntington on the West Virginia side of the Ohio River.

Mr. DEVINE. It apparently has runways long enough to accommodate the presidential jet.

Mr. HECHLER. They have to put on the brakes pretty fast. The runway is 5,300 feet long, which is a little short for the presidential jet. When the President came to Huntington, he changed from his 707 in Pittsburgh and then used a DC–6 to fly in to Huntington.

Mr. DEVINE. Thank you.

Mr. HECHLER. We appreciate having you there and also to referee some football games at Marshall University.

Mr. WILLIAMS. Are there any further questions?

Thank you very much, Mr. Hechler.

Mr. HECHLER. Thank you, Mr. Chairman.

Mr. WILLIAMS. Mr. Wharton, from the State of New York.

STATEMENT OF HON. J. ERNEST WHARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. WHARTON. Mr. Chairman, I wish to join in commending the committee on your approach to this troublesome subject. I will say at the outset that my statement will be rather brief because it has already been covered in part by Senator Keating. It relates particularly to the service in my own district at Poughkeepsie, N.Y.

As a matter of geographical information, I might first say that Poughkeepsie is located midway between New York City and Albany on the Hudson River, about 75 miles equal distant from either place. That would be approximately 75 miles from Teterboro, which is the proposed remote location here.

The number of personnel, I understand, involved is 12 in this case. This is also on the direct route between New York City and Montreal. It is the home base of the IBM air fleet. We also have a growing Texaco laboratory service there which use the air and I would say 25 or 30 other nationally known organizations. I will not belabor the growth of the community which will be touched upon on Thursday, I understand, by several of our local organizations.

Passing briefly along to the economies and the safety element which seems to be involved here, I would say that the economies affecting safety and the well-being of our population are rarely attempted and their announcement quite naturally raises the ire of responsible citizens. This, in brief, summarizes the reaction my constituents have had to the Federal Aviation Agency's announcement to close 42 flight service stations around the country, and, more particularly, the installation at the Dutchess County Airport in Poughkeepsie, N.Y.

I might say that the Poughkeepsie Airport would be 10 or 15 miles in the direction of New York City, so that the element of bad weather and safety landing is actually involved there.

This morning's testimony by colleagues representing similarly affected districts would indicate that the public demands we stop the penny-rich, pound-poor approach about to be thrust upon us in the interest of air safety.

In my own district, the 28th of New York, which comprises five counties and straddles the Hudson River for more than one-half of the distance between Albany and New York City, there is only one major airport suited to handle the overflow traffic from the three great metropolitan fields in time of foul weather.

It is this rapidly growing field at Poughkeepsie that gives New York-bound travelers an extra margin of safety. Its 4,000-foot runways, which are scheduled for lengthening in the near future, and the flight service facilities of the Federal Aviation Agency combined to handle no fewer than 77 clearances during the adverse conditions last month that forced the closing of New York terminals for 4 days.

Even more important, it is to be noted that in 1963 the Poughkeepsie station was credited with assisting 12 aircraft in emergency situations. Although these "saves" cannot be converted to a dollar amount, there is documented proof that the attendants' first-hand knowledge of the erratic terrain surrounding the field, an intangible which would be lost through remoting the station, was a decisive factor.

The flight service station has helped the Dutchess County Airport, home station for more than 200 pilots, and the 39 satellite fields in the mid-Hudson Valley while accommodating 700 more aviators as well. Its removal would seriously impair the growth and capacity of the airport to exercise its role in support of the New York area.

Although it is perhaps true to some degree that "remoted" facilities could handle a portion of the clearances and service pilots as well in most areas, the geographic posture of the mid-Hudson Valley is so extreme that local weather observations are a "must."

To the west, the Catskill Mountains rise sharply and the Hudson River, lying virtually at sea level, are strange bedfellows and are noted for their proclivity to produce weather phenomena which an official of the Weather Bureau has described as "reason enough for a permanent facility at the Poughkeepsie Field because readings taken at Stewart Air Force Base, 16 miles to the southwest, are grossly misleading."

However, weather reporting is not the only factor that would be affected by remoting the station. En route communications would likewise be hampered. The heavy air traffic which follows the valley presently requires 5 VHF and 3 UHF transmitting channels but, at this point, we have not been told what the Federal Aviation Agency intends to do in the communications area if their plan is effected.

There is no programed expense for leasing of transmission lines from the Teterboro area to the field and, hence, the projected annual savings of $70,000 is unmasked as optimistic at best. Furthermore, the Weather Bureau has not allowed for any expenses to maintain its equipment or the training of citizen observers for certification.

These are but two of the omitted factors that have been overlooked in assessing the savings to be realized. I am confident there are many more which are directly measurable in dollars and cents. Also ignored are such intangible points as the boost the station has given to the area, the "safety valve" it affords the New York airports, and the safety of 900 pilots in the mid-Hudson advisory area.

It is for these reasons then that I urge the committee to prevail upon this Agency to reevaluate their plan and reassess its savings by including the human element, which is, as I understand the scheme of things, why we have a Government.

In closing, Mr. Chairman, I should like to call the committee's attention to a recent copy of the Poughkeepsie Journal, under date of April 29, outlining the emergency landing of a twin-engine plane with five aboard following a power failure at this very location. As you know,

our morning papers have featured fatal plane accidents every day for the past week.

We do feel that this safety hazard is something that cannot be overlooked and I am sure that in view of recent occurrences that the FAA, and this committee as well, will give this situation a long, hard look.

Thank you very much, Mr. Chairman.

Mr. WILLIAMS. Thank you, Mr. Wharton. Did you say that Poughkeepsie is the only station now between Teterboro and Albany or between New York and Albany?

Mr. WHARTON. It is the only recognized station, yes. Of course we have several small local fields.

Mr. WILLIAMS. It is the only flight service station between those points. How many miles it is from New York City to Albany?

Mr. WHARTON. 150 miles.

Mr. WILLIAMS. That is rather high density traffic area, too, for aircraft, is it not?

Mr. WHARTON. Yes. There are mountains, the Berkshires on the east and the Catskills on the west.

Mr. WILLIAMS. What I mean is that there are quite a number of aircraft flying that route.

Mr. WHARTON. Yes, it is the main route to Montreal as well as upstate New York.

Mr. WILLIAMS. Poughkeepsie is down in the valley between the Catskills and the Berkshires. There is a river that flows down there?

Mr. WHARTON. The Hudson River.

Mr. WILLIAMS. Do you have a fog problem there?

Mr. WHARTON. Yes, we are practically at sea level so that we have almost the same fog problems intermittently as they do in New York City which, as everyone knows, is a very serious situation at times.

Mr. WILLIAMS. Mr. Friedel.

Mr. FRIEDEL. I have no questions.

Mr. WILLIAMS. Mr. Devine.

Mr. DEVINE. I have no questions.

Mr. WILLIAMS. Thank you, Mr. Wharton.

Mr. WHARTON. Thank you, Mr. Chairman.

Mr. WILLIAMS. Hon. Howard W. Robison, from the State of New York.

STATEMENT OF HON. HOWARD W. ROBISON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. ROBISON. Thank you, Mr. Chairman.

May I begin by commending you for agreeing to inquire into the wisdom of the Federal Aviation Agency's announced plan to consolidate—in the interest of economy—a substantial number of existing flight service stations now serving the air-safety requirements of thousands of general aviation pilots at some 297 locations across our Nation.

My study of how this consolidation plan developed indicates that it originated during congressional hearings on the FAA's 1964 appropriation request with a proper desire on the part of some members of the Appropriations Committees to inquire into ways and means for reducing the cost of operating our present national air traffic system.

I believe, Mr. Chairman, that my record during my nearly 7 years of service in the Congress indicates that I am as interested as anyone else in true economy in Federal spending, and I think that all of us here are particularly obligated, in view of the present deficit nature of the Federal budget, to redouble our efforts in pursuit of that goal.

However, Mr. Chairman, my intensive study of this proposal has led me to a firm conviction that, if it is carried out, we would be practicing false economy, and doing so, pershaps, at the risk of human life.

Although I, personally, do very little private flying, as I know the chairman does and the gentleman from California, Mr. Clausen, I have come to realize—these past few months—from which has been told me by those who do, and who do so in ever-increasing numbers, how very important the flight service stations are to the overall aviation picture, and what vital functions they perform in the interests of air safety.

My particular concern stems from the proposed closing of the flight service station now serving pilots at Elmira, N.Y.—in my congressional district—and the tentative "remoting" of its services to Wilkes-Barre, Pa.

The FAA seeks to claim that the essential pilot briefing, dispatching and flight following services now provided by the Elmira flight service station, will be continued, without any detriment to safety and convenience, after the proposed consolidation with the Wilkes-Barre flight service station, through direct "landlines" connected with the control station at Wilkes-Barre, and direct toll-free telephone service for pilot briefings and flight-plan filing between Elmira and Wilks-Barre.

The FAA also seeks to claim that such consolidation will produce an annual "savings" of $40,000, but it has been unable or unwilling, as yet, to give men or anyone else concerned a detailed breakdown or justification for that projected amount.

Let's take a closer look at the Elmira flight service station. There is presently no U.S. Weather Bureau airport station at the Elmira-Corning Airport where it is situated. The nearest such station is at Binghamton, N.Y., some 65 miles distant. The Elmira flight service station has, thus, been the main source of local weather condition information for general aviation pilots using the Elmira-Corning Airport as well as 14 other smaller airports located within a radius of 70 miles from Elmira-Corning.

It is especially important, I believe, to stress at this point that this region of New York State that we are talking about is a part of the so-called Finger Lakes section of the State, a section notoriously subject, because of its lakes and hills, to rapid and unforseeable weather changes and to violent local storms.

In the summer months, especially, the Elmira area may be subject to sudden thundershowers and gusty winds, accompanied by rapid reductions in ground visibility, at the very time that the sun is shining and there is unlimited flying visibility at both Binghamton and Wilkes-Barre. Or, of course, a reverse situation could be true, and these facts need instantly to be made known to transient aircraft and especially so to those pilots thereof unfamiliar with our terrain.

Within this same 70-mile radius, there are approximately 250 active pilots, all of whom, along with transient aircraft, now depend upon the Elmira flight service station for local weather observations, pilot

briefings, preflight services, emergency in-flight services, orientation, flight-following services, emergency search and rescue coordination and notam (notice of airman) services.

The specialists, and they are specialists, who serve in the Elmira flight service station have an essential familiarity with our peculiar terrain and weather problems, and possess a unique ability to carry out their prime responsibilities for the safety of those who depend upon them that, in my judgment, cannot be safely "remoted."

In this same connection, in stressing local service, I should like to point out that roughly 30 percent of the pilot briefings now being conducted by the Elmira flight service station are of the over-the-counter or face-to-face type, a method considered far superior to the kind of briefings that could be conducted by telephone or radio from a remote location, particularly for the relatively inexperienced or uncertain pilot of whom there are more and more in this fastest growing segment of the aviation community.

Even the more routine services that the more experienced pilot might need or desire from a flight service station would tend to be less accessible and efficient, especially during peak hours of activity when a pilot calling a remote facility over that toll-free phone would be apt to get a busy signal and be required to accept a long standby delay or else take off without the desired information, and perhaps into unknown and unnecessary peril.

In any "remoting" plan, Mr. Chairman, there is also an ever-present danger of a communications breakdown which, however, temporary, could have serious consequences to the cause of air safety.

But these arguments, and others I might make, may well only be repetitious in that they could also apply to other flight service station facilities scheduled for consolidation. While they must all be considered by you gentlemen in your study of the overall problem, I do not wish to intrude upon your time so I shall try to confine the balance of my remarks more directly to the Elmira situation.

The Elmira flight service station, you should be aware, also happens to serve a different and unique but important aviation activity which is uncommon to most other flight service station facility areas, that of "soaring." The sport of motorless flying is part of the history of the Elmira-Corning area.

An established soaring facility on "Harris Hill" near the airport, and the location nearby of a major manufacturer of sailplanes or gliders, as they are more commonly known, attracts hundreds of sailplane pilots to the area each year. The Elmira flight service station now renders, and will continue to need to render, vital safety services to the glider pilots and in connection with the several glider competitions scheduled at different times each year. And all this is an important part of the economic base of our community.

Is there a need for continuation of the Elmira flight service station as a separate facility, Mr. Chairman? Well, if "user" figures are any indication, there certainly is. Perhaps it would be well to cite these figures for the Elmira flight service station, and to compare them to user data for the Wilkes-Barre station, as well as for that at Williamsport, Pa., a tentative alternate location for remoting services.

The FAA's own figures for total FSS operations for these stations for the calendar year of 1963 are as follows: Elmira, 34,205; Wilkes-

Barre, 22,088; and Williamsport, 24,992. Total aircraft operations for the same year, again from the FAA, were: Elmira, 67,288; Wilkes-Barre, 43,705; and Williamsport, 46,309.

These figures for Elmira for 1963, represent a 16-percent increase in user demand, and the tentative figures for the first quarter of 1964 show a further 30-percent increase in user demand over the first quarter of 1963.

Now, it may well be, Mr. Chairman and gentlemen, that there is some justification for reducing the total number of FSS facilities where geographical spacing, weather-service requirements and the like might permit. I am not sufficiently familiar with the overall picture to say that there is not, and I strongly suspect that it was this possibility that members of the Appropriations Committees, last year, wished the FAA to inquire into, and that they did not thereby mean to imply any "mandate" to the Administrator of the FAA to embark upon any wholesale emasculation of the FSS program, which is about what the Administrator's announced and tentative plans for further consolidations seems to amount to.

However, if there is to be a consolidation program, and if it is to be a wise and responsible one, then I think that consideration should be given to the retention of the more active FSS facilities, such as at Elmira in our area, as representing key or hard core stations, and to peculiar weather and terrain conditions of the type I have attempted to explain to you as pertaining in our area, as well as to the local availability of information from U.S. Weather Bureau stations—there are U.S. Weather Bureau stations at both Wilkes-Barre and Williamsport, but none at Elmira as I have said.

On this basis, the Elmira FSS fully qualifies as a key facility whose retention is eminently desirable, and this opinion is not mine, alone, but is unanimously shared by the several hundred private pilots and aircraft owners who have contacted me on this issue.

Mr. Chairman, economy in Government is essential, but so is our safety, and we compromise with that cause not only at our peril, but at the peril of others who must depend upon us to make the right decisions.

I thank you for the privilege of making this statement.

Mr. WILLIAMS. Thank you, Mr. Robison.

Mr. Friedel?

Mr. FRIEDEL. I want to thank you for a fine statement, Mr. Robison. The thing I am very much interested in is your statement regarding false economy over safety. That is one thing we intend to pursue during the hearing and find out if it is false economy.

Mr. ROBISON. I appreciate that, Mr. Friedel.

Mr. FRIEDEL. Keeping in mind safety at all times.

Mr. ROBISON. Yes, sir.

Mr. WILLIAMS. Mr. Devine.

Mr. DEVINE. I have no questions. I would like to compliment the gentleman from New York. He has made some very fine statements. I think there is food for thought in this overall picture.

Mr. ROBISON. Thank you.

Mr. WILLIAMS. Mr. Harris?

Mr. HARRIS. I have no questions.

Mr. WILLIAMS. Mr. Robison, I will ask you the same question that I asked the two preceding witnesses. Are there any weather conditions that might be unique to this particular area which will make it mandatory in the interest of safety that this facility be retained?

Mr. ROBISON. Yes, sir, Mr. Chairman, in my judgment there are such peculiar and unique weather conditions. Principally our weather changes occur because of the pattern of long narrow lakes that we call the Finger Lakes in New York, of which there are six or seven in all.

These lakes are glacial lakes in origin, with very high hills on either side. The weather is changeable and changeable on an extremely local basis. In addition, this particular airport lies in the basin of the Susquehanna River and in the summer months and early fall months is particularly subject to fog conditions as most river basin areas in our State are.

Mr. WILLIAMS. I believe that is all I have. Are there any further questions?

Thank you very much.

Mr. ROBISON. Thank you, Mr. Chairman. I also have a telegram that I would like to file with you at this time in connection with my statement.

Mr. WILLIAMS. All right, sir. Let it be included.

(The telegram referred to follows:)

ELMIRA, N.Y., *May 12, 1964.*

HOWARD W. ROBISON,
Home Office Building,
Washington, D.C.:

Empire State Airlines May 25 will inaugurate five daily scheduled flights to and from the Chemung County Airport. T. R. Carpenter, Jr., president of Empire State Airlines, said, "Elmira's flight service station is vital to our service to and from the Chemung County Airport."

CLARENCE E. WOODHOUSE, *President,*
Chamber of Commerce of Chemung County.

Mr. WILLIAMS. We have a statement from Senator Javits for inclusion in the record. Let it be included.

(The statement referred to follows:)

STATEMENT OF HON. JACOB K. JAVITS, A U.S. SENATOR FROM THE STATE OF NEW YORK

Mr. Chairman, I would like to express my appreciation to the subcommittee for allowing me to submit a statement today concerning the proposed action by the Federal Aviation Agency to consolidate the facilities of 42 flight service stations throughout this country. Three of the flight service stations to be closed are located in Elmira, Poughkeepsie, and Utica, N.Y. The FAA's proposed action, consequently, has been a matter of vital importance and concern both to the communities affected and to New York State as a whole. Many important questions have been raised by interested persons, and it is most appropriate, I believe, that the Transportation and Aeronautics Subcommittee has seen fit to conduct hearings on this matter.

I would like to make it clear at the outset that I have always supported and will continue to support efforts by Federal agencies to achieve meaningful savings of Federal funds. The prudent and economical use of our Government's funds is an objective worthy of our best efforts. I do believe, however, that the Federal agency which proposes economy measures must bear the burden of proof that true and meaningful savings will be accomplished without loss of vital and necessary services to our citizens.

The FAA has estimated that consolidation of 42 flight service stations will result in savings of approximately $1.4 million. This, I believe, must be clearly

shown. Moreover, in evaluating the appropriateness of the FAA's plans to close flight service stations, among which the Elmira, Poughkeepsie, and Utica stations are most important, we must remember that flight service stations have played and continue to play a major role in providing essential safety services to private and commercial pilots in this country. The lives of Americans in this Nation and the State of New York cannot be thought of in terms of dollars and cents. Federal expense cannot be curtailed at human cost. If a compromise on flight safety is a result of the FAA's proposed consolidation, such compromise cannot be permitted.

I now discuss briefly the impact which the FAA's proposals to close the flight service stations would have upon flight operations in Poughkeepsie and Elmira, N.Y. With respect to the Dutchess County Airport in Poughkeepsie, which is located 75 miles north of New York City, the existing flight service station provides all in-flight aircraft with requested weather information. It is most questionable whether the proposed use of automated equipment would adequately be able to take the place of human evaluation and judgment on weather information. It is also open to question as to whether existing expert advisory services to distressed aircraft now provided by flight service station personnel could be adequately provided under the planned "remoting" operations. Removal of the only flight service station between Teterboro, N.J., and Albany, N.Y., would deprive this area of valuable services to operating aircraft. Because of the local terrain, consisting of hills in the south, the Catskill Mountains in the northwest and the nearby low Hudson Valley, changes in the area weather develop quickly and it is most important, in the view of those using the Dutchess County Airport facilities, for a 24-hour weather station to be maintained there for the benefit of in-flight air traffic. I have been advised by the Dutchess County Airport Commission that in 1963 there were 891 instrument operations in and out of the Dutchess County Airport. It is the commission's belief that the 24-hour availability of flight service station personnel to assist aircraft under IFR conditions would be lost if this flight service station was subjected to remote control operation.

With respect to the flight service station at the Chemung County Airport in Elmira, N.Y., it should be noted that this station also services air traffic at 14 other airports in a 70-mile radius from Elmira. The growth of air travel in the Elmira area has been the direct result of the tremendous industrial expansion in Dutchess and Orange Counties. The activity of the Elmira Flight Service Station has increased steadily during the past 3 years. Total facility operations increased by 11 percent in 1962 and 16 percent in 1963. This rapid growth has been accompanied by significantly increased demands by aviation users for flight services. The Elmira facilities presently service approximately 250 active pilots, in addition to a large number of itinerant pilots using the airport on a part-time basis.

The need for weather services at the Dutchess County Airport is particularly urgent because of the fact that Elmira is not served by a nearby U.S. Weather Bureau installation but depends on a Weather Bureau facility some 65 miles away at Binghamton, N.Y. The closing of the Elmira Flight Service Station would result in a complete absence of weather briefing services in the immediate area. Moreover, airport users have expressed their complete disagreement with the FAA's contention that there will be no reduction in air safety. They contend that the quality of emergency flight assistance service is expected to be lowered considerably because specialists at a remote location would not have the detailed knowledge of area terrain landmarks, and weather patterns peculiar to the Elmira area which local personnel manning the facilities possess. The consensus of opinion in the Elmira community is that the closing of the flight service station would impose a substantial hardship upon those using the Chemung County Airport.

As I have stated, I believe that the burden of establishing the meaningfulness of any economies allegedly to be obtained must be met by the Federal Aviation Agency. I have, together with Senator Keating, written the General Accounting Office on April 22, 1964, to request an analysis and report on these proposed economies and the impact of the closing of flight service stations in New York on essential services for air travel. As soon as this report is completed by the General Accounting Office, a copy of it can be made available to the subcommittee for its consideration. Until such time as the evidence clearly supports the proposed action, I feel the Federal Aviation Agency has not yet made out the needed justification for its plans to consolidate and close important flight service stations.

36-942—64——3

Mr. HARRIS. Mr. Chairman, our colleague from Arkansas, Mr. Trimble, has a statement in behalf of the people at Fayetteville, Ark. He is in executive session with the Rules Committee at this time. I would like to ask that his statement be included in the record.

Fayetteville is one of the stations affected by this proposal. It is in the foothills of the Ozarks, a mountainous area. They are terribly concerned about the effect of removing the flight service station from that area, as to the future of aviation in those mountainous areas.

As a matter of fact, it has only been just a few days since a tragic accident occurred when a well-known individual took off from that airport and had an accident that took his life and one other. They are greatly disturbed over this action. Mr. Trimble wishes his statement to be included in the record and include therewith a statement addressed to you as chairman of this subcommittee from the officials of Fayetteville, the chamber of commerce, and so on.

Mr. WILLIAMS. The statement may be received.

(The statement referred to follows:)

STATEMENT OF HON. J. W. TRIMBLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. Chairman and members of the subcommittee, I hope some way can be found for the flight service station at Fayetteville, Ark., to be kept in operation there. It is a fast-growing community, and the traffic is heavy. The people have become accustomed to this service and are dependent upon it. The terrain around the airport is such that this service is imperative.

I ask unanimous consent to include in the record of the hearings the enclosed statement of Raymond J. Ellis, Fayetteville Flying Service; and to file Reports Nos. 1 and 2 which state the situation in detail.

STATEMENT OF RAYMOND J. ELLIS, FAYETTEVILLE FLYING SERVICE ON BEHALF OF THE FAYETTEVILLE CHAMBER OF COMMERCE

In the matter of the possible consolidation of certain Federal Aviation Agency flight service stations, the City of Fayetteville, Ark., and the Fayetteville Chamber of Commerce are in opposition to the consolidation of the Fayetteville FAA flight service stations, the city of Fayetteville, Ark., and the Fayetteville Champresents the following facts and statements:

The Fayetteville FAA flight service station is in the public interest, is necessary to the Federal airways system, and is essential to the safe operation of all aircraft in the area;

The essential services of flight and weather cannot be adequately provided otherwise; and

There is enough volume of air traffic in the area to establish operational requirements, and warrants the cost on a fully manned basis.

We have not attempted to argue the question as to the feasibility of remoting communications. Communications may be remoted; but, under the law, the FAA has responsibilities to the aviation public other than communications and air traffic control.

The Federal Aviation Agency was created by the Federal Aviation Act of 1958. Its broad functions include:

1. The regulation of air commerce.
2. The promotion and encouragement of civil aeronautics.
3. Control and use of the navigable airspace in the United States.
4. Research and development of navigation facilities.
3. Control and use of thre navigable airspace in the United States.

All of these FAA functions include safety and efficiency in their full form and its purpose. Some of these functions can be remoted, others cannot.

There are many and varied essential services of flight and weather that the FAA flight service stations provide airmen. Some of these important services are:

1. Aviation weather observation, dissemination, and distribution.
2. Pilot weather reports.
3. Preflight briefings.
4. Air-to-ground communications with related inflight services.
5. Flight-following service.
6. Airport advisory service.
7. Significant meteorological data and advisories for light aircraft.
8. Flight plan filing.
9. Orientation of lost aircraft.
10. Written examinations for private pilots.

Many of these services contribute directly toward the safety of all airmen flying in the area. A reduction of these services would contribute to the downgrading of safety.

Not only do some of these services contribute to greater safety in flight, to the more expeditious use and control of the navigable airspace of the United States, but toward "the promotion and encouragement of civil aeronautics."

The name "flight service station" in itself implies the very nature of its services and responsibilities to the aviation public.

The city of Fayetteville and the Fayetteville Chamber of Commerce further state that the Federal Aviation Agency has been informed of their opposition to this proposed consolidation and remoting program. The FAA has been presented with valid reasons for the retention of the Fayetteville FAA flight service station in its present status and has supported these reasons with facts. They formally requested "in the best interest of the aviation public" that the Fayetteville FAA flight service station be continued on a fully manned basis; and further state:

1. There has been and still is a demand for the fully manned services of the Fayetteville FSS. The services available from the Fayetteville FSS have been satisfying this demand in a highly satisfactory manner. Nationally, Fayetteville is extremely high in flight assistance services and, also, well up in air traffic control communications.
2. The Fayetteville FSS is strategically located geographically. It is near the center of present and future air routes crisscrossing the Midwest area.
3. It is in a prosperous, progressive, and growing area, and has extremely high air traffic generating factors.
4. It is in an area of mountainous terrain with special weather and communications problems.
5. The northwest Arkansas area is making good use of the Fayetteville FSS facilities at Drake Field.
6. The Fayetteville station cannot be successfully remoted at less cost to the Government without a decrease in essential services and the resultant downgrading of safety.
7. Therefore, the situation is in the public interest and should be continued on a fully manned basis.

The Honorable J. W. Trimble, Member of Congress, will appear before the Subcommittee on Transportation and Aeronautics in opposition to closing the Fayetteville FAA flight service station.

Mr. WILLIAMS. May I say at this point that other Members of Congress have indicated a desire to appear or file statements. Of course, the committee will be glad to afford them an opportunity to do so.

Mr. HARRIS. I might say, Mr. Chairman, if I may be permitted, that along with the statement filed from Fayetteville, for the record we have a rather voluminous file for the information of the committee. I ask that it be received for the files of the committee.

Mr. WILLIAMS. Let it be received.

It is 11:25 now. The next witness scheduled is the Administrator of the Federal Aviation Agency. However, since the committee will have to adjourn around noon, I think it might be well if we would proceed to hear one or two other witnesses this morning and then let him start off this afternoon, if that is satisfactory to you, Mr. Halaby. It might obviate the danger of having to interrupt your testimony.

Is Walter Jensen here?

Mr. JENSEN. Yes, sir.

Mr. WILLIAM. I believe you are with the Air Transport Association of America.

May I say at this point that Congressman Clausen of California has indicated a desire to appear. He has requested permission to appear at a later date which I am sure the committee will be very glad to cooperate.

STATEMENT OF WALTER A. JENSEN, ASSISTANT VICE PRESIDENT, AIR NAVIGATION AND TRAFFIC CONTROL OF THE AIR TRANSPORT ASSOCIATION OF AMERICA

Mr. JENSEN. I am Walter A. Jensen, assistant vice president, air navigation and traffic control, Air Transport Association of America. As you know, Mr. Chairman, ATA is a trade association representing nearly all of the scheduled airlines of the United States.

Of the various categories of airlines which are ATA members, local service airlines have the most direct interest in flight service stations. All airlines have an interest in any effort by the FAA which has as its objective the provision of required services at less cost to the taxpayer.

We are convinced this is the objective of the FAA as it considers the future of flight service stations. We think this hearing will perform a useful service by permitting interested parties to express their views regarding past FAA actions and to state what they believe should be done in the future.

Before expressing the airline views, I would like to try to help clarify what a flight service station is. Basically, a flight service station is a communications station although today they provide a variety of services. In the 1920's the early communications stations served to operate the point-to-point ground communications network and later to operate the ground radio stations for communications with en route aircraft.

In those days most of these stations had to be located at the old four course range sites to talk to aircraft over the voice feature of the range. In the early 1930's technical advances made it possible for the communicator to move away from the range site to a more desirable location. This was the start of "remoting."

There were about 70 stations then, but by the midforties aviation had grown and so had the number of communications stations, to about 400. The peak number of stations was reached in 1950 when there were 464 stations, but an almost constant decrease has occurred since that time.

The decline in numbers of stations which started in 1950 was due largely to the beginning of direct pilot-to-controller communications. Instead of having the airways communication station relay the air traffic control messages between the IFR—instrument flight rule—

en route pilot and the air route traffic control centers, the CAA installed radio equipment in the centers, thus permitting more rapid communication directly between pilots and controllers.

This improvement in communications practices naturally reduced the workload on the INSACS or interstate airways communications stations as they had come to be known at that time.

It was only natural that, with a reduced workload, the stations would look for other useful services to perform. They were already observing and reporting the weather at a number of locations, in fact this service dates back almost as far as the stations themselves.

Another secondary service that dates right back to the beginning is that of monitoring the operation of the radio navigation aids. Today, in many cases, this monitoring is done by flight service station personnel remote from the navigation aid being monitored.

During the last dozen or so years, many additional secondary services have been added, such as briefing general aviation pilots, giving written exams for private pilot licenses, and VFR flight following service. These services are provided by individual flight service stations because they were often the only Federal aviation facility in the community.

Thus, people have come to call upon the flight service station specialists to tackle all manner of jobs and these specialists are to be commended for their willingness to be of service.

Many flight service stations are located at airports which don't have control towers and perform some services usually provided by control towers. These airport advisory services have become so extensive that they have led some persons to think of these flight service stations as small towers.

Although they are not manned by controllers and their personnel are not trained or licensed to control air traffic, they do relay among pilots their respective position reports to assist pilots in operating VFR around airports. The pilots, not the communicators, have the responsibility for maintaining proper separation of their aircraft.

As a summation of just what a flight service station is, I would like to quote from the FAA's Airway Planning Standard No. 3, which is entitled "Air Traffic Communication Services"—March 1960:

> Air traffic communication service is provided through a system of flight service stations, remotely controlled communication outlets and special interphone or telephone lines. In addition to the primary function of air-ground communication, the stations operate the radio navigation aid system and the point-to-point communication system essential to the air traffic control system and the safe and expeditious movement of all air traffic.
>
> Additional functions include flight assistant services such as preflight pilot briefing; issuance of information, suggestions and advice to aircraft during flight; assistance to aircraft in difficulty; initiating search and rescue action; issuance of information to aircraft using airports where airport traffic control service is not provided (airport advisory service); issuance of notices to airmen; and participation in the U.S. Weather Bureau weather observation program.
>
> A staffed flight service station will be established if the location meets all criteria listed below:
>
> (1) An FAA-determined air-ground communciation requirement exists.
>
> (2) Topography and/or establishment and recurring cost of control lines create a situation where a staffed facility is preferable to a remotely controlled communication function.
>
> (3) The facility will be located at an "operationally active publicly owned airport" having 15 or more based active aircraft.
>
> Remotely controlled air-ground communication facilities will be established at locations which do not met (2) and (3) above.

We have taken the time to make a somewhat detailed explanation of what flight service stations are in the hope that this will contribute to a better understanding of the subject before us.

The FAA decision to consolidate 42 more flight service stations is a continuation of a process which has been going on since 1950 and which, since that time, has resulted in reducing the number of stations from 464 down to the present 297. If advances in communications techniques make it possible for the FAA to provide the required services from a remotely operated station, we believe that the FAA effort should be supported.

We think that the basic communications function of the flight service staitons can be performed with no degradation of service and with greater economy by remoting more stations. We think that the secondary functions that the flight service stations have acquired over the years can be provided, where required, by alternate means and again with greater economy.

All of my comments are primarily concerned with those flight service stations located in the 48 contiguous States. It will undoubtedly take more time and effort to obtain alternate means for providing required flight service station services outside the 48 States.

There are four categories of services presently provided by flight service stations where the airlines have some interest. These are communications, weather, flight assistance—or dispatch service in airline terminology—and airport services. As I have already indicated, we think the communications services can be remoted.

The airlines have no need for the air-ground radio communications service provided for en route aircraft. The airlines have their own air-ground communications systems which, with the present widespread airline use of direct pilot-to-controller FAA communications, are adequate without the necessity of using the flight service stations.

The weather service provided by the flight service stations is divisible into the following specific types of service: distribution, observation, pilot weather briefing, and weather service for en route pilots. Certainly the airlines need a weather distribution system and this need is currently served by the teletype network operated by the FAA.

We also need many of the weather observations currently made by flight service stations, but we feel that in nearly every case alternate means of obtaining them are available. Ideally, the U.S. Weather Bureau should observe and report the weather at all locations where the need has been established.

At the present time Weather Bureau personnel are stationed at only about 250 of the 800 places where weather is being reported. The rest of the observations are made under cooperative arrangements with several groups. The military takes observations at about 100 airports, the flight service stations at about 230, and the airlines at about 220.

The airline observations are voluntary contributions as a part of the official Weather Bureau supplementary aeronautical weather reporting stations service known as SAWRS. Airline personnel are trained to standards set by the Weather Bureau which then examines and certificates them.

If weather observations are required at an airport where a flight service station could otherwise be remoted, the first step should be to see if circumstances justify a Weather Bureau station. If not, the

possibility of a SAWRS-type station should be examined. This is just what the FAA and the Weather Bureau are doing.

The remaining weather services performed currently by the flight service stations are primarily for general aviation.

The flight service stations also provide flight assistance or dispatch service. Under this heading I include the briefing of private pilots, the VFR flight following services, the emergency assistance to aircraft, and numerous other services provided general aviation by the flight service stations. Since the airlines have their own dispatch organizations, we, of course, do not need these flight service station services.

The fourth type of service offered by flight service stations is the airport advisory service. It is provided where a flight service station is located at an airport which doesn't have a control tower. In lieu of the flight service station providing this service, we recommend that the FAA look into the possibility of establishing a new type of low-cost, limited-service control tower manned by controllers.

Such a tower could provide a better service at approximately the same cost as a flight service station if the hours of operation, the services provided, and the equipment and structure are strictly limited to the minimum requirements.

The preceding remarks state very limited airline requirements for flight service station-type services. In saying that we do not have a requirement for a service we are not questioning general aviation's need for the service. On the contrary, from our knowledge of general aviation, several of the services currently provided by the flight service stations seems to be very worthwhile.

In summation, I have pointed out that the airlines have a very limited need for the services provided by flight service stations but we would not presume to judge the validity of general aviation requirements. In order to insure that valid requirements of all airspace users are met at the lowest cost, we suggest that each of the services which these stations presently perform be examined by the FAA and the users to see if the necessary facilities can be better tailored specifically to provide the required services.

If this is done, we expect that there could be a significant reduction in the number of communications stations and the additional stations, whether they be called flight service stations, manicoms, AIDs, or something else, would be quite different than the flight service stations we know today.

Thank you, Mr. Chairman.

Mr. WILLIAMS. Mr. Friedel.

Mr. FRIEDEL. I have no questions.

Mr. WILLIAMS. Mr. Devine.

Mr. DEVINE. I have no questions.

Mr. WILLIAMS. Mr. Harris, do you have any questions?

Mr. HARRIS. Mr. Jensen, you are primarily concerned with the service of commercial aviation, are you not?

Mr. JENSEN. Yes, Mr. Harris, we represent their interest, but I am sure if we confined our consideration to solely their interest we would be on the wrong track most of the ime. We like to take into account more than just a selfish interest.

Mr. HARRIS. I do not want you to think that I am implying anything, certainly not derogatory, but for the record none of these

stations that are to be closed would affect your pilots when they go in for their briefing and get read to take off, would they?

Mr. JENSEN. They would not affect the particular aspect that you identified, Mr. Harris.

Mr. HARRIS. In other words, your pilots would have all the services, that are being provided through these flight service stations, continued just as they are today?

Mr. JENSEN. No, sir; we do utilize today several of the services provided by the flight service station and probably the outstanding one is that we utilize fully the weather observations and reports that are made by the flight service stations.

Mr. HARRIS. When they start though, they obtain all this information from their starting point; don't they?

Mr. JENSEN. We start out that way, but we keep ourselves current en route as we go along.

Mr. HARRIS. Yes; that is true; but you get the basic knowledge and information about the entire flight from the start.

Mr. JENSEN. Yes, Mr. Harris; but some of that basic knowledge we start with comes from the flight service station when it observes the weather at downline stations. They are the ones who actually make the weather observations at some locations and put it on the weather sequences.

Mr. HARRIS. It is all channeled from the station where it starts from?

Mr. JENSEN. Yes, sir.

Mr. HARRIS. So they constantly get the counter-to-counter service and would continue to receive that service if these limited stations are closed.

Mr. JENSEN. Not unless alternate procedures are taken to provide for the weather reporting that the flight service stations now provide.

Mr. HARRIS. The point that I was trying to differentiate here is that the general aviation services are the ones primarily to be affected by this and not the commercial operations because, as I observed from looking at the list of the 42 to be closed down, not any of them are a starting point of a commercial service such as Houston, New York, Washington, or some other place of that nature, or Friendship, as Mr. Friedel says.

Mr. JENSEN. Mr. Harris, I think you are correct in your general observation. We would not be affected very greatly by the flight service station closing program. I am afraid I have not made it clear that even though we might start a flight from Friendship, if we are making a stop at one of these locations, and a number of the places that are on the list of 42 are served by airlines, we must receive the weather for each stop that we intend to make and the source of that weather at a number of these locations originates from the flight service station. It is then distributed back to the point of origin of our flight and that is where we get our information.

Mr. HARRIS. And that same information could be obtained just as well for your purposes by the consolidating of services that are channeled in.

Mr. JENSEN. No, sir. Weather service is one where there have not been technical means yet devised to remote the observation of the

weather. As I understand it, this is being worked on, but at the present time you have to have a man at the location to observe the weather.

In some cases, and preferably, we would like to see that be a Weather Bureau man. But in a lot of cases that I have mentioned, it is not. They don't have the facilities to cover all the airports where weather is needed. So flight service stations fill in, we fill in with our own people, but we must have a weather report.

The source of this is often a flight service station. I do not want to minimize that part of the effect, but neither do I want to challenge at all your impression that by and large, looking at all of the services that are provided by flight service stations, they are largely for general aviation.

Mr. HARRIS. The point is that you would not be affected to the degree that pilots would be affected in general aviation or private flying at a given location where they use this service.

Mr. JENSEN. That is correct, as far as flight service stations generally are concerned.

Mr. HARRIS. That is all.

Mr. WILLIAMS. Mr. Jensen, in regard to what the chariman has just mentioned, I believe you retain a dispatcher at every station where you have a scheduled stop, do you not?

Mr. JENSEN. Not a dispatcher, Mr. Chairman. We have a dispatch organization and they are essentially located more and more at airline major offices and then we have personnel, operations personnel, at nearly all the locations.

Mr. WILLIAMS. You have personnel who are available to observe local weather, do you not?

Mr. JENSEN. They can only observe the local weather when they have been certificated by the Weather Bureau. The rules require that we operate on the basis of weather sources that are approved by the Weather Bureau.

Mr. WILLIAMS. Would you permit your aircraft to go into a field where there was neither a flight service station facility or someone on the ground, one of your employees to report the conditions at that particular airport?

Mr. JENSEN. No, sir; I think the rules themselves would preclude that, that we could not operate into that airport.

Mr. WILLIAMS. There must be some reason for that rule. You have to have local weather observations in order to operate regularly in and out of an airport, do you not?

Mr. JENSEN. That is correct.

Mr. WILLIAMS. These services which are given to you by your own employees are the same services that are rendered to general aviation by the flight service stations, are they not?

Mr. JENSEN. I think the split runs about a third Weather Bureau, a third flight service station, and roughly a third airline personnel at the stations we serve as far as the source of the weather observation. It is roughly that.

Mr. WILLIAMS. Now, without your personnel and without the flight service station personnel, the rule prohibits you from flying into that field, does it not?

Mr. JENSEN. That is right.

Mr. WILLIAMS. Now, without the flight service station personnel the general aviation pilot is equally handicapped, is he not?

Mr. JENSEN. Yes, sir.

Mr. WILLIAMS. So that the flight service station acts in a sense as a dispatcher for general aviation?

Mr. JENSEN. In a general sense, yes, sir; not quite in the same sense as an airline but I think for the purposes you are talking about, yes.

Mr. WILLIAMS. You indicated in your statement on page 5, I believe it is, that you think that the seconday function that flight service stations have acquired over the years can be provided where required by alternate means at a gain of greater economy. What alternate means did you have in mind?

Mr. JENSEN. Mr. Chairman, I think this is a very important point and I would like to enlarge on it a little bit if I may.

Mr. WILLIAMS. I would like to hear it.

Mr. JENSEN. The present situation is that the flight service station is established on the basis of a communication need primarily and then, wrapped up in the same package that a flight service station is, are these other services. So, you may well have a strong need for additional airport advisory information at an airport but if there isn't the initial communications need, you may not get it.

You may have need for the briefing of private pilots at an airport, a strong need, and yet unless there is a flight service station established, based primarily according to present FAA practices on communications requirements, you won't have it. I would like to suggest that we look into these various needs individually by airports and, if time permits, with FAA, and find out where it is that general aviation needs pilot briefing, find out whether it is safe to do it by telephone. We are finding out that our dispatch organization and the airlines does most of its briefing and debriefing by telephone these days.

If it is safe, I think we can save some people in FAA and cut the cost and still provide the service. Let us look where all the other services——

Mr. WILLIAMS. I think one weak point in that argument is to be found. I quite agree this is something that should be looked into with a view toward trying to effect economies without reducing services. However, there is no basis for comparing airline operations with general aviation operations, in that your equipment is superior to general aviation equipment, your pilots are better trained, and you have all the navigational aids, you have ILS glideslopes, you have DME, you have localizers, you have radar, you have other equipment on the aircraft.

Whereas, the little fellow in a Cessna 172 may be sitting up there trying to get his information and trying to get into a field which may have local adverse weather conditions prevailing. Now that is the fellow that we are primarily concerned with in these hearings, the little fellow with 40, 50, 60 hours of experience and limited equipment in his aircraft.

Do you see that there is a definite need for services to take care of this fellow? Do you feel, in other words, that this man can get proper briefing by telephone equally as well as he can in person?

Mr. JENSEN. I think he can be briefed by telephone equally as well as he is in person. I think the service could be provided to more pilots

and extend the service by doing it that way. Secondly, I am informed that most of the pilot briefing that is now done by flight service station is done by telephone. If you want the figures, I think FAA might speak better to that point. I might also say, Mr. Chairman, that any one of us who has ever known an airplane, and you will certainly appreciate this, yourself, has been in a situation one or more times in his career when he wanted desperately to have somebody on the ground who was on his side. I have been in that situation and I am sure you have.

Flight service station fills a certain need in that respect. I do not want to disparage that need at all. I think that general aviation needs certain of the services. I don't think they are getting them in an organized way in terms of where they need them. I think it has been a somewhat patchwork kind of arrangement that there happened to be a flight service station at a location because of the communications background and then they picked up certain services.

I think a good look at that whole situation would provide and fill the need of general aviation. Our needs are minimal but I do not want to disparage the general aviation needs. I think it can be done better and provide the service that they legitimately require and probably do it at lower cost than can otherwise be done by considering only flight service stations.

Mr. WILLIAMS. I think you have made a very constructive suggestion. I hope that the Agency will give serious consideration to these suggestions. Now, you indicate that in 1950 there were 464 flight service stations in operation. Do you have any idea what the budget of the Civil Aeronautic Administration was in 1950?

Mr. JENSEN. No, sir; offhand, I don't.

Mr. WILLIAMS. Was it greater or lesser than it is now?

Mr. JENSEN. Just on general principles, I would assume it was lesser.

Mr. WILLIAMS. Now, they reduced the number of stations from 464 down to the present 297. Do you have any basis of comparing the cost of the operation of the flight service station in 1950 and what the present cost of operation may be?

Mr. JENSEN. No, sir. The only figure I looked up in preparation for this was to try to find out what the aggregate cost of the flight service station is and the last available figures, putting together all of the cost, the operation, and facility cost, it seemed to run in the neighborhood of $75 million in the latest budget figures available.

Mr. WILLIAMS. It seems to me that if we reduced from 464 to 297 in the last 10 years during which time the budget of the Federal Aviation Administration has skyrocketed, a further reduction might run it completely out the ceiling.

Mr. Jensen, I don't believe I have any further questions. The time is 5 minutes until 12.

Mr. Halaby, would you be available at 1:15? Does that give you enough time?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. The committee stands adjourned until 1:15 this afternoon.

(Whereupon, at 11:55 a.m., the committee recessed, to reconvene at 1:15 the same day.)

AFTERNOON SESSION

Mr. WILLIAMS. The subcommitte will be in order, please.

Before we call on the Administrator, we have another Member of Congress here, our colleague from the State of Montana, Mr. Battin. I believe you have a statement, Mr. Battin. We will be very glad to hear from you.

STATEMENT OF HON. JAMES F. BATTIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MONTANA

Mr. BATTIN. Mr. Chairman, I am James F. Battin, representing the Second District of Montana.

I understand that the Federal Aviation Agency proposes to close a number of flight service stations which, I presume, would include one or more such stations in my district.

You will hear objections from various aircraft owners, pilots, and their association, especially those not equipped with the more elaborate, sophisticated, and expensive navigational aids.

I happen to be one of these, or was until recently when I sold the small plane I had used in covering one of the largest congressional districts. There are many small plane owners and operators in the eastern district of Montana including flying farmers and ranchers who generally are low-altitude, visual-flight-rule pilots.

Flight service stations are by far the biggest aid to this group of VFR pilots who account for about 10 times the IFR or high-altitude traffic.

A group from Montana, including our Governor, was here a few months back to protest the proposed decommissioning of 3 low-frequency radio facilities at Livingston and Lewistown and Whitehall and 35 airway beacons. They pointed out that the low-frequency radio homers were in many cases the only facility available to a flyer without VHF equipment. Also, that the omnirange is of no value to low-altitude aircraft after they cross mountain ranges in certain areas of the State, such as the ranges adjoining Lewistown.

FAA rescinded its proposal to decommission the airway beacons but still has the matter of discontinuing the low-frequency radio range facilities "under advisement."

I have had many letters from private pilots emphasizing the advantages of such aids as the manned flight service stations because of the particular terrain and fast-moving weather across our mountainous areas. In fact, one of the big objections in "remoting" these stations from another facility would be in the reliability of the weather information from a remoted station. I understand that such weather information would then be obtained from someone like a storekeeper or housewife who, I presume, would take a correspondence course in weather reporting.

Two years ago, FAA advised the county officials of Beaverhead County, Mont., operators of the Dillon Airport, that building facilities at the airport were not adequate for the manned FSS there and they had to have a new building. The county at the time was not financially able to build the facility and asked the State for assistance which they got. A new $80,000 State-financed building was completed late last year. FAA signed a 10-year lease contract contingent on congres-

sional appropriations, in January of this year, but the FSS is still operating 5 months later in the old building. No one has actually been told that the Dillon FSS will be remoted but neither have they made any effort to move into the new building built especially for them.

A copy of a letter from FAA to another airport manager in Montana does say that the VHF/DF program has been temporarily halted. This action was taken until more definite plans were established for the future role of flight service stations and, the letter concludes, that "service implementation dates previously stated have been canceled and the entire program is under review." So the State of Montana may have a brandnew $80,000 vacant building on its hands. And this is the only manned station between Butte, Mont. and Idaho Falls, Idaho, quite a stretch, even in that country.

Mr. FRIEDEL. How far is it between those two airports?

Mr. BATTIN. I would have to guesstimate it would be somewhere between 250 and 300 miles.

Another airport operator wrote that he was afraid they might remote Lewistown, Havre, Glasgow, and Cut Bank to Great Falls leaving the whole northeastern area of Montana without VHF/DF facilities. He noted that there is a limit to the number of VOR's, remote communication outlets, and interphone lines that can be efficiently operated from a single location and that he had found, as I have too, that the poorest service often comes from the larger stations which are too busy to give an adequate briefing. And much of the over-the-counter briefing would no longer be available and this includes a pictorial presentation of the weather, assistance with route planning briefing on terrain features and sometimes valuable tips on the operating characteristics of the particular aircraft in the existing environment.

Familiarity with terrain features in a station's flight service area is a very important factor in furnishing emergency assistance to pilots in trouble. For instance, weather data of the mountain area to the west actually observed by Cut Bank FSS personnel could be many times more valuable than the "guess" an observer at Great Falls could make from more than a hundred miles away.

I would like to see a thorough study and evaluation made of each particular facility before such a facility is remoted to another station, particularly in terrain such as that in Montana.

I would like to add one further thing, Mr. Chairman, and this goes I think directly to the problem of our defense posture in this country. When the question came up of eliminating or discontinuing the low frequency range at Lewistown, Mont., I solicited through proper channels from the 341st Combat Support Group, at Malmstrom Air Force Base in Montana, their opinion as to the need for the low frequency range at Lewistown which is basically in the center of the State of Montana.

I received a copy of a letter written by Col. George Budway, who is the base commander at Malmstrom Air Force Base, written to Lt. Col. George M. Watrous, in Kansas City. It is a short letter. I have only this one copy. I would like to read it in the record:

I have recently learned that the Federal Aviation Agency is decommissioning the low frequency radio range at Lewistown, Mont. Owing to our extensive air

operation in the Lewistown area, I urgently recommend that the facility be retained as a low-frequency homer. The basis for this recommendation is as follows:

(*a*) Since July 1, 1963 we have flown an average of 3 to 5 C–47 aircraft per day 7 days a week into the Lewistown area.

(*b*) We have averaged between 5 and 10 flights per day to this area in helicopters whose navigation equipment is limited to the use of this type of low-frequency homing or range facility. There is no foreseeable reduction in our use of the Lewistown area for direct air support of the 341st strategic missile complex. Closing down the Lewistown low-frequency homer could impair our capability to perform our mission.

That is the end of the letter. The mission that they have there, of course, is to take care of the moving of personnel and equipment into the Minuteman missile complex, some 150 missiles that are buried through that particular section of the State.

Again, a good reason for taking a separate look at each facility rather than making a blanket policy of closing down a given number throughout an area. Again, where policy is being made here I feel that the policy should be an examination of each separate facility rather than the blanket meat-axe approach to any number of them.

Thank you, Mr. Chairman.

Mr. WILLIAMS. Mr. Friedel.

Mr. FRIEDEL. What would be the nearest station from Lewistown?

Mr. BATTIN. The nearest station would be almost directly between Great Falls, Mont., and Billings, Mont. Actually the closest station would be Great Falls.

Mr. FRIEDEL. What would we the distance?

Mr. BATTIN. I would say probably in the neighborhood of a hundred miles. Here again we are dealing with a terrain situation. Lewistown is located in a mountainous area. It is on the back slope or north slope of the mountain range. All through the State you find this very complicated problem. The district I represent, for example, is about 100,000 square miles. When you get into one section of the State, even with the low-frequency range, it is almost impossible to pick it up so that we have great distances that we are talking about.

Weather can move across the State at a tremendous speed, and you can take off from an area expecting good weather and run into squalls that develop around the mountains. And without having proper and adequate information—particularly as it pertains to the weather, and if you get into weather, being able to home in on a station—it could very easily cause the crash of the aircraft.

Mr. WILLIAMS. Congressman Battin, the purpose of these hearings is to inform the committee on the present and future role of the flight service stations. The problem that you have with respect to the low frequency homer, of course, is unrelated to this except as to the availability of information to the pilot.

You have indicated that you have been, I presume, a private pilot, and have flown light aircraft over the State of Montana. In the list of service stations that are scheduled to be closed, I don't see any in the State of Montana. Do you take a position in opposition to the closing of the 42 flight service stations, none of which is in the State of Montana?

Mr. BATTIN. Yes, I do, without a separate study being made concerning each one. Because if there are 42 now across the United States and being remoted to other areas——

Mr. WILLIAMS. Whether a station in Montana is the next station to go, we don't know.

Mr. BATTIN. Yes. I am pleased to report that any dealings that I have had or my office has had with the Federal Aviation Agency have been most cordial. When we raised the problem about Lewistown, Mont., they were very quick to respond. The station has not been dismantled. It is under study. I think they are making a realistic approach to a very complicated problem of handling the many people who journey into the area every day.

Mr. WILLIAMS. Mr. Friedel.

Mr. FRIEDEL. No questions.

Mr. WILLIAMS. Thank you very much.

Mr. BATTIN. Thank you, Mr. Chairman.

Mr. WILLIAMS. Our next witness is the Administrator of the Federal Aviation Agency, Mr. Halaby.

Mr. HALABY. We are glad to have you before the committee. I hope you can enlighten us with respect to some of the questions raised by the witnesses thus far and perhaps questions that will be raised in testimony to follow. We commend you for your efforts in reducing the cost of the operation of the Agency and also in seeking at the same time to maintain the present or an improved level of service. Of course, the question of whether the action that is presently contemplated by the Agency will accomplish either at this point is moot, insofar as this committee is concerned, and that is the purpose of holding these hearings.

We welcome the testimony that you are going to give the committee.

STATEMENT OF N. E. HALABY, ADMINISTRATOR, FEDERAL AVIATION AGENCY; ACCOMPANIED BY LEE WARREN, DIRECTOR, AIR TRAFFIC SERVICE; D'ARCEY HARVEY; AND WILLIAM ANDERSEN

Mr. HALABY. Thank you, Mr. Chairman and members of the committee, first, if I may, I would like to introduce Mr. William Andersen, who is counsel for this hearing to me, Mr. Lee Warren, Director of our Air Traffic Service, and Mr. D'Arcey Harvey, his associate, as those who will back me up on questions that I can't answer.

We have today the role of the flight service station as part of a system for the safe and efficient utilization of the airspace before this committee. These hearings provide us an opportunity to share with the committee, the other witnesses, and the public some of our thinking and planning on these matters and will allow us to get the response of others to our specific flight service station program which I will describe in a few minutes.

I sincerely appreciate the opportunity to join with your committee in considering this program.

I find myself, Mr. Chairman, in between, and I hope out in front of charges that we are serving private preferences and personal convenience on the one hand and, on the other hand, charges that we are countenancing a Government neglect of safety. We do not want to be guilty of either charge. We want to seek and find a public interest.

I find myself between the airlines on the one side and the personal and private pilots on the other side. Beyond that, the Appropriations Committees, and I will submit in the record what they said in their

two reports with respect to last year's appropriations, have admonished me to specifically reduce in this area.

If I may mention that to the committee, it will better understand the action of the Agency. This is the House independent offices appropriation bill, 1964, report.

Mr. WILLIAMS. May I ask for clarification? You mention that you find yourself between the airline and the private pilots. What do you mean by that statement?

Mr. HALABY. One would have me cut the budget one way, and the other would have me cut it another. In that respect we are between.

Mr. WILLIAMS. Do you plan to elaborate on that in your statement, as to which way the airlines would like to have you cut and which way the general aviation people would like you to cut?

Mr. HALABY. I can, if you wish, go into this in great detail.

Mr. WILLIAMS. The reason I ask that is that I have some difficulty in reconciling differences in purpose or conflicts of interest in the airline and general aviation operations that might have a tendency to put you in the middle.

Mr. HALABY. I will be glad to share that experience with the chairman because I have it constantly. It is just a fact that we have three broad categories of interests in this aviation community, military, the air carrier, and the so-called general aviation. They vary and they differ. One would enlarge the budget here and cut it there; another would cut it there and enlarge it here. I am just saying that we are trying to find the public interest between these trade and personal preferences.

Mr. WILLIAMS. That is a responsibility which you have as Administrator.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. I hope you will elaborate on those differences as we go along this afternoon.

Mr. HALABY. I can give you an example right now.

Mr. WILLIAMS. Such as reducing the controlled altitude from 24,000 to 18,000?

Mr. HALABY. The military and air carriers are anxious to see us reduce the controlled airspace in most areas of the United States from 24,000 to 18,000. Most of the private pilots do not care, but those who do, feel very strongly that this should not be done. I think it is fair to say that the air carriers would like us to reduce the number of air transport inspectors who are flying with their pilots. They think it is unnecessary. Perhaps on that point the private pilot would agree.

The point here, however, is that you are in a competitive situation and an arena of conflicting interests, and we are trying to find the middle of the high road, if you will. I think we have found it in this area.

I want to point out, however, that the witnesses this morning are also Members of the House who voted on the appropriations bill containing the language which I am about to read, in which the Independent Offices Appropriations Committee said:

The committee suggests that the Administrator give further study to the location of flight service stations. It appears that there are too many and that they are too expensive, but it realizes he has problems in trying to close some of them although substantial savings would result.

The Senate Independent Offices Appropriations Committee report, 1964, states, and I quote:

> The committee also agrees with the House committee's proposed reduction in a large number of flight service stations. It urges the Administrator to proceed with the reduction and consolidation of these manned stations. Their reduction should be based solely on their essentiality for safety.

Mr. WILLIAMS. You are reading from the report of the committee which accompanied the bill and not the bill itself?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. These are recommendations of the committee?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. And are not passed on by the House or by the Senate?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. I just wanted to make that point clear because, the first statement would indicate that the language was approved by the House and Senate.

Mr. HALABY. I did not intend to infer that, Mr. Chairman. The report was before the House. There was debate on the bill.

Mr. WILLIAMS. I am not denying the language. I am just trying to set the record straight on just what this language is that you have read to the committee.

Mr. HALABY. Yes, sir.

I think one of the most encouraging things about this testimony we have heard and the correspondence and hundreds of suggestions we have had regarding this program is the almost universal compliment to our personnel: the fact that they are wanted, they are needed, and they are complimented by all those who seek to prevent any change in the present situation is a very rewarding and reassuring point. The fact is that these men in these flight service stations have a remarkable record of increasing productivity. Their output per man per day has been going up steadily. We feel that with the rapid increase in the number of services they provide that this is very encouraging.

Furthermore, they have voluntarily often provided services that were authorized but not directed. For example, at many of these airports what is being complained about is that a flat tower will be taken away from the airport. It is not that there is any failure to appreciate that by consolidating two stations they will get the same service in the air. What they want is tower service on the airport itself, even though they do not have enough operations to justify our building and manning a tower.

So, these men are also to be complimented for going out and volunteering and offering services.

It is also a fact that the agency itself has, knowing these men are there, added to their opportunities to serve and that, too, would be missed if they were closed down.

Going back to the text, I would say that our aim in FAA is safety with economy. The principal business of the FAA is air safety and public protection. This is the business Congress has authorized us to conduct, and it is a body of responsibilities the public relies on us to meet. Both the Congress and the public, too, expect the business to be conducted in an efficient and economical manner.

The goal of economy, while not specifically identified in the Federal Aviation Act, as is the safety goal, is an implicity goal of any agency

conducting a portion of the public's business. We have all heard cries for economy. We have been hearing, "Economize, but not here." We also are getting some anticipatory reaction. For example, the previous witness, as the chairman's question pointed out, was not referring to any announced action by the FAA. He was concerned about a possible future action in his district.

Mr. WILLIAMS. While you are at that point, have these additional stations been announced or is that something that is in the gossip or rumor state?

Mr. HALABY. Mr. Chairman, the only stations whose consolidations have been announced are the 42. A lot of associations and publicists have published their own lists, many of which I have never heard of and know nothing about. We have not decided on any other list than the one we have published. I think in the West, from which I once came, we call this a backfire. It is something that is heating up. If you build a backfire to contain a conflagration, it is a very good defensive measure.

So I think there is a lot of anticipatory work which has gone on here, and I think it has properly become the concern of a number of people but unnecessarily.

Mr. WILLIAMS. Do I understand that insofar as your plans are concerned they do not go beyond the 42 stations?

Mr. HALABY. No, sir, that is not the proper inference unless we are directed by Congress to do so.

Mr. WILLIAMS. Then I would take it that the previous witness' apprehension might be well founded.

Mr. HALABY. Well, actually, I couldn't tell which of the flight services stations we maintain in that area he was concerned about, but it was obvious that someone had indicated to him that someone in the FAA was thinking about consolidating one of those stations.

Mr. WILLIAMS. Is that true?

Mr. HALABY. Well, sir, I guess I can't answer for my 45,000 colleagues as to who thinks what about which station. I should tell you that our technical men, the men who don't care about economics or politics or anything else, believe this job could be done with one-third to one-sixth of the present stations.

Now when they make that technical objective analysis concerning all of the features, the add-on, the supplementary features that the flight service stations have accumulated over the years, they are just thinking almost entirely of a network of communications for safety across the United States. So, they can see remoting them and consolidating them all over the country and waiting for the airport traffic to buildup to provide a tower when the traffic calls for a tower.

So, within the FAA there has been a healthy discussion about the least number and the largest number, and I believe that when we present the principles on which we will go forward in this program, unless directed otherwise, you will see that we struck a pretty good medium.

Mr. FRIEDEL. At no time was the safety disregarded or weather reports disregarded, saying it does not matter?

Mr. HALABY. Mr. Friedel, if I thought that any derogation of safety had occurred in the consolidation of these stations, I would reverse it at once. For example, there are 42 of these stations. I think in

implementing our program that there are about four or five of them that we have had to take a good hard second look at, and we may very well have made a mistake in putting them on the original list. If we have made a mistake, after detailed and specific examination, we certainly want to correct it.

If you will recall when we closed 8 out of 29 air route traffic control centers, one of those was alleged to be a mistake. We looked into it very carefully; we have reconfirmed our data and we have gone ahead with the consolidation of that station as well.

So, we are devoted to providing the essential safe services. That is our purpose in life. That is why this is a 24-hour-a-day job. If we make a mistake in that respect, or if we appear to be making a mistake, we hear about it, and we try to correct it, reversing ourselves if necessary. We have had some extended discussions with Congressman Clausen, who feels we made a mistake in Arcadia, Calif., and on the basis of a full review of that problem we do not now intend to close out that station. We intend to provide services there, perhaps not the kind he wants, but services there that would not have been possible had we completely closed out the station.

Mr. WILLIAMS. Does that reduce the figure down to 41?

Mr. HALABY. Sir, if I can finish our proposal, I think you will see how the 41 stations are affected. But at the same time I hope the committee will not request a place name by place name analysis and get into what could be quite an interesting discussion as to each location.

I think there were one or two of the members of the committee who were here 10 years ago when some other heedless administrator attempted to reduce the number of flight service stations. At that time a proposed reduction was made, and as a result of committee action, he was told not to proceed with the consolidation. I hope that the committee will not think it necessary to do that this time, but I believe that is the aim of many who will appear before you because they want to retain the status quo.

Our aim here is neither to close stations for the sake of closing them nor retaining the status quo. We are trying to find a subsystem of our national airspace system and build it upon the present structure of flight service stations. If I may, I would like to get to how we propose to do it.

If the chairman will, I think many of the arguments we have heard are about economies in the FAA but not in the flight service stations. It is as though we had picked out one area for our economy. I think if we are to remain responsive to the growth in aviation, we must be constantly searching for qualitative measures—for means of meeting the problem with more efficient, more economical measures.

Now, we have been doing that, and during the past 3 years we believe we have accomplished major economies without impairing safety or the level of services to the aeronautical community. In our 1965 budget request we have reversed the growth trend in FAA staffing and appropriations without altering the trend of improved services. Our total 1965 program called for almost 10,000 positions and $150 million less than would be required if we were operating on the basis projected in 1961.

These savings have been accomplished by several major operating and management improvements without any known derogation of safety or services. For example, we will be completing during 1965 a center consolidation program which will reduce the number of centers in the domestic United States from 29 to 21 with annual savings of $7 million and 540 positions. We have also reduced our Washington headquarters positions by 16 percent, 610 positions, with annual savings of $5 million. I know of no other department or agency who can claim that in the past 6 months.

At NAFEC we have reduced the complement by 248 positions and are in the process of reducing contract personnel by some 220. These changes will involve $2½ million savings per year. By combining our technical communication services with those in the Department of Defense, savings to the Government of $5 million have developed, about half accruing to the FAA.

Similarly, FAA/DOD coordination of radar installation and operation has produced savings of some $64 million in equipment, procurement, and installation and today 20 FAA and 28 DOD long-range radars are being used jointly with 5 additional military radars scheduled for joint use by June 30, 1964.

We hope that our flight services program will be another of these qualitative measures fostering both safety and economy by permitting a more discriminating application of our resources to the problems the public has put in our charge.

I should begin by describing what a flight service station is, and the role it presently plays in the total air traffic system.

Flight service stations came into being in the early 1930's as aeronautical communications stations. First, they provided a communications link between the air and ground, and later served to relay information and instructions between en route IFR aircraft and traffic controllers. Communications technology has now virtually obviated the latter function. A direct means is now provided for IFR pilot-controller communications through our air route traffic control centers. The flight service stations, however, continue to provide basic en route services to VFR aircraft. These basic services include air-ground communications, weather communications, monitoring facilities, pilot briefing, military flight service, handling flight plans, direction finding, flight assists, and the like.

While performing these basic en route functions, flight service station personnel located at airports have expanded their activities to include a variety of terminal services. These local services include weather observations, airport advisories, face-to-face briefings, monitoring airport lights, and so forth.

Mr. WILLIAMS. Mr. Halaby, isn't that the chief point at issue here?

Mr. HALABY. Yes.

Mr. WILLIAMS. The problem posed by reduction of these stations is reduction in airport terminal services by FAA to private pilots and general aviation.

Mr. HALABY. We think that is the problem.

Mr. WILLIAMS. Do you feel that is a necessary service?

Mr. HALABY. It is a very desirable service and should be performed by someone at the lower traffic airports and by the Federal Aviation

Agency at those airports where a sufficient amount of traffic is generated to justify the use of Federal money and Federal manpower.

As the chairman I believe is fully aware, there are about 8,000 places to land an airplane in the United States. Perhaps 600 of them are used by air carriers. Perhaps 75 of them by jets and soon more as the 727 comes into being. At those 8,000 airports, however, we maintain less than 300 towers because we require that there be 24,000 itinerant operations per year at an airport before it is entitled to have the Federal investment of a tower.

Yet, at some 297 stations there is, at most of them, not all of them, a window in the flight service station from which the communicator can see the airport runway. When he is not engaged in en route communications or accepting flight plans, which are his primary duties, he may give airport advisories. As Mr. Jensen pointed out, he is not a controller, he is not authorized to control traffic on the airport, but in many locations he doubles, he volunteers, he supplements his regular services by providing the wind direction, velocity, and visible conditions.

This is a fine thing as a supplementary duty, but for many it has become the primary and most familiar function provided by the FAA there.

Secondly, the weather observation by this same station has been valuable, and of course the FAA is doing this as an agent of the Weather Bureau. The Weather Bureau has other agents that it uses to take weather observations. One of the witnesses rather derisively referred to a correspondence course. The Weather Bureau does license individuals to be weather observers, they do give them training and checking, and of course this is not the most sophisticated kind of task for an individual to perform. We have hundreds of people authorized to take weather observations and report them, and I believe most of them do it very well. There are many private individuals authorized and funded by the Weather Bureau to do this.

So, in direct answer to your question, you can get the same airport advisories through a Unicom operated by the fixed-base operator or the airport manager. In fact, among the 8,000 airports that is where most of the airport advisories come form, at the smaller fields. And you can get weather operations.

It is not like the Post Office, which gets a country store or a drugstore manager to be also the postmaster or postmistress. It is not quite like that, but the same idea is in effect now at many places.

Another point I think made by one of the witnesses was that the tower controllers are so busy that they should not be called upon to make weather observations. At certain places, at certain hours, I think that is a valid comment, but at most places, at most hours, it is perfectly proper and possible and effective for tower controllers to make weather observations. In fact, they are doing it all the time, and they have that function when the weather gets below a certain level; they are required to do it.

So, I think that although perhaps the controllers association would not like to add to the workload all across the country at all hours, the fact is that we have an unused capacity for weather observation in a large number of places and that is why we and the Weather Bureau have been working for months on a more efficient weather observing

and reporting system to make use of all the Federal employees involved in both agencies.

Mr. WILLIAMS. That brings me around to another question.

I hope that in your discussion you will define, insofar as that may be possible, the role of the Weather Bureau and the role of the FAA employees in a combined station, where both the Weather Bureau and the flight service stations are located together. What responsibilities fall upon the Weather Bureau people and what responsibilities fall on the FAA people? I know that quite often when I go into a station to get briefed, I do not know whether I am talking to an FAA man or Weather Bureau man. Just what are their duties in a station of this type, and how are they divided? Is there any reimbursement from one agency to the other for services rendered as between the two functions? It seems to me that some of these operations are a sort of hybrid nature and it is not too easy for me to distinguish the responsibilities between the two. Perhaps you can clarify that for us.

Mr. HALABY. I will try to do so.

Mr. Lieurance of the Weather Bureau is here and as I understand it will be called soon to speak from the point of view of the Weather Bureau. I think to a pilot seeking weather information these two men are dressed alike and talk alike and have basically the same interest, but the Weather Bureau personnel are there primarily to observe and report and analyze the weather, and then report their synopsis or their synoptic map of the weather as they see it and as they forecast it.

Whereas the air traffic controller or the FAA communicator is there largely and primarily to communicate to the crewmen the weather conditions as they are and as the Weather Bureau has forecast them to be.

Second, to separate traffic, and third, to forward and compare flight plans of the civil and military aircraft in the area.

The Weather Bureau does not man the microphone except under the most unusual circumstances, but they do provide the man on the microphone, whether he be a communicator or controller, with the information which he passes on. So, briefly, the Weather Bureau man observes, analyzes, forecasts, reports. The controller and the communicator, where they are both in the same Federal facility, communicate that data and use it in the control of air traffic.

Now, where there is no Weather Bureau station, and under delegation from the Weather Bureau, the communicator may do both, except that he does not analyze the weather, he does not prepare the weather maps or make the forecasts. He observes and reports. He does not analyze on forecast. Now there may be a lot better way to describe that, but it is pretty hard to tell these people apart where they are colocated because they work that closely together 90 percent of the time.

Mr. WILLIAMS. Is it possible that at many of these stations the FAA might handle more of the Weather Bureau's functions at a saving to the Weather Bureau budget, for instance, since it all comes out of the Government's pocket anyway?

Is there a policy that would allow us to delegate more of the responsibility to some of the FAA personnel in order to make the savings in the Weather Bureau personnel?

Mr. HALABY. We have been seeking that kind of savings, and we have been finding it. There is not only a saving in money, but there is a prevention of the miscommunication that can exist between two agenices and two different employees of two different agencies, and we are very grateful to Mr. Lieurance and his staff in working with us to try to eliminate that.

Now this list of 42 stations had to be very, very carefully worked over by both the Weather Bureau and the FAA, because it made no sense whatsoever to claim credit for savings in FAA, knowing that the day after we moved out, the Weather Bureau personnel would have to move in. So, I can assure you that with respect to those stations we have carefully worked it out with the Bureau and that the net savings that we have stated were after netting out any important cost, if any, the Weather Bureau will incur.

Mr. WILLIAMS. In that regard, was the Weather Bureau consulted prior to the announcement of the selection of these 42 stations?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. In regard to each of the stations?

Mr. HALABY. It is my understanding that we consulted with them over not only these 42 stations but many more that are under consideration for consolidation. We are still in very close touch with them about every step of the program, and before actual closing or consolidation or relocating takes place, we will have a specific action plan that involves action on the part of both FAA and the Weather Bureau.

As you know, Mr. Chairman, this is all talk so far. Nothing has been closed. Nothing has been relocated. Nothing has been consolidated. After receiving Chairman Harris' letter, nothing went into reverse. So the action pending, involving savings each day, has been held up and will continue to be held up until we have given all of our information, until this committee has considered whether or not we are moving in the right direction. So, this has been in a sense all anticipatory.

Mr. WILLIAMS. In other words, the gun is loaded, cocked, and aimed, and all it is waiting for is the trigger to be pulled?

Mr. HALABY. The savings are within reach, but the hand is stayed.

Mr. WILLIAMS. Would you prefer to go ahead and conclude your statement before we get into any further questions? I suspect this will generate quite a number of questions.

Mr. HALABY. I think it will, Mr. Chairman. I have tried to be ready to answer them. As I have looked over the next 9 pages of beautiful prose here and observed the great knowledge of the members who are present, it occurs to me that you would probably just as soon have me put this in the record and go to some charts about where we are going from here, which I think is of greatest interest to the committee.

I will read it, or highlight it, and go to the charts, if you wish.

Mr. WILLIAMS. You may proceed as you wish, Mr. Halaby.

Mr. HALABY. Mr. Chairman, I think if I could put the whole thing in the record and just strike a couple of highlights, beginning at the bottom of page 6, as to what we are planning to do subject to all the higher authorities to which we must respond.

Approximately 150 present flight service station locations will be selected from the existing system on the basis of rank order of flight services, with some adjustments to insure that adequate spacing is maintained. We are thinking in terms of a minimum of 100 miles between stations to insure an adequate communications network with direction-finding capability. These stations will become the hard core of the system, operating around the clock, 7 days a week, and handling all the present en route navigation and communications functions being performed today by the full system, plus, of course, the normal terminal services these 150 stations now perform in their localities.

The staffing at these stations may need some augmentation, and there will be some nonrecurring expense in installing the equipment necessary for the remoting operation. But there will be a substantial net operational savings to the Government with no reduction in the quality of en route services.

Two new kinds of limited facilities will be tested to handle terminal services. The first is a one- or two-man facility we have come to call a manicom. This facility would be a kind of manned satellite of the nearest full-time flight service station. The manicom would have weather observation equipment, service A weather teletype (receive only), telephone lines to its parent station, a radio for contact with local aircraft and the usual complement of manuals, guides, and forms. The flight service specialists at the manicom will take weather observations, provide airport advisory service, conduct pilot briefs, accept and close VFR flight plans, and the like.

Mr. WILLIAMS. Will these be FAA employees?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Full time?

Mr. HALABY. Yes, sir. Well, they would be full-time employees. The station would not be manned full time.

While it was in operation, the manicom could thus provide a full range of terminal services of quality comparable to those presently performed by existing flight service stations. As a hypothesis for testing, the facility would be in operation from 40 to 84 hours a week or even longer, depending on the time-activity curve for the particular location, the degree to which we might be able to work out a kind of "mutual assistance" program with the airport operator, and any other quality of the individual location which needs to be considered. The basic principle here, as throughout this system, is to tailor the service to the actual needs of a given location—not too much, not too little—with self-help and cooperation from the local community as an important part of the total effort.

The manicom was designed to serve public-owned airports which are losing a full-time flight service station and which have a substantial activity level. The manicom might also be employed at locations where the weather network requires a facility with these capabilities.

In addition, we are exploring the possibility of extending manicom service to locations not now served by any Federal facility if the activity level and aid to safety is really significant. We have been thinking of these new facilities as the initial manned Federal facility at public-owned airports which may ultimately qualify as candidates for traffic control towers. Before the activity at such a location

reaches the level needed to qualify for a tower, the manicom may prove a useful and economical service.

The other limited facility to replace remoted flight service stations is an unmanned flight planning desk we have been calling an airport information desk (AID). This will depend on local self-help and mutual aid. The installation would include weather observation equipment where the local operator agrees to do some rudimentary weather work for local pilots, service A weather teletype if needed, telephone service to the parent flight service station and the usual collection of current guides, manuals, directories, and forms.

A pilot departing from an airport equipped with an AID would be able to get basic local weather information, detailed weather information, over his route and at his destination from the teletype, and from discussing weather with the flight service station in the vicinity by telephone. He would be able to file, and the arriving pilot would be able to close VFR flight plans with the flight service station.

This AID would, of course, be available to pilots whenever the airport is open, and we believe it would provide pilots with all the basic data needed to plan a flight, plus an opportunity to discuss the information by telephone with an FAA flight service specialist.

AID service was designed for all airports losing a flight service station where the terminal activity is not sufficient to justify the cost of a manicom.

If the manicom service can be extended as I have suggested to non-flight-service-station locations not yet qualifying for an FAA tower, AID service could provide a third level of service at non-flight-service-station locations, where activity does not justify a manicom. As in the extension of the manicom program, the principle is to perform a new and useful service at a minimum cost. If we placed these facilities at airports where they were warranted by the activity level, the service could be inaugurated at a considerable number of locations not now served by any Federal facility.

I believe if I can just hit another high spot or two, we could then go to these charts, Mr. Chairman.

It is also worth noting that the cost of operating the airways system which can be reasonably allocated to general aviation is about $150 million annually. Through fuel taxes, general aviation pays the Federal Government about $7 million annually and under the administration's modest user charge proposal, now before the Congress, the charge to general aviation would be boosted to only $10 million.

Now, we think that the flight service station program outlined here would give a little more service and still enable us to save somewhere around 500 to 600 jobs and about $3 million over the present system.

Mr. WILLIAMS. How do you arrive at that figure, Mr. Halaby?

Mr. HALABY. Which figure, sir?

Mr. WILLIAMS. $3 million?

Mr. HALABY. That would be the net savings after consolidating, setting up the manicoms and the AID desks.

Mr. WILLIAMS. That is after setting up the manicom's, after setting up the AID stations, after transferring the families from one place to another?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. After leasing the communications systems and after any construction that might be necessary. Now how much is the rest of it going to cost?

Mr. HALABY. The higher costs are in the lines from the old flight service station outlets, the remoting lines, to the new flight service station—hard-core station. That is the big cost in those lines back and forth. We think the total of all nonrecurring costs in 1 year would be in the order of $6 to $7 million. We would save about $3 million a year, so we would recover our capital outlay in about two and a half years.

From then on, in the third, fourth, and fifth year we would be on an annual savings of about $3 million a year.

Mr. WILLIAMS. In other words, you are going to have to spend $6 to $7 million in an initial outlay to save about $3 million a year?

Mr. HALABY. Yes, sir.

That, of course, is an extraordinarily quick recovery of a capital cost for any businesslike operation.

I might say that most of that money is in the current budget.

Mr. HARRIS. How many of these 42 stations that you announced you are closing down——

Mr. WILLIAMS. It is 41 now.

Mr. HALABY. I said while you out, Mr. Harris, that we believe we have made a few mistakes in this 42 which can be corrected in the full program that I have just outlined. I didn't mean to imply that we would leave all 42 stations or 41 stations as they are, but what we propose is to take a total of 297 stations, have 150, roughly half of them, remain substantially as they are. The remaining 150 stations would become manicom's AID's, or be phased out completely.

Mr. HARRIS. How many will be phased out completely?

Mr. HALABY. We don't have that number yet. Probably a very few, if any.

Mr. HARRIS. You call it manicom's and what else?

Mr. HALABY. AID, airport information desk.

I was about to say that this is still a Washington level plan and much work has to be done in the field on a site-by-site location. The rate at which we extend the manicom and AID facilities to nonstation locations will depend on a number of things, including the overall fiscal situation of the Government.

The budget priority of this new program must be considered in relation to priorities of other programs within the agency and throughout the Government.

I think after we have done the regional and local work that it will be possible to say that there will be a Federal facility offering service in this area at all of the locations where it is now provided, but I do not want to make that as a flat commitment, particularly when someone might view the AID as not being a Federal facility. They might say that the mere provision of a telephone and a teletype does not make a Federal facility. If you take the manicom-AID's, and 150 flight service stations in the new program, we will have covered not only the present 297 locations but quite a number more that justify it under the new criteria.

Mr. HARRIS. What I was about to ask earlier, Mr. Chairman, in the 1965 budget how many of these 41 stations will be continued as they are?

Mr. HALABY. Substantially all of them. In announcing the consolidation of those stations we pointed out that it would take place over 12 to 30 months, and I think also a moment ago, prior to your coming in, I pointed out that we had not taken any real action on the program to date, pending the hearings here, and I also pointed out that we have approximately $5 million in our fiscal 1965 budget to cover the capital costs of the consolidation, relocation, remoting of the 42 stations.

Mr. HARRIS. In other words, you have the funds in your 1965 budget to carry out this program about 80 percent?

Mr. HALABY. Yes, I think that is approximately right, Mr. Chairman. We would need to go in fiscal 1966 for an additional amount in the order of $2 to $3 million at most. We would then be able to save at the rate of 500 to 600 positions and about $3 million a year. If the Budget Bureau or the President should restrict the number of manicom's or AID's to a lower number, the savings could be somewhat larger.

Now if we could, Mr. Chairman, we would like to give you very briefly——

Mr. WILLIAMS. Before you go into that, Mr. Halaby, if you don't mind, I would like to get a description of this manicom operation

Mr. HALABY. That is what we are coming to, if we may. Mr. Harvey has prepared these charts. Mr. Warren and I will help. This one is simply designed to show the history of the number of flight service stations commencing in 1943 and coming up to 1963 showing that it reached the peak number of 464 in late 1949 and is now 297 within the contiguous 48 States and 334 throughout the 50 States and the territory.

These are the functions we describe. Basic are the en route services to en route aircraft, but supplementary or ancillary are airport services to aircraft at flight service station airports.

Mr. WILLIAMS. While you are on that one, Mr. Halaby, the basic functions, I think, partically all of us admit, could be performed just as easily remote, that is the en route services; is that right?

Mr. HALABY. Yes.

Mr. WILLIAMS. Does anyone contend that they could not be performed equally as well?

Mr. HALABY. Well, I think there are quite a number who either don't quite understand it as clearly as you do or don't want it presented quite that clearly, but that is a fact. They could actually be conducted on a technical basis by perhaps 50 stations instead of 300. The problem is that the cost of remoting at that lower number of stations is so great that you don't save any money so that it does not make any sense.

Mr. WILLIAMS. The nub of the problem here insofar as the services are concerned is what you have listed here as ancillary services or functions?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Airport services to aircraft at the flight service station airports.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. That is a service that the general aviation pilot depends on largely at the present time.

Mr. HALABY. I believe that most general aviation pilots think of the flight service station almost more in their minds as an airport service than they do an en route service.

Mr. WILLIAMS. However, it is the ancillary service which has been responsible in so many cases for so many so-called saves.

Mr. HALABY. No, sir.

Mr. WILLIAMS. Where local conditions, local terrain, and knowledge of the local area has contributed to bringing aircraft in safely whereas a remoted station would have been unable to identify——

Mr. HALABY. I see what you mean. In that respect the answer is yes.

Mr. WILLIAMS. That is what concerns me greatly about this proposition of remoting and consolidating these functions.

Mr. HALABY. In respect to the man who is lost en route, the en route service and the 16 locations where we have direction-finding equipment would continue to be his salvation. But with regard to the man who is lost near the airport, in the vicinity of the airport and can be guided to the airport on a topographical basis, you are right.

Mr. WILLIAMS. Don't those occasions happen quite often where the pilots are saved by the local people?

Mr. HALABY. Yes, sir. We can give you a breakdown of some 1,200 saves a year that occur in various categories.

Mr. WILLIAMS. What is going to happen to these pilots who find themselves in that situation and there is nobody on the ground to help them? They have to talk to somebody a hundred miles away?

Mr. HALABY. With the 150 hard-core stations, each with direction-finding capability, few of which are more than a hundred miles away from the nearest FAA facility, plus the 21 centers and radar approach controls, we have a very great saving capability planned here for the en route pilot.

Now with regard to the local airport area, we would then have the problem of the manicom doing what the flight service station has been doing, and there the hours during which this kind of flight assistance or save could be accomplished would be reduced. But the way in which we reduce the hours, which we are just about to come to, I think is the important thing.

Mr. WILLIAMS. In other words, for the pilot that I am talking about the basic function, the ancillary function that you have here would, as a practical matter, be reversed? In other words, the basic functions to the pilot in the vicinity of the airport would be in the matter of airport services to the aircraft at a flight service station airport, and the ancillary function would be the en route services.

Mr. HALABY. There is a mixture, but I would say you are absolutely right. If there is such a thing as a general aviation pilot, and I don't think there is, if you try to hypothesize one, he would say, "I take that en route service for granted."

The part that I am really eager and anxious about is the airport advisory and its weather observations. Of course, that brings into the question how essential is that to safety as distinguished from convenience. That is one of the toughest dilemmas we have in the Agency, as the Chairman knows. We have the obligation to assure safety. We do not have any responsibility for assuring convenience.

Often this will be the case of the man who wants to fly and without this service may not fly, or may fly a circuitous route or land in a different place. So, we get the question of how much the Federal Government owes the convenience of the pilot. We do not have any question about the safety assurance that we owe the pilot.

There is always the option, as I am so often told by my Budget friends, of his not flying. So, we have to find that high ground in the middle.

These are just some pictures of a flight service station. I think you gentlemen have, of course, seen them and are familiar with them. We have some old ones and some new ones. There is a device at the top that monitors navigation aids. At the bottom we have a man on weather communications. In the middle desk at a telephone there is pilot briefing and at the bottom, the main brunt of the work, air-ground communication.

Now, these are basic en route functions, and we think of them as primary. Air-ground communications, weather communications, monitoring of facilities. Many pilots don't even know that within the flight service station there is a man and a machine checking on the operation of the VOR and other facilities. Pilot briefings are face to face briefings in 22 percent of the cases. This is contrary to what a lot of people think who go in daily and have a face to face briefing with one of our men; they are only one out of roughly four. The other three out of four are briefed on the phone and on the microphone.

Military flight service which we assumed, formerly handled by the military——

Mr. HARVEY. They used about 800 positions.

Mr. HALABY. Three years ago we took over their military flight service, and that required us to add—they had 800 positions and we added——

Mr. HARVEY. We have assumed it without any increase in personnel.

Mr. HALABY. The handling of flight plans, the direction-finding network with which flight assists are made.

Mr. WILLIAMS. Is the direction-finding network a low frequency system of high frequency?

Mr. WARREN. It has gone into VHF and UHF.

Mr. HALABY. It is UHF right now, but we have programed and budgeted equipment for VHF and UHF.

Mr. WILLIAMS. How far away will VHF pick up a plane at 500 feet?

Mr. HALABY. A great deal depends on the strength of the transmitter in the plane. For example, yesterday morning in a borrowed Bonanza, borrowed from a friend outside of the aeronautical industry, who was a Republican, Mr. Chairman, I flew back from Virginia, over Casanova, Montebello, and here, to see what our flight assist, our "save" capability was. I called from over Montebello. I was on a VFR flight plan—at 7,500 feet coming back to Washington. I called Charlottesville radio. They said the nearest DF is Washington, D.C. I asked what the range was just as you have asked. They said that it depends on the strength of your transmitter. We think about a hundred miles. That is an average number that we use when you have line of sight. Now if you are only a thousand feet you

can't get that range, I guess, even on the flat. About 40 miles on the flat due to the curvature of the earth.

Mr. WILLIAMS. You indicated these hard core stations will be located 150 miles apart.

Mr. HALABY. No, sir; a minimum of 100 miles is our pattern. Let me show you what the pattern looks like, and we will come back to it. That is the kind of pattern we would have in the 150 hard cores after this program is implemented.

Mr. HARRIS. How many do you have on that chart?

Mr. HALABY. 154 I believe it is, Mr. Chairman. Those are hypothetical places.

Mr. HARRIS. Yes; I understand.

Mr. HALABY. Mr. Warren now will just describe this chart which shows our present flight service station network and the work it does.

Mr. HARRIS. Before you do that, to get my mind cleared up here, and I realize that is quite a job, what is the difference between a flight service station and the control tower operation at a given airport?

Mr. HALABY. There are several main differences, Mr. Chairman. At those locations where we have an FAA-manned tower, their job is primarily to control traffic.

It is to advise and assist and guide traffic from the moment the man calls at the ramp until he takes off and goes out of the control zone, usually approximately 5 miles away. Second, an incoming pilot calls in and he assures that he will be advised of other traffic and to the extent possible separated from other traffic as he comes in, lands and takes off the main part of the airport onto the ramp. Traffic control is the primary function. In addition he does a number of other things. Where there is a weather bureau information to the pilot, the altimeter setting, the wind, weather, sky condition.

Those are his two principal functions. Then at certain places where there is no weather bureau and no station separate from the tower we have a combination, a combined station and tower. This is a tower cab plus a station down on the ground. I think we have a total of 67 of those throughout the United States.

Mr. HARRIS. You mean a combined operation of control tower and flight service station?

Mr. HALABY. Yes, sir; 67 locations.

Mr. HARRIS. You have 67 of those?

Mr. HALABY. Right. We have 275 towers of which 67 of the towers are combined with a flight service station. In addition to that we have 297 flight service stations. They are primarily concerned with communications and these other functions that I have just listed; they do not control traffic.

Mr. HARRIS. Now are those 67 joint operations, control tower flight service station operations? If you were in your program to discontinue the flight service station at a given point, would that necessarily mean that you would discontinue the control tower operation too?

Mr. HALABY. No, sir. In fact I think we have in mind, six.

Mr. HARVEY. The creation of six.

Mr. HALABY. We have in mind in our program creating six combined station-towers. So far as I know we have no intention of

eliminating a tower because the flight service station functions can be performed from another location.

Mr. HARRIS. I would like to ask you if one of those is Texarkana, Ark., but I won't.

Mr. HALABY. It does not have a tower, Mr. Harris, so it would not fall in this category. On the other hand one of the witnesses this morning was referring to Elmira, N.Y. We have both a tower and a station there. I guess we feel that we could perform the work required, the service required there, by leaving the tower and remoting the station. He felt to the contrary.

Mr. HARRIS. Who felt to the contrary?

Mr. HALABY. The witness.

Mr. HARRIS. But you would have in mind remoting the flight service station at Elmira and leaving the control tower in operation.

Mr. HALABY. Yes, sir, and only if the traffic at Elmira fell below the 18,000 itinerant operations per year cutoff point would we have reason to discontinue the tower operation.

Mr. HARRIS. That 18,000 includes takeoffs and landings.

Mr. HALABY. That is itinerant operations. It does not include the flights around the field although I asked one of my colleagues whether a towed glider returning to the field constituted an itinerant operation and he generously answered yes.

I think that is a concession and a proper one to this very extraordinary flying fraternity which prefers silence to vibration.

Mr. HARRIS. To say nothing about safety.

Mr. WARREN. The present 297 flight service station system has an operating complement of 3,787 people. Since they are adjusted to the workload, a typical low station is 6 people, a typical high station is 17 people with the median falling around 9. The system performed, in the last calendar year, 19,350,000 flight services. A flight service is an air-ground contact, a flight plan, both VFR and IFR pilot briefs, flight condition messages and airport advisories.

The 19 million are broken up in today's picture in this kind of arrangement.

Mr. HALABY. That is the national workload on the subsystems.

Mr. WARREN. If you examine the distribution of big stations, little stations, and middle-sized stations, it comes out in rough thirds about like this. We have a low third which is from minimum activity up to about 30,000 flight service operations. The middle third runs from about 30,000 to 60,000. Our busy stations run from 60,000 to over 115,000. So, it roughly breaks out to this type of total operation and the individual stations in this also come out in approximately the same breakdown.

Then you examine the cost of performing the function versus the size of the station. We find that the operational cost per flight service runs from a low cost of about $1.60 to a high cost of about $4.65 per contact or flight service as it may be.

This gives us a median cost across the board of about $2.47. Then when you examine this, the cost of providing the flight services, we find that the low cost falls in here someplace around a station having a volume of 80,000 operations or more; from this point on the curve is relatively flat. The median cost is obtained when you have about 40,000 operations. In your small stations, as you can see, the cost curve rather skyrockets.

Mr. WILLIAMS. Can you give us an example of some field in this vicinity that would run something around 40,000? Is that 40,000 landings and takeoffs?

Mr. HALABY. This is 40,000 flight services which means a combination of pilot briefs, air-ground contacts, filing of flight plans. In other words, this is not actual contact operations but the functions that the flight service specialists perform.

Mr. HARVEY. Marysville, Calif., 47,000; Stockton, 45,000; Mason City, 52,000; Monroe, La., 45,000.

Mr. HARRIS. Monroe, La., 45,000?

Mr. HALABY. Mr. Chairman, I guess this is on the part of one who would like to conduct public service in a businesslike fashion.

Mr. HARRIS. What does El Dorado, Ark., have?

Mr. HALABY. I was just asking for that.

Mr. HARVEY. 43,000.

Mr. WILLIAMS. What about Meridian, Miss.?

Mr. HARVEY. 58,000.

Mr. WILLIAMS. I thought it would be pretty high.

Mr. HALABY. What that says to me, Mr. Chairman, is that every time my man picks up the microphone and has a couple of conversations with that wonderful fellow in Meridian who wants to land or take off it costs me, as the manager of these tax dollars, roughly $2 per shot. He is paying back probably something in the order of a tenth of a mill for the service.

Now the justification for that is safety. I want to spend every dollar essentially to that safety service but spending $4.65 per service and getting back less than a penny is not the most economical kind of public service organization. So, we have a real economic problem here except when it comes to his safety. Then there is no reason, if you can prove that safety is involved. So we try very hard to find out what the risk and cost is, what the cost and benefit is, what the increase and decrease in effectiveness is. It is very hard to figure that.

Mr. WILLIAMS. What constitutes an operation here in the way that you have developed it? You say a contact; is that one plane contact or each individual contact?

Mr. HARVEY. A contact has a weighting of one. A flight plan has a weighting of two. Pilot briefs, two. The sum of all of those is called flight services. For a pilot brief it would cost you $5. For an air-ground contact, $2.47 at a median station.

Mr. WILLIAMS. An air-ground contact. If a plane is flying east of Meridian, he reports in and he wants the winds aloft, and they give him the winds aloft, that is a contact, is it?

Mr. HARVEY. I should correct that. One aircraft contacted. He could contact any number of times. As long as it is the same aircraft he would only get a count of one aircraft contact.

Mr. HALABY. In other words, I might call and say, "I am approaching runway 24, have you any local traffic?" The reply would be no local traffic and he comes in and lands.

That would be a flight service. Another guy might call from 20 miles out, 10 miles out, 5 miles out, go around the field and make 10 calls. That would still be one flight service in our book. Now the argument is, well, why don't you lower the cost per service? We are trying to do that.

Mr. WARREN. In examining the remoting cost and the personnel cost we find that in this area of someplace between approximately 50 stations and 160 stations the curve is relatively flat. The personnel costs, of course, tend to go up but in your overall cost you really have a relatively flat curve.

Again, the same effect as we had before. If you go down to a few stations, remoting runs the cost up. In taking a look at the basic en route functions, the communications coverage, the "DF" factors, the various things discussed, I am trying to come up with criteria in which you provide all the basic services we have under consideration, a criterion which would first identify high-activity stations, meaning those that fall in the top third and which would be a hundred miles from any flight service station of more activity.

As you examine this you would find that you would need some lower activity stations in order to fill in the holes in the network because of the size and the geographic areas and so that you would have essential air-ground communications, essential "DF" coverage and as a control location to take care of your smaller locations.

Then as to a third step you would find certain stations are needed where they are on strictly the cost-benefit, strictly because of the fact that the remoting is excessive you may have an operational necessity for a station at that particular point.

Mr. HALABY. These are the principles, the basic requirements of the scheme, and the result of that is approximately 150 stars on the map.

Mr. WARREN. After examining the basic functions and the criteria for it, the ancillary or airport function consists of airport advisories, airport weather obseervations, face-to-face briefing and the monitoring of airport lights and equipment and the general things we fall heir to from being on the airport.

To provide those services to the greatest number of people and to examine our resources carefully, we took a look at the time when this flying is performed in general aviation. It is almost like the day-night relationships. As you can see here—these samples are from filed flight plans in the 8 hours from 8 a.m. to 4 p.m., 65 percent of the flight plans are filed.

If you take 10 hours from 7 a.m. to 5 p.m., you get 70 percent. In the 12 hours from 6 a.m., to 6 p.m. it covers 88 percent of the flight plans. This gap here at noon is quite prevalent with the rest of the overall day-night structures. So the coverage of 88 percent roughly covers your daylight hours.

Mr. HALABY. The significance of it of course, is that we now have 297 stations with 3,800 people and those are manned and operating 24 hours a day. Yet there are 12 hours in which only 12 percent of the work is being done.

Mr. WILLIAMS. This, of course has to do with flight plans. What percentage of your flights are made on flight plans?

Mr. HALABY. This is one measure of the activity of the flight service station.

Mr. WILLIAMS. What percentage of the VFR flights would you say are made on flight plans?

Mr. HARVEY. Six percent.

Mr. WILLIAMS. So that the other 94 percent that are flying still make contact, make use of the information available to them from these flight service stations and by the air-ground communications services.

So to limit it to the number of flight plans would not necessarily give the full picture.

Mr. WARREN. The hourly pattern by another measure would probably come out the same.

Mr. WILLIAMS. I would think it would, yes.

Mr. HALABY. Mr. Harris asked a little while ago what is this manicom. I think you did too, Mr. Chairman. We have to tell you we are not going to force a standard formula on any local community because in some communities right now there is already a desk.

You take a place like Rutland, Vt. There are probably seven or eight based aircraft there. It is a World War II field; activity is light. There is an anenometer and there is a thermometer and a hydrometer and a guy. He is the manager, the fixed base operator, the unicommunicator and to the community he is the man.

I think Mr. Clausen knows what I mean because to a very great extent he has been the man in one or two places in northern California. So that is there, that is private enterprise, it is working and I don't think Uncle Sam ought to come in and try to tell him how to do it better. But this is a picture here of what could be a manicom in a location.

There would be an office. Presumably it would be a room with a view so that you could see the airport. That is not true of all our present flight service stations by the way. Some of them are not even on airports. And it would have a desk with a map on it. It would have the weather sequence. It would have a teletype. It would have the weather instruments that read wind direction, velocity, temperature, and so on. Then it would have a telephone to the nearest hard core flight service station and a simple transceiver most of us know as a gonsett. This is a cheap 122.8 single-frequency unicom.

Mr. WILLIAMS. In other words, he would operate a unicom?

Mr. HALABY. Yes. I think it costs about $250 if he bought it. I am sure we could buy it for more. That is what a manicom would be. Now depending on the needs of that location it could be one man operating from 6 in the morning until 3 in the afternoon or it would be two men operating from 5 to 6 with overlapping——

Mr. WILLIAMS. In other words, he would operate a unicom?

Mr. HALABY. These would be Federal employees.

Mr. WILLIAMS. Do you anticipate or contemplate having this at one frequency?

Mr. HALABY. For the manicom?

Mr. WILLIAMS. Yes.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. And you are going to put it on 122.8?

Mr. HALABY. No, I don't think so. We would have to do some work on the frequency, particularly where there are a number of airports in the same vicinity. As you know, we have 122.8 for unicom now. We have 122.9 which we got set aside for multicom, and 123—so, we would have some frequency problems but I think we can solve them.

Mr. HARRIS. Is it contemplated that this kind of operation would take the place of some of your present flight service stations?

Mr. HALABY. Yes, sir. In other words, if this room were not filled with equipment like one of our best flight service stations or an average flight service station—take this one for example, the en route

communications, the remote air-ground communications unit would now go direct from wherever it was located to the hard core station, not in here. Some of the equipment would be left in there. Others would be taken out. It would become a manicom rather than a full-fledged flight service station.

The main saving is in manpower. We are talking about saving 500 to 600 positions.

Mr. HARRIS. What service would the manicom perform?

Mr. HALABY. Most of the services that the old flight service station performed but not all and here they are. Mr. Warren can give them to you now.

Mr. WARREN. Manicom of course would have the FAA flight service specialist on duty. It would be equipped with two-way radio for providing airport advisory information for that particular airport. Weather observation equipment would be there. There would be telephones for filing flight plans and getting pilot briefings from the adjacent hard core station.

Weather teletype if needed. In some places it would be needed and useful. Other places might not require it. There would be flight planning materials and this would be furnished in sponsor-provided space and furnishings with a flight planning desk, with a briefing counter and a desk or place for the flight service station specialist to operate.

Mr. HARRIS. Now you would have one or two men manning this manicom station then?

Mr. WARREN. I believe you would never have more than one man at one time but for a stretch of 12 hours it would require staffing of two men.

Mr. WILLIAMS. Is it possible you would run into difficulty there by only having one man?

Mr. HALABY. Yes, sir, you could. There are a number of things he has to do.

Mr. WILLIAMS. He has to perform other functions?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. You are not going to have a radio man all the time?

Mr. HALABY. That is right. This would show on the map as a part-time station. In other words, we would have different symbols on the map. He might not be able to get that man just when he wanted him even during the service duty period. He would have to wait, in other words, for a few minutes at a time.

Now it may be possible to arrange, and this is why we want, one of the reasons why we want a test application, for the local airport manager or his assistant manager to man this same station at other times.

We are a little dubious about whether we can work out that kind of deal or not but we want to try because it might be that you could have one man there 5 days a week and off Monday and Tuesday and the station could be manned by properly authorized and trained and qualified person on Monday and Tuesday.

Mr. HARRIS. Aren't you overlooking something in all of this? You evidently must have decided that there was a need for this kind of service.

Mr. HALABY. There is a great desirability in this kind of service, yes, sir.

Mr. HARRIS. Let us say not necessarily the desirability for it. Let us talk about the need for it. I was going to get to it after a while, Mr. Chairman. I might as well go back to it now. You started out with the statement, our aim is safety and economy. I was around here when the major amendment to the Civil Aeronautics Act was made and when the last major revision was made, which happens to have my name attached to it.

I have always thought that in addition to the safety and economy, the primary purpose of the act, itself, is service. If we were not providing the service to the American people there would have been no need for this program to start with. I am just wondering if our very great President's frugality program is not perhaps going overboard here.

I certainly am between the rock and a hard place if it appears that I am complaining about frugality because inherently I believe it is right. But I also have a deep feeling that the Government does have a function. I think we should keep in mind that these services are just as necessary as safety, itself, or economy, itself. It seems to me you are pointing out to us here a proposition where we have decided, and I am talking about your agency, here is a service that is needed, it is needed at this place to carry out this program, but we are going to cut it down to where we are going to have to take a vote, if you will pardon the expression.

If you are going to have one of those because the service requires that it be there, it seems to me, Mr. Administrator, that certainly you should go far enough to have it manned to the extent that the service will be performed. Now, in my judgment, if one man is desired to provide that service, and he is only going to give partial service, and if you are going to carry out the spirit of the act—which was intended—then you had better have two men or three men, whatever will be necessary, to provide that service when it is called for.

Mr. HALABY. I am sure you do not mean that we ought to provide two or three men where one man can do the job.

Mr. HARRIS. I certainly don't. No. But you can't have one man—I know this and everybody else knows it—at these stations where there has to be somebody right there all the time to perform that service, you can't expect one human being compelled to stay there 8 hours a day without a chance to go get a glass of water or a can of beer, Coca-Cola, whatever he might get or might do.

It just does not work that way in our working conditions today and Government should be the leader in that field. You can't expect one man to stay there 8 hours at that desk and man it all the time.

If that is the case, it seems to me there ought to be an arrangement worked out where there should be some relief, see that one man is there for a period of 8 hours and three men, as a matter of fact, by overlapping work, would do the job.

Mr. HALABY. Mr. Chairman, very often we only have one man at work now, very, very often, particularly in the night hours, because he is only needed at times, infrequent times. To keep one man at work in the Federal Government often requires five men to be hired and paid.

As you know, when you take annual leave and sick leave and emergencies and the 8-hour——

Mr. HARRIS. Service here from 6 o'clock in the morning to 6 in the evening, there is a certain time when you have your major services. If you are going to have your en route services provided some other way, then you don't need it there.

I am talking about providing service as the service demands. That would be for the time of the day that your chart shows.

There is no reason for keeping a man there at 2 o'clock in some old place or 12 o'clock if he is not needed.

Mr. HALABY. We come to that same conclusion. But, Mr. Chairman, I think Mr. Clausen, for example, who has been an airport manager and an airport commissioner would verify that very many airports around the United States among the 8,000 airports, not the 600 principal airports but among the other 7,500 airports there is a man with this Unicom and you often call and don't reach him.

You may call five or six times until you do reach him. Other times you do not even need to reach him. In fact, many pilots don't want to reach anybody. They want to fly themselves. So, there is a very strong precedent and a large body of experience that shows you can operate safely around airports without a full-time man on the microphone on the grounds.

Second, our own experience in the FAA is that at many stations during many hours of the day we only have one man on duty.

When he has to go out he has to go out and the service is broken briefly for that time. At that same station we may have a complement of six people to keep one on duty. Now, this is not WPA where two come, two go, two sit, two mow.

This is just the way you manage to keep one man on 8 hours because six men have to be in the complement.

Now, here is the way the costs look, Mr. Chairman, and Mr. Harvey would you explain this chart showing the various levels of service, 40 hours, 56 hours?

Mr. HARVEY. If you operate manicom service 7 days, 8 hours a day this is your green line. If you have a 5-day 8-hour manicom service it is your blue line. If you have a 5-day manicom service with 2 days made up by the community or the airport, this is your black line.

The median cost of performing a flight service at a station now is $2.74. If you were to operate 5 days, 8-hour days, or 40 hours a week, you would net in the neighborhood of 10,000 itinerant operations in order to have a cost for itinerant operations that is comparable to what you are now authorizing the FAA to spend for a flight service.

If you step this cost to 7 days, 8-hour days, then you would require 14,000, 12,000, to 14,000 in order to have a comparable cost. The basic cost of the flight service station and of the manicom is the salary of the flight service specialist which for generalized purposes can be around $9,300 a year.

So, each time you add a man you increase your cost most substantially for the service rendered.

Mr. HARRIS. How many men does it take to man these 41 flight service stations you are discontinuing now?

Mr. HALABY. Forty-two, six.

Mr. HARRIS. Awhile ago it was 41; 41, then.

Mr. HARVEY. About 320, Mr. Harris.

Mr. HARRIS. 320?

Mr. HARVEY. Yes.

Mr. HARRIS. That is about five?

Mr. HARVEY. That is about eight, I believe.

Mr. HARRIS. Eight men to the station?

Mr. HARVEY. Yes, sir. One thing, all of the en route duties of this man will be remoted at a station; he will no longer be required to handle the air-ground; he will not be required to do any of the numerous services.

He will be strictly only to handle the terminal.

Mr. HALABY. This man is a weather observer, airport adviser, flight plan briefer now instead of an en route communicator.

Mr. HARRIS. I would be quite sympathetic and I would applaud action that would reduce the cost and still provide the service demanded, and in any station where you can provide adequate service by reducing your total personnel from five to two or three, I think that you would have to be approved as a responsible administrator. But I do not want to see you completely run out on them and leave the thing, because I know and you know that all this is designed to send everything to the big urban centers. We have seen that trend in the last several years in Government planning, and it is understandable because that is where the heavy traffic is.

From the standpoint of the airlines they want to get the cream of the commerce or the transport, but there is a trend toward that which reduces the services to rural areas of the country.

That is what disturbs me very much. Any time you take the facility that is needed from an airport you are going to see that airport go down.

Then when you see that airport go down, the next thing you are going to see is the commercial air service try to leave. We have been experiencing it throughout the whole country.

I just wish sometime there might be another major effort to do something to stabilize and improve these services that bring these people out of communities who are just as much entitled to service as they are in urban areas so that they can get the benefit out of it, too.

This is not a new idea at all. We have been concerned about it a long time. When Carl Hinshaw was here in his lifetime in the late forties and in the early fifties we tried our best through the Administrator and the airplane companies, manufacturers, and since then to get somebody interested in it but, no, we are always interested in where you can get the great volume of business.

That is to be applauded too, by good hard-nosed business people. But this is a Government program. It started out as a Government program. In my judgment, the people in the small communities are entitled to the same consideration as the people in the large communities.

I wonder sometimes if we are not continuing to get stronger on the idea that these whole programs are set up for the benefit of those who are engaged in the business instead of providing services to the public without which there would not be any business.

That was all free gratis.

Mr. HALABY. Mr. Chairman, I want to be for the maximum service to the maximum number of people. I don't know whose philosophy that is but here is the population of the United States in 1960. These circles show maximum concentrations.

You have the New England megalopolis and the Chicago megalopolis and the southern California one here. We have carefully plotted all of the aeronautical activity. Slightly to my surprise most of it is in the major population concentration, first because they can afford to fly private aircraft or business aircraft and secondly because that is where people want to go to and from.

Mr. HARRIS. May I interrupt right there?

Mr. HALABY. So, if our job is to serve the largest number of the American public at the greatest safety and least cost, that is the kind of pattern we must provide. Now, that is not enough, I agree 100 percent.

Mr. HARRIS. Before you get too far from that statement you made, I want to inject this. Yes, they can afford it but why can they afford it and why can't the man in another place afford it? Because you have the facilities there; you have the airport there, the terminal, the communications, all of these things which the Government is providing.

That is the reason he can afford it. But, you take out yonder where they don't have it, the man of comparable means, he can't get that and, therefore, of course, he cannot afford it.

Mr. HALABY. Sir, in the last 3 years as you well know because you were one of the architects of the new Federal Airport Act, we have provided more service to more small fields and rural airports than I believe in any comparable period.

Mr. HARRIS. I grant you that is true insofar as developing the airport itself, runways, and so forth. But, we have been going down, I am fearful; we have been going down in providing services that are just as necessary and that is those things that provide safety.

Mr. HALABY. Yes, sir. Now under our program, Budget Bureau and Congress permitting, we would have facilities where there are now no Federal-supported facilities.

We would have a number of these AID's, these airport information desks. We would have some manicoms where there is now no flight service station.

So, far from constricting to only the metropolitan areas we contemplate expanding the services by supporting local communities who do not have anything like an AID.

Now, whether or not the Congress will support us in this, whether or not the Budget Bureau will, is a big question. Because the argument runs, Mr. Harris, that why should we pay for their convenience?

"It is a tiny fraction of the population, they are contributing a tiny fraction of the revenues in fuel taxes. Why should we subsidize these rich private pilots," is the argument I get all the time.

Now, we say, first, because we want an adequate network of safety services. Secondly, we want efficient use of the air space. Then, you come to the question, is this just for their convenience, just for their personal pleasure, and so on?

We say the Government is obliged to provide a level of service and I think the program we have outlined will do that. The program can be summed up pretty quickly here by showing you two charts.

One is the kind of configuration that we would have if we had full authority to proceed. Let us take a typical location, one of the 150 hard core. We would still call it a flight service station.

Let us say 60 miles away to the east and maybe 70 miles away to the northeast and 100 miles away to the northwest and 50 miles to the south there was an airport. They would be qualified because of their level of service and their peculiar circumstances for an airport information desk. The Federal Government would spend roughly $3,700 a year for the telephone line and the teletype into those stations.

Mr. WILLIAMS. How do you determine where you put the AID station, or where you remote, or where you establish a manicom?

Mr. HALABY. That is the criterion on which we have worked, we have been working, and will continue to work and when we have made decisions on where those are justified and they are approved we will announce them, sir.

Mr. WILLIAMS. That is an answer that leaves me right where I started.

Mr. HALABY. I can tell you that for the manicom this is where there are now flight service stations; they are nontower; they are non-Weather Bureau offices.

We would retain service through a manicom where there has been a substantial annual itinerant aircraft operation or where there is a critical need for weather observations.

Now, where there are no FSS we would put in a manicom where there is a significant number of annual itinerant aircraft operations or, again, a critical need for weather observations.

Now, that obviously would be subject to a program that would have to be approved by the Weather Bureau and the Appropriations Committee.

Mr. WILLIAMS. Now, you have a flight service station, for instance, in McComb, down in the southern part of my district. They don't have a tower. But this service station is on the field. According to your regulations, I am required to contact that flight service station 5 miles out, I believe, before I get into the zone. Now, apparently, if this thing works out, and I think I can foresee what is going to happen to McComb, you will remote that to Jackson. You will put some fellow down there on the one frequency of 122.9—am I supposed to report in to him before I go into that station?

Mr. HALABY. We believe, Mr. Chairman, that that rule would have to be changed in the light of this program. Some think the rule didn't make any sense in the first place. I guess maybe more than half feel that way.

Others who want to be a little surer about who is in the air space have welcomed the rule.

But if the man is not there all the time, if he has other duties, and so on, I think we would have to alter the rule.

Mr. WILLIAMS. That, in itself, is a reduction in service; is it not?

Mr. HALABY. To that extent; yes, sir.

Mr. WILLIAMS. Can you equate that with the intention to maintain the same level of safety? Aren't safety and service inseparable?

Mr. HALABY. Yes, sir; I think they are.

Mr. WILLIAMS. So, to that extent, you are reducing service?

Mr. HALABY. To that extent we are reducing service. The question is whether we are reducing safety. As you know so well, the VFR pilot is still primarily dependent upon his eyeballs and most VFR pilots like it that way.

Mr. WILLIAMS. I always have a little difficulty seeing gusts. I do not like to use my own experiences as an illustration but I think perhaps this does it more graphically than anything I can point up.

I went to McComb the other day. When I left my home, which is about 90 miles north, the wind was calm and the air was smooth. When I got to McComb I reported into the station and got the weather and they told me that there were gusts ranging from zero up to 35 knots.

So, they alerted me to expect gusts when I landed. In coming in I ran in a situation off the end of the runway where there was a downdraft and it was still gusty and I went in a little fast—as you know you have to do under those conditions.

Even as it was, it was pretty rough getting that thing on the runway under those circumstances with those tremendous gusts.

Now, had I not been warned of those gusts on the ground—he could not have warned me from Jackson about those gusts—there is a distinct possibility that there could have been an accident.

Mr. HARRIS. Meaning you had better stay out of a plane for a little while.

Mr. WILLIAMS. Well, I am not worried about that. I have had my accident. But, to that extent, that does reduce safety, does it not?

Mr. HALABY. Yes, sir; but, if we are going to be permitted to exercise our wisdom, I don't think that we would deny to an airport with that many operations, weather observations, and probably manicom. I guess we must have announced this in a very bad way.

Mr. WILLIAMS. But, if I am coming in while this fellow had a hard night the night before and is taking a nap or something and I can't raise him on the radio when those conditions prevail.

Mr. HALABY. If he has had a hard night the night before and he is asleep on the job——

Mr. WILLIAMS. Well, let us put him some place else. He is in another room in an emergency situation and I can't raise him. I have no way to get the report as to what the wind conditions are on the ground, do I?

Mr. HALABY. Is he having the emergency situation or are you? He is away for a few moments from his desk, there is no question, Mr. Chairman, that with one man on duty or two men overlapping and that is what we have in mind for many places there is part time service—while he is on duty he is there full time except for necessary brief absences.

This is not different from what it is in many, many of our stations today and most of the airports of the United States other than the big ones. So, I don't think we are going backward. We are giving somewhat less service but I don't think so much less as to give anyone the right to think that we are pulling out or withdrawing service.

Right now I believe, I hesitate to say this because you know the field better than I do right now, but I think McComb may only have one man on duty at some times anyway.

Mr. WILLIAMS. No, sir.

Mr. HALABY. We have seven men in the complement but I believe 16 of the 24 hours there is only one man there.

Mr. WILLIAMS. You have weather people there too, I believe.

Mr. HALABY. I don't think so.

Mr. WILLIAMS. I have never seen less than three people in there any time I have been there.

Mr. HALABY. I hope that includes the pilots being briefed as well as the FAA man or friends or others. These get to be fairly cozy little places at times. I think that is one of the reasons why people don't want to lose them.

If I could sum up, this hard core station, maybe with a manicom a hundred miles away to the west; another one 100 miles to the northeast; another a hundred miles to the south; with an air route traffic control center not too far away, perhaps a military base that is feeding information in and is often available in an emergency if the man has the right frequency this is the kind of a typical pattern that would result from implementing the program we have in mind.

Now, there has been a lot of very loose and I think very emotional talk in anticipation of the additional stations being announced for consolidation.

I can only take it that it is because of two things: One, the manner in which we announced the consolidation of the 42 stations and lack of faith in me and the Agency.

But whatever the reason, this program we have in mind which will have an effect on the 42 stations but will not change the proposed consolidation of the functions of those stations and the net result would be as follows:

We would have in the United States 150 flight service stations with a full complement of people and equipment and they would be able to do all of the en route and all of the local terminal services probably even better than at present because we have in the pipeline equipment going into these stations such as the "DF" equipment which is of superior quality.

In addition, and based upon this hard core, we would have a number of manicoms and we already have 67 combined station towers.

Mr. WILLIAMS. Now, what is a combined station tower?

Mr. HALABY. That is a place where there is a tower in operation. Normally, they have operations between, say, 25,000 and 100,000 operations a year and they need a flight service station for one of several reasons.

In the tower they are controllers, and at the base often there is a station with communicators. Sometimes they are in the cab.

Mr. WILLIAMS. Everybody is not a qualified tower operator?

Mr. HALABY. No, sir.

Mr. WILLIAMS. Only people who serve in the tower?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. You have a situation, say, in Jackson, Miss., where you have several tower personnel. Then, you have a flight service station. Are these people on the one head or does each have his own separate organization?

Mr. HALABY. One boss?

Mr. WILLIAMS. One boss.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. My question is going to be: Why not combine the administration of the two?

Mr. HALABY. We intend to do so.

Mr. WILLIAMS. You could effect savings that way, it appears to me.

Mr. HALABY. We intend to do so. There are some towers and separate stations still on the same airport and we are moving to consolidate those so that there will be one boss.

Mr. WILLIAMS. You anticipate a saving in the administrative cost?

Mr. HALABY. We think so, yes.

Mr. WILLIAMS. Mr. Halaby, when did this plan get underway? When was this idea of reducing the number of stations conceived? Was it after you received the report of the Appropriations Committee?

Mr. HALABY. No, sir. This has been a continuous process from 1949, Mr. Chairman. I guess when you get so much resistance to a program you wonder where on earth you went astray. You must have done something wrong to get so many complaints and other comments.

Mr. WILLIAMS. I think the committee would be interested in finding out just how these particular stations were selected, what type of studies were made?

Mr. HALABY. From 1949 to the present approximately 167 stations have been closed. During the past 2½ years in addition to the regular consideration of closing these stations we have had an almost continuous study of what to do about this problem.

You can see how difficult it is from the witnesses you have just heard today and it will probably get more complicated as you hear from other witnesses in subsequent days because there are so many different points of view and so many different interests and so few who are really trying to solve the problem and so many who are trying to fight it or avoid it.

That is the basic difficulty we have. If you are suggesting that did we have a study just before announcing the 42, the answer is this was the last of about three different studies.

One by the research and development side who look at it completely; they are ethically and hypothetically without consideration of the local place at all, and the guys in the regions on the scene who are looking at it from the day-to-day operational as well as political situation.

So, these studies have been going on for a couple of years. They were accelerated last year when the two Appropriations Committees told us to get on with this and at the same time although not identifying it , cut our budget in the operating account a fairly substantial amount.

Mr. WILLIAMS. A written report was submitted to you as Administrator for consideration prior to the announcement of February 4, I believe.

Mr. HALABY. No special bound volume or anything like this. This was a continuous process of going over this, refining this, and working over the other.

In our presentation today, we have not taken any action yet and we are still working out the optimum program.

Mr. WILLIAMS. Now, the announcement of February 4 was rather firm?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. The announcment said these stations to be converted and their locations follow. Now, I understand from your testimony you are not so sure that you picked the right stations.

Mr. HALABY. I said that a few of them we may have made a mistake and in the process of implementing this program we would correct the mistake.

Mr. WILLIAMS. Could you mention the few that you made a mistake on?

Mr. HALABY. I prefer not. If the committee requires, I can; yes, sir.

Mr. WILLIAMS. The committee is not going to require you to do this, if you prefer not to do it.

Mr. HARRIS. Have you completed your revision yet?

Mr. HALABY. Pretty much; yes, sir.

Mr. HARRIS. If you have completed your revision, then you can give the committee the benefit of it.

Mr. HALABY. I think what the chairman may be seeking is an example of how, with regard to the 42 stations, we might revise the announced consolidation. Let us take, for example, Arcata, Calif. We have a very unusual situation there. We have a tower that has survived from World War II. We have an instrument landing system which is residual from some very special fog tests conducted in the thirties and forties. We have a very unusual kind of weather bowl there in the mountains and near the coast and we have a fair amount of activity.

The choice was to consolidate all three or one of three into two stations—Ukiah, Marysville, and Arcata. I think we picked the wrong one.

Mr. WILLIAMS. How did that happen?

Mr. HALABY. Just a goof, a mistake, I presume. It was a close decision. You could have done it into Ukiah or into Arcata.

But on reexamination and on a lot of protests I might say that were very articulately presented, we see that it would be wiser to use this program there and leave in Arcata a Federal facility.

Mr. WILLIAMS. Is it safe to say now that Arcata will not be included in those to be closed?

Mr. HALABY. What I have tried to present here, Mr. Chairman, is a whole new program by which the 42 would be affected. So, in the case of Arcata, we will, at least, have a manicom there.

Mr. WILLIAMS. How many manicoms do you plan to install over the country?

Mr. HALABY. We have not made that decision and got it approved yet, Mr. Chairman.

Mr. WILLIAMS. Is it possible to assess the cost of this without knowing how many manicoms you will have?

Mr. HALABY. Yes, sir. We have a hypothetical cost estimate which shows we can save with a presumed number about $3 million a year and 571 jobs.

Mr. WILLIAMS. How do you reach that figure if you don't know how many manicoms you will have?

Mr. HALABY. You have to take a planning approximation and start with that to see if the whole program makes any sense. We may be able to save more than that.

Mr. WILLIAMS. What GS level are you going to make the manicom operator?

Mr. HALABY. We arbitrarily picked the salary at about $9,000 which is about GS–8 to GS–9.

Mr. WILLIAMS. Starting salary of GS–11 is $8,610. He can go after 20 or 30 years of service as high as $10,650 and he is the chief, as I understand it in your flight service stations.

He is the chief cook and bottle washer. I would think the employees would range downward. Are you going to make every manicom operator a top kick?

Mr. HALABY. No, sir.

Mr. WILLIAMS. You are going to give him the same salary as grade 11, which is the highest salary you can pay, as I understand it, the flight service employee?

Mr. HALABY. We are talking about the overhead involved. This is the total cost of the man. You see, this is not just his salary.

Mr. WILLIAMS. You mean the salary and operation cost and leased wire cost?

Mr. HALABY. This is salary, rent, and overhead items. The average manicom chief would be grade 9 if that is what you are seeking, sir.

Mr. WILLIAMS. He would be a grade 9?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. That ranges from $7,000 starting salary, I believe, to some $9,100. So, it would be in the average roughly of $8,000. It costs about $1,000 a year to operate.

Mr. HALABY. Sir?

Mr. WILLIAMS. Your rent, your leased wire and the other expenses of operation would run in the vicinity of $1,000. I believe you said $9,000.

Mr. HALABY. We are just taking an average one-man facility. We figure the total is about $13,000 a year which would be $8,900 for the man, $1,400 for maintenance, including rent for the teletype and supplies and other costs, and $2,700 for the rental of the telephone line.

If it is a two-man you add $8,900 to that and you get $22,000 roughly. That compares to what we showed you earlier, these very substantially more expensive operations. What we are shooting for here is a cost per service down here in the range of approximately half to 55 percent of the present cost of the same service.

We may not make it but that is what we are aiming for. We had to make an arbitrary number of manicoms and an arbitrary number of AID's, which, of course, would be much less expensive.

The average AID would be about $1,000 for maintenance, about $2,700 for line rental, roughly $3,700 a year or $300 a month.

Mr. HARRIS. I have several appointments waiting for me and I just have to go. I do want to say, Mr. Halaby, that I am glad to have this report today. I want to compliment you for your efforts.

I am glad to see that there is a concession that has been given in reducing the 42 to 41. We have the other concessions you mentioned a moment ago with reference to certain rules that you found out would not work.

Maybe we will develop some other concessions before it is over. All we want is to provide the service, to be sure that the service required is provided.

I have great admiration for your administration of this program and those who are working with you. I want to thank you for the consideration you have given to these many vocal expressions that we have been receiving. Perhaps in many instances it is lack of understanding about what you are undertaking. We do hope that these hearings will develop facts that will at least help you to bring about

better understanding of the revisions which you apparently are supporting.

If you will pardon me, I have several people waiting. I did want to thank you for the information.

Mr. HALABY. Mr. Harris, I thank you for that support because I think there is a little more than just this program involved here. The easy thing to do in a case like this is nothing, just roll right on down the river on the log. The hard thing to do is to figure out what is the right thing to do to keep the safety, keep the adequate level of service, and make the savings.

I just hope the committee can help us get the safety with the economy because it is a tough time to do it and we would like to succeed and I think you would like to see us succeed.

We give a great deal of credit to the trade associations, to the Members of the Congress, because we have worked many of their suggestions into this program.

Mr. HARRIS. I think perhaps the greatest damage that was done is when you let it be known, maybe unintentionally, because it has been publicized, as soon as you get these 42 out of the way you are going to close down 129 others.

Maybe you are; maybe you are not; but you cleared some of it today by stating you will have these alternate means. You might have been a lot better off if you had permitted that announcement to be made instead of saying that you are closing 42 now and as soon as you get this over we will close down 129 others. That really disturbed the interests throughout the country.

Mr. HALABY. I don't know that the Agency ever said that but I know it has been attributed to the Agency.

Mr. HARRIS. Thank you, very much.

Mr. WILLIAMS. Mr. Halaby, in the original proposal, as I understand it, you set aside your hard-core flight service stations as one high activity initially numbered about 100 and selected lower activity ones 15, plus or minus, will provide complete communications service, and will provide best balance between maximum local services at low cost. Do I understand that you have now revised that upward to 150 hard-core stations?

Mr. HALABY. I think the answer is "Yes."

Mr. WILLIAMS. Did you get the question? It is the folder I am reading from. This is the proposal, as I understand it, that was presented to the meeting.

Mr. HALABY. In our meeting with the association?

Mr. WILLIAMS. Yes; where you said that there would be 100, plus or minus, high activity stations, hard-core FSS stations. I presume that figure is now 150. Is that the same figure you had in mind when this was written, the same type of station?

Mr. HALABY. I am not sure what you have before you. If it is what I think it is the answer is "Yes."

Mr. WILLIAMS. In other words, where your original figure had 100 stations, now you figure 150?

Mr. HALABY. I believe that is right; yes, sir.

Mr. WILLIAMS. I will let you see this.

Mr. HALABY. That is an internal document that the staff tossed out as a preliminary draft for discussion with the user groups.

Mr. WILLIAMS. In view of the fact that you have increased your original estimate by 50 percent, there is even a possibility you might revise the 150 figure?

Mr. HALABY. Yes, sir; up or down.

Mr. WILLIAMS. Up or down?

Mr. HALABY. Yes, sir. The next step as I tried to point out in the testimony is to spell out this whole program, take it to the field, have a test area where we would actually conduct negotiations with groups of local sponsors, actually install some manicoms in at least two parts of the country, and then while that was going on, have our regional offices examine it all over the country and then after that process, then actually do the work, actually take the action.

Mr. WILLIAMS. Have you ever put one of these manicom operations in as a pilot program to see how well it works?

Mr. HALABY. That is what we intend to do immediately.

Mr. WILLIAMS. Don't you feel perhaps it might be well to postpone this program until such time as you can get the report of the pilot operation or several pilot operations?

Mr. HALABY. No, sir. I think we can do them concurrently. We can test in several areas and proceed——

Mr. WILLIAMS. Where will we be if it does not work out?

Mr. HALABY. There is no reason to believe it won't work out, Mr. Chairman. We are already doing it on the unicoms now on a private basis and on our smaller flight service stations there will be very little change. So it is not technically risky—it is only politically risky.

Mr. WILLIAMS. Do you know what kind of reception it is going to receive?

Mr. HALABY. I have had quite a number of discussions with the user groups and I think it is fair to say that they greeted the outline of the program with a mixture of relief and favorable interest. I can't say they are all happy. I don't expect to live long enough to ever see that.

Mr. WILLIAMS. In your prepared statement you say:

> While it was in operation, the manicom could thus provide a full range of terminal services of quality comparable to those performed by existing flight service stations.

Now, are you suggesting that the manicom system can provide the same service as now provided by flight service stations?

Mr. HALABY. Substantially, in the hours of their operation. Here is the list of things they do. They have a two-way radio for local——

Mr. WILLIAMS. Is that a suggestion, then, on your part that the flight service stations are presently overmanned?

Mr. HALABY. Well, I didn't make that suggestion but I suspect it is true. And certainly since the functions and the procedures and the organization are going to change, we have more men that are necessary to provide just terminal service.

Otherwise, we would not go through this reorganization of the flight service subsystems as we have been doing now for months.

(The statement follows:)

STATEMENT OF MR. N. E. HALABY, ADMINISTRATOR, FEDERAL AVIATION AGENCY

Mr. Chairman and members of the subcommittee, the role of the flight service station as part of a system for the safe and efficient utilization of the airspace is before this committee today. These hearings provide us an opportunity to share with the committee, the other witnesses, and the public some of our thinking on these matters and will allow us to get the response of others to our specific flight service station program which I will describe in a few minutes. So I very much appreciate the opportunity to join with your committee in considering this program.

I

Our aim is safety with economy. The principal business of the FAA is air safety and public protection. This is the business Congress has authorized us to conduct and it is a body of responsibilities the public relies on us to meet. Both the Congress and the public, too, expect the business to be conducted in an efficient and economical manner. The goal of economy—while not specifically identified in the Federal Aviation Act as is the safety goal—is an implicit goal of any agency conducting a portion of the public's business.

When the public's business involves regulation of a dynamic industry like aviation, economy is spotlighted for another reason. We cannot keep pace with constantly expanding air traffic and aircraft production with merely quantitative measures—increasing payroll and facilities in proportion to the growth in aviation. If we are to remain responsive to these growing needs we must be constantly searching for qualitative measures—for means of meeting the problems with more efficient and more economical measures.

We are engaged in a search for such measures and we have made some progress. During the past 3 years we believe we have accomplished major economies without impairing safety or the level of services to the aeronautical community. In our 1965 budget request, we have reversed the growth trend in FAA staffing and appropriations without altering the trend of improved services. Our total 1965 program called for almost 10,000 positions and $150 million less than would be required if we were operating on the basis projected in 1961.

These savings have been accomplished by several major operating and management improvements without any known derogation of safety or services. For example, we will be completing, during 1965, a center consolidation program which will reduce the number of centers in the domestic United States from 29 to 21 with annual savings of $7 million and 540 positions.

We have also reduced our Washington headquarters positions by 16 percent (610 positions) with annual savings of $5 million.

At NAFEC we have reduced the complement by 248 positions and are in the process of reducing contract personnel requirements by some 220 employees either by elimination or conversion to lower cost civil service personnel. These changes will involve savings of $2.5 million per year.

By combining our technical communications services with those of the Department of Defense, savings to the Government in excess of $5 million have developed, about half accruing to FAA. Similarly, FAA/DOD coordination of radar installation and operation has produced savings of some $64 million in equipment, procurement, and installation costs. Today, 20 FAA and 28 DOD long-range radars are being used jointly with 5 additional military radars scheduled for joint use by June 30, 1964.

We have every hope that our flight service station program will be another of these qualitative measures, fostering both safety and economy by permitting a more discriminating application of our resources to the problems the public has put in our charge.

II

I should begin by describing what a flight service station is, and the role it presently plays in the total air traffic system.

Flight service stations came into being in the early 1930's as aeronautical communications stations. First, they provided a communications link between the air and ground, and later served to relay information and instructions between en route IFR aircraft and traffic controllers. Communications technology has now virtually obviated the latter function. A direct means is now provided for IFR pilot-controller communications through our air route traffic control

centers. The flight service stations, however, continue to provide basic en route services to VFR aircraft. These basic services include air-ground communications, weather communications, monitoring facilities, pilot briefing, military flight service, handling flight plans, direction finding, flight assists, and the like.

While performing these basic en route functions, flight service station personnel located at airports have expanded their activities to include a variety of terminal services. These local services include weather observations, airport advisories, face-to-face briefings, monitoring airport lights, etc.

In examining the possible future role of the flight service station, we faced a dilemma arising from these two distinct sets of functions. The same technological developments which made the consolidation of centers possible make it possible to consolidate most of the flight service stations' en route functions. Through the use of remote communications outlets, these en route navigation and communications services could be performed from any number of stations. We could, therefore, in technical terms reduce the number of flight service stations to one-half the present number or even less. Such a consolidation would, of course, produce considerable dollar savings with no diminution in en route services.

On the other hand, remoting a station must be evaluated in light of its effect on terminal services the station is performing. Consider, for example, the question of weather. We know that good weather information is vital to pilots planning flights and that reliable local observations contribute in some measure to the safety of terminal operations. We know, too, that there are a considerable number of public-owned airports in the country where standardized public weather service or observations are not available. We believe that the volume of operations at many of these locations might justify providing at least a minimum of public weather service. The weather functions of the flight service station, therefore, must be considered and underscored.

The same might be said for the flight service station's airport advisory service. This service involves giving incoming pilots information about airport weather, runway conditions, and traffic. It is difficult to gage the safety value of these services at smaller airports. But we have required pilots to use the services where we had facilities at the location, and without question at the higher activity airports such services should at least be available at the request of arriving flights.

In looking for means of reaping the benefits of remoting en route services while not diminishing needed terminal services, we concluded that the only effective solution lies in redesigning the entire flight service station subsystem. This network grew up as a set of facilities into which various functions were as those functions became necessary. The degree of service provided tended to be affected by the capabilities and capacities of the facility. We need facilities that are tailored closely to the needs of a given location. We need facilities in which the size, the equipment, kind of service, and the hours of operation are custom fitted to the particular needs of a given locality while serving as part of a national system of safety service.

If form is thus to follow function, we needed to reexamine the need for these various services very carefully. In our studies to date, a number of interesting things were learned. We plotted time-activity curves for typical locations, for example, and learned that a facility operated only half of a 24-hour day would be able to provide 90 percent of the terminal service called for.

We plotted flight service costs as a function of activity and learned that considerable savings could be effected with minimal reduction of service by scaling down light activity facilities.

We examined the cost of remoting en route functions and learned that the most economical configuration of full-time stations would be between 50 and 150.

The outcome of these and numerous other studies is a tentative program which could substantially reduce the present number of full-time flight service stations, which could fill the gap thus created in terminal services by a subsystem of part-time facilities of substantially reduced proportion, and which could, through the use of these smaller facilities, make it possible to extend critical weather observation and airport advisory service to a number of airports now serviced by no Federal facility.

In as much detail as we have been able to develop to date, the program will look like this:

Approximately 150 present flight service station locations will be selected from the existing system on the basis of rank order of flight services, with some adjustments to insure that adequate spacing is maintained. We are thinking in terms of a minimum of 100 miles between stations to insure an adequate communications network with direction-finding capability. These stations will become the hard core of the system, operating around the clock, 7 days a week, and handling all the present en route navigation and communications functions being performed today by the full system, plus, of course, the normal terminal services these 150 stations now perform in their localities.

The staffing at these stations may need some augmentation, and there will be some nonrecurring expense in installing the equipment necessary for the remoting operation. But there will be a substantial net opertaional savings to the Government with no reduction in the quality of en route services.

Two new kinds of limited facilities will be tested to handle terminal services. The first is a one- or two-man facility we have come to call a Manicom. This facility would be a kind of manned satellite of the nearest full-time flight service station. The Manicom would have weather observation equipment, service A weather teletype (receive only), telephone lines to its parent station, a radio for contact with local aircraft and the usual complement of manuals, guides, and forms. The flight service specialists at the Manicom will take weather observations, provide airport advisory service, conduct pilot briefs, accept and close VFR flight plans, and the like.

While it was in operation, the Manicom could thus provide a full range of terminal services of quality comparable to those presently performed by existing flight service stations. As a hypothesis for testing, the facility would be in operation from 40 to 84 hours a week or even longer, depending on the time-activity curve for the particular location, the degree to which we might be able to work out a kind of "mutual assistance" program with the airport operator, and any other quality of the individual location which needs to be considered. The basic principle here, as throughout this system is to tailor the service to the actual needs of a given location—not too much, not too little—with self-help and cooperation from the local community as an important part of the total effort.

The manicom was designed to serve public-owned airports which are losing a full-time flight service station and which have a substantial activity level. The manicom might also be employed at locations where the weather network requires a facility with these capabilities.

In addition, we are exploring the possibility of extending manicom service to locations not now served by any Federal facility if the activity level and aid to safety is really significant. We have been thinking of these new facilities as the initial manned Federal facility at public-owned airports which may ultimately qualify as candidates for traffic control towers. Before the activity at such a location reaches the level needed to qualify for a tower, the manicom may prove a useful and economical service.

The other limited facility to replace remoted flight service stations is an unmanned flight planning desk we have been calling an airport information desk (AID). This will depend on local self-help and mutual aid. The installation would include weather observation equipment where the local operator agrees to do some rudimentary weather work for local pilots, service A weather teletype if needed, telephone service to the parent flight service station and the usual collection of current guides, manuals, directories, and forms.

A pilot departing from an airport equipped with an AID would be able to get basic local weather information, detailed weather information over his route and at his destination from the teletype, and from discussing weather with the flight service station in the vicinity by telephone. He would be able to file (and the arriving pilot would be able to close) VFR flight plans with the flight service station.

This AID would, of course, be available to pilots whenever the airport is open, and we believe it would provide pilots with all the basic data needed to plan a flight, plus an opportunity to discuss the information by telephone with an FAA flight service specialist.

AID service was designed for all airports losing a flight service station where the terminal activity is not sufficient to justify the cost of manicom.

If the manicom service can be extended as I have suggested to nonflight service station locations not yet qualifying for an FAA tower, AID service could provide a third level of service at nonflight service station locations, where activity does not justify a manicom. As in the extension of the manicom program, the principle is to perform a new and useful service at a minimum cost. If we place these

facilities at airports where they were warranted by the activity level, the service could be inaugurated at a considerable number of locations not now served by any Federal facility.

III

Perhaps the major criticism we have heard in moving ahead with this program is that it singles out general aviation for a discriminatory and unwarranted reduction of services.

The Federal Aviation Agency. is interested in promoting the continued growth of air commerce through general aviation, and I feel that we have made some significant accomplishments on behalf of this segment of the aviation community.

Some of these goals are being met through the airport-aid progam, through the installation of new equipment for navigation and communication and through widespread educational projects. The Office of General Aviation Affairs was established in the Agency to function as a focal point for Agency-wide staff leadership concerning matters in the general aviation field. To stay abreast of the developments and needs of general aviation, this Office maintains close liaison with the various aviation organizations and other groups active in this field.

Under the Agency's decentralization plan, we have attempted to give more responsibility closer to the level of operation so that the day-to-day needs of general aviation may be more adequately met.

FAA officials have worked closely with representatives of the general aviation industry and the Aviation Insurance Underwriters in seeking areas of cooperation toward reduction of general aviation accidents. We have implemented flight instructor refresher programs and other educational and improvement programs toward this goal.

I am confident that these and other programs will yield significant and important results and the Agency will increase its responsiveness to general aviation.

It is also worth noting that the cost of operating the airways system which can be reasonably allocated to general aviation is about $150 million annually. Through fuel taxes, general aviation pays the Federal Government about $7 million annually and under the administration's modest user charge proposal, now before the Congress, the charge to general aviation would be boosted to only $10 million.

We believe the flight service station program outlined here will quite adequately meet the needs of general aviation.

The program I have described is at the present only a program and not an accomplished fact. A considerable amount of work remains to be done, most of it at the regional level, in working out local details, identifying actual sites, and applying the general criteria discussed above. The compression of the full-time flight service station system from 297 stations to about 150 hard core facilities will be accomplished over a 2-year period. Unless field tests prove the new supplementary facilities impracticable or their effectiveness unworthy of their costs, it is expected that stations removed will be simultaneously replaced, where appropriate, with manicom or AID service.

The rate at which we extend manicom and AID facilities to nonstation locations will depend upon a number of things including the overall fiscal situation of the Government. The budget priority of this new program must be considered in relation to priorities of other programs within this Agency and throughout the Government.

Experience with manicom and AID facilities in present remoted flight service stations locations, however, will be helpful to us in defining the need for expanding these services beyond the present flight service stations system. If this further study confirms our faith in the promise of these facilities and makes possible the development of realistic criteria, the total system could ultimately provide the taxpayer the cost benefits of eliminating about half of the present flight service stations and would at the same time provide for the aviation community substantially enhanced service.

The savings to the taxpayer if the full program were implemented could amount to several million dollars annually. The benefits to the aviation community would come from better matching facilities and services with needs and from adding a considerable number of service facilities where none now exist. This would provide broader availability of airport advisory services and, most

importantly, a significant expansion of weather observation and weather outlet points.

There is no magic in this program, Mr. Chairman. The expansion of services and the simultaneous reduction of costs is made possible by redesigning the system to fit more definitively the needs which exist. In this retrofitting process, some services will be diminished. Some full-time flight service stations will be replaced with part-time Manicoms. Some will be replaced with AID's and this will eliminate the airport advisory service now being performed at those locations. At some locations, weather observations now being taken around the clock by full-time flight service stations will be taken only on a part-time basis, during periods when most of the activity exists.

We have thought hard about this program and will continue to scrutinize it closely as its detailed implementation is worked out. We believe the principle of tailoring facilities to fit needed functions is a sound one and one which will result in the most effective allocation of our resources.

Mr. WILLIAMS. Mr. Halaby, when I first read your statement, which we received this morning, I must confess that I was not very favorably impressed.

I still am not too much impressed with your prepared statement. But I am going to take the opportunity to compliment you on the presentation which you made which was not prepared in advance.

I think that you have done an excellent job in presenting a rather graphic picture of the program which you have presented here. I must confess after reading your statement I was bitterly opposed to the program and now I can begin to see a little bit of merit in it after you have explained it.

But, I am quite certain that succeeding witnesses will proceed to tear the idea apart. I do not know anything else that we can develop at this point until we know what the objections to the particular program that you have presented are going to be.

So, I don't have any further questions except to ask you if you will be amenable to coming back before the committee at a later date after we have received the testimony that will be forthcoming from the aviation groups, the organizations, and representatives of the several States.

Mr. HALABY. May I take your remarks as a compliment, Mr. Chairman?

Mr. WILLIAMS. It is intended as a compliment. I hope you will take it as a compliment. I think you do a better job off the cuff than you do on the written record.

Let me get back to one question. What do you plan to do, Mr. Halaby, in regard to improving landing aids and on stations of the manicom classification?

Mr. HALABY. In general——

Mr. WILLIAMS. Would that be affected in any way?

Mr. HALABY. In general, neither the current nor the programed installations would be affected directly by this program. We do have the needed function of monitoring the safe and reliable operation of those facilities at those sites. If the manicom is a part-time operation, we will have to make some arrangements other than the present visual observation of the monitoring equipment.

We will have to either through contract or through remoting or through some other self-correcting or alerting device, take care of that. We think we know how to do that but other than the monitoring, I don't believe it would have any direct effect.

We hope, as I think you, sir, know, to be able to develop some low-cost navigation facilities that we have never been able to do before. We are making about three experimental installations of an ILS that costs about, as I recall it, 30 percent of the present ILS.

We hope that after we have bought a few of these and installed them that we can, with the same amount of money, for facilities and equipment, supply a large number of instrument landing systems for a larger number of airports.

We hope that some of our lighting experiments will produce lower cost lighting that can be made available within the same appropriation request.

We are doing quite a number of things to add to lower cost, less complicated navigation facilities.

Mr. WILLIAMS. Some time ago I was advised that the Federal Aviation Agency was budgeting some $30,000 for VOR stations whereas, a community could install the same station for $10,000 or thereabout. Has that situation been cleared up any?

Mr. HALABY. I believe that we have made very great progress since you heard that report.

Mr. WILLIAMS. That has been some time ago?

Mr. HALABY. Yes, sir. I believe the report was substantially true and it had a very good effect on the agency. I cannot say that we are buying everything in the most frugal manner at this time but we have a crew working very, very hard on it and I believe the prices we are paying in relation to the State and local communities are coming down substantially.

On the other hand, they are able to select the risk they will take and the sophistication of the equipment they will be satisfied with on their own standards.

They are able to shut them off because they do not in many instances have the obligation of 24-hour service as we do. They are obligated to serve only civil as distinguished from both civil and military users.

Mr. WILLIAMS. Has it gone up or down since?

Mr. HALABY. I can't tell you except with a particular item of equipment but we have more demands on our equipment. That is one of the reasons they cost more in the first place. But we still think we can meet those demands, particularly on the VOR and the ILS.

We think we have made a lot of progress. You are absolutely right, we have paid too much for some items in the past. I think it is being corrected.

Mr. WILLIAMS. Mr. Halaby, we have kept you quite a while this afternoon. We appreciate your patience and your willingness to explain even the most elementary items to us. We would ask you if you would mind coming back at a later date to wind up these hearings.

Mr. HALABY. I would be very grateful for the opportunity to be the cleanup batter on any team of this committee.

Mr. WILLIAMS. I expect the testimony that will come in the next day or so will generate a number of questions on the part of the committee. With that understanding, the committee will adjourn until 10 o'clock tomorrow morning.

We had Mr. Lieurance scheduled to testify this afternoon. Would you prefer to go ahead this afternoon, Mr. Lieurance?

Mr. LIEURANCE. Whatever you desire. This afternoon or in the morning will be all right.

Mr. WILLIAMS. It is 4:15 now. If it is all right, we will let you start off in the morning.

Mr. LIEURANCE. Thank you very much.

(Whereupon, at 4:15 p.m., the subcommittee recessed to reconvene at 10 a.m., Wednesday, May 13, 1964.)

FLIGHT SERVICE STATIONS

WEDNESDAY, MAY 13, 1964

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND AERONAUTICS
OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1334, Longworth Building, Hon. John Bell Williams (chairman of the subcommittee) presiding.

Mr. WILLIAMS. The subcommittee will come to order, please.

We have several Members of Congress this morning who would like to give the committee a statement, I understand. The first one we will recognize is our colleague on the committee, Mr. Glenn.

Mr. Glenn, I believe you have a statement.

STATEMENT OF HON. MILTON W. GLENN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. GLENN. Yes, thank you very much, Mr. Chairman.

I would like to introduce it in the record at this time.

Mr. WILLIAMS. Let it be received.

(The statement referred to follows:)

STATEMENT OF HON. MILTON W. GLENN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. Chairman, under the recently announced plan of the Federal Aviation Agency to change the operation of certain flight service stations to a remote control system, controlled by master stations, a very important and fine airport in my south Jersey area will be affected.

I speak of the Millville Municipal Airport, which is in the direct flyway of the coastal area of the Atlantic seaboard. It is used repeatedly as an auxiliary airport to the main airports in areas such as Philadelphia, New York, and Atlantic City, and has been quite a safety factor in many instances, such as navigation, use of the field, and weather reports and observations.

In the remoting of the Millville Airport to Philadelphia it was estimated that FAA would save in maintenance, repairs, and reduced stocks and stores, approximately $95,000, by one official of FAA, and in another report in the AOPA magazine it was stated that FAA had announced a saving would be effected between $30,000 and $40,000, and that it would cost at least $30,000 to effect the remote control from Millville to Philadelphia. Therefore, it is difficult to visualize what saving is being made, if any, and weighing this against the safety factors, it is infinitesimal.

It is my opinion that the program has actually been brought about by the suggestion of some Members of Congress in hearings on the appropriation bill—that the Administrator might be able to reduce the cost of operating the air traffic system by reducing the number of air flight stations. I do not think the members of the committee making this suggestion were familiar with the safety services furnished by flight service stations and their relation to general aviation, and the Administrator and his staff did little to enlighten the Appropriations Com-

mittee on the way flight service stations fit into the overall aviation picture. As a result, the emasculation program aimed at closing over half the 297 stations in the domestic system has been undertaken. I am advised by those who are familiar with the program and all its facets that a diminution of the service to the extent proposed would be a crippling blow to general aviation, the largest and fastest growing segment of the aviation community. In my instance, the Millville Airport has fitted into the general aviation picture of the eastern seaboard since the Second World War. It has for many years and is continuing to perform an indispensable and critical service to the thousands who use the airport. Any lessening of the service, and particularly the remoting and consolidation of the station, would result in a derogation of service to general aviation and would more particularly result in a high degree of inconvenience, and would assuredly reduce significantly the safety now enjoyed by those who find it necessary to use this facility.

The county of Cumberland, which I represent, and in which the Millville Airport is located, has been designated as a depressed area, and any consolidation or remoting of this facility would mean a further cutback and reduction in the economy. Actually, there would be a loss in excess of $150,000 in annual payroll alone and, in addition, would reduce the attraction of a well-equipped airport, which has been a very important factor in attracting industry to this area.

In my opinion, the consolidation and remoting of the facilities of a metropolitan airport, as suggested, and the paying and training of part-time weather observers, would in the interest of overall economy result in little if any savings to the taxpayer.

Mr. WILLIAMS. We have our colleague from the State of Tennessee, Congressman Everett.

STATEMENT OF HON. ROBERT A. EVERETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. EVERETT. Thank you, Mr. Chairman. I will be very brief because I have a group from Dyersburg coming tomorrow to testify but I thought maybe I would not be in town and I did want to very much and vigorously oppose the closing down of the FAA station at Dyersburg, Tenn., which is in my congressional district.

We are peculiarly located in the fact that we are in the storm belt, as you might say, and this service would be moved from Dyersburg into Memphis, Tenn., which is some 70 miles south. The weather is sometimes and on numerous occasions different in every respect from that in Memphis. As to being in this storm belt, it would, of course, where the pilot got his briefing from the airport in Memphis, the weather might be entirely different in Dyersburg. Of course, a lot of pilots would take an extra chance to get into Dyersburg and Dyersburg also services northeast Arkansas and southeast Missouri. There is a world of traffic, as the mayor will tell you tomorrow and those he is bringing with him.

I will certainly appreciate anything that might be done to help us keep this FAA station in Dyersburg.

Thank you a lot, Mr. Chairman.

Mr. WILLIAMS. Thank you, Mr. Everett.

Are there any questions?

Senator Stennis of Mississippi was scheduled to appear this morning. I understand he is unavoidably detained but his representative, Mr. Statham, is here.

Do you wish to submit that statement for the record, Mr. Statham?

Mr. STATHAM. Thank you, Mr. Chairman.

The Senator regrets he could not be present but he does wish to submit a statement, and also present Colonel Key, who will testify.

Mr. WILLIAMS. The committee is happy to receive his statement. (The statement referred to follows:)

STATEMENT OF HON. JOHN STENNIS, A U.S. SENATOR FROM THE STATE OF MISSISSIPPI

Mr. Chairman, the recent announcement of the Federal Aviation Agency with reference to the consolidation and closing of a number of flight service stations is one of great significance. Certainly we in the Congress cannot quarrel with any administrative agency which seeks to effect greater economy in the service it renders and in its internal operations. However, I do not believe we can approach a matter such as the safety and efficient operation of the congested airways of our Nation primarily from a budgetary or economy point of view. Our first concern must be that of providing the best possible service to the aviation industry, for as Administrator Halaby stated in his appearance before this committee on May 12, 1964, "The principal business of the FAA is air safety and public protection."

And yet it appears, Mr. Chairman, that the primary motivation behind the Administrator's decision to close some 41 flight service stations throughout the Nation was to save money. Simultaneously with the announcement of this decision, an effort was made to justify that decision on the grounds that, due to technological advances in the sciences of communication and navigation, no reduction in flight safety will result. The only reply necessary to this position is to state the opinion of experienced aviators and representatives of the industry who seem to be in unanimous agreement that the closing of these flight service stations will inevitably result in decreased efficiency and reduced safety in the areas where these stations are located.

I am confident, Mr. Chairman, that this committee will receive competent testimony on the overall feasibility and necessity of consolidating these stations throughout the Nation, and I therefore will not make any additional general remarks on the announcement of the Administrator. However, I do want to devote particular attention to the closing of the Meridian, Miss., flight service station.

The city of Meridian is the second largest municipality in the State of Mississippi and is serving an increasingly important function in the field of air transportation and military aviation in our State and the surrounding area. In additon to the approximately 50 private aircraft owners in the immediate area, the municipal airport at Meridian serves two commercial airlines and the largest operation of the Mississippi Air National Guard. There is also an Army National Guard helicopter unit on the field, and the facilities are used extensively by the McCain Naval Auxiliary Air Station and Craig Air Force Base for training on the instrument landing system (ILS). The significance of the field is evidenced by the fact that traffic has increased from 29,579 in fiscal year 1961 to 44,439 in fiscal year 1963.

Although the total itinerant operations exceed the 24,000 operations necessary to qualify an airport for a FAA operated control tower, there is no such tower located at the municipal airport. Because of heavy traffic, however, the Air National Guard for several years has operated a control tower between the hours of 8 a.m. and 5 p.m. except on holidays. Therefore, for a considerable part of the time there is no traffic control tower in operation, and this function is largely served by the flight service station. In the absence of such service the instrument landing system cannot be utilized, to the very serious disadvantage of aircraft operating in the area during inclement weather conditions. Mr. David Teetor, executive director of the National Aviation Trades Association, in a letter of March 13, 1964, to the chairman of this subcommittee pointed out the seriousness of this situation when he stated:

"A prerequisite for the vitally needed instrument landing system at Key Field is a control tower. The flight service station fulfills this function. If it is consolidated, a control tower must be built at this airport. If the station is lost, it is questionable whether much of the traffic will be able to use this facility and possibly airline services will be curtailed."

It is significant to note that Mr. Teetor chose the Meridian flight service staiton as one of seven such facilities to specifically discuss in this letter with reference to the Administrator's announcement of the closing of these 41 facilities.

Flight service stations play an indispensable role in assisting general aviation aircraft in the planning of flights and also through instructions to en route

flights. These services, in the opinion of private pilots, simply cannot be performed as efficiently through a remoted station located 90 to 100 miles from the aircraft's location. For example, during the period from April 1 to June 30, 1963, 398 pilots requested help because they were lost with a fast diminishing fuel supply. Of this number, 211 were located and directed to a safe landing by flight service stations through reference to lights, landmarks, and terrain features. I submit, Mr. Chairman, that this type of service cannot be measured in terms of the monetary savings which the FAA estimates will be realized through the closing of these stations. The Meridian facility alone was credited with saving 14 lost aircraft, and possibly many lives, in the period from July 1962 to January 1964.

I am also concerned, Mr. Chairman, with the uncertainty of the amount of savings which would result from remoting the Meridian station. In a letter to me dated January 31, 1964, Administrator Halaby stated that the savings would be approximately $7,000. However, the announcement of February 4, 1964, issued by the Atlanta office of the FAA shows an estimated savings of $71,400; so I am not at all sure that it is realistically known what the net savings would be. In the absence of more definite information, I believe it somewhat immature to close this facility.

In conclusion, I want to emphasize the vital role which the flight service station at Meridian is serving. With increasing traffic in general aviation, aircarriers, and military aircraft, I believe it would be very unwise to remove these facilities to Jackson, Miss., located some 90 miles away. It is simply not realistic to think that this action would not result in a lower degree of safety in the Meridian area. As Administrator Halaby stated to your committee yesterday, "We need facilities that are tailored closely to the needs of a given location." That is what exists today at the Meridian Flight Service Station, and I sincerely urge this committee to take whatever action is necessary to see that this facility remains open.

Mr. WILLIAMS. Are there any more Members of Congress who wish to testify this morning or submit statements?

If not, our first witness this morning is Mr. Lieurance, representing the Weather Bureau.

STATEMENT OF N. A. LIEURANCE, DIRECTOR, AVIATION WEATHER AFFAIRS, U.S. WEATHER BUREAU

Mr. LIEURANCE. Mr. Chairman, members of the committee, Dr. Robert H. White, the Chief of the Weather Bureau, regrets he is unable to be here. He is in Europe as head of a scientific delegation to the Soviet Union. I have been asked by Dr. White to represent the Weather Bureau.

My name is N. A. Lieurance, I am the Director of Aviation Weather Affairs of the U.S. Weather Bureau.

I have a short statement, Mr. Chairman, that I would like to read for the record.

Mr. WILLIAMS. All right, sir, proceed.

Mr. LIEURANCE. The Weather Bureau has cooperated with the Federal Aviation Agency for some time in its study of the flight service station program. The FSS's provide important weather services, and changes in the FSS program can have an impact on these weather services to aviation and also on the national weather observational network.

A study was started a few months ago under the joint sponsorship of the FAA and Weather Bureau. Mr. Halaby commented on that yesterday. The purpose of this study was to determine ways of making more efficient use of FAA and Weather Bureau field facilities in providing preflight and inflight weather services for aviation while at the same time effecting economies.

During this study, the current operational system and related FAA/Weather Bureau formal and informal working agreements are being analyzed in the areas of weather observations, services (pilot weather briefing), display, distribution, physical facilities, construction, electronic maintenance, and communications. When this study is completed, we expect to have a plan whereby the FAA and the Weather Bureau can provide the necessary weather and flight services at minimum cost.

Because of the central role of FSS's in taking weather observations and disseminating aviation weather advice, their operations were subject to extensive study. One of the major accomplishments of this study to date has been a determination that a number of FSS's can be remoted at a substantial savings to the Government while providing essentially the same aeronautical and weather services.

Based on this study and with full coordination with the Weather Bureau, the FAA announced the proposed remoting of 42 FSS's.

In order to understand more fully the problem of remoting FSS's while at the same time maintaining adequate weather services, it will be helpful to review briefly the Weather Bureau services to aviation and the working relationship between the FAA and Weather Bureau with regard to aviation weather services.

Providing day-to-day weather services to aviation has been a long-time responsibility of the Weather Bureau, dating back to the beginning of World War I. The first formal recognition of the Weather Bureau's responsibility in this regard came with the passing of the Air Commerce Act of 1926. These responsibilities were retained in the Civil Aeronautics Act of 1938 and carried forward in the Federal Aviation Act of 1958.

Mr. Chairman, the language in the Air Commerce Act of 1926 is virtually the same as the language that now appears in the Federal Aviation Act of 1958.

Mr. WILLIAMS. While you are at the point, you say that the language in that act is the same as the language in this act. Is it incumbent upon both FAA personnel and Weather Bureau personnel to furnish the same services?

Mr. LIEURANCE. No, sir.

Mr. WILLIAMS. To the pilots?

Mr. LIEURANCE. The same service?

Mr. WILLIAMS. Yes.

Mr. LIEURANCE. It is not incumbent. In connection with the flight service stations the Weather Bureau produces the product. These are warnings, forecasts and advisories.

The flight service station is in fact a retail store that dispenses the products produced by the Weather Bureau.

Also, the Weather Bureau airport stations are also retail stores. There are a number of locations, in the neighborhood of 80 or 85, where WBAS and FSS are colocated either in the same building or at the same field. These are places where there are two retail stores and it is incumbent upon the Weather Bureau and the FAA personnel to answer questions upon request concerning the weather as it relates to aviation.

Mr. WILLIAMS. To some extent, there is a duplication of effort?

Mr. LIEURANCE. Yes, to some extent there is.

There is a program underway now where we are trying to eliminate duplication of effort. The FAA and Weather Bureau have a number of pilot projects. The closest one to Washington is at Charleston, W. Va. There we are consolidating our efforts and will have a single briefing facility, a single telephone number, a single store so to speak. This will be in operations about July 1.

Mr. WILLIAMS. I believe you have a similar facility in Atlanta, don't you? I know when I go in there I do not know whether I am talking to a Weather man or whether I am talking to an FAA man, but I always get the information I want without any difficulty.

Mr. LIEURANCE. I am not quite sure of the actual physical location of the flight service station at Atlanta. However, the Weather Bureau has an aviation forecast center there (FAWS) located in the Southern Airways Building.

The Weather Bureau services to aviation include:

(1) A flight advisory weather service producing terminal weather forecasts, and en route weather forecasts which includes winds, temperatures, and advisories of hazardous weather.

I might here state that the facility at Atlanta is one of the 25 flight advisory weather service centers which actually produce this type of product for a specified area.

(2) An international aviation service producing weather reports, forecasts, briefings, and documentation for all flights departing from U.S. territory over international air routes. This service extends over about one-third of the Northern Hemisphere, from the Far East to Europe, between the polar regions and the Equator. This service is in accordance with international agreements under ICAO (International Civil Aviation Organization).

(3) An airport observing program providing measurements of weather conditions important for aircraft approaches, landings, and takeoffs. This includes specialized equipments and procedures for determining cloud height at the middle marker of the instrument landing systems, runway visual range at the approach end of major runways, and temperature and wind at representative points on the runway complex.

(4) A program providing mass dissemination of aviation weather reports, forecasts, advices, and warnings over the FAA navigational aid and on automatic telephone answering systems in the major metropolitan areas throughout the country.

In addition, Mr. Chairman, the Weather Bureau maintains in the major metropolitan areas unlisted aviation telephone numbers which are not published in the regular directory but are published in the Airman's Guide and many trade magazines, aeronautical magazines for the benefit of the pilot.

This type of mass dissemination of weather information enables the pilot to obtain necessary preflight weather information from almost any location where there is a telephone or an aeronautical radio receiver.

In providing these specialized services to aviation, the components of the Weather Bureau's basic national meteorological service system are essential. Without the widespread surface, upper air, and radar observing network, the international exchange of meteorological information, and the analyses prepared by the National Meteorological Center, the aviation special services would not be possible.

The Weather Bureau and the FAA of necessity maintain a close working relationship. This has been traditional with the predecessor agencies of the FAA, extending back through the history of Federal aviation agencies.

The cooperation has been principally in the areas of communications, airport observations, and pilot weather briefing. The FSS's and their predecessors have played a key role in these services. This program of cooperation, making full use of Federal facilities at airports, has permitted the Weather Bureau to serve aeronautics without large increases in annual appropriations.

At present the FAA, though its FSS's, provides airport observations and pilot weather briefing services at one-third of the nearly 760 locations where official Weather Bureau observations and services exist.

Now, these 760 locations, Mr. Chairman, are the number of official Weather Bureau observations taken throughout the 50 States and possessions. It is not confined just to the 48 States. For this reason you might have some discrepancy in the numbers given by me and the FAA. I think the numbers they are using relate primarily to the 48 States.

Mr. WILLIAMS. Mr. Friedel.

Mr. FRIEDEL. You said FAA, through its FSS, provides airport observations and pilot weather briefings at one-third of the nearly 760 locations. Then I notice on page 2, you said that a number of FSS can be remoted at a substantial saving. You say you have weather stations at one-third of the 760 places and you recommend some of them be closed down and be remote stations. How can that work out?

Mr. LIEURANCE. Mr. Congressman, at the 42 stations that have been announced for remoting by the FAA, the Weather Bureau will provide a minimum observing program when the station is remoted. In other words, we are taking care of the meteorological requirements by establishing a cooperative station with an airline or fixed base operator or in some cases paying a local citizen so much per operation to take care of the minimum meteorological requirements.

Mr. FRIEDEL. In other words, the Weather Bureau will have 42 stations that will be remoted?

Mr. LIEURANCE. Out of the 42 stations, as I recall, there are about 10 places with a Weather Bureau office. Therefore, there is no change in the Weather services.

Mr. FRIEDEL. There will be no change in those?

Mr. LIEURANCE. No change in those. In other locations, the Weather Bureau is planning to go in with a full-time Weather Bureau office. At a great percentage of these, though, Mr. Congressman, the Weather Bureau is providing the airport observations through cooperation of either an airline or fixed base operator at no cost to the Government.

Mr. FRIEDEL. I think you heard Congressman Everett's statement that they intended to close up one flight service station in Dyersburg and move it to Memphis. That will be 70 miles away from Memphis. Will they have any one at that paritcular station to give a weather report?

Mr. LIEURANCE. At Dyersburg, Tenn., when the flight service station is remoted, the Weather Bureau will provide a cooperative observing program at the airport in collaboration with an airline. I

can't remember the name of the airline. May I ask Mr. Gladney, my assistant, here, to help me on this one?

Mr. GLADNEY. There will be weather observations provided at Dyersburg on a reduced scale. By this I mean they will not be 24 hours a day as now provided by FAA. There will be part-time observations provided at Dyersburg by the Weather Bureau through cooperative arrangement. This is a "sawrs" type of weather-reporting station.

Mr. LIEURANCE. There is an air carrier in Dyersburg. I don't know the schedules but there will be a supplemental weather reporting station established at Dyersburg to take care of the requirement for landing and takeoffs at that airport.

Mr. FRIEDEL. Thank you.

Mr. LIEURANCE. I was enumerating some of the services of the Weather Bureau.

Most of the observations provided by the FSS's are an important supplement to the surface observing network, and in addition to their use by aviation, some are needed for other services of the Weather Bureau, particularly the public weather service.

Aviation continues to grow in national and international importance, and this growth probably will increase even more rapidly in the future. The demand for aviation weather services has had a parallel increase. Since World War II, it has become increasingly difficult for the Weather Bureau to provide inperson or telephone briefings with individual pilots with its available resources and to maintain weather observing facilities at the ever increasing number of air carrier and general aviation airports.

This problem has been alleviated in part by resorting to cooperative programs of observations, utilizing air carrier personnel, airport personnel, fixed-base operators, and others as designees to provide official weather observations with almost no cost to the Government. FAA cooperation has been expanded to include more of its facilities, e.g., towers, in the official observational program.

The pilot weather briefing problem has been relieved in part by the program of mass dissemination of weather information over FAA radio facilities and telephone recordings in the major communities.

To further expand the weather information services, the Weather Bureau entered into an agreement with the FAA some 2 years ago whereby the FSS personnel would be trained and qualified as pilot weather briefers. The flight service specialists have now been trained in the fundamentals of meteorology, particularly as it relates to aeronautics, and are certified by the Weather Bureau as qualified pilot weather briefers. Through this arrangement, the number of weather briefing outlets has been more than doubled. This arrangement makes available a more complete aviation weather service at more locations at a very low cost. The program has proven highly acceptable to the aviation community.

Both the weather observations and the weather briefings that are provided by the FSS's are important to aviation, especially to the general aviation pilots. Under the FAA's program to remote FSS's, it is believed that locations have so far been chosen which will minimize the impact on weather services to aviation. The pilot will be able to obtain the same quality weather briefings over air-ground facilities and by telephone as before. The continuous weather broadcast

and the automatic telephone answering services will remain unchanged. We are cooperating with the FAA to insure that the FSS remoting program will have minimum impact on the airport observing program.

We have discussed with FAA its plan concerning the provision of weather observations and services in connection with the FSS remoting program, and this is the plan that was briefed by Mr. Halaby yesterday before the committee. We will work closely with the FAA in the program to insure that weather services are adequately provided.

Mr. Chairman, in closing may I say that the problem of the Weather Bureau is to insure that there is an adequate weather observing program to provide forecasts and warnings for aviation as well as other users. There are over 6,000 airports, of which about one-half are publicly owned. The Weather Bureau, through commissioned facilities—and by "commissioned facilities," I mean full-time Federal employees—maintains observations and services at 266 of these airports.

Through cooperative arrangements with the FAA, official Weather Bureau observations and services are available at 267 more airports, and through cooperative arrangements with the airlines and airport authorities, official observations are available at some 223 other locations. Weather observations and services are available at about 760 of these airports which are located in the vicinity of the major cities. The bulk of these airports are located in the vicinity of major cities and they are primarily served by the air carriers under a certificate of convenience and necessity issued by the Civil Aeonautics Board.

With limited funds and such a large number of airports, priorities must be established in order to arrive at an equitable and reasonable distribution of facilities. We are constantly trying to establish better criteria and are exploring means to better serve all of aviation everywhere all of the time.

We are ever mindful of the responsibility of the Weather Bureau in the protection of life and property and will continue to work with the Federal Aviation Agency and the aviation industry to enhance the safety of flight and promote the efficiency of aviation operations.

Thank you very much, Mr. Chairman.

Mr. WILLIAMS. Thank you very much, Mr. Lieurance. There may be some questions.

Mr. Friedel?

Mr. FRIEDEL. No questions.

Mr. WILLIAMS. Mr. Springer?

Mr. SPRINGER. No questions.

Mr. WILLIAMS. Mr. Jarman?

Mr. JARMAN. I have no questions.

Mr. WILLIAMS. Mr. Sibal?

Mr. SIBAL. Do you have an arrangement with the nonpublicly owned airports to provide services there?

Mr. LIEURANCE. We have no arrangements for providing local service for nonpublicly owned airports.

Mr. SIBAL. Would it be practical to work out something like that?

Mr. LIEURANCE. I can give a personal opinion here, Mr. Congressman. I think it would be perfectly possible, yes, indeed, and perhaps desirable.

Mr. SIBAL. Thank you.

Mr. WILLIAMS. Mr. Lieurance, on page 1 of your testimony, you made mention of a study that was conducted by the Weather Bureau and the Federal Aviation Agency in regard to flight service stations. When was that study begun? Is that a continuing thing?

Mr. LIEURANCE. The study that I mentioned which is elaborated on at the bottom of page 1 and the top of page 2, includes the whole spectrum of services provided by the FAA and Weather Bureau at airports. This includes buildings and communications of all sorts and things of this nature. This study was started last September. There was a joint group set up by agreement between the Assistant Secretary of Commerce for Science and Technology and the FAA Administrator, to look into this whole area of joint facilities and provisions of weather services to aeronautics. This was started last September. Now the flight service station program, remoting program and review program, has been a continuing thing so far as I know for many years; I think Mr. Halaby mentioned about 1949. This was about the time I came with the Federal Government. But since this was such an important program, and the FAA felt it was a very high priority project, it was looked at by this organized group——

Mr. WILLIAMS. Was this study initiated by the Federal Aviation Agency?

Mr. LIEURANCE. No—the one in September?

Mr. WILLIAMS. Yes.

Mr. LIEURANCE. Well, it is hard to say, Mr. Chairman, whether they actually initiated it or Commerce initiated it. The Commerce Department (Weather Bureau) and the FAA felt a strong need to get together and look at these joint facilities since we had not reviewed our working arrangements for some time. These agreements were with the old CAA. So, I would say it was a joint effort.

Mr. WILLIAMS. Was there any indication at the beginning of the study that there was a desire on the part of the Federal Aviation Agency or the Department of Commerce to reduce the number of flight service stations in operation?

Mr. LIEURANCE. In the establishment of this joint study group, this was not mentioned as a primary mission of the original study group set up in September.

Mr. WILLIAMS. In view of that response, do you know what caused the initiation of the study? In other words, what prompted it?

Mr. LIEURANCE. Mr. Chairman, I am not quite sure what prompted the FAA to place this as a high priority. I think Mr. Halaby answered this question yesterday and I do not think I can add anything to this, sir; to my knowledge the Department of Commerce (Weather Bureau) has not felt any great urge here except a desire, of course, to maintain a level of service which would in our opinion be what aviation needs within the authority that we have to provide these services.

Mr. WILLIAMS. Is that study still underway?

Mr. LIEURANCE. Yes, sir; it is still underway. The joint group has been dissolved. However, as a replacement for that, we have now a series of ad hoc arrangements at various working levels in all the areas of joint concern.

Mr. WILLIAMS. Has a final date been set for the completion of the study and reports to the Secretary and the Administrator?

Mr. LIEURANCE. The original program of a joint study was started in September, and I would like to emphasize here again, sir, this was not started for the FSS program alone; it was concerned with the whole spectrum of Federal aviation services.

Mr. WILLIAMS. Have you begun to see daylight on the completion of the study?

Mr. LIEURANCE. The preliminary study was to be completed by the 1st of April. We dissolved the formal group that was set up last September on the 3d of April. The final report is now in preparation. Lots of it is not complete. For example, cost-benefit studies and things of that nature are not complete.

Mr. WILLIAMS. In view of that, and the fact that the report has not yet been finalized, do you know on what basis the Administrator may have selected some 42 stations for action as far back as February?

Were these 42 stations discussed specifically with the Weather Bureau and your opinions, advice, and counsel requested in regard to these individual stations?

Mr. LIEURANCE. Yes, sir.

Mr. WILLIAMS. Were the stations selected by the Federal Aviation Agency to be closed suggested by the Weather Bureau?

Mr. LIEURANCE. Mr. Chairman, I would say they were jointly selected. We looked at the whole FSS program and the Weather Bureau was a full-time party to these discussions, particularly in those areas where the flight service station was involved in Weather Bureau programs, observing, pilot weather briefings, and so forth. Out of the entire list, the 42 were jointly selected as being those which would have the minimum effect on the programs that we were concerned with and would result in savings to the Government. So the answer directly to your question, sir, the Weather Bureau and the FAA were jointly responsible for the selection of these 42 stations.

Mr. WILLIAMS. Could you advise us how many other people, that is people who are essentially nonaviation people, take advantage of your service at airports?

Mr. LIEURANCE. This is a very difficult one to answer. I am sure a great number of people who are not——

Mr. WILLIAMS. I am speaking, of course, of the facilities at the airport.

Mr. LIEURANCE. At the airport, that is right. Are you talking specifically, Mr. Chairman, of the telephone aspect?

Mr. WILLIAMS. Well, I am thinking of housewives, businessmen, farmers, et cetera.

Mr. LIEURANCE. If we get a call on the unlisted aviation number from a nonaviation person, we do not tell him "You can't have the information." We do answer his questions. It is, after all, a public facility. But we will try as diplomatically as possible to suggest that he call the other number or listen to the radio, because this phone is primarily for aeronautics and is reserved for aviation information.

Now, periodically, we change these numbers. Every so often the unlisted number is changed because it does not take very long for this number to be completely bogged down with nonaeronautical calls because people talk and they pass it on.

Mr. WILLIAMS. As far as your aviation reporting is concerned, that does constitute a problem.

Mr. LIEURANCE. Yes, indeed it does.

I might add something here, Mr. Chairman, because I think it is quite important. Just as soon as you open up a special facility, like an aeronautical facility, to the public, you very, very quickly get bogged down to the point where you can't take care of the aeronautical services.

Mr. WILLIAMS. In your statement you said: "formal and informal working agreements are being analyzed in the areas of weather observations, services." Can you give us the details of the formal and informal working agreements that are being analyzed?

Mr. LIEURANCE. The first formal agreement, Mr. Chairman, between the Weather Bureau and the then Bureau of Air Commerce was 1930. This is an exchange of letters between the Secretary of Agriculture, where the Bureau was at that time, and I believe the Director of the Bureau of Air Commerce. These letters transferred to the Bureau of Air Commerce the responsibility of providing long-line communications for the Weather Bureau. Now, this is one agreement that we are looking at.

Another one, was signed by the Weather Bureau and FAA in 1950. This is called the CAA-Weather Bureau memorandum of understanding. This was signed then by Donald W. Nyrop, who was, I believe, the Acting Administrator of CAA and Dr. Reichelderfer, Chief of the Weather Bureau at that time. This laid down working arrangements at the field level, concerning observations and other programs. Basically this agreement spelled out what the Weather Bureau would do for the CAA and what the CAA would do for the Weather Bureau.

This is still a valid agreement, as far as the field service is concerned, since it has never been rescinded. It has been agreed that we will study this along with other agreements. We have a formal agreement with the FAA on the joint use of radar for weather detection.

We have a formal agreement with the FAA concerning the provision of pilot weather briefings.

This involves the training of the FAA flight service specialist in weather. They are not becoming meteorologists but they are becoming weatherwise, they are studying a little bit about the fundamentals so they know what they can and cannot do.

We have a staff assigned to the FAA Academy at Oklahoma City, to handle the meteorological training. These meteorologists also handle weather training for other aspects of the FAA training program. These are the formal ones. I can't recall the informal. There are some unwritten things that you cooperate on. For example, at an airport, in case of an emergency, the FAA and the Weather Bureau certainly cooperate in all respects.

We have an agreement with FAA, at John F. Kennedy airport, New York, O'Hare Airport in Chicago and Los Angeles International Airport, concerning visibility. When there is a failure of the visibility equipment on the main ILS runways, and the visibility is at or below a certain value, an observer is dispatched to the end of that runway to observe the weather under these critical conditions. The observer may be an FAA or Weather Bureau employee depending on availability.

We have a number of agreements like these, sir.

Mr. WILLIAMS. Where the flight service stations and the Weather Bureau are combined in the same building, how do you arrange for the housing? Is it a joint venture of the FAA and the Weather Bureau, or does the Weather Bureau furnish housing for the FAA people, or vice versa?

Mr. LIEURANCE. No, we are an independent agency so far as the quarters are concerned. Whenever there is a new building at an airport, Federal aid building particularly, the FAA determines from the Weather Bureau how much space the Weather Bureau needs for this facility. It is through the FAA that we arrange our space in this category of building.

Now, when the FAA builds a building at an airport to house their local services, like the flight service station or a tower, or maybe their inspection staff, the Weather Bureau will participate in the design and if it is convenient, we will take space from them and pay them.

Mr. WILLIAMS. You pay them for the space?

Mr. LIEURANCE. That is right. Usually what it amounts to, Mr. Chairman, is the cost of utilities and janitor services and this type of thing, not actual rent per square foot of space. This would become a Federal building actually.

In cases where there is no Federal building, I can't recall a location right off, the Weather Bureau negotiates with the local authorities for space and tries to get the space at the most economical price.

Mr. WILLIAMS. In your statement, you indicated that you expected to have a plan whereby the Federal Aviation Agency and the Weather Bureau could provide necessary weather and flight services at a minimum cost. You state that at the conclusion of your study this will be done, I believe.

Does that reflect what Mr. Halaby testified to yesterday, or does his testimony reflect what that plan is?

Mr. LIEURANCE. The plan that Mr. Halaby briefed yesterday, sir, has had a preliminary look-see, by the Weather Bureau. We have made some preliminary evaluations of the plan. I am sure before Mr. Halaby makes any decision to go forward with such a plan, the Weather Bureau will be a party to it.

Mr. WILLIAMS. Have you been consulted thus far with respect to that specific plan?

Mr. LIEURANCE. We have. We have been consulted. We have been apprised of it in detail. We have not completed, however, our analysis of the weather aspects of this plan which they have requested us to do. This has not been completed.

Mr. WILLIAMS. They have requested you to do it but you have not yet completed it?

Mr. LIEURANCE. Yes, sir.

Mr. WILLIAMS. At the conclusion of the study, will there be an improved service at a reduced cost? If you feel that there will, can you explain how this is going to be done?

Mr. LIEURANCE. It is very hard, Mr. Chairman, right now to answer that categorically. I can only speak concerning the weather aspect of this since I do not have the competency nor the authority to speak in the other areas.

It is my opinion that, when the study is complete and the FAA and the Weather Bureau have gotten together completely on details, that there is a very, very good chance that the weather service to aviation could be much better and particularly much more available to the individual pilot than at the present time.

Now, I might explain some of the things that appear to me——

Mr. WILLIAMS. Are you speaking of terminal services or en route services or both?

Mr. LIEURANCE. I am actually talking about both now. I am quite well aware, Mr. Chairman, that when you remote a flight service station that is making observations on a 24-hour basis around the clock and you substitute therefor something less than that, you are in effect reducing a service. I am well aware of that, but the question is, how much are you reducing it and what impact would this have on an airport, on the safety?

Mr. WILLIAMS. I might as well get around to the $64 question while I am about it. In your opinion, will the elimination of these 42 flight service stations reduce service to the general aviation community?

Mr. LIEURANCE. Mr. Chairman, it is my opinion that the 42 stations that we are talking about now, the remoting of these stations and the plans that the Weather Bureau has with the FAA to fill in behind these remoting stations, will not reduce the necessary weather services.

Now then, when you analyze this from the standpoint of safety, the impact on safety, it is extremely difficult.

In my opinion, from a weather viewpoint, I don't think that safety would be jeopardized in any way by the remoting of these 42 stations. As a matter of fact, I know Mr. Halaby would not permit a program that would jeopardize safety, nor would we. There is a question as to how much you want to pay for safety? I mean just how much is it worth? These are very difficult questions to answer.

I think the general weather services will not be hurt.

Mr. WILLIAMS. I am simply asking for your opinion. I know that Mr. Halaby would not consciously nor intentially do anything that would reduce the level of safety. The question as to whether such action would do it is subject to argument.

Mr. LIEURANCE. My analysis at the moment, and my own personal opinion is that what we have planned concerning the weather support after the 42 stations have been remoted would have a very minimal effect on the weather services. I mentioned in my statement the briefing is not going to change. You still get that by telephone. The forecasts, warnings, advisory services will not be affected since most of these places are, from a severe weather viewpoint, under the umbrella of a nearby Weather Bureau radar. There are exceptions to this, however.

Mr. WILLIAMS. Yes; as a matter of fact, yesterday it was testified before the committee that there were unique weather circumstances and conditions that were prevalent in the area of Elmira, N.Y.

Another gentleman testified to the same thing with respect to Poughkeepsie.

Mr. Halaby, I believe, mentioned a place in California called Arcada, where they have unusual weather circumstances.

I can anticipate the same type of testimony from Brunswick, Ga., from Meridian, Miss., from Pensacola, Fla., and from out west.

Does the Weather Bureau recognize that as being a factor in certain places; in other words, they have unusual weather conditions that may require more intensive surveillance?

Mr. LIEURANCE. Mr. Chairman, yes; the Weather Bureau recognizes that weather is highly variable from one end of the runway to another and certainly highly variable between airports in the same community. This is particularly true in areas where you have mountainous terrain, rivers, and so forth.

For example, this morning is a good example, between Dulles and Washington National. Dulles is some 300 feet higher than Washington National. Dulles had a little trouble this morning visibility-wise and Washington National had some trouble but not nearly as much.

So, there are differences, there is no question about this. Sometimes there are quite important differences concerning visibility, winds, ceilings, types of precipitation, and this type of thing. We do recognize this; yes, sir.

Mr. WILLIAMS. In your testimony, you describe the flight service station's role in taking weather observations and providing weather service as a central role. Is the FAA's responsibility in this paramount to that of the Weather Bureau in serving aviation?

Mr. LIEURANCE. Well, the big problem is weather at most of the locations in the list of 42. It is the responsibility of the U.S. Weather Bureau to provide weather to promote safety and efficiency of aircraft operation.

Mr. WILLIAMS. As a weather bureau man, you feel that your role is primary?

Mr. LIEURANCE. Yes, that is right.

Mr. WILLIAMS. On page 2, you mention it has already been determined that a number of flight service stations can be remoted at substantial savings to the taxpayer while providing essentially the same aeronautical and weather services.

Now, if a study is still underway, how was this determination made prior to the conclusion of the study? Was that your responsibility or Mr. Halaby's?

Mr. LIEURANCE. Well, I think this would be primarily an FAA responsibility since the primary function of the flight service station, in answer to your other question, is communications and aeronautical nonweather services. That is the reason they exist. They are not there because of weather, they are there because of other aeronautical services. Because they are there and they have time and personnel to do it, they take on these other services for the Weather Bureau as cooperators. So, I guess I would have to agree, sir, that their primary role is not weather although from my viewpoint, the weather aspects of this becomes the greatest problem.

I would say it would be up to the FAA primarily to determine that the remoting of the 42 would have the least effect on the services and the programs concerned with aviation.

Mr. WILLIAMS. You do not need to answer this question if you don't want to, but did you agree with the FAA's action in closing these 42 stations?

Mr. LIEURANCE. Mr. Chairman, we are a party to the agreement and to the news release that was put out by the FAA announcing

that the 42 stations would be remoted and that the Weather Bureau would handle the weather service in some other way without jeopardizing the safety and efficiency of operation.

Mr. WILLIAMS. Do I understand from that answer that you concur in the action of the FAA?

Mr. LIEURANCE. Yes, sir.

Mr. WILLIAMS. Now, if 42 flight service stations can be remoted without reducing the service, how many more might be remoted without reducing service?

Mr. LIEURANCE. That is a difficulty one for me to answer, sir.

The flight service stations play a rather important part in observing the weather and particularly as retail stores for the general aviation pilot. This program should be seriously studied from the standpoint of the FAA and Weather Bureau missions. I think that the joint Weather Bureau and the FAA review is in line with this thought.

I would be wrong, in saying that all of these 42 FSS's serve a required weather need. This would not be true. Those that have no effect on the weather observations and weather distribution from a weather viewpoint are not needed. I am sure there are some of these.

Mr. WILLIAMS. Both you and Mr. Halaby mentioned that substantial savings would be effected through this plan. Would you be in a position to advise the committee what you estimate those substantial savings will be?

Mr. LIEURANCE. Well, the 42, the announced savings is a million and a half dollars annually.

Mr. WILLIAMS. Is that to the Weather Bureau, the FAA, or is that a saving to the Federal Government?

Mr. LIEURANCE. That would be net savings to the Federal Government. There are several places where the Weather Bureau would have to increase its cost. Now, this would be a transfer of funds from the FAA to the Weather Bureau. So, the million and a half dollars is a net savings to the Federal Government.

Mr. WILLIAMS. Mr. Lieurance, would you agree with the contention that there is a basic interdependency between service and safety?

Mr. LIEURANCE. With certain qualifications, yes. I think you look at safety from the standpoint of exposure time and if you don't know what the weather is and you inadvertently get into it, you are certainly exposing yourself unnecessarily.

Mr. WILLIAMS. You use this language, "essentially the same aeronautical and weather services" and stated that would be furnished. Now, does the use of the term "essentially" imply that there might be some reduction in services and, if so, how much?

Mr. LIEURANCE. I would be quite unfair, Mr. Chairman, and dishonest if I said that the reduction of a service from 24 hourly and specials around the clock, 7 days a week, 365 days a year, was the same as 8 hours a day, 7 days a week, 365 days a year. So there is, yes, a reduction in the amount of service available. There is bound to be. The question is "Where is the point of no return?"

Mr. WILLIAMS. To the extent that there will be a reduction in service, do you feel that that is also a reduction in the level of safety?

Mr. LIEURANCE. I don't know that I am an expert in this area, Mr. Chairman. It would be very difficult, I think, for me to answer this with any degree of expertise. Weather is one of the largest casual

factors in aircraft accidents, not the primary cause, but certainly is a casual factor in the largest percentage of the fatal accidents. I believe CAB quotes the figure of 35 percent. A great percentage of these accidents, I can't give you a figure on this, are within the vicinity of the terminal, either approaching, landing, taking off, or in an approach pattern.

Mr. WILLIAMS. Recognizing the fact that weather is probably the chief cause of accidents in general aviation, is it fair to say that any reduction of service in this respect will reduce the level of safety to some extent?

Mr. LIEURANCE. I don't see how I could say no to that, sir.

Mr. WILLIAMS. Is there any escape from that premise?

Mr. LIEURANCE. I don't think so. There are certain cases, for example, if you have no operation from the period of darkness to dawn, I don't think there is reason to retain an observing program throughout that night unless it contributes to the area problem.

Mr. WILLIAMS. That might well be.

In the second full paragraph on page 2, you speak of the Weather Bureau's full coordination with the Federal Aviation Agency on their proposed remoting of 42 stations. Does the term "coordination" in that context mean an equal assumption of responsibility, or does it mean concurrence with each other, or does it mean urging on the part of the FAA?

Mr. LIEURANCE. Mr. Chairman, I think that I would have to answer that by saying that means concurrence.

Mr. WILLIAMS. Was there any urging on the part of the FAA to get you to concur with their findings?

Mr. LIEURANCE. No. As I said before, this has been a joint study. We have worked closely together on this program.

Mr. WILLIAMS. Was there any disagreement between the Weather Bureau and the Federal Aviation Agency on any point in connection with the remoting of these 42 stations?

Mr. LIEURANCE. I would be quite dishonest if I said there were no disagreements.

Yes, there have been disagreements in the program. We came up with what we thought was a reasonable compromise. As far as I know, we are fully together on the list of 42. As a weatherman, one who has spent his working life in aeronautics, some 30 years of it in weather, naturally, I have some very personal biases.

Mr. WILLIAMS. What led to the practice of qualifying flight service station personnel as pilot weather briefers?

Mr. LIEURANCE. This was a program which I had a great deal to do with. This was initiated by the Weather Bureau and we asked the FAA if they would participate.

Prior to 1960, the flight service specialists did not do pilot weather briefing. They provided factual information only. So, we felt that it was necessary to find more outlets for weather service, to raise the level of the quality of people in "the weather retail store" to provide a better store to go to and more stores to go to since the Weather Bureau only had about 260. We looked at 300-and-some-odd flight service stations and said, "Here are some more stores, let us bring them into the fold, and see if we can't give general aviation a much better break weatherwise than they have now."

It was our desire to spread our product farther and farther and make weather more available to the pilot everywhere.

Mr. WILLIAMS. Mr. Lieurance, who is the chief user of the services of the Weather Bureau in the 48 States? Is it aeronautics?

Mr. LIEURANCE. Again, I hate to keep saying it is hard to answer, but again it is hard to answer these questions. I would say that the largest single user and the greatest beneficiary of the weather service from the Weather Bureau is the great American public, the individuals, who are protected by the hurricane service, tornado service, flood warnings, and so forth. Aeronautics, however, has placed the greatest demand over the years on the weather service because by and large meeting the requirements of aviation are beyond the state of the meteorological science.

We are required in the aviation services to forecast noise in the atmosphere which nobody else cares a thing about.

So, I would say that aeronautics is the user that has the greatest demands and probably has been responsible for more advancement in the field of meteorology and contributed to the growth of the Weather Bureau more than any other single weather user.

Mr. WILLIAMS. In view of this, and maybe this is an unfair question, how would you feel about placing the Weather Bureau under the jurisdiction of the Federal Aviation Agency? Would that impair any services to agriculture or to marine navigation or the others served by the Weather Bureau? Could those services be handled through the Federal Aviation Agency?

Mr. LIEURANCE. Mr. Chairman, I am not sure that this is within my authority to answer. I am not sure I have the competency to answer such a very deep, serious question as you have asked here.

Mr. WILLIAMS. As I say, maybe it is an unfair question.

Has any thought ever been given to that?

Mr. LIEURANCE. Yes; I think lots of thought has been given to this. The weather service to aviation direct, which makes up a rather small part of the Weather Bureau in total dollars, and total manpower, is a very important specialized service.

Mr. WILLIAMS. Is the same weather information that is made available to marine operations and aren't the same navigational aids used jointly by both the Federal Aviation—I mean both aviation and marine navigation?

Mr. LIEURANCE. There are certain common navigational aids, yes, used by the marine and aeronautical interests. Certainly, everybody, regardless of whether you are operating a small boat, a big ocean liner, a 707, or a supersonic jet, use the same basic information provided by the Weather Bureau; in other words, the same analysis of the surface charts and the various levels up to 100,000 feet. But each one of these users has something quite special that has to be derived from this basic set of data; for example, the marine interests are concerned about the state of the sea, the height of the waves and swells, which are a direct result of the wind. They are also concerned with the visibility. If the visibility gets below a certain amount, they have to reduce speed.

Now, these are derived values for the marine interests from the basic information that is common to everybody.

Aeronautics is concerned about different things; that is, turbulence in the atmosphere, visibility at airports, and so forth, which are peculiar to aviation and of no concern to others.

Mr. WILLIAMS. Can you see any reason, from a practical operational standpoint, or any problems that might be encountered in connection with placing the Weather Bureau under the jurisdiction of the Federal Aviation Agency?

Mr. LIEURANCE. I think there would be a great many problems; yes, sir, because the Weather Bureau is not common to the FAA any more so than to the Department of Agriculture.

Mr. WILLIAMS. I realize that.

Mr. LIEURANCE. I think it is hard to tell where its home should be because it serves the people and the Government across the board, and provide services to all types of interests—climatic, flood, aeronautical, marine, fruit frost, cranberries, all others.

Mr. WILLIAMS. In your consultation with the Federal Aviation Agency that resulted in the announcement of closing of these 42 stations, in the final determination, what consideration, if any, was given to the user of aviation who is not equipped to fly under instrument conditions? I have reference, for instance, to the fellow in a Piper Cub?

Mr. LIEURANCE. The consideration that was given to the 42 stations and the weather service involved two things: one, the impact on the observing program, as released to the basic meteorology of the United States. This involved the distribution of reports and the basic information needed for determining the climate, forecasts of maximum temperatures, and things of that nature. These were the first things we look at, which relates to aerial distribution.

The second thing related to the Weather Bureau's responsibility for weather service to the general community involved such things as the type of service required, nearby weather stations, weather radar coverage from a nearby station, and so forth.

Let us take the Poughkeepsie station. This community is under the surveillance of a weather radar (WSR–57) Stewart Air Force Base weather radar in New York, only 16 miles away, the weather radar of the Weather Bureau station at Albany. These are the types of things we looked at and are primarily related to en route operation.

The next thing we looked at was the type of operation at the airport, how much activity, what class of activity, whether there was an air carrier or no air carrier, and so forth.

After this was all reviewed, and it was a serious review, then we looked at our responsibility as a Federal agency to provide services.

Mr. WILLIAMS. To what extent was the problem looked into respecting the 50- to 100-hour pilot in his Cessna 172 with one radio as respects local changing weather conditions at the terminal?

Mr. LIEURANCE. Mr. Chairman, the first thing that we tried to take care of which was the requirement of any air carrier that operates in there because under civil air regulations the air carrier has to have official observations before he can operate as authorized by his certificate of convenience and necessity.

Mr. WILLIAMS. You say the first thing you looked at was the requirement of the air carrier?

Mr. LIEURANCE. This is spelled out specifically in the civil air regulations. It is also part of the air carrier's operating specifications and it is a requirement.

Mr. WILLIAMS. I realize that in asking this question you are with the Weather Bureau, you are not with the Federal Aviation Agency, but it has been testified by the Air Transport Association that they do not use the flight service stations.

It seems a bit incongruous that they should give first consideration to the people who don't use the flight service stations. Was that explained or discussed in the proceedings between the Weather Bureau and the Federal Aviation Agency? I know general aviation, for a long time, considered itself the stepchild of aviation when in truth and fact in most airports general aviation operations far exceed those of commercial operations.

I am wondering to what extent the problems of general aviation, as such, received priority in these discussions.

Mr. LIEURANCE. Mr. Chairman, in answering this question I do not want to be misunderstood. I feel that there should be a very serious look at the responsibilities of the Weather Bureau in providing specialized weather services to aircraft operators who are not under the control directly of the Federal Government like the air carriers.

I have no real reason, except a moral reason, to propose programs, for example, to provide weather service at strictly general aviation airports.

Now, we do have a responsibility for safety, providing services in support of safety, but it is very difficult to work up a program which gets full consideration based on something that is not spelled out in something like a civil air regulation, a requirement placed on you by someone in authority.

Now, the Weather Bureau determines the programs that we go to Congress to defend, based on the requirements that are placed on us primarily by the FAA in accordance with section 310 of the Federal Aviation Act, which directs and empowers the Administrator to do this.

Also, we have a joint responsibility with the Administrator to listen to the industry, various general aviation groups, air carriers, and others. We have a joint responsibility here.

I think this is an area that should be seriously looked at by you, Mr. Chairman, and your committee.

Mr. WILLIAMS. Thank you, Mr. Lieurance.

Are there any further questions?

Mr. Jarman?

Mr. JARMAN. No questions.

Mr. WILLIAMS. Mr. Devine?

Mr. DEVINE. No questions.

Mr. WILLIAMS. Mr. Lieurance, the committee appreciates very much the candor with which you have responded to our questions and the information that we have received. Speaking as one who has made use of your services, I quite frankly have no criticism to make of the Weather Bureau in their furnishing of services to pilots. I know weather is not an exact science and I recognize that, as such. I do think, under the circumstances, with our present knowledge of the science of meteorology, you are doing an excellent job. I am very happy to compliment you on it.

Thank you very much.

Mr. LIEURANCE. Thank you, Mr. Chairman.

Mr. WILLIAMS. Our next witness is the very distinguished flier from the State of Mississippi, and I believe his Congressman, Mr. Winstead, is here to make a brief statement of introduction.

Congressman Winstead will introduce Col. Algene E. Key from Meridian, Miss.

STATEMENT OF HON. ARTHUR WINSTEAD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. WINSTEAD. Thank you, Mr. Chairman and members of the committee.

I would like to have permission to extend my remarks to save your time in the record at this point.

Mr. WILLIAMS. Without objection, it is so ordered.

Mr. WINSTEAD. It is certainly a privilege for me to present to you one of my constituents, an outstanding citizen from the State of Mississippi, Col. Al Key. He is presently director of civil defense for Meridian-Lauderdale County, Miss.

Colonel Key was one of the pioneers in Mississippi aviation, especially in all-weather flying. He has been in aviation for 40 years and he retired from the Air Force in 1960 with 20 years' service. He is still an active pilot.

In 1935, he and his brother, Fred, established a world endurance flight record with air-to-air refueling, and for the method of refueling used this record still stands. They flew better than 27 days or to be exact for 653 hours 34 minutes. You know, 28 years ago, that was some record.

The "Ole Miss," the airplane used in establishing this endurance record was donated to the Smithsonian Institution in 1955.

Colonel Key served with distinction as a bomber pilot in World War II. He was in the first group of such pilots sent from the United States to the Southwest Pacific after Pearl Harbor in an attempt to repel the advance of the Japanese.

From 1954 to 1957, Colonel Key served as chief of the U.S. Air Force mission to Colombia.

I feel that he is one of the best qualified men with his experience to testify on this subject.

Mr. Chairman, I regret that I must leave for another appointment but it certainly is a pleasure for me to present to you and this committee, Col. Al Key.

Mr. WILLIAMS. Thank you, Mr. Winstead.

(The extension of remarks follows herewith:)

ADDITIONAL STATEMENT OF HON. ARTHUR WINSTEAD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. Chairman, I come before this committee today in a renewed effort to maintain the flight service station at Meridian, Miss. There are presently only four such flight stations in the entire State of Mississippi, and I feel, as do the people of Meridian and the surrounding area, that it would be most unfair to remove the specialists and other trained and area-oriented personnel from the Meridian station, leaving only three manned stations in the entire State, the nearest being over 90 miles away.

Meridian is the second largest city in the State of Mississippi and is strategically located with reference to air traffic in the area. In addition to the civilian and airline traffic afforded by two airlines operating in this area, there is also considerable military traffic by the Mississippi National Guard, which has its largest operation located at Meridian, and also by Key Field and the McCain Naval Auxiliary Air Station.

The removal of this flight service station would result in the loss of approximately $100,000 annual payroll in the city of Meridian. It would bring about the transfer of 11 flight service specialists, who are intimately familiar with the Meridian area, and would cause the loss of valuable area-oriented talent to the civilan and military aviation interests. It would deprive pilots the assistance now afforded in "in person" briefing and counseling. It would make more expensive the interphone lines betwen the McCain Naval Air Station and the Federal Aviation Agency Flight Service Station. The removal of this station would also result in a great loss of safety for general aviation not only in the city of Meridian but also in the surrounding area.

I cannot believe that the insignificant savings that would be realized by the closing of this station would justify the possible loss of life which could easily result from the lessening of proper safety measures, the curtailment of service to the entire area and the anticipated reduction in the income of the city of Meridian.

For these, and additional reasons which I am confident the representatives of the Meridian Chamber of Commerce will enumerate, I earnestly request that the flight service station be continued at Meridian, Miss.

STATEMENT OF COL. ALGENE E. KEY, REPRESENTING THE CITY OF MERIDIAN, MISS., THE MERIDIAN CHAMBER OF COMMERCE AND PRIVATE AIRCRAFT OWNERS

Colonel KEY. Mr. Chairman, allow me to thank you for the opportunity of appearing before your committee to bring to you the thoughts underlying the city of Meridian's request that the Federal Aviation Agency reconsider their directive closing the flight service station located at the Municipal Airport in Meridian, Miss. I also represent the Meridian Chamber of Commerce and approximately 50 private aircraft owners of the Meridian area. A larger delegation would have been present if necessary, but we realize that your time is limited.

By way of introduction, let me say that I occupy the position of director of civil defense for Meridian, Lauderdale County, and have been in aviation for over 40 years and am still an active pilot. I served 20 years in the Air Force and am now a retired colonel.

While the city of Meridian is of course concerned over the loss of the annual payroll of the flight service station amounting to approximately $100,000, its request for reconsideration is based not on that loss but on the effect on general aviation in the area by the moving of the station and that its continuance is required for air safety. At the present time there are only four flight service stations in the State of Mississippi, leaving three manned stations in the State, the needs of the flying public and the safety of the private pilot will not be met. When, on the other hand, we are informed that some States have as many as 15 such stations within their boundary.

By way of information concerning our city, Meridian is the second largest city in the State of Mississippi and is strategically located with reference to air travel in this area. We feel that it is unfair and dangerous to pilots flying in this area to transfer the skilled locally familiar personnel and to depend up personnel at another location to look out for the safety of these pilots by remote control located approximately 90 miles from the area. At a manned station the spe-

cialists know their local and immediately adjacent areas very intimately. This knowledge is extremely important to the safety and expediency for all pilots flying over the area. During an 18-month period from July 1962 to January 1, 1964, the Meridian flight service station was credited with saving 14 lost aircraft and perhaps many lives. These saves were a direct result of the specialist on duty knowing the local area intimately.

While it is understood that the flight service station was originally established as an en route facility providing air-ground communication, as conditions change the station assumed additional duties very important to general aviation pilots. We feel that general aviation pilots are entitled to the personal services provided by the flight service station and that it should be the finest assistance available. There is no question in my mind that the discontinuance of this manned station will set back the general aviation in our area many years.

It has been said that the consolidation of certain stations is part of the FAA's effort to increase the economy by eliminating those facilities and services no longer needed for air safety. It is the opinion of the city of Meridian that it would be false economy indeed to eliminate person-to-person across the counter briefing and establish for its telephone communications with some person 90 miles away. We think, and most pilots agree with us, that person-to-person conversation and use of aeronautical charts and maps is far superior to an impersonal telephone conversation. Also, the airport advisory service is very valuable to pilots at nontower locations and we consider it most necessary to air safety at the municipal airport in Meridian. Traffic has shown a steady increase from 29,579 in fiscal year 1961 to 44,439 in fiscal year 1963. The Meridian flight service station ranks in the top third of the 408 throughout the Nation. The traffic count now meets the criteria of the Federal Aviation Agency for a control tower and the city of Meridian not only feels that the flight service station should not be discontinued but in addition to the service now rendered at the Municipal Airport, a control tower should be constructed in the immediate future as there is considerable military traffic at this location, as the Mississippi Air National Guard has their largest operation located at Meridian as well as an Army National Guard helicopter unit, civilian and two airlines operating from this location. In addition the facilities at Meridian are used extensively by the Navy Auxiliary Air Station and Craig Air Force Base for training on the instrument landing system (ILS).

In the construction of the new Airport Administration Building in 1959, the city of Meridian was required to provide 1,692 square feet to house the flight service station for a period of 20 years. It did so willingly and in good faith that the FAA would use it for that period of time. To remove it would be a serious breach of faith with the city planners.

In conclusion, I wish to state that I do not want you to think that the city of Meridian is here crying just because it appears some payroll will be taken from the city. We are seriously here to object to the discontinuance of the flight service station located at the Municipal Airport because we feel it is necessary for safety and that it will adversely affect general aviation in our area if these services are not continued.

Thank you, sir.

Mr. WILLIAMS. Thank you, Colonel. There may be some questions.

Mr. Devine?

Mr. DEVINE. I have no questions, Mr. Chairman.

Mr. WILLIAMS. Colonel Key, in connection with the Meridian situation, as I understand it, they plan to remove to Jackson.

Colonel KEY. That is right.

Mr. WILLIAMS. I believe Monroe, La., is also on the list of 42 stations to be closed.

Colonel KEY. That is as I understand it.

Mr. WILLIAMS. The Administrator says he plans to have hard-core stations at a minimum of a 100 miles apart. I believe he testified to that yesterday.

You were here. Did I understand him correctly?

Colonel KEY. That was my understanding, sir.

Mr. WILLIAMS. Assuming that the Meridian station is closed, what is the closest station to the west?

Colonel KEY. Jackson will be the closest.

Mr. WILLIAMS. What will be the closest to the east?

Colonel KEY. I understand Tuscaloosa, which is on the list to be closed. That would make Birmingham, 150 miles away.

Mr. WILLIAMS. That would mean there would not be a flight service station between Jackson and Birmingham?

Colonel KEY. As I understand it.

Mr. WILLIAMS. Do you know how many miles it is from Jackson to Birmingham?

Colonel KEY. Approximately 250 miles.

Mr. WILLIAMS. That is a far cry from a 100-mile minimum.

Colonel KEY. Yes, sir.

Mr. WILLIAMS. Let us go in the other direction. If there is a flight service station in Jackson and the one at Monroe is closed, the next one will be at Shreveport, will it not?

Colonel KEY. That is correct.

Mr. WILLIAMS. It is 210 miles, I believe, from Jackson to Shreveport.

Colonel KEY. That is right.

Mr. WILLIAMS. Again that is a far cry from the hundred miles minimum which has been set by Mr. Halaby unless he decides to set up some new stations which we don't know about. There is a flight service station, I understand, at Greenwood, Miss.?

Colonel KEY. Yes.

Mr. WILLIAMS. Where is the other one?

Colonel KEY. McComb.

Mr. WILLIAMS. How far is it from McComb to—well, I imagine McComb will probably be closed if they go through with this plan, but how far is it from Meridian to McComb? It is at least a hundred miles?

Colonel KEY. It is about 125 miles.

Mr. WILLIAMS. But from McComb to Birmingham, here again it would be about 250 miles?

Colonel KEY. That is correct.

Mr. WILLIAMS. I don't know that I have any further questions, Colonel Key, except to express the appreciation of the committee for your appearance here.

Of course, I, being from Mississippi, naturally I know about your distinguished flying record. Everybody in aviation certainly knows about it. I think that you have made a tremendous contribution, you and your brother, to the progress of aviation. I hope that your endurance mark will stand forever.

Colonel KEY. Thank you, Mr. Chairman.

Mr. WILLIAMS. Our next witness is Hon. Otto Passman from Monroe, La.

STATEMENT OF HON. OTTO E. PASSMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. PASSMAN. Mr. Chairman, it is a privilege for me to have this opportunity of appearing before you today, in the interest of maintaining operation by the Federal Aviation Agency of the flight service station at Selman Field, Monroe, La.—which is the principal city in my great State north of Baton Rouge (in south Louisiana) and east of Shreveport (in northwest Louisiana), or, expressed in other terms, the principal commercial, financial, industrial, agricultural, retail trade and population center in all of the large area of northeast and central Louisiana.

It is also a privilege for me to submit on this occasion a statement in opposition to the removal of this flight station which was prepared by the Aviation Committee of the Monroe Chamber of Commerce.

My record in Congress through a period of 18 years has been one of consistent advocacy of Federal fiscal solvency and a balanced budget. But, in supporting the cause of sound economy in government, I have not closed my eyes to the fact that certain Federal programs and services are essential and that others are of vital importance to the public interest.

It is my contention that in every instance these particular programs and services should be given priority in the allocation and expenditure of the funds which are provided to our Government by the taxpayers of our Nation. And that premise is foremost in my thinking now as I appear before you to express opposition to the closing—or changing to a mode of operation by remote control—of the FAA's flight service station at Selman Field. After studying this matter quite thoroughly, I am firmly convinced that such action—which has been proposed by the FAA—would unquestionably be false economy.

Mr. Chairman and members of the committee, let me review for you briefly some pertinent phases of the flight service station and aircraft operations at Selman Field.

Fifty-four aircraft are regularly based on this airport, and at some time during the year most of these aircraft have occasion to use the flight service station. The fact is, as I have learned in my recent investigations, most of these aircraft use this service daily.

For example, in 1 month only—January, this year—the Selman Field flight service station had a total of 112 instrument contacts—these being radio contacts between pilots and the flight service station in actual instrument-flying weather, or on instrument flight plans. During the same month, there was a total of 888 contacts between pilots and the flight service station in good weather conditions. Furthermore, also in January, the Selman Field station weather briefed

and accepted 284 instrument flight plans and 180 good weather flight plans, and, in addition, gave a total of 872 briefings to pilots on weather, navigational aids, and any unusual conditions that existed.

I want to repeat, the record I have here recited is for 1 month only—January 1964.

As one of the primary functions of any flight service station is the briefing of pilots, I should like to cite to the committee a listing of the number of such briefings by flight service stations in seven cities of the area during 1963:

Monroe, La. (Selman Field)	9,213
Lafayette, La	8,553
El Dorado, Ark	4,202
Lake Charles, La	3,612
McComb, Miss	3,313
Alexandria, La	2,410
Harrison, Ark	1,505

Of these stations, only the one at Selman Field is on the list to be closed.

Now, Mr. Chairman, I should like to inform the committee, further, that as of February 1, this year, there were 17 corporation-owned business aircraft based on the airport at Monroe. These airplanes—which represent a very small percentage, of course, of the total aircraft handled by the Selman Field flight service station—travel an estimated 5,440,000 passenger-miles each year, and, incidentally, represent an investment of approximately $1 million.

Another fact that is highly important, Mr. Chairman, is that Monroe is on one of the South's busiest airways (V–18), which handles eastbound and westbound traffic between the east and west coasts, and between such major flight terminal points as Dallas and Atlanta.

And I want to note, too, that in order to operate an instrument airport a licensed weather observer must be on duty. At Monroe, this job is now being done by the flight service station at Selman Field. Moving these personnel from the flight service station would involve replacing them either in the FAA-operated control tower at Selman Field or replacing them with U.S. Weather Bureau personnel.

So, Mr. Chairman, in view of these facts, as well as numerous others of considerable significance, it seems quite clear to me that:

1. To close (or remotely control) the flight service station at Selman Field—one of the busiest airports in the entire region—would seriously reduce the standards of safety and service to the flying public of Monroe—West Monroe and all of northeast Louisiana.

2. And, it would not result in real economic savings, but would, in fact, be false economy. For example, the estimated savings from closing the station would be represented by salaries paid to personnel there. However, as I understand the matter, the cost of remoting the station alone would exceed that figure. Also, in addition, there would be the cost of maintenance, telephone wire-service charges, plus the cost of moving and relocating the station's present personnel.

I have not gone into the overall question, Mr. Chairman and members of the committee, of the remote-control operation of FAA's flight service stations on a broad scale, but I am thoroughly convinced, and

believe that you will be in agreement with my conclusion, that the Agency has made a serious mistake in designating the station at Monroe's Selman Field for this type of operation. It is my sincere hope that prompt action will be taken to rectify this mistake.

I thank you again for the opportunity of discussing this important matter with you.

And now, if I may do so, I wish to have inserted in the record the statement from the Monroe Chamber of Commerce, to which I referred earlier in the course of my remarks.

(The statement referred to follows:)

STATEMENTS OF W. L. HOWARD, MAYOR, CITY OF MONROE, LA., AND LOUIS D. SMITH, CHAIRMAN, AVIATION COMMITTEE, MONROE CHAMBER OF COMMERCE, INC., IN OPPOSITION TO THE REMOVAL OF THE FLIGHT SERVICE STATION AT SELMAN FIELD

The unprecedented "change of concept" evidenced by the FAA in its February 4, 1964, announcement, which revealed the Federal Aviation Agency's intent to "remote" 42 flight service stations, devoid of any practical depth survey among the Nation's civil users of flight service station services, is indeed an unfortunate departure from the present administration's past policies.

Certainly, open and frequent consultation has been (in the past) one of the administration's most valuable instruments; that is, in gaining practical information and general aviation observations pertinent to the safety, efficiency, and common welfare of American aviation; and its allied relationship with the FAA.

With the FAA's announced plans to reduce some 42 flight service stations among its current 334 total operating facilities * * * too, it was jointly communicated that projected "other" cuts would bring the total reduction to 70 or more flight service station installations.

The city of Monroe, La., and the Monroe Chamber of Commerce vigorously protests the FAA decision to reduce its total complement of flight service stations; until at such time the FAA provides a practical and uniform formula of criteria that may be employed in thoroughly reexamining the complete nationwide service station pattern along a primary priority manner where the actual functions directly concerned with facilitating general aviation operations shall be the paramount determining factor in the retention of these facilities.

By this statement, we wish to imply that the "announced" FAA plan of flight service station curtailment was based primarily upon economic factors; i.e., "savings estimated at approximately $1.4 million per year, at an estimate of some $35,000 per average facility" and not the interests of general aviation in key metropolitan service areas.

Turning directly to the Selman Field flight service station, located at Monroe, La., we wish to point out that this installation is one of the "oldest" in the Southwest region FAA, having been implemented in 1940 (under the Civil Aeronautics Authority), and serving in continuous operation since its inception.

In the Southwest region, Selman Field is included among the seven flight service station operations which are "currently" slated for remoting modification. There are a total of some 62 flight service stations in the Southwest region and it is apparent that little or no consideration was given to the volume of traffic, pilot briefings, flight condition messages, instrument operations, and the general aviation complex which the Selman Field Airport at Monroe, La., generates among the entire Southwest region.

Too, it becomes increasingly apparent that the FAA, prior to its announced decision, did not create any parallel of judgment relating to airports having Weather Bureau stations in connection with their flight service stations. This point becomes increasingly important, particularly, when it is recognized that the Selman Field facility does not have a Weather Bureau station; and, functionally, its flight service station has literally "filled the void" in transmitting valuable weather conditions to general aviation for nearly 25 years.

In commenting further upon the Southwest region FAA, which is comprised of New Mexico, Texas, Louisiana, Arkansas, and a sector of Oklahoma, the prime

importance of the flight service station installation at Selman Field in Monroe, La., can be clearly observed when basic statistical operating data is examined:

Selman Field, Monroe, La., comparative rank in services:[1]

(*a*) Twenty-eighth in total flight services.
(*b*) Forty-third in total aircraft contacted (14,658).
(*c*) Thirty-first in total flight plans originated (5,795).
(*d*) Fourteenth in pilot briefings (9,199).
(*e*) Thirty-eighth in flight condition messages.

It is pertinent to point out in above category subsection (*b*), that Selman Field's operations in Monroe ranked ahead of a number of major cities in FAA Southwest region including Lake Charles, Baton Rouge, Shreveport, Galveston, Beaumont, and Lafayette.

Too, in subsection (*d*), Selman Field's 14th rank in pilot briefings, again eclipsed all similar population cities; with only giant metropolitan cities including Dallas, Houston, Fort Worth, Oklahoma City, Tulsa, El Paso, and New Orleans in the Southwest region overshadowing the Monroe, La., scale of operations.

It is pertinent to emphasize that among the 42 stations designated by the FAA for "remoting," that only 8 have control towers—and, Monroe's significant position of rank among these stations should be further examined:

Stations with control towers	Total movement (rank)	Air carrier (airline rank)	General aviation (rank)
Pensacola, Fla	132	151	211
Utica, N.Y	165	112	215
Monroe, La	212	143	189
Rochester, Minn	215	111	198
College Station, Tex	234	231	232
Jackson, Mich	244	225	201
Huntington, W. Va	249	162	221

Too, in the State of Louisiana—Monroe is the only station that is scheduled by the FAA to lose its valuable flight service station facility.

The local Selman Field-Monroe Airport in "general aviation" handled 9,672 operations, with 38,820 total itinerant flights, 5,970 instrument operations, and total aircraft operations of 48,648. (Statistics quoted from: "1963, FAA Air Traffic Activity P–40.")

In commenting on the 5,970 instrument operations recorded by the FAA in fiscal 1963 reports at Monroe, it should be reiterated that Monroe's airport does not have a Weather Bureau station, therefore, it must be stated with emphasis—"that the flight service station and its personnel have accomplished a most important task in servicing general aviation interests."

In Monroe, therefore, the FAA plan to "remote" the flight service station will impose a tremendous void on the safety of general aviation interest operating in the area.

Although it is recognized that the commercial airlines have their own weather reporting systems, yet we must remind the committee that "general aviation accounts for approximately 75 percent of the workload of the flight service station system; and, therefore in Monroe—we can envision a serious situation.

In summary, may we offer the following statements:

Monroe, during calendar year 1963, handled over 48,648 aircraft movements, of which, 38,820 were itinerant. General aviation accounted for 26,409 of these movements.

Monroe ranked 25th out of 43 airports in instrument operations.

Monroe ranked 34th in a spectrum of 138 fields in the region, with 747 instrument approaches.

For 25 years the general aviation interests in the Monroe area have relied upon the local flight service station for its important functions.

Monroe does not have a Weather Bureau station.

Monroe's airport is strategically located in the hub of a vast commercial trading area, where general aviation has flourished and its safety and operational demands are increasing.

Monroe's community of interest is tristate in nature considering Arkansas, Mississippi, and Texas.

[1] FAA Air Traffic Activity, 1963.

The city of Monroe has recently completed a $50,000 fire service station facility devoid of any governmental cost.

The city of Monroe is currently building a $500,000 air terminal building as evidence to the expansion and importance of aviation in the trade area's economy.

In conclusion, may we request that the committee investigate the immediate need for the FAA to stalemate its plan to "remote" the Monroe Selma Field flight service station (and all of the other proposed 42 stations throughout the Nation) until a practical primary formula is developed by the Federal Aviation Agency based upon specifications of need and use for general aviation; that is, in determining which flight service stations shall remain active, and under what circumstances shall a facility be placed in a remoted capacity.

Finally, the current policy announcement offered by the FAA is seemingly based on debatable economy philosophy, which does not consider general aviation's daily increasing needs, nor the importance of safety in this great industry's requirements.

We hasten to reiterate that the entire savings that the FAA purports to enact in its current consolidation of these 42 flight service stations (quoted at approximately $1,470,000 per year) is quite misleading. Particularly, when it is realized that not one employee is to be removed from the FAA payrolls.

Surely, the committee is mindful of the FAA's $50 million experimental data processing central project, which was questioned by general aviation during its inception, construction, and implementation. This was a sheer experimental venture—devoid of any thoughts of economy.

And, in closing, to point out another inconsistency in the FAA's so-called economy policy, we call the committee's attention to the $175 million Dulles Airport, which may be characterized as a tremendous spending program devoid of the aircraft volumes which could in any manner justify the expenditures of this vast sum.

The questionable Dulles Airport expenditures * * * would pay for the retention of the nationwide flight service station safety programs for a period of approximately 119 years; and, gentlemen, we urge you to immediately stop in its tracks the FAA plan to consolidate the 42 flight service stations which represents flying insurance to general aviation and its echelons of business executives. These are the taxpayers. And, they are due these continuing safety aids.

Respectfully submitted.

[SEAL]

W. L. HOWARD,
Mayor, City of Monroe, Monroe, La.
LOUIS D. SMITH,
Chairman, Aviation Committee, Monroe Chamber of Commerce.

Mr. WILLIAMS. Thank you, Mr. Passman. Representing Pensacola, Fla., is Bob Sikes.

Welcome to the subcommittee.

STATEMENT OF HON. ROBERT L. F. SIKES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. SIKES. Thank you, Mr. Chairman. This morning, a group from Pensacola, Fla., is appearing to testify for the continuation of the FAA Flight Service Station at Pensacola, Fla.

I support most vigorously the request that the Pensacola station be continued in operation.

There are a number of significant reasons. First, the savings anticipated by closing the Pensacola station are among the lowest, if not the lowest, among all the stations proposed for closing. Second, the number of airplane flights in the Pensacola area makes it among the most congested, if not the most congested, in the Nation.

It is proposed to consolidate the Pensacola facility with the one at Crestview. In my opinion, there is ample need and ample justification for the continuation of both. The great number of flights utiliz-

ing both facilities would make automation a highly unsatisfactory process. Even more significantly, I believe the considerations of safety are such that it would be unwise and dangerous to close either station. One unnecessary aircraft accident could cost many times the annual savings projected in the FAA proposal, and the possibility of the loss of life is an even stronger argument against the closing of this facility.

Turning to the wider national picture, it is my belief that the proposal for closing FAA flight service stations should be reconsidered and revised. While efforts to save the taxpayer's money are always commendable, there remains the possibility of doing more harm than good through ill-considered economy. Surely, it has been demonstrated already that the number of flight service stations cannot be determined by the distance between stations. Just as in the case at Pensacola, matters of air congestion and flight safety must be carefully evaluated and given precedence over distance and savings. I sincerely urge that your distinguished committee take such action as may be necessary to bring about a deferment of the proposed closures and a reevaluation of criteria to be followed.

I would like to introduce Mr. Vince Whibbs, from Pensacola.

Mr. WILLIAMS. Thank you, Congressman, and will you please introduce your associates, Mr. Whibbs?

STATEMENT OF VINCE WHIBBS, ACCOMPANIED BY FRED HUBACKER; ROGER McDONALD; HOMER REED, CITY MANAGER; AND ARTHUR BOWMAN, AIRPORT COMMITTEE OF THE CITY COUNSEL, REPRESENTING THE CITY OF PENSACOLA, FLA.

Mr. WHIBBS. Thank you, Mr. Chairman; I have with me Mr. Hubacker, manager of Pensacola Municipal Airport and Roger McDonald, chairman of our airport committee. We have in addition, two other people representing Pensacola, Fla.: Homer Reed, our city manager, and Mr. Arthur Bowman, who is on the airport committee of the city council.

Mr. WILLIAMS. Do you have a prepared statement, sir?

Mr. WHIBBS. I have a very short statement that I would like to read and then make a few other observations, if I may.

Mr. WILLIAMS. You do not have copies of your statement?

Mr. WHIBBS. Not enough, sir, I do not. I am sorry.

We do have a couple of copies.

Mr. Chairman and gentlemen of the committee, we are grateful to you for the privilege of presenting our problem to you this morning. We are grateful for your taking the time to listen to what we have to say.

In behalf of maintaining the maximum degree of aviation safety through the personnel service being rendered by the FAA Flight Service Station located at Pensacola, Fla., the following is respectfully submitted to the committee conducting this hearing for its careful consideration in determining the final action to be taken.

The FAA and its Administrator, Mr. N. E. Halaby, are to be commended for the analytical approach to the problem of increasing the safety factor of aviation, and at the same time, seeking economies in its operation.

We believe the justification for the existence of the FAA lies in its prime purpose—that is to provide and maintain safe operations in the air space above our Nation.

It is the provision for this safety in the Pensacola area, the ninth busiest airport in the State of Florida, that we seek a hearing on this matter today.

The Pensacola flight service station is one of the 42 facilities affected by the proposed consolidation plan. Current plans call for a merging of the Crestview and Pensacola facilities.

We strongly urge this committee to closely analyze the following facts, to determine wherein the true economy could best be effected, and then relate the dollar savings to the possible jeopardy of human lives in air travel.

Facilities—Pensacola recently completed in 1962 a new $300,000 building located on the Municipal Airport, the prime purpose for which is to provide and maintain safe operations of aircraft in our area. This building was built at the suggestion of the FAA and to its specifications. It was financed 50 percent by Pensacola funds and 50 percent by Federal assistance. Approximately 95 percent of the total building area is now occupied by the FAA and the Weather Bureau. And the city's financing of this facility was based on the anticipated revenue from the FAA agencies.

Manpower—Twelve men currently employed by the FAA at Pensacola efficiently handle the volume of flight service to general aviation, air carrier, and many military aircraft movements through the area.

Services rendered—Total aircraft operations during 1963 numbered 87,247. This figure does not include the multitudinous operations conducted at the Navy complex in the Pensacola community. The U.S. Navy operates four active flight training bases, plus flight training from an aircraft carrier, all of which are in the Pensacola metropolitan area. This combined activity makes the Pensacola air space the most congested area in our Nation; therefore, every safety measure possible should be continued.

It is primarily the general aviation and the air carrier aspects with which we are concerned. It is the volume of general aviation which exists today that indicates the wisdom of retaining the flight service station in Pensacola today, and the rapid growth of this aspect of aviation traffic will necessitate the person-to-person service available only through the FSS for the future.

Conclusion—Pensacola is a rapidly growing area of approximately 225,000 people today. Population trends indicate a growth to about 350,000 people in the foreseeable future. Surely, the FAA with its vision can determine that safe operation for aircraft in such a congested airspace demands that the person-to-person contact and briefing be readily available at the point of greatest need—Pensacola.

The consolidation of Pensacola and Crestview FSS will jeopardize safe operation for the present and will put safe operation in a critical area for the future.

This consolidation of Pensacola and Crestview is opposed from a safety standpoint by our entire community, including the City Council of Pensacola, the County Commissioners of Escambia County, Fla., the Greater Pensacola Chamber of Commerce and the over 300 certified pilots who live in the Pensacola community.

Further, Congressman Bob Sikes has asked that safety be maintained and that the consolidation not be undertaken.

We are cognizant of the necessity for economies in operation and possibly the staff could be reduced to contribute to more economical operations for the future. However, Pensacola is an unusual situation in that it is the most congested airspace in the Nation and should not be without a flight service station.

The savings in dollars, based on the FAA original decision to consolidate, would be a mere $10,200 per year.

Gentlemen, for 87,247 aircraft operations, the savings would be only about 10 cents per operation.

We submit that it is logical to save, but not at the risk of life and limb, and property for such a small dollar saving, and we respectfully request that the FSS in Pensacola be maintained in its present form.

Mr. Chairman, we honestly and sincerely believe that Pensacola represents an unusual situation. While Mr. Halaby's plan for hard core stations sounds very plausible, I think Pensacola needs to be looked at from the standpoint of its particular location.

Again, without question, it is the most congested airspace in the Nation. We have circumstances and conditions in this area which we feel do provide the maximum degree of safety for our pilots and for our air traffic. Circumstances necessitate that the flight service station be retained in Pensacola, Fla. It is true that economies are necessary, and we commend Mr. Halaby and the other governmental agenices who seek economies. If it is necessary to economize, perhaps we might consider areas in the general vicinity, for example, Mobile, Ala., which does not have the amount of activity which Pensacola, Fla., has.

Again, sir, we submit that the safety of the airmen in our community is at stake. We heartily suggest and recommend to you, sir, that you consider the maintenance of the flight service station in Pensacola.

If the gentlemen of the committee have any questions, we would be delighted to answer them in whatever way we can.

Mr. WILLIAMS. Thank you, sir.

Any questions, Mr. Devine?

Mr. DEVINE. No questions.

Mr. WILLIAMS. Mr. Whibbs, the present plan calls for your station to be remoted to Crestview?

Mr. WHIBBS. Yes, sir.

Mr. WILLIAMS. How far away is Crestview?

Mr. WHIBBS. Crestview, from an air-mile standpoint, would be approximately 50 to 60 miles.

Mr. WILLIAMS. There is a flight service station to the west of you? Where?

Mr. WHIBBS. In Mobile, sir.

Mr. WILLIAMS. How many miles is that?

Mr. WHIBBS. About 60, 65 miles.

Mr. WILLIAMS. So even that takes you over the 125-mile minimum that was mentioned by the Administrator?

Mr. WHIBBS. Yes, sir; it does.

Mr. WILLIAMS. To the north, where is the next flight service station?

Mr. WHIBBS. I believe, sir, it would be Montgomery, Ala.

Mr. WILLIAMS. How far is that?

Mr. WHIBBS. About 140 air miles.

Mr. WILLIAMS. That exceeds the 100-mile minimum.

Mr. WHIBBS. Yes, sir; it would.

Mr. WILLIAMS. Do you consider that there is a definite interdependence between safety and service with respect to these flight service stations?

Mr. WHIBBS. Yes, sir; I most certainly do.

Mr. WILLIAMS. Do you feel any reduction in service whatsoever from its present level will impair aviation safety?

Mr. WHIBBS. It would be my opinion, Mr. Chairman, that it would.

Mr. WILLIAMS. Are there further questions?

Thank you, gentlemen, very much.

Mr. WHIBBS. Thank you, sir, for the opportunity to be here.

Mr. WILLIAMS. Representing Millville, N.J., we have our colleague, Mr. Glenn, who will introduce his witnesses.

Mr. GLENN. Mr. Chairman, I am happy to introduce as the next witness, Mr. William M. Frantz, manager of the Millville Airport and then he will, in turn, be succeeded by Mr. Rudolph Chalow, who is owner of Rudy's Airport in the city of Vineland, N.J.

The city of Millville is a very important municipality in my district of New Jersey and is a very fine airport which is helpful to the whole area.

I have already submitted a statement previously as to how important it is, in my opinion, to this area.

It is so important in fact that Mr. Frantz has brought with him the mayor of Millville, the Honorable Benjamin H. Corson, and one of its most prominent citizens, Bloomfield Phrampus, and Paul R. Porreca. Though he is not listed to make a statement, they have brought with them Colonel Girard, chief of the Bureau of Aeronautics of the State of New Jersey.

I believe he would like to make some comments on completion of the two statements.

Mr. WILLIAMS. Thank you, Mr. Glenn.

STATEMENT OF WILLIAM M. FRANTZ, MANAGER, MILLVILLE MUNICIPAL AIRPORT, MILLVILLE, N.J.

Mr. FRANTZ. Mr. Chairman and members of the committee, the facility of the Millville Municipal Airport——

Mr. WILLIAMS. Will you identify yourself first?

Mr. FRANTZ. William M. Frantz, F-r-a-n-t-z, manager of the Millville Municipal Airport, Millville, N.J.

Millville Municipal Airport is now a 24-hour, 7-day-per-week, tax supported general aviation terminal with the following facilities:

(1) Four hard surface runways 5,000 by 150 feet. With an altitude of 87 feet it is suitable for the landing of all civilian planes except the largest jets, the 707 and the DC–8. The approaches to all runways are unobstructed, permitting full length operation. Two runways (northwest-southeast and east-west) are concrete and lighted to accommodate night operations.

(2) Refueling, servicing, and maintenance activities (Aero Service Co.) and a major engine overhaul facility (Airwork Corp.).

(3) Extensive off-runway paved ramp aircraft parking areas. Limited hangar space, and very extensive (500 acres) unpaved off-

runway emergency aircraft parking areas suitable for military and civilian emergency aircraft diversion purposes.

(4) Instrument approach radio navaid (navigational aid) an approved instrument approach procedure, permitting adverse weather aircraft operations.

(5) Established control zone to provide traffic control separation and protection of aircraft operating to and from the airport during instrument flight rules conditions.

(6) Full period FAA flight service station providing:

(*a*) 24-hour weather reporting service.

(*b*) Runway lighting operation.

(*c*) Airport advisory service.

(*d*) Emergency airport services alerting.

(*e*) Elbow-to-elbow pilot briefing and flight plan service.

(*f*) Access to complete air traffic control services.

(*g*) Emergency assistance to aircraft in difficulty in the station's service area.

(*h*) Scheduled broadcast of aviation weather and flight information over seven navaids.

(*i*) Air-ground radio communication on all standard frequencies, including emergency channels.

(7) Airport fire station, restaurant, store, and other facilities.

Comments: (1) Millville Municipal Airport is strategically located within minutes flying time from the major air terminal areas of New York, Washington, Baltimore, and Philadelphia. In the event of military action against the United States, or any area disaster, the above named terminal areas would be the principal targets of enemy attack. Millville Municipal Airport, close enough for aircraft diversion and diversion parking purposes should seriously be considered for a planned aircraft refuge. My first seven paragraphs certainly point this up. In fact, it is my knowledge that the late President Kennedy had started such a study. If for no other reason than this one, its present facilities should not be sacrificed. Enemy action would not give us time to restore them. It is well to remember that there is not another civilian airport out of the metropolitan area on the seaboard between Washington and New York that can accommodate so many planes or so many types.

(2) If the Millville flight service station is remoted to Philadelphia there will be no way for them to have competent, constant, professional weather information for Millville. Therefore, when an instrument approach is needed at Millville, without the knowledge of weather conditions, i.e., ceiling height and visibility distance, and without corrected altimeter setting, and without control zone protection it is not the kind of operation likely to instill confidence and will without doubt cause apprehension. The flight service station provides these facilities. At Millville the flight service station specialist serves as the pilot's eyes on the ground.

Mr. WILLIAMS Does the FAA have a tower there?

Mr. FRANTZ. No, they do not.

(3) Although a great deal of radio channel remoting has been accomplished to good purpose there certainly is much left to be desired. The witness of the Greater Millville Chamber of Commerce will take this up in greater detail. Aircraft in difficulty must necessarily be

within range of an appropriate receiving facility, most of them located at the flight service stations. Line of sight characteristics of VHF and UHF radio channels used for domestic emergency flight communications are unforgiving of distance-altitude limitations.

(4) The Millville flight service station, and many others, have been involved in flight assists which are a matter of record. I believe there were 368 last year of which 5 took place at Millville. Experience seems to indicate that when flight service station services are necessary or desirable they are very much so. Consolidating them so as to attempt to stretch the area of a given station will minimize their effectiveness.

(5) When aviation weather information is most significant all flight service station experience their heaviest workloads. As a pilot has stated: "Did you ever try to telephone the Weather Bureau on a rainy day?" Certainly these services in so-called hard core locations is not likely to provide the quality of services presently available to general aviation. The radio phraseology, "Wait—I will call you," is likely to be overworked.

(6) Some modification of the flight service station functions at Millville and/or even some consolidation of functions now carried on at Millville such as military flight service could, perhaps, achieve some operating cost economics without sacrificing its service to general aviation.

SUMMATION

(1) Messrs. Halaby, Thomas, and Prill testifying before the Appropriations Committee on March 6, 1963, were asked if reducing flight service stations would curtail services of safety. Mr. Thomas' answer was:

> Sir, if we did reduce, the service would be curtailed. These provide for a variety of functions. One of the functions that they do where there is not a Weather Bureau location it takes the weather observations——

This was when appropriations were being asked for. However, now that appropriations were curtailed, Mr. Halaby in a letter to Senator Williams of New Jersey, dated January 31, 1964, stated:

> * * * through the use of remote communications facilities, the essential services, excluding weather observations, can be provided from fewer locations without degrading or reducing air safety.

Is it not a derogation of service and safety when competent, constant, and professional weather information cannot be obtained for Millville? It is not a further derogation of service and safety when elbow-to-elbow pilot briefing and flight plan service is discontinued? What of the loss of our emergency channels? What price economy? Are lives valued less in Millville than in Philadelphia where our flight service station is proposed to be remoted?

(2) While the military and airlines have their own facilities why are general aviation facilities being minimized?

Consistent with the national trend Millville Airport has increased is based planes 700 percent, its movements in proportion. We need more facilities not less.

(3) We, in Cumberland County, are vitally interested in the economics of the loss of our FSS. We are designated as a depressed

area under the Area Development Act and the remoting of our FSS would mean a loss in excess of $150,000 per year to our county.

We are in the midst of developing an airpark or industrial center at our airport. The remoting of our FSS would strike a severe blow to those plans because our tenants and prospective tenants count on their personal services at Millville, not remoted from a hard-core station.

(4) We, in Millville, are interested in economy in government—sure, but what will the savings be? How much? A letter from Administrator Halaby dated January 31, 1964, that the expected savings of remoting Millville will be $101,000 per year. Yet, a letter from Mr. Oscar Hakke to Congressman Glenn states a savings of $95,000 a year. Now in its original communication to the press upon the remoting of the several FSS the FAA said there would be a savings of from $30,000 to $40,000 per year per station. It seems that my guess is as good as theirs and my guess is negative. Paper savings probably.

(5) From the FAA air traffic activity manual for 1963 it is found in tables K, 15, 16, and 17 that of 404 FSS reporting IFR–DVFR, VFR, briefings, flight plans, et cetera, Millville ranked 66th and Philadelphia 89th. Gentlemen, why not remote Philadelphia to Millville—they already have a tower. We will donate all the land needed for a first-class FSS and we'll all gain. Otherwise, land will have to be bought for FSS expansion in Philadelphia and then where will the savings go?

Thank you for your courtesy in having heard us.

STATEMENT OF RUDOLPH CHALOW, OWNER-OPERATOR, RUDY'S AIRPORT, VINELAND, N.J.

Mr. CHALOW. Honorable Chairman, my name is Rudolph Chalow, owner and operator of Rudy's Airport, Vineland, N.J.

I would like to speak from the user's standpoint.

Mr. WILLIAMS. Is that a private or public airport?

Mr. CHALOW. Private airport, sir, open to the public. We pay taxes.

Speaking from the user's standpoint, I was amazed to learn of the FAA's proposal to remote certain flight service stations. Especially in the light of recent gestures on the part of the FAA to apparently improve services to aviation—namely, flight-following service and air-share meetings—around the country to find the needs of the aviation community and providing top echelon representation on their staff for general aviation.

The proposal to remote certain flight service stations appears to be an absolute reversal of the above policy and the selection of stations seems to have one objective in mind, "Where will it hurt aviation most?"

Millville makes the greatest impact being in our backyard, in addition to its location on a segment of the most highly traveled airway in the world.

Dissemination of weather information is as necessary to the safe operation of aircraft as fuel in the tank. Right now, when any significant weather is in the area, it is practically impossible to get a line through to the Philadelphia area for weather information. The

remoting of the Millville FSS to Philadelphia will compound this problem and result in pilots originating flights for which they are ill prepared. The remoting of Millville will eliminate weather observations. Millville is not situated on a great plain where weather usually is the same for hundreds of miles around. Rather, it is certainly located on the South Jersey Peninsula. The adjacent water creates local weather conditions depending on the existence and direction of the wind, such as, ground fog, fog rolling in off the bay or ocean. Philadelphia weather observations cannot be used as it has its own peculiarities, such as industrial haze and river fog.

Millville is the only station between Washington and New York which retains a "low frequency" transmitter which means it may be heard much like any broadcast station on your home AM receiver. It is not limited to "line of sight" as are VOR transmitters which may have a maximum broadcast distance of 5 miles on the ground. All other FAA stations in this area are VOR. Therefore, Millville adequately serves the complete South Jersey Peninsula in addition to cities like Wilmington, Del., and Philadelphia, which are high population areas.

Millville should not only be retained in its entirety but should be expanded into a continuous weather broadcast station to afford pilots weather information when phone lines are congested and personnel busy.

Other stations selected to be remoted which come to mind at the moment are Lebanon, N.H., and Concord, N.H. These two stations are on opposite sides of the White Mountains which are located in some of the most rugged and desolate terrain in the Northeast. Elmira (N.Y.) FSS is also located in mountainous terrain and offers the only continuous weather broadcast service in New York State.

The implementation of this plan to remote flight service stations can only result in increasing the hazards to aviation whereas, by the use of our present-day technology, we should be improving our safety factor.

Thank you.

Mr. WILLIAMS. You mentioned that Lebanon and Concord are slated to be remoted. In checking over the list, we do not see any indication that these are included in the 42. Are those expected to be in the next 100 or so that are supposed to come along?

Mr. CHALOW. From my memory, I thought Lebanon was included in the first 42 and Concord was in the second 24 or 25.

Mr. WILLIAMS. The Administrator said that the second list has not been made public yet.

Mr. CHALOW. I saw it in writing somewhere, sir. I can't recall at the moment. I thought it was available publicly.

Mr. WILLIAMS. Did you have anyone else to present a statement?

Mr. GIRARD. Just one short statement, sir.

Mr. WILLIAMS. Will you identify yourself?

STATEMENT OF FRANCIS R. GIRARD, CHIEF, BUREAU OF AERONAUTICS, STATE OF NEW JERSEY

Mr. GIRARD. Francis R. Girard, chief of the Bureau of Aeronautics, State of New Jersey.

I was sent down here by the Governor to support the position of Millville. We want to emphasize everything they have said.

I won't go through my dissertation, but we consider Millville as the last link before you enter into the metropolitan area. Some of us who have been used to flying with the military and the commercial airlines lose touch with what the general aviation pilot has to put up with. This also speaks for the FAA. This is the last ditch airport and the airport is used as an alternate.

If we lost the daily weather observations, it cannot be planned as an alternate.

We are very much concerned with this.

We are also concerned with the cutdown on the utilization of Millville in Cumberland County. This area is growing and this certainly will be a detriment to its growth.

Thank you very much.

Mr. WILLIAMS. Thank you, sir. If you would like, you may elaborate on those remarks and submit it to the committee for inclusion in the record.

Mr. GIRARD. Thank you.

Mr. WILLIAMS. We thank you, gentlemen, very much. Millville, I believe, is the center of a great deal of aviation activity, is it not?

Mr. GIRARD. Yes, sir.

Mr. WILLIAMS. Is the Flying "W" Ranch in that area?

Mr. GIRARD. Yes, sir; it is north of it.

Mr. WILLIAMS. Do you have any idea how many operations the Flying "W" Ranch has?

Mr. GIRARD. Yes, sir. On each weekend they have in excess of 300 movements, on each Saturday and Sunday.

Mr. WILLIAMS. The other airports are also high-density airports?

Mr. GIRARD. Yes, sir.

Mr. WILLIAMS. If you are to be remoted to Philadelphia, what will be the nearest flight service station in the East?

Mr. GIRARD. Other than Philadelphia, I could not answer that, sir.

Mr. FRANTZ. Salisbury, Md.

Mr. WILLIAMS. How far away is that?

Mr. FRANTZ. Eighty-five miles.

Mr. WILLIAMS. How far to Philadelphia?

Mr. GIRARD. Forty-two.

Mr. WILLIAMS. That exceeds the 100-mile minimum which has been presented to the committee as a figure.

Mr. GIRARD. Yes, sir; but the point you picked up before about trying to contact them on a rainy day certainly applies to that area. You can't get through to Philadelphia or you can't get through to any of your commercial towers or FAA towers at the same time. It is very difficult in that area.

Mr. WILLIAMS. That poses a problem, I think, that the Administrator might very well deal with when he comes back before the committee, as to how many lines we will have in these hard-core stations and how difficult it will be to reach them, particularly during times of bad weather.

Mr. GIRARD. May I say one point, sir? Millville is always the last station in the New Jersey-New York area to go below minimums.

This is always kept in the back of the mind of each pilot that flies in the area. It is the best alternative. This is the one thing that the lack of weather observation will have, it will preclude Millville from that picture. This is our best weather station. It is a very important point.

Mr. WILLIAMS. Thank you very much, gentlemen. We appreciate the testimony you have given us.

The committee will stand adjourned until 1:30.

(Whereupon, at 12:15 p.m., the subcommittee adjourned until 1:30 p.m., this same day.)

AFTERNOON SESSION

Mr. WILLIAMS. Let the subcommittee be in order, please.

Mr. Saul Babbin?

STATEMENT OF SAUL BABBIN, CORNING GLASS WORKS, CORNING, N.Y.

Mr. BABBIN. Mr. Chairman, I would like to have sit with me Mr. Glenn Banfield, the airport manager of the Chemung County Airport, and introduce Betty Haesloop, a pilot and aircraft owner in the area, and Mrs. Mary Wallace, who is also a pilot in the area, who joined me in our sojourn down here.

Mr. Chairman, we do not have a formal statement for several reasons: We have quite detailed briefs which we will leave with you, copies of these briefs were sent to Senators Keating, Javits, and Congressman Robsion.

We would like to thank you for allowing us to appear and thank Senator Keating and Congressman Robison for appearing on behalf of the Elmira Flight Service Station in the Chemung County Airport.

My name is Mr. Saul Babbin. I am a member of the Corning Glass Works, but I represent myself as a taxpayer and as a member of several flying organizations in the area; the Southern Tier Flying Club, which is representative of pilots within a hundred-mile radius of the Elmira-Corning area, and the Silver Star Aero Club, representing more than 50 pilots and owners of aircraft at this airport.

Mr. Banfield is the airport manager, as I have mentioned before.

Mrs. Haesloop is an aircraft owner and a pilot in the area.

One of the things I would like to do is read just a few paragraphs from some of the statements we have sent to Senators Keating, Javits, and Congressman Robison, and for the sake of brevity, to bring up some specific questions which became evident to us when the Administrator, Mr. Halaby, testified.

We do understand that the FAA's prime objective is economy. We all are for controlling excess Federal spending, but in this case I can see no savings, as such. It is noteworthy that such national organizations as the Aircraft Owners & Pilots Association, the National Business Aircraft Association, the National Aviation Trades Association, and the National Pilots Association are all of the same opinion.

I also agree with these national organizations that there are several other FAA spending programs which could be reduced without such adverse effects to the aviation users and taxpayers.

Previous similar economic programs by the FAA and its predecessors have ended unsuccessfully and have resulted in a waste of taxpayers' dollars.

In view of this, I have valid reason to view the projected savings of this proposal quite apprehensively.

Mr. WILLIAMS. Mr. Babbin, you mentioned that other programs could be reduced. I think it might be well, in view of the fact that you have made that statement, that you give us some indication as to what programs you feel could be reduced and why.

Mr. BABBIN. I have reference to some of the NAFEK facilities at Atlantic City where it has been public knowledge that certain moneys were spent on programs, one for instance, where money was spent for the production of ice in the summer to test skidding by aircraft when they could have done this in the winter time and saved, I believe—I don't have the exact figures here, but they can be obtained—in excess of quite a few million dollars, to produce a natural product which could have been done if the program was delayed perhaps 6 months.

I am sure that the national user groups, specifically Aircraft Owners & Pilots Association, which I have mentioned some of these facts, can back this up in their later testimony.

I would like to mention specifically the Elmira flight service station and our justification for being here. As has been mentioned by Congressman Robison and Senator Keating, this geographic region served is enjoying a rather rapid industrial expansion and growth. Aviation growth goes hand in hand with such a program. Airport facilities and services are primary considerations by industry considering locating in this particular area.

The recent acquisition of a new $15 million plant by the A. & P. which is being built just a few miles from the airport was the result of great coperative effort in a highly competitive market for attacting new industry. I know that this airport for a fact, and its facilities and services, was one of the major points of consideration by the A. & P., in selecting this area for the plant. The loss of this flight service station will hinder future efforts of this kind.

We note with interest that the State of Pennsylvania has 10 flight service stations and that none of these is included in the preliminary FAA remoting program.

We also note that 6 of these 10 stations had a lower activity count during fiscal year 1963 than our own Elmira Flight Service Station. To add insult to injury, it now appears that the FAA plans to remote the Elmira Flight Service Station to Wilkes-Barre, which, interestingly enough, had a considerably lower activity count during this period.

It should also be noted that the Wilkes-Barre location and quite a few other surrounding locations are served by U.S. weather stations. Were the Wilkes-Barre Flight Service Station function to be remoted to Elmira, preflight briefings and associated weather services would still be available to Wilkes-Barre user from the station.

When the Elmira service is remoted, no such service will be available locally.

The activity of flight service stations according to the FAA record has increased from 11 percent in 1962 up to 16 percent in 1963, and so far in 1964 has increased 29 percent.

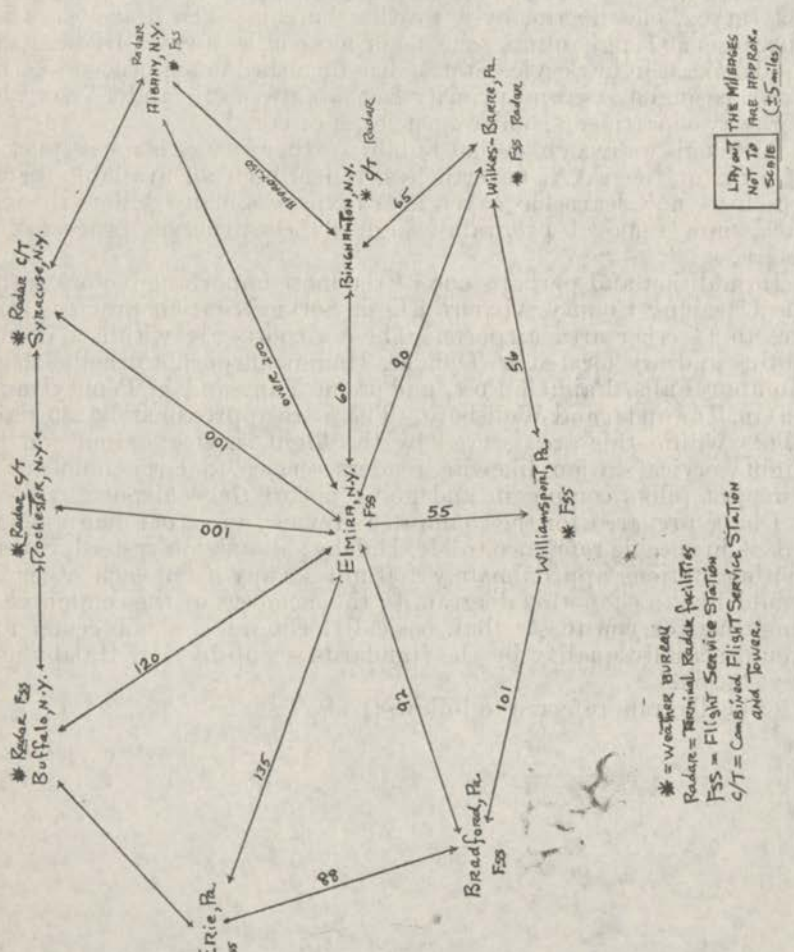
On the basis of Mr. Halaby's statement, we are considered a medium activity station and on a projected growth rate we would become a high activity station within the next 5-year period. The Elmira and Corning areas have a population in excess of 200,000 people and are not served, once again, by a weather bureau. The nearest weather bureau is at Binghamton, some 65 or more miles away. By necessity, the Elmira Flight Service Station has furnished much-needed weather information on a second priority basis to area radio and TV stations, highway departments, police agencies, et cetera.

Although we recognize that public weather service is not a function of FSS or the FAA, nevertheless, it has been an available service which we now learn has saved area taxpayers many dollars through area snow removal programs, highway construction programs, et cetera.

In addition and perhaps one of the most important factors is that the Chemung County Airport Flight Service Station provides services to 14 other area airports. These airports are within a 70-mile radius and are located at Dundee, Hammondsport, Cornell, Ithaca, Montour Falls, Painted Post, and Penn Yan; and in Pennsylvania, Sayre, Towanda, and Wellsboro. There are approximately 250 active pilots within this area served by the flight service station and the flight service station likewise renders service to large numbers of itinerant pilots coming in and going out of these airports.

I have prepared for the committee's review, an actual diagram, and this is in specific reference to Mr. Halaby's discussion yesterday of remoting stations approximately 100 miles away from each other. I would like to show this diagram to the members of the committee at this time for you to see that, basically, Elmira is a hub center and would actually qualify by the standards set up by Mr. Halaby as a key station.

(The diagram referred to follows:)


Radar
Albany, N.Y.
FSS
Binghamton
Binghamton, N.Y.
C/T Radar
Wilkes-Barre, Pa.
FSS Radar
Radar C/T
Syracuse, N.Y.
Radar C/T
Rochester, N.Y.
Elmira, N.Y.
FSS
Williamsport, Pa.
FSS
Radar FSS
Buffalo, N.Y.
Bradford, Pa.
FSS
Erie, Pa.
FSS
100
100
120
135
88
92
60
90
55
56
101
65
Lay out the mileages not to true approx. scale (±5 miles)
* = Weather Bureau
Radar = Terminal Radar Facilities
FSS = Flight Service Station
C/T = Combined Flight Service Station and Tower.

Mr. WILLIAMS. Let me interrupt you just a moment. That was the impression I got from what Mr. Halaby had to say, also, that these stations would be not more than 100 miles apart, these hard-core stations.

Mr. BABBIN. That is correct.

Mr. WILLIAMS. On rereading Mr. Halaby's statement, I see that the language leaves the question in doubt as to just how far he plans to put these stations apart. I quote from his language:

> We are thinking in terms of a minimum of 100 miles between stations to insure an adequate communications network with directions finding capability.

The way the sentence reads, it leaves the impression that he is going to compress them within 100-mile areas.

When you analyze the sentence carefully though, you see he uses the term "a minimum of 100 miles," which means it could be somewhere beyond a hundred miles and that could reach into infinity. So, I suppose we might as well go ahead on the premise that they will be roughly a hundred miles apart.

Mr. BABBIN. I think, upon examining the diagram you have in front of you, that if Elmira were eliminated, in many direction areas, from Bradford to Albany, you would have in excess of 300 miles with no coverage. In other directional areas, basically speaking, and from analyzing the map that Mr. Halaby showed yesterday, you would have a void in the center of New York State and also a void covering most of Pennsylvania. Wilkes-Barre, which has been tentatively mentioned, is almost in excess of a hundred miles from Elmira, and the topography is so far different—being an experienced pilot I believe I can talk quite well about this—there have been several cases, and I have been personally involved in one of these incidents, whereby life was saved because of a flight service station.

Mr. WILLIAMS. You say your life has been saved by a flight service station?

Mr. BABBIN. Yes, sir.

Mr. WILLIAMS. I think the committee would be interested to know the details.

Mr. BABBIN. All right. If I may qualify and preface this description with one or two statements and then go into the details, I would appreciate your allowing me to do this.

Mr. WILLIAMS. All right, sir.

Mr. BABBIN. The reason why I think this description is important is that it shows, on the basis of Mr. Halaby's manicom proposal that a manicom facility at Elmira at this particular time would have been inadequate. Although the current flight service station is doing an excellent job, in our opinion we need better facilities rather than less.

Approximately a year and a half ago, in the winter, I departed from La Guardia. At that time, I did not have my instrument rating. I was strictly a VFR pilot. The weather had been forecast to show no severe weather would be coming into Elmira until late in the evening, around 8 or 10 o'clock. I left La Guardia about 1 o'clock in the afternoon. The weather had indicated by sufficient pilot briefing that everything was and would be OK en route.

I filed a flight plan fortunately and, after taking off and going en route, the weather began to deteriorate rapidly, which had not been predicted.

As you know, if I may deter a moment, the science or art of weather prediction is still maybe 85 percent accurate at its very best. Upon reaching the Wilkes-Barre area, I made a position report. Since Elmira has a remoted station which is responsible for south of Elmira, they picked up my conversation and at that exact time I had made my position report, the weather had deteriorated unexpectedly below VFR conditions, in fact below IFR minimums, which was in the form of a snow squall and storm—lasting more than 12 hours—with ceiling obscured and zero-zero visibility.

Because I had filed a flight plan, which a tower does not receive, a VFR flight plan, Elmira FSS communicated with Wilkes-Barre to advise me what had happened immediately, which was not forecast.

At that time, my decision had to be made whether I should continue or go back to New York or divert to another station, which, at a later think we are all talking about, and not instrument flight—which has Binghamton—there was no other reporting station—I encountered marginal if not below VFR weather and before I got to Binghamton had many hair-raising experiences unfortunately due to the fact that the weather had unpredictably closed in.

If I had continued without Elmira informing Wilkes-Barre of my coming and they would not have known I was coming, and if a VFR flight plan was not filed, I would have tragically continued on not knowing which way to turn or what to do.

The main key here is that on VFR flight plans, which is what I think we are all talking about, and not instrument flight—which has its own qualifications and instrumentation—a flight service station which has limited communications facilities, which the manicom will have, according to Mr. Halaby's presentation, would not have been able to communicate instantaneously with Wilkes-Barre in this case. They would not, indeed, have heard my transmission.

Secondly, since they were on the spot in Elmira, they could radio instantly rapid weather changes which altered my course of action.

There have been other cases, including the airlines where the flight service station has played an important part due to the fact that they were there with sufficient communication frequencies and sufficient equipment to take over when there was complete communications failure by the tower and there was no means of communication during instrument weather except through the FSS located on the airport.

This is a sidelight.

The important feature here is that nothing can equal pilot-to-pilot briefing by people who are experienced with the terrain—and I don't know how many of you have actually been in a flight service station when a "save" is being made. There is probably nothing more tense, nothing more dramatic, than seeing, and hearing these moments. Here is a man stuck on top, either through inadvertent planning of his own or in a situation like mine, unpredicted bad weather—these men, because of the familiarity of terrain and locations, because of the fact that terrain location changes because of construction or by the natural elements, that a man who is at Elmira now, 10 years from now or even 5 years from now, might not know the same locations or new landmarks because of building and other changes in the area—these men can bring him in not only within a radius of the airport, but within a good 75-mile radius of Elmira. Limited frequencies certainly

could not do this as was indicated for the manicom to replace FSS stations.

I have another personal incident. I was going to Richmond, Va., a few weeks ago. The weather teletype sequence came in without giving the current Richmond weather. The weather had forecast severe thunderstorms all around. If I were dealing with manicom, I would not have been able to ask Elmira flight service station to radio, or teletype—which takes additional teletype lines, then manicom would have—to ask Richmond, "Your weather did not come over, what is happening now?" I would have had to wait another hour or make long-distance phone calls at my own expense to find out what was happening.

There is a serious discrepancy in opinions between the Federal Aviation Agency and the so-called general aviation or people like myself, the general users group.

We do not feel that there has ever been area of conflict between ourselves and the airlines and the military. We feel that, in terms of rebuttal to that statement, this conflict is generally rated within the FAA themselves.

We have been talked to like children, we have been treated like children in this specific instance, by not giving us and showing the maturity of sitting down and saying this is what we plan to do, what is your opinion, let us thresh this thing out together.

We were issued an edict of which I have a copy here. Mr. Halaby's testimony stated that this consolidation will take place in the next 20 to 30 months. This copy is a definite edict stating between 12 to 24 months these stations will be closed resulting from a specific lengthy study.

The most disturbing thing to me, Mr. Chairman, is that if I, as a businessman, would state to my boss that I could save my corporation $3½ million a year by spending $6 to $7 million, and then say to my boss, I don't know how I am going to do this, but I think by having such and such stations consolidated, but I don't know how much this will cost, I don't know where they will be, and we don't know what the exact cost of the manicoms will finally be, then saving this kind of money is conjecture. I don't think any businessman would stay in business very long with that type of statement.

The other question, when FAA representatives came to visit the flight service stations, after the consolidation statement was issued the statement was made that there was going to be no reduction of personnel at any of these stations, that they would be absorbed in other facilities. Mr. Halaby stated however in the record that 500 to 600 positions would be saved—directly contrary to the originally recorded statements made by FAA.

The question I am asking to myself, if there is no reduction in personnel, and we are going to be remoting stations, you are going to have 150 key stations, and each one will have a manicom, perhaps two or three. If each one has three satellite stations, you will have 600 to 700 associated stations with Federal employees. It is very dubious in my mind how the savings can be made that have been suggested by the FAA.

I reviewed with you the questions which were brought up in our minds yesterday by Mr. Halaby's testimony. There are many other

questions which we have raised and we would like to feel free to actually submit these questions in written form, not a statement, in the next 7 days to this committee, that we feel the committee should get justifiable answers from Mr. Halaby when he appears in rebuttal.

Mr. WILLIAMS. The committee will be glad to consider your request.

Mr. Babbin, in your opening statement you mentioned the word "economy." We want to save money where we can, but not at the expense of safety.

Mr. BABBIN. That is correct.

Mr. WILLIAMS. You said, "I cannot see any savings, as such." Could you elaborate on that?

Mr. BABBIN. That is correct. The cost of remoting landlines from Elmira to Wilkes-Barre has had a preliminary investigation and the fact that there were 14 other airports within a 70-mile radius, north, east, and west, which would have some sort of communication either at the expense of the pilot—you are talking about a remoting expense, we found, of at least $40,000 in terms of nonrecurring and recurring landline expenses—then you have the cost of relocating 11 personnel, which are in attendance, for 24 hours, 7 days a week. You would have relocation of these men plus in this particular area, which is a very bad marketing area for housing, a personal loss to these men of at least $2,000 to $3,000 for forced sale of homes, which has been the standard in the Elmira-Corning area when you have had to sell a home on short notice.

Another question we have is that you will then have surplus equipment which may or may not be utilized by manicom. What happens to this capital investment?

On the leasing of these telephone lines, we do not know what class they will be and the big question which is redundant, which has been mentioned by many of the affected people, and which you have known if you have traveled to other cities other than your own, by your own plane waiting on a telephone line at a flight service station on bad weather is a trying task when weather is marginal and in any case when you have peak hours in the morning or afternoon when people are coming or going to their homes.

Mr. WILLIAMS. You said you could not see any economy, as such. Are you trying to say that it is going to cost more money?

Mr. BABBIN. No; what I am saying is that the immediate economies are not there. I will concede there is a possibility of saving on a long-term basis. There may be very positive savings within the Elmira area, but I question the overall program from my other statements that if these men from consolidated stations are not being dropped, if these facilities of the manicom are going to be maintained and other new satellite manicoms issuing from a main station, it is beyond my belief that savings can be effected.

Mr. WILLIAMS. Don't they have men at these stations today?

Mr. BABBIN. We have 11 men at our station today.

Mr. WILLIAMS. There would not be 11 at Elmira. There will be less.

Mr. BABBIN. The assumption here is that we will have nothing. We will be remoted to another facility. On that basis alone, you are talking about $90,000 in salaries, you would easily have savings.

We are talking about Elmira. The community will lose $90,000 in salary.

Mr. WILLIAMS. The community will?

Mr. BABBIN. Yes, sir.

Mr. WILLIAMS. The Government will save $90,000; is that right?

Mr. BABBIN. I don't see how if they do not discharge these people.

Mr. WILLIAMS. They will be transferred to other places.

Mr. BABBIN. But the Federal Government still has to pay their salaries regardless of where they are working.

Mr. WILLIAMS. They would not be paying more.

Mr. BABBIN. According to the published budget in March 1964, American Aviation magazine, the so-called outlay of money programed for domestic flight service stations from the actual 1963 budget to the 1965 budget is doubled. It is currently 4.402, I assume that means $4,200,000. It shows the money is programed for FSS stations to be $8,556,000 by 1965.

Mr. WILLIAMS. Yes. That is the reason for this controversy because the Appropriations Committee said we are expanding too much. You have too many employees. It is almost a mandate on FAA and the Weather Bureau to cut down. Not only that Agency, but every agency in Government. The Appropriations Committee is the one demanding many to cut down. We are looking at it from the safety standpoint.

I don't know whether it is smart to cut down on them or not.

Mr. BABBIN. This, I agree, sir. However, this article does take into effect, and does mention that the FAA has had pressure to cut its budget and this budget mentioned here has been cut. It says $751 million for the 1965 budget, from the pressures from the administration. This represents a 10-percent reduction in this particular 1965 budget from the 1964 budget.

It actually shows a doubling of money spent for flight service stations. I don't understand this. I can submit this to you, sir, for your perusal.

Mr. WILLIAMS. We probably have that in our records. A lot of agencies will ask for so much money and then the Appropriations Committee cuts them down. They may not cut them less than they had a year before. That is the interpretation I had from the article. Although they received more money, there was a reduction in the amount requested. The Agency is growing too big and the Appropriations Committee said: "You have to cut down." We want to look at it from the safety factor. Maybe it is not smart to cut down.

Mr. BABBIN. I understand, sir.

Mr. WILLIAMS. The problem is where to cut it. How to do it without reducing the necessary services.

Mr. BABBIN. The last thing I would like to bring up is the fact that Elmira, though you may not be familiar with it, is a rather large airport and relatively speaking is as large as La Guardia Airport in New York City, and has more runways, three runways. The longest is a 5,600-foot runway and Corning Glass Works' two DC–3's and Lockheed jets are operating in and out of this airport, beside Mohawk and United Airlines Viscounts. The key is that almost every surrounding station—Buffalo, Rochester, Syracuse, Albany, Binghamton, Wilkes-Barre, Williamsport, and Erie—all have not only a flight service station either through a flight service station by itself

or a combined tower facility, but alsc have both radar and/or a weather bureau in addition to its flight service station.

Elmira has one thing only, a flight service station. But every one of these stations that you saw on this hub has additional backup facilities.

The question I also have for Mr. Halaby is, How many of these stations which he has consolidated have the so-called backup of radar and a weather bureau? We do not have both, yet we are larger in many, many aspects not only in activity, in terms of numbers, take-offs and landings, but also in flight contacts, then more than half of these stations listed here. Yet, they have twice the facilities we do in terms of radar, weather bureau, and other airport services.

I have no further comments for the committee, except I would like to have 1 minute to discuss with Mr. Banfield if he has any other points or with Mrs. Haesloop to see if they have any other points to bring before the committee.

I believe Mr. Banfield would like to make a short statement.

STATEMENT OF GLENN S. BANFIELD, AIRPORT MANAGER, CHEMUNG COUNTY AIRPORT, FOR COMMITTEE FOR THE RETENTION OF THE ELMIRA FLIGHT SERVICE STATION

Mr. BANFIELD. Mr. Chairman, my name is Glenn S. Banfield. I am manager of the Chemung County Airport, which serves the cities of Elmira and Corning, N.Y., in the geographical southern tier of New York and the northern tier of Pennsylvania.

We thank you for this opportunity to appear and talk at the hearing.

I have a prepared statement but I have only one that we put together. Most of what needs to be said has been said.

I respectfully request, however, that it be entered into the record and further request an attachment which is entitled, "Fact Sheet No. 2," be incorporated in the statement.

Mr. WILLIAMS. How voluminous is that second one?

Mr. BANFIELD. It is not too long, Mr. Chairman.

Mr. WILLIAMS. Well, let it be received for the record.

Mr. BANFIELD. Thank you, sir.

Mr. WILLIAMS. You know, we can get saturated with information. But, from the looks of it, it is short enough.

You want this included as part of your testimony?

Mr. BANFIELD. If you please, sir.

Mr. WILLIAMS. All right, sir.

Mr. BANFIELD. There are some fresh concepts and perhaps some observations which we have not covered but in detail will make up this part of it, it could be incorporated that way.

(The document referred to follows:)

STATEMENT OF GLENN S. BANFIELD, MANAGER, CHEMUNG COUNTY AIRPORT

Mr. Chairman and members of the subcommittee, we are deeply appreciative of your efforts in satisfactorily arranging these scheduled hearings on FAA's program of consolidation, closing and remoting many flight service stations and for the privilege afforded us to attend.

I am Glenn S. Banfield, airport manager at Chemung County Airport located in southern tier New York about midway between New York and Buffalo at the intersection of seven busy airways. At this important junction, Elmira FSS

controls and monitors these VOR facilities with voice—Elmira, Ithaca, Wellesville, Watkins Glen, in addition to Stony Fork Vortac. Both Ithaca and Stony Fork are provided with remote receivers.

We are confident that as a result of the ensuing testimonies by competent spokesmen much worthwhile information on the important role of the FSS function will be brought to light that previously had not been openly and completely divulged.

The Elmira FSS is one of the oldest stations in the FSS network and down through the years has gained enviable recognition as one of the best by reputation in safety and service, which has materialized through sound devotion to fulfillment of duty and not by happenstance.

Our airport, too, has kept pace with aviation's rapid progress. To cite the development and improvement program over the past 5 years:

(1) 1959–60 Airport Terminal Building, 40,866 square feet, with ticket counter and office space for 3 airlines	$800,874
(2) 1961 Runway evtension, 900 to 5,600 feet, Airport lighting: High-intensity and taxiway lighting and hazard beacons installations land acquisition clearing	530,000
(3) 1962 Approach light system (ALS) commissioned, Mar. 7, 1962. Instrument landing system (ILS), commissioned Oct. 19, 1962	
(4) 1963 Instrument runway pavement strengthened	94,118

Airline passenger count and air traffic activity have paralleled our advance, to wit:

From 1959 to 1963:	
Air carrier (only) passengers (36 percent increase)	62,761–97,439
Aircraft movements (29 percent increase)	48,134–67,288

FSS activity has proportionately increased to a high of 34,205 total operations in the year just past. This rise continues, for in the first quarter of this year a 30-percent hike is notable above same period last year. A third level intrastate airline service has just been inaugurated to provide six round-trip flights daily between Elmira-Corning and upstate communities. This operation is destined to have an appreciable effect on boosting the already significant healthy growth of FSS activity, since flight plans and weather briefings for these flights will be handled by our station. The pilots in the conduct of their flight operations will avail themselves too of other safety services offered by our Elmira FSS.

It is an accepted fact that all indications point toward a significant accelerated growth in all segments of general aviation which is the category most active in the aviation industry, and the one that relies heavily on FSS safety services.

In the April FAA Aviation News, FAA planners forecast a 20-percent increase in the general aviation flight activity 5 years hence from 84,121 (January 1, 1963) to 102,000. Trade magazines also carry articles predicting outstanding increases.

As mentioned heretofore, the Elmira FSS activity is comparatively high with steady impressive increase. Its closing would open a serious void in flight services throughout a large geographical area and to a large user group in general aviation. There are no flight service stations at adjacent locations, such as Rochester, Syracuse, or Binghamton, except as combined facilities of stations and control towers. These combined stations do not serve the prime functions of the FSS, most of which duties are covered by the Weather Bureau. Airport Weather Bureau stations and radar facilities are both provided at these named airports. Elmira FSS provides service coverage to most of this large area.

If the Elmira FSS were to be closed and not replaced with a weather bureau station essential safety services would definitely be adversely affected:

(1) Over-the-counter preflight briefings with current aeronautical charts, Airman's Guides, Flight Information Manuals, and other information publications for convenient reference and assistance would be entirely eliminated.

(2) The latest available, on-the-spot weather reports and wind analyses en route and at destination would not be available locally.

(3) Firsthand operational status and frequencies of NAVAIDS pertinent to route of flight as applicable information concerning warning areas—restricted areas—AIDZ and special regulations would not be available locally for pilots' review.

(4) Emergency assistance services would definitely be considerably less effective from a remote location.

(5) The transcribed weather information would not be as instantaneous from a remoted location.

(6) The VOR navaids monitoring might be less reliable through remote type of monitoring.

(7) Frequency availability would undoubtedly be greatly reduced in a remoting program because of cost factors.

The area served by the Elmira FSS is rugged terrain with extremely variable weather conditions resulting often in pilots becoming lost. There is no area D/F to effectively serve their needs nor does area radar adequately assist for small planes at low altitudes oftentimes flying in valleys.

Substantial savings as announced in the consolidation program appear very questionable with moving costs to absorb for personnel, the installation costs of equipment for remoting, recurring monthly line rentals, communications lags, saturations, and failures and more. Any reduction in the number of FSS facilities in the interest of economy should be weighed completely to insure that there is no resultant compromise in air safety.

It seems logical that any reduction in flight service stations should start with those of lowest activities and preferably those colocated with Weather Bureau airport stations, so that the essential weather services will still be available from the Weather Bureau when the FSS is removed. We again call your attention to the fact that there is no Weather Bureau station at Elmira.

When our new airport terminal building was constructed in 1960, a second floor comprising an area of some 3,000 square feet was provided for the flight service station quarters. Chemung County was given to understand that the FSS would be completely modernized, expanded, and staffed with full complement of personnel to cover and provide present and future needs of more and special diversified safety services. The county in good faith assumed its full share of space requirements costs and FAA fulfilled its commitment to implant a complete flight service station. Now, in little more than 3 short years of occupancy the FAA Administratior has issued an edict to vacate this space. Also, we were notified the first of the year that FAA was relinquishing space provided for them on the third floor for radar, IFR, and equipment rooms. Radar was planned for fiscal year 1963.

Mr. Chairman, as a listed station to go, we ask, Why us? Why was the Elmira FSS picked for closing? (Certainly not on basis of low activity.) Was it for apportioning certain facilities for elimination—on a geographical equity? Perhaps we may be so bold as to interject the inference or conjecture that selection was made on the basis of other unknown considerations. The fact that our neighboring State of Pennsylvania has 10 flight service stations of which 6 are of lower activity than our Elmira station, yet not one has been listed in the FAA consolidation program, gentlemen, leaves me slightly perplexed as to what criteria was used in the selection of locations for remoting.

Mr. Chairman, members of the committee, in summation, I beseech you to consider the following factors as relevant to our purpose: the knowledge and experience of our acclimated specialists thoroughly familiar with the locale—prerequisites to safety in our hazardous terrain, for on-the-spot coverage to emergency flight assistance service, pilot briefing, flight plan issuance and flight following service, weather observations, continuous transcribed weather broadcasts, monitoring navaids, and notam service.

We have no second agency, such as Weather Bureau, which normally provides many of the above-named services. There is no duplication of effort nor conflict of duty. We have no backup of radar. Our FSS is essential to our daily operation and we respectfully petition that it be retained. To this end, we pray you will support our cause to seek out the justification of our station's existence.

I thank you for the privilege of making this statement.

FACT SHEET NO. 2—ELMIRA FSS

The following data have been prepared by several members of the committee for the retention of the Elmira FSS. To this end, it may serve for review and to bring up to current status some of the activity comparisons from the late source of the FAA activity report recently released.

1. The Elmira FSS serves 14 area airports, in addition to the Chemung County Airport. The activity of the Elmira FSS has increasd steadily during the past 3 years. Total facility operations (which in essence is user demands for some type of flight service offered) increased 11 percent in calendar year 1962. In calendar year 1963 the increase went up 16 percent. In the first quarter of 1964 activity increased 30 percent over the first quarter of 1963. General aviation growth has been increasing throughout this area and it is expected to continue. In view of this, there exists more justification for maintaining the Elmira FSS than at any other time in its history.

2. There is no Weather Bureau office at this airport, nor in this large populated area and the closing of the Elmira FSS would result in no weather briefing services being available locally. The void of such essential services cannot be justified in an area having such a large segment of general aviation operations.

3. Area users have expressed their complete disagreement with FAA's contention that there will be nc reduction in services or air safety. We have not found one single pilot that supports FAA's contention in this respect.

4. Approximately 30 percent of the preflight briefings conducted by the Elmira FSS specialists are the "over-the-counter" type, despite the fact that the Elmira FSS is located on the second floor of the terminal building, which is not convenient to general aviation pilots.

5. This over-the-counter type briefing which is considered by the majority of pilots as being far superior to briefings conducted over the telephone or radio will be eliminated completely if the Elmira FSS is remoted.

6. The quality of emergency flight assistance service is expected to be lowered considerably. Obviously specialists at a remote location would not have the detailed knowledge of the area terrain, area landmarks, and weather patterns peculiar to the area that the Elmira FSS specialists have gained through years of experience in working and flying in this area.

7. During peak activity hours, even the routine services from a remote facility are not expected to be as efficient. With the additional remoted workload we envision that during peak activity hours a pilot calling the remote facility will get a busy signal or a standby a good bit of the time.

8. The activity of the Elmira FSS is considerably higher than either the Wilkes-Barre or Williamsport flight service stations to which we could be remoted according to rumor. We feel it would be more logical to remote a facility of lower activity to one of higher activity rather than vice versa as FAA proposes. It should also be pointed out that Wilkes-Barre and Williamsport both have Weather Bureau personnel at their locations that would still provide weather briefings and other routine weather services to area pilot if their flght service functions were remoted to Elmira. No such services will be available locally to Elmira area pilots if the Elmira FSS were remoted.

9. The FAA air traffic activity publication for fiscal year 1963 has recently been released and the information from this source is more favorable to Elmira than the fiscal year report which was compiled in our file of presentation at an earlier date. The calendar year 1963 records total FSS operations as follows:

Elmira	34, 205
Wilkes-Barre	22, 088
Williamsport	24, 992

Total aircraft operations, calendar year 1963:

Elmira	67, 288
Wilkes-Barre	43, 705
Williamsport	46, 309

10. We say again, according to the record, our cause is just and reasonable. We need our FSS to remain intact; the location and terrain require it; the activity count and continued increase consistent with safety demand it; there is no Weather Bureau station to replace it. If consolidation is justified and imminent—it is sound policy to consider Elmira as the key station from which to remote less active adjacent stations.

Respectively submitted.

GLENN S. BANFIELD
(For Committee for the Retention of the Elmira FSS).

Mr. BANFIELD. Yesterday we heard from Administrator Halaby in defense of his consolidation program. With most parts, we completely disagree. If we did not disagree we would perhaps not be here taking up your time, I am sure, on this.

We most emphatically disagree with Mr. Halaby's announcement by the flight service station and the personnel. We believe that many of the so-called ancillary, what he terms in his verbiage, airport services as nonimportant, and, secondly, we deem these to be very essential and necessary in our everyday safe conduct of our operation.

Mr. Chairman, if our Administrator is sufficiently convincing to be allowed to proceed with this closing plan, then we ask very simply and plainly, Why not start with low-activity stations and especially where these coexist with Weather Bureau airport stations? The rest of our text is in the statement, Mr. Chairman, and we do feel we have a very valid case.

We are hopeful that it will be considered in its complete form.

Thank you, sir.

Mr. WILLIAMS. Thank you very much.

Does that conclude your presentation?

Mr. BANFIELD. It does, sir.

Mr. WILLIAMS. Did you have anything to add to it?

STATEMENT OF MRS. RALPH G. HAESLOOP, PILOT AND AIRCRAFT OWNER

Mrs. HAESLOOP. Mr. Chairman, a woman always has to have the last word.

I am Betty Haesloop, a pilot. I just want to add one short thought. This is a fact. What value do you place on a human life? I think this is something for us all to think about.

That is all I have to say.

Mr. WILLIAMS. Thank you.

Are there any questions?

Thank you very much.

We have had other witnesses, as you know, on the subject of Elmira. You have done an excellent job. All of the witnesses have in presenting the case for Elmira. I would hope that the Agency might take another look at their action on Elmira, but, of course, we are considering this not from an individual station standpoint but from the overall effects of the program. We realize, of course, that that is made up of many elements and this is certainly one of the broad elements here.

Thank you very much.

Mr. BABBIN. Thank you, Mr. Chairman.

Mr. WILLIAMS. Mr. Tuten, do you have some witnesses you would like to introduce?

Mr. Tuten, do I understand you have a statement you would like to have printed for the record?

STATEMENT OF HON. J. RUSSELL TUTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Mr. TUTEN. That is right.

Mr. WILLIAMS. Your own statement?

Mr. TUTEN. Yes.

Mr. WILLIAMS. Let it be received.

(The statement referred to follows:)

STATEMENT OF HON. J. RUSSELL TUTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Mr. Chairman and members of the Interstate and Foreign Commerce Committee, I am indeed grateful to you for the privilege of appearing for the purpose of protesting the closing of the flight service station in Valdosta, Ga.

As we all know, flight service stations constitute a major safety service to general aviation. Over the years they have saved hundreds of pilots and passengers in emergency situations. In addition, they are a major source of routine, daily safety service to the commercial and private users throughout the county.

Because of its geographic location, Valdosta is dependent upon air transportation. The increasing volume of air travel in this area brought about by a healthy economic growth justifies the continuance of the facility. Most of the locations where the stations are to be closed will lose vital weather service completely, others will be reduced to part-time observations. The commercial airlines and the military operate their own elaborate dispatching and weather services. The FAA flight service station is the only source of such service essential to the safety of general aviation operations. These stations must be there to provide pilots with information if general aviation is to be properly and safely served.

There has been a tremendous industrial growth in Valdosta in the past 15 years and the services rendered by this station are vital to the area. Its discontinuance would be extremely unfortunate. The saving involved would by no means compensate for the loss of service and the possible loss of lives. Some of these services are emergency assistance to aircraft, pilot weather briefing, flight plan program, search and rescue coordination, handling and distribution of weather, radio dissemination of weather and many others.

I strongly feel that the FAA should do its part to cooperate with the Congress and the President in balancing the budget. However, I do not feel that impairment of air safety methods is the most logical way to effect economies in our Government.

I am pleased to introduce the Honorable Richard Stewart, mayor of Valdosta, and Mr. William T. Braswell, executive pilot for Thompson Industries, Metal Products Division, Valdosta, Ga., who has a technical knowledge of this particular service and its value to the community.

I wish to submit for the record certain information compiled by the Aviation Committee of the Valdosta-Lowndes County Chamber of Commerce for a FAA hearing held in Valdosta on May 6, 1964, under the direction of Mr. Paul H. Boatman, Acting Director, Federal Aviation Agency in Atlanta.

Mr. TUTEN. Mr. Chairman and members of the committee, I would like to express my sincere appreciation to you for giving us just a few minutes and being aware of the time element, I shall just submit my statement in writing and say briefly that I come in protest to the closing of a flight service station at Valdosta, Ga.

I have two flight stations in my district that are vitally necessary to the economy of the communities and we feel they are very vital in the interest of the safety of lives.

Of course, I will be before you in behalf of the other station but today I come in behalf of the Valdosta, Ga., station. We must find some way to save this station. I am not very well versed about flight service stations and the various needs they serve, but I would like to take this opportunity to present to you the honorable mayor of the city of Valdosta, Ga., Mr. Richard Stewart. He will in turn briefly introduce a professional pilot from the city of Valdosta who will be available to make a brief summarizing statement and to answer any questions you might have.

Thank you.

Mr. WILLIAMS. Thank you very much, Mr. Tuten. I will say for the benefit of your constituents that I was your guest at Brunswick 2 or 3 weeks ago, and was privileged to discuss the Valdosta problem and the Brunswick problem not only with you but with many of the local people.

I want to assure them of your intense interest in the subject and the fact that you have certainly left no stone unturned in attempting to look after the interest of your district in this respect.

Mr. TUTEN. Thank you, sir.

Now, Mr. Chairman, I would like, before I introduce the mayor, to ask that the results of a hearing which you were good enough to help us get for the city of Valdosta be included in the record. We have some of the facts here.

Mr. WILLIAMS. May I say this, Mr. Tuten: We will have these for quite a number of other stations. If we print this as a part of the record hearings, then I am afraid we will wind up with some rather voluminous hearings. However, the committee will be very happy to receive these for our files for reference purposes. That is the way we are handling them for the other stations. This will be incorporated by reference and will be in the committee's files for that purpose.

Mr. TUTEN. That will be perfectly all right. I just want to have them where you can put your fingers on them.

Now, I would like to present the mayor of Valdosta, Richard Stewart.

STATEMENT OF HON. RICHARD STEWART, MAYOR OF THE CITY OF VALDOSTA, GA.

Mayor STEWART. I happen to be the mayor of the city of Valdosta in which you good folks plan to close our flight service station.

Mr. WILLIAMS. Do you mind a correction? I am afraid that this group is on the other side. At the moment, we are trying to find some means by which these services at least can be continued.

These hearings were the result of expressions of concern by representatives of the several cities in which these stations were located and also interested parties in the aviation community. So, may I say that the Federal Aviation Agency and not the Subcommittee on Transportation and Aeronautics in trying to close the station.

Mayor STEWART. Good. We can give you plenty of ammunition, sir.

Mr. Chairman, I would assume that you would expect a mayor from a town with a population of 35,000 people, especially since we are going to have an election down there in the not too distant future, to make a long talk on why we think this flight station should be kept open.

Our Congressman, J. Russell Tuten, has advised us to keep this as brief as possible so I plan to make this short and sweet.

By profession, I happen to be a certified public accountant. I believe in economy but not to the extent that it will jeopardize human lives. We have submitted to Mr. Paul H. Brockman, of the FAA—he had a hearing in Valdosta—12 valid reasons why we think the Valdosta Flight Service Station should not be closed. We have with us Mr. Bill Braswell, who has a total flying experience time of 23 years.

He has been an airline pilot. He has 8 years' military flying as a civilian serving as a flight instructor. He is presently a professional pilot flying for a corporation in Valdosta, Ga.

If I may, I would like for him to briefly give you good folks the 12 reasons why we think the flight service station should not be closed at Valdosta.

Mr. WILLIAMS. Thank you, sir.

STATEMENT OF WILLIAM T. BRASWELL, AVIATION COMMITTEE, CHAMBER OF COMMERCE, VALDOSTA, GA.

Mr. BRASWELL. Mr. Chairman and committee members and distinguished guests, we, in an effort to be as brief and take as little of your time, for which we are grateful, offer these 12 points after considerable study and these points pertain strictly to Valdosta's flight service station. We will not take any of your time in trying to argue merits but merely to point out the merits of the service that we now have, the only service that we have at Valdosta and the service that we hope to continue to have in Valdosta.

In considering consolidation of Valdosta, Ga., flight service station with that of Tallahassee, Fla., we would like to give the following testimony:

1. The workload of the flight service station at Valdosta, Ga., has been steadily increasing. The total operations of the Valdosta station in 1961 were 17,326 activities on which the station is rated. In 1963, the total activities were 34,936.

2. Valdosta's flight service station is centrally located in the southern part of the State and a large portion of air traffic to Florida is funneled into, over, or near Valdosta. The Interstate Highway is causing more and more pilots to take the center of the State route on north and south flights.

Mr. WILLIAMS. You are not suggesting that any Georgia pilot flies a concrete beam?

Mr. BRASWELL. The "concrete radio," we call it.

Mr. WILLIAMS. Surely, they must be ex-Navy pilots, speaking as an old Air Corps man.

Mr. TUTEN. I might add that the chairman is a pilot and he knows what you are talking about.

Mr. BRASWELL. 3. A very large portion of the State of Georgia, approximately 30,500 square miles, will be without any FSS personnel, or weather reporting. This area lies in a prevailing storm track resulting in considerable weather conditions which, if unreported, would have serious consequences to the pilot.

I might mention that area will extend from north Macoon, Ga., to south Gainesville, Fla., a distance of 200 miles or more in an east-west line from Jacksonville to Tallahassee.

4. That removal of Valdosta's FSS personnel will leave Valdosta without terminal assistance and effective weather watchers. This reduces the safety factors of civil aircraft, air carrier and military aircraft. The control zone cannot be maintained and flying will be curtailed. This area has a high percentage of instrument flight conditions, and for the last 6 months averaged 12 days a month, during which the field operated partly under instrument conditions.

5. That service, safety and economy could better be served by remoting FSS facilities to Valdosta from stations that have tower and weather operations. Where weather and airport control operations are available, pilot has weather watches and terminal assistance available and could very easily file flight plans by wire. At stations where there is FSS personnel, they give weather watches and terminal assistance.

6. That the U.S. Air Force has announced a propeller-type, civilian contract, primary training program to begin in August 1965. This program will be in the immediate area of Moody Air Force Base and there is strong possibility that the Valdosta Municipal Airport will be used. This is in addition to the jet-type training which now incorporates supersonic aircraft.

Mr. WILLIAMS. Wasn't there a training field at Valdosta during the war?

Mr. BRASWELL. It was a primary field, yes, sir. And one at Moultrie, Ga.—Spencer Air Base.

Mr. WILLIAMS. You had an advance training field at Valdosta?

Mr. BRASWELL. The base at Moultrie was advanced during the war and starting with the Korean outbreak in 1951.

The T–28 program used the Valdosta Airport during 1963 making approximately 8,000 approaches.

7. That general aviation which comprises approximately 97 percent of nonmilitary aircraft would be the most severely hit by closing down of these facilities. General aviation accounted for 64 percent of all aviation operations in the calendar year 1963, while air carrier and military accounted for 24 and 12 percent respectively.

8. That large majority of documented "saves" by alert FSS personnel were by reference to landmarks, lights, and terrain features. This type of service is effective only when a flight service specialist has responsibility for a normal service area within a radius of 50 to 75 miles from his station.

9. Centralization of these stations make an interruption of the FSS system more probable due to power failure, storms, and other acts of nature. With greater distances between stations, one station will not be able to back up another station, as is possible at closer distances.

10. The economic savings in remoting these facilities we believe to be negligible for the following reasons: (1) a great percentage of the savings resulting from a reduction in personnel would be offset by high communication costs in remoting necessary telephone and land lines. (2) In an area such as the coverage of the Valdosta flight service station where a military student training program is being conducted, emergencies warrant the need of every available facility. (3) eleven emergencies were assisted by the Valdosta flight service station in 1963. One "save" of a military aircraft (T–38 type) would result in sufficient savings to operate the Valdosta flight service station for over 10 years.

11. That the intended DF equipment for Valdosta FSS cannot be operated remotely, therefore, Valdosta will lose this equipment which has already been authorized by Congress, and which will leave an extremely large area not covered by direction-finding equipment which is so vitally needed with student pilots in the area.

Mr. WILLIAMS. Has this already been allocated for Valdosta by the Federal Aviation Agency?

Mr. BRASWELL. That is my understanding, that is correct.

Mr. WILLIAMS. Do you know how much the cost of that is going to be, how much investment the Government will have in that DF equipment?

Mr. BRASWELL. No, sir; I don't give the cost of the equipment.

Mr. WILLIAMS. Thank you, sir.

Mr. BRASWELL. The last item:

12. That pilots anticipate longer waits to getting service at these consolidated stations where workload will be so heavy.

These are the points that we have given considerable study and time to.

I am a business pilot but I am here as a private citizen and a member of the aviation committee of the chamber of commerce and again we are very grateful for this opportunity and will appreciate all consideration that can be extended.

I, of course, in first volunteering to come here, feel that with the experience I have I am well qualified in aviation. However, in this sort of operation, I am not so well qualified, but I certainly would like to answer any questions that these points might have brought to your attention.

Mr. WILLIAMS. Thank you.

Mr. Devine?

Mr. DEVINE. This thought occurs to me, Mr. Chairman, not directed particularly at these witnesses. Every one in the country seems to be in favor of economy if you take the "me" out of it. I know you men here are interested in air safety first. I kind of have a hunch notwithstanding what has been said by the Federal Aviation Agency that they, too, have a prime responsibility as far as safety is concerned.

Do any of you witnesses here from Valdosta, Ga., feel that the Federal Aviation Administrator, Mr. Halaby, has made this judgment on the basis that economy is better than safety?

Mr. BRASWELL. No, sir; I do not believe that is the case. My opinion is that this has been brought about by the reasonable success, or I should say "unqualified success" of remoting the air traffic control centers, using peripheral sites.

Of course, the air traffic control centers handle instrument flights and it is done quite well because the terminal assistance is there at the destination in all cases; in other words, your instrument flights. Certainly center remoting has worked out quite well. There is nothing better than person-to-person communications which we now have and certainly enjoy.

However, in applying this same principle to the flight service station, you are dealing with an entirely different segment, a segment that needs closer contacts, a segment that is not operating equipment such as the military air carrier and, of course, business fleet. Yet, this segment is not small. It constitutes the majority.

Mr. DEVINE. I have been sitting here for 2 days listening to the various witnesses. Your testimony is very convincing. Of course, I understand that general aviation far surpasses numerically the number of commercial air transports, the regular air carriers. This is not political because I am a Republican and the Administator, presuma-

bly, and those who appointed him happen to be of the opposite political faith. But I find it hard to believe that this administration would all of a sudden, in a surge of frugality and economy, decided to jeopardize the lives of maybe 90,000 general aviation pilots.

Now, the young lady that preceded you very briefly said, "What value do you place on a human life?" We can't put a dollar and cents value on a human life. I am just trying to in my own judgment find out what is behind the proposed move by the FAA.

I appreciate your judgment.

Mr. BRASWELL. I certainly can understand your sentiments because they are my sentiments, also.

I don't understand why this announcement was made. I do feel that since it affects such a vast number, I think as one means of bringing the issues into focus and arousing the flying public and, of course, all concerned in aviation, in that respect I think it has done a very fine job.

Mr. DEVINE. One thing we have aroused is you good people. Thank you, Mr. Chairman.

Mr. WILLIAMS. Mr. Braswell, the chief problem here is with respect to terminal briefings, is it not; briefing at the terminal?

Mr. BRASWELL. Not terminal briefings.

Mr. WILLIAMS. I mean the availability of weather information en route does not constitute too much of a problem?

Mr. BRASWELL. That is correct.

Mr. WILLIAMS. The availability of weather information at the point of departure is one of our chief concerns here; is it not?

Mr. BRASWELL. Well, the point of arrival is the main concern. In my trips, the company I am with manufactures automotive parts and we are in Detroit frequently.

Mr. WILLIAMS. You have to have that information before you leave.

Mr. BRASWELL. When I am coming back to Valdosta, I certainly would like to be able to have current weather information.

Mr. WILLIAMS. Exactly. You do not feel that with the FAA-suggested system of hard core stations and manicoms that the information will be as readily available to you as it is under the present system?

Mr. BRASWELL. The information in the area which we are discussing, the 35,000 square miles, will not have adequate weather information. This is my understanding.

Mr. WILLIAMS. Point No. 8 of your statement reads as follows:

> That large majority of documented "saves" by alert FSS personnel were by reference to landmarks, lights, and terrain features. This type of service is effective only when a flight service specialist has responsibility for a normal service area within a radius of 50 to 75 miles from his station.

I think I understand fully what you are talking about.

Mr. BRASWELL. I am sure you do, sir.

Mr. WILLIAMS. But other members of the committee may not fully appreciate this as some of them have not had experience in flying. Could you give us a hypothetical case where a "save" may have been effected by a flight service station resulting from the operator's knowledge of the local terrain and geographical features?

Mr. BRASWELL. I think I can.

I will read from a report of the National Association of Air Traffic Specialists, a very good example of the abilities of our flight service specialists. The ability to talk a pilot down by the sight-and-sound

method would be lost by remoting. We cite a recent example at Mineral Wells, Tex., scheduled to be remoted to Fort Worth. On March 9, the weather deteriorated to a ceiling 100 feet, sky obscured, visibility one-quarter mile, snow, snow pellets, fog, winds, wind 300°, 16 knots with gusts at 24.

Three single-engine aircraft caught in this weather were talked down by a flight service specialist at the Mineral Wells flight service station by standing outside the station—and if it is remote that certainly excludes that—standing outside the station building using an extension microphone. The entire action took place between 9:54 and 10:21 a.m., central standard time.

The aircraft and pilots involved were Man 790 Delta, and Bravo Easy 35—that is the type of aircraft, Beechcraft 35—the pilot, Gene C. Head, of Fort Worth; and Ham 3825 Delta in a Cessna 182, pilot, Eugene Morris, Shreveport, La.; and Man Fly 77, Fly Whiskey PA 28, Pilot Roger Burke, Long Beach, Calif. These were not novice pilots and could have made a semblance of instrument approach but could not see the airport when right over it. So, on the spot the flight service personnel, of course, contributed to the saving of those lives.

Mr. WILLIAMS. I think of another hypothetical case, and I would imagine this occurs quite often, where you have a low-ceiling condition and a pilot is hopelessly lost. That can happen, as you know, and quite often does happen. The pilot can get excited, or he can be a novice and get hopelessly lost. But, by identifying a certain landmark on the terrain or by identifying a town by its topographical features, that town can be identified by the fight service station people and they can bring him in on a heading until he can orient himself. How often does that type of situation happen?

Mr. BRASWELL. It happens too many times.

It happens with our visual flight rule pilots because in frequent cases of operating below the clouds, it forces them to lower levels where the transmission reception range of the omni stations is very short and, of course, they are trying to dead reckon and pretty soon nothing looks like it should.

We had an example, as I say, of familiarization with an area. We had a pilot who flew to the Taylor VOR, which is one of the satellite stations of Valdosta. The Valdosta operator controls three VOR stations. He flew the Taylor VOR due to the frequency of Valdosta having changed to the Taylor VOR. Arriving at Taylor, there was nothing but some marsh and not even a road of any consequence. He was hopelessly lost and confused and I think had let down anticipating a landing at Valdosta and at the time, of course, transmission or reception of any other VOR station was impossible. The personnel being very familiar with the area were able to quickly help him or tell him where he was and to ease his panic.

The report I had was he was about ready to ditch the aircraft in the swamp.

So there is a case that it is easy and it happens very frequently that pilots are disoriented for numerous reasons.

Mr. WILLIAMS. I have a situation out in my backyard where we have two television towers that reach up 1,949 feet above sea level, and close to 1,700 feet above the ground. We have a flight service station in Jackson, which is some 15 miles away. On numerous occasions I

have heard the flight service station in Jackson warn pilots in that general area to be on the lookout for these obstructions.

There, again, is another service that can be rendered by the flight service station people if they are familiar with the local area.

These television towers, I assure you, are hard to see even on a clear sunny day.

Mr. BRASWELL. These services that we are talking about have become so numerous due to the relaxed load of the flight service stations in regard to remoting position reporting and for IFR traffic that these services are now so numerous and so extremely beneficial that certainly they warrant their continuance.

Mr. WILLIAMS. Are there any further questions?

Mayor, Mr. Braswell, Mr. Tuten, we thank you very much.

Mr. TUTEN. Thank you, Mr. Chairman.

Mr. WILLIAMS. Mr. Dole, of Kansas.

STATEMENT OF HON. ROBERT J. DOLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. DOLE. Three of the forty-two stations being closed are in my congressional district. I believe in economy but I do not want it all in my district. Three out of forty-two is undue attention.

First, I would like to introduce Mr. J. I. Wilcoxen, who has a statement he would like to give in part and also answer any questions.

Mr. Wilcoxen is representing the interests of the Dodge City, Kans. area. This is the home of Matt Dillon, and other famous fliers, as you gentlemen perhaps know.

STATEMENT OF J. I. WILCOXEN, DODGE CITY, KANS.

Mr. WILCOXEN. Mr. Chairman and members of the committee, you have before you several pieces of literature. I am not going to read them all. There is a petition by fellows who would like to keep the Dodge City station and also one on the activities of the station and another letter and I will probably put some interjections here from time to time.

Mr. WILLIAMS. Would you like your statement to be included in full in the record as it appears? If so, the committee will be very happy to receive your entire statement for inclusion in the record in the same fashion as if you had delivered the entire statement.

You might want to cover the high spots.

Mr. WILCOXEN. That will be fine. I would like to have this included.

Mr. WILLIAMS. The other documents will be received for the committee files for committee reference.

Mr. WILCOXEN. All right; I will bypass a lot of this, then. This is the facts about Dodge City Flight Service Station.

If you care, I will go through it.

Mr. WILLIAMS. All right, sir.

Mr. WILCOXEN. A flight service station was established in Dodge City, Kans., in 1941. It was first housed in the post office building downtown, but in 1943 was moved to quarters in the administration building at the municipal airport, which is located about 2 miles east of the city. Until 1960, it occupied approximately 1,400 square feet

of floorspace on the top floor of the administration building. In 1960, the Weather Bureau was moved to other quarters in the administration building, and since that time, the flight service station has occupied all of the top floor, or about 3,000 square feet. The Government pays an annual rental of $2,158, which is insufficient to pay the costs of the services furnished. Services included are electricity, gas, heat, air conditioning, water, janitor service, and necessary maintenance of the building space.

A large sum of money has been spent since 1960 in improving these quarters by the city of Dodge City, the work being done according to the plans furnished by the Government.

The Federal Aviation Agency has an investment of approximately one-half million dollars in equipment at Dodge City. In the new improvements recently completed, a new auxiliary powerplant was constructed and a power unit installed which will furnish adequate power for all of the flight service station needs, together with the needs of the entire airport.

In the first year of the operation of the flight service station at Dodge, it had a total of about 1,200 contacts with airplanes. This number was increased to 17,928 contacts in 1963. In 1963, 2,035 flight plans were filed, 13,788 airport advisories were issued, and 2,444 pilot briefs were given. There has been a substantial annual increase for the past several years. For example, in 1959, there were only 12,435 contacts with airplanes; in 1960, 1,508 flight plans were filed; in 1961 (the first year for which figures were available), 6,222 airport advisories were issued, and 1,431 pilots were briefed. Each year has shown a steady increase in all of these activities.

Now, I am a private pilot. I have been flying since 1936. At the present time, I have an instrument rating but I think this airport advisory on airports, such as ours that does not have a tower is one of the best services which has ever been rendered by the flight service station or the FAA for the safety of all private pilots such as myself.

Mr. WILLIAMS. How far is Dodge City from Wichita?

Mr. WILCOXEN. It is 150 miles from Wichita. About 45 from Garden City to which we make reference in the letter.

Mr. DEVINE. Our colleague, Mr. Dole of Kansas, who represents this particular district in Kansas, tells me his district is larger than the entire State of Ohio and it has 49,728 square miles and they have three of these FSS areas there.

Mr. WILCOXEN. To me, eliminating the flight service stations, not alone Dodge City but any of them, is a hazard to the flying public. That is, to the private pilots, not the airlines. The airlines don't use them. Well, the airlines do but not the high-altitude airlines.

Mr. DOLE. You were commenting earlier on what you really thought was the basis of the judgment in closing certain stations. This would be interesting to the committee chairman in addition to your statement.

Mr. WILCOXEN. I think possibly when they got ready to eliminate these flight service stations they took the high-altitude airway map and anything that was not on the high-altitude airway they took off.

Mr. WILLIAMS. Let me ask you as a pilot, Do you have a feeling that the Federal Aviation Agency seems to be airline oriented?

Mr. WILCOXEN. I think they are. I looked at the high-altitude maps in Kansas City in my airplane and I came in on commercial airlines coming on in. By checking through the list of 42 stations, the only ones that were taken off are the ones which are not on the high-altitude airway maps with the exception of two connecting points.

Mr. WILLIAMS. That is an interesting observation. I think it might be well for us to follow it up and check it out.

Mr. WILCOXEN. Russell, one of the stations taken off, does not happen to be on a high-altitude airway intersection which Hill City is. They left Hill City on which has an airport to accommodate a few airplanes. Russell has quite a few. On high-altitude airways for which they keep these facilities—I talked to some of the fellows——

Mr. WILLIAMS. You may have "let the cat out of the bag." I think we will do some checking on that.

Mr. WILCOXEN. I talked to some of the fellows in the flight service stations, particularly Garden City, which has a really fine flight service station, and they have an average of one contact a month with these high-altitude flights which kind of makes it a little bit foolish to keep them there for just that one reason.

The Dodge City flight service station serves a large area. It serves pilots as far east as Pratt, Kans., a distance of 80 miles, 50 miles to the north and to the south, and 25 miles to the west. There are numerous small towns and communities around Dodge City which make use of the Dodge City Airport and flight service station facilities.

The facts about facilities at Dodge City I will let go. I have been in Meridian about three times. I have been in Meridian and Greenwood two or three times in the last year and a half. It is really nice to go in someplace where they have nice facilities as they do down there.

Part III on page 3:

The Federal Aviation Agency proposes to remove the personnel from the Dodge City flight service station and operate it by remote control from the flight service station at Garden City, Kans. This latter station is located on the Garden City Municipal Airport, approximately 45 miles west of the Dodge City Airport. There are several reasons for our objection to this proposal, but three readily come to mind:

(*a*) This operation inevitably will lower flight safety standards and increase the hazards of flying, particularly for those pilots with few hours and little experience.

(*b*) Flight service stations should, as a matter of national policy, be maintained for private pilots who fly low and slow as well as for military aircraft, the airlines, and those private planes who customarily fly about 18,000 feet.

(*c*) The proposed change is false economy.

Now, I would like to interject right in here, at the time when President Kennedy was inaugurated, I flew back here for the inauguration. At Elkins, W. Va.—you might call it another "save," I would hardly say so, I was not in any danger as far as danger is concerned except I could not find the Elkins, W. Va., airport, and the personnel at the flight service station gave me enough information to get over the mountains on the west side of the Elkins Airport. So, a lot of times, if you had that station remoted, possibly the fellow who re-

moted it would not know all of the features of the terrain surrounding that area.

Mr. WILLIAMS. Don't you have some unusual wind conditions out there, surface winds, in Kansas?

Mr. WILCOXEN. Very much so. The last 2 or 3 months a lot of times they have been up to 60, 65 miles an hour, and very dusty conditions.

Mr. WILLIAMS. It is pretty well for the pilot to know that when he comes in to land.

Mr. WILCOXEN. If he does not, he will soon find it out.

About 3 weeks ago, I left my farm in western Kansas; I stopped at Garden City, the weather was real fine. Thirty minutes later, I left. There was an area of dust about 10 miles wide between Garden City and Dodge City. By calling the Dodge City weather, Dodge City flight service station, I could find out that the area of Dodge City was clear but the area in between there was about 10 miles that was practically instrument conditions.

Mr. WILLIAMS. Let me interrupt just a moment. The bells have rung for a vote in the House. We would like very much to conclude your testimony this afternoon, if possible.

Mr. McMillan, in view of the circumstances, I don't know how long we will be able to run this afternoon. Are your people prepared to stay over tomorrow?

Mr. MCMILLAN. I understand it won't take them over 10 minutes.

Mr. WILLIAMS. I suspect we had better play it by ear and recess for a few minutes and run over and vote and then come back and wind this up.

Then we will hear Mr. McMillan's group. And that will be all this afternoon.

I am sorry to interrupt you in the middle of your testimony, but, unfortunately, the circumstances are such that we have to.

(Short recess.)

Mr. WILLIAMS. The committee will come to order.

You may proceed.

Mr. WILCOXEN. Mr. Chairman, I will omit a lot of this. I will start over here on page 7 under item (C).

The Federal Aviation Agency estimates that the remoting of the 42 stations planned over the United States would result in the saving of approximately $1,680,000 per year. At the very moment this reduction in service to the private pilots of 42 communities was being put into operation, the Administrator of the Federal Aviation Agency took delivery of a jet liner for the use of himself and other personnel of the FAA which cost the taxpayers of the United States $1,500,000. The interior decoration job alone cost $70,000. This one airplane cost almost as much as the estimated saving for 1 year resulting from the remoting of 42 flight service stations around over the country. This information comes from a statement by Senator William Proxmire, of Wisconsin, issued about March 18, 1964.

The Federal Government claims that a saving of $35,000 to $40,000 per year will be made by remoting each of the 42 stations over the country, but it admits that it will cost about this amount of money, on the average, to remote each station. Thus, there can be no saving for at least 1 year. We have been unable to obtain a breakdown of

the costs of remoting the Dodge City station; however, we question that the job can be done for $35,000 to $40,000. The proposal is that part of the Dodge City personnel be moved to the flight service station at Garden City, Kans., and that all manned operations be conducted out of that station. This operation is now housed in one room of the administration building at Garden City Municipal Airport. The move will result in the addition of three or four men to the staff at Garden City and the installation of some additional equipment. The space at Garden City is already inadequate, which means that additional space will have to be built. Someone will have to pay the cost of it, and since Uncle Sam is involved it doesn't take a wizard to figure out who that "someone" is going to be. Therefore, we strongly suspect that this is an expense which has not been taken into consideration by the Federal Government in the projected savings figure.

The value of aircraft which have been saved by flight service stations over the United States greatly exceeds any saving that might be effected by the proposal that has been made. For example, the Dodge City flight service station has made the following "saves" in the last 3 years:

A DC–3 belonging to the Gates Rubber Co. of Denver, Colo., valued at about $300,000, lost an engine, and was guided to a safe landing at the municipal airport.

An H–21 military helicopter, from San Angelo, Tex., valued at approximately $500,000, lost an engine and was guided into the Dodge City Airport to a safe landing.

An Air Force C–47, valued at approximately $75,000, lost an engine and was guided to a safe landing. This is just out of the Dodge City station alone.

The FAA's own records show that for 1963 flight service stations over the United States were responsible for saving 1,083 single-engine aircraft, 68 multiengine planes of the civil fleet; 25 piston engine and 7 jet aircraft belonging to the U.S. Defense Department.

I might say that would not include all of the savings because there are a lot of them that are not reported by the flight service station personnel. They only report part of them.

The value of one jet aircraft alone exceeds the proposed annual saving which would be made under the current proposal. The Kansas City Star of March 18, 1964, reports that more than $1.8 billion worth of U.S. military planes have been lost or badly damaged in crashes over the last 3 years. The estimated annual saving of $1,680,000 is puny when considered in the light of these statistics. It is obvious that the need is for more aids to safe flying—not a reduction in safety aids. No one is financially more affected than the Federal Government. It is false economy to save $1,680,000 in the Department of Commerce at the expense of many millions of dollars to the Department of Defense.

Reference has been made on numerous occasions in this statement to the flight service station at Garden City, Kans. It should be understood that we are not critical of nor do we wish to imply anything derogatory about our sister community, Garden City. We certainly do not feel that the flight service station at Garden City should be eliminated or remoted out of Dodge City. Our position is that

both stations are needed on a manned basis, and that this is true of all the 42 stations over the United States which the current FAA proposal would eliminate or put on a remoted basis.

If you have any questions, I will try to answer them.

(The formal statement follows:)

STATEMENT OF J. I. WILCOXEN

FACTS ABOUT DODGE CITY FLIGHT SERVICE STATION

A flight service station was established in Dodge City, Kans., in 1941. It was first housed in the post office building downtown, but in 1943 was moved to quarters in the administration building at the municipal airport, which is located about 2 miles east of the city. Until 1960, it occupied approximately 1,400 square feet of floor space on the top floor of the administration building. In 1960, the Weather Bureau was moved to other quarters in the administration building, and since that time, the flight service station has occupied all of the top floor, or about 3,000 square feet. The Government pays an annual rental of $2,158, which is insufficient to pay the costs of the services furnished. Services included are electricity, gas, heat, air conditioning, water, janitor service, and necessary maintenance of the building space.

A large sum of money has been spent since 1960 in improving these quarters by the city of Dodge City, the work being done according to the plans furnished by the Government.

The Federal Aviation Agency has an investment of approximately one-half million dollars in equipment at Dodge City. In the new improvements recently completed, a new auxiliary powerplant was constructed and a power unit installed which will furnish adequate power for all of the flight service station needs, together with the needs of the entire airport.

In the first year of the operation of the flight service station at Dodge, it had a total of about 1,200 contacts with airplanes. This number was increased to 17,928 contacts in 1963. In 1963, 2,035 flight plans were filed, 13,788 airport advisories were issued, and 2,444 pilot briefs were given. There has been a substantial annual increase for the past several yars. For example, in 1959, there were only 12,435 contacts with airplanes; in 1960, 1,508 flight plans were filed, in 1961 (the first year for which figures are available), 6,222 airport advisories were issued, and 1,431 pilots were briefed. Each year has shown a steady increase in all of these activities.

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The Dodge City flight service station serves a large area. It serves pilots as far east as Pratt, Kans., a distance of 80 miles, 50 miles to the north and to the south, and 25 miles to the west. There are numerous small towns and communities around Dodge City which make use of the Dodge City Airport and flight service station facilities.

FACTS ABOUT FACILITIES AT DODGE CITY AIRPORT

Dodge City is an historic old town of about 13,500 population located in southwestern Kansas. The municipal airport comprises an area of 367 acres, and is located about 2½ miles east of town. It has two hard surfaced runways, each 4,600 feet long, 1,800 feet of taxiways, and 3,400 square yards of hard surfaced parking ramps. On this area are located a modern administration building (which has been enlarged and modernized within the past 4 years), the only Weather Bureau station in southwest Kansas, a fine restaurant, a well-furnished lobby with airline offices, and also space and offices for two privately owned flight operators.

There is a fine hangar and shop facility, which has been built for many years, and the city is now in the process of building another large brick hangar and shop facility. Starting in 1960, an improvement program was initiated by the city to spend an estimated $206,429 on improving the administration building, installing runway lights and security fencing, constructing and equiping an auxilary power building and a new shop and office building. The latter is not completed. In 1963, an average of 500 itinerant planes were serviced at the airport per month. There are 36 permanently based airplanes on the field, which are owned by persons living in and around Dodge City. There are two

private flight operators located at the airport. A total of 36 permanent employees work on the airport for various employers, the annual payroll being $212,200.

In the past 5 years there has been a tremendous increase in private flying, not only in Dodge City but in the immediate area. A ground school course has been operated almost continuously at the airport, which was interested and qualified a great many persons; many of the new pilots have purchased airplanes and have become active in flying. Immediately after World War II there was a tremendous activity in aviation and the production of new pilots. This fell off sharply after the termination of flying under the GI bill, and for many years flying was in the doldrums here in our community. This has changed and we now have a tremendous interest in private flying here. A large part of this is accounted for by the cattle industry, which brings many buyers to the sales in Dodge and by the many cattle feeders and traders in the area.

GROUNDS FOR OBJECTION TO PROPOSED REMOTING OF DODGE CITY STATION

The Federal Aviation Agency proposes to remove the personnel from the Dodge City flight service station and operate it by remote control from the flight service station at Garden City, Kans. This latter station is located on the Garden City Municipal Airport, approximately 45 miles west of the Dodge City Airport. There are several reasons for our objection to this proposal, but three readily come to mind:

(a) This operation inevitably will lower flight safety standards and increase the hazards of flying, particularly for those pilots with few hours and little experience.

(b) Flight service stations should, as a matter of national policy, be maintained for private pilots who fly low and slow as well as for military aircraft, the airlines, and those private planes who customarily fly above 18,000 feet.

(c) The proposed change is false economy.

(*a*) The FAA says that the remoting of the Dodge City flight service station and 41 other stations around over the United States will not result in any lowering of flight safety standards. It should be obvious that this is not correct. In regard to Dodge City, it is proposed that personnel in the station at Garden City, Kans., direct aircraft in and out of the airport at Dodge City, give them briefings, weather information, emergency service, and all of the other services which modern pilots need and must have. We will concede that many of these services can be supplied very adequately from Garden City under ordinary conditions. It is in the unusual situations that the loss will be felt most keenly. For example, the proposal is that a direct telephone line be installed at the Dodge City Airport running directly to the FAA office at Garden City municipal airport, to be used for filing and closing flight plans, pilot briefings, etc. However, there have been many occasions in western Kansas when violent snowstorms have knocked down and decommissioned the telephone and telegraph lines for many days. Under such circumstances, it would be impossible to telephone in a flight plan.

Perhaps the greatest single service provided to the private pilot by flight service stations is emergency information and help to pilots in trouble, particularly those pilots who are trying to get into the Dodge City Airport, or any other airport at night or under adverse weather conditions. It is a well-known fact that weather information which comes solely from the Weather Bureau is often out of date, particularly at the later part of the reporting interval. This is very true in western Kansas. One would think that the weather would be uniform over almost all of the High Plains area at the same time. This is not true. Most weather conditions out here result from the movement of low-pressure systems, and on the High Plains this usually produces strong winds, blizzards, duststorms, and other violent weather. These storms often move quite rapidly and weather conditions often change very quickly. The weather may be perfectly good at Dodge City and impossible at Garden City, or vice versa.

An inexperienced pilot who suddenly finds himself in severe weather needs help, and it is utterly foolish to contend that a man sitting in a room 50 miles away can give just as accurate and helpful information to such a pilot as an operator who is sitting right on the airport of destination and can look out the window, see what the weather is like without regard to weather reports or information, and tell the pilot just exactly what things are like on the field he is trying to get into. Nighttime compounds the difficulty.

Furthermore, it is not possible for an operator to intimately know the terrain around an area 200 or 300 miles in diameter as one whose area is only 50 to 100 miles in diameter. Many a lost pilot has been saved by a flight service station operator who had him identify the landmarks he could see on the ground and thus enable the operator to locate him and guide him in safely to an airport.

Garden City already operates the Liberal, Kans., Airport activities by remote control, and to add the increased area now served by the manned flight service station at Dodge City would greatly increase the coverage and responsibilities of the Garden City station, and considerably lower the margin of safety now enjoyed by private pilots who use the Dodge City station. Incidentally, many Liberal pilots are very dissatisfied with the FAA services now provided at that city.

(*b*) The Federal Aviation Agency takes the position that historically flight service stations have provided air-to-ground communications for en route traffic in the national system of air traffic control, and that this philosophy should continue. We say this is wrong because such service benefits only military, airlines, and charter aircraft who fly high, fast, and far. It ignores entirely the rights and needs of the ordinary private pilot who flies under visual flight rules at lower altitudes. The ordinary private pilot is not greatly experienced and he needs the communications facilities which are provided by flight service stations spaced fairly close together. He often needs them to make purely local flights. Such a pilot does not need such aids as approach control, instrument landing systems, and such other facilities as are needed by large aircraft which fly in all kinds of weather, but they do need aid-to-ground communications, pilot briefings, airport advisories, weather advisories, handling of flight plans, and emergency help.

It has been suggested that many of the services which private pilots want and need around local airports can be provided by aircraft operators by means of Unicom channels. This is neither satisfactory nor is it fair to the flight operators, who are thereby saddled with unnecessary and expensive burdens. Operations around the field at Liberal, Kans., which is remoted out of Garden City, Kans., are handled in just this way, and the system is very unsatisfactory. A pilot who calls in and wants to know the direction and velocity of the wind, and other airport information, very often cannot get any answer because the operator is outside gassing in airplane.

Private pilots are all substantial taxpayers, and they are entitled to something better than a Unicom system for local operations. It's time that the rights and needs of private pilots are taken properly into account by the Federal Government.

(*c*) The Federal Aviation Agency estimates that the remoting of the 42 stations planned over the United States would result in the saving of approximately $1,680,000 per year. At the very moment this reduction in service to the private pilots of 42 communities was being put into operation, the Administrator of the Federal Aviation Agency took delivery of a jet liner for the use of himself and other personnel of the FAA which cost the taxpayers of the United States $1,500,000. The interior decoration job alone cost $70,000. This one airplane cost almost as much as the estimated saving for 1 year resulting from the remoting of 42 flight service stations around over the country. This information comes from a statement by Senator William Proxmire, of Wisconsin, issued about March 18, 1964.

The Federal Government claims that a saving of $35,000 to $40,000 per year will be made by remoting each of the 41 stations over the country, but it admits that it will cost about this amount of money, on the average, to remote each station. Thus, there can be no saving for at least 1 year. We have been unable to obtain a breakdown of the costs of remoting the Dodge City station; however, we question that the job can be done for $35,000 to $40,000. The proposal is that part of the Dodge City personnel be moved to the flight service station at Garden City, Kans., and that all manned operations be conducted out of that station. This operation is now housed in one room of the administration building at Garden City Municipal Airport. The move will result in the addition of three or four men to the staff at Garden City and the installation of some additional equipment. The space at Garden City is already inadequate, which means that additional space will have to be built. Someone will have to pay the cost of it, and since Uncle Sam is involved it doesn't take a wizard to figure out who that "someone" is going to be. Therefore, we strongly suspect that this is an expense which has not been taken into consideration by the Federal Government in the projecting savings figure.

The value of aircraft which have been saved by flight service stations over the United States greatly exceeds any saving that might be affected by the proposal that has been made. For example, the Dodge City flight service station has made the following "saves" in the last 3 years: A DC–3 belonging to the Gates Rubber Co. of Denver, Colo., valued at about $300,000, lost an engine, and was guided to a safe landing at the municipal airport. An H–21 military helicopter, from San Angelo, Tex., valued at approximately $500,000, lost an engine and was guided into the Dodge City airport to a safe landing. An Air Force C–47, valued at approximately $75,000, lost an engine and was guided to a safe landing. This is just out of the Dodge City station alone. The FAA's own records show that for 1963 flight service stations over the United States were responsible for saving 1,083 single-engine aircraft, 68 multiengine planes of the civil fleet; 25 piston-engine, and 7 jet aircraft belonging to the U.S. Defense Department. The value of one jet aircraft alone exceeds the proposed annual saving which would be made under the current proposal. The Kansas City Star of March 18, 1964, reports that more than $1.8 billion worth of U.S. military planes have been lost or badly damaged in crashes over the last 3 years. The estimated annual saving of $1,680,000 is puny when considered in the light of these statistics. It is obvious that the need is far more aids to safe flying—not a reduction in safety aids. No one is financially more affected that the Federal Government. It is false economy to save $1,680,000 in the Department of Commerce at the expense of many millions of dollars to the Department of Defense.

CONCLUSION

Reference has been made on numerous occasions in this statement to the flight service station at Garden City, Kans. It should be understood that we are not critical of nor do we wish to imply anything derogatory about our sister community, Garden City. We certainly do not feel that the flight service station at Garden City should be eliminated or remoted out of Dodge City. Our position is that both stations are needed on a manned basis, and that this is true of all of the 42 stations over the United States which the current FAA proposal would eliminate or put on a remoted basis.

Mr. WILLIAMS. Thank you, Mr. Wilcoxen. I notice on the last page of your testimony you refer to savings in the Department of Commerce. You have reference to the savings that are alleged to accrue to the Federal Aviation Agency rather than to the Department of Commerce, do you not?

Mr. WILCOXEN. Yes.

Mr. WILLIAMS. I thought perhaps you might want to have the record corrected, if you are referring to the Federal Aviation Agency.

Mr. WILCOXEN. That is what the reference was made to.

Mr. WILLIAMS. It is now no longer under the Department of Commerce. It was at one time.

You mentioned also that most of the stations that were slated to be cut off were not on the high altitude charts. If I am not mistaken, I understood you to say all but two.

Mr. WILCOXEN. All but a few.

Mr. WILLIAMS. Do you know how many there are, or have you had an opportunity to check?

Mr. WILCOXEN. I did at one time but it was a long time ago. I don't remember at the present time. The only ones that are on the high altitude airways happen to be between the crossing of the high altitude airways. If you happen to be on a crossing, there are not any of those that are eliminated. Like Meridian, I do not remember for sure, I do not think it is even on the high altitude airway. I am not sure on that. But if there was a crossroad at Greenwood and another one up the line, Meridian would be eliminated if it was on. It does not happen to be on a high altitude airway.

Mr. WILLIAMS. I think it might be well to analyze that situation before we have Mr. Halaby back before the committee. Maybe we would want to ask him a few questions in regard to that.

Mr. WILCOXEN. I wish I had brought my high altitude maps with me. Sorry I left them in Kansas City.

Mr. WILLIAMS. I think we can get some from the Agency.

Mr. WILCOXEN. I think you probably can.

Mr. DOLE. Mr. Chairman, I have spokesmen here for another of the three stations to be closed. We have four gentlemen from the city of Goodland, Kans. This city is located in the northwestern part of my district. The spokesman for this group will be Mr. Richard Spencer, a banker and also a pilot.

They have flown nearly 1,200 nautical miles in Mr. Maricle's plane to be here today. These gentlemen do a lot of traveling by air, Mr. Robert Maricle, the pilot; Mr. Clayton Burton, a businessman, and Mr. Charles Dockhorn, an attorney and a pilot.

Mr. Dockhorn may have a brief comment to make after Mr. Spencer is finished.

STATEMENT OF RICHARD F. SPENCER, JOINT AVIATION COMMITTEES OF THE CHAMBER OF COMMERCE AND CITY OF GOODLAND, KANS.

Mr. SPENCER. Mr. Chairman, members of the committee, our statement is not too long. Anything in it that is repetitious I will try to omit.

One thing I might state. Each of us who gets up here seems to think that this affects only him, but after all we all fly pretty well over the country and the closing of these 42 stations would affect us just as much as the closing of Elmira or Valdosta, Ga., or one of the others, as our own would, although we would use our own more than the others.

This statement, by the way, is that of the joint aviation committees of the city of Goodland, Kans., and the chamber of commerce.

The city of Goodland, Kans., and its chamber of commerce oppose the announced plans of the Federal Aviation Agency to remote the flight service station at Goodland. We believe that the plan would cause risk to the safety of pilots and passengers of light aircraft out of all proportion to any savings, real or imagined, which might result.

As responsible citizens, we all wholeheartedly support any reasonable proposal for reduction of the expense of Government. If the facility at Goodland can be operated from a point more than 100 miles away without endangering the lives of the pilots and passengers of small aircraft, then we believe it should be remoted. However, from our understanding of the situation, we believe this to be impossible.

In passing, we believe that private aircraft would be primarily affected. Our information is that commercial and military aircraft, under normal operating conditions, have other and different facilities available to them, which are not, in any way, affected by this proposal of the FAA. We further understand that light aircraft presently account for 90 percent of the air miles flown nationally. We further

understand that this percentage is predicted to increase. Certainly, light aircraft account for more than that percentage in the operations at the airport in Goodland, Kans.

Goodland is located in the extreme northwest corner of Kansas on a direct line between Denver and four major air traffic producing cities in Kansas and Missouri. It is approximately 165 air miles east of Denver, 390 air miles west of Kansas City, 220 air miles west of Salina, 250 air miles northwest of Wichita, and 351 air miles southwest of Omaha, Nebr. Air traffic from these cities to Denver and other Colorado cities or vice versa pass over Goodland and use the facilities of the manned FAA service station located at our airport.

A great amount of air traffic, both large and small aircraft, depends on our facility for current information while passing between these cities. Small aircraft operations are abnormally high because of the great distances in our high plains. The traffic at and over the Goodland Airport is further increased by ferrying operations from the small aircraft plants located in Wichita. These plants make the State of Kansas the largest producer of private aircraft in the world. Goodland is equipped with a modern airport, including a lighted, hard-surfaced runway, used in emergencies by larger aircraft. It is served by Central Airlines and is the only airport between Salina and Denver, a distance of 450 miles, capable of handling local service commercial aircraft and larger aircraft on an emergency basis. The airport includes a weather-forecasting station, the flight service station, and omni range facilities. It is the only airport so equipped within a radius of 200 miles.

Goodland has an 865-foot television tower 2 miles south of its airport, which is an important matter in bad weather. In at least two known instances in the last year, lost pilots made safe landings in sudden weather emergencies in spite of this obstruction. In each instance, this was possible because FSS personnel on the ground at Goodland were able to talk the pilots around the obstruction and down safetly. We submit that from Salina or Garden City this would be virtually impossible.

Typical of the emergency use of the Goodland Airport by the military and larger commercial aircraft is an incident which occurred last March 23 involving an Air Force transport. A portion of a letter from Lt. Col. Joe B. Grobe of the 76th Air Transport Squadron, USAF, reads as follows:

> On March 23, Capt. Harold G. Wiechman, commanding a Lockheed C–130–E and flying at 27,000 feet, experienced an inflight emergency which necessitated his immediate descent and landing at Goodland Municipal Airport.
>
> He has described to me the outstanding manner in which you prepared for his arrival by providing normally unavailable crash and rescue emergency facilities.

This letter was addressed to the personnel manning the Goodland flight service station.

The northwest corner of Kansas, including Goodland, along with southwest Nebraska and northeast Colorado compose an area which is subject to frequent, fast, and violent changes in weather. Because of this meteorological situation, the U.S. Weather Bureau has located one of its most important weather-forecasting stations at our airport. Aircraft traveling between Denver and points east and south of Good-

land in Kansas, western Missouri, and Nebraska must pass directly through this weather area. Pilots place great reliance on weather information from the Goodland forecasting station.

In 1963, 1,061 flight condition messages were given to pilots en route. This is second only to Wichita in the State of Kansas and ranks high in the entire United States. This unique and dangerous weather situation is well known in flying circles.

In a letter dated March 23, 1964, William A. Ong, president of the National Aeronautic Association, wrote to Najeeb Halaby, Administrator of the FAA. In that letter, he pointed out:

> We get fast and severe weather change in that corner of the State where Kansas, Colorado, and Nebraska meet. According to your experts, it has something to do with an air mass moving down the eastern slope of the Rockies.

He went on to state that "Goodland is one place where we really need FSS." And he added that many pilots have received badly needed help from the Goodland Station. He ended the letter by suggesting the Federal Aviation Agency should take a second look at the elimination of Goodland.

At the present time, there are in Kansas 12 manned flight service stations or other stations from which pilots can obtain flight information and other information so necessary to their safety. Of those five are presently located in the western two-thirds of Kansas and seven are located in the eastern one-third. The Federal Aviation Agency proposed to eliminate three of those in western Kansas and one in eastern Kansas. There is some speculation that they eventually propose to eliminate a fourth one in western Kansas. There are approximately 85,000 square miles in Kansas. If Goodland and the two other western Kansas stations are eliminated, it will mean that two stations will have to serve an area of approximately 29,000 square miles each. In eastern Kansas, each station will serve only about 5,000 square miles.

The various services supplied by manned flight service stations has been analyzed for 10 stations throughout the western half of the Nation. This analysis, which is attached, shows that of those 10 stations Scotts Bluff and Goodland rank No. 1 and 2 consistently throughout. There is a wide disparity between them and the other stations. Nevertheless, of the 10 stations, Scotts Bluff and Goodland are the only 2 to be eliminated as manned flight service stations.

In summary, we do not believe that a manned flight service station at Garden City, Kans., can adequately protect the lives of pilots and passengers operating over an area of about 55,000 square miles. We believe that the vast area would be so diverted in its weather and other flight characteristics that an operator 100 miles from Goodland could not conceivably keep abreast of emergency situations in the Goodland area. Even if there were some financial saving connected with this plan, which we sincerely doubt, we do not believe that it would fairly balance against the decrease of safety factors to the taxpaying operators and passengers of civil aircraft.

We do not believe that the lives and safety of American citizens can be measured in dollars and cents.

Thank you, Mr. Chairman. I will be glad to answer any questions.

(The attachment follows:)

Comparison of some station activities for fiscal year 1963

Station	Aircraft IFR	Contacted VFR	Flight IFR	Plans VFR	Pilot briefs	Airport advisory	Flight condition messages	Total activity
Goodland, Kans	2,996	12,316	328	1,075	1,394	5,420	1,115	24,644
Hill City, Kans	3,490	6,475	85	471	951	1,354	326	13,152
Bryce Canyon, Utah	820	5,155	20	1,019	980	1,004	835	9,833
Livingston, Mont	889	6,037	23	756	924	3,497	115	12,241
Mullan Pass, Idaho	743	2,843	60	228	250	0	190	4,314
Idaho Falls, Idaho	765	7,664	122	2,444	3,177	352	307	14,831
Truth or Consequences, N. Mex	421	8,784	39	1,385	1,430	2,972	657	15,688
Sidney, Nebr	846	9,729	67	1,143	1,446	6,012	253	19,496
Chadron, Nebr	1,099	6,579	40	665	1,172	3,910	174	13,639
Scotts Bluff, Nebr	2,070	19,441	254	2,330	2,475	14,671	346	41,587

NOTE.—This information taken from the FAA air traffic activity book for fiscal year 1963, dated August 1963, put out by Office of Management Services, Data Systems Division.

Note the activity of Sidney and Chadron, Nebr., on either side of Scotts Bluff, Nebr. It seems they were just unlucky enough to be located with a weather bureau. There are numerous cases such as these. I firmly believe that a station located with a weather bureau can do a better job of giving the pilots the information they need. If any station should be closed it looks to me like it should be Sidney or Chadron and leave Scotts Bluff.

The comparison between Goodland and Hill City, Kans., again it seems that if either of the two were being closed, it should be Hill City. You may be interested to kuow that Hill City has the lowest activity of any station in Kansas, yet they are being kept open while others are being closed.

Mr. WILLIAMS. Thank you, Mr. Spencer. Your statement is very clear and to the point.

There is only one question I would like to ask you. How far is Garden City from Goodland?

Mr. SPENCER. Approximately 150 miles.

Mr. WILLIAMS. Will that be the nearest station?

Mr. SPENCER. Hill City which does not have a weather bureau, has FSS service only, is 110 miles east of us.

Mr. WILLIAMS. So, going from Garden City to this other station will be in the vicinity of 200-plus miles?

Mr. SPENCER. Yes; North Platte, Nebr., would be the next one north, which would be close to 175 or 180 miles. Akron, Colo., west, would be a little over 100 miles.

Mr. WILLIAMS. Is this at the edge of a hilly or mountainous area?

Mr. SPENCER. We are on what they call the High Plains, Mr. Williams; we are about 165 to 175 air miles east of the mountains. This is a down slope all the way.

Mr. WILLIAMS. And your winds?

Mr. SPENCER. Our winds—as my predecessor from Dodge City just stated, very recently we have had winds clocked in the Goodland area up to 70 miles an hour.

Mr. WILLIAMS. Mr. Spencer, I don't believe I have any further questions but we appreciate your giving us this information.

The committee will take it into consideration.

Mr. SPENCER. Thank you very much.

Mr. DOLE. Mr. Dockhorn, do you have anything you want to add?

Mr. DOCKHORN. The time is getting late. This would be a lot of repetition but the only one thing that I got a lot out of today was Colonel Key's statement that he was the boy who flew for 27 days.

My first airplane was a Curtiss Robin, the same that he was flying at that time. I remember distinctly watching that through all those days and reading the newspapers and we old fliers had nothing. Now we have a good system built up in Goodland and our student pilots come down from Denver, from every place across country, and we really need it for that type of flier.

That is about all I have to say.

You mentioned the duststorms. Duststorms in our country are worse, we think, than fog is along the sea coast because you start in them and they will be 20,000 feet high. You think "I can go a little further," but pretty soon you had better be able to make a 1–A and get out of it. Then where do you go? Most of your dust, the thick part, is where you land, you can't see to land. We can't see across the street sometimes. That has happened in just the last 2 or 3 weeks.

So, our situation in Goodland is in what was a Dust Bowl area in the 1930's, it is a hazard to flying. As long as we have our flight service stations they can help the boys down.

Mr. WILLIAMS. Thank you very much.

Mr. DOLE. Mr. Chairman, in conclusion, I just want to thank you for your patience and your kindness. We certainly appreciate this opportunity.

These gentlemen have flown about 1,200 nautical miles to be here.

I understand how important that things are and we do not come here in any sense of embarrassment. I consider myself a conservative

Member of Congress and interested in economy. Certainly these gentlemen are. I do not know their politics but they are here only to present just reasons for not closing these three stations. If the closing can be justified, the necessary service provided and the safety features protected, then I will have no complaint. I frankly do not feel there has been adequate justification. I have contacted Mr. Halaby by letter and his office, as I would like some justification and a record made.

We will have one other witness tomorrow and at the conclusion of that time, I would like permission to file a statement summarizing our position.

Mr. WILLIAMS. Thank you.

We have a group from South Carolina.

STATEMENT OF HON. JOHN L. McMILLAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH CAROLINA

Mr. MCMILLAN. Mr. Chairman and members of the Interstate Commerce Committee, I have a group of leading citizens from my congressional district representing the city of Myrtle Beach, S.C., here with me today. These gentlemen are extremely interested in the Federal Aviation Agency's proposal to transfer the flight service station from Myrtle Beach, which is one of the fastest growing cities on the Atlantic coast.

These gentlemen have designated Mr. Joseph E. Singleton, president of the Myrtle Beach Chamber of Commerce and city attorney for the city of Myrtle Beach, to make a statement in behalf of the four gentlemen who are here today.

Mr. WILLIAMS. Would you introduce the members of your group?

Mr. MCMILLAN. I would like to introduce to the committee Col. William Cameron, mayor of the city of Myrtle Beach; Mr. Joseph E. Singleton, president of the Chamber of Commerce and city attorney for Myrtle Beach; Mr. Edward Blackwell, city manager for the city of Myrtle Beach; and Mr. Bob Grissom, mayor pro tem for the city of Myrtle Beach.

Mr. WILLIAMS. We are happy to have you before the committee. Which one has been designated as spokesman?

Mr. MCMILLAN. Mr. Singleton. Mr. Chairman, I have a written statement which I would like to insert in the hearings immediately following Mr. Singleton's statement.

STATEMENT OF JOSEPH E. SINGLETON, PRESIDENT, CHAMBER OF COMMERCE, AND CITY ATTORNEY FOR MYRTLE BEACH, S.C.

Mr. SINGLETON. Mr. Chairman and members of the committee, we are here from Myrtle Beach, S.C., to register a protest for your consideration concerning the closing of the Federal Aviation flight service station facility located at Myrtle Beach.

We feel that Myrtle Beach and the 50-mile Grand Strand area extending along the coast from the North Carolina line southward, of which Myrtle Beach is the hub, is a fast-growing and expanding community.

Our economy is based primarily on the tourist industry. During the last 10 years, our economic growth has been quite tremendous.

We feel that the economic growth in the future depends a great deal on having sufficient air travel and air transportation in and to our community.

In 1963, our Grand Strand attracted more than $50 million in tourist income and the new construction in the area has totaled over $10 million for 1963. We have no railroad passenger facility for transportation into and from our area so we are dependent upon air travel and travel by bus and car.

We feel that the Myrtle Beach Airport is very active in that many of our tourists visit Myrtle Beach by air transportation in their private and business airplanes.

In 1963, more than 13,000 itinerant aircraft used our Myrtle Beach Airport.

Again, we are not so fortunate as some of the surrounding cities in our area. For instance, Florence has both a weather station and FAA flight service station. Wilmington, N.C., has a weather bureau and tower service.

Charleston, S.C., and Savannah, Ga., both have weather bureau, tower service, and FAA flight service facilities.

We, at Myrtle Beach, have no weather bureau. The FAA flight service station is the only Federal facility which handles the phase of weather briefing for us. We feel that that service is very important to our area. Myrtle Beach has in excess of 6,000 air carrier passenger personnel originating at Myrtle Beach Airport during the past year. There are some 102 other FAA flight service stations which had less passenger origination service than ours did which are not scheduled to be removed. There were some 46 of those stations not scheduled to be removed which had no flight service, air passenger flight service origination passengers.

We, of course, are in favor of economy. We are taxpayers and we are always in favor of seeing our taxes reduced and the economy of Government curtailed where it will not jeopardize anything of great importance to us. However, we are not in favor of economizing when we feel that it will be at the expense of saving lives and property.

The Myrtle Beach Air Force flight service station, we feel, is quite a great asset to the area.

We are, of course, bound all the way for 50 miles by the ocean and the east. The Myrtle Beach FAA flight service station has saved about 100 lives and about 50 aircraft in the last 10 years. These are figures in the record.

In 1953, the flight service station saved 29 people from almost certain disaster. They were passengers aboard a marine DC–3 that was flying lost over the Atlantic. The most recent disaster was averted in February 1964, just a short while ago when the Myrtle Beach station saved four passengers and a twin-engine Piper aircraft that was lost over the ocean. We feel they are doing a marvelous job with the service.

We feel that the Myrtle Beach FAA flight service station more than justifies its being and more than pays its way in the saving of lives and property which has been done about it.

Again, by having this facility available for briefing and for the other services which it renders, we are creating a favorable climate for

general aviation in the area. This, of course, is what is important to us and we feel important to the country as a whole as well.

We understand that general aviation in the United States is the largest in the world, that there are more flying hours with general aviation in the United States than with the airlines and the military put together.

We feel that by creating this favorable climate in making air flights safe for general aviation that there will be a continued growth and great expansion in the civil aircraft industry. When this is generated, we feel that it in turn generates all kinds of taxes and creates business and job opportunities ranging from aircraft skills men to the miners who mine the material from which the aircraft industry fashions the planes. We are very much interested in this facility and in keeping it as it is. We feel that if it is necessary to keep it that perhaps the operation could be changed to a 16-hour operation which I understand would save somewhere in the neighborhood of $10,000. We feel that this would be much better than doing away with the station.

Although I believe it has been cited that perhaps by removing the station there would be something in the neighborhood of $40,000 saved, we have not been able to come up with a justification for that figure.

We think the personnel service which this station is able to render to the general aviation in the vicinity justifies having it left there.

I would like to cite the Federal Aviation Agency Airman's Guide, an official publication, I understand, for the Federal Aviation Agency, of May 5, 1964.

On page 50 of that guide, there appears an article captioned by the Federal Aviation Agency, which reads as follows:

> Every pilot, either VFR or IFR is urged to visit the nearest FAA flight service station prior to departure for flight briefing and to file a flight plan. If the visit is impracticable, telephone calls are welcome. Telephone briefing however lacks the direct reference to maps and charts which is always desirable and helpful. When neither a visit nor telephone call is practicable, preflight briefing may be requested by radio as soon as possible after takeoff.

We think that this is in direct line with what we feel is the most desirable and that is direct briefing so that the flight personnel will have access to these maps and to the direct contact with the briefing service which is very desirable.

Mr. WILLIAMS. It is too bad the other members of the subcommittee could not have been here to hear that reading from the Airman's Guide, which I understand was in May?

Mr. SINGLETON. May 5, 1964, issue.

Mr. WILLIAMS. I can assure you it will be called to their attention.

Mr. SINGLETON. Thank you sir.

Very briefly, that is our position on it. I feel, after listening to the other testimony which we have heard, that to elaborate more on it than I have, would probably be repetitious.

We would, however, like to introduce into the record for your possible consideration a brochure which was, incidentally, not prepared specifically for this hearing, a brochure prepared by the Myrtle Beach Chamber of Commerce, showing many of the statistics to which I have referred.

Mr. WILLIAMS. How voluminous is that?

Mr. SINGLETON. It is just a few pages, possibly a 5-minute reading.

Mr. WILLIAMS. Let the committee accept that testimony primarily for our files and we will make a determination as to whether to put that in the record of the hearings. However, it will be available to the committee for reference.

Mr. SINGLETON. All right, sir. We would also like to have this one mimeographed sheet presented to you for your consideration also, which cites some of the instances to which I have referred.

Mr. WILLIAMS. Fine.

Mr. SINGLETON. Thank you very much for your allowing us to appear here and register our sentiments on this vital subject. At least vital, we fell.

Mr. WILLIAMS. Myrtle Beach is on the sea coast, is it not?

Mr. SINGLETON. Yes, it is.

Mr. WILLIAMS. Do you ever have fog problems at Myrtle Beach? Does fog ever roll in?

Mr. SINGLETON. Yes; fog does. We probably do not have as much fog as some of the other coastal areas but we are troubled with fog and, of course, I am speaking primarily of ground fog. Now, we do have, of course, fog that would bother aircraft at the height of less than a thousand feet quite often.

Mr. WILLIAMS. Gentlemen, we certainly do appreciate your appearance before the committee. I think you have given the committee a great deal of food for thought.

Mr. SINGLETON. Thank you very much.

Mr. WILLIAMS. Mr. McMillan has a statement to go in the record at this point, I believe.

(The statement referred to follows:)

STATEMENT OF HON. JOHN MCMILLAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH CAROLINA

Mr. Chairman and members of the House Interstate Commerce Committee, I take great pleasure in appearing before your committee this morning with Col. William Cameron, the mayor of Myrtle Beach, Mr. Richard Singleton, the president of the Myrtle Beach Chamber of Commerce, and the city attorney, and also Mr. Ed Blackwell, city manager, Mr. R. L. Grissom, mayor pro tem of Myrtle Beach.

First, I want to thank you and the members of your committe for giving the people of the United States an opportunity to express themselves in connection with the flight service stations located in the individual States.

I personally am very much interested in the flight service station located in Myrtle Beach, S.C., which is located in my congressional district. This station has given valuable services to the people of the coastal area of South Carolina; and, since we have thousands of private planes visiting the beach at all times of the year, this flight service station has proved to be an outstanding feature of the aviation service in that community.

I am certain that there is no Member of Congress more interested in economy and reducing the expenses of the U.S. Government than I; however, I could mention a number of places and a number of items connected with the Federal Aviation Agency and every other Government agency where millions of dollars could be cut from the budget without vitally affecting the service of these Government agencies.

The flight service stations give the taxpayers in every community where they are located, and the people who visit the community where these stations are

located, real valuable service. Some people in these United States do not get any service from the Government other than through sources of this nature and through the U.S. mail service.

I think it would be poor economy to abolish flight service stations where their services are used as much as they are in Myrtle Beach, which is one of the fastest growing communities in the State of South Carolina. I have filed with the Federal Aviation Agency numerous letters and petitions from some of the leading citizens of Myrtle Beach, including the mayor, the chamber of commerce, and numerous other interested parties throughout the State. I sincerely hope that if the Federal Aviation Agency officials are determined to economize in this matter that they should reduce the station by only one-third, which would give the people 16-hour service rather than 24-hour service.

I do not hear of any Government agency or Government official requesting the Congress to reduce the foreign-aid spending or the money we are spending in connection with the Import-Export Bank and other items of that nature; however, it seems that some people in this country would like to reduce expenses and Government service to the taxpayers of the United States.

Mr. Chairman, I would like to ask that you include with my statement a statement from Mr. Sherrill Hodges, of Myrtle Beach, a statement of Mr. William J. Southerland, or Myrtle Beach, a statement from Mr. William Stavrou, a statement from Mr. W. A. Collins, of Myrtle Beach, statement from the Honorable Windell McCrackin, and a concurrent resolution sponsored by Mr. McCrackin and adopted by the South Carolina State Legislature.

GREATER MYRTLE BEACH CHAMBER OF COMMERCE,
Myrtle Beach, S.C., April 30, 1964.

Hon. JOHN L. MCMILLAN,
Member, U.S. House of Representatives,
House Office Building, Washington, D.C.

DEAR MR. MAC: We sincerely appreciate everything you are doing in support of maintaining the Federal Aviation Agency flight service station at Myrtle Beach. Thank you for sending us the correspondence that you have received as a result of your leadership in this matter.

We have just been advised that Congressman John Bell Williams, of Mississippi, chairman of the Transportation and Aeronautics Subcommittee of the House Interstate and Foreign Commerce Committee, will begin hearings on May 12, 1964, to determine the fate of FAA flight service stations.

Our air service committee feels that it would be very effective if you could be represented at these hearings and/or make your files on this subject available to Congressman Williams and his committee.

We have just studied the latest edition of the Airport Activity Statistics of Certified Route Air Carriers (published jointly by the Federal Aviation Agency and the Civil Aeronautics Board). This publication reveals some startling facts which we believe gives very strong support for the need to maintain the FAA flight service station at Myrtle Beach. It shows that the FAA plans to keep in operation 102 stations at airports throughout the Nation that had less airline passengers than Myrtle Beach. A total of 6,048 air carrier passengers were boarded last year at Myrtle Beach (where the FAA wants to close its flight service station). Of the 102 FAA stations scheduled to remain open that had fewer air carrier passengers than Myrtle Beach, it is interesting to note that not a single airline passenger was boarded at 46 of these stations, according to the FAA–CAB published statistics.

These figures do not account for the estimated 13,680 aircraft from other areas that used the Myrtle Beach airport facilities last year. And, of course, as you have already pointed out so well in your correspondence, the safety factor is of greatest importance.

The enclosed sheet outlines in detail some of the supporting facts that, in our opinion, make it vitally important that the FAA flight service station be maintained at Myrtle Beach.

It is our understanding that proposals were presented by air user groups to the FAA last week, calling for the strengthening of the FAA flight service station system throughout the Nation.

Your continued effective leadership in support of maintaining essential FAA flight service stations, including the one at Myrtle Beach will be sincerely appreciated. Please call on us if we can help you in any way.

Sincerely,

FRED P. BRINKMAN, *Manager.*

FACTS AND FIGURES SUPPORTING THE NEED FOR MAINTAINING THE FEDERAL AVIATION AGENCY FLIGHT STATION AT MYRTLE BEACH

Compiled by Air Service Committee, Greater Myrtle Beach Chamber of Commerce, Carl Pridgen, chairman

The Greater Myrtle Beach Chamber of Commerce believes that the recent decision of the Federal Aviation Agency to close the Myrtle Beach flight service station does not represent the public interest and fails to consider the present and future needs of aviation in the Grand Strand area. We believe that the recommendations requesting a reversal of this decision are supported by many facts and figures, including official statistics published by the Federal Aviation Agency and the Civil Aeronautics Board.

The Myrtle Beach municipal airport boarded more air carrier passengers last year than 102 other airports that are scheduled to maintain their FAA flight service stations, according to air traffic figures published by the Federal Aviation Agency and the Civil Aeronautics Board. Statistics for origination of air carrier passengers for all airports are listed in the FAA–CAB publication "Airport Activity Statistics of Certified Route Air Carriers" (which is available to the public from the U.S. Government Printing Office). Issued in January 1964, the book covers the 12-month period ending June 30, 1963. These airports and their number of air carrier passenger boardings are listed on page 2 of this report.

A total of 6,048 air carrier passengers (an average of 16.6 per day) were boarded at the Myrtle Beach airport in the fiscal year ending June 30, 1963, the published figures show. In view of these facts, it is difficult to understand what criteria the FAA used in deciding to close the Myrtle Beach station while, at the same time, deciding to maintain 102 other stations that obviously had much less activity than the Myrtle Beach airport. It is also interesting to note that not a single airline passenger was boarded at 46 of these 102 airports.

The 6,048 count for Myrtle Beach represents only air carrier passengers whose flights originated at Myrtle Beach. It does not include thousands of additional Grand Strand itinerant passengers who used aircraft other than commercial air lines. Last year, an estimated 13,680 itinerant aircraft used the Myrtle Beach Airport facilities. For 6 months of the year, the Myrtle Beach Airport has more itinerant passengers than any other in South Carolina.

Air safety is of vital importance in the decision to maintain the Myrtle Beach flight service station. During the past 10 years, the services of the local FAA station have saved approximately 100 lives. In 1963, the station's action saved 29 people from almost certain disaster; they were passengers aboard a Marine DC–3 that was flying lost over the Atlantic. The most recent disaster was averted in February 1964, when the Myrtle Beach station saved four passengers and a twin-engine Piper Aztec aircraft that was lost over the ocean. These examples illustrate the important air safety roll of the FAA facility and its personnel.

The development of aviation in the Grand Strand and surrounding areas is dependent on an adequate program of air safety and flight service. One of the fastest growing areas of the State, the Grand Strand now attracts $50 million in annual tourist income. New construction for the area totaled more than $10 million in 1963. Myrtle Beach's per capita income rose to $2,080, higher than any city in South Carolina. With no railroad passenger service, it is important that air transportation be developed to its full potential at Myrtle Beach and the Grand Strand.

The above facts clearly point out the need for the Federal Aviation Agency to reverse its decision to close the Myrtle Beach flight service station. This station must be maintained if the public interest is to be served.

Airports that did not originate as many air carrier passengers as Myrtle Beach and their flight service stations are not proposed for remoting

Airport	Passengers originated
Myrtle Beach, S.C	6,048
Walnut Ridge, Ark	0
Daggett, Calif	0
Montague, Calif	0
Needles, Calif	0
Ukiah, Calif	0
Akron, Colo	0
Eagle, Colo	0
La Junta, Colo	0
Trinidad, Colo	0
Crestview, Fla	0
Alma, Ga	0
Malad City, Idaho	0
Mullan, Idaho	0
Chanute, Kans	0
Emporia, Kans	0
Hill City, Kans	0
Millinocket, Maine	0
Old Town, Maine	0
Alexandria, Minn	0
Redwood Falls, Minn	0
McComb, Miss	0
Vincy, Mo	0
Dillon, Mont	0
Livingston, Mont	0
Lovelock, Mont	0
Tonopah, Nev	0
Concord, N.H	0
Deming, N. Mex	0
Grant, N. Mex	0
Las Vegas, N. Mex	0
Truth or Consequences, N. Mex	0
Gage, Okla	0
Hobart, Okla	0
The Dalles, Oreg	0
Crossville, Tenn	0
Alice, Tex	0
Childress, Tex	0
Cotulla, Tex	0
Dalhart, Tex	0
Junction, Tex	0
Wink, Tex	0
Bryce Canyon, Utah	0
Delta, Utah	0
Hanksville, Utah	0
Hoquiam, Wash	0
Lone Rock, Wis	0
Houlton, Maine	376
Cut Bank, Mont	351
Lewistown, Mont	742
Miles City, Mont	787
Imperial, Nebr	305
Findlay, Ohio	424
Dickinson, N. Dak	530
Ardmore, Okla	534
Rawlings, Wyo	576
Baker, Oreg	815
McAlester, Okla	1028
Bellingham, Wash	1093
Sidney, Nebr	1230
Garden City, Kans	1270
Jamestown, N. Dak	1279
Redmond, Oreg	1303
Kirksville, Mo	1333
Martinsburg, W. Va	1423
Bowling Green, Ky	1577
London, Ky	1583
Chadron, Nebr	1595
Salisbury, Md	1653
Greenwood, Miss	1751
Carlsbad, N. Mex	1753
Worland, Wyo	1872
Lufkin, Tex	1879
Hobbs, N. Mex	2035
Burley, Idaho	2058
Laramie, Wyo	2202
Harrison, Ark	2222
DuBois, Pa	2234
Elkins, W. Va	2336
Rock Springs, Wyo	2584
Bozeman, Mont	2588
Vero Beach, Fla	2718
Douglas, Ariz	2774
Blackstone, Va	2839
Crescent City, Calif	3181
Ponca City, Okla	3181
Cedar City, Utah	3459
Cape Girardeau, Mo	3490
Augusta, Me	3621
Prescott, Ariz	3659
Gainsville, Fla	3749
Elko, Nev	3895
Ottumwa, Iowa	4092
Paso Robles, Calif	4105
Watertown, S. Dak	4362
Jackson, Tenn	4492
Wenatchee, Wash	4708
Rocky Mount, N.C	4807
Danville, Va	5052
Hibbing, Minn	5103
Houghton, Mich	5690
Hickory, N.C	5923
North Platte, Nebr	5981

Compiled by Greater Myrtle Beach Chamber of Commerce Air Service Committee from "Airport Activity Statistics of Certified Route Air Carriers"; published January 1964, by Federal Aviation Agency and Civil Aeronautics Board.

Hon. JOHN L. MCMILLAN,
House Office Building,
Washington, D.C.

DEAR CONGRESSMAN MCMILLAN: As you know the Federal Aviation Agency is planning to remote the flight service station from Myrtle Beach.

We need this air safety facility. We have no weather bureau or other Federal facility at our airport which serves all of Horry County.

If the Grand Strand resort area and Horry County is to develop and progress it is imperative that we have good air traffic facilities because our surface transportation facilities are limited.

The FAA claims that they will save $1,400,000 a year by remoting 42 stations. But this is doubtful because it will cost a lot of money to remote equipment, relocate personnel, and pay the rental on expensive telephone long lines.

The FAA now operates 297 stations on a 24-hour basis. At many locations very little service is furnished between 10 p.m. and 6 a.m.

If the FAA really wanted to save money they could continue to operate 100 of the busiest stations on a 24-hour basis and operate the other 197 only 16 hours a day (6 a.m. to 10 p.m.). This would save them about 300 positions with a positive savings of $2 million; and there would be no expensive equipment remoting, relocations cost, or rental on high-priced telephone long lines.

Best of all is the fact that the safety services would still be available where and when (6 a.m. to 10 p.m.) they are so badly needed.

The FAA is holding a meeting on April 21, 1964, with various aviation groups who are protesting the remoting of the stations.

I sincerely request that you use your influence to help us retain this much needed air safety service at Myrtle Beach.

Sincerely,

SHERRILL D. HODGES.

GREEN'S FUEL OF SOUTH CAROLINA,
Myrtle Beach, S.C., April 17, 1964.

Hon. JOHN L. MCMILLAN,
Member of Congress,
House Office Building,
Washington, D.C.

DEAR CONGRESSMAN MCMILLAN: First let me thank you for the response which I have received from you in the past on the same subject I am writing you about today; and that is the remoting of the flight service station at Myrtle Beach.

As you know, the FAA operates 297 flight service stations on a 24-hour basis. It has been suggested that the FAA operate 100 of the busiest flight service stations on a 24-hour basis and operate the other 197 stations from 6 a.m. until 10 p.m.

This reduction of 8 hours per day for the 197 stations would reduce personnel by 300 positions at a savings of $2 million a year. In addition it would eliminate the expense of remoting, personnel relocations, and eliminate telephone long lines.

The most attractive feature of this plan is that the services will still be available between 6 a.m. and 10 p.m. when they are so badly needed and in addition would allow the flight service station in Myrtle Beach to operate where there is definitely a need for it.

As you probably know, the FAA is holding a meeting on April 21, 1964, with several using aviation groups which are protesting the remoting of the stations. I would certainly appreciate you doing whatever is in your power in order to save the station at Myrtle Beach.

Thanking you for past considerations, I am,

Sincerely,

WM. J. SOUTHERLAND, JR.

Hon. JOHN L. MCMILLAN,
House Office Building,
Washington, D.C.

DEAR CONGRESSMAN MCMILLAN: The Federal Aviation Agency is planning to remote the flight service station away from Myrtle Beach.

We need this station. It is the only Federal air safety service in Horry County and is used by the many tourists who visit the Grand Strand in their airplanes.

Many aviation groups are protesting the remoting of these stations in a meeting with the FAA on April 21, 1964.

We hope you can be represented at this meeting, and help us keep this much needed air safety service at Myrtle Beach.

Sincerely,

WILLIAM STAVROU.

THE COLVIS CO.,
Myrtle Beach, S.C., April 16, 1964.

Hon. JOHN L. MCMILLAN,
House of Representatives,
House Office Building,
Washington, D.C.

DEAR MR. MCMILLAN: I am enclosing herewith a ditto copy of a plan which a good many of the flying organizations are endorsing.

This plan proves conclusively at a very quick glance that the Federal Aviation Agency can offer practically the same service that they are now offering and save $2,163,000 instead of the $1,470,000, that they were contemplating saving. This would be a savings of $693,000 over and above what they were contemplating saving.

You will note also that there will be other savings involved by using the proposed plan.

In addition to that, there is a suggestion that the Federal Aviation Agency could save more by closing down certain towers where they are not busy.

Frankly, the above seems a rather perfect perfect solution. The very few pilots I know of want to know any weather or any other information from 10 p.m. until 6 am. in the morning. Most of them would have to get that much sleep if they are going to fly during the day.

I hope that you will use the weight and influence and the good wisdom that you have always shown in supporting this proposal and to keep us from losing here at Myrtle Beach our much needed flight service station.

Actually, people from all over the United States come in and out of Myrtle Beach here and we need the service station here because we have very little surface transportation. We have no railroad transportation, and very little other transportation and not enough other transportation.

There are no flight service stations out in the ocean to give us any help.

I would like to point out that during certain seasons of the year, Myrtle Beach is very vulnerable to storms and other weather, and we feel that this flight service station here has been a great factor in saving lives and property and in alerting people inland and in other parts of the various States to danger . I feel that this merits your strongest support.

Sincerely,

W. A. COLLINS, Sr.

THE FEDERAL AVIATION AGENCY PLAN

The Federal Aviation Agency plans to remote 42 stations at an estimated saving of $35,000 at each location. The total estimated saving would be $1,470,000.

ALTERNATIVE PLAN

1. Federal Aviation Agency has 296 stations.
2. Operate 100 of the busiest stations 24 hours daily.
3. Reduce the hours of operation for the other 196 to 16 hours a day (close at 10 p.m., and open at 6 a.m.).
4. This would save 1.58 positions at 196 stations for a total of 309 positions.
5. Average salary of each position is $7,000. This would be a total saving of $2,163,000.
6. And would still leave the services where they are and when most of the work is done. Very little work is done at many locations during the hours between 10 p.m. and 6 a.m.

7. There would be no remoting costs.
8. There would be no relocating personnel costs.
9. There would be no expensive recurring rental on telephone long lines.
10. The Federal Aviation Agency should also take a close look at the less busier towers because many of them could be closed down during the night hours, thereby saving even more money.

Introduced by Mr. McCRACKIN.

A CONCURRENT RESOLUTION MEMORALIZING CONGRESS TO CONTINUE THE OPERATION OF EXISTING FLIGHT SERVICE STATIONS AT MYRTLE BEACH IN HORRY COUNTY AND IN ANDERSON COUNTY

Whereas flight service stations are of major significance in promoting air safety; and

Whereas it has been announced that numerous flight service stations throughout the United States will be eliminated, included among those are the stations at Myrtle Beach and Anderson; and

Whereas with the rapid expansion of aviation, to eliminate the stations at Myrtle Beach and Anderson would jeopardize the safety of individuals employing this means of transportation; and

Whereas perhaps some flight service stations should be eliminated but such is not the case as regards the flight service stations at Myrtle Beach and Anderson because with the rapid growth of aviation it is imperative that these two stations remain in operation in order to provide vitally needed service and safety in their service areas: Now, therefore, be it

Resolved by the House of Representatives, the Senate concurring, That Congress be memorialized to continue the operation of the existing flight service stations at Myrtle Beach in Horry County and in Anderson County in order that the safety of the individuals in the field of aviation and the public generally may be protected; and be it further

Resolved, That copies be forwarded to the President of the United States, to each U.S. Senator from South Carolina and to each Member of the House of Representatives of Congress from this State.

STATE OF SOUTH CAROLINA, IN THE HOUSE OF REPRESENTATIVES.
COLUMBIA, S.C., *February 28, 1964*.

I hereby certify that the foregoing is a true and correct copy of a resolution adopted by the South Carolina House of Representatives and concurred in by the Senate.

[SEAL]

INEZ WATSON,
Clerk of the House.

STATE OF SOUTH CAROLINA,
HOUSE OF REPRESENTATIVES,
Columbia, May 6, 1964.

Hon. JOHN L. McMILLAN,
Congressman, Sixth Congressional District of South Carolina,
House Office Building,
Washington, D.C.

DEAR MR. McMILLAN: I am writing to you again concerning the retention of FAA flight service at Myrtle Beach Airport at Crescent Beach. I understand that Congressman John Bell Williams of Mississippi as chairman of the Transportation and Aeronautics Subcommittee of the House Interstate and Foreign Commerce Committee will have hearings on the proposed closing of 42 FAA stations. It will be appreciated if you will use your influence with Mr. Williams in trying to keep the station at Myrtle Beach from being closed.

The people of Myrtle Beach and I are grateful for your assistance in the past concerning this matter, and your continued efforts will certainly be appreciated.

With my kind personal regards, I am,

Sincerely yours,

E. WINDELL McCRACKIN.

Mr. WILLIAMS. I believe that concludes the list of witnesses that we had scheduled for today.

The committee will stand adjourned until 10 o'clock tomorrow morning.

(Whereupon, at 4:30 p.m., the subcommittee adjourned to reconvene at 10 a.m., Thursday, May 14, 1964.)

FLIGHT SERVICE STATIONS

THURSDAY, MAY 14, 1964

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND AERONAUTICS
OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess in room 1334, Longworth Building, Hon. John Bell Williams (chairman of the subcommittee) presiding.

Mr. WILLIAMS. The committee will come to order, please.

I submit for inclusion in the record, at the request of Hon. Ben Reifel, of South Dakota, a copy of a letter from Mr. Walter F. Ball, president of the South Dakota Aviation Trades Association.

Also, at the request of Hon. E. Y. Berry, of South Dakota, a copy of a letter directed to him over the signature of Mr. L.V. Hanson, Director of Aeronautics of the State of South Dakota.

(The letters referred to follow:)

SOUTH DAKOTA AVIATION TRADES ASSOCIATION,
Huron, S. Dak., May 3, 1964.

Hon. BEN REIFEL,
U.S. House of Representatives,
Washington, D.C.

DEAR MR. REIFEL: At the recent annual meeting of the South Dakota Aviation Trades Association considerable time was spent discussing the Federal Aviation Agency and their use of the money allocated to them each year. Therefore, after careful study and discussion of this subject, our association feels that the FAA budget should be drastically cut. We won't bore you with all of the details we discussed, but will try to bring out just the most important points. If you desire more detailed information behind our reasoning, we will be more than happy to supply it.

Of course, many people in the industry have realized for a long time that FAA has seriously mismanaged the use of their funds. Only a short time after one association recommended a 36-percent cut in this year's budget, FAA announced that they were going to consolidate 42 flight service stations. We are not being fooled by such actions, as this is typical of FAA whenever they are threatened with a cut. They retaliate by cutting where it will hurt the public the most. They never mention the fact that the improvement program for the National Aviation Facilities Experimental Center at Atlantic City will cost $35 million—which is 23 times more than the annual savings would amount to on the 42 stations. They also forget to ever mention the cost of operating that incredible medical center they have in Oklahoma City, which costs the taxpayers more than $500,000 a year in rent alone. Neither of these two expenditures has produced any results even worth discussing, and much of their work is duplication of work already done by other agencies. We could find no basis for their choice of the 42 stations, but we did notice that not a single station is to be elimianted in Oklahoma. Now FAA is charged with the safety of the public, and cutting out these 42 stations is definitely not in the interests of safety.

To show you a typical example of FAA's thinking, we are enclosing a copy of a proposal to decommission the Huron, S. Dak., low-frequency radio. You will notice that the H facility is to be decommissioned as soon as the VORTAC

facility is completed. Just what the connection is between the two, we fail to grasp. The low-frequency radio voice is used considerably in this area by farmers, aerial applicators, etc., and as a homing device for radio compasses in aircraft. This is something like telling a child that he will not need his shoes after his parents buy him a new hat.

We could go on and on about this subject, but I am sure you are well aware that there is something seriously wrong in the management of the Federal Aviation Agency. I think it is time that the Congress of the United States should take a serious look at this situation before any more damage is done.

We would again like to thank you for the help you have given us in the past. If you feel that we are unreasonable in our thinking, or if there is something in connection with the problem which we don't understand, we would very much appreciate hearing from you.

Sincerely,

WALTER F. BALL.

SOUTH DAKOTA AERONAUTICS COMMISSION,
Pierre, S. Dak., May 7, 1964.

Re flight service station retention.

Hon. E. Y. BERRY,
U. S. Congressman, House of Representatives,
House Office Building, Washington, D.C.

DEAR CONGRESSMAN BERRY: We were pleased to receive your recent letter and Congressional Record concerning the FAA proposal to discontinue operation of 42 flight service stations.

From a safety standpoint this becomes a serious matter which concerns aviation interests in our State a lot.

Comments concerning the problem follow:

1. The FAA policymakers when considering changes in their flight service station program should be particularly concerned with the safety problems of the general aviation pilots and the great number of our citizens who depend upon them for their transportation needs. They should remember that flight service stations when first developed were simple but due to the complexity required by the FAA it has become very expensive. Now it is proposed to reverse this trend which tends to be a cycle in some circles of governmental operations.

Give the aviation industry 10 more years and the FAA should have twice the number of flight service stations due to their forecast of increased traffic and safety problems. The experts say our air traffic control center problems were created because of delays involved in updating the equipment and personnel. If FAA will take a close look they will notice this proposed remoting and shutting down flight service stations is a backward step which in turn will be duplicating the air traffic control center problems of a few years back including today's activities. Political considerations appear to be dictating policies rather than a need for safety facilities.

2. There have been suggestions by organizations as to criteria for manicoms or airport information desks (AIDS) which do not take into consideration the sparsely populated areas. People that will be handicapped live in the less dense areas as the previous criteria set up by FAA demonstrates. The use of control towers for local weather and airport advisory service, as has been suggested, is limited in South Dakota due to only one tower in operation. Also how can organizations suggest criteria for manicoms and airport information desks before hard core stations have been named, with the crieteria for a hard core station still to be established?

3. The aviation industry seems to agree we need more and better weather-reporting facilities. It feels this should be carried out by the U.S. Weather Bureau, not the FAA. This would be satisfactory; however, it would require additional appropriations for the Weather Bureau. This is "robbing Peter to pay Paul." It is all tax money, appropriated by Congress and spent by two different Government agencies. Perhaps it would be more economical to remove the Weather Bureau from the Department of Commerce and make it a coagency of the Federal Aviation Agency due to requirements for trained personnel.

It is very difficult to suggest ideas until the intentions of FAA are published for public comment. If the industry has a few midair collisions the public pressure will be tremendous, which, in turn, will create a monstrous push for more flight service stations by the FAA for relief of congestion.

4. With the proposal of increasing the number of facilities such as manicoms and airport information desks, which if understood properly would require the leasing of land lines leading to the hard core stations for direct communications. The service and information would increase for pilots by these additions, but so would expenses.

If, for example, one flight service station is remoted to another by leased land lines, then in high density areas manicoms and airport information desks would be placed at airports with sufficient traffic, which, in turn, would require more personnel at the hard core station plus some personnel at manicom stations. We would support this idea if it can be proven to be a feasible solution to the problem.

5. The FAA with a 1964 annual appropriation of nearly $780 million claims that there is not enough money to operate the flight service station system; while in 1956 the old CAA had a total annual appropriation of only $169,320,000 and operated 300 flight service stations, compared to 297 flight service stations in 1964, without financial stress. The question is what has happened to the money. The finger can be pointed in many areas such as the supersonic transport, medical centers, research centers, etc., supported by the FAA budget.

It is respectfully suggested that a review of FAA current and proposed future expenditures for the supersonic transport development program may reveal that funds should come from some other budget which would not tend to require a reduction of facilities and services used by many more people than could possibly have requirements to go to Paris or some other distant point in 3 hours instead of 6 hours as can presently be accomplished with jet airliners.

We realize that you are cognizant of the need for good and safe transportation facilities for our economic welfare and appreciate your serious consideration of the problem.

With kind personal regards.

Very sincerely,

L. V. HANSON,
Director of Aeronautics.

P.S.—A similar letter has been sent to Congressman Ben Reifel, who also wrote us and sent information concerning the subject as contained in the Congressional Record.

Mr. WILLIAMS. This morning our first witness scheduled is Hon. Winston L. Prouty, the Senator from Vermont. Senator Prouty has not arrived, I understand; so, I am going to request my good friend and colleague, Congressman Stafford, who will introduce his witness.

Mr. Stafford.

STATEMENT OF HON. ROBERT T. STAFFORD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VERMONT

Mr. STAFFORD. Thank you, Mr. Chairman.

I very much appreciate this opportunity to appear in front of this distinguished subcommittee to introduce Vermont's Commissioner of Aeronautics, Mr. Edward Knapp, who has been our commissioner since we have had one.

I have read the statement Mr. Knapp proposes to extend in the record, and I endorse it, and I also wholeheartedly endorse the remarks which he will make to this committee.

I present Mr. Edward Knapp, our commissioner of aeronautics.

STATEMENT OF EDWARD KNAPP, COMMISSIONER OF AERONAUTICS, STATE OF VERMONT

Mr. KNAPP. Mr. Chairman and members of the committee, I am Edward F. Knapp, and I have been commissioner since the establishment of the Vermont Aeronautics Board in 1945. In addition to

representing the State of Vermont, I am authorized to represent the cities of Barre and Montpelier.

Following announcement on February 4 by the Federal Aviation Agency that the Montpelier Flight Service Station was included in the list of 42 such stations to be consolidated, the State of Vermont has appeared at several discussions of the issues which were created by the above action.

In substance, the State of Vermont maintains that: (1) It recognizes the desirability of effecting significant economics wherever possible in the operation of stations, including Montpelier; (2) it objects to remoting the Montpelier station if such action would result in loss of weather reporting services now existing except between the hours of 11 p.m. and 7 a.m. A great deal of the ensuing statement is devoted to the importance of the weather reporting service at this or other stations.

We have contended, and still do, that the entire aviation industry from the little J–3 to the jet is dependent in varying degrees upon the availability of weather information. It is difficult to see how this information can be made available to service points throughout the country except through the system which is now known as the flight service stations.

We think it is significant that originally these stations were known as airway communication stations, with the emphasis upon communications, that the Federal Aviation Agency subsequently changed the name to flight service stations. To that extent, we think that the element of service entered into the concept at the time that change was made. And the element of service included, certainly, the availability of weather data.

With respect to economies, we believe that some stations—and we would include that at Montpelier, Vt.—could be operated without great loss of effectiveness on a two-shift basis, from 7 a.m. in the morning until 11 p.m. at night. I emphasize the 7 a.m., because that would enable flights to get started early in the day or enable briefings to be obtained at that hour for a somewhat later start.

There are certain areas where it is possible that further economies might be effected in the operation of the stations. We believe that the flight-following service is something which might be performed just as effectively if pilots could be educated to the simple task of requesting the data as they proceed en route, in contrast to requesting flight-following service which entails, on the part of the local operator, the necessity of calculating the time when the pilot will arrive over his station, and successive attempts to reach him by radio in flight.

At the Montpelier station, weather is related, as it is in many other stations, to moutnain conditions. The weather at Burlington, which is 40 miles west in the Lake Champlain Valley area, and at Lebanon, N.H., which is in the Connecticut River Valley area, bears no resemblance to the mountain weather conditions at Montpelier.

The Montpelier station is located at a point in the central part of the State with three satellite airports likewise dependent upon this weather information. It is located at the airport serving the capital city of Vermont, and I might point out it is the only station in Vermont. I would also point out that it is the only station which has been listed for consolidation out of all of those in New England.

With respect to subsequent proposals by FAA, referring to the hard core substation manicom and airport information desk or AID, we believe that this has merit. We believe that if significant economies can be effected without reducing the availability of information and services that some of the savings might be applied constructively to installation of AID's or AID's at airports which presently have an improved instrument letdown, but which have no weather data.

As an example about which I feel qualified to speak, I would refer to such airports in Vermont as Springfield, Rutland, and Newport. At present all of them have an improved instrument letdown based on a low frequency beacon provided by the State. They do not have weather data available. If a foreign exchange line could be extended under the AID concept from the nearest flight service station, whether it be Montpelier or others, to these three airports, it would provide them with a service which does not now exist.

The directors in New England met recently with a representative of FAA and discussed the feasibility of realining some of these services in New England. It was the broad conclusion of the directors that the realinement could be effected at less in New England, and with constructive advantages, and from that, with the installations of AID or manicoms in areas or points which now have no service at all, the value of the total service might be considerably enhanced.

In connection with the statement I should like to call attention especially to the letter which is attachment "A," which was directed by Gov. Philip H. Hoff to Mr. Halaby, under date of April 17. It contains a great deal of material which otherwise would have been included in the statement of Vermont State itself.

I believe that summarizes the high points of this statement. I shall be happy to answer any questions that the committee may care to ask.

Mr. WILLIAMS. Thank you, Mr. Knapp.

Mr. Jarman, do you have any questions?

Mr. JARMAN. No questions.

Mr. WILLIAMS. Mr. Knapp, I believe Montpelier is located in a mountain area.

Mr. KNAPP. It is.

Mr. WILLIAMS. How near is the nearest flight service sation to Montpelier?

Mr. KNAPP. The nearest flight service station is at Lebanon, in the Connecticut River Valley, 60 miles southeast.

Mr. WILLIAMS. How about in a northwesterly direction?

Mr. KNAPP. I believe the nearest one would be at Massena, N.Y., roughly well over a hundred miles.

Mr. WILLIAMS. In other words, if the Agency should go through with its presently announced plans for abandoning this station or remoting it, what would be the closest station to Montpelier?

Mr. KNAPP. It has been variously suggested by FAA that it would be remoted to Augusta, Maine, or subsequently to Massena N.Y., each of which are well over a hundred miles; which would leave Montpelier with a rack of hot tubes as local equipment, but no one who was speaking knowledgeably of current conditions in between hourly weather reports.

Mr. WILLIAMS. So the nearest one would be 60 miles on one side and the other would be a hundred miles on the other side. In other words, that would leave an area of about 160 miles without a flight service station.

Mr. KNAPP. That is right.

Mr. WILLIAMS. Thank you very much, Mr. Knapp.

Mr. KNAPP. Thank you, sir.

Mr. WILLIAMS. Your entire statement will be included in the record.

(The full statement referred to follows:)

STATEMENT OF EDWARD F. KNAPP, COMMISSIONER OF AERONAUTICS, STATE OF VERMONT

My name is Edward F. Knapp, I have been commissioner of aeronautics since establishment of the Vermont Aeronautics Board in 1945. In addition to representing the State of Vermont, I am authorized to represent the cities of Barre and Montpelier.

Following announcement on February 4, 1964, by the Federal Aviation Agency that the Montpelier Flight Service Station was included in the list of 42 such stations to be consolidated with other points, the State of Vermont has appeared at several discussions of the issues which were created by the above action. In substance, the State of Vermont maintained that—

1. It recognizes the desirability of effecting significant economics where ever possible in the operation of stations, including Montpelier.
2. It objects to remoting of the Montpelier station if such action would result in loss of weather reporting services now existing, except between hours of 11 p.m. and 7 a.m.
3. If consolidation is to be effected among some stations in northern New England, the geographical location of Montpelier in relation to these stations and physical facilities in the newly constructed terminal building would suggest that Montpelier itself is a logical point to which the consolidation of other stations might be effected.

Subsequent to announcement of consolidation, FAA has outlined a possible realinement of functions and services now performed by all flight service stations in a four-part classification of hard core, substation, manicom, and airport information desk (AID). The State of Vermont concurs with the general criteria by which these classifications were established.

Considering the matter on a national basis, it would appear that a careful study of stations would show that manpower could be reduced at some points without impairing effectiveness of services rendered. It was suggested by Vermont in the earlier discussions that some stations, including Montpelier, could be operated on a two-shift program from 7 a.m. to 11 p.m. without serious impairment of service since traffic in the Montpelier area between 11 p.m. and 7 a.m. is minimal. However, under such a program, it would be recommended that communications at Montpelier be remoted to the nearest station which is operating during the 11 p.m. to 7 a.m. period in order that a reply might be transmitted to any flight unaware that Montpelier was operating on a limited time period.

It is suggested that in the event of limited operations, a station open at 7 a.m. in order to provide services to the many flights which are either departing shortly after 7 a.m. or which are seeking flight planning information for a departure around 8 a.m.

With respect to an earlier closing hour, attention is invited to the noticeable increase in night traffic at many points up to the approximate hour of midnight. Prior to the trend toward light twins, small plane traffic was almost nonexistent within an hour or two after sunset, but current experience suggests that this is no longer true. Some consideration should be given to this fact in relation to weather reporting services at FSS as will be noted in the following paragraphs.

In relation to the consolidation program of February 4, FAA has pointed out on numerous occasions that the function of FSS is basically that of communications in contrast to the reporting of weather. While this may have been the intent associated with establishment of FSS, it has become only too apparent that a large portion of the services now rendered or requested is related to weather data, both local and other points. If there is an issue as to

whether this data should be compiled and disseminated administratively by Weather Bureau or by FAA and its system of flight service stations, the question should be resolved between these two Federal agencies. However, from the standpoint of the user, the combination of weather reporting and its transmission to and from a single point is clearly a basic service which must be retained in essentially the present form if the entire system of flight is not to be seriously handicapped. It must be recognized that the aviation industry from J–3's to jets is dependent upon availability of weather data in varying degrees, and any reduction in the quality or quantity of weather data will hamper operation of the system proportionately. It may be added that the industry's dream of more accurate forecasts is still a fond hope.

If an evaluation of the FSS system as a whole or of individual stations is to be undertaken with reference to the relative usefulness of the varying services which are supplied, the following observations may be of some assistance.

The VFR flight plan should be encouraged and efforts made to extend its use wherever possible to more flights in the VFR category. While the VFR flight plan is recognized as a valuable aid in locating an aircraft presumed down in flight, it has further value in requiring for its filing some degree of flight planning on part of the pilot prior to departure.

The value of the flight following service seems rather questionable in relation to equivalent results which could be obtained if the pilot in flight were to contact FSS on his own initiative at convenient intervals of 50 or 75 miles. The contacts could be a simple position report or if weather is marginal, a request for weather reports at en route points. This would eliminate the necessity for station personnel to calculate his time of arrival near the station and attempting to reach him by successive calls from the station.

A special type of service has been established under the classification of mountain or lake reporting services. Personal experience has been only in relation to one such area, that of the Stoneface area between Montpelier, Vt., and Augusta, Maine, and including other perimeter stations. From occasional operation through this area over many years, it would appear that the current Stoneface is one whose effective operation is questionable under low ceiling conditions when it could be truly useful, and under high ceilings or CAVU conditions, it is doubtful whether it serves any useful purpose in contrast to the filing of a simple VFR flight plan. How many man-hours are involved in maintenance of this service among the area net is not known, but if man-hours are critical, some study might be given to the value of this service.

The basic weather service rendered by FSS at points where there is no Weather Bureau is a function of major importance to the industry. It is needless to dwell upon the importance of weather data as a whole, but some special aspects of reporting may not be so widely known. In the cases of the Montpelier station, which may be representative of some other points, the geographical location is within the center of the Green Mountain area. Forty miles west is the Lake Champlain Valley in which weather frequently bears no resemblance to that existing in the Montpelier area, including three satellite airports. To the east by some 50 miles is the Connecticut River Valley which, in turn, frequently has a brand of weather differing widely from that at Montpelier or in the Champlain Valley. The weather functions of the Montpelier FSS therefore become of prime importance during periods of bad or marginal weather conditions. Obviously, under CAVU conditions, reports from any station are relatively needless except in relation to possible high winds.

If the industry is to function through a system of airports, weather service at these airport locations is a "must" in relation to local operations and becomes an equal "must" in relation to en route operations under many conditions. It is evident that without facilities to disseminate data at such points as Montpelier, the system breaks down. The combination of weather reporting and communications is inseparable.

It has been suggested by FAA that should a station such as Montpelier be consolidated or remoted to another station, weather reporting functions could be assumed either by airline or fixed base operator personnel. If by airline personnel, it is evident that reports could be made only during the hours when the airline station is open. At Montpelier, this is between 7 a.m. and 6 p.m. which would result in a total absence of local weather data during hours when the station is closed. In turn, this would result in nonuse of the airport under night conditions other than clear since no one familiar with the mountain area would be inclined to trust upon projection of reports from nearby stations as an indication of conditions in the mountain area.

36-942—64——12

Considering circumstances during operating hours of the airline station, an evaluation must be made of the manner in which airline personnel will take weather observations at hours which coincide with airline flight operations. If, as reported, these observations are to be taken on a volunteer basis the results would probably be much short of a dependable system. Conversation with pilots who use airports frequently where the only weather reporting is that done by airline personnel indicate that these observations are not considered to be completely reliable under marginal conditions by very nature of the circumstances.

It is probably pointless to spend further time on the theory that effective weather reporting will be done by fixed base operators except at points where the operator has a considerable staff on duty for 16 hours or more.

Except for fixed base operations where staffing is very complete, it is unlikely that personnel would be available during peak periods of operation which, in turn, would frequently become a period when weather information is most needed. The same would be true in relation to weather observations by airline personnel.

In summary, strong objection is made to remoting of the Montpelier Flight Service Station as proposed in the Federal Aviation Agency announcement of February 4. Some modifications in the volume of services now being rendered would be possible. If some consolidation is to be effected in the New England area, the location of the Montpelier station in a newly constructed terminal building and at a geographical site which is consistent with the proposed pattern of hard core stations all merit consideration of this site for such a purpose.

(The attachments to this statement were placed in the files of the subcommittee.)

Mr. WILLIAMS. Our distinguished colleague on the committee, Hon. Kenneth Roberts, has a group representing Tuscaloosa.

Mr. ROBERTS. That is correct, Mr. Chairman.

STATEMENT OF HON. KENNETH A. ROBERTS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. ROBERTS. Mr. Chairman, it gives me a great deal of pleasure to introduce to the subcommittee today some old friends of mine from Tuscaloosa, Ala, who are in opposition to the removal of the Van DeGraaff Flight Station.

I also have several statements and resolutions which I would like to ask permission to include in the record.

A statement from our colleague Representative Armistead Selden.

Mr. WILLIAMS. Let it be received:

(The statement referred to follows:)

STATEMENT OF HON. ARMISTEAD SELDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. Chairman and distinguished members of the subcommittee, we certainly welcome and appreciate this opportunity to voice our opposition to the recent decision of the Federal Aviation Agency to close the flight service station at Tuscaloosa, Ala.

The decision to close this vital facility comes at a time when Tuscaloosa, the commercial hub of west Alabama, is experiencing an accelerated growth rate. The neighboring city of Northport has also experienced a similar growth rate—40 percent in the last 6 years. With increased industrial development and general city expansion, the number of private planes operating out of Tuscaloosa has multiplied.

In addition to this, the University of Alabama since 1956 has had a growing flight instruction program for Air Force and Army ROTC cadets. The first in the Nation to institute such a program, the university conducts this training program under a subcontract with an FAA-approved flying school. The University of Alabama also has an extension service which covers the State and requires continual flights from Tuscaloosa to all points of the State.

To better provide for this general aviation, the city of Tuscaloosa has begun a long-range plan to vastly improve its airport facilities. This includes landing field expansion and improvements costing more than $1 million. Tuscaloosa has just completed a new flight terminal building for the scheduled commercial airline flights servicing Tuscaloosa and vicinity.

The Van DeGraff Flight Service Station is one of the 42 such stations scheduled to be discontinued for economy reasons. However, no savings are expected for the first year or so as a result of this centralization of control from Tuscaloosa to Birmingham. The expenses of changing to remote facilities, the maintenance of these facilities, the cost of moving personnel, and other expenses will cut deeply into any FAA-expected savings. As you realize, having fewer flight service stations with more personnel does not necessarily mean better service. However, it sometimes leave serious gaps in areas that might jeopardize flight safety. The station at Columbus, Miss., was remoted to Tuscaloosa some time ago. If the Tuscaloosa station is remoted to Birmingham, over 250 miles of area in west Alabama and east Mississippi will have no weather reporting facilities or flight station services.

The remote Birmingham station cannot provide accurate, on-the-spot information on local Tuscaloosa weather. There is frequently great divergence in the weather condition of these two cities 60 miles apart, since Birmingham is mountainous and Tuscaloosa's terrain is flat. Also, the Birmingham remote cannot give adequate advisory information on the traffic conditions at Van DeGraaff Field. While we realize that it would not be feasible to have a flight station at each landing area in the United States (we do not believe that a price tag should be put on safety. I strongly favor economy in the Federal Government, but economy is not always measured in dollars and cents.

All pilots need preflight information and flight assistance. Commercial and military flights are provided this assistance, but the general aviation pilot must depend on the flight service station. Approximately 75 percent of the flight station's workload comes from this general aviation, and the pilots depend solely on these service stations. To discontinue this facility in Tuscaloosa would not only adversely affect the increasing flights of local businessmen and university officials and the training flights of the ROTC cadets, but, in my opinion, it will be a step backward in general aviation's efficiency and safety.

The Administrator of the Federal Aviation Agency has admitted that there will be some increased cost to the Weather Bureau, for the Weather Bureau will have to make arrangements for continued weather observing and reporting services at Tuscaloosa. The Federal Aviation Agency has also advised me that it is exploring way and means by which certain airport services may be provided on a limited basis when justified by local conditions. Certainly a plan such as this will require funds, and these funds, combined with the increased cost to the Weather Bureau, will greatly minimize or abolish completely the projected savings of the FAA by closing the Van DeGraaff Flight Service Station.

Mr. Chairman, I am grateful for this opportunity to submit my testimony to this subcommitte, and I am hopeful that, when all facets of this problem are considered, this drastic proposal of the Federal Aviation Agency will be reversed.

Thank you very much.

Mr. ROBERTS. Also I would like to insert a resolution from the commissioners of the cities of Tuscaloosa and Northport, with a covering letter signed by Mr. Willard V. Brown and the members of the Citizens Aviation Safety Committee. The resolution contains statements by various people; Dr. Frank Rose, president of the University of Alabama; John C. Steele, chief pilot for Gulf States Paper Corp.; Gordon Lawless, Tuscaloosa, Ala.; Mr. Olmstead of Copeland; Mr. Guy E. Moman, Sr., who is with the Read News Agency, Tuscaloosa, Ala.; Wilmer A. Ivey, chief pilot, Aviation Department, Southern Natural Gas Co.; Jack Finch, who is also one of the witnesses today, and several other people have attached material to this resolution.

Without objection, I will place that in the record.

Mr. WILLIAMS. It may be received.

(The resolution referred to follows:)

CITIZENS AVIATION SAFETY COMMITTEE,
Tuscaloosa, Ala., February 25, 1964.

Mr. NAJEEB HALABY,
Administrator, Federal Aviation Agency,
Washington, D.C.

DEAR MR. HALABY: As authorized representatives of the various categories of general aviation utilizing all of the current services afforded by the Federal Aviation Agency flight service station located at Van DeGraaff Field, Tuscaloosa, Ala., we the undersigned members of the Citizens Aviation Safety Committee do hereby urgently request that the Federal Aviation Agency delete the flight service station at Tuscaloosa, Ala., from the list of those stations planned for conversion to remote facilities within the next 12 to 24 months.

It is our earnest conviction that the Tuscaloosa Flight Service Station has been the greatest single factor responsible for the splendid general aviation safety record in this region of Alabama, and further, that the proposed remoting of this facility will result in grave impairment of flying safety in the Tuscaloosa area.

Speaking unanimously for every pilot and plane owner in this vicinity, we do not concur in the Federal Aviation Agency contention that the proposed remoting of the flight service station will not encroach on present services and safety standards. We have had many combined years of discouraging experience with the hazards of remoted stations, and we cannot accept the hypothesis that Tuscaloosa's wide variety of general aviation activities will be served as safely and equally as well by reduced remoted facilities.

The attached documents express the positions of the various segments of general aviation which will be critically affected by the proposed remoting of the present facility. We are unequivocally opposed to removal of the station and its personnel. It is infinitely preferable to have continued the full services presently available than to gamble on safety of flight for the paltry few dollars purportedly to be saved by remoting these services. We urge that you take immediate steps to insure the continued retention of the complete services and full personnel complement of the flight service station at Tuscaloosa.

Most sincerely yours,

WILLARD V. BROWN, *Chairman.*

EX OFFICIO

George M. Van Tassel, mayor, city of Tuscaloosa.
C. Snow Hinton, Jr., commissioner of finance, city of Tuscaloosa.
A. K. Callahan, member, house of representatives, State of Alabama.
George K. Ryan, commissioner of public safety, city of Tuscaloosa.
David M. Cochrane, judge of probate, Tuscaloosa County.

EXECUTIVE COMMITTEE

W. V. Brown, assistant to the president, University of Alabama.
J. B. Carl, president, Dixie Air, Inc.
H. J. Finch, flight supervisor, Dixie Air, Inc.
Gordon Lawless, vice president, Phifer Management Corp.
Robert A. Cardinal, Jr., vice president, Dixie Air, Inc.
Olmsted Copeland, president, Roma Development Co.
Claude H. Hinton, chairman, Aviation Committee, Chamber of Commerce.
John C. Steele, chief pilot, Gulf States Paper Co.

GENERAL MEMBERSHIP

E. J. Brown, executive officer, Civil Air Patrol.
Guy E. Moman, Sr., owner, Read News Agency.
Neil C. Morgan, President, N. C. Morgan Construction Co.
W. D. Partlow, Jr., attorney.
George A. LeMaistre, president, City National Bank.
Frank M. Moody, president, First National Bank.
Arden Moser, manager, Radio Station WJRD.
Harry H. Pritchett, president, Pritchett-Moore, Inc.

RESOLUTION OPPOSING THE REMOVAL OF A FLIGHT SERVICE STATION FROM THE TUSCALOOSA AIRPORT

Whereas it has come to the attention of the commission board that the Federal Aviation Agency proposes to remove the flight service station from the Tuscaloosa Airport and replace the facility with a remote-control service; and

Whereas the city of Tuscaloosa, over the past 10 years, has experienced a marked population growth and expansion and is in a period of rapid accelerated growth; and

Whereas the industrial development in the Tuscaloosa area is continuing to expand, and several of the local industries now use, as an integral part of their operation, the service of private planes and private pilots continually flying in and out of Tuscaloosa; and

Whereas the city of Tuscaloosa is well into the plans for a vastly expanded airport facility, which may well result in landing field expansion and improvement costing approximately $1 million; and

Whereas the city now has under construction a new flight terminal for use by the commercial flights originating and terminating at the airport; and

Whereas the city of Tuscaloosa is in a unique position in serving the Universty of Alabama, with its extension services reaching throughout the State and requiring continual shuttling service across the State of Alabama; and

Whereas it is the opinion of the commission board, based on advice of competent advisers, that a remote-control facility here would increase the hazards of flying to and from Tuscaloosa; and

Whereas the commission board desires to go on record as opposing such a move, and to urge the FAA to reconsider a stated plan in this regard: Now, therefore, be it

Resolved by the Commission Board of Tuscaloosa, That this commission board strongly urges the Federal Aviation Agency to maintain a flight service station in operation at the Tuscaloosa Airport, serving Tuscaloosa, west Alabama, the university, and the industrial facilities in the area; and that, for the reasons above stated in the preamble hereof, the FAA is urged to reconsider its proposed plan to serve this area with a remote-control facility.

RESOLUTION OPPOSING THE REMOVAL OF A FLIGHT SERVICE STATION FROM THE TUSCALOOSA AIRPORT

Whereas the City Council of the City of Northport, Ala., has been informed that the Federal Aviation Agency proposes to discontinue and remove the flight service station from the Tuscaloosa Airport, same to be replaced with a remote-control service; and

Whereas the city council has been informed by competent advisers that a remote-control facility or service would not be as safe for flying to and from Tuscaloosa, and would increase the hazards of flying; and

Whereas the population of the city of Northport has increased approximately 40 percent in the last 6 years and the incorporated area of the city has expanded rapidly; and

Wheras the State of Alabama is constructing an inland dock facility on the Warrior River, inside the city limits of the city of Northport, and the industrial development in Northport is increasing yearly, several of these industrial organizations use the services of private planes and private pilots flying in and out of the airport; and

Whereas plans for expanding the airport facility and actual construction of a new flight terminal are realities today at the airport; and

Whereas the city of Northport feels that the proposed action of the Federal Aviation Agency would be very detrimental and harmful to this entire area; and

Whereas the City Council of the City of Northport desires to express their strong opposition to the closing of such facility and to also urge the Federal Aviation Agency to reconsider its proposed action relative to this facility: Now, therefore, be it

Resolved by the City Council of the City of Northport, Ala., as follows: This city council sincerely requests and strongly urges the Federal Aviation Agency to maintain a flight service station in operation at the Tuscaloosa Airport, serving Tuscaloosa, west Alabama, and industrial facilities in this area; and

for the reasons above stated the Federal Aviation Agency is requested to reconsider and abandon its proposed plan to replace the flight service station with a remote-control facility.

H. D. DARDEN,
Mayor, City of Northport.

Attest:

O. T. FAUCETT, *City Clerk.*

STATE OF ALABAMA,
City of Northport:

I, O. T. Faucett, city clerk of the city of Northport, Ala., do hereby certify that the above and foregoing is a full, true, and correct copy of a resolution duly adopted by the City Council of the City of Northport, at a special meeting of said council, held on the 10th day of February 1964.

In witness whereof, I have hereto affixed my signature and the official seal of the city of Northport, Ala., this the 14th day of February 1964.

City Clerk.

RESOLUTION

At a public meeting of plane owners, pilots, and other interested citizens of Tuscaloosa, Northport, Greensboro, and Demopolis, held at the commission room of the city of Tuscaloosa, the following motion was offered by W. D. Partlow:

"*Resolved*, That this group vigorously protest the demoting of the Tuscaloosa Flight Service Station from Birmingham as adequate weather and traffic information from the Tuscaloosa station is vital to the safety of local and transient pilots."

The motion was seconded by R. O. Fant and passed unanimously.

CLAUDE HINTON, Jr.,
Chairman, Tuscaloosa Chamber of Commerce Aviation Committee.

UNIVERSITY OF ALABAMA,
University, Ala., February 14, 1964.

Hon. ARMISTEAD I. SELDEN, Jr.,
House Office Building,
Washington, D.C.

MY DEAR ARMISTEAD: As you know, the Federal Aviation Agency has announced the planned closing of its Tuscaloosa Flight Service Station at Van DeGraaff Field. I should like to express to you my grave concern for this proposed action, and to outline herewith reasons why the installation should be retained.

The University of Alabama has had since 1956 an excellent and growing flight instruction program for its Army and Air Force ROTC cadets. The services-sponsored program is conducted under university subcontract by an FAA approved flying school, and is designed to identify and select pilots for future military flying training. An important contribution to the national defense effort, the university was the first in the Nation to institute such a program. The local flight service station provides an invaluable training segment of this program, consisting of detailed in-person preflight briefings, provision of teletype sequences for familiarization and study by trainees, orientation and instruction by station personnel concerning availability and utilization of all communications equipment, personal assistance in weather analysis for flight planning, etc.

In addition, the station issues airport advisories to airborne students and other traffic in the vicinity of the airport, keeps close watch on local and area weather conditions, particularly during periods of marginal weather, and advises aircraft of all changes affecting safety of flights. The flight instruction program is conducted each academic year from October through the winter months to May. The immediate availability of up-to-the-minute weather information is vital to the safety of this program.

The university has an approximate $20,000 contract for the current academic years, and anticipates the 1964–65 year will increase to approximately $35,000 due to increased enrollment to some 50 students in the flight program.

A university aircraft is used extensively for flights of administrative personnel in the conduct of university business. Pilots of this aircraft depend almost

entirely upon the flight service station for all weather information necessary for flight planning, which is now immediately available to them whenever required. The univerity is planning shortly to begin regularly scheduled flights between Tuscaloosa and Huntsville, because the completion of its research institute in Huntsville will require periodic exchange visitations by campus and Huntsville faculty, as well as scientists and technicians from NASA and Army Missile Command. Also, these latter two agencies will increase their flights from Huntsville to Tuscaloosa as university-conducted Federal-sponsored research activities grow.

The university feels that from the standpoint of safety alone, it cannot afford to lose the flight service station in Tuscaloosa, and does not concur with FAA statements that neither service nor safety will be jeopardized by its removal. The proposed telephone line to remote personnel in Birmingham cannot provide on-the-spot flight advisories concerning busy Van DeGraaff traffic, current local weather conditions, including transition from contact to instrument, teletype, and many other services now furnished by station personnel. The proposed remoted services to supplant the station are considered completely inadequate.

The following subparagraphs are extracted and quoted verbatim from the Federal Aviation Agency's own publication, the "FAA Air Traffic Activity" fiscal year 1963, summary section, pages XII and XIII, published by the Government Printing Office.

"An examination of the summary data reveals that during fiscal year 1963, most major categories of activity recorded higher levels than in fiscal year 1962. Many of these measures reached alltime highs on a fiscal year basis. This reflects the development of air traffic and the subsequent increases in FAA facilities. The continued growth in activity of the general aviation portion of air traffic contributed markedly to this development. This increased activity may be explained by the greater utilization of aircraft in the conduct of business, such as transporting executives, sales personnel, and materials, and in commercial 'for hire' flying. Increasing business uses of aircraft are indicated by production trends; thus further gains in general aviation activity may be anticipated.

"Flight plans originated at FAA flight service stations continued to increase, and a new annual high was attained.

"Fiscal year 1963 was a year of significant increases in many of the major categories of activity. Trends toward the * * * continued growth of general aviation activity * * * are reflected in this report."

In my opinion, the increases of general aviation activities in Tuscaloosa, which are in consonance with national increases reflected above, militate positively against removal or reduction of the essential services now rendered by the Tuscaloosa Flight Service Station. I feel that such station removal from Van DeGraaf Airport, used predominantly by general aviation, will critically affect the safety of all university air operations. I urge that all possible measures be taken to prevent the removal of this facility which contributes so heavily to the safe operation of so many aircraft in this area and region. It will be a severe blow to safety of flight if the Tuscaloosa station, the only one in Alabama planned to be removed, is closed.

Cordially yours,

FRANK A. ROSE, *President.*

ALABAMA DEPARTMENT OF AERONAUTICS—OBJECTING TO SHUTDOWN OF FAA FLIGHT SERVICE STATIONS

ALABAMA DEPARTMENT OF AERONAUTICS,
Montgomery, Ala., February 13, 1964.

The Alabama Department of Aeronautics will strongly object to the pending new reduction of FAA flight service stations, particularly the elimination of the Tuscaloosa station, as announced by FAA on February 4.

Objections were discussed by Asa Roundtree, Jr., State director of aeronautics, with other southern aviation directors at their annual conference with FAA regional officials in Atlanta on February 11.

As this is a national problem, the shutdowns will also be protested at the midwinter meeting of the National Association of State Aviation Officials, scheduled for March 10 to 11, in Washington, D.C. The NASAO will be asked to join other national aviation organizations in resisting the gradual decrease in

flight service stations in the smaller cities and their concentration in major cities. Further decreases are indicated in FAA press releases. Already such stations have been reduced since World War II from 464 to 296 and the pending reduction will reduce the total 42 more.

It is to be noted that facilities of particular service to private aviation are steadily being eliminated. First came the elimination of intermediate emergency auxiliary fields, then airway beacons and low frequency radio ranges. Flight service stations in the small cities now seem to be on the way out.

Objections will also be filed direct with FAA in Washington and Alabama pilots and aircraft owners will be asked to protest the closing of the Tuscaloosa station and others in the Southeast, to the FAA and to their Senators and Representatives.

GULF STATES PAPER CORP.,
February 4, 1964.

HON. ARMISTEAD I. SELDEN, Jr.,
Post Office Building,
Tuscaloosa, Ala.

DEAR CONGRESSMAN SELDEN: We in Tuscaloosa have just received the bad news that the flight service station in Tuscaloosa is to be closed and remoted from Birmingham.

I have listed several reasons here that should convince even the least informed layman that the closing of the Tuscaloosa Fight Service Station is not in the best interest of flight safety.

1. Weather briefing to inbound IFR traffic.
2. Responsibility for field conditions such as lights, beacons, and so forth.
3. Weather briefing for outbound IFR and VFR traffic.
4. This writer has had considerable experience with remoted stations all over the United States and I can say very positively that a remoted station cannot give the service that is needed in a rapid growing airport and city such as Tuscaloosa. At the last count, we had 37 based aircraft at Tuscaloosa, many of which do a considerable amount of IFR work. Some 4,000 miles of Alabama Power Co. powerline patrol work is carried on by Dixie Air, Inc., under contract. Needless to say, a good portion of this is emergency-type work which occurs at something less than visual flight work. The University of Alabama, with its ROTC work and its close association with the National Aeronautics and Space Agency and its top level people, would have to work in and out of Tuscaloosa by air to conduct their business with the University of Alabama.

In a statement just released by the Federal Aviation Agency, it discusses the tremendous growth of general aviation and its impact on the growth of business, transportation of executives, customers, materials, and so forth. It seems to me that we need more service rather than less service.

It would further seem to me that it would be more practical to remote Birmingham to Tuscaloosa inasmuch as Birmingham would still have a good weather station, control tower, and radar approach control and departure control. Why then, do we put all of the facilities in Birmingham and nothing in Tuscaloosa? This does not add up to good flight safety or service.

Respectfully,

JOHN C. STEELE, *Chief Pilot.*

TEXT OF REPORT TO SPECIAL COMMITTEE MEETING HELD FEBRUARY 12, 1964, 7 P.M. AT TUSCALOOSA CITY HALL AUDITORIUM

I am opposed to remoting flight service facilities at Tuscaloosa. I have operated business aircraft in and out of Tuscaloosa on both VFR and IFR flight plans for approximately 8 years. There are times when marginal weather conditions call for a study of sequence reports and forecast plus securing pilot reports from aircraft in the air that could not be accomplished by remoting the flight service facilities. The thorough survey for safety reasons of weather conditions at Tuscaloosa and en route weather is of vital necessity in many business flights. It is also recognized that weather conditions along the route of flight cannot be obtained without the necessity for a long-distance call to the closest facility from a pilot's home or office. A reporting of weather in Birmingham would not give weather conditions at Tuscaloosa because of the difference in terrain and sea level altitudes of the respective reporting points. Bir-

mingham is mountainous and Tuscaloosa terrain is flat; climatic conditions are varied because of the industrial air pollution conditions in both locations. With Meridian discontinued this leaves over 250 miles of airways with no weather reporting facilities, which would disrupt business flying at all west Alabama and eastern Mississippi airports, during periods of marginal weather or make it hazardous to proceed when weather conditions are not at very good levels.

Columbus, Miss., is already remoted to Tuscaloosa. Will it be further remoted to Birmingham? Business aircraft like my own must operate on schedules that are sometimes closer than those of the common air carrier in order to conduct business vital enough to use private aircraft. Without weather information that is accurate and detailed we cannot justify this operation since it clearly reduces the percentage of time that the aircraft can be flown. There have been substantial increases in expenditures for equipment in radar and low approach and en route facilities designed to implement air carrier operations which have little value to private aircraft operation. This makes decreasing facilities used primarily by private aircraft a matter fraught with implications of special privilege.

GORDON K. LAWLESS, *Tuscaloosa, Ala.*

FEBRUARY 13, 1964.

Representative ARMISTEAD I. SELDEN, Jr.,
House Office Building, Washington, D.C.

DEAR MR. SELDEN: At a public meeting last night in the city commission room, I was requested to write to you as a representative of all of the private pilots in the Tuscaloosa area—so this letter speaks the unanimous mind of those pilots.

The Federal Aviation Agency, through two representatives from the Atlanta Regional Office, informed a small group of us at the municipal airport on Wednesday morning, February 5, that Tuscaloosa Flight Service Station along with 41 others in the United States was to be discontinued and would be remoted and operated by telephone from Birmingham. They stated that this was an economy move in order to permit the installation of additional equipment to handle high-flying traffic, which is, in a large measure, regional airlines and military. They read to us a letter that they stated had that morning been personally handed to each Representative and Senator in the affected States. They would not permit us to have a copy of this letter.

Naturally, our unanimous reaction was one of opposition and distress that we were to be deprived of such an essential service. We have no quarrel with additional service to that highflying bunch, and we think they need even more help and assistance, but we are concerned that it is to be done by the curtailment of service given to the general aviation segment which is by far the largest and fastest growing element of aviation. The FAA states that we will receive the same service by phone that we do now in a face-to-face weather briefing and flight planning, but we know, from experience, that this is false on the face of it—as nothing takes the place of this personal contact and discussion. They claim that this is being done as an economy move and, if so, it in effect puts a price tag on safety. Due to the admited increase in aviation traffic, we need more flight service stations rather than fewer and any step toward the elimination of any of them constitutes a backward step.

I shall not attempt to detail to you the pending plans for the improvement of our local airport and the imminent increased use by the university due to its connection with its growing research institute activities with NASA at Huntsville, but we feel sure that you know that the Tuscaloosa area will be critically affected by such elimination of this needed service.

The other 41 facilities that are to be discontinued were in a press release from FAA, and I am sure that information is available to you. I know that many other Congressmen and Senators will be besieged by protests from all over our country by people so vitally affected by this action which seems so contradictory to their avowed safety program to which they seem so earnestly dedicated, but which in the long run will make our phase of flying more hazardous.

In summary, may I say that Tuscaloosa is the only station in Alabama on this list of 42 to be discontinued, and we feel sure that all of the other 41 will be just as concerned and distressed as we are, and we cannot help but believe that they are going to protest to their Representatives in Washington just as

we are, and we believe from these people you will find much assistance and support in helping all of these 42 stations retain their present service. We cannot emphasize enough the importance of this matter to all of us who fly.

Kindest personal regards,

Yours very truly,

OLMSTED COPELAND.

READ NEWS AGENCY,
Tuscaloosa, Ala., February 12, 1964.

To Whom It May Concern:

It is difficult to express the shock and complete lack of understanding concerning the announced abandonment of Tuscaloosa, Ala., by the Federal Aviation Agency. The removal of the flight service station from Tuscaloosa is an act directly contrary to progressive thinking.

The claim of "economy" is very inadequate to the ears of those who know the value of the station. I speak only as a businessman who, besides using the facilities at Tuscaloosa, and elsewhere, realizes that true economy does not consist of withdrawal from realism or retarding progress. It does not consist of creating danger to innumerable persons and properties for the sake of money.

Any political figure who would use "economy" as his campaign motto, and then explain that his motto meant to stop paving roads, cut out sewage and water systems, curtail public education, eliminate all traffic signs, stop striping highways, closing fire and police departments, that political figure would get fewer votes than a cannibal running for president.

Any agency of any level of government which would cut out necessities of life in an effort to take on a look of conservatism is just as obviously wrong as any of the foregoing conditions would be. Our highway departments would be just as right as the Agency is if they abandoned all paving and road upkeep except the new interstate roads, forcing everyone to use them alone or risk their lives on the "remote" roads.

To attempt to sell the idea that a remote station is equal to a local unit is absurd. Yesterday's paper comes as close to today's local weather as one could get right now from a remote prognosticator. I have found, in many instances, that the weather information from a remote unit was wrong, and in instances where, if accepted, would have proven dangerous to life and property.

I have seen the height of inadequacy on occasions when I have been asked by the remote operator to give him the weather at the "remote" station where I was seeking aid.

As for planning flights, which in many cases calls for routing around weather, I would say that local, personal, service is very necessary. From my office I can and have always been accorded the patient and friendly service that allows me to safely plan trips. I can do this without calling long distance. On occasion I have found it more advisable to personally visit the station for aid. I have always been afforded the very best cooperation from the personnel on duty. To obtain extended flight information by long distance, often required due to marginal weather, would require several calls leading up to time of departure. A direct line will not serve as a substitute for this, and the time involved in traveling to the airport to use the line would entail many hours of valuable time.

I know well of which I speak concerning remote stations. I have offices in two cities now served by remote, and taking off in marginal weather after obtaining their best weather information is like playing Russian roulette. Approaching a "remote" field for landing is much more dangerous than departing from one. At least we have time to look it over before taxing out, and we can use a little judgment. However, last hour's weather is of little benefit in many cases when approaching for landing.

To further confuse me, the flight service station is being moved when it is needed most. Tuscaloosa is in the process of developing a long-overdue north-south runway. With this dual runway system completed, and with not even a flight service station to guide traffic, I can foresee dangers which make me very uncomfortable. Landing on the present east-west runway in a 90-mile north wind would be much safer than trying to land in the middle of 80 students, each having a different idea of wind direction, drift, compass heading, right-of-way, and runway-in-use after we complete the north-south runway.

I have observed, in regard to our present service station, that pilots respect it as they would a tower. The heavy air traffic, business, pleasure, student, and

commercial, demands such respect and attention. The station personnel are knowledgable, patient, courteous, and dedicated men. Their value cannot be measured in dollars, but it can be measured in lives of local and visiting airmen and passengers.

Fortunately, I have had need for only two forced landings, and without the aid of our station personnel neither could have been safely made. In neither case would I have wanted to place a dollar value on the lives and properties involved, or possibly involved. I do not want the Federal Aviation Agency to place a price tag on these lives and properties of persons involved in Tuscaloosa air traffic. It is my firm hope that the Agency will reconsider the peculiar decision made regarding Tuscaloosa.

GUY E. MOMAN, Sr.

SOUTHERN NATURAL GAS CO.,
AVIATION DEPARTMENT,
Birmingham, Ala.

PAUL H. BOATMAN,
Director, Federal Aviation Agency, Southern Region,
Atlanta, Ga.

DEAR SIR: The proposed remoting of the services of the Tuscaloosa Flight Service Station will pose grave problems for our company.

We use small aircraft in the patrol of our natural gas lines, one of which cuts across the corner of the Tuscaloosa airfield. Our pilots fly at a very low altitude and before entering the Tuscaloosa control zone they are briefed by the Tuscaloosa FSS as to local traffic. Due to the amount of training and local flying at Tuscaloosa, the closing of this advisory will create a dangerous situation.

Again, due to the low altitude at which our pilots fly, there are many times when the weather suddenly deteriorates and they find that they cannot get into Montgomery or Birmingham but many times the weather in Tuscaloosa is above minimums. This weather information cannot possibly be relayed to them by a remote station as there will be no weather observer at the station.

We feel that this move is certainly a backward step and should not be taken in the interest of safety.

Sincerely yours,

WILMER A. IVEY,
Chief Pilot, Aviation Department.

FEBRUARY 13, 1964.

LADIES AND GENTLEMEN: I am concerned with the part of aviation most affected by the closing of the Tuscaloosa Flight Service Station—flight training. As pilots, you know that any factor contributing toward improved flight training is a blessing. Student pilots need all the help they can get. To withdraw the experienced assistance, the professional know-how of a manned aviation facility is a step backward.

Consider the word "remote." That's what the FAA plans to do with the Tuscaloosa Flight Service Station—remote it to Birmingham. This means that a person in Birmingham will answer when you call Tuscaloosa on the radio, a person 50 miles away whom you probably have never seen. Remote means away from here—away from Tuscaloosa. If this happens, Tuscaloosa will be referred to in the future as a "country airport" with little to offer—as in fact it will be. People who fly make an airport good or bad, important or not important. Let's not step backward to a "country airport"—not now—not ever.

Student pilots at Tuscaloosa today can go to the flight service station—alone or in a group—and receive all the information and assistance necessary to plan a safe flight. This includes a firsthand briefing and interpretation of the weather, assistance in preparing a flight plan, information on the use of radio, etc. Experienced professional people will advise him on crosswind conditions—on local conditions pertaining to visibility. This will be firsthand information while they look him in the eye—remote facilities reached only by telephone cannot fully substitute for this.

There have been many instances where a human personal interest in our student pilots has contributed to safety—advice by radio that our peculiar smoke conditions were about to change the airport to instrument flight conditions—

students discouraged from making flights on extremely turbulent days. I have been advised two or three times of changes in wind direction while in the traffic pattern—even on final approach to the runaway. Weather changes are given to students as they occur instead of at a prescribed time.

A bright and enlarged future is forecast for general aviation by aircraft manufacturers, by people who sell and distribute aircraft and by the FAA. This means more flight training for the future—more student pilots who need all of the best help they can get. It means we need increased facilities for safety—not a reduction.

This is not the time to "remote" ourselves backward into insignificance—not if Tuscaloosa is to stay in the aviation business.

JACK FINCH,
Flight Superintendent.

A STATEMENT BY J. B. CARL, AIRPORT MANAGER, VAN DEGRAAF FIELD, TUSCALOOSA, ALA.

Ladies and gentlemen, despite the assurances of the Federal Aviation Agency officials from Washington, we certainly believe that the remote control of the flight service station in Tuscaloosa from Birmingham will be very unsatisfactory; and we are puzzled as to why Tuscaloosa was the only station in Alabama on the list of 42 to be closed. This station has been in operation since back about 1936 or 1937 and has been very instrumental in helping to build cross-country traffic through our city.

Those of us who have had experience with remotely controlled stations know that they cannot possibly render as good service as one that is adequately manned. Certainly no one can criticize our Government in trying to effect economies, but the general aviation pilots feel that this move will be a backward step and should not be done in the interest of safety. There have been many times when the very efficient personnel of our local station, who number 10, have been instrumental in helping pilots to a safe landing. In one instance a doctor from Florida foolishly flying over an overcast was lost and out of gas. One of the FSS personnel, who was himself an accomplished pilot, talked this doctor down through the clouds even though he did not have an instrument rating, and he came out under a 300-foot ceiling and made an immediate landing without power on a broad highway. He and his wife and two children continued on to Texas for their vacation.

The loss of this station will be a serious blow to the University of Alabama, Gulf States Paper Corp., Goodrich Co., our company Dixie Air, the Westinghouse Co. at Reform, and many others too numerous to mention.

It appears that the services of the Federal Aviation Agency are slanted more to the needs of the national air carriers and the military to the detriment of the local service carriers such as Southern and to general aviation. General aviation today flies 10 times as many hours as the scheduled air carriers. The general aviation fleet of private and business airplanes is 40 times the number of the air carrier fleet.

The economies which the FAA seeks to accomplish are very hazy. They claim that no employee will lose his job or a dollar. They will simply be transferred to other stations. The total, according to FAA officials, that will be saved in Tuscaloosa, would be $42,000 per year.

We do not criticize Mr. Thomas and Mr. Thompson who brought us the bad news. They were merely acting on orders from Washington. The Administrator of the Federal Aviation Agency, Mr. Najeeb Halaby, has done a very excellent job since he has been in office and has demonstrated that he is a capable man, but we certainly think that he has been ill advised on this matter.

We people in aviation cannot help but wonder why it is necessary for the FAA to maintain Boeing 707 jets that cost in the neighborhood of $7 million each or why they must have so many very expensive airplanes which they occasionally use in checking radio facilities. Millions of dollars could be saved each year by the use of smaller aircraft that could do the job just as efficiently.

The pilots and planeowners of this country will deeply appreciate any assistance that you and other interested people can give to prevent this facility from being moved.

TUSCALOOSA, ALA., *February 14, 1964.*

Mr. J. B. CARL,
Manager, Van DeGraaff Airport,
Tuscaloosa, Ala.

DEAR SIR: The February 4 announcement by the FAA of their intentions to placet heir flight service station at Van de Graaff Airport on remote operation from their Birmingham facility is a tragic step "backward" for Tuscaloosa as a city, general aviation in this area of Alabama and for each and every pilot using Van DeGraaff Airport.

The FAA announcement that this will not encroach on aviation service or safety standards is a very hollow phrase, otherwise what was the premise for its initial justification. Further, how gullible does FAA expect pilots to be?

As an American taxpayer and pilot, I am definitely interested in our Government operating economically, but by FAA's own admission this will not reduce their total operating costs, instead new costs will be added while service will be reduced to nothing more than navigation. This announcement is part of the old political "shell game" designed to impress people with economy moves for votes only. The purported savings from foreign aid or Khrushchev's wheat deal would not even make a dent.

Please convey my most vigorous protest to the parties responsible for this decision and call on me if in any way I may lend support to obtaining a cancellation of FAA's proposed remote operation of their flight service station at Van de Graaff Airport.

Yours truly,

M. W. WHITE.

DIXIE AIR, INC., *Tuscaloosa, Ala.*

Hon. ARMISTEAD I. SELDEN, Jr.,
Post Office Building,
Tuscaloosa, Ala.

DEAR CONGRESSMAN SELDEN: I was shocked beyond belief to learn of the Federal Aviation Agency's plan to remove the Tuscaloosa Flight Service Station to Birmingham. This decision comes at a time when general aviation is expanding with great strides and needs more and better service from the FAA. Tuscaloosa is one of the heaviest used general aviation airports in Alabama and, as you know, the city is right now planning to greatly expand Van de Graaff Airport to a facility of which not only this city and the great University of Alabama but the whole area of west Alabama can justly be proud.

I have been a pilot for over 20 years both in the military and general aviation; the last 13 years have been spent working in all phases of general aviation. Every day I see the wonderful assistance the personnel of these flight service stations extend to the pilots of their areas. If this personalized service is taken from these pilots, some of whom are very inexperienced, it would be a serious blow to general aviation.

Our great economy is geared to the versatility of our great transportation system of which general aviation will contribute to greatly in the future. To discharge this growth be removing a vitally needed service and placing a price tag on safety is not in the best interest of the people of this country. This great country has always placed a high value on the human life of its people and goes to great extrems to protect its people. The dedicated personnel of the flight service stations save countless lives each year. Economy in Government is fine and good but when economy begins to encroach on safety, it loses its true meaning and places a price tag on safety.

I make numerous instrument departures and approaches and I know the value of having up to the minute accurate information on airport weather and advisory. When I am planning a low visibility approach, I want to know that a very well trained expert took the altimeter setting and gauged the ceiling and visibility. I have had experience with remoted stations all around the country and have found that you just can't get the accurate information a pilot needs for a safe approach. Every pilot will tell you this very same thing. I beg of you, sir, in the interest of safety, to take measures to oppose the order to close these 42 flight service stations.

Very truly yours,

R. A. CARDINAL, Jr., *Vice President.*

AIRCRAFT PAINTING AND FABRIC SERVICE,
February 15, 1964.

Mr. PAUL H. BOATMAN,
Director, Federal Aviation Agency,
Atlanta, Ga.

DEAR SIR: The remoting of the Tuscaloosa Flight Service Station will work a great hardship on me and my employees due to the lack of adequate weather information in Tuscaloosa.

I and one of my employees, Mr. Marvin Hester, operate an aircraft paint and fabric shop in Tuscaloosa. We live in Aliceville and commute by airplane. In the morning we can call the Tuscaloosa station and get the local weather. From this we can determine whether we can fly or not.

It would be impossible for the Birmingham Weather Bureau to adequately advise us on the current weather at a station 60 miles from them and would reduce the effective use of our airplane.

Yours very truly,

A. B. POTTS, *Owner.*

To Whom It May Concern:

As an employee of Dixie Air, Inc., and as the pilot of the powerline patrol for the Alabama Power Co., I object to the remoting of the Tuscaloosa Flight Service Station to Birmingham.

We fly approximately 70 hours a month on this patrol and much of this flying is done in adverse weather conditions. Quite often we are called upon to fly emergency patrols in very bad weather and must get a special clearance out of and into the control zone. This must be obtained from Tuscaloosa Flight Service Station. It will be a delay to us and a hindrance to the power company to have to call a remote station in Birmingham for this clearance.

The flight service station warns us of approaching thunderstorms or icing conditions and gives us the weather of the area we are going to patrol. It will be impossible to get the same weather by telephone that we can get by reading a sequence report and weather map at the Tuscaloosa Flight Service Station.

The Tuscaloosa Flight Service Station also provides us with many other valuable services. Due to the excellent services of this station, our patrol has had a perfect safety record since this patrol was begun 15 years ago. We feel that the remoting of this station will greatly reduce the safety of this patrol and urge that every measure be taken to prevent this occurrence.

DOUGLAS H. SANDERS,
Aerial Patrol Pilot.

FEBRUARY 14, 1964.

Mr. PAUL H. BOATMAN,
Director, Federal Aviation Agency, Southern Region, Atlanta, Ga.

DEAR SIR: It was with extreme displeasure that I learned of your Agency's plans to close its Tuscaloosa facility in the near future. The reasons stated in your release of February 4 seemed inadequate to support such a move.

I am a businessman-pilot, and since I do not make a regular profession of flying, the local flight service has become a doggone good copilot to me. On numerous occasions, I have found it necessary to make sudden trips to such cities as Atlanta, Quincy, New Orleans, as well as many other smaller cities. I cannot always choose my flying weather, hence I rely heavily on help from the local flight service station in making my flight plans. These plans entail several phone calls plus at least one personal visit to the facility. Even if I desired to pay the long-distance phone charges it would be folly for me to assume that the flight service station in Birmingham would know the exact up-to-the-minute weather conditions at Tuscaloosa's Van de Graaff Field.

If one of your FAA flight stations must be removed in this area, it would seem more sensible to remote the station in Birmingham from Tuscaloosa, since Birmingham is already covered by a tower operation. Your release stated that this move was made after exhaustive study. It appears to me that a little more careful thought would have indicated the practicability of remoting Birmingham from Tuscaloosa.

Another statement which I find very difficult to believe is that this is an economy move. When I take into consideration that you are going to place all the local FAA people in other areas and then leave the present equipment installed at Van de Graaff Field, it only takes a person who can add two plus two to see

that there is no economy involved. Now, add to this "economy" the costs of moving these personnel and their families, the addition of some local source for weather and the telephone circuits to operate this remote facility, the man-hours needed to install this new operation, and I find that your "economy" comes right out of my taxpaying pocketbook.

I appeal to the FAA's commonsense and hope that you can find some other means of saving money. Please don't try to save money at the expense of my safety and the safety of the rest of the Tuscaloosa flying population.

Yours very truly,

ARDEN D. MOSER.

STATEMENT OF AIRCRAFT OWNERS AND PILOTS ASSOCIATION

The Aircraft Owners and Pilots Association (AOPA) opposes the FAA's announced program to reduce the number of flight service stations.

Flight service stations constitute a major safety service to general aviation. Over the years they have saved hundreds of pilots and passengers in emergency situations and continue to do so. In addition, they serve as a major source of routine, daily safety service to general aviation users throughout the country. It is significant that 98 percent of all civil aircraft in the United States are general aviation.

In its February 4 announcement, which the FAA made without any prior consultation with the affected user groups, the FAA said this program "will result in annual savings of between $30,000 and $40,000 for each station without any encroachment on aviation service or safety standards."

However, the FAA also informs us that there will be no savings of consequence in manpower during the first year. They also advise AOPA it will cost at least $30,000 to remote each station. Therefore, there can be no savings at all for at least 2 years.

AOPA disagrees emphatically with the FAA contention that neither service nor safety will be jeopardized. Some of the announced locations will lose vital weather service completely; others will be reduced to part-time observations. Detailed in-person preflight briefings will be eliminated. Flight service station personnel, now thoroughly familiar with their local areas, will no longer be available for assistance to pilots requiring inflight emergency services. Further, remoting of these stations will preclude the use of ground-based radio direction-finding equipment already authorized by Congress, for assisting pilots in these local areas. In addition, the FAA has indicated that some of these locations may lose presently authorized instrument approaches.

It is significant that the airlines and the military operate their own elaborate dispatching and weather services. The FAA flight service station is the only source of such services essential to the safety of general aviation operations.

The February 4 announcement lists 42 stations to be discontinued within 12 to 24 months. The FAA also advises that as many as 70 of these stations will be slated for discontinuance by the end of this year.

It is AOPA's position that the flight service station program should be revised so that more of the services essential to general aviation are available at more locations, rather than fewer. The facilities should be located at airports used predominantly by general aviation. They need not be as elaborate and costly as are some present-day stations.

AOPA is filing an official statement on this subject with the FAA. AOPA also recommends to its members that they express any concern they may have to their Senators and Representatives.

Mr. ROBERTS. I assume we would call, Mr. Chairman, these witnesses. There are five. I don't know just in what order they want to appear.

Is Mr. Finch here?

Mr. WILLIAMS. Would it be possible for one of the witnesses to summarize the testimony for the entire group? If you have statements for insertion in the record, we will be glad to receive them; but, as I mentioned a moment ago, we have a deadline. We are going to have to ask the witnesses representing individual stations to limit their testimony to something like 5 minutes.

Mr. ROBERTS. I present Col. Van Brown, chairman of our safety committee, Tuscaloosa.

STATEMENT OF VAN BROWN, CHAIRMAN, TUSCALOOSA, ALA., CITIZENS AVIATION SAFETY COMMITTEE

Mr. BROWN. We have with us Mr. William Partlow, who is seated at the table with me, an attorney and former adjutant general of Alabama. We have also Mr. Jack Finch, flight superintendent of Dixie Air, Mr. Jewell Hooper, who is the fixed-base operator at Columbus, Miss., which is a remoted station; and we have Mr. Gordon Lawless.

Mr. Chairman, in deference to your request, and in the interest of saving time, you have up there our letter and I will omit page 1. I would like to read essentially the remainder of it, sir.

Mr. WILLIAMS. Certainly. We would like you to hit the high points. We are seeking to avoid as much repetition as possible. Of course, your statement will be included in the record in its entirety.

Mr. BROWN. Thank you, sir.

I might mention that I am a military trained pilot. I have flown for a domestic airline for 3½ years, a number of years ago. I flew in the Air Force, and I am now a pilot in general aviation. I work for the University of Alabama. I feel that every flight has to be a planned flight, in the interest of safety. That is why I would like to read in essence what we have in the remainder of our letter to you gentlemen.

Almost every conceivable category of general aviation is based at and is a grateful constant user of the FSS facilities presently available at Tuscaloosa. For example, we have industry represented by aircraft of a papermill complex, a wire-products manufacturer, several concrete-product producers; business concerns, such as builders and contractors, interstate publications, advertising firms; private owner-pilots who are lawyers, real estate operators, and so forth; and numerous other professional men who fly their own aircraft in the furtherance of their business.

We have a distributor and dealer of general aviation light aircraft who is also the fixed base operator. In addition, he provides aircraft charter and rental service, pilot service, powerline and forestry patrol, crop dusting, and he conducts the only FAA-approved flight training programs in west Alabama.

The University of Alabama conducts an all-weather aircraft operation in the discharge of many administrative duties. Regularly scheduled flights to Huntsville provide for necessary liaison with its scientists and faculty at its research institute in that city. The research institute performs vital space research for and works in close cooperation with units stationed at Redstone Arsenal, including Marshall Space Flight Center, NASA, whose director, Dr. Werner Von Braun is a frequent aerial visitor to the Tuscaloosa campus. In addition, distinguished educators, industrialists, and high Government officials visit the university periodically for selected conferences, seminars, and symposiums. For example, less than 3 weeks ago, the Secretary of Commerce, Mr. Hodges, was flown into Van deGraaff Field at night in squall line instrument weather, which required several special observations of ceiling and visibility by Tuscaloosa FSS personnel to insure his safe arrival.

Finally, the university's burgeoning Army and Air Force ROTC flight instruction programs make heavy demands on FSS facilities and services.

Besides general aviation, the Tuscaloosa FSS services daily scheduled air carrier morning, afternoon, and evening flights. Air Force air evacuation hospital aircraft make frequent and periodic flights transporting patients for the Veterans' Administration hospital in Tuscaloosa, and Army fixed and rotary wing aircraft are also frequent visitors who are dependent upon Tuscaloosa's FSS.

In addition to its normal function and services to all aviation, the Tuscaloosa FSS has an outstanding record of saves and assists to pilots in emergency situations. It is conservatively calculated from documented records of these saves that in the past 20 years, aircraft valued at more than $2.3 million have been saved, together with the lives of their pilots and an unknown additional number of crewmembers and passengers, through the vigilance and capabilities of the FSS personnel of this station.

Attached herewith as exhibits are statements from Tuscaloosa representatives of the various categories of general aviation who regularly and frequently utilize the facilities of its FSS. These representatives are members of Tuscaloosa's Citizens Aviation Safety Committee, and all are pilots whose individual experience and training varies from military, commercial, military-commercial, to private flying. All are dedicated to safety in flying and all urge the retention of the FSS facility at Tuscaloosa.

We respectfully invite your attention to the following extracts from the Federal Aviation Agency's own publication, "FAA Air Traffic Activity, Calendar Year 1963," published in March 1964:

Page 4:

An examination of the summary data reveals that during calendar year 1963, most major categories of activity recorded higher levels than in calendar year 1962. Many of these measures reached alltime highs on a calendar year basis. This reflects the development of air traffic and the subsequent increases in FAA facilities. The continued growth in activity of the general aviation segment of the aviation complex contributed markedly to this development. The increased activity in this phase of flying may be explained by the greater utilization of aircraft in the conduct of business, such as transporting executives, sales personnel, and materials, and in the commercial "for hire" flying. Increasing business uses of aircraft are indicated by production trends; thus further gains in general aviation activity may be anticipated.

Page 5:

Flight plans originated at FAA flight service stations continued to increase, and a new annual high was attained.

Page 5:

Calendar year 1963 was a year of significant increases in many of the major categories of aviation activity. Trends toward the greater utilization of turbojet aircraft, the continued growth of general aviation activity, the increased control tower commissionings—all of these measures are reflected in this report.

Our committee is at a loss to reconcile these statements concerning general aviation's continued expansion with the proposed removal of the 42 FSS, including Tuscaloosa's, whose overall services have grown and shared proportionately in the marked increase of general aviation.

Following that, I give a table to illustrate that growth.

36-942—64——13

The number of Tuscaloosa based aircraft has steadily climbed in the past several years from an average of 38 to 55 in 1963. On numerous occasions, as many as 50 additional aircraft are temporarily based at Tuscaloosa. All of these aircraft are users of the services offered by the FSS.

We again respectfully invite your attention to page 217 of the same March 1964 publication of the "FAA Air Traffic Activity," wherein as recently as only 2 months ago a flight service station is defined by the FAA as follows:

Flight service station (FSS).—A facility which provides preflight and inflight service, particularly pilot briefing and flight planning. These services include, but are not limited to, information regarding major typographical [sic—should be "topographical"] features, airways, airports, airport services, mileages, courses, preferential routes, VFR routes, restricted areas, weather trends, and weather phenomena peculiar to the station's area.

We also cannot reconcile this FSS definition with the following statement by Mr. Halaby in his letter to Congressman Selden of March 13, 1964, which relegates the most important, essential functions of an FSS to so-called "ancillary" status:

By way of explanation, a flight service station is an enroute facility which is sited to an air-ground communications requirement rather than to the volume of airport activity. While a station may perform ancillary functions at its particular airport, such as airport advisory services, personalized pilot briefings, and flight plan handling, in many instances weather observations, such functions in themselves do not justify retention of a manned station at any location.

In conclusion, we feel that we cannot compromise with safety of flight, and it is our carefully considered opinion that any lessening of all of the services currently afforded by the Tuscaloosa FSS will invite ultimate disaster in some phase of Tuscaloosa's myriad aviation activities. We urge that the necessary measures be taken to insure the retention of the Tuscaloosa Flight Service Station.

We request that this letter and its attachments be made a part of the permanent records of this hearing.

Mr. WILLIAMS. How many stations are at Tuscaloosa?

Mr. BROWN. One.

Mr. WILLIAMS. If there is no flight service station at Tuscaloosa, and there is not one at Columbus, I understand——

Mr. BROWN. There is not.

Mr. WILLIAMS. I presume Columbus would be remoted from Birmingham, would it not?

Mr. BROWN. We assume so, if we are remoted from Birmingham.

Mr. WILLIAMS. How far is Columbus from Birmingham?

Mr. BROWN. Columbus from Birmingham is a little over a hundred miles, 110 miles. We have estimated we have a quadrilateral-shaped area stretching from Birmingham to Jackson, Miss., which is 255 miles in that direction, and from Mobile to Muscle Shoals in a north-south area of 280 miles. This whole area will be without in-flight service station reporting facilities.

Mr. WILLIAMS. From Birmingham to Greenwood, Miss., and then from Birmingham to Memphis you won't have any stations, will you?

Mr. BROWN. That is correct. Except, if you want to consider Muscle Shoals as a little to the north of the line between Birmingham and Memphis.

I know you are familiar with these, Mr. Chairman, but these are the kind of things that we stand to lose, the face-to-face briefing and

the opportunity for an individual pilot to look over these teletype sequences, most of which come in every hour; those are the station's weather readings. Some come every 6 hours. For instance, here's a sample of an area forecast. We have map prognostication information which the station members put on a chart of the United States to show the location of frontal areas and severe weather warnings.

We have regional airmass and frontal analyses. We have pilot reports of dangerous conditions or unusual conditions or ceilings and tops of overcast. We have light aircraft advisory, which are the salvation, frequently, of some of the smaller aircraft. We have severe weather warnings. We have the typical station sequence, and an experienced pilot depends on these tremendously, as you know, in watching trends to see whether the weather is going up or down in case it is marginal.

We have winds-aloft reports. Here are some more samples of some hourly sequences. I just present there extemporaneously to remind the committee that these are essential things which a trained pilot—and certainly a pilot who is learning to fly—needs and requires.

Mr. WILLIAMS. In case these stations are remoted and you have these vast areas, such as that between Birmingham and Jackson, won't the chief reliance for local weather have to be on pilot reports?

Mr. BROWN. I would say that could be a source. But where they might report to and what station the pilot on the ground trying to plan a flight could call to get these pilot reports, is problematical.

We guess that our station will be remoted to Birmingham.

Mr. WILLIAMS. Mr. Jarman, do you have any questions?

Mr. JARMAN. Yes.

Colonel, how many flight service stations are there in Alabama?

Mr. BROWN. I will have to ask for some help on that. I don't know. Perhaps one of the gentlemen from FAA could answer that.

Mr. JARMAN. We can get that later. Let me ask this. How many personnel are involved in the Tuscaloosa station?

Mr. BROWN. Ten, I believe, plus three technicians who maintain the equipment.

Mr. JARMAN. Do you know what the annual cost is of operating that station in Tuscaloosa?

Mr. BROWN. No, sir. The reason I did not investigate that is because I do not feel that it has a direct bearing on the problem at hand. It has been mentioned several times before, and I would like to emphasize it, I don't think you can put a dollar value on human life. We feel that there is no compromise with air safety.

Mr. JARMAN. I can appreciate your comment on that, but it is possible, of course, that the station could be run with fewer or more personnel and still achieve results. I was curious as to how much of a financial operation it is in one station like Tuscaloosa.

Mr. BROWN. Well, sir; I would not attempt to presume upon the duties of the FAA on that. All I know is that these people are working 24 hours a day, 7 days a week, and they are without doubt the finest group of people in a profession that you could find anywhere.

Mr. JARMAN. Roughly, how wide a radius does the Tuscaloosa station service serve?

Mr. BROWN. It all depends on how high the aircraft is, so that the VHF and UHF transmission can reach out. I would say 150

miles in all directions for high-flying aircraft, and perhaps a hundred miles or even 75 or 50 miles, depending on the altitude. For instance, not long ago there was a T–33 who had a flameout over Jasper, 65 miles north of us. He was at 35,000 feet. Thanks to the vigilance and the preparedness of our flight service station people, they brought him into Tuscaloosa on a dead-stick landing. All he did was blow a tire. He was a wonderful pilot.

Mr. JARMAN. How long have you had a flight service station in Tuscaloosa?

Mr. BROWN. I believe in the late 1930's, sir. It has been there more than 20 years, I am sure.

Mr. JARMAN. Thank you.

Mr. WILLIAMS. Mr. Devine.

Mr. DEVINE. I have no questions, Mr. Chairman.

Mr. WILLIAMS. Colonel, thank you for your testimony.

Mr. ROBERTS. Mr. Chairman, I would like to endorse what the witness has said. I am very familiar with that situation, too, having been at school at the University of Alabama for some 5½ years. I simply would like to commend Colonel Brown for his statement and for the appearance of the witnesses here in opposition to the removal of the station.

Mr. BROWN. Thank you. If there are any questions that anyone would like to ask of any of the witnesses?

Mr. WILLIAMS. I don't believe so.

Mr. BROWN. Thank you, Mr. Chairman and members of the committee, and Mr. Roberts.

(Mr. Brown's complete letter along with a statement by Mr. W. D. Partlow, Jr., follow:)

CITIZENS AVIATION SAFETY COMMITTEE,
Tuscaloosa, Ala., May 12, 1964.

CHAIRMAN AND MEMBERS OF AVIATION SUBCOMMITTEE,
House Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

GENTLEMEN: On the morning of February 5, 1964, at Van de Graaff Field, Tuscaloosa, Ala., at a hastily called meeting of all available pilots of the area, two representatives of the southern regional office of the Federal Aviation Agency (FAA) informed those assembled that the FAA was consolidating the local Tuscaloosa Flight Service Station (FSS) with a nearby station, and that its functions would thereafter be remoted from that station, possibly Birmingham. After much discussion, the group was told that the decision was firm on the contemplated action, which definitely would take place within the next 12 to 24 months. (No mention whatsoever was made of a possible substitution at Tuscaloosa of manicom or AID, as discussed at today's hearing by FAA Administrator Mr. Halaby.)

As a result of this previously undisclosed FAA pronouncement of February 5, pilots and the aviation community of Tuscaloosa banded together to ask for reconsideration of this decision to curtail its FSS services, enlisting the assistance of the entire Alabama congressional delegation in support of this endeavor, and strongly requesting in a February 25 letter to Mr. Halaby that he retain the complete services and full personnel complement of the FSS at Tuscaloosa. Similar requests and objections from other areas losing FSS's resulted in the hearings now underway.

Almost every conceivable category of general aviation is based at and is a grateful constant user of the FSS facilities presently available at Tuscaloosa. For example, we have industry represented by aircraft of a papermill complex, a wire products manufacturer, several concrete product producers; business concerns, such as builders and contractors, interstate publications, advertising

firms; private owner-pilots who are lawyers, real estate operators, etc.; and numerous other professional men who fly their own aircraft in the furtherance of their business.

We have a distributor and dealer of general aviation light aircraft who is also the fixed base operator. In addition, he provides aircraft charter and rental service, pilot service, powerline and forestry patrol, crop dusting, and he conducts the only FAA approved flight training programs in west Alabama.

The University of Alabama conducts an all-weather aircraft operation in the discharge of many administrative duties. Regularly scheduled flights to Huntsville provide for necessary liaison with its scientists and faculty at its research institute in that city. The research institute performs vital space research for and works in close cooperation with units stationed at Redstone Arsenal, including Marshall Space Flight Center, NASA, whose Director, Dr. Wernher von Braun is a frequent aerial visitor to the Tuscaloosa campus. In addition, distinguished educators, industrialists, and high Government officials visit the university periodically for scheduled conferences, seminars, and symposiums. For example, less than 3 weeks ago, the Secretary of Commerce, Mr. Hodges, was flown into Van de Graaff Field at night in squall line instrument weather, which required several special observations of ceiling and visability by Tuscaloosa FSS personnel to insure his safe arrival.

Finally, the university's burgeoning Army and Air Force ROTC flight instruction programs make heavy demands on FSS facilities and services.

Besides general aviation, the Tuscaloosa FSS services daily scheduled air carrier morning, afternoon, and evening flights. Air Force air evacuation hospital aircraft make frequent and periodic flights transporting patients for the Veterans' Administration hospital in Tuscaloosa, and Army fixed- and rotary-wing aircraft are also frequent visitors who are dependent upon Tuscaloosa's FSS.

In addition to its normal function and services to all aviation, the Tuscaloosa FSS has an outstanding record of saves and assists to pilots in emergency situations. It is conservatively calculated from documented records of these saves that in the past 20 years, aircraft valued at more than $2.3 million have been saved, together with the lives of their pilots and an unknown additional number of crew members and passengers, through the vigilance and capabilities of the FSS personnel of this station.

Attached herewith as exhibits are statements from Tuscaloosa representatives of the various categories of general aviation who regularly and frequently utilize the facilities of its FSS. These representatives are members of Tuscaloosa's Citizens Aviation Safety Committee, and all are pilots whose individual experience and training varies from military, commercial, military-commercial, to private flying. All are dedicated to safety in flying and all urge the retention of the FSS facility at Tuscaloosa.

We respectfully invite your attention to the following extracts from the Federal Aviation Agency's own publication, FAA Air Traffic Activity, Calendar Year 1963, published in March 1964:

Page 4: "An examination of the summary data reveals that during calendar year 1963, most major categories of activity recorded higher levels than in calendar year 1962. Many of these measures reached alltime highs on a calendar year basis. This reflects the development of air traffic and the subsequent increases in FAA facilities. The continued growth in activity of the general aviation segment of the aviation complex contributed markedly to this development. The increased activity in this phase of flying may be explained by the greater utilization of aircraft in the conduct of business, such as transporting executives, sales personnel, and materials, and in commercial 'for hire' flying. Increasing business uses of aircraft are indicated by production trends; thus further gains in general aviation activity may be anticipated."

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Our committee is at a loss to reconcile these statements concerning general aviation's continued expansion with the proposed removal of the 42 FSS, includ-

ing Tuscaloosa's, whose overall services have grown and shared proportionately in the marked increase of general aviation.

Following is a breakdown for the past 2 years of the activity of the Tuscaloosa FSS, as shown in FAA publications, FAA Air Traffic Activity:

Calendar year	Aircraft IFR	Contacted VFR	Flight IFR	Plans filed VFR	Pilot briefs	Airport advisories
1962	2,689	29,168	4,119	4,253	4,449	18,625
1963	2,791	30,743	4,510	3,738	4,836	21,237

The number of Tuscaloosa-based aircraft has steadily climbed in the past several years from an average of 38 to 55 in 1963. On numerous occasions, as many as 50 additional aircraft are temporarily based at Tuscaloosa. All of these aircraft are users of the services offered by the FSS.

We again, respectfully, invite your attention to page 217 of the same March 1964 publication of the FAA Air Traffic Activity, wherein as recently as only 2 months ago a flight service station is defined by the FAA as follows:

"*Flight service station (FSS).*—A facility which provides preflight and in-flight services, particularly pilot briefing and flight planning. These services include, but are not limited to, information regarding major typographical (sic—should be 'topographical') features, airways, airports, airport services, mileages, courses, pereferential routes, VFR routes, restricted areas, weather trends, and weather phenomena peculiar to the station's area."

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"By way of explanation, a flight service station is an en route facility which is sited to an air/ground communications requirement rather than to the volume of airport activity. While a station may perform ancillary functions at its particular airport, such as airport advisory services, personalized pilot briefings and flight plan handling, in many instances weather observations, such functions in themselves do not justify retention of a manned station at any location."

In conclusion, we feel that we cannot compromise with safety of flight, and it is our carefully considered opinion that any lessening of all of the services currently afforded by the Tuscaloosa's FSS will invite ultimate disaster in some phase of Tuscaloosa's myriad aviation activities. We urge that the necessary measures be taken to insure the retention of the Tuscaloosa Flight Service Station.

We request that this letter be made a part of the permanent records of this hearing.

W. V. BROWN,
Chairman, Citizens Aviation Safety Committee.

STATEMENT OF W. D. PARTLOW, JR., TUSCALOOSA, ALA.

Mr. Chairman and members of the committee, my name is W. D. Partlow, Jr. I am a practicing attorney with offices in Tuscaloosa, Ala. I am a private pilot, having received my first private pilot's license in 1956. My business and that of some of my clients requires me to travel generally through the Southeast, which I do largely by my own aircraft. During the past year, I have flown approximately 30 hours each month. Being the father of five children, I am naturally interested in the maximum safety I can obtain in flying.

My experience with remoted stations has not been good. Only recently, I was forced to turn back because of the impossibility of obtaining knowledge of bad weather conditions until encountered at a station now remoted but formerly active. I refer to the Evergreen, Ala., station now remoted from Mobile, Ala. Soon after this station was remoted, an inexperienced young pilot and his newly married bride were killed in bad weather at Evergreen on a flight from Pensacola, Fla., to Montgomery. Had this station been then active, there is no doubt but that this pilot would have been briefed on weather conditions there instead of only the conditions at Pensacola and Montgomery.

I do not believe a price tag can be put on safety, and when the safety factors for small plane pilots afforded by an active flight service station are removed because of a comparatively small financial saving, the indication is manifest that the FAA is not properly light plane oriented. Each year these light planes are becoming more and more a business necessity rather than a toy or luxury. It is considerd that the pilots and passengers using such aircraft are as much entitled to safety as pilots and passengers of commercial airlines.

In addition to the above example of the undesirability of remoted stations, the following safety factors are lost when a station is remoted:

1. A weather map for pilot study now provided at all active flight service stations.
2. The teletype and sequence reports for pilot study and discussion with flight service personnel in determining the movements of weather conditions.
3. Face to face briefing which telephone service can never replace.
4. Airport advisories as to conditions at the station and surrounding terrain.

It is my considered judgment that the continued policy of remoting flight service stations will either sharply curtail private flying or result in many unnecessary deaths and injuries, particularly among young and inexperienced pilots. The interest of this committee in this pressing problem is highly commendable and deeply appreciated. Private pilots, and the overwhelming majority of all pilots, feel that what we need is more active flight service stations, and less remoted dummies. Thank you for your attention.

Mr. WILLIAMS. Our colleague from the State of Texas, Hon. Omar Burleson, is next.

STATEMENT OF HON. OMAR BURLESON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. BURLESON. Mr. Chairman and members of the committee, I read something in the paper the other day which indicated that every Member of Congress who came here was telling you how important it was to maintain the station located in his congressional district. I must say that I would not deny that I am in that some position. At the same time, I do feel perhaps we are in a unique position by reason of having a vital military installation involved. This fact will be developed in the testimony of the witness I shall introduce.

This installation is at Mineral Wells, Tex., located in my congressional district. Mr. Jarman, and perhaps the chairman, may know where that might be. I would not expect Mr. Devine or Mr. Sibal or any of the others to know. But it does involve a helicopter training establishment. This committee knows very well that is a highly important mission at this particular time. I would not have to develop it for you to be well aware of that situation.

First, I would like to introduce, Mr. Marshall Hamilton, of Mineral Wells, president of Mineral Wells Chamber of Commerce, and Mr. Grady Elder, manager of the chamber of commerce. To testify is Mr. Chester Robert Upham, chairman of the committee on aviation.

Thank you very much, Mr. Chairman. I personally appreciate the interest your subcommittee is taking in this vital and important question.

Mr. WILLIAMS. Thank you, Mr. Burleson.

Mr. Upham, I notice you have a prepared statement that covers some five pages. If you do not mind, we can permit your statement to be included in the record in its entirety. Would you mind covering the high points in the interest of expediency?

STATEMENT OF CHESTER ROBERT UPHAM, JR., CHAIRMAN, AVIATION COMMITTEE, MINERAL WELLS CHAMBER OF COMMERCE, MINERAL WELLS, TEX.

Mr. UPHAM. Yes, sir.

Mineral Wells has as its nearest reporting stations, Wichita Falls, 90 miles to the north; Abilene, 100 miles to the west; Waco, 100 miles to the southeast; and Fort Worth, 50 miles to the east. By closing the Mineral Wells Flight Service Station there will be a large void left in the weather observations on the teletype circuits.

As was pointed out, the flight service station serves directly many private aircraft based at Mineral Wells. It serves the U.S. Army Primary Helicopter School at Fort Wolters. There are 37 industries at Mineral Wells which use the facility, 2 directly affecting aviation—Mitchell Industries, one of the largest manufacturers of auto pilots, and Electra Manufacturing Co., manufacturing aircraft components.

Not only will we lose the weather observations which are necessary for instrument flights, terminals use, but we will lose the airport advisory services and the personal briefing.

Mineral Wells is situated in a peculiar position geographically. It lies on a line that marks the transition of the dry west Texas airmasses and the moist gulf coast airmasses.

Abilene is generally west of a line of low ceilings and visibilities that occur along a stationary-type system that is often prevalent in this area.

The conditions at Fort Worth and Dallas are often below VFR conditions.

More often than that, Abilene at this same time has clear systems.

I have picked two sequences a day for the first 8 days of May before coming and I have tabulated those in the last page of this statement and I would like to point out that, during those 8 days when we had two sequences a day, Abilene had no instrument weather, Fort Worth had six sequences of absolute IFR weather, and one condition which would close Meachman Field, that was May 4 at 9 o'clock central time. There were only two sequences when conditions were better than 2,500 feet.

Dallas had five sequences of actual IFR weather and only two sequences better than 2,500.

In contacting Mr. Walt Schoen, the chief dispatcher of Trans-Texas Airways, and Mr. Newland, chief dispatcher of Central Airlines, they both advised that approximately 350 to 400 times a year the two airlines used Mineral Wells as an alternate. Of course, an alternate can only be designated when you have a sky ceiling and visibility observations. These two dispatchers plus a third from a large major airline in Dallas advise that the Mineral Wells weather is most important to them in timing the passage of these conditions, these frontal passages and overcast transitions through the area.

The U.S. Army Primary Helicopter School at Fort Wolters is planning to integrate into an instrument flying school which will require more flight service from the flight service station. The derogation of safety was pointed out in a letter of March 13, 1964, by

the Army representative, the FAA Southwest Region, to the commanding general of the 4th Army, and I quote:

The U.S. Army Primary Helicopter School objection to the discontinuance of the manned Mineral Wells, Tex., Flight Service Station by the Federal Aviation Agency is valid. A definite flight hazard will be created within the Fort Wolters training complex if accurate, timely weather reproting and aircraft advisory service are not provided.

The U.S. Army estimates that in order to replace the services lost through the closing of the Mineral Wells Flight Service Station they will have to increase their expenditures some $35,000 to $40,000 per year.

Mr. WILLIAMS. Where did you get that information, Mr. Upham?

Mr. UPHAM. Colonel Gonsett asked for this budget and the 4th Army told him to defer it until after the station was closed.

Colonel Gonsett is the fort commander.

Mr. WILLIAMS. Do you have that in a letter or memorandum of any type?

Mr. UPHAM. No, sir; I do not. I was advised by him that he made the request for the fiscal years 1964 and 1965 and since there were 18 months to 2 years until the closing of the station, it was rejected.

Mr. WILLIAMS. I see.

Mr. DEVINE. I notice in your statement, Mr. Upham, you say the FAA feels it will save $40,000 a year by closing Mineral Wells. Your information would indicate that it would cost nearly that much so there would be no economy involved here at all if your figure is correct.

Mr. UPHAM. That is correct. I would also like to point out that in this change that the Army would be able to retain the services for their use which not necessarily would coincide with general aviation.

The Weather Bureau indicated to me that they would install equipment if they could find someone to man it at no cost to the Government other than the cost of installation of the equipment to have a SAWRS (supplementary airways weather reporting system) and that this would be available to the airlines.

Again, general aviation is not being served except at the convenience of the others, yet there is no saving, from what we can determine.

We have offered an alternate plan based on the point that the personal interview or personal briefing was not important. We have been told by FAA that you can do as well on the phone and that is what we were being given.

We have suggested that the facility at Meacham Field be remoted to the Mineral Wells area. There are presently seven points—that is, towers and Weather Bureau facilities—that are observing weather in the Fort Worth-Dallas area. By removing the flight service station which is not observing weather at this time and remoting it to the Mineral Wells office, Fort Worth would still have its adequate weather facilities at the seven points. They would have control towers at all major airports.

Mineral Wells would retain its weather reporting facilities. They would have their aircraft advisory service. The flight safety at Mineral Wells would be maintained and the distance between the flight service stations would be more proportionate; that is, Dallas to Mineral Wells would be 70 miles, Mineral Wells to Abiline, 98 miles,

and the Fort Wolters would have the service that they need and general aviation would have the service they need.

Mr. WILLIAMS. Do you think if that were done there might be a possibility that there might be a delegation here from Fort Worth?

Mr. UPHAM. We feel that we should offer an alternate solution rather than just being negative on the closing of Mineral Wells.

Mr. WILLIAMS. Does that conclude your testimony?

Mr. UPHAM. That concludes my statement.

(Mr. Upham's entire statement follows:)

STATEMENT OF CHESTER ROBERT UPHAM, JR., MINERAL WELLS, TEX.

My name is Chester Robert Upham, Jr. I reside at 1301 Northwest Seventh Avenue, Mineral Wells, Tex. I am a private pilot, instrument and multiengine rated with a total flying time of approximately 2,000 hours. I am appearing before this committee as an individual and as chairman of the Aviation Committee of the Mineral Wells Chamber of Commerce. I am appearing in connection with the recent announcement that the Mineral Wells Flight Service Station is scheduled to be closed and the VOR facilities remoted to Forth Worth.

The Mineral Wells FSS serves directly private aircraft based at Mineral Wells, the U.S. Army Primary Helicopter School located at Fort Wolters, the traffic terminating at Mitchell Industries, one of the largest manufactures of autopilots, and Electra Manufacturing Co., a second company based at Mineral Wells Airport because of the aviation facilities. There are, of course, several companies owning aircraft in our city, however, they are not located at the airport and as dependent on fly-in customers

The following weather reporting stations are the nearest stations: Wichita Falls, 90 miles north; Abilene, 100 miles west; Waco, 90 miles southeast; and Fort Worth, 50 miles east. Elimination of the FSS at Mineral Wells will leave a large void in the weather observing pattern.

While the proposed FAA plan will leave Mineral Wells with some services—i.e., a telephone line to the local exchange, remoted tranceiving equipment at the present station, etc.—the following aviation services will be lost:

1. Weather observation on the teletype circuit.
2. Airport advisory service with respect to altimeter settings, ceiling and visibility, winds, runway in use, air traffic that is observed but not in radio contact, and many other reports such as helicopter training patterns, etc.
3. The personal individual briefing.

Mineral Wells is situated in a peculiar position, lying on a line that often marks the transition of the dry west Texas air masses and the moist gulf coast air masses. Abilene is generally west of the line of low ceilings and visibilities that occur along the stationary-type system in this area. The conditions at Fort Worth and Dallas are often below VFR (visual flight rules) conditions and are, at times, below IFR (instrument flight rules) minimums.

As an exhibit, I would like to offer various weather sequences for the Abilene, Mineral Wells, Fort Worth, and Dallas observations. These sequences were obtained at the Mineral Wells Flight Service Station at random over the first 8 days of May. I picked up two reports per day as a sample and these hourly reports were not the only reports but merely a normal sampling during this period. Please notice that Abilene had no instrument weather on any of the observations. Fort Worth had six sequences of absolutely IFR conditions, one condition (May 4 at 0900C) when the field was closed, and there were only two sequences when the conditions were better than 2,500-foot broken clouds. Dallas had five sequences of actual IFR conditions and only two sequences better than 2,500-foot broken clouds.

I have personally contacted Mr. Walt Schoen, the chief dispatcher of Trans-Texas Airways, and Mr. H. M. Newland, the chief dispatcher of Central Airlines. They both advised that the Mineral Wells Airport is listed as the alternate airport on many of their instrument fight plans. They estimated the two systems listed Mineral Wells as an alternate terminus 350 to 400 times per year. Without the weather observations that are currently being made by the Mineral Wells FSS, these air carriers would have to use a different alternate destination.

These two chief dispatchers and a dispatcher for a major airline (which uses jet and turboprop equipment too large to land on the Mineral Wells Airport) advised that the Mineral Wells weather is most important to them in scheduling their flights and timing frontal passage and overcast transitions.

As an instrument pilot, I would be very reluctant to attempt to guess the weather at Mineral Wells using the weather at stations other than Mineral Wells. Further, I would be very reluctant to make an instrument approach to the FAA minimums without current local altimeter setting, wind velocity and direction, and a ground observation of the cloud heights and visibility.

I have been advised that the U.S. Army Primary Helicopter School is planning an instrument flying school for Fort Wolters which will require more flight service from the FSS. The derogation of safety was pointed out in a letter of March 13, 1964, by the Army representative, FAA, Southwest region, to commanding general, 4th Army. "The U.S. Army Primary Helicopter School objection to the discontinuance of the manned Mineral Wells, Tex., Flight Service Station by the Federal Aviation Agency is valid. A definite flight hazard will be created within the Fort Wolters training complex if accurate, timely weather reporting and aircraft advisory service are not provided."

I have been advised that the FAA contemplates an annual saving of $40,000 per year by the closing and remoting of the Mineral Wells FSS. I have been advised by the FAA that the basic responsibility of all weather reporting is with the U.S. Weather Bureau and that they will make necessary weather observations, although I have been unable to determine from the U.S. Weather Bureau exactly what this means.

I have been advised that Mr. Lieurance, Director of Aviation Weather Service, in a letter to Mr. Roger Flynn of the Airline Transport Association indicated that some sort of SAWRS (supplementary airways weather reporting service) would probably be worked out. This is a system where a nonpaid volunteer is trained by the Weather Bureau to observe weather observations in connection with his other occupation. This works well when an airline uses an employee for this service, but this does not seem practical since there are no airlines at Mineral Wells. I am sure a line boy for the airport operator would not qualify. The Weather Bureau would not assure me that the weather observations would be placed on the teletype circuits.

The U.S. Army estimates that in order to replace the services lost through the closing of the Mineral Wells FSS, they will have to increase their expenditures some $35,000 to $40,000 per year, or an amount approaching the saving expressed by the FAA. The Army will not, therefore, lose its services to the same extent that others will.

It is apparent that the closing of the Mineral Wells FSS will cost the taxpayer, through the Defense Department and Weather Bureau, an amount equal or more than the projected saving. Further, while the U.S. Army will furnish themselves the services they need at the times they need it, the general aviation flyer will be deprived of vital services which will result in a more hazardous operation in the vicinity of Mineral Wells. We have received communication from interested private flyers from Graham, Breckenridge, Olney, Stephenville, and Jacksboro expressing their concern over the loss of the FSS.

We have offered an alternate plan proposing the closing of the Fort Worth FSS and remoting it to Dallas or Mineral Wells. The situation that would exist would be enumerated as follows:

1. The Fort Worth area would still have adequate weather facilities at Meacham Field, Carswell Air Force Base, and Greater Southwest Airport.
2. The Fort Worth area would still have tower control of the above major airports.
3. Mineral Wells would have weather reporting facilities.
4. Mineral Wells would have airport advisory service.
5. Flight safety at Mineral Wells would be maintained.
6. Distances between FSS and weather reporting points would be more proportionate; i.e., Dallas to Mineral Wells, 70 miles; Mineral Wells to Abilene, 98 miles.

In summary, no overall saving can be seen, and flight safety and flight utility of the users of the Mineral Wells Flight Service Station will be greatly reduced if the Federal Aviation Agency closes the Mineral Wells facility.

The latter can be avoided without loss of service by closing the Fort Worth facility and leaving the Mineral Wells station. The net saving to FAA should be the same since one flight service station is being closed.

SELECTED WEATHER CONDITIONS
May 1964

Date	Time	Abilene	Mineral Wells	Fort Worth	Dallas
1	0900C	1400 ◎ U ◎	1700 ◎	700 ⊕	1200 ◎
1	1100C	4000 ◎	1600 ◎ 2300 ⊕	500 ⊕	1400 ◎
2	0200C	Clear	900 ⊕	2500 ◎	Clear
2	0900C	Clear	Clear	1500 ⊕	600 ◎
3	1100C	Clear	Clear	3000 ◎	Clear
4	0900C	Clear	1500 ◎	300 ⊕	400 ◎
4	1200C	Clear	Clear	1600 ⊕	1500 ⊕
5	1100C	2800 ◎	2000 ◎	1200 ◎	1200 ◎
6	1100C	/-(High thin)	2000 ◎	600 ◎	900 ⊕
6	1200C	/-	3500 ◎	600 ◎ 1200 ◎	800 ◎
7	0900C	12000 ◎	1000 ⊕	600 ◎ 1100 ◎	1000 ⊕
7	1100C	12000 ◎	1400 ⊕	900 ⊕	1200 ◎
8	1000C	12000 ◎	1400 ◎	700 ◎ 1800 ◎	1500 ◎
8	1100C	/-	1400 ◎	700 ◎	1500 ◎

The above times are Central Standard Time.

The cloud heights are the reported bases of clouds in feet above ground.

The cloud cover symbols are as follows: ◎ Scattered ◎ Broken ⊕ Overcast

Mr. WILLIAMS. Are there any questions? Mr. Jarman.

Mr. JARMAN. How many people do they have in the Mineral Wells station?

Mr. UPHAM. There are eight operators and three or four maintenance personnel. The maintenance people will not be removed because there will be actually more maintenance with remoted facilities but there will be men who will be moved.

Mr. JARMAN. Is the station operated on a 24-hour basis around the clock?

Mr. UPHAM. Yes, sir.

Mr. WILLIAMS. Mr. Devine.

Mr. DEVINE. Mr. Upham, is Mineral Wells 50 miles west of Fort Worth?

Mr. UPHAM. Yes.

Mr. DEVINE. How many miles from Dallas?

Mr. UPHAM. Seventy nautical miles. The 50 was statute miles.

Mr. DEVINE. The removal of the flight service station from Mineral Wells, if I read the figures correctly, would make a 150-mile gap in one direction and 180-mile gap in the other.

Mr. UPHAM. That is correct.

Mr. DEVINE. That is all, Mr. Chairman.

Mr. WILLIAMS. Mr. Sibal.

Mr. SIBAL. No questions.

Mr. WILLIAMS. Mr. Upham, thank you very much.

Mr. BURLESON. Mr. Chairman, may I make a brief additional statement?

Mr. WILLIAMS. Yes.

Mr. BURLESON. I thank the committee very much.

(The statement referred to follows:)

ADDITIONAL STATEMENT OF HON. OMAR BURLESON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Chairman and members of the subcommittee, you have heard the testimony of Mr. Chester Robert Upham, Jr., chairman of the Aviation Committee of the Mineral Wells, Tex., Chamber of Commerce, in connection with the closing of the flight service station and the VOR facilities remoted to Fort Worth.

I am not qualified to comment on the technical aspects of this plan, but it appears that Mr. Upham has done so adequately. My purpose now is to emphasize the fact that Fort Wolters has a vital mission in our national defense. It is here that primary training is given to helicopter pilots. Army officials say it is necessary that the flight service station and related facilities be maintained at Mineral Wells, or else install a similar system on the base at Fort Wolters.

In addition the Army Primary Helicopter School is planning instrument flying instruction, which will require more flight service from the flight service station, rather than less.

In simple terms, the Federal Aviation Agency estimates an annual saving of about $40,000 by closing and remoting of the Mineral Wells Flight Service Station. The Army estimates that it will cost approximately this same figure to install facilities at Fort Wolters, necessary for them to carry out their mission. It is obvious that no savings will be effected to the taxpayer, but rather a disruption of the continuity of service will result.

I trust this committee will make its strongest recommendation to maintain this station in Mineral Wells, Tex. Again, I make no pretense of being knowledgeable of the technical aspects involved but it seems to me that if consolidations of these services are to be made, facilities at Fort Worth should be moved to Mineral Wells instead of the other way around. I believe facts in the matter will justify this contention.

Thank you gentlemen.

Mr. WILLIAMS. Looking around, I notice Mr. Everett.

Suppose you call your group, Mr. Everett.

STATEMENT OF HON. ROBERT A. EVERETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. EVERETT. We have with us today the Honorable F. E. Pitts, the mayor of Dyersburg, Jerry Williams, chamber of commerce, Mr. William Braese, manager of the airport at Dyersburg, who will file a statement and make a few brief remarks.

STATEMENT OF WILLIAM BRAESE, AVIATION MANAGER, DYERSBURG, TENN.

Mr. BRAESE. Most of the points were previously covered by the witness from Tuscaloosa on the actual facts. We obtained our facts from primarily the same source. The facts I point out to you now will be condensed from this file you have there, the folder.

The point I would like to bring out is that the Dyersburg Flight Service Station serves 589 pilots in the area. We have 225 aircraft based within a 50-mile radius. This includes parts of Missouri, Arkansas, and Kentucky, and is due to our location in the northwest corner of the State. We are actually serving a tristate area. We

serve 11 airports and each one of these airports and people from these areas have sent letters to our airport there advising their concern over removal of the station.

Now, the figures I obtained from the same records, aircraft activity report published and certified by the FAA as being the true thing, shows that Dyersburg, with a complement of 9 personnel, performed 7,612 services per man. Memphis, with a complement of 28 personnel, performed 5,571 services per man. Nashville, with a complement of 14 personnel, served 8,289 services per man.

Now, when you look over these figures, you find out that our little station there is doing more service to general aviation than either Memphis or Nashville, which are the two nearest and biggest airports and flight service stations.

So, when you consider the total value spent and the services rendered in comparison to Memphis and Nashville, we show more service per man which, in itself, is a form of economy.

Student pilots in our future in aviation can take a written exam at this point. Our location puts us 77 miles. We have a map on the back of the last page which gives our location in reference to these different airports that I will call out.

As you notice, we are 77 miles from Memphis, 43 miles from Jackson, and 150 miles from Nashville. Now, for our future pilots in aviation to travel this excess distance as well as maintain their jobs in industry while they are in this training program, they would have to travel in excess of 77 miles in one direction or 42 miles in the other. This program was instituted by the FAA as a good thing, now it will be abandoned.

This is the point that I feel and several other people have voiced this concern that this is the most important part. In the past 3 years and 5 months, 21 aircraft and 40 persons have been guided to safety by personnel, not by remote radio, not by anything else, but the man on the ground, the man standing right there, giving the weather conditions as he sees them. An average of 5 aircraft and 10 persons per year.

Now, I do not see how they could figure the saving of a total of $18,000 which they propose our station will save them can overcome this safety factor. It is a value well above the $18,000.

I have also enclosed our actual case histories taken from our local flight service station records. They are on file. I cited the last 3 years only. There were 14 aircraft and save incidents similar to this one previous to the record that you have there.

Pilot briefings, which was more or less brought out by the witness from Tuscaloosa, we have the same feeling on this subject that this is a vital and necessary form in today's high-speed traffic. The faster we travel, it seems the more definite conclusive information we need due to the fact that we are traveling from one weather condition to another so rapidly that you have to have up-to-the-minute weather conditions at the airport where you are intending to land or en route weather. So, in order to plan a safe trip, you have to have this all figured out on the ground.

The pilot briefings or information relative to a proposed flight, person to person or by phone, shows Dyersburg to be fifth in the entire southern region, in fifth place, mind you, out of these 46 stations in

the southern region. For example, Memphis in 1963 had a total of 25,502 briefings. Atlanta, Ga., one of our main hubs, 22,903. In Dyersburg with 13,908. As you can see, the pilots themselves select the smaller, more thorough briefing points.

Your airport advisories are an additional service rendered and counted in the FAA reports. This is a local airport advisory condition as to the weather and is of great importance to the pilot at the destination to alert him to the local traffic conditions which can only be done from that particular point. It cannot be done from a point 70 miles away where a man is dealing with several thousand aircraft and he can't remember what airplane called in and said he was going to land at that particular airport at that particular time.

Mr. WILLIAMS. Do you have airline services at Dyersburg?

Mr. BRAESE. No, sir, we are working on trying to establish one. Another point that we want to bring out is the fact that if they remove the personnel from Dyersburg we will also lose our instrument landing system or emergency field procedure which will eliminate a safety factor. Our nearest instrument approach is to the west, would be Tulsa, Okla. That is a pretty good stretch from Dyersburg. The next one to the east is Nashville, 50 miles away. You pull out the middle plug, you have an awful long span from Tulsa to Nashville. All the other stations to the north of us are remoted into Cape Girardeau. That leaves a place in there for no provision made for any ground reporting weather or river weather, as we call it in that territory, which every pilot in that area is aware of. You can run from one front into another and out again and into another one in that area due to the dampness of the river and change in the air temperature and everything right above.

Mr. WILLIAMS. You even have lakes in that area.

Mr. BRAESE. We have lakes in the area and swamps.

What we are concerned with mainly, gentlemen, is the safety of our pilots involved and our future pilots.

This point I brought out just a little while ago.

If Dyersburg is remoted, we will have a loss in an area 150 miles along the river known to differ weatherwise 60 percent of the time with both Memphis and Paducah. Paducah is our nearest point to the north which, on the map, is 85 or 87 miles to the north and Memphis 77 to the south. When you pull out the middle, there you have a 150-mile span. Most of your trouble occurs at low altitude, for the average pilot trying to go from point to point, he does not care to go 18,000 to 20,000 feet where he can reach on beyond with the radio. He is concerned on how far he can go at 2,000 feet and the actual conditions at that airport when he is there, not what it was an hour ago or what it might be an hour later.

The instrument landings will not be approved without this station. For our main airways which pass over our station this is removing a safety factor from all aircraft throughout the United States. If you pull that airport out there they cannot land there which includes your transports which were capable of landing. We have 4,000-foot runways, concrete. We have an omni station, a regular landing procedure. But it is only good when you have personnel on the ground to advise these pilots coming down in an emergency situation as to the actual weather conditions at that airport at the time of landing. It

is not something you will have time to call back and have them look up to see what they have forecast for that area. They want to know right then what is the weather condition right there. The decision that has to be made in a split second or minute cannot be delayed because, if you do delay, it may mean a misapproach or missed landing, which might involve lives if you delay it that long.

In summary, we cannot see where any major economy can be realized under these conditions. The evidence we have presented clearly shows that the removal of the personnel from the Dyersburg Flight Service Station will create a hazard to general aviation in this area as well as eliminate the many services supplied to agriculture and industry, industrial interests.

It is the responsibility of your committee to see that this hazard in justice to northwest Tennessee does not take place, and I would like to include general aviation.

If you gentlemen care to ask any questions on this chart, I believe I have noted the mileage and distance from the different points.

Mr. WILLIAMS. Thank you, sir.

(The formal statement follows:)

FACTS PERTINENT TO THE NECESSITY OF MAINTAINING THE PRESENT FLIGHT SERVICE STATION IN DYERSBURG, TENN.

Dyersburg Flight Service Station serves 589 pilots and 225 aircraft based within a 50 mile radius. This includes parts of Missouri, Arkansas, and Kentucky, and is due to our unique location.

We have two major airways, one going north and south, Victor 11 and Victor 11W, from Memphis to Paducah, and the other east and west, Victor 140, from Tulsa to Nashville. Most of our weather moves in from the northwest or southwest. Walnut Ridge is the nearest westerly reporting point, soon to be remoted. Then no weather reports will be available.

Eleven airports served by Dyersburg have voiced their concern to us and to their Congressmen. These people will not be served by a foreign exchange.

Using figures published by the FAA Air Traffic Activity Report, we find that Dyersburg, with a personnel of 9 men, rendered a total of 68,511 services or an average of 7,612 per man. Memphis, with a total of 28 men, rendered a total of 156,010 services or an average of 5,571 per man. Nashville, with a total of 14 men, rendered a total of 102,048 services or an average of 7,289 per man. Therefore, if the workload from Dyersburg were shifted to Memphis, and it remained the same, Memphis would be incapable of handling this extra burden and would soon require the expansion of its facilities.

When you consider the dollar value spent and services rendered in comparison to Memphis and Nashville, we show more service per man, which in itself is a form of economy.

Other facts and figures show the following additional services not in the official report but nevertheless are rendered:

(1) Student pilots, our future in aviation, can take their written examinations at the flight service station. One hundred and fifty-five have done so in 18 months. This program was initiated by FAA to encourage future pilots.

(2) The Dyersburg Flight Service Station gives notice of approaching storm warnings to local aircraft owners enabling them to protect their aircraft from wind or hail damage—23 times in 1963—a definite service of immeasurable value.

(3) In the past 3 years and 5 months, 21 aircraft and 40 persons have been guided to safety by personnel at the station, an average of 5 aircraft and 10 persons per year—a value well above the $18,000 supposedly to be saved by remoting the Dyersburg facilities. The following is a detailed record of these incidents:

February 6, 1961: Time 0004Z. Type C–172. Aircraft lost. Landed safe at the Dyersburg Airport 0055Z. Three persons on board. Total time used, 51 minutes.

March 30, 1961: Time 0100Z. Type C–172. Aircraft lost. Landed safe at the Dyersburg Airport 0112Z. Two persons on board. Total time used, 12 minutes.

July 18, 1961: Time 0018Z. Type C–172. Aircraft lost and low on fuel. Landed safe at Dyersburg Airport 0108Z. Twenty minutes fuel on board. Three persons on board. Total time used, 50 minutes.

November 14, 1961. Time 2336Z. Type PA–22. Aircraft lost. Landed safe at Dyersburg Airport 0016Z. Two persons on board. Total time used, 25 minutes.

November 13, 1961: Time 2226Z. Type BN–35. Lost. Landed safe at Dyersburg 2300Z. Total time used, 33 minutes.

December 31, 1961: Time 1655Z. Type BN–35. Aircraft lost and unable to see forward due to ice on windshield. Landed safe at Dyersburg at 1722Z. Two persons on board. Total time used, 27 minutes.

February 18, 1962: Time 1505. Type PA–22. Aircraft lost and student pilot on top of clouds, all area within a hundred miles below VFR mins. Aircraft also low on fuel. Pilot talked down through clouds to make a safe landing Dyersburg Airport at 1620Z. One person on board. Total time used, 1 hour and 15 minutes.

June 19, 1962: Time 1528. Type C–140. Lost. Landed safe at Dyersburg Airport at 1544Z. One person on board. Total time used, 24 minutes.

March 13, 1963: Time 2045Z. Type ARCA Champ. Lost. Made safe landing Dyersburg Airport 2115Z. One person on board. Total time used, 30 minutes.

May 13, 1963: Time 0148Z. Type C–172. Lost. Aircraft located and steered to the Union City Airport for a safe landing at 0230Z. Two persons on board. Total time used, 36 minutes.

June 23, 1963: Time 1658Z. Type C–182. Lost. Landed safe at Dyersburg Airport at 1730Z. Three persons on board. Total time used, 32 minutes.

July 5, 1963: Time 1810Z. Type PA–28. Lost and low on fuel. Located and steered to the Humboldt, Tenn., Airport where a safe landing was made at approximately 1905Z. One person on board. Total time used, 55 minutes.

August 24, 1963: Time 2311Z. Type C–120. Lost and low on fuel. Located and steered to the Humboldt, Tenn., Airport and landed safe at approximately 2325Z. One person on board. Total time used, 14 minutes.

October 31, 1963: Time 1740Z. Type C–172. Lost. Made safe landing at Dyersburg Airport 1804Z. Two persons on board. Total time used, 24 minutes.

November 5, 1963: Time 1750Z. Type T–34. Lost on top of clouds. Not instrument rated. Talked down through the clouds and made a safe landing Dyersburg Airport 1816Z. Two persons on board. Total time used, 26 minutes.

November 11, 1963: Time 1847Z. Type PA–24. Lost. Made a safe landing at Dyersburg Airport 1919Z. Two persons on board. Total time used, 31 minutes.

January 18, 1964: Time 1935Z. Type PA–28. Lost. Made a safe landing at Dyersburg Airport, 2010Z. Three persons on board. Total time used, 26 minutes.

January 22, 1964: Time 2234Z. Type PA–22. Lost. Aircraft located in the vicinity of Jackson, Tenn., and given a steer to the McKeller Airport for a safe landing at approximately 2315Z. Two persons on board. Total time used, 45 minutes.

February 21, 1964: Time 1920Z. Type BN–35. Lost. Pilot orientated and proceeded on to Indianapolis at 1935Z. On board unknown. Total time used, 15 minutes.

March 10, 1964: Time 1838Z. Type PA–28. Lost. Made safe landing at Dyersburg Airport at 1857Z. Four persons on board. Total time used, 20 minutes.

April 8, 1964: Time 1833Z. Type C–140. Student pilot. Lost. Made safe landing Dyersburg Airport 1901. One person on board. Total time used, 28 minutes.

(The above saves of lost aircraft is on file at the Dyersburg, Tenn., Flight Service Station along with 14 other saves that were recorded in previous years.)

(4) Pilot briefings or information relative to a proposed flight, person to person or by phone, shows Dyersburg to be in fifth place in the entire southern region of 46 such stations. For example, Memphis in 1963 had a total of 25,502 briefings, Atlanta, Ga., 22,903, and Dyersburg, 13,908. As you can see, the pilots themselves select the smaller stations for information.

(5) Airport advisories are an additional service rendered and counted in th FAA reports which consists of alerting pilots to the local traffic conditions as well as wind and runway most suitable for landing.

36–942—64——14

Listed below is a complete report on annual totals of services rendered by the Dyersburg Flight Service Station dating back to the fiscal year 1960:

Fiscal annual totals

	1960	1961	1962	1963	1964 (10 months)
Contacts	14,920	16,510	16,831	17,578	18,090
Flight plans	1,204	3,602	6,316	9,265	8,419
Pilot briefs	(1)	3,966	7,355	12,013	10,295
Condition messages	(1)	300	412	431	389
Airport advisories	(1)	3,772	6,316	7,748	9,488

[1] Unavailable.

Fiscal year 1964

	July	August	September	October	November	December	January	February	March	April
Contacts	1,708	1,866	1,662	2,103	1,480	1,520	1,997	1,916	1,853	1,985
Flight plans	917	1,055	849	1,023	763	714	766	775	783	774
Pilot briefs	1,258	1,382	1,334	1,233	835	762	798	893	896	904
Condition messages	60	55	41	49	22	31	35	32	31	34
Airport advisories	804	943	826	1,087	655	802	1,239	1,042	1,001	1,089

The proposal by the FAA is not clear cut or defined as to what and how we will be served. The only suggestions made were to install a foreign exchange line to Memphis open to any public phone. We can see nothing but confusion as a future possibility.

What will happen to our present and future pilots who only fly local and cannot afford high-priced radio equipment and rely on information received from our present flight service station?

General aviation composes more than 80 percent of the air activity. We should render the services to them where needed. Most stations remoted were for lack of use. This is not the case with Dyersburg. The areas in which other stations have been remoted are still served by a control tower and weather station, such as Chattanooga to Crossville, Tenn.

We feel the FAA should encourage the use of its facilities and put them where they are needed and will do the most good.

If Dyersburg is remoted, we will have the loss of a weather reporting point in an area 150 miles along the river known to differ weatherwise 60 percent of the time with both Memphis and Paducah.

Weather has been a contributing factor to many accidents. These may have been prevented by a more thorough understanding of the weather conditions by the pilots or the expert advice of the flight service station personnel.

The present area weather conditions and traffic are vital to this area and cannot be given from 40 to 70 miles away.

The instrument landings would not be approved without the station, therefore eliminating a definite safety factor for all aircraft in distress.

In summary, we cannot see where any major economy can be realized under these conditions. The evidence we have presented clearly shows that removal of the personnel from the Dyersburg Flight Service Station will create a hazard to general aviation in this area as well as eliminate the many services supplied to agricultural and industrial interests. It is the responsibility of your committee to see that this hazardous injustice to northwest Tennessee does not take place.

Mr. JARMAN. How many people are in the Dyersburg Flight Service Station?

Mr. BRAESE. We have nine personnel, sir. In Memphis, we have 28. In Nashville, 14.

Mr. JARMAN. How many stations in Tennessee altogether?

Mr. BRAESE. I estimated 11 that I could remember. I may be wrong by one or two. Our flight service station has been there for the past 20 years as near as I can recall the figure, since 1946 or before that.

Mr. JARMAN. Thank you.

Mr. WILLIAMS. Mr. Devine.

Mr. DEVINE. You say that the annual cost for these nine people is $18,000.

Mr. BRAESE. No, sir. The proposed saving. The FAA estimates the total savings by remoting this station will be $18,000. But they do not take into consideration that we are not serving just our area there. We are serving 11 airports in Arkansas and Missouri. By extending a trunkline or foreign exchange phone line to our town, they are eliminating 11 other airports in that area that will not have this service. Therefore, if you extend trunklines or interconnecting phone lines to Dyersburg, you have this needless expense to go across the river to get to the nearest weather reporting point. Now, their nearest weather reporting point is Cape Girardeau or Memphis. We have a military installation there that depends on Dyersburg for flight plans and so forth that would have to be cabled straight on through and into Memphis.

Mr. DEVINE. How far east of the river are you?

Mr. BRAESE. We are about 18 miles east of the river.

Mr. DEVINE. About everybody who has testified here thus far—perhaps it is not unusual, it seems to me—everyone who has testified so far has unusual weather conditions at their particular flight service station. I notice here that in this list you have compiled of the last 3 years, it seems a lot of folks get lost in Tennessee.

Mr. BRAESE. It is not our folks, sir.

Mr. DEVINE. Is this a normal situation here or is this normal in all parts of the country?

Mr. BRAESE. In the basic points of navigation, 9 times out of 10 you find that the people who are lost have either taken off from airports without these facilities—now, this is what I have found and I have no actual proof to substantiate it, but in talking to the people, they left on marginal weather conditions, waited until they got airborne to find out what the weather was ahead because it would cost them 35 or 40 or 60 cents or a dollar and a half or something to make a long-distance phone call.

Mr. DEVINE. Then they have to be talked down.

Mr. BRAESE. They get there and would be committed into flying and could not return. Now, if they had the material available, even as much as a teletype machine at their airport where they could read the sequence, each pilot is trained to read the sequence and summarize his own weather so that he can conduct that flight safely, that would be of great assistance. It is hard to say whether the program will work unless the pilots use it. Most of the cases we have on record would be change of weather. In other words, a pilot would be destined to go from one airport to another. At the time he takes off from this airport, you more or less have to guess the weather, you have to go along with the weatherman, you have to look at these different charts in the surrounding area and come to your own conclusion as well as the weatherman's.

Mr. DEVINE. It gets down to judgment?

Mr. BRAESE. That is right. You have to base your flight or planning on the trends in weather. The only time that you will go wrong is when you get inclement returns or omit some that would have a bearing on that particular flight.

Mr. DEVINE. Thank you.

Mr. WILLIAMS. Mr. Sibal?

Mr. SIBAL. No questions.

Mr. WILLIAMS. I don't believe I have any questions.

We thank you very much for your presentation.

Mr. BRAESE. Thank you, sir.

Mr. WILLIAMS. I see our colleague, the Honorable William Henry Harrison, of Wyoming.

I believe you have witnesses you would like to introduce, Mr. Harrison?

STATEMENT OF HON. WILLIAM HENRY HARRISON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WYOMING

Mr. HARRISON. Thank you, Mr. Chairman.

In the interest of saving time, I would like to submit my statement in opposition to the closing of the Sheridan, Wyo., Flight Service Station.

I might say that I am a resident of Sheridan and because of that I know of the surrounding territory which is mountainous and rough.

The Sheridan Flight Service Station is the only one in the northern one-half of the State of Wyoming.

Mr. WILLIAMS. That covers quite a bit of territory, too.

Mr. HARRISON. It covers a lot of territory and a lot of rough territory. I think it is necessary that the station be retained.

(The statement referred to follows:)

STATEMENT OF WILLIAM HENRY HARRISON, A REPRESENTATIVE AT LARGE FROM THE STATE OF WYOMING

Mr. Chairman, I very much appreciate the opportunity to testify here today before you and your committee concerning the announced plans of the Federal Aviation Agency to close certain flight service stations as they affect the State of Wyoming of which I have the honor to be the Representative at Large.

The State of Wyoming is directly affected in that the flight service station at Sheridan, Wyo., would be closed and the services presently provided at Sheridan would have to be handled by remote facilities.

While I strongly believe that our Federal agencies and departments and the Congress should economize whenever it is possible to do so, it is my firm conviction that the elimination of the flight service station at Sheridan, resulting as it would in the loss of vital service and safety factors, would be false economy.

This opinion is shared wholeheartedly by aviation interests in Wyoming, including particularly the private operators in a large geographical area which is served by the Sheridan Flight Service Station. Both the Wyoming State Aeronautics Commission and the Wyoming Air National Guard have officially communicated with the Federal Aviation Agency, urging the retention of the station at Sheridan.

As experienced pilots familiar with the conditions and characteristics of the area, they contend that it would be impossible for a remote facility to provide the necessary instant weather, weather advice, lost aircraft procedures and the many flight services to either IFR or VFR traffic at Sheridan.

This can be demonstrated by the fact that Sheridan is situated on the eastern slope of the Big Horn Mountain Range in Wyoming and the area is therefore subject to sudden and rapidly-changing weather conditions. I am quite familiar

with the weather situation in that area because Sheridan has been my home for more than 30 years.

The nearest remote facility would have to be located at Casper, which is 132 miles away, or at Worland which is 74 miles away and situated on the opposite side of the Big Horn Mountain Range. In a marginal weather situation, a pilot would have to ask Casper for an up-to-the-minute reading on weather conditions and advice; Casper in turn would have to ask the weather bureau at Sheridan, and the information would then have to be relayed back to the pilot. Precious minutes could be lost in the process, and it could mean the difference between safety for the pilot and his passengers, or disaster.

The Sheridan Flight Service Station last year handled more than 15,000 plane contacts, including 10,000 items of the airport advisory service which I am told would be discontinued entirely if the station is eliminated. According to FAA file data, there were eight documented cases of flight assistance of an emergency nature last year.

Strictly from a dollars and cents standpoint, the economies to be effected by the elimination of the flight service station at Sheridan would not be nearly so great as they have been represented to be. FAA estimates a savings of $40,000 per year can be made by closing the flight station, shifting some of the personnel to other flight service stations and transferring the remainder to the U.S. weather bureau at Sheridan. Since no personnel are being eliminated, no actual savings are being made in this respect—salaries are simply being transferred from one account to another. Taking into account the three new weather bureau salaries which would result at Sheridan, the salary of the additional man added to the Casper Flight Service Station, plus the monthly charges for the VOR and FSS control lines needed to meet minimum requirements, it would appear that the net savings per year would total less than $3,000. In addition there would be the installation cost of approximately $35,000 for the remoting station. This would mean that it would take approximately 12½ years to break even, assuming that all costs remain the same.

Mr. Chairman, I hope your committee will take steps to see that the Sheridan Flight Service Station and others in similar circumstances be retained for the vital services they provide and for the safety and protection of the growing number of people and their increasing activities in the field of private aviation.

Mr. HARRISON. I have with me today from Wyoming, Mr. Bill Riley, who is chairman of the Wyoming Aeronautical Commission, and Mr. Jim Fulkerson, of Gillette-Campbell County Airport served from the Sheridan station. Then I have Mr. Marvin Stevenson, who is the director of the Wyoming Aeronautical Commission, who will do the talking for us, and we would like to have consent of the committee to submit additional statements later, because they do not have a prepared statement at this time.

Mr. WILLIAMS. The record will be kept open for a reasonable length of time.

STATEMENT OF MARVIN W. STEVENSON, DIRECTOR, WYOMING AERONAUTICS COMMISSION, CHEYENNE, WYO.

Mr. STEVENSON. Mr. Chairman, in order to make what I have to say clearer, I would like to submit to the members some maps of Wyoming so that I think they would have a little better idea of what I am talking about. I am not sure you are all aware of the great State of Wyoming and how it lies, but we do have quite a bit of it extending on end.

Basically, there are seven flight service stations in the State of Wyoming. Five of these serve a VOR facility directly. All other VOR facilities are either remoted or in the case of Worland, we do have a flight service station without a VOR facility at the field. The area is 97,000 square miles and it is served by these seven stations, and

we would like to guard each and every one of them zealously because we think they are imperative to the safety of aviation within the State.

My department is responsible for the search and rescue and the accident investigations in the State and we are monetarily affected by anything that causes an additional hazard and, of course, we all agree that the value of human life we cannot evaluate, but in money alone, in taxpayer money, and it is all the same money, we represent a lot of lives to run a search. A search costs the State and the taxpayer in the neighborhood of $300 per hour.

Now, I would like to point out to the committee that the northern half of Wyoming is already particularly destitute of any type of aid and if we were to remote Sheridan to Casper, which is the plan as we have received it, we would leave the entire northern half or an area of about 50,000 square miles without any manned facility. There would not be a facility with manned personnel below latitude 42–45 north. This area serves a great many aircraft. It serves one scheduled airline. Western Airlines—excuse me, two scheduled airlines, Western Airlines and Frontier Airlines. Actually, the Sheridan facility serves only Western.

We prepared from FAA's plan to remote the Sheridan flight service station some figures based on their plan, the yearly cost of the remote facility will cost about $52,000 a year. This is for the remote lines based on the $3 per mile per month that the telephone company has assured us it would cost.

The present personnel salary which would be saved by the remoting of this facility is $54,750 a year.

This would result in approximately $3,000—it is not quite that much—savings per year, and the cost of the installation itself, using FAA's figures, the remote installations I am referring to, would cost about $35,000 initially.

If we are going to just talk money, it would take us about 12 years to break even at the best.

This savings which is minimal would certainly not reflect good budget planning, in our estimation, at this particular facility.

Our chief concern, I must admit, is not in this particular savings. We think the loss of flight safety and the fact that there is no instant weather communication, that the pilots who fly into this area, and I fly into it daily, would be left without adequate weather support, that is instant weather, without the additional information that it is impossible to get from any mechanical device to make safe flight, and particularly in such mountainous areas.

I know everyone has referred to unusual weather. I doubt that any weather exists that is not unusual. But I am sure that in all of these areas, we experience quick and rapid changes that a sequence prepared even 30 minutes earlier is practically worthless to make the flight decision that is necessary as to whether or not I should fly this area.

We will submit in our formal testimony the actual mechanical saves, all of the mechanical devices that you might want to rely on. But I think that for the purpose of this hearing, we would be of more benefit to the committee with an off-the-cuff presentation.

We hope that the maps we have given you will point out exactly what we are talking about.

I believe that most of the technical information would be better in written form.

I would like to put myself open to any questions that the committee wants answered rather than to waste your time with a lot of technical information.

Mr. WILLIAMS. Thank you, sir. Mr. Jarman?

Mr. JARMAN. Is there a station at Jackson Airport?

Mr. STEVENSON. There is not. We are asking for a VOR facility there. There is no station at the Jackson Airport.

Mr. JARMAN. At present there are five stations in Wyoming?

Mr. STEVENSON. There are presently actually seven manned stations. One of those maps might not be quite up to date. There is a manned station at Worland, which is not a VOR installation, but merely a manned station there.

There is the manned station at Rock Springs, at Rawlins, at Laramie, at Cheyenne, and at Casper, and at Sheridan presently.

I think you will find this is seven. The rest are remote facilities.

Mr. JARMAN. How many personnel are in the Sheridan station?

Mr. STEVENSON. Seven. It would require some additional people in the Weather Bureau to man the station as the present plan calls for.

One of the things that I thought might be of interest to the committee and I would like to submit it is that in a study made by our commission, we find that in those hours between 10 o'clock at night and 6 in the morning, the number of movements of aircraft within the State of Wyoming is very, very small. We might suggest as an alternate proposal, if you are going to try to simply make this thing come out with an adding machine, that we might reduce our personnel on those late watches and save more money and get more done with our present facilities.

Mr. JARMAN. From the Jackson Airport, to what station would they look for their flight information?

Mr. STEVENSON. General aviation would have to call by long-distance telephone to Idaho Falls or Rock Springs, both facilities looking on the opposite side of large and tall mountain ranges. I am not talking about little mountains but 12,000, 13,000, 14,000 feet.

Mr. JARMAN. The Rock Springs station would be far removed from the flight conditions in an area like Jackson Airport.

Mr. STEVENSON. The weather that you receive from Rock Springs would probably be of some use in your future flight planning but as far as getting out of Jackson Hole with a pilot who had no other information, I think the passenger is crazy to get in the airplane.

Mr. JARMAN. Thank you.

Mr. WILLIAMS. Mr. Devine.

Mr. DEVINE. I have no questions, Mr. Chairman, other than the fact that I am acquainted with Mr. Harrison's State. Years ago, I was in Government service and Wyoming was part of that district. So I have some knowledge of the vast areas, in Cheyenne, Medicine Bow country, Pinedale, and the Jackson Hole country. I see the need for more, rather than less, flight service stations in that section.

Mr. STEVENSON. At the present time, we requested for three more facilities that we think are vital to the area. The losing of one right now we think would be real bad planning.

Mr. DEVINE. That is all, Mr. Chairman.

Mr. WILLIAMS. Thank you, sir.

I don't have any questions to ask. I do have this comment to make. I think if there is any place in the world where pilots need plenty of information, it would be in the Rocky Mountains.

I congratulate you on having a very attractive chart.

Mr. STEVENSON. Thank you, sir.

(The prepared statement of Mr. Stevenson follows:)

STATEMENT OF MARVIN W. STEVENSON, DIRECTOR, WYOMING AERONAUTICS COMMISSION

My name is Marvin W. Stevenson. I reside in Cheyenne, Wyo., and I am director of the Wyoming Aeronautics Commission. I have served in this capacity since June of 1960 and I have been associated with the commission since July of 1957. Previous to my appointment as director, I served as safety and enforcement officer for the Wyoming Aeronautics Commission.

The Wyoming Aeronautics Commission appears at this hearing to protest the remoting of services at the Sheridan flight service station and the removal of the flight service station and the removal of the flight service station personnel now serving the aviation public at that facility.

The State of Wyoming encompasses an area of approximately 97,000 square miles. The State is served by seven manned flight service stations. The State of Wyoming has within its borders, several of the higher mountain ranges which are a part of the entire Rocky Mountain section. While these mountains are beautiful to look at and are a tourist attraction because of the scenery and attendant summer and winter sports, dude ranching, and both summer and winter recreational activities of all types, they do present an added hazard to the navigation of aircraft. Such mountain ranges are always so-called weather breeders with their many upslopes which cause mountain fogs and with the altitude above sea level which always brings quick mountain storms and snow practically all seasons of the year. This mountainous terrain also produces turbulence which is their usual weather and is not unusual weather in any sense. Therefore, such terrain and flight conditions require manned flight service stations so that the pilots and the aircraft flying in this area can receive the many services provided by flight service stations such as the instant weather advice as to how the terrain should be flown, location of facilities and landmarks, lost airplane procedures, etc., to accomplish safe flight within the State.

The Wyoming Aeronautics Commission is responsible for search and rescue within the State of Wyoming and the assistance received from such manned facilities is invaluable in performing this vital role and service to the aviation community.

The State of Wyoming and the Wyoming Aeronautics Commission feel that the seven manned flight service stations now in the State of Wyoming are all extremely important to this flight safety and several additional facilities may be required both in the navigational field and the weather reporting field.

When you compare Wyoming, areawise, to other regions, and particularly the eastern portions of the United States, you find that our flight service stations service many more square miles of area than those in the more thickly populated East. Yet, the very nature of the airplane makes it interstate in character and the services provided in Wyoming are not basically there to service Wyoming pilots but rather to serve all segments of aviation over the entire United States. The removal of such service from this area is a jeopardy to flight safety for all pilots.

If the Sheridan flight service station is removed, it will leave the entire northern half of Wyoming without a manned flight service station serving a navigational facility. This is an area of approximately 50,000 square miles with two large and high mountain ranges—the Absaroka Range of the Rockies on the west and the Big Horn Mountains on the east. Sheridan, Wyo., is situated within 20 miles of the highest peak (Cloud Peak, 12,420 elevation) of the Big Horn Mountains.

For the information of the committee, we have prepared and attached to this testimony, an estimated yearly cost for the remoting of the Sheridan flight service station to Casper.

We would like to thank the committee for their interest in this matter and should any additional information be desired from the Wyoming Aeronautics Commission, please feel free to call upon us.

Minimum requirements to remote Sheridan Flight Service Station to Casper

(1) A VOR line from Sheridan to Casper, 160 miles, at $3 per mile per month	$5,760
(2) 1 VOR remote line from Crazy Woman to Casper, 135 miles, at $3 per mile per month	4,860
(3) 1 Sheridan flight service station control line, 160 miles, at $3 per mile per month	5,760
(4) 1 foreign exchange line, Sheridan to Casper, flat rate of $300 per month	3,600
(5) 3 additional weather bureau personnel at Sheridan, GS–9's, at average yearly salary of approximately $8,000 per year	24,000
(6) 1 additional flight service personnel at Casper at GS–9 at approximately $8,000 per year	8,000
Total	51,980
7 flight service personnel stations at Sheridan, with an approximate salary for these 7 at $54,750 per year	54,750

NOTE.—This results in approximately $3,000 per year. FAA's estimate of the cost of installation of equipment necessary to remote the flight service station at Casper is $35,000. If we could only save $3,000 a year and this assuming that the yearly cost would remain the same on the above items, it would be at least 11 years before we could break even on this plan.

STATE OF WYOMING AERONAUTICS COMMISSION,
Cheyenne, May 20, 1964.

Hon. JOHN BELL WILLIAMS,
House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN WILLIAMS: The Wyoming Aeronautics Commission and the flying public who use the Sheridan flight service station strongly protest the recent order to remote the Sheridan flight service station along with 41 other such stations throughout the United States.

It must be remembered that the FAA Act of 1958 and its predecessor, the CAA, were set up to control and assist all areas of air traffic for only one basic reason—that of safety.

With the removal of live personnel from these stations, many necessary activities will not be available or will be seriously curtailed, such as airport advisories, lost airplane assists, actual pilot briefing, instant weather advisories, and many other activities too numerous to mention, that can be handled only by live personnel at the station.

In the case of Sheridan, by remoting this station there will not be a manned flight service station from Casper, Wyo., north to Billings, Mont.—a distance of approximately 250 miles—and from Rapid City, S. Dak., west to Idaho Falls, Idaho—a distance of approximately 500 miles. Or to look at it another way, there will not be any flight service station personnel in the whole northern half of Wyoming and extreme southern Montana, that is, not any serving a navigational aid.

We feel that this will impair the safe flight of not only the local citizens but also of the transient general aviation pilot. Our area is the beginning of the high mountain-low valley country of the West and many instant weather problems arise in this area both winter and summer that a remoted station would not be able to handle.

It is our belief that this committee should make every attempt to see that the role of the flight service station of FAA be updated so as to include in its regulations the many duties and services they have been performing for the general aviation pilot that may not have been included in the original act.

We whole-heartedly concur with the Federal Government to reduce unnecessary spending where and whenever possible, but we feel that the operation of flight service stations is a most necessary and important function of Government for the safety of the flying public and should not be curtained where a life might be at stake.

We would like to impress upon the committee that the general aviation pilots need all of the flight service stations now in operation to conduct their flights

safely. The military has its operations officers, the airlines have their dispatchers, and the general aviation pilot has only flight service stations for the planning and accomplishment of his flight safely.

We must agree that many routine duties of the flight service station can be handled by a remoted station, but when an emergency arises with a flight in the station's area, only live personnel at the station involved can handle the situation promptly and safely. A delay of only a few minutes for necessary information may mean disaster.

Respectfully submitted.

WILLIAM L. RILEY, *Chairman.*

Mr. WILLIAMS. We have J. Russell Tuten from the State of Georgia. He was here yesterday.

You were hit pretty hard down there, weren't you, Mr. Tuten?

Mr. TUTEN. Yes, sir.

STATEMENT OF HON. J. RUSSELL TUTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Mr. TUTEN. Mr. Chairman, I appreciate your hearing me again. I shall again submit my short statement in writing and briefly tell you that this is a vital service to us and we are one of the several, apparently, who have a very unusual situation in our particular section. I know very little about flying conditions but I do come from an area which has two thriving communities in it. It is dependent largely on air traffic.

I bring with me today two men who are qualified to give you some of the vital reasons why we need to retain this service. I am pleased at this time to introduce to you Hon. W. Quealy Walker, president of Dixie Plant & Varnish Co., Inc., a manufacturing plant, and one of our important industries. Dixie Paint & Varnish owns its own plane. Mr. Walker is a member of the chamber of commerce, an outstanding citizen who knows the needs of the community and is a licensed pilot of 20 years' experience.

I also respectfully request that you hear Hon. F. A. Sam Baker, president of Golden Isles Aviation Corp., a veteran pilot of 35 years' experience, all of which has been spent in Glynn County, Ga. He has been a flight instructor for better than 25 years and has been in the aviation business in Glynn County for over 25 years. He has been manager of the Brunswick Municipal Airport since its inception in approximately 1947. He is an appointed flight examiner for Federal Aviation Agency. During World War II, he was operations officer for an antisubmarine base and was responsible for flight safety.

Mr. Chairman, after these men have testified, I would like to submit for your files the results of a recent hearing in Brunswick, Glynn County, Ga., under the direction of Mr. Boatman. At this time I will turn the mike over to the Honorable Qualey Walker for whatever statement he sees fit to make.

(Congress J. Russell Tuten's statement follows:)

STATEMENT BY HON. J. RUSSELL TUTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Mr. Chairman and members of the Interstate and Foreign Commerce Committee, please accept my gratitude for this privilege. I appear to protest the closing of the flight service station in Brunswick, Ga.

As we all know, flight service stations constitute a major safety service to general aviation. Over the years they have saved hundreds of pilots and passengers in emergency situations. In addition, they are a major source of routine, daily safety service to the commercial and private users throughout the country.

Because of its geographic location, Brunswick and Glynn County, Ga., are dependent upon air transportation. The increasing volume of air travel in this area brought about by a healthy economic growth justify the continuance of the facility. Most of the locations where the stations are to be closed will lose vital weather service completely, others will be reduced to part-time observations. The commercial airlines and the military operate their own elaborate dispatching and weather services. The FAA flight service station is the only source of such service essential to the safety of general aviation operations. These stations must be there to provide pilots with information if general aviation is to be properly and safely served.

There has been a tremendous industrial growth in Glynn County for the past 15 years and the services rendered by this station are vital to the area. Its discontinuance would be extremely unfortunate. The saving involved would by no means compensate for the loss of service and the possible loss of lives. Some of these services are emergency assistance to aircraft, pilot weather briefing, flight plan program, search and rescue coordination, handling and distribution of weather, radio dissemination of weather, and many others.

I strongly feel that the FAA should do its part to cooperate with the Congress and the President in balancing the budget. However, I do not feel that impairment of air safety methods is the most logical way to effect economies in our Government.

In the interest of time, I shall submit my statement and ask that you hear two men who are qualified to furnish the technical knowledge you need. I am pleased to introduce the Honorable W. Quealy Walker, president, Dixie Paint & Varnish Co., Inc., a manufacturing plant and one of our important industries. Dixie Paint owns an airplane. Mr. Walker is a member of the chamber of commerce and an outstanding citizen who knows the needs of the community. He is a licensed pilot with 20 years of experience.

I respectfully request that you also hear Hon. F. A. (Sam) Baker, president, Golden Isles Aviation, Inc., a veteran pilot with 35 years experience, all of which has been spent in Glynn County. He has been a flight instructor for better than 25 years and has been in the aviation business in Glynn County over 25 years. He has been manager of the Brunswick Municipal Airport since its inception which was approximately 1947. He is an appointed flight examiner for the Federal Aviation Agency. During World War II, he was operations officer for an antisubmarine base and was responsible for flight safety.

I wish to submit for the record a transcript of the proceedings of a public hearing held in Brunswick May 1, 1964, under the direction of Mr. Paul H. Boatman, Acting Director, FAA, in Atlanta.

STATEMENT OF W. QUEALY WALKER, PRESIDENT, DIXIE PAINT & VARNISH CO., INC.

Mr. WALKER. Thank you, Congressman Tuten, and thank you, gentlemen, for allowing us to come here. We do not want to take too much of your time.

I come as a private citizen representing my company and many other companies in our area that operate private planes.

For your information, we have one airline serving our area with one flight south a day and that is at night and our turn around flight which lands in the middle of the day with an early flight to Atlanta.

We operate in an area of approximately 700-mile radius from Brunswick. In order to service our business, our particular company is required to operate our plane approximately 70 hours per month. Of course, we are only one of the companies there. The Brunswick Pulp & Paper operates a plane, and I would guess that they operate even more than we do. The Sea-Land Co., plus a hotel, which is an internationally known resort, depends very largely on the facilities of this airport because of the lack of transportation in and out of our area. Our railroad is 18 miles away.

As I say, we have one airline coming in there occassionally you might say. We have the largest seafood processing company in the world that operates out of there and they are constantly operating charter planes for this service.

Our weather, again I will say, is quite unusual but I will not go into that because it will be covered in this report.

The main point I would like to make in my statement, and I think possibly the most important recommendation for keeping this facility open, is a statement that was made by Capt. Vic Hughes, who is a Delta Airlines pilot but was not speaking for Delta. Mr. Hughes was speaking for the Air Line Pilots Association out of Chicago and I would like to read his statement. Mr. Hughes said:

> We have one major problem here in Brunswick and I might state now that I understand that we have got to close some 42 flight stations in this country. As far as the Air Line Pilots Association is concerned, you can close 41 of them but we do want this one kept open.

Then he has given his reasons, which I will have in this report, and I will not go into that.

Thank you very much.

Mr. TUTEN. Mr. Chairman, I might say for the benefit of the gentleman, that we have a lot of people from his part of the country flying into Brunswick, Ga. That is the reason we need this service.

I would like you to hear Sam Baker who has been in the flying business in Glynn County for 35 years.

STATEMENT OF F. A. (SAM) BAKER, PRESIDENT, GOLDEN ISLES AVIATION, INC., MANAGER, BRUNSWICK MUNICIPAL AIRPORT, BRUNSWICK, GA.

Mr. BAKER. Thank you, Mr. Tuten, Mr. Chairman and members of the committee, our statement is completely written out. I am not going to go into the details which were covered in our meeting on May 1 in the Federal Court Building in Brunswick.

Mr. WILLIAMS. This committee had a representative at that meeting, Mr. Dixon.

Mr. BAKER. That is correct. I am quite sure we had the pleasure of having you gentlemen present. One of the main reasons we are here today is that we do not believe in remoting where people can do

better. We thought we could do a little better maybe by coming up here rather than remoting our request.

We do have unusual weather in Brunswick and I believe we can prove our case. We are located on the shoreline of the Atlantic Ocean and it has been my experience through the years that we do have weather from the ocean that is not even forecasted, other than a pilot's report, is not reliable, and we have to have someone on the spot there.

My whole thought in this flight service station is that flight service stations are concerned with safety as far as I am concerned. I feel that we cannot afford to do without knowledge, without ours. I am sure there are others the same way. I am only speaking for ours in this case because I know more about this particular station. I do not think that I could do away with my 100-hour inspections on my engines and go to 200. I don't think the FAA would allow me to do that. I could save some money but, in the long run, it would probably cost me more. Therefore, I do not think that we should even consider it.

I was bewildered and dismayed to even hear they were considering doing that. The traffic along our coastline, I would like to bring up, is similar to the flyway of the ducks. They fly down that coastline and, believe me, in marginal weather you are going to have pilots hutting that coast that are unreported. We may have instrument conditions, airplanes on approach, if somebody does not see this plane, who should not be there but he is going to be there, it could cost lives rather than dollars. It costs dollars also.

I think someone has to be on the spot. We have no radar facility there, no tower, but we do have a lot of traffic.

Sea-Land is visited, of course, by many large aircraft. I think in the last week we have had Westinghouse F–27's in there, maybe 200 or 300 people.

I think that possibly pilots would not care to come see us quite as much and bring these people if we don't have facilities to serve them.

I won't go into the many details, such as the written examination, that is all covered, and it is an important part of our operation to have this flight service station to deal with the student pilot, the pilot of tomorrow. If we do not take care of our children coming up and train them right, we are looking for trouble later on.

I feel that these boys in the flight service stations are the front lines of the pilot of tomorrow. They teach him what he should know when it comes to advice on his weather, and I feel that without it, we are asking for trouble.

I would like to say that general aviation needs the flight service station and let us not forget the many for the few.

Thank you.

Mr. WILLIAMS. Thank you, sir.

Mr. Devine, do you have any question?

Mr. DEVINE. No questions, Mr. Chairman.

Mr. TUTEN. Thank you, Mr. Chairman.

Mr. WILLIAMS. The Chair is pleased to recognize the gentleman from Kansas, Mr. Dole.

STATEMENT OF HON. BOB DOLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. DOLE. I have one.

Thank you, Mr. Chairman. We know that time is always a problem.

I am pleased to introduce this morning Mr. Russell Townsley, from my hometown of Russell, Kans. He is the third witness appearing from the First Congressional District.

The district will lose according to Mr. Halaby's announcement, three flight service stations. I would also submit, at this time, a written statement of Senator James Pearson, of Kansas, which he be made a part of the record. Also our colleague, Congressman Garner Shriver, would like to have his statement inserted at this time.

Mr. WILLIAMS. They may be received.

(The statements referred to follow:)

STATEMENT OF HON. BOB DOLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. Chairman, first of all, I again thank the chairman and members of this committee for conducting these very important hearings. Listening to many of the witnesses, including those from my own district, it becomes more and more apparent those responsible for announcing the closing of 42 flight service stations, last February 4, were unaware of many of the factors which should have been seriously considered.

The chairman will recall I requested permission on Wednesday to file my statement after the testimony of all witnesses from the First Congressional District of Kansas, had been concluded, hence my comments shall be a brief summarization of some of the salient points called to the attention of the committee by the witnesses from Kansas.

The first Kansas witness to appear was J. L. Wilcoxen, Ford, Kans., who testified concerning the announced closing of the flight service station in Dodge City, Kans. Mr. Wilcoxen submitted a very excellent statement and in addition made very valuable comments. While I do not wish to be repetitious, I would point out Mr. Wilcoxen is an experienced pilot who has literally flown all over the country, and one who understands and fully appreciates the value of the services offered, not only in Dodge City, but at every other place a FSS station is located.

Following his testimony, I visited with him again, and in addition to the points he emphasized he stressed the tremendous value of airport advisories to the private pilot, and too, that southwestern Kansas has experienced this year, and in past years, severe dust storms which create hazards from the standpoint of visibility and wind velocity. These storms can very likely complicate matters by causing mechanical difficulties. Time and time again Mr. Wilcoxen stressed the safety factors involved and the possible increased hazards by closing the station as compared with the relatively small savings, which at best have only been estimated savings by the FAA and the Weather Bureau.

Another announced closing was to be in Goodland, Kans., and the joint aviation committees of the city of Goodland were ably represented by Charles Dockhorn, an attorney, and a pilot; Clayton Burton, a nonpilot, but an interested businessman; Richard Spencer, a pilot and president of the Goodland Chamber of Commerce; and Robert Maricle, businessman and pilot. These four gentlemen traveled to Washington, D.C., a total of some 1,186 nautical miles, for the hearings in a single-engine plane owned by Mr. Maricle. They did so because of their interest and the intense interest of the majority of citizens of that area in retaining the flight service station at Goodland. Their primary concern is not that the closing will mean the loss of four or five families in Goodland, for certainly these gentlemen subscribe to economy in government, they practice it in their businesses, and expect every agency of the Federal Government to do the same. Their spokesman, Mr. Spencer, stressed the fact the primary beneficiaries of any flight service station are, of course, pilots of

and passengers in private aircraft. He further pointed out that light aircraft presently account for 90 percent of the air miles flown nationally and called attention to the unusual weather conditions in northwest Kansas. Without question, he made a very convincing and forthright statement which was buttressed by the comments of Mr. Dockhorn, a pilot for many years.

The final witness, Russell Townsley, a newspaperman and pilot, appeared to testify concerning the flight service station in Russell, Kans., the third station in the First Congressional District of Kansas on the FAA closing list. Mr. Townsley also emphasized the basic needs of private and commercial fliers throughout the Great Plains, and pointed out the importance of the Russell station not only to pilots with planes based in Russell, Kans., but throughout the entire area. He also stressed the weather conditions with some emphasis on the fact we have had severe dust storms, high-wind velocities, and other unusual weather conditions which exist from time to time throughout that area. He emphasized concern for his own safety and to other pilots who use the flight service stations in Kansas and other States, and made his point by stating, "Automation cannot take the place of visual observation and aid."

When it was announced last year the Federal Aviation Agency was conducting a survey of flight service stations, there was little advance information, and not until the reduction program was announced on February 4, 1964, were civilian pilots apparently aware of the scope of the FAA proposal to eliminate 42 flight service stations in various parts of the country. It was then I learned that Kansas was to lose four—three in my congressional district.

Mr. Chairman, not being a pilot, I am not familiar with technical terms employed by those who fly, but I often use small airplanes in my district and have a great respect for and reliance on the judgment of these men. Private pilots I have visited with on this proposal are understandably deeply concerned.

My congressional district is comprised of 58 counties, an area of about 50,000 square miles. Having traveled the district time and time again, I am quite familiar with the private air activity and am well aware of the fact these flight service station facilities are used not only by Kansans, but very frequently by pilots from neighboring States of Nebraska, Colorado, Oklahoma, and Missouri, who travel to western Kansas with reference to their farm, oil, and other business interests.

I am not equipped to argue the technical merits of the case, and as stated before in these hearings, I strongly feel that economy in Federal Government is a necessity; but there should be justification by the FAA Administrator, Mr. Halaby, and this justification should be spread upon the record. It seems rather strange to notify Members of Congress one day that stations will be closed, and on the next send emissaries to each of the towns involved to meet with the mayors, pilot, and other interested parties and advise them, after the decision was made, they were to lose their flight service station. Why was a decision reached prior to the completion of studies by the FAA and the Weather Bureau? If studies were in fact made, why are they not made available now to Members of Congress? Not a single one of these six witnesses who appeared from the First Congressional District of Kansas wants the Federal Government to spend $1 unnecessarily, but they would appreciate, and are entitled to, justification being made. If there is a satisfactory showing by the agencies involved that there will be a real savings, no increased hazards to the hundreds of thousands of pilots and passengers who use private, low-altitude air travel, and that the estimated economy is in line with economies in urban areas and the Administrator's own expenditures, then I shall not object. The best information obtainable is that the bulk of the savings will result from the fact that eventually—we are not told when—there will be 162 fewer employees, but this does not seem completely reasonable. I am making a separate effort to determine how much is spent by the Federal Government each year in various phases of safety and accident prevention, to determine whether or not the estimated $1½ million saving is of any real significance.

In the meantime, I again thank the committee for your patience, for conducting the hearings, and make it crystal clear it is in the spirit of cooperation these gentlemen from Kansas have appeared. They wish to cooperate with the agencies involved and with this committee to determine the best course to follow from both the standpoint of economy and also ultimate safety and the future of private air travel.

Thank you, Mr. Chairman.

STATEMENT OF HON. JAMES B. PEARSON, A U.S. SENATOR FROM THE STATE OF KANSAS

It is a privilege to present my views relating to the Federal Aviation Agency's proposed reduction in the number of flight service stations in Kansas. I congratulate your committee for undertaking a prompt review of this proposition.

During these hearings you have received and will receive many statistics describing flight operations in various cities and regions affected by the proposed reduction in stations and the change from manned to automative service. I do not intent to repeat these statistics or the cases they support. I would like to present another picture which gives an indication of the value of these flight service stations to pilots who frequent Kansas, to Kansas industry, and consequently, to the economy of my State.

As currently proposed, flight service stations at Dodge City, Goodland, Manhattan, and Russell, Kans., have been designated for adaptation as remote control weather and flight plan service units by the FAA. The plans proposed, I am sure, are in response to pressures for economy and requests for review of essential service by the House and Senate Appropriations Committees. The recent technological developments in communications are also a contributing factor. I commend the intent of this effort. On the other hand, I question whether, in my own State, the result will justify the steps proposed.

Mr. Chairman, the State of Kansas in the first quarter of 1964 produced considerably more light aircraft than all other 49 States combined. Kansas is the marketplace for private aircraft in this country. Pilots from all 50 States and many foreign countries at some time during the course of the year, and many of them several times during the year, visit my State in order to take delivery on a new aircraft. These newly produced planes are flown to all areas of the United States. In the process, many flight plans are filed by their pilots and many requests for assistance are transmitted to flight service centers. These are a matter of record.

The purchaser of new planes are either new owners, dealers, or ferry pilots. Upon leaving the factory it is standard operating procedure to check the aircraft instruments and the operating efficiency of the plane during the early hours of the craft's life. This safety practice makes it essential that adequately manned radio communication and electronic guidance systems be available during the first hours of these initial flights. I cannot rely on statistics to document this case and the related importance of the availability of these facilities. I make my case on the basis of the operating practices of the pilots and upon the recommendations of the aircraft companies which, through the soundness of their business practices and their concern for a quality product and safe operating practices has made Kansas the light plane capital of the world.

Kansas is to the light plane industry what Detroit is to the automobile industry. As automobiles need good highways with adequate safety and traffic regulation devices to assure their safe operation, so also do planes and their pilots, particularly as they leave one region in substantial number.

The Kansas cities affected by this proposal of the Federal Aviation Agency plan to present well documented and statistically correct cases concerning the aviation interests and their communities. My thesis, however, is directed to the simple, practical, economic aspects of the present service which we in Kansas know is important to the owners of Kansas-built aircraft. The availability of these early check points is critical. A reduction in their effectiveness would be an unfortunate step.

The Federal Aviation Agency flight service station personnel have provided great service to all of aviation. For this FAA and its personnel is to be complimented. I hope that this highly valuable service and the competent personnel which has provided it will not be silenced in a hasty act.

STATEMENT OF HON. GARDNER E. SHRIVER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. Chairman, I join in commending you and your subcommittee for the leadership which has been demonstrated in conducting these public hearings regarding the Federal Aviation Agency proposal to convert 42 flight service stations across the Nation into remote control facilities. During the past few days you have had the opportunity to listen to the arguments, pro and con, on this proposal.

Today I wish to be associated with my colleague, Congressman Bob Dole, and the representatives from my home State of Kansas in their knowledgeable presentations to your subcommittee. I share their deep concern that four of the flight service stations are to be remoted in Kansas.

I favor economy in the operations of our Federal Government. One of the major weapons in the so-called war against poverty should be fiscal responsibility in the spending of tax dollars. There are undoubtedly areas in which the Federal Aviation Agency can effect economies, and perhaps your subcommittee will conclude that phasing out 42 flight service stations is one of those areas. However, it is difficult to measure safety and the protection of human lives in dollars.

Since the FAA announced its intention to reduce the number of flight service stations on February 4, 1964, I have received mail from many private pilots, most of them business men and women, salesmen, and farmers in Kansas. I would like to insert in the record, excerpts from two of the many communications which I have received:

The president of a mobile home company with offices in Wichita, Kans., and branch offices in Nebraska, Wyoming, and Montana wrote:

"I do not do a lot of flying, but manage to get in around 250 hours a year and frankly I appreciate the value of these stations. A fellow can get along fairly well in clear weather without them, if he wishes to wander around over the country, but when it comes to instrument flying, they are an absolute necessity. The military and the commercial aircraft have radio equipment strong enough and they fly high enough that they can skip some of these stations, but the general public, for all practical purposes, flies below 10,000 feet and cannot reach these stations so far away and therefore need many more stations."

A sales representative for an insulation company in Wichita wrote:

"Although I am nearly 40 years old, I have just been a 'private' pilot for about 2 years. Already I have used and come to respect the services provided by the flight service stations in Kansas. The closing of four of these Kansas stations will cut back vital weather and safety service to anyone flying over Kansas. I expect to fly over other States in the future and know I will need the services of flight service stations wherever I go * * *. Closing down existing flight service stations will only increase the hazards of flying. Let's not be guilty of taking this step backward."

There is special significance to the arguments which have been presented by members of the Kansas congressional delegation and private citizens from the communities where the flight service stations are to be remoted. The "airplane capital of the world" is in Wichita which is in my congressional district. It is a common sight to see our giant Air Force B–52 jet bombers and jet fighters flying over our cities and farms. But we are even more familiar with the planes manufactured by the light aviation industry of Wichita.

Thousands of these private aircraft are flown out of Wichita each year for delivery throughout the world. Their pilots are dependent upon the services of existing flight service stations.

Mr. Chairman, in the years ahead we are going to see a tremendous growth in the use of airplanes by business, industry, agriculture, and just private citizens. The FAA has estimated that by 1968 there will be 99,000 active aircraft in general aviation flying more than 17 million hours annually.

In view of this expanded air traffic and because more businesses and industries are relying upon executive and private planes, the FAA should be encouraged to proceed with caution on any program which involves safety and lives. However, there are many aspects of this proposed FAA program which remain vague in regard to specific economies and services.

Mr. DOLE. I now present Mr. Townsley.

Mr. WILLIAMS. Before you proceed, we have following this witness what appears to be a group of witnesses from Poughkeepsie, N.Y. I believe that with the disposition of their testimony that will finish all who have been scheduled except those appearing in regard to individual stations.

The time is 10 minutes until 12. It is my hope we might conclude this portion; that is, dealing with individual stations, by 12 o'clock if it is at all possible.

This afternoon, if it is agreeable with the witnesses, we would like to come back just as soon as possible after 12 o'clock, when we will hear from our colleague, Representative Clausen, who will give his own testimony. He is a pilot and a professional in this field, as well as a Member of Congress.

Following that, I think we will call on the AOPA.

Beyond that, I don't know how far we will be able to get this afternoon. So, with that schedule, we will try to proceed as best we can.

STATEMENT OF RUSSELL T. TOWNSLEY, RUSSELL, KANS.

Mr. TOWNSLEY. Thank you, Mr. Williams. If Mr. Halaby had wanted testimonials as to the value and effectiveness of the flight service station, he certainly has succeeded. Like these other gentlemen, we have unusual weather conditions. We feel that in Russell, Kans., we are going to lose facilities that are vital to our particular area and we want to enlist your support in bringing these points to light. I am speaking apparently today in a minority and yet I hope not.

I am a business pilot and in the newspaper business. I fly about a hundred hours a year. I have an instrument ticket. I have not heard many of the business-type pilots or pleasure fliers speak here.

The thing we are interested in is the 98 percent of general aviation, fellows who fly a small part of the year, have a small plane, they are in the 100- and 200-mile-an-hour class.

Now, the jets with their 600-mile-an-hour speeds don't need the constant review of weather conditions below them as they go across country. The small pilot does.

You have superhighways and yet these highways are used primarily from farm to urban driving, rural to urban motorists. In the air it is the same consideration. In the country, the Great Plains, the largest part of our flying, and I can say this without reservation, is a matter of one, two, or three omnistations. It is an experience for a pilot of our type of flying to go from coast to coast or to fly beyond Chicago or St. Louis, Dallas or Denver. We need weather reporting. We need the facilities on the ground. We need the shoulder-to-shoulder briefing, the talking over the weather maps, and we need what the FAA prefers to brush off as terminal facilities. Like Topsy, these facilities have grown. They are there because others have demanded them, have needed them, and used them.

Now, we do not expect an FSS station to be a tower. We have no Weather Bureau at Russell, but we need that man on the ground to give us our airport advisory and weather conditions so that we can come down, but this serves more than just Russell. The direct area responsibility of the Russell Flight Service Station includes approximately 14 airports, over a hundred permanently based planes, and around 300 pilots. These men come into Russell, use the instrument letdown, and then fly under the weather VFR to their home airports. Without the Russell station, without the manned station, we would lose the instrument letdown, we would lose the facility of having someone on the ground to tell us about the weather, and would severely limit the flying and flying activities throughout our country.

I have mentioned in our statement the types of flying, the need of flying, and the agricultural, oil, wheat, business use of aircraft in the Great Plains.

Last Friday, for example, we had 40- to 60-mile winds with gusts up to 65. Our visibility throughout the entire morning was from a mile to a mile and a half of blowing dust. At about 12:15, the wind shifted approximately 10° from almost due west to slightly west-northwest and the dust was cleared in the air in less than 5 minutes. This is typical of our country this time of year, also in the fall, when the crops are harvested and the ground is bare. We have heavy winds and many other areas do, too. We have sudden fogs.

Kansas is divided into 10 weather reporting zones by the U.S. Weather Bureau.

Russell, Kans., is in the center of the State and consists of a small four-county area given its own zone because we are a transition point from the High Plains to the lower elevations and weather brews in that part of the country.

We need the airport advisory service, we need the weather observations, the weather department, and the FAA has tendered the idea of volunteer weather observers. Gentlemen, this is not feasible.

I have been in the newspaper business for many years and my family has before me. As you know, weather reporting is important to a newspaper and we have lived with volunteers until about 10 or 12 years ago, when the FSS station was established at Russell. The weather that volunteers give is not of the caliber that can be used for flying. With all due respect to the volunteers, they try hard, but they are not on hand and they do not make the proper readings, they can seldom evaluate what they see. The 100- to 200-mile-an-hour pilot who goes from one town to another town needs advisory, he needs airport advisory, he needs the facilities that the FSS has inherited, although they don't want it, it is being used, it is effective, and it has increased the safety.

This type of flying is vital throughout the entire Great Plains, this idea of having immediate weather contact, having advisories, having pilot briefings, filing flight plans, the many routine things handled by the flight service station are vital to us.

In our three-county area by comparison there are approximately 62,000 people, and airplanes, a little over 60 planes in those three counties, which would be one plane per thousand population. This is typical of the Great Plains and it shows the tremendous use of private planes, business pilots, and the common everyday type of flying which, unfortunately, seems to be not regarded highly by the FAA at this time.

Thank you.

Mr. WILLIAMS. Thank you, sir. In view of your comments on restricted visibility from duststorms, I am sure you recognize the value of the direction finding capability at a manned flight service station.

Mr. TOWNSLEY. That is very important to us. We have to be at over 8,000 feet in our area, for example, to get on the radar screen, and the weather has to be perfect for that to happen.

Our flight service station has within the past 6 years attested to six lifesaving situations in volume of aircraft and personnel. They are not documented in my statement. There is reference to the fact

that it has happened. There are many others, out of gas, and things of that kind, emergency landings that have happened out there that the flight service station has taken care of.

Mr. WILLIAMS. Does that conclude your statement?

Mr. TOWNSLEY. Yes, sir.

Mr. WILLIAMS. Thank you very much.

(Mr. Townsley's statement follows:)

THE RUSSELL DAILY NEWS,
Russell, Kans., May 12, 1964.

HON. JOHN BELL WILLIAMS,
Chairman, Subcommittee on Transportation and Aeronautics, Interstate and Foreign Commerce Committee, U.S. House of Representatives:

The base for continuation of a manned flight service station in Russell, Kans., is a basic recital of needs of private and commercial fliers throughout the Great Plains. I submit that any change to reduce the present service available for pilots would bring a hardship. I urgently enlist your support toward bettering facilities used by the 98 percent of aircraft flying today, general aviation.

I am Russell Townsley, newspaper publisher of the Russell Daily News and the Russell Record, Russell, Kans. I am here on behalf of the city of Russell, Russell Chamber of Commerce, and I speak, in addition, for myself and for the over 300 pilots, owning 101 permanently based aircraft in a 14-city area served by the Russell Flight Service Station. Russell is 260 miles west of Kansas City and 400 miles east of Denver. Included in the Russell FSS flight plan routing and airport search area, and the number of planes based at each airport, are: Russell, 30; Hays, 20; Great Bend, 15; Ellinwood, 4; Downs, 1; Ellsworth, 5; Holisington, 3; Holyrood, 1; La Crosse, 2; Lebanon, 2; Osborne, 3; Larned, 9; and Smith Center, 10. In addition, this oil, wheat, and cattle country is served by planes from nearly all major oil companies, many business and industrial interests and with extensive agricultural air activity including crop spraying and delivery of machinery and repair parts.

Commercial feeder lines exist in Great Bend and Hays, the former 40 miles to the south and the latter 25 miles west. The area is typical of the Great Plains with major surface transportation east-west oriented. Private and business aircraft are vital as connecting links to major cities where commercial terminals are operated. Aircraft is used extensively for ambulance, taxi, and charter work.

None of the fields in this area have tower facilities. The nearest are at Hutchinson, 70 miles southeast; Wichita, 135 miles southeast; Schilling AFB (emergency only, for private craft) 70 miles east; and Topeka, 180 miles east. Only a portion of the 14 area airports have hard-surfaced runways. All are operated from daylight to dusk, most with one fixed-base operator and one or two staff members.

The Russell FSS facility is a hub for these pilots and towns. By far the largest number of flights are from city to city, not involving a span of more than two or three omnirange stations. Pilots leaving from these fields or coming into the area often home-in on the Russell omni using an instrument let down procedure to come through the overcast and then continue to their home base under visual flight rules.

The Federal Aviation Agency proposes to install remote-control equipment in the Russell Flight Service Station. We object to this move.

Last year, the Russell FSS unit had 6,412 pilot briefings, second greatest in Kansas; 8,704 airport advisories, fifth in the State; 13,728 visual flight rule contacts, sixth in the State. The station has ranked 5th in Kansas for 4 years in instrument flight rule contacts and is ranked, for last year, 196th in the Nation in VFR contacts.

Remoting this station would have little effect on "inroute" traffic. Such overflights would continue to use it for a navigational aid. Remoting would, however, adversely affect pilot briefing, airport advisories, weather reporting, and limit instrument flying.

Within the past 6 years, there have been six attested cases in which the lives of pilots and passengers have been saved through direct, on-the-spot work by the alert crew of the Russell FSS unit.

Weather is the prime factor in flying. The FSS unit has competent personnel to take hourly readings which are fed to the U.S. Weather Bureau network. Special advisories give 24-hour protection for pilots. The Aviation Agency

proposes to replace this service with volunteers. From my experience in newspaper business and reporting of weather. I am convinced the substitute is not adequate.

The 105 counties of Kansas are divided into 10 weather zones. Russell is in a four-county area, the smallest of all the zones, because the terrain brews storms. Volunteers, combined with delays is reporting, will make a mockery of a service which today is scarcely good enough.

Overflights, cruising at 600 miles an hour, have little need for a constant review of surface conditions. Last year, about 75 percent of all FSS contacts over the Nation were from general aviation, planes flying from 100 to 200 miles an hour and for whom the distance between omnistations is long enough for surface conditions to become an important factor. Thunderstorms, fogs, winds, blowing dust, and lowering ceilings can happen in minutes. Remote control involves a timelag—and adds to the hazard of flying.

My flying experience with remoted stations is limited, and all bad. On three occasions, the master station reported erroneous weather conditions which endangered my safety. On an instrument flight to Denver, I was unable to contact Thurman, remoted from Akron, and, as a result, added an extra burden to Denver approach control.

Pilot briefings, the most important single service to a pilot, must be an over-the-counter conversation. Although a landline telephone to the center is proposed, that service leaves unanswered questions and confused pilots.

The Russell unit serves as a center for pilot's written examinations. The service saves miles of driving for students. It is hoped the private pilot license facility will be expanded to include instrument and commerical exams.

Although the area is crisscrossed with major air routes, it is, by eastern standards, sparsely populated. Flying is today in this country at about the stage of highways when Henry Ford switched to the Model A. It is individual, elementary, and a challenge between the businessman or private pilot and the elements. Distance to terminal centers is great. The time to Kansas City in a good plane is about the same as from Kansas City to Washington in a jet. Airports are not numerous. The needs for complete service for pilots is vital. Any reduction will adversely affect a rapidly growing industry.

The FAA tells us the FSS unit is not intended for terminal facilities. In the land of great airports, this is true. But in the Great Plains, where private flying is commonplace, there's no one else to give the service. Without it, flights from the 14 central Kansas cities would be limited. We do not look to the FSS for operations of the kinds expected at Dulles or Friendship. Instead, we need a man on the ground who can tell us, firsthand, wind directions and intensity, ceiling, and condition of the field.

The need for terminal facilities for military and commercial airlines is lessening. Each has its own network. Private aviation has only the FSS to which it can appeal. They cannot remote the experience and knowledge of the man on the ground.

Please add my personal protest, concern for my own safety, to those of other pilots when considering the proposed remoting of the Russell FSS facility. Automation cannot take the place of visual observation and aid. Counting the saving of lives and property in dollars and cents may be difficult. But it is easy to see the false economy of removing so highly valued and necessary a service.

RUSSELL T. TOWNSLEY.

Mr. WILLIAMS. The group from Poughkeepsie.

STATEMENT OF WILBER R. R. WINANS, EXECUTIVE VICE PRESIDENT, POUGHKEEPSIE AREA CHAMBER OF COMMERCE

Mr. WINANS. There are only some of us here. Weather delayed the others.

Mr. WILLIAMS. Will you identify yourself for the record, please?

Mr. WINANS. Yes. My name is Wilber R. R. Winans. I am executive vice president of the Poughkeepsie Area Chamber of Commerce.

Mr. WILLIAMS. Mr. Winans, permit me to say this: We have received previously testimony on the Poughkeepsie situation. I don't know whether you were here when that testimony was given.

Mr. WINANS. I was not, but I know you did.

Mr. WILLIAMS. You have a very, very short statement. I would hope that you will be willing to file it.

Mr. WINANS. I have filed copies. I have also the copies for Mr. Wesley Van Benschoten, secretary of the Dutchess County Airport Commission, who was to have been here today but, because of the weather in our area, he won't be here.

Mr. WILLIAMS. The committee will receive the statements.

Mr. WINANS. I have left copies with Mr. Williamson. I will defer reading them now.

Mr. WILLIAMS. We will be glad to receive them.

Mr. WINANS. All right, thank you.

(The statements referred to follow:)

STATEMENT OF WILBER R. R. WINANS, EXECUTIVE VICE PRESIDENT, POUGHKEEPSIE (N.Y.) AREA CHAMBER OF COMMERCE

My name is Wilber R. R. Winans, I am executive vice president of the Poughkeepsie Area Chamber of Commerce. The following statement is presented for this organization with regard to the Federal Aviation Agency plan to close some 42 flight service stations throughout the country, one of which is located at the Dutchess County (N.Y.) Airport with plans to substitute remote services through the Teterboro (N.J.) Airport.

The chamber of commerce is dedicated to the development and growth not only of the Poughkeepsie area but of all of Dutchess County and consequently the closing of the flight service station at the airport. The membership of the organization comprises more than 700 firms and individuals engaged in diversified activities in commerce, finance, manufacture, services, and the professions.

It is the chamber's considered conclusion that in the interest of flight safety the full complement of airport advisory services presently available through the flight service station ought to be maintained. Instantaneous information as to local traffic and local wind and weather conditions is a necessary and many times an urgently needed service for inbound or outbound aircraft. This information could not be supplied by a remote station.

There is a considerable amount of general aviation activity at the Dutchess County Airport. A total of 71 airplanes are based at the port including company owned airplanes operated for business purposes, and airplanes operated in charter and air taxi service, flying instruction, and personal flying. In the group of business or corporate owned aircraft used for business purposes there are 23 aircraft. Included in this category are five planes owned and operated by the International Business Machines Corp., consisting of two Fairchild F-27 airplanes, two Aero Commanders, and a North American Jet Sabre Liner which has just been added to the IBM fleet. Other companies own and operate single-engine and twin-engine airplanes.

There is also much activity in flight instruction conducted by Poughkeepsie Aviation Services which operates nine airplanes in this category of flying, together with air taxi and charter services.

The Mid-Hudson Airlines, division of Poughkeepsie Aviation Services, operates a shuttle service between the Dutchess County Airport and New York metropolitan airports with five airplanes.

There are 34 privately owned airplanes based at the airport, which are used for personal flying.

All of these locally based aircraft and the many transient aircraft using the airport rely upon airport advisory services provided by the FAA flight service station located at the airport. These advisory services, which could not be provided in a remote system, contribute in a large measure to safety in operation and are most essential to operation under unfavorable or quickly changing local weather conditions.

Dutchess County is one of the fastest growing upstate New York counties, with a population increase between 1950 and 1960 of 28.7 percent and an addi-

tional increase of 7.5 percent between 1960 and 1963. The increase in population reflects economic growth of the county which has been accompanied by an increase in general aviation activity at the county airport. This is a further factor supporting the need for continuation of the flight service station at the airport.

The chamber of commerce urges in the interest of flight safety that the flight service station at the Dutchess County Airport be maintained; and further respectfully requests your committee to take appropriate action for the continuation of the FAA station at the Dutchess County Airport.

DUTCHESS COUNTY AIR PORT COMMISSION,
Poughkeepsie, N.Y., May 14, 1964.

To: Subcommittee on Transportation and Aeronautics of the House Interstate and Foreign Commerce Committee.

Subject: Proposed FAA plan to consolidate the Poughkeepsie Flight Service Station.

Attached are exhibits A and B which outline in detail the necessity for retaining the Poughkeepsie Flight Service Station in its present status.

We ask that your committee study our situation at Poughkeepsie and sincerely hope your findings will recommend this flight service station be retained.

The Poughkeepsie Flight Service Station is invaluable from the safety factor alone, in addition to its many other valuable services. There is no tower operation at the Poughkeepsie (Dutchess County) Airport. There are 71 aircraft based at this airport, many of which operate all hours of the day and night. There are eight schedule flights daily from this airport by Mid-Hudson Airlines, four by Mohawk Airlines, and numerous in and out flights by International Business Machines Co. Many of these operations are during hours of darkness.

The airport advisory assistance which the flight service station at Poughkeepsie has offered and performed in the past is directly responsible for the excellent safety record at this airport. We feel if this station is consolidated this safety factor will be lost, as may be a life.

Certainly, the monetary saving to FAA to remote control the Poughkeepsie Flight Service Station will never repay a life.

Respectfully,

WESLEY VAN BENSCHOTEN, *Secretary.*

EXHIBIT A

POUGHKEEPSIE FLIGHT SERVICE STATION

April 25, 1964.

Poughkeepsie FSS serves 37 airports within its FPRAS (flight plan routing and airport search area).

Over 500 aircraft are based at these airports.

A recent survey taken at 5 of the largest of the above airports indicates that as of March 1, 1964, there was a total of 520 student pilots. This figure will increase with spring and summer weather.

From April 1 to April 24 a total of 805 airport advisories were provided pilots utilizing the Dutchess County Airport. Numerous other aircraft did not contact the Poughkeepsie FSS but merely followed the observed traffic.

On April 7, 8, 14, and 21, 77 inbound and outbound IFR clearances were issued involving the Dutchess County Airport. On these 4 days extended periods of below IFR minimum weather in the New York Metropolitan and Westchester County Airports caused numerous diversions to Dutchess County which remained above IFR minimums. The distance from Dutchess County to these airports is less than 100 miles but on many occasions affords a suitable alternate because of weather conditions. There would have been a larger number of diversions to this airport but the limited runways available (4,000 feet maximum) prevented this. The county is now discussing the possibility of extending the present runways.

Weather observations from Poughkeepsie have always been an extremely important factor for pilots in this area and for pilots traversing the Hudson Valley in any direction.

Airport advisories in this area are becoming more and more important. The IBM Corp. is receiving delivery of a Sabre Liner jet early in May. This is being

added to its present fleet which is based at Poughkeepsie. The importance of airport advisories to this company alone is extremely important for a safe operation at this particular airport.

AIRPORTS SERVED BY THE POUGHKEEPSIE FLIGHT SERVICE STATION

Dutchess County Airport, Poughkeepsie Flight Service Station located at this airport. Hard surface runways, 71 based aircraft. Station located near ramp area and accessible to pilots.
Armonk Airport, Armonk, N.Y., 20 based aircraft.
Accord Airport, Accord, N.Y., 3 based aircraft.
Anderson Acres, Accord, N.Y., 6 based aircraft.
Airhaven Airpark, Staatsburgh.
Candlelight Farms, New Milford, Conn.
Christie Airport, New City, N.Y., 5 based aircraft.
Colemans Airfield, Florida, N.Y., 2 based aircraft.
Croton Airpark, Croton, N.Y., 16 based aircraft.
Danbury Airport, Danbury, Conn., 83 based aircraft.
Great Barrington, Great Barrington, Mass., 32 based aircraft.
Gardiner Airpark, Walden, N.Y., 4 based aircraft.
Hodges Field, Roscoe, N.Y., 3 based aircraft.
Huguenot Airport, Huguenot, N.Y., 2 based aircraft.
Kingston, Kingston, N.Y., 24 based aircraft.
Koebelt Airport, Wallkill, N.Y., 54 based aircraft.
Liberty Airport, Liberty, N.Y., 4 based aircraft.
Livingston Manor Airport, Livingston Manor, N.Y., 9 based aircraft.
Mahopac Airport, Mahopac, N.Y., 12 based aircraft.
Matamoras Airport, Port Jervis, N.Y., 15 based aircraft.
Middlehope Airpark, Newburgh, N.Y., 3 based aircraft.
Marlboro Airport, Marlboro, N.Y., 5 based aircraft.
Montgomery CAP, Montgomery, N.Y., 10 based aircraft.
Myer Field, Milford, Pa., 1 based aircraft.
Old Rhinebeck Airport, Rhinebeck, N.Y., 13 based aircraft.
Orange County Airport, Montgomery, N.Y., 14 based aircraft.
Old Sillman Field, Taconic, Conn., 1 based aircraft.
Peekskill Seaplane Base, Peekskill, N.Y., 20 based aircraft.
Randall Airport, Middletown, N.Y., 20 based aircraft.
Stormville Airport, Stormville, N.Y., 45 based aircraft.
Stanwyck Airport, Newburgh, N.Y., 2 based aircraft.
Stanton Airport, New Paltz, N.Y., 4 based aircraft.
Sages Airport, Kerhonkson, N.Y., 2 based aircraft.
Sullivan County Airport, Monticello, N.Y., 3 based aircraft.
Webber Field, Germantown, N.Y., 6 based aircraft.
Tri-Valley Airport, Grahamsville, N.Y.
Warwick Airport, Warwick, N.Y., 23 based aircraft.
Wrights Field, Gardiner, N.Y., 4 based aircraft.
Wurtsboro Airport, Wurtsboro, N.Y., 44 based aircraft.

EXHIBIT B

DUTCHESS COUNTY AIRPORT COMMISSION,
Poughkeepsie, N.Y., March 6, 1964.

Subject: Flight Service Station, Poughkeepsie, N.Y., Dutchess County Airport, R.F.D. No. 3, Wappingers Falls, N.Y.

Hon. NAJEEB E. HALABY,
Administrator, Federal Aviation Agency,
Washington, D.C.

DEAR MR. HALABY: On February 4, 1964, we were informed by the above agency they had just been notified by the Federal Aviation Agency, Washington, D.C., that the above flight service station was scheduled to be closed within 1 to 2 years. Also, a meeting had been scheduled in Poughkeepsie on February 6 with Mr. Sidney Doroff, Chief of Executive Staff, Air Traffic Division of the Eastern Region, Federal Aviation Agency, Jamaica, N.Y., to explain in detail the "closing" of the flight service station at Poughkeepsie.

The following facts were learned at this meeting:

1. The flight service station at Poughkeepsie was not to be closed—it was to be "remote controlled."

2. Minimum time for this change would be 1 year.

3. Poughkeepsie would be consolidated (remote controlled) with Teterboro, N.J.

4. No equipment would be moved from the present station. This includes all radio, teletype, weather equipment, etc. Present equipment would continue to be operated.

5. Flight service personnel would be transferred.

6. Weather Bureau personnel would be moved in to maintain a 24-hour weather service at the station.

7. Weather information (briefings) would be available to all by telephoning a local number, at no charge, and being connected directly with the Weather Bureau in Teterboro.

8. Weather would also be available by telephoning the local Weather Bureau (presently the flight service station) and talking to the weather personnel on duty.

9. Weather, notams, pilot reports, briefings, etc., would be available to any person who wished to go to the Weather Bureau (presently the flight service station). This service would be available 24 hours a day and the station would be manned by competent Weather Bureau personnel.

10. Weather observations, reports, and forecasts would be as good, or better than presently being offered. This service would be on a 24-hour basis.

11. Safety at the Dutchess County Airport would continue to be maintained on the same high level.

12. Inbound and outbound traffic would receive the same safe handling now being performed.

13. The instrument approach and departure (IFR) minimums at the Dutchess County Airport would not be increased due to consolidating the station.

14. Inbound, outbound, and inflight aircraft would receive the same airport advisory control and protection as presently being offered.

15. The annual saving to the Federal Government per year for remote controlling the present flight service station at Poughkeepsie, N.Y., would be $30,000 to $40,000.

Since this meeting of February 6, the Dutchess County Airport Commission has endeavored to investigate all facets of the intended consolidation of the Poughkeepsie Flight Service Station before taking a firm stand in any direction.

In the interest of safety alone, we ask you to rescind your order to consolidate the Poughkeepsie Flight Service Station with an adjacent flight service station.

One life is worth many more thousands than the probable saving of $30,000 to $40,000, and to consolidate the Poughkeepsie Flight Service Station would unjustly endanger many lives daily, weekly, and yearly.

Briefly we would like to point out a few reasons why it is so important to retain the flight service station at Poughkeepsie.

1. Poughkeepsie is strategically located. It fills a void that exists between New York City and Albany in a north-south direction, and between Hartford and Scranton-Wilkes Barre in the other direction.

2. Poughkeepsie is the only FSS reporting weather station between New York and Albany. Due to the hills south of the area, Mount Beacon (1,602 feet), the Catskills to the northwest and the low Hudson Valley, much weather developes and originates in this area. To accurately report weather between New York and Albany for the benefit of inbound, outbound, and also inflight air traffic, a 24-hour weather station must be maintained at the Dutchess County Airport. This service is presently being supplied by the FSS in a most satisfactory, reliable, and efficient manner on a 24-hour basis.

At the meeting with Mr. Doroff, we were informed that weather would be available on a 24-hour basis. A recent communique dated February 20, from Mr. Oscar Bakke, Director, FAA, eastern region to Senator Jacob K. Javits, brought to light the following: "It is our understanding that the Weather Bureau will plan to establish a supplementary weather reporting station—(nonpaid) to serve aircraft landings and takeoffs and such other part-time observations that may be needed by the community."

3. If Poughkeepsie is consolidated, and "nonpaid" personnel are asked to take weather observations on a part-time basis to fully supply the aviation needs in

this area, we firmly believe that safety will be taking a backward step instead of a progressive one. Safety in aviation is essential to its success.

4. There are two runways at the Dutchess County Airport—the longest being 4,005 feet. There is no control tower at the airport.

Mohawk Airlines services this airport with four flights daily. They use Convair and Martin 404 aircraft. Some of these flights are operated after dark.

IBM bases their aircraft at this airport. Their fleet consists of two F–27's, two Aero Commanders, and they have on order, with expected delivery this month, a North American Sabreliner Jet. IBM operates on a 24-hour basis. As many of their takeoffs and landings are after dark as are made during daylight hours.

Mid Hudson Airlines bases here and operates a fleet of two Aero Commanders, one model D–18 Beechcraft, one Apache, and several single engine aircraft. They operate daily eight flights to New York City airports, many after dark.

Poughkeepsie Aviation Services maintains a complete flight school operation, maintenance facilities, sales, charter service, gasoline, waiting room, etc. Flight advisory service is invaluable to them, as it is to all other aircraft operating in the area.

There are 71 planes based at the Dutchess County Airport ranging from a Piper Cub to a P–51, and several twin engine aircraft. Of these only four are not radio equipped.

Daily itinerant private and corporate aircraft of all sizes operate in and out of the Dutchess County Airport.

5. The flight service station at Poughkeepsie contributes greatly to the safety operation of all these aircraft. As you realize, the larger planes mentioned need all the assistance possible when landing and taking off. Instantaneous weather (wind direction and velocity, etc.) is a big factor with them and this becomes increasingly more important at night.

6. Knowledge of other aircraft and their location in the area is most important to the safety of all, and this can only be supplied through the flight advisory services of the FSS.

7. Last year there were 891 instrument operations in and out of the Dutchess County Airport. At 4,000 feet, radar is reliable, but below this altitude it is unreliable. The 24-hour availability of the flight service station personnel, to assist these aircraft in and out of Poughkeepsie under IFR conditions, would be lost if this station was remote controlled.

8. Lost aircraft or aircraft in distress. Just recently, a pilot on his first cross-country was hopelessly lost in this area, and through the efforts of the flight service station, he was led into the Dutchess County Airport. There have been several instances similar to this one.

9. Strobe lights are located on runway 24 and are controlled by the FSS, just to mentioned another of the many services the Poughkeepsie Flight Service Station offers to the area.

Dutchess County is located 75 miles north of New York City and the present expansion rate in industry, population, etc., is tremendous. The population in 1940 was 120,542; in 1962 it was 185,467 and the 1980 estimate is 282,000. As this growth continues, so will the demands in aviation. The trend is away from the metropolitan airports.

If Dutchess County is to properly and safely meet the aviation requirements of the present and the future, we believe the local flight service station should not be "remote-controlled." We sincerely hope your findings will agree with ours concerning this matter.

Very truly yours,

WESLEY VAN BENSCHOTEN,
Secretary, Dutchess County Airport Commission.

Mr. WINANS. I have filed copies of this, too, so I can defer with that.

The chamber is, of course, opposed to closing the FAA station at Dutchess County Airport for safety reasons. The station at the airport serves some 37 other airports in the area within 50 miles or so with some 495 planes based at these other airports.

At the Dutchess County Airport, there are roughly 71 airplanes, 23 of these are in the business category, and including IBM's 2 F–27's,

2 aero commanders, and this company has just added a North American jet Sabre Liner to its fleet. There is also a great amount of flight instruction at the airport conducted by the Poughkeepsie Aviation Services and the company operates a shuttle air service between Dutchess County Airport and the metropolitan airports, using five airplanes in that service.

The 34 privately owned airplanes, based at the airport, are used for personal flying.

Our emphasis is that we are a growing area, our economy is growing, and there has been a great increase in the general aviation. Our airline service is limited only to Mohawk Airlines with two flights a day in and two out.

As I say, our real concern about this is the matter of safety. If the FSS is remoted we would not have this instantaneous local weather and traffic information so necessary to safe operations. We would like to see the station continued at the airport.

Mr. WILLIAMS. Thank you, Mr. Winans.

As I mentioned a moment ago, the committee has received quite a bit of information previously in regard to this station. We received testimony from Senators Keating and Javits and, of course, Mr. Wharton has been very active and has testified and has presented the case.

We appreciate your kindness and your indulgence.

Mr. WINANS. Rowland Alexander, from the bureau of aviation, New York State Department of Commerce, is supposed to be here today.

Mr. ALEXANDER. I am right here.

Mr. WILLIAMS. Did you want to add to that, sir?

STATEMENT OF R. K. ALEXANDER, BUREAU OF AVIATION, NEW YORK STATE DEPARTMENT OF COMMERCE

Mr. ALEXANDER. I will be very brief. New York State's Bureau of Aviation wholeheartedly supports the position of both Elmira and Poughkeepsie.

Mr. WILLIAMS. Do you have a prepared statement for submission?

Mr. ALEXANDER. No; I do not.

Mr. WILLIAMS. The committee will be glad to receive your statement for the record if you desire to submit one.

I believe that concludes the list of witnesses we have had from out of town who have come in to represent the stations that are slated to be closed, representing these stations, primarily from the standpoint of their value to the aviation community.

The subcommittee will recess until 1 o'clock, at which time our first witness will be Mr. Don Clausen, Congressman from California, and following him the various representatives of the general aviation community, beginning with the Aircraft Owners & Pilots Association.

The subcommittee will stand adjourned until 1 o'clock.

(Whereupon, at 12:05 p.m., the subcommittee adjourned until 1 p.m., this same day.)

AFTERNOON SESSION

Mr. WILLIAMS. The committee will come to order, please.

Our first witness this afternoon is our distinguished colleague from the State of California, the Honorable Don H. Clausen.

STATEMENT OF HON. DON H. CLAUSEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. CLAUSEN. Thank you, Mr. Chairman. Before I get into my testimony, I want to pay a particular tribute to you, Mr. Chairman, and Mr. Harris, the chairman of your full Committee on Interstate and Foreign Commerce, for initiating these hearings, giving people throughout the country an opportunity to be heard on a matter that is of great importance, I believe, to the overall economic progress of the country. I truly believe that these hearings are going to make history and you, as an individual, as a qualified chairman, being a flyer yourself, are certainly deserving of all of the credit that is possible to deliver to you as an individual. I think the country is indebted to you and particularly the aviation community, general aviation community, for your initiating these hearings.

I welcome this opportunity to appear before your committee to relate my personal views and comments regarding the FAA directive to remote and/or consolidate a number of flight service stations throughout the country.

At the outset, I believe it may prove valuable to the committee to have a brief résumé of my personal background in aviation prior to becoming a Member of Congress:

Former Navy carrier-based fighter pilot.

Developed airport as manager-operator.

Operated flight school, charter service, and air ambulance service.

Former CAA pilot examiner.

Currently hold single and multiengine, flight instructor, and instrument ratings.

In addition, I cofounded a flight training program in the high school of my home community, and currently serve as adviser to a number of flight training programs in high schools and colleges in California and other States.

Mr. Chairman, I want to compliment you and Mr. Harris for holding these hearings, thereby permitting the Members of Congress and representatives of the aviation community to express their reaction and the views of their constituents on the FAA recommendation to remote certain flight service stations throughout the country. For 2 days I have joined your committee in hearing testimony from Mr. Halaby, the FAA Administrator, Mr. Lieurance of the Weather Bureau, Members of Congress, and representatives of the aviation trade associations. The presentations have been detailed and informative and you, Mr. Chairman, have done a masterful job in the questioning of witnesses in order to develop the proper record as we review the current and future role of the flight service station.

Anyone remotely acquainted with the aviation problems of this country will acknowledge the great service your committee is providing by these recorded hearings. I think it is encouraging to see the

increasing number of Congressmen who are concerned over aviation problems, for in the final analysis, it is the Congress that must bear the responsibility.

For the record, I should like to refer to some of the remarks of previous witnesses that I believe tend to penetrate right to the core of the problem, which has caused the current uprising in various sections of the United States. In my judgment, more attention must be given to the problems and potentials of general aviation and the rapidly expanding business fleet. For too many years, general aviation has been kept in the shadow of military and commercial aviation.

I believe the remarks of our colleague from New York, Congressman Robison, properly describes the new awareness on the part of Congressmen. I quote:

> Although I, personally, do very little private flying, I have come to realize—these past few months—from what has been told me by those who do and who do so in ever-increasing numbers, how very important the flight service stations are to the overall aviation picture, and what vital functions they perform in the interests of air safety.

Congressman Wharton of New York made the following comment:

> Even more important, it is to be noted that in 1963, the Poughkeepsie station was credited with assisting 12 aircraft in emergency situations. Although these "saves" cannot be converted to a dollar amount, there is documented proof that the attendant's firsthand knowledge of the erratic terrain surrounding the field—an intangible which would be lost through remoting the station—was a decisive factor.

Congressman Hechler of West Virginia said:

> The general aviation pilots to a man say that their safety is threatened when you take away the flight experts who know our mountainous terrain in the locality, and substitute instead a remote and impersonal briefing far removed from the immediate scene.

Senator Keating of New York commented:

> In short, the selection of the Elmira flight service station for consolidation raises disturbing problems of air safety. It raises also the effect of such a move on the industrial growth of the area. For general aviation users do not intend to lower their own safety standards in the face of downgraded safety services. If adequate weather and preflight planning facilities are lacking at Elmira, the result will be fewer takeoffs, fewer landings, and more overflights.

In this statement, I believe the Senator has touched on a major point of significance. Safety and service are completely interdependent. In areas where the weather changes rapidly and the terrain is mountainous, it is impossible to provide the same degree of safety with a lessening of the flight services.

While we talk in terms of safety and service, I think another factor of great importance is the matter of reliability. In my humble judgment, more emphasis must be placed on facilities providing direct service to safe operation of aircraft. The rapidly expanding general and business aviation fleet will become increasingly dependent upon better and more flexible communications and navigational aids. At the same time, feeder airlines and instrument equipped aircraft will only reach maximum utilization when they can guarantee a reliability of scheduled operations. This can only be provided through better terminal services, approach lights, terminal VOR's, instrument landing systems, direction finders, radar surveillance, et cetera. Here again flexibility is the key. Some of the feeder airlines are subsidized

by the Federal Government. The subsidy contract is drawn in such a way that payments are decreased as the business potential expands. But they will never reach their maximum potential without adequate landing aids.

In the interest of economy, wouldn't we be better off to provide better landing aids, increase the airlines' business, thereby lowering subsidies and further assure the general and business public of better service. Currently, the FAA is responsible for taking and reporting weather observations at many of their stations. I see a possibility of savings by phasing more of the weather bureau responsibilities into the FAA program, thereby eliminating a duplication of effort and expense. We spend much time, money, and effort to encourage business expansion throughout this great Nation in other programs. It would appear to be a wise investment to more adequately consider the needs of business and general aviation. It is possible that "economy could be gained through wiser spending."

The three Western States—Washington, Oregon, and California—contain 20 percent of all registered active aircraft in the United States. The three States are the residence of more than 19 percent of all active civil pilots. A great number of these aircraft and pilots constitute a part of America's great business aircraft fleet—aircraft used by our industries and commercial enterprises to provide instant transportation to 793 civil airports located in the three-State area.

The three Western States are noted for their rugged scenic grandeur—their mountain ranges which extend from border to border reaching upward to 14,000 feet above sea level.

Incidentally, when I am referring to this 14,000 feet, Mount Shasta is just about a matter of 50 or 60 miles from the Arcata Flight Service Station. This gives you an idea of the terrain.

In many places these mountains are bordered by the Pacific Ocean which is noted for its cold currents which bring heavy fogs and low ceilings into many of the State's airports. The southern California area is known for its occasional freak winds—the Santa Anas which occasionally disrupt all types of flying. The needs for weather observations at many points in this tristate area seems to be, without question, a prime necessity for all of aviation.

The business fleet is dependent upon these weather observations and the forecasts which are developed from them. They are also dependent on the flight service stations, in many areas, to be the focal point for all manners of aeronautical information pertinent to the safe operation of their aircraft.

These aircraft include single engine forest patrol aircraft used by timber companies such as the Weyerhaeuser Co., Simpson, U.S. Plywood, Pacific Lumber Co., Georgia-Pacific, to name only a few, and by electric utility companies such as Pacific Power & Light Co. They include the light twin aircraft used to transport company personnel between plants and areas of raw materials. They include larger transports which are used to bring prospective customers into mill and factory sites, or to maintain personal executive supervision of farflung plants. The largest bank in the world, the Bank of America, contracts with an operator flying a twin Beech to pick up the daily records from branch banks to be delivered to San Francisco for transmittal to new computers now being used in modern banking facilities.

These business aircraft provide transportation to the business and commerce of our States in a swift and safe manner to an extent unmatched by any other form of transportation. Their safety cannot be impaired by loss of weather and aeronautical information services as the FAA's announced plan in February would have done. There are 34,000 aircraft used in business and commerce today. They fly almost 50 percent of the total hours flown in civil aviation and they are almost entirely dependent upon the services now provided through flight service stations and by other Federal Aviation Agency services.

Inasmuch as Mr. Halaby used the Arcata, Calif., facility as an example of one of the five flight service stations where he felt an error had been made, I will not dwell on the problems created by carrying out the remoting recommendations. I have discussed the problems in detail with Mr. Halaby and his very fine staff.

Incidentally, for the record, I want to in particular acknowledge the tremendous amount of cooperation that I have had from his staff and single out Mr. Bill Schulte and Mr. Bob Reynolds, who were extremely familiar with the real needs throughout this country for general aviation if they have a chance to tell their story.

At the request of an aroused citizenry, I held hearings in Humboldt County, where Mr. Joe Tippetts, regional FAA Administrator, had consented to participate. The hearings were recorded by a court report and could be made available should the need arise to prove our case for retention of the Arcata facility. However, it would cost approximately $800 for a complete transcription because the testimony ran for nearly 3 hours. As a highlight of the meeting, I would like to request permission to insert at this point in the record a letter from Mr. Dave Zebo, Humboldt County aviation director, as well as his prepared testimony delivered during the hearing protesting the proposed remoting of the Arcata Flight Service Station.

Mr. WILLIAMS. Without objection, it may be included.

(The testimony referred to follows:)

HISTORY OF HUMBOLDT COUNTY AVIATION, BY DAVE ZEBO, AVIATION DIRECTOR, COUNTY OF HUMBOLDT, PROTESTING THE PROPOSED REMOTING OF THE ARCATA FLIGHT SERVICE STATION

The notification by the Federal Aviation Agency of the proposed remoting of the Arcata Flight Service Station to another location came as a complete surprise. In the interests of air safety and by virtue of our rugged terrain, a history of floods, earthquakes, tidal waves, our known adverse weather, and at times, complete isolation, the many offshore rescue operations, it is imperative that this installation be kept intact. It is felt, at this presentation, the history of aviation in Humboldt County over the past 45 years, along with charts and statistical data would be appropriate.

Our aviation history starts back in 1919, immediately after World War I. Dayton Murray, Sr., was the first pilot in Humboldt County, operating off an airport in Eureka where the Cottage Garden Nursery is now located.

Murray Field, the former Eureka County Airport, was named after this pilot. Dayton Murray, Sr., is still enjoying good health and has the distinction of having an airport named after him while still alive.

Aviation progressed at a rapid rate, and in the late thirties, Murray Field was acquired by Humboldt County and a small runway was constructed with a kodiac-type hanger. Aviation in Humboldt continued to advance until 1941 and the declaration of war.

In 1942, the U.S. Navy constructed the Arcata Airport—known then as the Auxiliary Naval Air Station, Alameda, at a cost of 86 million. This was used as a training center for naval fliers. During the latter part of 1944 and 1945,

the Navy conducted experimentation in fog dissipation, first starting in England, the Aleutians, and then Arcata. In 1946, after World War II, Transocean Airlines, as the prime contractor, was awarded a contract in landing aids experimentation and fog dissipation. From 1946 until 1950 this station then became known as the landing aids experiment station. Many experiments were conducted during these years in various types of landing aids such as the slope line, strobe lighting, FIDO (fog intensity dispersal of) and many others. The FIDO was the most spectacular and quite successful.

In 1950, Congress discontinued appropriations for the landing aids experiment station, which was then turned over to Humboldt County for operation.

In 1950, when acquiring the airport, the Humboldt County Board of Supervisors, with much foresight, created the department of aviation, giving recognition of a function of local government that has become the considered responsibility of State, county, and municipal authorities: Said responsibilities having been necessitated to meet the requirements of a transportation factor that is of increasing importance to trade and commerce as a means of private conveyance.

The prime mission of the department was to provide modern, safe, efficient, and economical aviation facilities that were in keeping with the advancing progress of the parent industry; to administer the aeronautical resources of the county in such a manner as will provide for their maximum utilization in the interest of commercial and private aircraft operators; and to promote a constantly increasing volume of itinerant flights to and from county airports, as a step toward realizing widespread economic gains.

During this period, six airports were acquired by the county; namely, Arcata Airport, Murray Field Airport, Rohnerville Airport, Garberville Airport, Shelter Cove Airport, and Dinsmore Airport. Shelter Cove and Dinsmore Airports are under lease agreements, the others are owned outright by Humboldt County.

In 1957, the Humboldt County Board of Supervisors created the department of public works, and the department of aviation became a division of the department of public works. This was a deciding factor in the aviation advancement of Humboldt County. The division of aviation now had access to the public work's talent and engineering guidance that has been so evident in our aviation development and construction over the past 7 years. All construction plans have been formulated and administered in the public works family without the necessity of hiring consultants. We have seen, over the past 7 years, extensive face lifting to our airport system. All airports were master planned and approved. Adherence to these master plans are in evidence as each year progresses.

The airline operations out of the Arcata Airport showed increases each year up to 1960, 34,960 passengers enplaning during that calendar year—96 per day (see chart). With a population of 100,000, this is one-tenth of 1 percent of our population.

Air transportation has become such an important and necessary part of the Nation's economy that no industrial community, regardless of size, can afford to be without adequate airport facilities.

Today, our Nation's airports provide a base for some 30,000 business aircraft, owned and operated by corporations and businessmen to expedite sales and production, to decrease travel hours, and to reach off-line communities. Businessmen also use charter services available at airports to reach their plants and customers in small cities. A chartered plane may fly a staff of five or six men halfway across the United States and make a dozen stops in fewer hours than would be required to make airline connections and take off-line surface transportation.

At no time is an airport so incalculably valuable to a community as during emergencies which no one can foresee. During our Humboldt County disastrous floods of 1955–56, this value was demonstrated time and again. Missions of mercy happen so often today that they are rarely noted by the public; but to the individuals involved, they have meant life itself. The airport not only permits service to the community in times of emergency, but also provides a means of bringing aid to the surrounding rural areas.

All successful air traffic movements starts and ends at the airport, and its safe and efficient flow depends upon the quality of each facility and the relationship of one to the other. Airport planning must advance simultaneously with development of aircraft, or the advantages of one segment of the industry will be offset by the disadvantages of the other.

I feel additional information regarding the Arcata Airport would be in order. This facility is noted as the foggiest airport in the United States. It is the only airport on the coast between San Francisco and Canada with a 6,000-foot runway, an ILS system, and the only airport on the coast between these points with air crash service available on a 24-hour basis. The National Bureau of Standards has conducted continuous evaluation of landing aids from 1953 to date. Because of our weather conditions, the atmospheric research group conducted fog studies and dissipation during the 1959–61 fog season with Armour Research of Chicago. Aeronautical icing research laboratories conducted research during the 1961–63 fog season.

The Federal aviation personnel assigned to the station have been outstanding in their devotion to duty and a credit to their organization. Time and again they have displayed exceptional ability in analyzing critical situations and making correct decisions.

I would now like to explore the special services offered to this area by the flight service station personnel stationed at the Arcata Airport. In 1949, the station was commissioned and was located on the first floor of the tower structure. At this time, there were Navy personnel operating in the tower. In 1950 when the landing aids experiment station was discontinued, the Civil Aeronautics Administration thought it was necessary to move their personnel into the tower cab to operate the numerous landing aids in conjunction with the changeable coastal weather conditions peculiar to this airport. Equipment at that time consisted of transmissometers, ceilometers, high-intensity runway lights, slope line light lane, and a complete instrument landing system. The Civil Aeronautics Administration determined at that time that this would provide more efficient and safer service to pilots using this airport. At this time, Southwest Airways (now known as Pacific Air Lines) was landing with minimums of 100 feet and one-fourth mile visibility, the lowest in the United States. It was the duty of the flight service personnel at that time to control all of these landing aids. Wih these minima the lowest in the United States, the personnel had to be monitoring the approaches of these aircraft from start to finish and in constant contact with the pilot. The lights had to be turned completely off instantly upon the pilot's request in order to effect a safe landing. From this early beginning, it can readily be seen that these were not ordinary conditions nor was this an ordinary flight service station. New personnel arriving here had to be completely trained for the unusual conditions encountered only at this location. The same equipment evidently is still considered necessary by the Federal Aviation Agency since all of it is still intact, with the exception of the slope line light. However, this has been replaced by sequence flashing lights. The flight service personnel are still operating this equipment during IFR weather conditions, yet we are told that this is not one of their duties. Since this station's inception, not only has this equipment been in operation, but through the joint efforts of the Federal Aviation Agency and the Weather Bureau, additional equipment has been installed, which these same flight service station personnel are required to operate.

Due to the unusual weather conditions, and for safety, the Federal Aviation Agency installed direction finding equipment in 1958. This direction finder was installed at Arcata because the majority of northcoast aircraft are based in this area. There are 150 based aircraft in a 25-mile radius of Arcata. Since this direction finding equipment was installed, flight service personnel have used it in conjunction with the changeable weather condition to bring VFR pilots into this area during our heavy fog season. It is necessary for these pilots to use their aircraft for transportation in conjunction with their various businesses. There have been 24 actual saves made by the use of this direction finding equipment. To name a few: One aircraft was 24 miles offshore and heading due west toward Honolulu, but with the use of the direction finder, this aircraft was turned around. Another aircraft was lost on top of an overcast. One of our corporate pilots was steered with the direction finding equipment to intercept and effect a contact and landing of this aircraft at another airport. Lost aircraft have been vectored through holes in the overcast, visible from the flight service station and effected safe landings. It is felt without this manned direction finding equipment, many lives would have been lost.

Attached to my prepared statement, you will find a compilation of statistical data that should prove useful in your evaluation of our Arcata Airport and north coast problems.

36-942—64——16

Chart No. 1 is a summary of meteorological observations taken at the Arcata Airport from Federal Aviation Agency records during the period of November 1962 to October 1963, one of our lightest fog years. It is interesting to note during this season there was a total of 422 hours on 86 days we were below the minimum 200-foot ceiling and if our minimums were below the 500-foot ceiling, this would indicate 1,104 hours on 146 days.

To show again how Humboldt County has been interested in aviation safety, chart No. 2 depicts a complete aircraft accident breakdown covering the period of July 1950 to December 1963. There have been 59 property damage accidents, 17 injury accidents, 10 fatal accidents, 28 injured, and 35 killed. The thought occurs to me, "What will the statistics show 5 years hence if the Arcata Flight Service Station is remoted?"

Chart No. 3 is a breakdown of scheduled flights and those that bypassed or were canceled due to weather at the Arcata Airport. Again, this was a light fog year and yet Pacific Air Lines had 52 flyovers during the month of December—with minimums raised, this figure could well be 152.

Chart No. 4 shows a breakdown of the direction finding steers (saves) since 1958. How much do we value a human life?

Chart No. 5 shows annual air traffic at the principal airports of this county—all controlled by the Arcata Flight Service Station. Quite an impressive figure for a small California northwestern county interested in the vital safe aviation advancement of this area.

We are also attaching a limited number of aircraft directories showing the number of aircraft registered in Humboldt County and their location. Humboldt County is the only county in the State of California that requires aircraft registration. There are 183 based aircraft in Humboldt County. The distribution of this annual directory ranges from the sheriff's office, office of civil defense, Federal Aviation Agency, to the California Aeronautics Commission.

The next chart shows the nine Western States that comprise the western region of the Federal Aviation Agency. There are 50 flight service stations in the western region, indicated by dots. Those marked in red are the seven stations marked for remoting. California shows Marysville and Arcata. The two columns on the right show the numerical position of each station regarding airport instrument approaches and instrument flight rule contacts. Those stations colored in red again indicate those slated for remoting. It would be well to note the Arcata Station is third from the top on instrument contacts and fifth on IFR/DVFR contacts. Were studies made of these statistics available from the Federal Aviation Agency's own publication "FAA Air Traffic Activity, Fiscal Year 1963"?

The next chart shows an outline of Humboldt County and the location of the 33 airports and airstrips served by the Arcata Flight Service Station. These airstrips and airports have proven invaluable over the years in air search and rescue, air ambulance, parts delivery, and in protecting our natural resources they are used extensively by the State and U.S. Forestry. During our disastrous floods of 1955–56, with 50 some bridges lost, the only means of serving these areas was through the use of aircraft operating from these airports. Medications, food, clothing, you name it, was delivered.

The next two charts show the operation of United Air Lines and Pacific Air Lines. United started in November 1946 and ended in September 1952. Pacific started March 1947 and is still operating. The chart pictures the passengers enplaned at the Arcata Airport.

The green binder on the exhibit display captioned "Airport Aerial Photographs for Flight Assistance," again shows the devotion to duty and interest in air safety of the Arcata Flight Service Station personnel in assisting with the many problems our rugged terrain and adverse weather presents. With their desire to give better service, this manual was conceived. Seventeen airports, located in the surrounding areas, were photographed from the air, made into 8- by 10-inch enlargements with a description of each airport, length of runway, fuel, and service available. In the event of a lost aircraft, or an aircraft in trouble, by use of the direction finding equipment, the flight service station personnel can vector this aircraft to an area of VFR weather condition and through the use of this binder can advise the pilot of what he should see from the air and which airport he is approaching hazards in the surrounding area, and other information in order for the pilot to affect a safe landing.

The last chart is a compilation of all aircraft accidents in Humboldt County from 1950 to date. As you can see, they are scattered throughout the county. This chart was originated to determine an accident frequency and location with the hopes of cutting down on this accident rate. Remoting the Arcata Flight Service Station will certainly enhance this accident frequency.

In conclusion, gentlemen, I have great faith in the aviation future of Humboldt County and the Federal Aviation Agency in arriving at a decision in the interests of aviation safety not to remote the Arcata Flight Service Station.

SUMMARY OF METEOROLOGICAL OBSERVATIONS AT ARCATA AIRPORT

This table shows the totals of the ceilings and visibilities as reported by the Federal Aviation Agency at the Arcata-Eureka Airport, Arcata, Calif., for the 12-month period from November 1962 through October 1963. This is latest year for which the meteorological reports were available. The fog season for 1963—July through October—is regarded as having the least amount of low ceiling and visibility conditions for many years. This factor should be considered in evaluating this table.

The times were computed to the nearest half hour for each day during which the conditions were reported as below each of the indicated levels of ceiling or visibility. Thus a reported ceiling of 300 feet would be included as below 500 feet and below 800 feet but was not included as below 300 feet. The totals for each month show the total number of hours below each level to the nearest hour and also the number of days during the month in which conditions occurred below the indicated level. The total minimums are the times for which the airport would have been closed because either the ceiling or visibility was reported as below the levels indicated if this had been the criteria for minimums.

TABLE 1.—*Summary of meteorological observations, November 1962–October 1963, Arcata-Eureka Airport*

Month	Ceiling				Visibility				Minimums				
	Below 100 feet	Below 200 feet	Below 300 feet	Below 500 feet	Below 800 feet	Below ¼ mile	Below ½ mile	Below 1 mile	Below 2 miles	Below 3 miles	Below 200 feet or ½ mile	Below 500 feet or 2 miles	Below 800 feet or 3 miles
November 1962:													
Hours	17	36	68	105	124	29	44	95	114	138	43	130	154
Days	5	8	11	13	17	7	8	12	13	15	8	14	18
December 1962:													
Hours	84	111	140	159	170	98	121	183	190	217	124	206	226
Days	12	12	14	14	17	13	13	15	16	19	13	16	20
January 1963:													
Hours	12	14	19	26	51	16	20	30	46	66	20	46	75
Days	4	5	7	8	12	5	6	7	11	12	6	11	13
February 1963:													
Hours	8	14	20	41	68	14	18	28	57	68	18	66	89
Days	3	5	9	12	17	7	7	11	14	15	7	14	20
March 1963:													
Hours	----------	----------	1	13	41	----------	1	2	9	29	1	16	44
Days	----------	----------	1	3	6	----------	1	3	4	6	1	4	7
April 1963:													
Hours	----------	2	5	10	28	----------	2	4	12	17	2	14	32
Days	----------	1	1	1	7	----------	1	1	3	4	1	3	8
May 1963:													
Hours	10	18	31	75	134	11	18	40	58	78	19	80	141
Days	2	4	6	10	15	2	4	7	8	12	4	11	16
June 1963:													
Hours	12	22	46	100	154	14	26	52	76	99	27	106	160
Days	4	9	11	14	21	6	11	12	13	13	11	15	21
July 1963:													
Hours	12	16	26	71	131	12	16	33	55	84	16	80	144
Days	4	5	6	13	21	4	5	8	12	17	5	13	23
August 1963:													
Hours	26	59	124	230	355	28	60	129	200	248	62	242	370
Days	11	17	23	23	27	13	17	22	23	24	18	23	27
September 1963:													
Hours	68	108	151	214	285	68	95	148	201	235	110	227	296
Days	14	16	18	23	25	13	15	18	22	23	16	23	25
October 1963:													
Hours	16	22	41	60	93	12	22	36	60	76	23	74	102
Days	3	4	8	12	12	2	6	8	9	12	6	13	14
Total:													
Hours	265	422	732	1,104	1,634	302	443	708	1,078	1,355	465	1,287	1,833
Days	62	86	115	146	197	72	94	124	148	172	96	160	212

TABLE 2.—*Humboldt County—Aircraft accidents, July 1950–December 1963*

Year	Property damage accidents	Injury accidents	Fatal accidents	Number injured	Number killed
1950	5	3	2	3	4
1951	6	1		2	
1952	3		2		4
1953			1		1
1954	1	1	1	2	2
1955	2	1		1	
1956	4	1	2	1	5
1957	6	1	1	2	4
1958	12	3		4	
1959	6				
1960	4	4	2	9	5
1961	5	1	1	2	1
1962	3		2		6
1963	2	1	2	1	3
Total	59	17	16	28	35

Source: Compiled by Department of Public Works, Division of Aviation.

TABLE 3.—*Breakdown of flights that bypassed or were canceled because of weather, by months, for 1962 and 1963 versus flights scheduled for the same period*

	Scheduled	Canceled		Scheduled	Canceled
January 1962	197	14	January 1963	149	12
February 1962	187	4	February 1963	220	0
March 1962	215	1	March 1963	240	2
April 1962	208	2	April 1963	173	2
May 1962	212	4	May 1963	174	1
June 1962	191	16	June 1963	143	0
July 1962	206	9	July 1963	149	1
August 1962	195	16	August 1963	145	8
September 1962	188	12	September 1963	134	11
October 1962	164	50	October 1963	146	5
November 1962	183	7	November 1963	146	11
December 1962	162	52	December 1963	141	10

Source: D. A. Walker, Sales/Service Manager, Eureka-Arcata, Pacific Air Lines, Inc.

TABLE 4.—*Direction finding steers (DF) Federal Aviation Agency—Arcata Airport*

Year 1963	
January	1
March	6
June	1
October	1
November	1
December	1
Total	11
Year 1962	
January	1
March	2
April	1
June	1
Total	5
Years 1958–61	
Total	8
Total DF	24

TABLE 5.—*Humboldt County aircraft movements—1963*

Arcata	9,000
Murray Field	25,000
Rohnerville	13,500
Garberville	6,000
Samoa	4,000
Total	57,500

COUNTY OF HUMBOLDT,
DEPARTMENT OF PUBLIC WORKS,
DIVISION OF AVIATION,
Arcata, Calif., May 12, 1964.

DON H. CLAUSEN,
Member of Congress,
First District, California,
Washington, D.C.

DEAR DON: Referring to the scheduled hearing before the Aviation Subcommittee, House Interstate and Foreign Commerce Committee, to be held in Washington, D.C., May 12, 13, 14, 1964.

In light of the volumes of testimony presented at the recent Federal Aviation Agency hearing held in Eureka on Saturday, April 4, 1964, regarding the proposed remoting of the Arcata Flight Service Station to another location, it is imperative that this station remain at its present location—intact.

While we enjoy the distinction of having the foggiest airport in the United States, and because of this we are equipped with the latest of landing aids. allowing us to utilize this facility under the minimums of 200-foot ceiling and ½-mile visibility which are comparable to any other fully instrumented airport in the United States.

A history of our violent north coast weather: floods, earthquakes, and tidal waves seem to be the usual and apparently something to plan for each year.

As the Arcata Airport is the only airport on the cost between San Francisco and Canada with a 6,000-foot runway, a complete ILS system, air crash equipment available on a 24-hour basis and the only airport on this route equipped with direction finding equipment, military and civilian aircraft use this facility frequently during en route emergencies.

In the interest of Humoldt County safe aviation future, it is suggested that all means under your command be exerted to assure the continuance of this vitally needed north coast flight service station.

CHARLES SHALLER,
Public Works Director.

MAY 15, 1964.

HON. JOHN BELL WILLIAMS,
Chairman, Subcommittee on Transportation and Aeronautics,
House of Representatives.

DEAR COLLEAGUE: Enclosed is a resolution of the California State Assembly which was adopted by the assembly on April 28, 1964.

I would like to add this resolution immediately following the enclosure by Mr. Dave Zebo.

Thank you very much.

Sincerely,

DON CLAUSEN,
Member of Congress.

HOUSE RESOLUTION NO. 207, BY MR. BELOTTI, RELATIVE TO THE ARCATA FLIGHT SERVICE STATION

Whereas the administration of the Federal Aviation Agency has announced that the Arcata Flight Service Station is to be remoted to Crescent City within the next 12 to 24 months; and

Whereas this flight service station is the only facility of this type serving a geographical area noted for its isolation, hostile terrain, and changeable weather conditions; and

Whereas instrument flight rule conditions prevail in the area and along this coast rather than being the exception; and

Whereas an investigation of the cost factors involved by remoting this facility and operation by telephonic land line to serve the area indicates a false economy; and

Whereas the present facility is physically located in a tower at the Arcata Airport and thus serves an important function in traffic control by its advisory services; and

Whereas the facility by being manned in its present location has been instrumental in guiding lost or disoriented aircraft to a safe landing on numerous occasions; and

Whereas after careful study, investigation, and the consideration of all factors involved, the State aeronautics board has determined that the proposed remoting of the Arcata Flight Service Station would result in a diminution and degraduation of flight safety within the area to the flying public of the State of California as well as to transient aircraft; and

Whereas the economic welfare of this entire area has been proven to depend to a large extent through recent years on the air accessibility provided the region by its airport and flight safety services; Now, therefore, be it

Resolved by the Assembly of the State of California, That the members strongly and vigorously oppose and protest the Federal Aviation Agency proposal to phase out, or remotely control, the existing flight service facility at Arcata, Calif.; and be it further

Resolved, That the chief clerk is hereby directed to transmit copies of this resolution to U.S. Senators Engle and Kuchel; to each Representative from California in the Congress of the United States, including Congressman Donald Clausen; and to Mr. Najeeb Halaby, the Administrator of the Federal Aviation Agency.

Mr. CLAUSEN. Mr. Chairman, despite the possibility that I might be accused of appearing here to defend my vested interest, I welcome the chance to set the record straight.

For a press that is noted for its eager espousement of frivolous programs, I am amazed at the cavalier treatment given to a program of true public service in the conduct of the Federal Government's responsibility to regulate the airways. For one thing, Mr. Halaby, with great courage, remarked early in these hearings that his Agency had erred in ordering some of the 42 flight service stations to be closed. I am sure you recall that, as an example, he mentioned Arcata Airport as one of those cases in which his Agency "goofed" and that he planned to rectify the mistake.

I do not intend to belabor this at all. My only point is that if the problem of Arcata Airport in my district is solved, then why am I here? I have no vested interest to represent—obviously, my problem is solved.

My interest is this. There is much more at stake here than 42 specific flight service stations. What this committee has before it is the product of changing times—a cost reduction in some areas because automation can replace personnel and a lesser cost increase in other areas because general aviation has changed from a rich man's fair-weather fun to practically all-weather flying of aircraft for business efficiency and private travel.

Up to now, flight service stations have had the sole responsibility of offering en route navigation communications and weather service. Although they were not supposed to do so, the personnel at some of these stations adapted to the times. They began offering on-the-spot weather observations during bad weather. These are the so-called "educated eyeball" observations to direct a pilot to a hole in the overcast or advise him whether a fog bank is on the deck or whether the ceiling is a thousand feet or 2,000 feet.

Mr. Chairman, I am going to digress from my testimony to give you one of many personal circumstances that might help to illustrate the point.

As I previously mentioned, I have flown a number of air ambulance emergency cases when I served as a fixed-base operator and charter pilot. Out on the coast, we have extremely extenuating fog circumstances that require our flying under very difficult circumstances. I can give you this one example. I had a fellow who was driving from Brookings, Oreg, down to Eureka, Calif. This gentleman was suffering from a bleeding ulcer. I will not go into the gory details of his major problem other than to say it was critical because the weather was such that we could not have a doctor come to that area. He had a special type of blood. We had to fly this particular patient to the doctor. The ceiling conditions were somewhere in the vicinity of 200 to 300 feet of ceiling in Chescent City. When you take into account the fact that the elevation of the Arcata Airport is 217 feet you can see that I had some very tight weather conditions under which to fly.

It could also be said I was flying under conditions in which I possibly should not have been flying, but here was a man's life at stake, and I was the one man who could help him. So I flew this aircraft down the coast. As I approached the Arcata Airport, the fellow who was in the flight service station, which was located in a tower building, was able to provide me with on-the-spot judgment so that I could continue to come on in. I was so low—I was flying below the runway itself, as I came down the beach—and I actually had to climb to get up onto the runway. Had I not had this continuing communication by someone qualified to pass judgment at that particular time, we would have lost a man's life.

What sort of price can you put on this?

I can give you case after case of personal experiences should you so desire.

This was a terminal landing service. It took into account the terrain and the weather—not the general weather conditions furnished by a remote forecaster, but the situation that very minute at that spot. To remove the personnel and remote the Arcata navigation and weather facilities would leave a void that must be recognized as a great safety hazard. The safety services offered by these personnel now on a voluntary basis would be lost.

The real answer is to revamp the criteria for flight service stations. Terminal services with "educated eyeballs" to give up-to-the-minute reports on weather and terrain should be added to the criteria. Then the services can be applied to each area according to need.

This, basically, is the heart of the program Mr. Halaby has proposed here. The details still need to be ironed out, but the basic changes in criteria that have been proposed are a giant step in the right direction.

In the past, commercial and military categories of aviation have been given priorities, and I am not going to take anything away from the tremendous job which these people have done. I just simply think it is necessary to start recognizing the third segment of our aviation community. But I believe that the recent uprising throughout the country—as the result of the announced decision to remote 42 flight service stations—suggest that the FAA, the Weather Bureau, the

Congress, and the press should recognize the changing needs and heed the temper of the public.

Business executives are taking to the air as their companies expand into new areas, creating jobs. Commercial fleets and private aircraft ownership is rapidly expanding. These people expect the high degree of safety essential to the aviation public—be they pilots or passengers.

I strongly support the view, stated by Mr. Harris yesterday, that fully as much or more emphasis must be placed on service to the public and this includes the aviation public, as is placed on economy, safety, or the convenience of the Government. I, too, believe that the fundamental purpose of the Federal Aviation Act is to provide adequate support for the development of aviation and the provision of aeronautical services; otherwise, the Agency has no purpose in being. The provision of these services to rural areas as well as urban areas is a vital requirement if these areas are to have an opportunity to develop economically, socially, and culturally.

The 100-mile separation between facilities located in mountainous terrain concerns me, particularly for aircraft maintaining visual flight rules below an overcast. As I recall in Mr. Halaby's testimony, he made reference to the fact that there would be a minimum of 100-mile seperation. I would urge that the committee have this spelled out adequately before they close these hearings.

The full direction-finder capability of all flight service stations should be expedited to assist during bad weather and low visibility conditions. I believe you heard the gentleman from Kansas today make reference to the dust blowing and I am sure in many of the other States in the South you have a similar problems.

Further, indoctrination flights for flight service station personnel should be encouraged and provided by the FAA on a regularly scheduled program in order to familiarize personnel with the terrain conditions of the areas they serve as well as give them a better understanding of pilots' potential problems.

If these people who are serving as communicators or flight service station specialists, call them what you will, if they are going to be able to understand the real problems of the pilot, they should spend some time in the cockpit so that they can properly advise them under adverse conditions.

In conclusion, Mr. Chairman, we can agree that transportation and communications have advanced tremendously in the past decade. It can also be said that transportation and communication advances are an important motivating force behind our social and economic progress.

With the expanding population we must be ever alert in seeking out opportunities for progress. As we improve our facilities to accommodate the business community, I believe we will create the environment for economic growth. We must accentuate the positive. We must promote the flexibility, mobility, and utility that only aircraft transportation can provide—but unless we have adequate means of communication, under every conceivable circumstance, safety, service, and reliability will be jeopardized.

We must retain those "educated eyeballs." With safety, service, and economy the prime consideration, I could never support a program designed to delete the on-the-spot judgment of qualified personnel where rapidly changing weather and terrain conditions are so unique.

A price tag simply cannot be placed on the safety requirements on operating aircraft. Adequate flexibility in criteria is an absolute essential. I am pleased to see the FAA moving in this direction.

Mr. WILLIAMS. Mr. Clausen, let me say that your statement, in my opinion, is one of the finest that I have heard given to a congressional committee on any subject. You certainly display a knowledge of your subject.

Before asking you any questions on my own, I will recognize Mr. Devine for any questions he might have.

Mr. DEVINE. I would just like to join the chairman in complimenting you on your statement, Mr. Clausen. It is most refreshing to have a colleague in the Congress who is knowledgeable in the field in which we are conducting an investigation and it is very helpful to know these things first hand.

I notice that during the 3 days of hearing you have been in constant attendance and have not missed much. I wonder if you will agree with me that everyone who has testified here, no matter from what area of the country, everyone has unusual weather conditions. Are there any common weather conditions in this country?

Mr. CLAUSEN. Well, I would say in general you will find that there are extenuating circumstances throughout the country. There may be certain areas—maybe in the plateau country—where you may have some level or stable weather conditions, but I think you will have some very serious problems to consider in almost every area.

Mr. DEVINE. Do you happen to know, and perhaps I can get this from Mr. Schulte or someone in the FAA later, how they selected the present flight service stations in the country?

Mr. CLAUSEN. I think it would be best for you to have them give you the technical answer, but I will say simply this: that I am sure it was designed originally taking into account the geographical circumstances. I know that the airways were laid out under the old low-frequency days, taking into account the passages whereby aircraft could fly the safest and they actually lined up the direction of that particular leg of the low-frequency range to permit the maximum amount of safety.

Now, as they laid out the various VOR, the omnirange stations throughout the country, I am sure they had maximum utilization of communications and navigation in mind. But I think what we have found here, Mr. Divine, is that over the years we have had an expanding demand for aviation brought about as a result of technological advances in communications and the type of aircraft and there just simply has not been enough consideration, in my judgment, given to this rapid expansion.

Mr. DEVINE. Do you happen to know what criteria they used in the selection of these original 42 sites for abandonment?

Mr. CLAUSEN. No, sir; I do not, but I am sure that by the time you complete your hearings, you should certainly have a fairly adequate record to bring this out.

Mr. WILLIAMS. Will the gentleman yield at that point?

Mr. DEVINE. I certainly will.

Mr. WILLIAMS. In that regard, you have talked to Mr. Halaby and others in the Agency at great length and quite often, I understand, about the situation at Arcata. In view of the fact that the Agency

has now changed its mind in regard to Arcata, do you know how Arcata got on there in the first place?

Mr. CLAUSEN. No, sir. It is almost beyond my personal comprehension that Arcata would have been included.

Mr. WILLIAMS. Is it possible that it was an arbitrary selection?

Mr. CLAUSEN. Well, I think I should lay it right on the line. I feel that the people who drafted this particular plan were simply not familiar with the aviation and pilot requirements of those particular areas.

Mr. WILLIAMS. The Administrator is a native of California, I understand, and I would think that he would be reasonably familiar with most of the problems in California. I have some difficulty in understanding how Arcata got on the list in the first place.

Mr. CLAUSEN. Well, I am sure that the Administrator is a very busy man. Incidentally, I want to compliment him, he is a very able man. I think he has done a tremendous job for the aviation community of the entire United States. But, in my judgment, I do not think that Najeeb Halaby saw this final recommendation in detail or he would certainly not have made some of the recommendations that were made.

Second, I believe that one of the great problems that was brought out by Senator Keating yesterday is the fact that some hearings or at least some discussion should have been held in the areas that were going to be affected—there should have been some consideration given to the problems in those areas before they remoted the facility or offered the recommendation.

I think Senator Keating brought this out very specifically in his testimony.

Mr. WILLIAMS. In view of the peculiar weather situation that you have at Arcata, which has now been admitted and recognized by the Federal Aviation Agency, how would you account for the fact that the Weather Bureau concurred in the original recommendation?

Mr. CLAUSEN. I would have to say that the same answer would apply here. I think that what we are faced with, they were basing their recommendation on established criteria, Mr. Chairman. The established criteria were originally set up to include basically en route navigational and communication facilities. Voluntarily, they have given credence to the terminal serivces and here in the Arcata area, you have a former military tower where the INSAC is housed. As a result, these people have been performing a service that the aviation community has become accustomed to, as they suggest.

I think the pertinent fact is that business and all of the users have become accustomed to this and now are dependent upon it. They have built their business operations around this. We have major business interests throughout the entire west coast that come into the Arcata area primarily because of existing facilities. If we are going to be creating jobs and expanding industry, as this administration and previous administrations have always placed a great amount of emphasis on, I think here is an area where we should take into account evaluations as far as the economy is concerned.

Mr. WILLIAMS. I take it you think there should be some kind of poverty program for general aviation. Would you like to comment on the program that has been presented by Mr. Halaby thus far having

to do with the setting up of so-called manicom stations and the other plans that he suggested?

Mr. CLAUSEN. Yes. As I understood from his testimony, there was certainly going to be a lot of consideration given to trial and error in various areas. I have some reservations about this because it has been pointed out that in certain instances one man could handle the operation for that particular day or you could have some restriction throughout the 24-hour period. This may be possible in certain instances. But I can also show you flight operations in and about flight service stations that would certainly require as many as three men on duty at the particular time, dependent upon the amount of traffic you have, the telephone ringing, et cetera. Having visited a number of these flight service stations, I can tell you sometimes these people need three or four hands, particularly when there are adverse weather conditions.

Let me say something else, Mr. Chairman. There have been some comments about the fact that this is purely for rich businessmen or Sunday pilots or what have you. I think that there has not been enough attention given to the nonaviation users or the nonaviation demands that are being made of some of these flight service stations simply because of their existence.

I believe Mr. Lieurance alluded to this in his testimony of yesterday.

I know for a fact in our own area many people, for instance, who call up to find out what the weather was going to be so that they could determine whether or not to hang out their laundry. Many of the housewives were doing this. I happen to be familiar with this. Even though the flight service station personnel would try to advise them, they say, "I am a taxpayer. Why am I not entitled to this type of service?" If it is there, they expect results.

Second, I know of many of the commercial radio stations that would set up a beeper service where they would call out to the flight service station, asked to be tuned in to the regular broadcast station, to their frequency, over the telephone, and then in this way they would transmit the weather information over the broadcast station to the entire community. This was a great service to that particular community, and we would not have had it were it not for the fact that we had the flight service station available there.

So there is a lot of value to people other than just aviation users.

I just wanted to make that point, sir.

Mr. WILLIAMS. Thank you, sir.

While we are on the subject of the Weather Bureau, you make this remark in your statement on page 2, you say:

I see a possibility of savings by phasing more of the Weather Bureau responsibilities into the FAA program, thereby eliminating a duplication of effort and expense.

In connection with the testimony of one of the witnesses, I forget which one, the subject of the possibility of a reorganization plan which would place the Weather Bureau under the Federal Aviation Agency was mentioned. Another witness, I believe, mentioned the desirability of making the Weather Bureau an independent agency.

What did you have in mind in the statement you made in your prepared text?

Mr. CLAUSEN. I would say that a complete merger between the FAA and the Weather Bureau probably would be somewhat drastic.

But inasmuch as we have here in the Congress two separate committees that are evaluating the appropriations, it would be my considered judgment that we might consider the possibility of placing the Weather Bureau as an independent agency under the jurisdiction of the same Independent Offices Appropriations Committee. In this way, the members of that committee, the chairmen, could then assist in working out some of the elimination of duplications and I think it would be a great service and I think it would be a tremendous savings in money.

Mr. WILLIAMS. There is one other item that I would like to cover with you while you are here.

There has been quite a bit of discussion about tower criteria currently followed by the Federal Aviation Agency. Would you like to comment on that matter?

Mr. CLAUSEN. Mr. Chairman, I have always felt that the tower criterion has always been too rigid and I think that the testimony here spells out what I am saying.

You see, it requires some 24,000 operations under current criteria for a tower facility. As I understand it, there also has to be, in order to qualify for an ILS, you have to have 700 completed instrument approaches. Here again we have a chicken and egg situation. What comes first? So, I feel that in certain areas, the number of operations will not meet this rigid criterion but yet they need the service very badly, they need to have a tower facility, or not quite as rigid a criterion so as to provide the terminal service that has been brought out so often here in this testimony.

The flexibility of criteria for these flight service stations where terminal services are necessary in my judgment is the real key. I would hope that this concept can be carried out.

Mr. WILLIAMS. I know we have run into the same situation with regard to Federal aid to airports. In the past—I don't know whether it is true now—but in the past it was required they have a specified number of based aircraft before they would be eligible for airport funds and, of course, they couldn't have any based aircraft unless they had an airport.

Mr. CLAUSEN. That is right.

Mr. WILLIAMS. So it is a sort of chicken-and-egg proposition.

I have one last question. You have had a great deal of experience in training student pilots. As a matter of fact, you have been active in carrying out programs in conjunction with public schools, I understand.

Mr. CLAUSEN. Yes, sir.

Mr. WILLIAMS. Regarding pilot training. To what extend do the flight service stations render service in connection with student programs?

Mr. CLAUSEN. As you know, in the Del Norte County High School of my community, we have a complete flight training program as a recognized part of the curriculum in the school system. Were it not for the fact that we have this flight service station readily available, we would have a very difficult time in maintaining a control upon the student pilots as they fly in the area. Through this arrangement, we are in a position to be able to maintain constant communication with that particular student as he is in the air. When we think in terms of

some of our international problems, Mr. Chairman, I believe that it is going to become increasingly necessary, as we shift into the space age, for some of our people, particularly our young people, to become more and more aviation oriented. So I have always been a strong advocate of the fact that aviation education and flight training should be in our school systems. This has accrued to our benefit in many, many ways. There are many fringe benefits as a result of the program. The program has provided the motivation for many students to acquire an education that had not been able to be motivated in any other way. In other words, we take the hot rodders off the ground and put them up in the air, assign them responsibility, and the results have been fantastic.

I think as we look beyond the horizon we are going to have to come forward with a major program if we are going to win this cold war. It is my personal belief that if we will recognize the true potential of aircraft, and I am not talking about jets, I am not talking about big aircraft, I am talking about a small aircraft—as you also know, Mr. Chairman, I have worked with a private flying Peace Corps for the past 9 years throughout the world—and if we are going to win the cold war, I think we are going to have to have people equipped with information on the American system and I can't think of any better way in which to export this particular information than through proper utilization of the aircraft.

In my judgment, transportation and communications is the answer to this problem. And as we look to answers, those of use in the Congress, for a program to win the cold war, I would like to refer you to the comments of Henry Cabot Lodge, the Ambassador to Vietnam, who, just the other day, singled out that what we should be doing is accentuating again the positive, showing the Communists where we excell, not trying to compete in areas where we cannot even compete. One of them I might mention, as in his comment in the Life magazine, was the use of the aircraft. I have lived this all my life. I am personally convinced this is the only way we will ever be able to export freedom and show them the benefits of our free society. So, I place great emphasis on this partcular communications facility in Crescent City, Calif., as an example that should be considered here domestically. We need to expand this concept because it may very well be that these will be the tools that we will be looking to for winning the cold war.

We should look at the aircraft as a more effective tool of peace than a tool of war by loading aircraft not with bombs but with people equipped to export the American image and the American free enterprise system.

Thank you.

Mr. WILLIAMS. Mr. Devine?

Mr. DEVINE. I have no questions.

Mr. WILLIAMS. Mr. Clausen, I have no further questions. If there is anything that you would like to add to your testimony, we will be very happy to hear it.

You have made a splendid statement and I think you have given the committee some very valuable information.

Mr. CLAUSEN. Thank you for the privilege, Mr. Chairman.

Mr. WILLIAMS. We are going to vary from the announced schedule in one respect by calling next, instead of the Aircraft Owners & Pilots Association, the representatives of the National Association of Air Traffic Specialists, Mr. Kraham and Mr. Rand.

STATEMENT OF GEORGE L. RAND, EXECUTIVE DIRECTOR, NATIONAL ASSOCIATION OF AIR TRAFFIC SPECIALISTS, BETHESDA, MD.

Mr. RAND. Mr. Chairman, distinguished members of the committee, my name is George Rand. I am executive director of the National Association of Air Traffic Specialists. I have with me our general counsel, Mr. William R. Kraham, who is a veteran Air Force pilot and for some years was an attorney with the Federal Aviation Agency.

In order that we might share the pleasure of addressing this committee, I ask that Mr. Kraham deliver our paper after which I would like to make a few short remarks and stand by to answer any questions that you may have.

Mr. Kraham.

STATEMENT OF WILLIAM R. KRAHAM, GENERAL COUNSEL, WASHINGTON, D.C.

Mr. KRAHAM. Thank you, Mr. Rand.

Mr. Chairman, I might say one thing in the beginning. We have been preceded by excellence—the statement by Congressman Clausen. So, quite frankly, I will attempt to confine our statement to the now refined issues.

The National Association of Air Traffic Specialists is a nonprofit, professional association whose membership comprises over 75 percent of the flight service specialists employed by FAA to operate its system of flight service stations. This association was granted formal recognition by FAA under the provisions of Executive Order 10988.

At this time a repetitious review by us of all the services rendered by these specialists would appear to be not only self-serving on our part, but indeed, out of order for other reasons. The grassroots response from the affected areas of the country presented thus far at this hearing have adequately presented and demonstrated these very great and meaningful successes.

The FAA proposal involves removing personnel from a vast number of flight service stations, remoting the navigational aids and some of the communications channels to central "hub" stations—and this I should emphasize, some of the communications channels—because bearing on the extent and the numbers of these channels being remoted, will determine, in large part, the cost. In any event, these would be remoted to so-called central "hub" stations to replace two to three existing stations and increasing the staff of the "hub" stations to handle additional workloads. This has been called the "octopus" concept of planning. The landline rental costs will depend upon the number of communication channels remoted, the number of military operations offices served, et cetera. Because of nonrecurring installation costs incident to consolidation (average $35,000 per station) and

the costs of adjusting staff and relocating personnel, no savings would be realized until the third year.

The FAA has stated that the primary function of a flight service station is en route communication and that there is no limit to the number of stations reasonably that can be consolidated without derogating safety. We disagree with this statement and ask that you consider the following:

1. The flight service system accounted for 455 documented "saves" during a typical 3-month period, April 1 to June 30, 1963. During this period 398 lost aircraft were oriented and directed to a safe landing, 93 by the use of VHF/DF equipment and 211 by reference to lights, landmarks, and terrain features. This latter technique is highly effective only when a flight service specialist has responsibility for a normal "service area" within a radius of 50 to 75 miles of his station. Modern VHF/UHF direction-finding equipment has been provided in prior-year appropriations, adequate to provide complete coverage down to minimum en route altitude (MEA) if installed in the present system of approximately 300 stations. DF equipment cannot be remoted except at prohibitive cost. It must be operated from a position within a few hundred feet of the equipment installation. The proposed "hard core" system of approximately 110 stations will provide only 40 to 50 percent DF coverage.

2. The effectiveness of preflight briefing is seriously impaired when it must be done by telephone as opposed to over-the-counter briefing because pictorial presentation of weather, plotting charts, navigational computers, terrain profiles, current FAA publications, danger area charts, et cetera, are not available to the pilot.

3. Alternative arrangements for aviation weather service—part-time SAWRS, AMOS, et cetera—are inferior to the existing 24-hour first order service provided by the FSS. Example:

At Poughkeepsie, N.Y., 7 p.m., April 28, 1964, the New York ARTCC contacted the Poughkeepsie FSS via interphone, asked for a recheck of the reported 3,000-foot ceiling at Poughkeepsie, then advised that they had an Aero Commander—a twin-engine aircraft—in the New York traffic complex with one engine feathered and weather at all New York area airports was below minimums. The aircraft was diverted to Poughkeepsie; emergency equipment was alerted and the aircraft landed at 7:30 p.m. without incident. Without full-time weather reporting service this alternate airport would not have been available in this emergency.

4. Many control zones will have to be canceled and many airports will lose their instrument approach procedure because of lack of communication capability.

5. The ability to "talk a pilot down" by the sight-and-sound method would be lost by remoting. Example:

At Mineral Wells, Tex.—scheduled to be remoted to Fort Worth—on March 9, 1964, the weather deteriorated to "ceiling, 100 feet, sky obscured, visibility one-quarter mile, snow, snow pellets, fog, wind 300° 16 knots with gusts to 24." Three single-engine civil aircraft caught in this weather were talked down by a flight service specialist at the Mineral Wells FSS as he stood outside the station building using an extension microphone. The entire action took place in 27 minutes. The aircraft and pilots involved were: N7980D BE35, pilot,

Gene C. Head, Fort Worth, Tex.; N3825D C182, pilot, Eugene C. Morris, Shreveport, La.; and N5775W PA28, pilot, Roger L. Burk, Long Beach, Calif. These were not novice pilots and perhaps they could have made a semblance of an instrument approach off the VOR but could not see the airport when right over it.

6. Airport advisory service, now furnished by many flight service stations where there is no airport control tower, will no longer be available. Safety will be seriously impaired by a return to the old practice of several agencies on the airport issuing information for the same airport at the same time over different communication channels; that is, airline radio, unicom, et cetera.

We are reminded that two fatal midair collisions between air carrier and general aviation aircraft in the vicinity of airports in good weather furnished the impetus for the initial establishment of this service.

What are the alternative means of effecting economies if we maintain the position, as we do, that most of the existing flight service stations should be continued in force? The association agrees that a balanced budget and a "lean and clean" operation are desirable goals, and that FAA should cooperate with the President and Congress in all areas of its operation. However, emasculation of the flight service system does not effect economy consistent with safety and service. We suggest that FAA reexamine its entire area of expenditures including management, research, and analysis. Perhaps the cost of maintaining equipment in the air traffic system should be reexamined and weighed against any increases in safety it actually buys, as well as industry cost figures for similar maintenance programs. In fact, more careful consideration should be given to the operating facilities of the entire air traffic service.

In this connection, and more to point up our case involving flight service stations, we believe each low and medium activity VFR tower should be considered for 16-hour operation. Each flight service station, not to be forgotten in this survey, should be reexamined in the light of what it is doing for general aviation, and placed in one of the following categories:

1. Primary stations (without regard to hub designation) with an aggregate of "annual flight services" in the upper three-fifths of the approximately 400 stations and combined station/towers listed in the current publication "FAA Air Traffic Activity."

2. Intermediate stations where service can be reduced to 16 hours per day (6 a.m. to 10 p.m. local time) with a modest reduction in staffing and no serious derogation of safety.

Testimony presented during this hearing tending toward this type of operation has been repeatedly referred to and should receive additional consideration.

These stations should be provided with VHF–UHF direction finding equipment as originally programed. Nonrecurring installation costs are not involved in reducing the hours of operation of an existing station or in returning it to 24-hour operation when warranted. It is only necessary to send a NOTAM and adjust the staffing.

3. Low activity stations in the lower 10 percent of the ranking order of "annual flight services" of the approximately 400 stations and combined station/towers listed in the current publication "FAA

Air Traffic Activity" which could be remoted to a primary station provided monetary savings would outweigh any impairment of safety resulting from the removal of personnel.

Also, it is suggested—and this might appear to be quite similar to the suggestion propounded by the Federal Aviation Agency—it is suggested that airport locations be selected for satellite flight service substations and equipped with a briefing counter, pictorial displays, service "A" receiving-only teletypewriters, direct FAS or FX line to a primary station, minimum weather observational equipment, and two-way communication with aircraft on 122.1, 122.2, and 122.5 megacycles. These stations would be staffed by FAA personnel for periods of 12 to 16 hours per day, 7 days per week, depending on the volume of general aviation activity. These are not manicoms. These, therefore, differ from the proposed manicoms as suggested by FAA. We would refer to these as satellite flight service stations, the idea being to give the maximum service within the existing framework.

Finally, and of equal importance, there is a real opportunity to effect savings and improve the quality of both tower and FSS services be decombining most of the 67 combined station-towers remaining in the FAA air traffic system. The case for decombining has been made abundantly clear in two papers published by the Air Traffic Control Association, the first dated October 15, 1963, reporting the findings of a technical panel at the eighth annual ATCA meeting in Dallas, Tex.; the second, entitled "The Combined Station-Tower Dilemma," in the March issue of the Journal of Air Traffic Control. I think their executive director, Mr. Ed Cockerham, is here and possibly he can give us a better discussion of those views later.

I simply want to say this association and ATCA appear to be in complete agreement on the question. We want to add that it appears that at a low activity VFR tower location the removal of all FSS functions to an adjacent FSS would normally permit placing the tower on 16-hour operation with a minimum VFR tower complement. For general aviation, the quality of pilot briefing would be improved because the man at the other end of the line would have the full array of pictorial displays to assist him. This is not possible in a tower cab because of space limitations. Pilot briefing over the local interphone or telephone from a combined station-tower is not a satisfactory substitute. Additionally, the savings per man to be realized by reducing tower staffing would exceed the savings per man resulting from reduction in FSS staffing because of the difference in grade structure. The association recommends that the program of decombining combined station-towers previously commenced and halted, be resumed at this time and completed prior to any major changes in the present flight service system.

The National Association of Air Traffic Specialists welcomes the opportunity to express its views before this committee. Giving consideration to the facts at hand, we believe the public interest demands a continuance of the highest possible degree of aviation safety. Most expert opinions and advisories we have heard, I think, prove that the case for keeping the flight service stations in existence, has been overwhelming. Don't we, in fact, now have an excellent opportunity to hold on to these very excellent capabilities and at the same time effect economies where best suited within the existing framework through-

out the country? In other words, giving application to the desired flexibility as pointed out by Congressman Clausen, but not losing sight of, nor the value of, the existing stations.

We believe the public interest also demands this kind of economy consistent with safety and service. It always has. We are confident that you will insure that the public interest continues to be so served.

Thank you.

Mr. WILLIAMS. Thank you, sir.

I would like to comment on your statement by saying that here is again another excellent analysis of this situation. You have not made an arbitrary approach to the problem. Apparently, you recognize that some streamlining of the operation could be effected without impairing safety or without reducing services.

I was interested in the alternative which you presented to the plan suggested by the Administrator. I think it might well command his attention and consideration as an alternative to what he himself has proposed.

It seems to me that there are going to be a number of problems that will result in the setting up of these manicom stations in that these stations will be operated on a single frequency. At the present time, what is the minimum number of frequencies guarded by the flight service stations in the country?

Mr. RAND. Mr. Chairman, would you like me to read off the frequencies or give you the number of them?

Mr. WILLIAMS. I think I know most of them.

Mr. RAND. The receiver guards are maintained on 122.1, on 121.5, which is the international distress frequency, on 126.7, on 135.9, on 243.0, which is the UHF distress frequency and two other military UHF frequencies which I do not recall from memory. Transmissions are made on the voice feature of the VOR, on 122.2 as a reply channel to 122.1, and Simplex on 126.7, 135.9, 121.5, 243.0, and on the other two military UHF frequencies. And in the direction-finding equipment, which has been authorized by Congress, most of these frequencies are set up in the equipment for pushbutton selection. In other words, an aircraft can transmit on these standard FSS frequencies and if he is within range, the flight service specialist will see a strobe line from the center of his scope to the perimeter indicating the azimuth from the station.

We were concerned about remoting a flight service station to a hub station or primary station 75 or a hundred miles away unless all of these frequencies, with the equipment in place at the old station, were remoted. The channels have been found to be necessary to handle the communications load and if you remove five or six of them and try to handle the whole load on one or two, it is just like pouring a gallon of milk into a pint bottle; it is not going to work.

I think that, in the Agency's analysis of cost, they ought to spell out the number of frequencies that are to be remoted and the number of landlines that are to be leased from the A.T. & T. to accomplish this.

Mr. WILLIAMS. In case the Administrator saw fit to remote three frequencies instead of just one frequency, would it require three different lines?

Mr. RAND. Yes, sir. It is my understanding that each frequency requires its own discrete line because flight service specialists at the hub station, at the center of the octopus, are required to utilize all of these channels simultaneously through the different operating positions. In other words, one specialist might be talking to one airplane in the area on 126.7 while another specialist may be talking to another airplane in the area on still another frequency. So that requires a pair of wires or a channel—they are not always wires, they are channels—it requires one channel for each frequency.

Mr. WILLIAMS. In addition to these frequencies you mentioned, doesn't each station have a transmission on its omnifrequency?

Mr. RAND. Yes, sir, that is another line. They also have many other services. For example, in the transcribed weather broadcasts made on the low-frequency homing facilities, there are 77 of those, I believe; if that service is moved, you require another line to carry the voice from the station out to the high-power, low-frequency transmitter.

Mr. WILLIAMS. So, a saving might be effected by remoting with one line?

Mr. RAND. That is possible.

Mr. WILLIAMS. But when we reach a point we have to remote with three lines we are going to have to have a new evaluation of savings, aren't we?

Mr. RAND. Yes, sir; that is correct.

Mr. WILLIAMS. I believe that is all I have at the moment.

Mr. RAND. Mr. Chairman, may I have a moment, then, to give you a little bit of a story of the history of flight service stations and how we got ourselves in the fix we are in? We have heard a couple of the witnesses give the background of the flight service system but we have a little more of the story to tell.

The flight service system of today had its beginning in the era of the airmail service, from 1918 to 1927. They were called radio stations and the people who operated them were called radio operators. This was followed by the pre-air traffic control period from 1928 to 1934 which say the planning and implementation of the first Federal airways systems of Navaids, emergency landing fields, airway beacons, and communications stations.

By 1935, the requirement for positive control of IFR en route traffic and of both IFR and VFR traffic in the congested terminal areas was fairly well established and the Federal Government went about the business of satisfying this requirement. That was the time when the air traffic control people joined the Federal Airways family.

Effective control of air traffic required reliable communications between the pilot and the controller. This was first accomplished by relaying clearances and position reports through appropriate communications stations. Air carrier aircraft worked through "company radio," military aircraft worked through either military radio, or "Insacs" they were called (interstate airway communications stations). They were the forerunner of the present FSS.

General aviation aircraft depended entirely on the Insacs. Only the aircraft in terminal areas talked directly with the controller.

Now, at that time in our history, there was a very close community of interest between the people operating the stations and the air traffic

controllers in the centers and towers, particularly in the centers. As time marched on, the volume of traffic increased tremendously.

HF communication was supplanted by VHF and UHF. The VOR replaced the Adcock four-course range as the primary Navaid and direct controller-pilot communications with IFR aircraft was developed by implementing a comprehensive system of peripheral communications outlets. The FSS system continued to serve VFR flights and acted as a backup for the controller in case of failure of the direct controller-pilot channels, which is not infrequent.

In this process of evolution, the flight service stations gradually assumed a new role which amounts to furnishing for general aviation the same briefing, dispatching, and flight following services as the air carrier "company system" and the military base operations offices.

The only significant difference is that the general aviation pilot still retains the authority and accepts the responsibility for beginning, canceling, or diverting a flight.

I will add, parenthetically, that is the way we like it. We are not anxious to assume any dispatching powers. I think the pilot should make his own decisions, based on the information given him.

Flight service specialists have undergone intensive training in navagation, aviation weather, pilot briefing, aircraft operating characteristics, terrain familiarization, and emergency procedures.

Over 30 percent of the flight service specialists are themselves licensed pilots. This brings me to a point now where I would like to say that we realize as well as some of the other witnesses that the flight service system of today is not the ideal system. The location of some of the stations, particularly the location of personnel, are the result of bad planning. We have flight service stations on the third floor of airline terminal buildings where general aviation pilots can't find them for face-to-face briefings.

Another part of this evolution is that the flight service system, and the people who operate it, have grown away from that close community of interest with the air traffic control people and we now have a closer affinity with general aviation.

If you want to know why the system is devoid of good flight service planning, I can give you a clue.

In the past 9 years in the Federal Aviation Agency there has been a gradual elimination of what we call flight service types from the key positions in the Washington office and the seven regional offices until we have reached the point now where not one key position in the organization chart is filled with a person who has either the experience or the motivation to plan, implement, and manage a good flight service system.

I have stated the problem.

You probably want to know what I think should be the answer. I think Mr. Halaby, whom I admire presonally, is trying to do a fine job for general aviation, as well as the air carriers. I also think he has had some bad advice. I think he would do well to seriously consider removing the entire leadership and administration of the flight service system from the Office of Air Traffic Control and placing it under the Office of General Aviation. That is a drastic thing to suggest. I am sure my friends in ATC are not going to love me for it.

Mr. WILLIAMS. I suspect you would get a lot of support for that in the general aviation community.

Mr. RAND. That is all for that part of my statement, sir. My time is running short. I was going to describe the combined station/tower. I will briefly say that Mr. Halaby did not adequately answer the question of what a combined station/tower is. I would like to answer it for him.

Mr. WILLIAMS. All right, sir.

Mr. RAND. The majority of them with the exception of two or three we call odd balls which are combined rapcon/stations and things of that sort, the great majority of the 67 CS/T's are low-activity locations and all of the personnel are in the cab, all operations are conducted in the cab. They are under one boss. They are all certificated air traffic controllers and they attempt—I will stress that word—they attempt to do both jobs in a crowded tower-cab with the clatter of teletype equipment and no room for any briefing aids or anything of the sort. They are not trained and certificated by the Weather Bureau as pilot weather briefers as are the flight service specialists, yet they are called on over the telephone to brief pilots. The best they can do is tear a piece of paper off the teletype machine and read it over the telephone to the pilot. Then the pilot makes his own judgment as to whether he should attempt a flight or not.

Mr. WILLIAMS. How many of these installations do we have over the country?

Mr. RAND. There are 67.

Mr. WILLIAMS. Are they included in the number of flight service stations that we have had given to us as the number of service stations in operation?

Mr. RAND. No, sir, there are 297 flight service stations in the continental United States and I believe 40 outside the United States. There are 404 total flight service stations and combined facilities. I don't know whether that adds up to 67 CS/T's or not. But those figures appear in the ATS Fact Book.

I would also like to say a word about the 150-station hard core network which the FAA has proposed. I think the proposal in our paper, if fou worked out the formula, would probably come out to about 200 hard core stations which we think would probably be enough if you add 50 part-time stations. We think part-time operation of an existing station without a lot of nonrecurring installation costs is a very valid answer to some of these problems.

We have had two stations in the southern region operating on a 16-hour schedule on a test basis for about 6 months. Alma, Ga., and Dyersburg, Tenn. I don't think the delegation up here from Dyersburg, Tenn. I don't think the delegation up here from Dyersburg this morning even knew that, but they have been on a 16-hour operation for the past 6 months and our membership there tells us that it is satisfactory and that there is very little derogation of safety, and you save 1½ man-years in salary by removing the man from that midnight watch. It requires 1.58 men to cover one 8-hour watch, 7 days per week, according to FAA staffing tables. I think that should be explored more fully.

Also, the decombining of these combined station-towers should be studied.

Mr. WILLIAMS. The Federal Aviation Agency has quite an investment in equipment in these flight service stations, does it not?

Mr. RAND. That is right; and it is fine equipment.

Mr. WILLIAMS. How much of this equipment could be utilized in converting these stations to manicom-type operations?

Mr. RAND. I believe a good bit of it could. The cost of maintaining it would be a little bit higher than if the equipment were removed and it were supplanted with a Gonset communicator, which is a low-cost, low-power Mickey Mouse piece of equipment.

Mr. WILLIAMS. Could you give us any indication of how much it costs in radio equipment alone to equip the average flight service station, with the number of frequencies that you must necessarily guard?

Mr. RAND. It would have to be a shotgun guess, Mr. Chairman. I would guess $50,000.

Mr. WILLIAMS. How much of that equipment, do you think will be usable if, in the event these stations are removed and replaced with a manicom operation?

Mr. RAND. If they remote them properly and remote all of the communications channels, then most of the transmitting and receiving equipment would still be in use.

Mr. WILLIAMS. On the assumption they would only have one frequency as has been indicated?

Mr. RAND. Then they would probably remove four-fifths of the equipment and retain one-fifth. It would be sent to the warehouses and probably reused.

Mr. WILLIAMS. So, out of that $50,000 worth of equipment that you have estimated, you have given us a curbstone guess on it, you would say that roughly $10,000 might be used?

Mr. RAND. Yes, sir.

Mr. WILLIAMS. That leaves $40,000 worth of equipment that is going to become surplus overnight.

Mr. RAND. That is right.

Mr. WILLIAMS. Is there any market for that kind of equipment?

Mr. RAND. Well, I will say this: When the Government bought it they might have paid $50,000 for it including engineering and installation. If they sell it, they might sell it for $50.

Mr. WILLIAMS. That is what I was thinking.

Mr. RAND. It would be sold as surplus.

Mr. WILLIAMS. This surplus equipment would hardly bring the amount that it would take to have it hauled to the warehouse, would it?

Mr. RAND. That is a fair assumption.

Mr. WILLIAMS. So, whether the Federal Aviation Agency has figured in the loss on their investment in equipment, in connection with this we don't know yet, do we? Do you know whether they have figured that in against the amount that they plan to save?

Mr. RAND. Mr. Halaby has not taken me into his confidence to that extent.

Mr. WILLIAMS. Thank you.

Mr. Sibal, do you have any questions?

Mr. SIBAL. I have no questions.

Mr. WILLIAMS. Does that conclude your statement?

Mr. RAND. Yes, sir. Thank you very much.

Mr. WILLIAMS. It looks like we are going to have a long session this afternoon. I think it might be well for us to recess for a few minutes and then start up for another hour and a half.

(Short recess.)

Mr. WILLIAMS. The next witness is the Aircraft Owners & Pilots Association. Mr. Karant, are you going to speak for the association?

Mr. KARANT. Yes, sir.

Mr. WILLIAMS. Mr. Max Karant.

STATEMENT OF MAX KARANT, VICE PRESIDENT; ACCOMPANIED BY VICTOR J. KAYNE, DIRECTOR, OFFICE OF POLICY COORDINATION; AND ROBERT E. MONROE, ASSISTANT DIRECTOR, OFFICE OF POLICY COORDINATION, AIRCRAFT OWNERS & PILOTS ASSOCIATION, WASHINGTON, D.C.

Mr. KARANT. Mr. Chairman, first I would like to introduce, on my left, Mr. Victor J. Kayne, who is director of the office of policy coordination, and on my right, Mr. Monroe, assistant director of the office of policy coordination. We will take turns trying to field your questions.

Before I go ahead, I would like to say I have been able to spend only this morning and this afternoon here. I have been inspired by one important thing. I did not think I would live to see it but I have now seen it. I want to say, both for the record and for your ears, that there are two Members of Congress here that talk my language, yourself and Congressman Clausen. We don't have to go into a lot of elaborate detail to explain what an airplane is, and you understand why we don't have to be an astronaut to fly them. I just want you to know that that, above all, has inspired me, at least.

Now, we are going to put the statement in, the big one, and I will not read it. I have some remarks here which I will summarize. I will summarize the principal points of this document in a brief fashion and then I would like to comment on a few things which have been developed by this hearing.

Mr. WILLIAMS. You want your statement to go in in its entirety as it is?

Mr. KARANT. Yes, sir; this statement.

Mr. WILLIAMS. All right.

(The statement referred to follows:)

STATEMENT OF THE AIRCRAFT OWNERS & PILOTS ASSOCIATION ON THE FLIGHT SERVICE STATION PROGRAM OF THE FEDERAL AVIATION AGENCY

Mr. Chairman and members of the Transportation and Aeronautics Subcommittee, my name is Max Karant. I am vice president of the Aircraft Owners & Pilots Association. I am accompanied by Victor J. Kayne, director of the office of policy coordination, and Robert E. Monroe, assistant director of the office of policy coordination. We appreciate the opportunity to present the views of our association on the FAA flight service station program.

AIRCRAFT OWNERS & PILOTS ASSOCIATION

The Aircraft Owners & Pilots Association is an organization which provides services to more than 101,000 members located in every State in the Union. It is a nonprofit association incorporated under the laws of New Jersey.

Purpose: It was formed 25 years ago to promote, protect, and represent the interest of its members in aeronautics and the pursuit of flying; to promote economy, safety, popularity, and use of aircraft by members. To accomplish

these purposes, we seek several specific objectives: maximum freedom of the airspace for all users consistent with safety, improved aviation safety, an adequate airport system, an adequate system of air navigation aids, production of improved aircraft, reduction of frustrations in aircraft ownership and use, facilitation of international travel by private aircraft, and wider public support of general aviation requirements.

Membership: Half of the active general aviation aircraft in the United States are owned and operated by our members. Our 101,000 members comprise more than 34 percent of all the active civil pilots in the entire country—63 percent of our members hold private certificates; 24 percent hold commercial certificates; 2 percent hold airline transport ratings; 8 percent hold student certificates, and the balance are pilots in military service. AOPA is not a profession or trade association in the commonly accepted sense of those terms. The majority of our members are nonprofessional pilots and therefore do not join for the usual professional or commercial reasons, characteristic of unions or business trade associations. AOPA is a service organization more analogous to the American Automobile Association or the National Rifle Association.

AOPA staff: To serve our members, who fly for business, personal, and recreational purposes, we have assembled a full-time staff of 95 people. Our professional staff is composed of specialists who are acknowledged experts in their respective fields. We cover virtually every field of significant interest to the owner or pilot of a noncommercial aircraft. Many of these fields are also of interest to commercial operators. Our headquarters is located in Bethesda, Md.

Method of policy formulation: You will recognize the inherent problem in policy formulation in an organization with so large a membership. It is not unlike your own problems in representing your constituents on specific issues. Like you, we pay very close attention to the nature, character, substance, and volume of mail from our members, as well as our personal contacts with members throughout the country. AOPA policy is formulated, in the light of extensive member comment, by the professional staff members, who combine their knowledge, background, and understanding of aviation problems. Our rapid growth in 25 years from zero to 101,000 members, is practical testimony to the success of this method and th eaccuracy with which our staff reflects member desires—for we are dependent upon members and dues voluntarily paid.

THE PROBLEM

On February 4, 1964, Federal Aviation Agency officials announced a program to consolidate 42 flight service stations over the succeeding 2 years. This unilateral decision was arrived at by the Agency without any consultation with the general aviation community which was most immediately and directly affected. Individuals, local groups, and industry representatives were virtually unanimous in their immediate and outspoken opposition to both the substance of the FAA program and the manner in which it was presented to them. The Agency denied the possibility of any substantial reconsideration. Your committee has been gracious enough to recognize the industry's petitions for reconsideration to you directly and through our respective delegates to Congress.

JUSTIFICATIONS

The FAA officials gave several justifications for their program. It was directed by the President. It was an economy measure. No loss of service would result. Greater efficiency in operation and administration would occur. The reduction had been directed by this Congress. The industry had asked for economy.

Presidential direction: We suspect that the Presidential direction, if it followed the usual procedure, derived from an inquiry by the President as to what additional economy measures the FAA could undertake. The Administrator probably responded that a few flight service stations could be cut out without causing too much ruckus. The response was probably on the order of "Fine. Go ahead." We doubt very much that the President called the Administrator in and on his own initiative said, "Chop off 42 flight service stations," or anything like it.

It may be an economy measure, but if so, we think it is one which will come home to roost in the form of an increased accident rate and loss of life. Moreover, the savings in this area are minimal if not nonexistent for a considerable period. There are other places in the FAA program where greater economies can be achieved without resulting in significant reductions of service to the

public. We treated the possibilities of this kind at some length last year in our comments on the FAA budget request. Most of those recommendations are still valid in our view.

Any time that a station is eliminated and face-to-face contact is made impossible, there will be a reduction in service despite all denials to the contrary.

Greater efficiency probably would result so far as the Agency itself is concerned. That omits any consideration of how well or efficiently the aviation public is served. For its own purposes, the Agency would probably be most efficient if it were all assembled in one place, but that would not serve well the needs of the public—though it might give us a good excuse to say that we don't need the Agency at all since it wouldn't serve our needs.

Congressional direction is a crutch that the Agency has leaned on mightily. Let us quote from the committee reports last year so that we can see precisely what was said by the Appropriations Committees of the two chambers. House Report No. 824 says in pertinent part:

"The committee suggests that the Administrator give further study to the locations of flight service stations. It appears that there are too many and that they are too expensive, but it realizes he has problems in trying to close some of them, although substantial savings would result."

This language is hardly a clarion call for elimination of flight service stations if we understand the meaning of words like "give further study," "it appears that," and "it realizes that he has problems."

Senate Report No. 641 says in pertinent part:

"The committee also agrees with the House committee's proposed reduction of the large number of flight service stations and urges the Administrator to proceed with the reduction and consolidation of these manned stations. Their retention should be based solely on their essentiality for safety."

This language, while stronger than that of the report above, assumes a House proposal that did not in fact exist. We grant that these passages are suggestive but we hardly conceive them to be directive. The Agency, in other cases (e.g., medical limitations), has interpreted (or misinterpreted) far more specific language that that used in this case to enable it to do something that it wanted to do which was contrary to the suggestion of the Congress. It has even had a few directives, some of them in the basic legislation establishing the Agency, which it has rather steadily ignored or found convenient excuses to postpone implementing (e.g., the study of special personnel problems called for by sec. 302(g) of the Federal Aviation Act).

We also find ourselves constrained to remember that the House report language resulted from something less than a spirited defense of the flight service station program on the part of the Agency officials during the 1963 hearings. In view of the weakness of the FAA defense, we are even a little surprised that the committee did not suggest that flight service stations be eliminated entirely.

It is true that at least some of the industry has asked for some economy in FAA activities. Certainly, AOPA has. We have pointed to several areas where some sizable reductions in spending could be made without substantially impairing services to the public. The FAA has rather studiously ignored these areas and instead has selected an area which does serve the public in which to make its economies. This is time-honored retaliatory measure of the bureaucracy under fire for wasting money. Make the cuts where the public will be hurt and save the areas where it won't.

AOPA'S POSITION

Actually, AOPA's position with respect to economy and to flight service stations has been honestly misunderstood in a few quarters and intentionally misrepresented in several others—mostly FAA related. It may be timely for us to repeat what we have said previously. In our FAA budget comments last year, we said this about money:

"We approach the task of commenting upon the FAA budget request with considerable reluctance and some apprehension. Reluctance, because we remember so vividly those times just a few years back when it was so difficult to get adequate sums of money appropriated for aviation purposes. We observe that much good has been accomplished with the funds that have been supplied. We have noted the tendency to oscillate between supplying too little and supplying too much * * *.

"We still believe that sizable sums of money can be spent profitably for aviation purposes in the public interest."

In discussing the FAA appropriation for "operations" we made only a passing reference to the flight service stations as they related to the pilot-to-forecaster experimental service. By omitting further comment on flight service stations in connection with this appropriation we signified, or meant to, our acquiescence to and approval of their continued operation for this year. We made no recommendations for cuts in the "operations" appropriation with respect to flight service stations.

However, with respect to the appropriation for "facilities and equipment," when we commented on flight srevice stations, we did recommend that no money be authorized for new or additional equipment or facilities pending a thorough reappraisal of the role of the flight service station in the future air traffic system. In other words, we were not, and are not, opposed to the continued operation of flight service stations, but we do think that further investment in this type of facility should be postponed until its future role in the system is determined.

When we commented on this subject a year ago, we had not studied the flight service station problem comprehensively. We had no fixed ideas about what we thought the future role of these facilities should be. In the interim we have studied this problem and have arrived at some fairly firm and specific recommendations. These are treated comprehensively in annexes B and C attached. Some general aspects of the present FSS problem deserve comment and we turn now to these.

GENERAL COMMENTS

Present role: As we see it, the basic function of the present flight service station is to communicate information which is useful to the pilot. It may do this by radio, telephone, teletype, interphone, or face-to-face conversation. The information may relate to weather conditions, airport conditions, navigation aid facilities, or air traffic matters. Additionally, the station may have to monitor and maintain navigation and communication facilities, observe weather, assist in the location of lost aircraft, and help pilots who have become disoriented. In the process of communicating information, the station may also be involved in the relay or exchange of information to other stations. Primarily, it has been oriented to the needs and functions of the IFR traffic control system.

Continuing need: We think some form of flight service station is essential to the promotion and development of civil aeronautics. Some mechanism is necessary to provide general aviation pilots with the essential information which they need to execute their flights safely. Mechanisms for this purpose already exist for airline and military pilots. The general aviation pilot, as well as those in nonscheduled operations, presently rely upon the flight service station for this assistance. No other mechanism is available or able to serve the need.

The promotion and development of civil aeronautics depends upon continued improvement in the operational utility of civil aircraft operations. Safety improves with the ready availability of information essential to operational safety. The flight service station is the best mechanism yet available to make essential information readily available to the pilot, either on the ground or in the air. Many types of information available in the flight service station are not available in the tower or the center; e.g., airport conditions at uncontrolled airports.

Cause for the FSS retrenchment: We are not sure of the causes for the original retrenchment program begun in 1949 when we had 464 stations. It seems to have been a result of perhaps three different programs: (1) a calculated effort to combine low-activity control towers and flight service stations into one facility serving both needs. This concept, valid on the surface, has never worked really well due to the markedly different functions and purposes of a tower and a station. (2) The shift from low- to very-high-frequency navigation facilities. Formerly, we had a station in conjunction with almost every low-frequency facility and the numbers of these were limited by the geographical spacing required to provide interference-free radio operation. Very-high-frequency stations can be spaced much closer together and it became evident that we could not establish a station in connection with each. This led to the development of remote operation of these navigation facilities. (3) The closing of a number of intermediate fields which had stations located on them leads to a further decline in activity and subsequent closing due to lack of use.

The current retrenchment appears to arise from a twofold situation. (1) The FAA planners seem to feel that flight service stations no longer serve an essential purpose and that all essential purposes can be met by centers and towers. They apparently do admit that stations have an en route communica-

tions function and a teletype communications function which can be performed by a small number of rather large stations. (2) The congressional Appropriations Committees have apparently been led to feel that we have too many flight service stations. In recent reports, they have suggested a reduction.

Reduction criteria: We have been unable to deduce what criteria for selecting these 42 stations will reconcile with the activity records of these and other stations. The FAA has not divulged what criteria, if any, they used nor have they explained why this information has not been released. Neither have they explained why whatever criteria they did use was used.

Annex A attached shows a tabulation of the 42 stations included in the FAA reduction program. A study of this tabulation reveals several things:

Two of the stations (Melbourne, Fla., and Millville, N.J.) are among the hundred busiest stations in the four categories of activity that FAA ranks. One station (Myrtle Beach, S.C.) is among the hundred busiest in three categories. Seven stations are in this group in two categories, and ten more are in one. In short, 20 of the 42 stations are among the 100 busiest stations in 1 or more of the categories in which the FAA makes counts and ranks stations.

Furthermore only 8 of the 42 stations are not above the median in any ranked category of activity. Another 8 stations are above the median in all four categories (Tuscaloosa, Ala., Melbourne, Fla., Albany, Ga., Brunswick, Ga., Meridian, Miss., Millville, N.J., Poughkeepsie, N.Y., and Anderson, S.C.); 5 are above the median in three categories, 11 in 2, and 10 in 1.

Or put still another way, out of 408 stations and combined station/towers, many of the 42 enjoy a high level of use. Apparently, the criteria for selection did not involve activity in any consistent pattern.

Neither do we find any logical geographic pattern. Other areas have stations more closely spaced and still others more widely spaced.

Future role: It seems to us that the best and most productive role of the future flight service station is to act as the source for help and guidance in everyday flight operations. The station, instead of being focused basically on serving the IFR system, should be focused primarily on serving VFR traffic. In general aviation, VFR operations exceed IFR operations on a ratio of about 24 to 1.

Provision of flight services to general aviation pilots is needed at more and more public-use airports as general aviation operations increase. The character of service needed at each location is broad in range. The number of locations at which service is needed will increase each year. We should be in a position to serve the needs of most communities. The pilot has a number of sources of en route aid, either centers or flight service stations, but he has only a few sources of terminal aid—the control tower at some 277 locations, and the flight service station at some 334 locations. Many of these are colocated; i.e., there is both a tower and a flight service station at about 113 airports.

The station should serve as a point for the collection and dissemination of aeronautical information of all kinds which the general pilot may need to do his job safely and efficiently. This service should be provided on a voluntary demand basis rather than as a result of regulatory action. The service should be scaled to the real demand based on the use rather than providing excessive service for which there is little request or doubtful need. Many stations should be part-time operations rather than around the clock. If traffic does not warrant manning, assistance should be provided by phone to remote stations and self-help facilities. In any case, assistance should be available in some form wherever there is a volume of public use.

What is needed? Briefly, we think most of the existing stations should be retained in a basic network operating around the clock for en route communications purposes. Some can be operated with reduced staffing and/or on a part-time basis. A number of additional part-time stations should be established where traffic justifies. The scale of these should vary with the demand but basically, they should be minimum facilities. Also, a number of unmanned facilities should be established at public-use airports, both public and private, which do not have any other facility to provide assistance. These facilities should provide self-help materials, access to weather information and a phone line to the nearest basic station.

What will it cost? We have made some rough calculations, using data supplied by the Agency, and estimate that such a program could be provided at some 1,130 more airports than are now served for about $13,153,000 in initial costs and $12,808,000 in recurring costs each year.

Though rough, we think these estimates are reasonable for the scale of service we have in mind. If the above program were spread over a 10-year period we think it would be responsive to both present and future general aviation needs. If some of the present stations were reduced in size and made part-time instead of around-the-clock operations, the added cost of the program we propose would be very modest indeed.

Numbers: A review of the fundamental numbers involved is helpful though we continue to be bothered by disparities in these numbers. The FAA ATS Factbook dated December 31, 1963, shows the following situation with respect to number of flight service stations as of that date:

	FSS	CS/T	Total
Number of stations	334	67	401
Less—			
Alaska	−30	−2	−32
Hawaii	−2	−2	−4
Virgin Islands	−2		−2
Puerto Rico	−1		−1
Balance, 48 States	299	63	362

On the other hand, FAA Air Traffic Activity, calendar year 1963, reports on page 150 that as of December 31, 1963, there were 336 flight service stations and 68 combined station/towers, or a total of 404.

At the February 4 briefing, the FAA officials told us, and subsequently distributed a handout showing that as of December 31, 1963, the Agency had in the 48 States 297 flight service stations involving 3,787 ATS positions.

A review of requirements table from FAA justifications which were inserted in the appropriations hearing records, shows the following numbers:

Fiscal year	Number of stations (FSS and IFSS)	Number of positions	Program appropriation
1961	338+11=349	3,926	$28,236,000
1962	338+11=349	4,471	34,467,000
1963	337+11=348	4,613	37,865,000
1964 requested	336+12=348	4,735	42,075,000

For fiscal year 1964, the Agency asked for new obligational authority of $545,500,000 for its "operations" which included the operation of flight service stations. The appropriations bill granted $528 million. This was $17,500,000 less than requested and a cut of 3.2 percent. The flight service station program, at a requested value of $42,075,000, constituted only 7.7 percent of the Agency's "operations" program.

If we divide the program cost and the total positions as reported in the hearing records by the number of stations, we find the following results:

Year	Average cost per station	Positions
1961	$80,905.44	11.3
1962	98,759.31	12.8
1963	108,807.47	13.3
1964 requested	120,905.17	13.6

With the number of stations remaining virtually constant, we find it hard to attribute all of this cost to salary increases (one of the more frequent excuses for rising costs); the staffing must have gone up. We also find it difficult to reconcile these growing cost figures with the decline in staffing which FAA presented at the February 4 briefing. The 3,787 positions (for the 48 States) they reported at that time is less than the total number of positions back in 1961 (3,926).

In fact, the ATS Fact Book dated December 31, 1963, on page 5, shows 4,245 positions authorized in the 48 States and 4,180 of them filled as of November 30, 1963. It shows only 380 positions authorized for Alaska and the Pacific, and 364 of them filled.

The average number of positions per station also marks the rise in staffing in view of a constant number of stations.

The capital investment in flight service stations in recent years is shown by the following figures drawn from budget documents regarding FAA appropriations for facilities and equipment.

Year	Domestic	International	Total
1961	$11,103,000	$5,383,000	$16,486,000
1962	8,188,000	3,682,000	12,870,000
1963	4,402,000	1,667,000	6,069,000
1964 estimated	4,320,000	2,020,000	6,340,000
1965 requested	8,556,000	3,079,000	11,635,000

FAA's request for all facilities and equipment in 1964 included a program amounting to $170,612,000 and new obligational authority for $127 million. Congress granted $100,250,000. The cut in new authority was 21 percent, but the cut in program was only 15.6 percent. Flight service stations, domestic and international, comprised only 3.8 percent of the requested total program. Even in capital investment, the impact of flight service stations is minor compared with other aspects of FAA's program. It is interesting to note that the FAA in its current request, asks for more money for aircraft and related equipment and for research, test, and evaluation facilities—to serve itself—than it asks for domestic flight service stations to serve the public directly.

Economic factors: Any change involves both initial and recurring costs. The establishment, elimination, remoting or reestablishment of a station involves both types of costs and sometimes they become accumulative. There will be costs for: salary, personnel compensation and benefits; transportation of personnel and perhaps families; transportation of things, equipment, supplies, etc.; communications land lines in varying numbers; utilities in the form of heat, light, water, etc.; equipment of various kinds, from transmitter-receivers to switching mechanisms.

In many cases it may turn out that the initial and recurring costs are so great that any net benefit in savings will be a long time in showing. We understand that $35,000 will be allocated to the appropriate regions for each station to accomplish remoting. This amount does not appear sufficient to enable the remoting of all of the frequencies presently used by the station to be remoted, such as the emergency frequency, 121.5 megacycles, and the en route frequencies 126.7 and 135.9. Probably it would only allow remoting of VOR and the 122.1 megacycles communications receiver associated with it. The lost frequencies do provide an essential body of service.

Nor will this amount also enable the remoting of the direction-finding capability for which money has already been appropriated and equipment ordered. While remoting of direction-finding capability is technically possible, it is not economically practical.

Services lost: If a station is remoted or eliminated, a number of things are lost. The preceding paragraphs indicate some losses due to economics. Naturally, if a station is eliminated, all functions are lost.

If the station is remoted, we lose the observation and reportage of weather, if these are presently performed by the station. We lose face-to-face briefing. We lose personnel with detailed knowledge of the area for assisting lost aircraft. We probably lose communications on certain common frequencies such as 126.7, 135.9, and 121.5, depending upon whether the Agency can afford to remote these frequencies as well as the communications associated with the navigation aid. We lose a point where written examinations are given. We lose another station where direction-finding and locating service could be established per existing plans.

Cost of contact: The FAA draws attention to what it termed the high cost of providing flight services. These ran from a low of $1.60 for a flight service

to a high of $9.30 for a flight plan or briefing. We don't know what kind of mathematics the Agency went through to arrive at these figures but we did do a few rudimentary calculations of our own.

The National Office Managment Association reports that it costs private business almost $2 just to write a letter. We suspect that the cost to Government is a good deal higher. By comparison, the cost of flight services (essentially another form of communication) is probably not too far out of line, if at all.

Or, to approach the problem another way, if the average FSS employee is a GS–9 and earns about $8,000 per year, his time alone is worth about $4 per hour or 7 cents per minute. If a briefing takes 5 minutes, that's 35 cents worth of time. Double or triple to account for cost of equipment and overhead and the cost of a service is in the neighborhood of a dollar .

Or still another way. If the 1963 program cost about $37,865,000 and the total number of aircraft contacts, flight plans, airport advisories, pilot briefs, and flight condition messages amounted to 15,415,000 for the same fiscal period as reported by the FAA air traffic activity fiscal year 1963, then the average cost of each service was about $2.46. This of course ignores that the stations do a lot of other uncounted services, including some for the military and the Weather Bureau—not mentioning FAA's own internal communications. The actual prorated cost should be somewhat lower.

We do not find these costs outside of an accepted range for communications in other lines of activity, especially if compared to the average cost of a long-distance phone call or a letter.

Criteria: Perhaps a word about criteria will be helpful. The Administrator has the power to establish criteria for the installation, retention, and removal of facilities. These benchmarks are not laid down in the Federal Aviation Act or other legislation. Since they were established by the Administrator, they can be altered by him.

It seems to us that the present criteria do not adequately reflect the uses made of the flight service station. No credit is given for a number of essential and useful services. For example, if a briefing results in a flight plan, it counts. But, if a pilot decides not to fly because of adverse weather and does not file, it does not count. The relative weights given to the various kinds of services also are open to question in our view.

WEATHER

Elsewhere, we have given our views on the weather problem in some detail. For the present instance, it is sufficient to say that we want the entire load of weather observing, reporting, analysis, and forecasting firmly placed on the Weather Bureau. We want no divided responsibility on this score. Therefore, we do not claim a special consideration for flight service stations in this connection. However, we do not object to a contractual arrangement between the FAA and the Weather Bureau whenever such is practical.

On the other hand, all flight service stations do need accurate weather information at their disposal to communicate to pilots. In other words, they need the product after the Weather Bureau produces and distributes it.

CONCLUSION

AOPA recognizes that substantial changes in the air traffic system have occurred, and that as a consequence, the role of flight service stations in that system should be altered. The FAA has placed great emphasis on modernizing the air traffic control system as it relates to towers and centers but has virtually ignored the flight service stations that serve the majoriy of the air traffic. We believe that opportunities for using flight services should be increased, not decreased, if civil aeronautics are to be promoted and developed. We will support changes in the system along the lines we have outlined in this paper and its attachments.

ANNEX A

FAA'S 42-station reduction program activity counts and ranks out of 408 FSS and CS/T

[Data from FAA Air Traffic Activity, fiscal year 1963]

	Column C	Aircraft contacted				Flight plans originated				Airport flight		
		IFR-DVFR		VFR		IFR-DVR		VFR		Pilot briefs	Advisories	Condition messages
		Count	Rank	Count	Rank	Count	Rank	Count	Rank			
Alabama: Tuscaloosa	*1+	2,663*	135	30,352*	42+	4,239*	125	4,171*	132	4,547	20,649	527
Arizona: Yuma	1+	1,083	304	13,443	203	1,751*	190	8,440*	73+	2,616	----------	1,104
Arkansas: Fayetteville	1+	2,613*	147	22,539*	96+	655	259	4,488*	120	8,523	15,992	340
California:												
Arcata (DF)	1+	4,850*	26+	14,188	185	2,907*	151	3,887*	146	3,412	10,400	144
Marysville	----------	974	324	21,942*	101	3,152	145	3,735*	155	3,281	19,069	283
Florida:												
Melbourne	*4+	3,752*	65+	26,563*	68+	5,791*	96+	5,731*	100+	4,797	22,867	523
Pensacola	2+	845	345	8,083	300	8,938*	59+	9,949*	49+	9,463	----------	251
Georgia:												
Albany	*2+	3,242*	89+	24,437*	79+	4,298*	123	3,355*	171	6,981	16,285	558
Brunswick	(*)	2,615*	146	20,951*	113	2,842*	153	3,879*	147	5,867	11,545	422
Valdosta	----------	1,790	212	16,170*	164	2,290*	160	2,233	238	1,772	10,151	510
Kansas:												
Dodge City	----------	1,181	288	16,049*	167	214	326	1,737	281	2,116	12,070	346
Goodland	----------	2,996*	109	12,316	224	328	298	1,075	342	1,394	5,420	1,115
Manhattan	----------	935	332	16,051*	166	720	252	2,754	197	2,793	17,560	164
Russell	----------	1,797	211	13,738	196	217	325	2,639	210	6,412	8,704	404
Louisiana: Monroe	1+	3,744*	66+	13,364	204	3,494*	139	2,817	194	8,636	----------	577
Michigan:												
Jackson	----------	1,229	283	9,285	283	2,225*	163	2,633	211	3,835	218	172
Saulte Ste. Marie	1+	3,240*	90+	2,779	383	1,605	196	1,234	327	807	1,918	5
Minnesota: Rochester	----------	988	322	12,022	232	736	250	2,662	206	4,232	----------	234
Mississippi: Meridian	*2+	3,391*	77+	17,460*	147	4,314*	122	6,270*	91+	5,577	6,524	892
Nebraska: Imperial	----------	866	343	6,987	321	49	386	597	380	560	3,934	476
Nebraska: Scottsbluff	----------	2,070	191	19,441*	128	254	308	2,330	232	2,475	14,641	346
Nevada: Ely	----------	437	386	4,033	369	41	390	873	362	876	4,239	90
New Jersey: Millville	*4+	3,173*	97+	22,812*	92+	12,652*	39+	6,296*	90+	4,706	4,243	521
New Mexico: Zuni	----------	2,004	193	12,768	216	107	360	1,006	353	1,235	----------	2,539
New York:												
Elmira	2+	6,862*	7+	9,582	281	6,711*	85+	1,601	291	6,281	----------	394
Poughkeepsie	*1+	3,898*	56+	17,145*	150	5,285*	106	4,310*	128	2,915	7,266	455
Utica	1+	1,454	252	4,448	363	8,467*	65+	3,662*	159	3,327	----------	239
North Carolina: Elizabeth City	----------	1,783	213	6,582	334	1,814*	185	1,077	341	1,657	----------	135
Ohio: Zanesville	1+	2,882*	117	22,870*	89+	665	256	1,198	330	3,598	16,590	488

South Carolina:												
Anderson	*2+	3,337*	85+	28,232*	54+	4,631*	117	4,062*	134	3,823	9,330	611
Myrtle Beach	3+	3,815*	60+	10,536	269	13,683*	33+	7,311*	78+	7,941	----------	362
Tennessee: Dyersburg	----------	1,596	234	15,989*	168	4,164*	130	4,800*	115	12,214	7,748	431
Texas:												
College Station	2+	1,062	307	14,448	183	14,018*	32+	8,161*	76+	4,557	158	725
Galveston	----------	1,300	272	11,756	241	246	315	1,158	335	1,578	10,501	165
Mineral Wells	----------	1,170	289	21,411*	110	372	291	3,532*	165	3,675	7,833	585
Palacios	----------	1,046	313	12,351	223	3,262*	144	4,872*	113	1,793	1,777	386
Vermont: Montpelier	2+	3,705*	67+	8,852	288	6,787*	83+	3,646*	161	2,762	5,707	65
Washington:												
Ephrata	----------	1,615	231	9,244	284	5,601	101	2,210	241	2,713	6,799	190
Toledo	----------	164	404	5,481	354	41	391	600	378	492	922	88
West Virginia:												
Bluefield	1+	4,954*	24+	13,997	189	1,291	209	1,153	337	3,430	9,825	415
Huntington	----------	1,260	276	8,760	293	2,816*	154	2,252	236	4,351	----------	369
Wyoming: Sheridan	----------	1,748	218	12,397	222	241	317	2,323	234	2,723	10,614	389
High	----------	11,154	----------	81,566	----------	58,143	----------	44,788	----------	----------	----------	----------
Median	----------	2,257	----------	15,567	----------	1,657	----------	3,238	----------	----------	----------	----------
Low	----------	18	----------	0	----------	0	----------	0	----------	----------	----------	----------

NOTE:
*=above median.
+=hundred busiest.
Column C—*=above median in all 4 ranked categories.
Column C—2+=in hundred busiest in 2 categories.
(DF)=has direction-finding equipment installed.

36-942—64—18

ANNEX B

COMMENTS AND RECOMMENDATIONS ON THE FUTURE ROLE OF FAA FLIGHT SERVICE STATIONS

AIRCRAFT OWNERS & PILOTS ASSOCIATION,
Washington, D.C., February 17, 1964.

Mr. N. E. HALABY,
Administrator, Federal Aviation Agency,
Washington, D.C.

DEAR MR. HALABY: Our letter of February 12, 1964, transmitted a brief press release concerning our initial reaction to the FAA proposal to close numerous flight service stations. Our concern, on behalf of our more than 100,000 members, is based on the adverse effect that the FAA program will have on safety through reduced service to general aviation, which is the largest user group of these facilities and which has no other source for obtaining these safety services.

Our detailed comments and recommendations on the future role of flight service stations are enclosed. Briefly, we recommend a long-range program which may take as long as 10 years to complete and which proposes a bold new concept designed to provide maximum service and enhance the safety of general aviation operations. The new concept envisages a basic nationwide network of full-time stations, supplemented by part-time stations strategically located at the busier general aviation airports. This proposal is designed to assist you in modernizing the Nation's air traffic system with the objective of obtaining maximum service and safety for the taxpayers' dollar.

Again, we renew our offer of assistance and stand ready to discuss this matter with your appropriate staff officials at their convenience.

Cordially,

MAX KARANT, *Vice President.*

COMMENTS AND RECOMMENDATIONS OF AOPA ON THE FUTURE ROLE OF FAA FLIGHT SERVICE STATIONS

The recommendations of the Aircraft Owners & Pilots Association with regard to the future role of FAA flight service stations propose a bold new concept designed to provide maximum service and enhance the safety of general aviation operations. The new concept, which is outlined in detail below, envisages a basic network of stations operated around the clock, supplemented by part-time stations strategically located at general aviation airports throughout the country. A brief summary of the background of this subject is essential to proper understanding of the situation.

BACKGROUND

Early in 1963 we learned that the FAA was conducting an internal study concerning flight service stations. Our members had complained to us about the problems associated with the declining numbers of stations and about mandatory requirements in the use of those which provided airport advisory service. As a consequence of these and related matters, AOPA asked Congress in the spring of 1963 to withhold further capital investment in flight service stations pending a review of their role in the avitaion system. We did not by any means intend this request to convey the impression that AOPA was opposed to flight service stations and wanted them eliminated or seriously reduced. Rather, we made the request in recognition that the place of the flight service station in the system had in fact changed substantially, not so much through changes in the stations and their functions themselves, but in changes in the nature and character of the system as a whole. Member complaints merely provided the impetus for recognition of this shift.

In the months which followed, we heard frequent rumors concerning the course of the flight service station study, which gave us cause for apprehension. On July 31, 1963, AOPA wrote to Mr. R. J. Shank, Associate Administrator, and voiced our concern regarding the flight service station problem and asked for an opportunity to learn what alternatives were being considered and to offer our assistance in the form of user input before changes were programed. Over a month later, by letter of September 11, Mr. Shank acknowledged our offer and indicated that "if any changes in the basic concept of operations are contemplated, the AOPA * * * will be consulted * * *." Perhaps a reduction of 42

from a total of 334 stations is not considered a "change in the basic concept" but we think that a change of this magnitude is open to question on that score, particularly when considered in relation to projected additional cuts which would bring the total reduction to 70 or more.

Once more, in response to public allusions to this program, we wrote Mr. D. D. Thomas on November 7 and restated our interest in this matter and again offered our assistance. Mr. Thomas promptly replied on November 18, pointed out that the study was an S.R. & D. study, admitted that change was likely and invited a statement from us concerning the functions which we considered essential as distinguished from those we believed only desirable. At this point, we entered into the preparation of such a statement, even though we were working without the benefit of any information concerning the FAA study or program.

Despite our repeated representations, both by letter and by telephone with various FAA officials during the last several months, indicating our serious concern with the flight service station study and the direction in which it might be leading, we were never consulted prior to the announcement of the reduction program on February 4, 1964. Neither, so far as we can learn, were any other civil users of flight service station services. One of the outstanding characteristics of the present administration of the FAA, which favorably distinguished it from that of the previous administration, has been the frequent and open consultation with parties at interest in the aviation system before major programs involving substantial changes were "frozen into concrete." We had no inkling that this policy was to be abrogated in a matter so important to a major sector of the aviation system as the flight service station program is to general aviation. The disappointment of several of the largest user groups was expressed to Mr. Thomas at the briefing on February 4.

The theoretical savings indicated by the FAA for the closing and remoting of the 42 stations appear to paint only one side of the picture. No savings in manpower are indicated for the first year. Next, the quoted cost of remoting the facility equals 1 year's saving. This means no savings for at least 2 years. However, not accounted for are the recurring land line and maintenance costs associated with the remote control nor the costs of moving the displaced personnel, their families and their household goods to a new location. These additional costs further cut into the theoretical savings quoted by the FAA.

Notwithstanding the cloud which the announcement of February 4 places over the entire program, we will continue to work in good faith and offer for consideration the following material which was to be our answer to Mr. Thomas' letter. It suggests a major modification of the role of the flight service station to match the changing character and composition of the aviation system, particularly as it relates to general aviation.

THE ROLE OF THE FLIGHT SERVICE STATION

For a considerable time to come, the pilot will have a valid need for certain kinds of flight assistance. Military operations offices provide this to the military pilot. Airline dispatchers provide it to airline pilots. The general aviation pilot is left largely to shift for himself due to the fact that he does not have an organized requirement such as leads to the operations and dispatch offices of the military and the airlines. The general aviation pilot requires a substantial measure of support which, in our view, can only be supplied by a flight service station of some nature.

General aviation already accounts for something in the order of 75 percent of the workload of the flight service station system, when measured in terms of contacts both IFR and VFR, and the relationship of VFR to IFR is in the vicinity of 8 to 1. It seems likely that airline and military dependence on the flight service station network will continue to decline as it has in the past. That portion of dependence which will remain is not inconsistent or incompatible with the services provided to general aviation.

A realistic appraisal of general aviation needs should also take into account the locations of activity and the hours during which it is significant enough to merit support. Obviously, it is not economically feasible, nor is it necessary, to provide assistance at every one of the more than 8,000 landing places in the United States.

A valid appraisal must also encompass the need of that substantial portion of the pilot population which needs personal contact with the preflight materials to do a safe and efficient job of flight planning. There is present evidence that

while two-thirds of FSS briefings are by phone, still a third is over the counter. Considering the inconvenient location of many of these FSS offices, we think this sizable percentage is important and its needs must be met. We think that if FSS's were more accessible, the proportion of over-the-counter contacts would be much higher and pilots would be much more likely to avail themselves of this safety service.

For some time, the FAA has pursued a general program of decentralization of its administrative offices in an effort to provide better services at the points where the need arises. At the same time it has undertaken a contrary program to consolidate and centralize flight service stations. The net result has been a smaller number of stations with more employees providing, in our estimation, poorer service to the using public.

The number of flight service stations reached its peak in 1949 with 464 stations. Since then the number has suffered a rather steady decline to the present 335 or 339 (sources differ), though this is partially offset by some 67 or 68 combined station-towers. Investigation of employment and funding of recent years (1961–64) shows that while the number of stations remained substantially constant, the number of positions increased by about 900 (from 3,926 actual to 4,735 requested) and costs rose almost $14 million (from $28,236,000 actual to $42,075,000 requested).

In our view, the aviation public would be better served by having flight service stations with minimum staffing and equipment located at more fields where a volume of general aviation activity occurs. It seems to us also that this would more properly reflect and execute the Administrator's policy of decentralization to bring the services which can be made available closer to the points of real need and use.

While we want the Weather Bureau to be clearly and solely responsible for the provision of an adequate weather service, we see no impediment to flight service stations assisting in this area under a suitable contract. We think flight service stations must, for the visible future, be able to provide pilots with meaningful weather information if general aviation is to be properly and safely served.

Furthermore, the provision of weather and communications at more airports, through the mechanism of more flight service stations, even on a part-time basis, would permit the establishment of more instrument approaches, and thereby greatly enlarge the utility of the air traffic system. Such a development, while not answering all needs, would satisfy a major part of the requirement.

One substantial defect of the consolidation program is the adverse effect it will have on the direction-finding capabilities of the ultimate network which has been proposed. A reduction in number of station locations would inevitably reduce the coverage which this VHF service can provide and will leave serious gaps in areas where the service may be sorely needed for safety purposes.

Provision of flight service station assistance at all airports meeting the criteria we suggest hereafter may mean the establishment of such stations at several locations in each major metropolitan area. We think this is valid, reasonable, and proper for its responds to needs for service where they exist. This may pose problems in radiofrequency utilization but we do not think that these are insoluble on a reasonable basis. A primary station in such a complex could handle en route communications and the rest could be limited to terminal communications.

CONCEPT

The changing character and composition of the aviation system seems to spell out the need for a service provided only spottily to general aviation pilots at the present time. It is evident that these pilots need a good information service to operate with the level of safety that the general public and the Congress consider necessary.

We envision a new program comprised of two major elements. One element is a basic nationwide network of flight service stations (FSS), somewhat similar to those we have now, operating on a 24-hour basis at our major and intermediate metropolitan areas. They would serve the pilot much as he is served by them now.

The other element is a new type of station, which for purposes of distinction we shall call a general aviation service station or GASS for short. It would be a "compact" type of station with minimum staffing, minimum equipment and operating only part time in the majority of cases. It would be located on every public-use airport meeting a threshold of general aviation based aircraft and operations. It would have briefing facilities, be convenient to general aviation

pilots, and be able to help them enter and leave the IFR system if necessary. It would not be open during the hours of darkness unless there is sufficient activity to justify it.

A major metropolitan area with several airports would probably have one FSS and several GASS. Such a system would still not serve all possible needs but it would serve the majority of them and thereby make a major contribution toward greater general aviation safety by making needed information readily available to general aviation pilots.

WEATHER

Our ultimate goal is the capacity to fly in virtually all weather. While the attainment of this capacity, we readily admit, does not lie within the immediate future, it does condition our choice of intermediate goals and our view of where the responsibility for various elements of the weather service should be placed.

For the foreseeable future, aviation's need for reliable weather information will continue to increase. The character of the requirements—i.e., the kind and accuracy of data—will in all probability remain essentially the same, while the volume—i.e., the number of pilots and the number of locations into and out of which they will operate—will increase markedly. We fully expect the number of airports in use to increase by 50 percent within the next 20 years. The number of active pilots should also increase by one-third.

Weather information comes in a variety of forms and finds various uses, but essentially it all arises from functions of observing, reporting, communicating, and analysis which ought to be welded into a unified network that serves the requirements of all users without causing a drag on any, or perpetuating mechanisms which no longer have a valid purpose.

As a consequence of the foregoing general observations, we believe that the Weather Bureau should be responsible for the weather system in toto, including observations and land line communications. Elsewhere (in a statement regarding Weather Bureau appropriations) we have stated our belief that the various weather services provided by the Government should be consolidated in the Weather Bureau with the objective of developing at least one good weather service that meets the needs of the various segments of the public for weather information. The present dispersion of meteorological effort among several agencies has not produced a good reliable weather system and is not likely to do so. If any of the Weather Bureau functions are to be performed by others, suitable contracts should exist to provide the Weather Bureau with complete control. But in any case, the Weather Bureau should have the obligation of meeting the requirements specified to it by the various users, including aviation, whether stated by FAA, CAB, DOD, or the industry.

Specifically then, we think that—

(1) All meteorological observations should be made by the Weather Bureau or by personnel or agencies under contract to the Weather Bureau.

(2) Landline communications for the conveyance of weather data and information should be the responsibility of the Weather Bureau. The FAA should seek the earliest possible transfer of this function to the Weather Bureau. In other words, the Weather Bureau should provide its own communication network and should be in a position to provide weather teletype drops into any public office as required. Connections for drops to private offices should also be available.

(3) FAA air traffic control facilities and flight service stations should have weather information as appropriate to their needs.

(4) FAA facilities should provide radio communications for conveyance of weather information to and from pilots.

(5) Pilots require rapid access while in flight to Weather Bureau forecasters. We are not particularly concerned whether this access be direct radio communications, as in the pilot-to-forecaster service, or indirect, as in the radio patch-cord hookup through the flight service station, though we are inclined to favor the former as a simpler solution.

(6) Pilots also have a valid preflight requirement for face-to-face discussion of weather information. This briefing-type contact may be provided by either FAA or Weather Bureau offices.

(7) Transcribed weather broadcasts (TWB), public automatic telephone weather advisory (patwas) and weather reports by pilots in flight (pireps) are all essential parts of the interim system for disseminating

weather information. They must be preserved and extended into more locations where pilots can use them.

NAVAIDS

Perhaps in the long run, it may develop that inertial guidance will provide the simplest, least costly, most flexible and most reliable navigational system for all concerned. For the immediate future though, we are pretty well dependent upon a ground-based navigational system, which includes en route and landing aids, and this system requires someone to own, operate and maintain it. It is essential.

The pilot cares little who owns the navigational aid, a Federal, State, or private agency, just so that it exists and is functional within certain limits. A Federal agency seems simplest to us and should be most economical—although we have been given cause for doubt on this latter point. Too often the equipment specifications have become "gold plated" and the staffing requirements have exceeded essentials. On balance, we favor a Federal agency as the owner, provided it demonstrates an ability to make discriminating judgments between the relative values and benefits of possible equipments. Thus far, the States have shown a better ability in this respect than has the FAA and its predecessor.

AIR TRAFFIC SERVICE

Eventually, we hope for an air traffic system which will permit the pilot to provide his own navigation and, under most conditions, his own traffic separation even in IFR conditions. Once again we readily admit that achievement of such a system is not possible in the immediate future but, as with the weather system, it conditions our choice of intermediate goals. We also believe that the pilot should retain responsibility for the safety of his flight—indeed we doubt if he can rightfully dodge it. However, for the present and the near future, we must rely upon ground-based controllers for air traffic separation in IFR weather conditions. This makes flight plans, position reports and clearances essential under IFR weather conditions in controlled airspace.

Clearances also are essential for VFR operations through restricted and prohibited areas, air defense areas, into and out of congested airports with mixed traffic, and under conditions permitting special VFR. VFR connotes the ability to "see and be seen" to a sufficient extent that the pilot may avoid collision with other aircraft. The FAA has espoused this concept in its defense or law suits arising from collisions in VFR weather conditions involving air traffic control clearances. Flight plans are essential (as contrasted to "desirable") for only a few of these operations. More often, the intentions of the pilot are all that is needed by the ground system.

A major use of VFR flight plans is associated with the possibility that an aircraft may go down en route without warning or contact with ground facilities. The information in the flight plan then becomes the basis for search operations.

In the past several years, the FAA also has brought into play a new program called flight following service whereby the VFR pilot flies a flight plan and reports over certain designated points. FSS personnel then provide him with selected information relating to his route of flight. The reactions to this service have been mixed—both from the viewpoint of pilots and FSS personnel. Many pilots rarely use the service while others like the "personalized handling." FSS personnel have openly stated that the pilot who contacts the station, even though not on a flight plan, receives essentially the same service as the pilot on a flight following flight plan. The FAA has been strongly "selling" this concept of personal service even though it should be apparent that we should be moving toward more mass handling techniques and away from individual treatment if we are to cope with increasing numbers in the air traffic system.

The concept and use of VFR flight plans and flight following service should both be reviewed carefully by the FAA in consultation with the users to establish the essential requisites and eliminate functions not required for safety or expedition of flight.

We classify communications, radio, teletype, or telephone, in connection with lost or downed aircraft as essential. This also applies to direction finding (DF) of lost aircraft, orientation by reference to landmarks and fixes, and the talking of lost aircraft down through the overcast.

We classify airport advisory (traffic) service on a voluntary basis as sometimes helpful to the free flow of traffic. However, on a mandatory basis it often becomes an impediment to the safe and expeditious flow of traffic without adequate compensating benefits. It should be provided only on request.

AERONAUTICAL INFORMATION

There also is a valid and essential requirement for the collection and communication of general aeronautical information regarding what kind of facilities are available at various locations. This includes general information such as usually forms the background for preflight planning as well as timely information regarding changes in the availability of facilities for one cause or another. In other words, it includes that vast spectrum of information which is now normally encompassed in Notams, advisories to airmen, the Airport Directory, Flight Information Manual, Airman's Guide, on charts and in regulations.

The collection and communication of this information can and should take place using whatever media of communications are most appropriate.

OTHER SERVICES

Some flight service stations are used to give written examinations to applicants for airman certificates. This effects a savings to the Government and is a convenience to the public. This function should continue and would be even more effective under the concepts outlined in this paper since the stations would be located at more locations easily accessible to the applicants involved. It also is envisaged that the stations under the new concept would provide a valuable source of information to the flying public by having available the latest information on regulations, Notams, proposals and information bulletins from the FAA. They also would provide a better outlet for informatin that the FAA may want to get into the hands of pilots on the widest possible scale.

RECOMMENDATIONS

In view of the above considerations, OAPA makes the following recommendations regarding flight service stations:

1. The current program of consolidation of flight service stations should be halted.
2. A new program should be initiated which embodies the following concepts:
   (*a*) The primary purpose is to facilitate general aviation operations.
   (*b*) General aviation access to and egress from the IFR system should be broadened as much as practical.
   (*c*) Face-to-face pilot briefing is an essential element for a substantial portion of the pilot population.
3. The present location of flight service stations (FSS) should be reviewed to provide a basic nationwide network, usually with one such station at each metropolitan area exceeding a specified number of based aircraft and aircraft movements.
4. Direction finding equipment should be installed at all FSS except where low-level radar coverage is already available.
5. Teletype switching interchange and transfer operations of service B should be transferred to the centers and the meteorological teletype circuits should be transferred to the Weather Bureau.
6. Airport advisory service should be provided only on request.
7. A new type of "compact" station, called a general aviation service station (GASS) should be established. It should embody the following characteristics:
   (*a*) Minimum staffing, i.e., a complement of five employees for a 24-hour duty station.
   (*b*) Part-time operation should be the norm. Hours of operation should normally coincide with the demand for a reasonable volume of service. This would mean daylight hours normally, but the station could remain open for earlier or later periods if a reasonable demand exists. Suggested criteria: a threshold of 10 calls or contacts per hour to remain open beyond 1 hour after sunset.
   (c) The station should have radio communications on a minimum number of channels, probably no more than three; a VOR or LF beacon associated with it; interphone to the Center; teletypes to receive weather and to handle

air traffic related messages such as flight plans, Notams, etc. Military channels would not be required unless military traffic is regularly using the field.

(d) GASS's should be established at airports wherever there are 25 or more general aviation based aircraft and/or at airports showing an average activity of 25 itinerant general aviation operations per day over a period of a year. We recognize that this is a substantial program of expansion and would have to occur over a period of perhaps 10 years. We would not expect or desire it to become a crash program. Further, the criteria of 25 aircraft or operations are suggested only as a basis for the start of a study to determine firm criteria. The integration of this new type of station into the system would pose some problems that need to be solved before they are established in great numbers, particularly in metropolitan areas where they are most needed.

(e) Stations should be established temporarily at seasonal airports showing a proportionate volume of activity to take care of the need for service at resort locations such as national parks.

(f) Stations should be able to provide all information, including weather—short of forecasting—necessary for flight planning and briefing.

8. All stations, both FSS and GASS, should be located so as to be convenient to general aviation pilots, i.e., in the general aviation area of the airport rather than the airline area, if these are separated substantially.

9. All stations should continue to relay, as required, IFR clearances and requests between pilots and controllers where direct communications with the ATC facility are not possible. They should be able to authorize special VFR operations, in a control zone where no tower exists, in coordination with the Center.

10. Ready radio communications with Weather Bureau forecasters must be available to pilots in flight but we are not sure whether the most suitable means of providing this service lie in the station or in direct pilot-to-forcaster procedures.

CONCLUSION

We recognize that the above program represents a rather radical departure from present practice. We only suggest that general aviation is growing apace and that present procedures and services do not provide the necessary information in the places where the majority of general aviation pilots can readily use it.

We recognize also that a program such as outlined above would cost money and that AOPA has asked that due economy be observed. We find no contradiction therein. We have never objected to expenditures for programs or objects of proven merit. We have objected, and will continue to object, to expenditures for programs which give little hope of significantly improving the safety record or for objects of undemonstrated merit or problematical value.

We cannot escape the obvious conclusion that the entire "saving" the FAA speaks of in its current effort to consolidate these 42 flight service stations is misleading. Taking an average of the FAA figures, the ultimate program is supposed to save the taxpayers approximately $1,470,000 per year (an average of $35,000 per station for 42 stations). We are reminded of such exotic projects as data processing central, one of many at the National Aviation Facilities Experimental Center, on which nearly $50 million has been spent without any discernible benefit to the taxpayer. This project, which was highly questionable from its inception, would have paid for these important safety services for 34 years. Nor can we ignore the somewhat startling fact that the ultimate cost of Dulles Airport—$175 million—would pay for the retention of this part of the safety program for 119 years. It was—and is—AOPA's contention that expenditures of this kind (and there are hundreds of others throughout the Agency) contribute nothing to safety, hence should be eliminated ruthlessly before harm is done to an essential and primary safety program such as the flight service stations.

Nor does our proposal of a program like that above modify our view of the proper means of paying for it. If the public and the Congress are vitally concerned with safety in the air, and really desire a substantial improvement in the safety record, then the Government should stand ready to bear the cost. It should not attempt to shift that cost to a selected minority as a further penalty to their use of the airspace in which there is declared to be a right of freedom of transit. Increased user charges are not an appropriate method of funding this program.

ANNEX C

FURTHER COMMENTS AND RECOMMENDATIONS BY AOPA ON THE FUTURE ROLE OF FAA FLIGHT SERVICE STATIONS

AIRCRAFT OWNERS AND PILOTS ASSOCIATION,
Washington, D.C., April 14, 1964.

D. D. THOMAS,
Associate Administrator for Programs,
Federal Aviation Agency,
Washington, D.C.

DEAR MR. THOMAS: Enclosed are AOPA's further comments and recommendations regarding the future role of the flight service station as requested at the meeting on April 6.

As stated in the initial paragraph, these comments are in amplification of our previous paper dated February 17, 1964.

Perhaps it is wise to restate our views that development of the network of supplemental facilities may prove to be a 10-year program. We are not looking for a crash program.

We are well aware that any shift in the FSS program will create problems. We think these can be minimized by a gradual transition into the new program.

Cordially,

MAX KARANT, *Vice President.*

FURTHER COMMENTS AND RECOMMENDATIONS BY AOPA ON THE FUTURE ROLE OF FAA FLIGHT SERVICE STATIONS

In view of the recent presentation by the Administrator and his staff on April 6, we offer the following comments. These are supplemental to and build upon the AOPA comments dated February 17, 1964, on the future role of the flight service station.

REVIEW

In our previous statement we outlined a new concept as follows:

"We envision a new program comprised of two major elements. One element is a basic nationwide network of flight service stations (FSS), somewhat similar to those we have now, operating on a 24-hour basis at our major and intermediate metropolitan areas. They would serve the pilot much as he is served by them now.

"The other element is a new type of station * * *. It would be a 'compact' type of station with minimum staffing, minimum equipment, and operating only part time in the majority of cases. It would be located on every public-use airport meeting a threshold of general aviation based aircraft and operations. It would have briefing facilities, be convenient to general aviation pilots, and be able to help them enter and leave the IFR system if necessary. It would not be open during the hours of darkness unless there is sufficient activity to justify it."

At the April 6 meeting, the FAA Administrator and his staff outlined an Agency proposal along somewhat similar lines which called for a hard-core network of 24-hour FSS facilities supplemented by a small number of subfacilities and further supplemented by a new type of service designated as limited-flight-service outlets (manicoms and airport information desks).

Representatives of the aviation community were asked for comments or suggestions as to the feasibility of the FAA proposal and recommendation for criteria.

The functions performed by the present flight service station system may be divided into two categories. One category contains those functions which are related to briefing and communications contacts with pilots directly. The other category is composed of FAA internal communications and activities which are necessary prerequisites to the foregoing but do not involve direct contact with pilots. This category includes the functions associated with the operation of a large-scale, land-line communications service which are now characterized as data interchange centers, send-receive centers, and circuit relay stations. To these might be added the function of producing transcribed weather broadcasts on the LF "sacred 88." All of these functions can be conducted at any location most convenient to the Government. The pilot has no limiting interest in the location of these activities. They could be downtown, at Fort Knox, atop the

Empire State Building, or in the basement of the Pentagon. In view of this, it might be better to separate these functions from the traditional flight service station complex and either establish them separately at the most economical and convenient locations, or even perhaps to add them to the ATC center complex. At any rate, once we separate these functions from the rest, the problem of how to serve the operational requirements of pilots becomes measurably simpler.

REQUIREMENTS

The category of functions which require direct contact with pilots arises from a body of requirements for various kinds of information which pilots need to properly plan and execute a flight with reasonable safety. The character of this information can be understood best by considering the requirements of the pilot during the various phases of a flight. These are outlined as follows:

Preflight: Weather, including local, en route, destination, winds aloft, route forecasts, and Pireps. Notams, including status of navigation aids, airport conditions, etc. Flight plan filing facilities.

Takeoff: Altimeter, wind, and runway (wind and runway may be obtained visually). Radio communications desirable for obtaining special VFR or IFR ATC clearances by radio when ready for takeoff.

Inflight: Weather, including en route, destination, winds aloft, Pireps, forecasts, and reports of clear air turbulence. Notams. Flight plan filing, amendment, and cancellation. Assistance to lost aircraft or those in difficulty. Search and rescue.

Prelanding: Assistance to lost aircraft or those in difficulty. Weather, wind, runway, altimeter—ceiling and visibility. Airport condition. Traffic information desirable but not a requirement.

On ground: Taxi information or guidance (airports having large land area). Close flight plan—radio preferably, or by phone.

SYSTEM

The system necessary to fulfill the requirements stated above appears to fall into two basic elements.

The first basic element is a network of full-time stations similar to those which now exist as flight service stations. These should provide the basic, hard-core, air-ground communications system throughout the country for en route operations, should provide emergency service, and should provide a direction finding capability which will satisfy the safety requirement to assist aircraft in difficulty.

The other basic element is a random network of small-scale facilities established at airports wherever a reasonable demand for service exists. This element should begin with an airport information desk along the lines outlined by the FAA, augmented as demand requires with personnel, service A teletype, and limited air-ground communications capability.

FSS BASIC NETWORK

Requirements to be considered in determination of the basic network of full-time flight service stations (FAA "hard core") are:

(1) Communications should be available for all VOR facilities as at present. Normally, communications distances required of aircraft should not exceed 50 statute miles. Provision of two-way communications through use of 122.1 receivers in conjunction with VOR voice at remotely controlled VOR sites, supplemented by 126.7 and 135.9 at the basic network stations, should satisfy this requirement.

(2) Direction finding capability should be available on a full-time basis to assist aircraft in difficulty. The determination of locations required in this network must take into account the lower altitudes used by general aviation aircraft. Facilities should be available at all basic flight service stations and may be supplemented by those at control towers.

(3) Adequate coverage is required on a national basis on the emergency frequency 121.5. Currently, a pilot in difficulty can call on 121.5 and be assured that some FAA facility will be within reasonable range of his transmitter. This is the only channel that a pilot can use to establish communications when he is unsure of his position and does not know what facility can respond to his call or on what frequency.

The three requirements outlined above must be considered individually and then melded into a composite system that will provide the various coverages required. We have not been able to plot these coverages so as to determine the specific number of stations needed to fulfill the requirement. However, our preliminary calculations lead us to think that approximately 250 stations are needed in the 48 coterminous States in a geographically well distributed net to satisfy safely these 3 essential requirements. This distribution would provide one station for each 12,000 square miles or a square of about 110 miles on a side.

SUPPLEMENTAL FSS FACILITIES

In providing assistance to pilots at airports, we are faced with four possible situations which present fundamental differences in requirements. We categorize these situations as follows:

Airport A: Tower and weather bureau both present.
Airport B. Tower present but no weather bureau.
Airport C: No tower but weather bureau present.
Airport D: No tower and no weather bureau.

The basic element of the supplemental facility is the airport information desk (AID). It should consist of a desk, appropriate charts, reference materials, and an interphone to the basic flight service station.

Airport A needs little more than a basic desk. The tower provides terminal radio communications and appropriate information. The Weather Bureau provides weather briefing and related information. All that remains to be provided are the flight planning facilities in the form of a desk, reference materials, and a means of filing a flight plan. This last could be by interphone with the tower or to a basic FSS facility. Staffing could range from nil to one or two depending upon the volume of activity and the real demand for assistance voiced by pilots which could not be supplied by phone conversation with the tower or the basic FSS facility. In the event the Weather Bureau office is remotely located, a service A teletype drop would be required. If the desk is manned, a public telephone is also needed.

Airport B likewise needs no radio communications since a tower is present to provide this kind of terminal service. It does require the basic airport information desk equipped with a service A teletype, an interphone to the basic FSS facility, and the various reference materials essential to adequate preflight planning. Staffing, as with A, should depend on demand.

Airport C has a Weather Bureau office but no tower. If activity is sufficient to warrant a manned desk, then we think it needs radio communications on at least one channel. Ideally it also should have communications through the Navaid serving the airport. Methods of providing this latter capability should be developed. If the activity warrants only an unmanned desk, no communications should be provided. As in other cases, staffing should respond to demand. If the Weather Bureau office is only a part-time facility, provision must be made to make the service A available during closed hours.

Airport D has neither tower nor Weather Bureau. If activity warrants a desk, it should be augmented with service A. If traffic warrants staffing, it needs the communications capabilities outlined for airport C. Staffing is in accord with demand.

OTHER FACTORS

Public versus private.—The eligibility of public airports for facilities of the character we are considering is taken for granted. Not so with privately owned airports. We think this is a short-sighted mistake. We think that privately owned, public-use airports should be eligible on the same basis as publicly owned airports are so long as they charge no landing fees. The privately owned, public-use airport fills an essential public need which the public has not yet seen fit to answer. Since the promotion of air safety is a basic FAA responsibility, we see no justification for avoiding this responsibility merely because the land is in private rather than public hands. The public uses the field in the accomplishment of air commerce and is entitled to FAA service.

Hours of service.—The hours of service demanded by the flying public will vary with season, location, and the economic character of the community. We suggest initiating service with normal working hours, i.e., 8 to 5, 7 days a week, and then modifying as local demand dictates. The same measure will not suit all circumstances. Some resort stations would doubtless have a high demand for long hours for a short season and little or nothing the rest of the year. Some

in densely populated metropolitan centers would require 24-hour service every day of the year. Some may not even sustain a requirement for one 8-hour shift and have to be reduced to a self-help desk only. The principal thing is to meet the demand, when and where it exists on a reasonably consistent or predictable basis.

Staffing.—We think that each manned station should start with at least one trained specialist on duty. His services should be augmented as demand requires with judicious combination of other full-time trained specialists and/or part-time, on-the-job trainees, or local people who can be partially trained to fill out the station requirement when it does not justify an added full-time employee. Essentially, these people will be briefers and rather elementary radio/telephone communicators. Their GS level should be relatively modest.

Sizes.—The size of the supplemental FSS facility probably should vary only within rather narrow limits—from just the airport information desk with no employees to a facility with elementary communications, service A teletype, and perhaps at the busiest airport in the country as many as three employees on duty simultaneously during the rush periods of the day.

Location.—Geographic: We are less concerned with a neat geographic distribution than with having facilitiets at locations where a demand for service either exists or would be likely to develop within a reasonable period of time if the service were provided.

Airport: Naturally the facility should be located on the airport at a site which is most convenient to pilots, particularly transient pilots. Ideally, they should have to trip over it or detour to avoid it. They should never have to hunt for it, climb stairs to it, walk a mile for it, or have to ask questions on how to find it. We would not support provision at Government expense of more than one supplemental facility at an airport.

Weather observations.—We have said nothing about weather observations—not because they are unimportant—they are very important—but because we think that weather observation, data collection, analysis, and distribution is or ought to be the responsibility of the Weather Bureau. We think we need weather observations from practically every airport in the country plus a number of locations not on airports that are important to en route operations.

If the Weather Bureau wishes to contract with the FAA for specialists to take and report observations this should be one of several possible solutions depending upon the workload existing. In any case, it is a problem for the Weather Bureau to solve, not the FAA.

However, FAA and the aviation community should make their requirements for Weather Bureau service known to the Bureau. Aviation weather requirements need to be stated clearly and forcefully.

Location of Weather Bureau offices.—Like the FSS facilities, the Weather Bureau officers need to be located on the airport at a site which is most convenient to the general aviation pilots.

Population.—Concentrations of population will give rise to several airports in a single metropolitan area. We think that service should be provided at any and every airport in the area which exhibits a demand for service. The pilot at Addison Airport should not have to take off and fly to Love Field to execute the preflight functions required by his trip to El Paso. Nor should he be forced to do this solely by phone. Most people are "eye" rather than "ear" minded and consequently do not feel at ease when armed only with information they have heard but not seen. This is particularly true of relatively new and low-time pilots who have not yet had the opportunity to amass a wealth of experience upon which to base judgments or visualize the intelligence conveyed by the spoken word.

Criteria.—Aviation characteristics change rather markedly as the industry develops. Therefore, the criteria for establishment and retention of facilities need to be a flexible meld of several characteristics which represent either apparent existing needs or the probable existence of potential needs. Recognizing and meeting these potential needs is, we think, a logical and legitimate consequence of the FAA's obligations to foster and promote civil aeronautics. The following are items which ought, in our judgment, to be considered as criteria factors:

(*a*) Based aircraft: If any are present it indicates the likelihood of an existing need. We think 15 should justify a supplemental facility desk and 25 should generate sufficient activity to justify manning. Lesser numbers in combination with other justifications should also permit installation and retention.

(*b*) Itinerant operations: We suggest an average of 20 per day be considered as sufficient justification for a desk facility and an average of 25 per day should justify manning. Lesser numbers in combination with other criteria should also serve. Seasonal airports should qualify for seasonal service at the same levels for the season.

(*c*) Telephone contacts: All phone calls for flight or preflight information should be justifying items, whether or not a flight plan is filed. We will never know how many lives have been saved by adequate preflight briefings which never resulted in a flight plan simply because the projected flight was abandoned or filing was impractical or unnecessary. We suggest that 40 calls per day average from the supplemental desk to the basic FSS facility should justify manning a supplemental facility.

(*d*) Aircraft radio contacts: We suggest that an average of 50 contacts per day should justify retention of a supplemental manned facility independent of other justifications. Lesser numbers in combination with other justifications should also serve.

(*e*) Face-to-face briefing contracts: These should justify retention of a manned supplemental facility if they average 30 per day independent of any other justification. A lesser number in combination with other justifications should also serve.

Mr. KARANT. I found, after listening to the witnesses and your questioning this morning, that I am apparently some sort of expert on this particular subject. At every flight service station that was mentioned here, every location and almost every place in your States, gentlemen, including you, Mr. Sival, I have had to make precautionary overnight stops. That is testimony to the help I have gotten from your flight service stations which warned me of trouble ahead. I was surprised to find that I was thoroughly familiar with every location that was discussed here this morning by the individual delegations.

Mr. Chairman, we think that a large share of the FAA's trouble with this program is due to three things: (1) lack of coordination with the users to ascertain their requirements before deciding on a program; (2) failure to show a rational explanation for picking these particular stations; and (3) failure to announce simultaneously a program to adequately fill the void created by the removal of the stations.

I wanted to say here also that I feel rather badly about this constant use of the term "FAA" in a derogatory manner, because there are many dedicated people in that Agency. Many I regard as highly skilled and competent. And in this particular instance, when we telephoned over to the Agency, when we heard of this flight service station program and talked to the people we thought were the experts in this field they, too, had not been informed of this program.

AOPA has made recommendations for a modification of the flight service station program which in many respects is echoed by the FAA's proposals made during these hearings and at its April 6 meeting with industry representatives. We think that areas for compromise and agreement are now developing. However, we find the adamant attitude of the FAA regarding the initial consolidation program for the 42 stations unreasonable, unsound, and unjustified on the basis of evidence presented so far.

We think the FAA has not adequately explored the savings to be achieved through reductions in staffing and the limitation of hours during which service is provided.

We believe that the promotion of civil aeronautics justifies the provision of service at more locations and that the cost of doing so is well

within reason—particularly in view of many of the programs which the FAA supports which do not provide direct services to the public.

We have noted that the FAA is somewhat confused as to how many stations and how many employees in them it has. This may help to account for some of its confusion on related subjects. We have presented what evidence we were able to quickly locate as to numbers of stations, personnel, and dollars in the FSS program and what relationship these bear to the overall operations and facilities programs.

Because the Agency had not thought its program out, it has been unable to tell precisely what services would be remoted and what services lost at each station. We have pointed out some of the items that remain in doubt and preclude therefor a responsible conclusion as to whether the Agency's proposal is sound or not.

We have done some cost accounting speculation on the costs of flight services, even though we have major doubts of the validity of such results in a program of this nature. They lead us only to the conclusion that the cost of flight services is within what we would term a "reasonable range."

We have only briefly touched on our view of where the responsibility for weather observation and development should be placed. We think it ought to lie exclusively with the Weather Bureau. We have treated this problem in some detail in a separate document which we supplied to Members of Congress last year.

The FAA has indicated that only 22 percent of the pilot briefings given by flight service stations were over the counter and that the remainder were given by telephone or radio. We were puzzled by the low figure of 22 percent for face-to-face briefings when we first heard it but we now understand how this low figure was obtained. First, we are considering only preflight briefings. Preflight briefings by radio is not a normal practice. We think the FAA briefing figure has been distorted by inclusion of airborne radio contacts for normal inflight information, thus making the face-to-face statistics appear to be of a smaller value than they actually are. Preflight briefings by telephone are a valid source of statistics, but we submit that preflight briefings by radio are almost nonexistent.

Now, these are specific points that have been brought up in these hearings.

Safety versus service and convenience: Much has been said about the personal convenience to individual pilots that accrues from having a flight service station at his airport of departure so that he can receive face-to-face briefing prior to commencing his flight. We do not consider this as a personal convenience to the pilot but rather as a safety service that can provide a pilot with an adequate picture of conditions along his proposed route of flight. On the basis of that picture, he then makes his decision as to whether the flight can be safely accomplished or whether he should cancel or alter his plans in the interest of safety.

Mr. WILLIAMS. May I interrupt you at that point?

Mr. KARANT. Yes, sir.

Mr. WILLIAMS. I do not know whether you were here when this was called to the attention of the committee or not but in the May 5 issue of Airman's Guide, we find this little paragraph:

> Preflight briefing: Every pilot, either VFR or IFR, is urged to visit the nearest FAA flight service station prior to departure for a preflight briefing and to file

a flight plan. If the visit is impracticable, telephone calls are welcomed. Telephone briefing, however, lacks the direct reference to maps and charts which is always desirable and helpful. When neither a visit nor a telephone call is practicable, preflight briefing may be requested by radio as soon as possible after takeoff.

Would you agree with that philosophy?

Mr. KARANT. Mr. Chairman, I want the record to show——

Mr. WILLIAMS. You are not in disagreement with that?

Mr. KARANT. I want the record to show that AOPA absolutely, completely, agrees with the FAA in this matter and we endorse their position wholeheartedly.

The next item I have here is "Briefing by Telephone." It needs to be recognized that there is a great deal of difference in the capabilities of various pilots to profit from a telephone briefing. The professional pilot who is highly trained and who is flying every day develops an ability to mentally translate information received over the phone and convert it into a mental impression of the flight problem he faces. The amateur pilot, on the other hand, has a limited amount of training. His experience is intermittent. He often finds it difficult to convert technical data into useful mental impressions that enable him to visualize his flight problem. The FAA, itself, and which you just read, recognizes this problem of using a telephone briefing (as indicated yesterday) by pointing out in the Airman's Guide that telephone briefing lacks the direct reference to maps and charts which is always helpful.

We can, of course, hope that pilots will become more proficient in the use of telephone briefings but we must also remember that we will always have new people coming into aviation who have not had time or opportunity to develop this capability. They also must be served if aviation is to develop and serve the needs of our people as a useful, safe, and dependable transportation medium.

I might add here that we have no way of knowing how many lives actually have been saved by prudent pilots who have gone into flight service stations or called them on the telephone and have learned of weather that they did not know about previously that proved to be dangerous and they canceled their flight. This has happened many times. It has happened especially with me and I am sure it has happened to you gentlemen. There is no way to record this. I wish there were. It might give us a higher score with the FAA.

Productivity: We have heard the Administrator's claim that productivity of FSS employees has increased substantially. We don't know what mathematics he used to arrive at this conclusion but we made our own efforts to see how close we came to his results—and we must admit some difference of opinion. By consulting the appropriate FAA air traffic activity books, we found that FAA reported about 10 million flight services in 1961 consisting entirely of flight plan originations and aircraft contacts; and about 16 million flight services in 1963 consisting of not only the flight plans and aircraft contacts but also airport advisories, flight condition messages and pilot briefs. Now, while the flight service stations may not have been counting or reporting these later items in 1961, we were flying then and know that they were doing them. They were performing the services, even though they apparently got a credit for them. The volume of these services in 1961 was probably not much less than at

present with the possible exception of airport advisories due to the mandatory rule. The number of flight plans and contacts in 1963 exceeds the number in 1961 by only 8 percent.

The number of FSS positions was 3,926 in 1961 and 4,613 in 1963. We recognize that positions are not the exact equivalent of employees but the ratio remains relatively steady. If we assume that the stations were doing about the same ratio of advisories, briefs and flight condition messages in 1961, though not counted and reported, we obtain a decrease in productivity of about 8 percent.

Cost per flight service: The Administrator has presented figures purporting to set forth the operational cost of flights services at low, median and high activity stations. While interesting as an exercise in cost accounting, we doubt if these figures have much, if any, validity in an air traffic system of this kind. Some of the services are mandatory and some are voluntary. In some cases this varies with circumstances.

Essentially, the air traffic system, including the flight service stations, exists to serve the public. If small pieces of the system are eliminated, and this process is long continued, we will soon have no system. Failing to provide service at locations in small communities where there is a reasonable demand for them is like failing to put a powerline into a rural community because the small town doesn't have enough people. If service is not provided, the young people leave for the big city where it is provided and the small town never grows into a larger town. It is to remedy situations of this kind for the greater good of the entire Nation that we engage in Government-sponsored development programs, of which the Federal Aviation Agency is but one example. Cost accounting for this type of development process has doubtful meaning.

Remoting of interphone lines and radio communications channels: In briefing the user organizations after the 42-station reduction was announced, the FAA stated that $35,000 was being allocated for remoting each station in the program. Costs will vary considerably at each location according to the particular situation and the FAA regional offices are expected to do as much as possible within the allocated funds. For example, some of the affected stations currently control VOR's at other locations some distance removed. When the FSS is closed, this VOR remote-control function must be extended to some other FSA at an even greater distance. This will result in increased landline costs. In addition, each flight service station has interphone and telephone lines to adjacent airports for briefing of pilots and filing of flight plans. If these are extended to a remote FSS many miles away, line rental increases will occur—provided there is enough money in thhe program in the first place to accommodate such increased costs. If not, service will be curtailed. Another facet that remains unclear is the fate of the emergency frequency 1215 megacycles, the en route communications frequencies 126.7 and 135.9 megacycles, and the UHF frequencies provided for military aircraft at each location. If these are to be remoted, additional costs will occur for equipment and landline rentals—and it does not appear that the amount mentioned by the FAA for the remoting operation could reasonably cover these costs after all others have been paid. If these radio communications channels are discontinued, serious gaps will

exist for both civil and military aircraft, particularly at the lower altitudes.

Justification criteria: The FAA has adopted various criteria to justify establishment, retention, and elimination of its various facilities. These are necessary to an orderly program. However, they need to reflect the realities of service rendered and in some cases they do not do so at present. For example, a pilot gets a briefing. As a results he decides not to fly, and therefore does not file a flight plan. That briefing does not count as an activity or flight service in favor of the station. FAA, more than anyone else, should recognize that the service rendered by giving a pilot a good briefing which saves him time, effort—and perhaps even his life—by persuading him not to fly into conditions which exceed his capabilities, is a most valuable and worthwhile service and should be counted. This kind of activity is the very essence of safety. We think the Agency's criteria should be revised to take this kind of service into account.

The Federal Aviation Agency has requested and spent tremendous sums of money to provide service to the air traffic that operates under the instrument flight rules, even though much of that traffic is actually operating in good weather. High-cost items include new air traffic control center buildings, radar, remote radio communications, computers and many other complex innovations. Yet, the traffic operating in the IFR control system is estimated to be not more than 10 percent of the total air traffic in the United States. The great majority of the traffic—about 90 percent—operates VFR with no service from the IFR air traffic control system other than that given by control tower facilities in the control of local traffic around less than 300 airports out of the more than 8,000 used by general aviation. The provision of safety services for VFR general aviation traffic, such as adequate preflight briefing, weather and direction-finding service, has received little attention from the FAA—other than to try to reduce these not-so-glamorous services below the already inadequate level to which they have been allowed to drift.

We sometimes hear the uninformed refer to general aviation as "weekend fliers" or "ports pilots." It is quite true that these categories do exist and these people are in the same class as our millions of boat-owners who use boats on weekends for pleasure. We will not go defensive on this. Since when has pleasure become improper? We support a national park system for pleasure alone. I wonder what would happen to Pan-American Airways and Eastern Air Lines if pleasure flying was barred from their routes?

However, the ratio of airplanes that are used for various business purposes is quite another matter and here all resemblance to pleasure boating ends. The bulk of our general aviation operations are conducted in furtherance of many diverse facets of our national economy. The users range from farmers and ranchers to salesmen, engineers, surveyors, aerial applicators, air-taxi operators, pipeline patrol, and just plain everyday businessmen who use their airplane just like the automobile to provide quick transportation between places where they do business. These owners pay a rather high price for the utility that an airplane offers to their business—much higher, in fact, than the airline passenger pays for his ticket—whether it be pleasure or business that puts him on the airline. The general aviation user's require-

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ments for safety services are in no way diminished just because his vehicle is smaller or cannot fly in the air traffic control system. The criteria for providing these services through the FAA are established by the Administrator and can be changed by him to meet the safety requirements of the aviation community.

Economy: One bit of smokescreen used by the FAA in these hearings is the claim that interested parties are "all for economy, so long as it doesn't affect us." Last year AOPA recommended the FAA's budget be cut 36 percent. But we also warned our members that the favorite trick of Government agencies is to cut when the pressure got great enough—but always in places where it hurts the public the most, and raises the greatest fuss. That's what they have done here.

Alongside some of the exotic expenditures the FAA doesn't even mention, the entire FSS program is "peanuts." One of the most incredibly costly FAA items is its giant facility at Atlantic City known as NAFEC (National Aviation Facilities Experiment Center). After careful study, AOPA recommend that $25 million be cut from the FAA's research and devolpment program, that NAFEC be closed entirely, and what little was being done of value there be transferred to the FAA's second costly center at Oklahoma City. We do not oppose research and development, and we even think the Government has a legitimate role to play here. But the FAA's activities here appear well out of hand.

We once asked an FAA official to list on a scratch pad those specific contributions to civil aviation's programs that have come from their research and development programs. The best he could do was to come up with one or two items of primary concern to the airlines, such as a British visual glideslope system for jet airliners. Yet this Agency spent nearly $5 million on a giant radar that didn't work, for example, and something on the order of $50 million for a traffic control computer system that has yet to handle any traffic, though they've been pouring money into the idea for many years. Just a few items like these, picked at random, would support the FSS program for years en end. And just recently the Comptroller General revealed that the FAA had wasted over $47,000 on the operation of equipment in just two traffic control centers, $95,000 on another traffic control system, and so on. It certainly wouldn't be hard at all to find places to cut FAA fat without touching meat. Specifically, we recommended they be cut $293,638,000 last year.

Mr. WILLIMS. Before you proceed, Mr. Karant, you are familiar with those suggested cuts in the budget that were made by the AOPA?

Mr. KARANT. Yes, sir.

Mr. WILLIAMS. What did you suggest specifically in regard to flight service stations?

Mr. KARANT. We have an actual statement on that in our main paper. It describes precisely what was recommended. There has been much confusion on that point. I am glad you raised it. It is the difference between establishing new facilities in the flight service station program and operating existing facilities.

We recommended that the whole flight service station program be reexamined before expenditures were made on new systems.

Mr. WILLIAMS. In 1963, the AOPA put out a press release under date of April 19. Do you have a copy of that in front of you by any chance?

Mr. KARANT. No, sir.

Mr. WILLIAMS. I am advised this is material that was probably given to the Appropriations Committee.

Mr. KARANT. Yes, sir.

Mr. WILLIAMS. On page 18 of that document is this statement:

So far as the industry is concerned, the future role of the flight service station in the air traffic system is a hazard. Many of its services are desirable but not essential.

Before I proceed further, would you differentiate between the desirable and the essential services?

Mr. KARANT. The essential services would have to do do with anything connected with weather problems, flight safety matters, anywhere along the route of the flight or at the location of the flight service station itself.

We have said that there were certain nonessential things being done by these stations. As we probed more deeply into them, we found a number of things that I believe are essential to other people now, such as switching arrangements, switching centers, and things of that kind, but one of the things we objected to, for example, was a rule that was put in that said anybody approaching one of those airports with a radio had to call the station 5 miles out, and so on.

This item and other items—I don't have a list of them now, maybe Mr. Monroe can recall them—led us to the conclusion that perhaps the whole thing ought to be looked at to see whether by 1963 then or 1964 standards now, the flight service system, as a system, is giving proper service for the dollars being spent.

Mr. WILLIAMS. Perhaps I should not have taken that out of context. Let me go ahead and read the rest of this paragraph and then get your comment on it.

You say:

Many of its services are desirable but not essential. Many who would use those services would not do so if required to pay for them on a service fee basis. Indeed, some doubt even exists within the Agency as to the merit of continuing these establishments. In view of these things, we think a moratorium on flight service station investment * * *.

I presume that is additional flight service stations——

Mr. KARANT. Yes, sir.

Mr .WILLIAMS (reading):

Is in order until their future role is determined. A rigorous examination of the services they provided and objective appraisal of other available alternatives may very well reveal other similar and more economic methods of attaining the desired objectives.

If you would like, I will show that to you.

Mr. KARANT. I am familiar with that. You may or may not recall that we took a crack at that analysis ourselves. We came up with a program similar to the present FAA program to revise, we call them, things like GASS stations. They called them supplementary stations with manicoms. All of these words came out of that kind of evaluation. We took a look at that problem. We think ultimately, with this new effort by the FAA, and if they will work in cooperation with the users, we will come up with a system that will meet what we said in that document. It will probably be a different system and not as costly.

Mr. Monroe is thoroughly familiar with that. Would you care to have him comment?

Mr. WILLIAMS. I think it might be well; yes.

Mr. MONROE. Yes; there were two or three events that led to this. In the first place, leading to the words in that statement, in the first place we had gone to this rule requiring mandatory contact with the flight service station and this was giving a lot of our people considerable trouble.

In addition, over the period of years since the flight service stations had reached their highest level in about 1948 or 1949, the number of flight service stations had declined rather substantially, by almost a hundred or better. The number of employees had remained almost constant or gone up. There had been a concentration of more employees in fewer stations, so that we had service at fewer locations, and this combination of circumstances is the thing that led us to say that this whole thing needs to be reevaluated and restudied because maybe there is a change needed.

In addition, many of the justification requirements for a flight service station are hinged on the en route communications requirement. This is based on the criteria which the Administrator established for creating these things.

If the communications requirement which originally existed to serve IFR traffic has now been in large part transferred to the centers, then this leaves the flight service station open to serve a greater proportion of the VFR traffic. This, too, may call for a revision of the method by which it operates or the kind of facility which provides this sort of service.

This, basically, is what led to this.

Mr. WILLIAMS. While we are on the subject, do you know what part of the FAA budget is devoted to maintaining and operating these flight service stations?

Mr. MONROE. Yes, sir; we have those figures in our basic paper. They are relatively modest.

In the year 1961, to operate a total of 349 flight service stations—this is on page 13 of our basic document—and for 3,926 positions, there was a program appropriation of $28,236,000 with virtually no change in the number of stations, the number of employees has gone up to a present requested figure in 1964 of 4,735 positions, and the requested amount in that year for that budget was $42,075,000. There was a minor cut but in actuality the flight service station program, as a part of the overall operations program amounted to only about 7.7 percent of the Agency's operations. So far as investment is concerned——

Mr. WILLIAMS. Let me ask this question. On the assumption that we charge off the cost of the flight service stations entirely to general aviation, do you have any basis for comparing the cost of flight service stations against the cost of operating IFR facilities exclusively?

Mr. MONROE. No, sir, we have not drawn or attempted to do an analysis on that basis. I do not have any figures that I can give to you at the moment.

Mr. WILLIAMS. We have en route radar but that operates, as I understand it, only with high IFR traffic above 24,000 feet. Is that right?

Mr. MONROE. Essentially, if you are talking about the high-altitude radar and the positive controlled air space, yes.

Mr. WILLIAMS. Do you know what the cost of operating the high-altitude radar might be?

Mr. MONROE. No, I don't. I don't have a figure on that.

Mr. KARANT. You understand, sir, this is only one kind of radar they are using, just the high altitude would be above 24,000 feet. Is that what you had in mind?

Mr. WILLIAMS. Yes. I realize that the airlines also fly below 24,000. Is there any way that this budget can be broken down so as to differentiate between the amount of money that is budgeted for general aviation purposes and other, commercial aviation, purposes?

Mr. MONROE. No, sir, there is no way in which a reasonably good line can be drawn on this.

Mr. WILLIAMS. There would be no way of drawing a definite line, I realize that.

Mr. MONROE. Or even a reasonable approximation of it.

Mr. KARANT. As a matter of fact, we have asked the FAA for similar information because of the continuing discussion of user charges. We have taken a position, as you may know, if we are going to pay for these things we want to know what we are paying for and we would like to have a voice in them.

Therefore, when we try to find out about these very expensive aids, like the high-altitude radar, we have difficulty in tracing these things down and finding what the prices really are.

Mr. WILLIAMS. All right, sir, I think that is as far as we can go with the information at hand.

Mr. KARANT. In addition to such obvious places, the FAA wastes money in many other ways. They create new rules, techniques, and standards that all too often have no relation to the facts. But the administration of them takes a lot of people and a lot of overhead. They write rules for no evident reason, than later spend great sums of money to prove they were right. One of the classic examples of this took place in the medical division of the FAA. They decided airline pilots must stop flying at age 60. They had no factual evidence to support this stand. Later, they set up a testing program here in Washington—it's still going on—to test pilots to see what, if anything age has to do with flying.

These same medical people enhanced their empire by arbitrarily forcing all private and student pilots to get their simple physical examinations from aviation medical examiners, especially designated by the FAA, and eliminating the ordinary licensed family physician from this simple function—again despite a total lack of factual evidence. Today that medical empire is costing the taxpayers more money than the FAA hopes to save by the FSS consolidation.

Mr. WILLIAMS. Let me ask you in regard to the medical research work that is being done by the Federal Aviation Agency, is that the only agency that is doing research in the field of aviation medicine?

Mr. KARANT. No, sir.

Mr. WILLIAMS. What other agencies of Government are doing research in this field?

Mr. KARANT. As you probably know, all the military do: and I suppose the National Institute of Health, and maybe even NASA. The answer we get when we raise this question with the FAA is, "Yes, but they are programs being conducted to test the lung capacity,

let us say, of pilots in the military but these are all hot-blooded young men and their lungs are different from you old folks; therefore, we need a new program to test you old folks' lungs, and that is a new program."

Mr. WILLIAMS. The military is not doing that type of thing?

Mr. KARANT. No, the military is not interested in the old folks.

Mr. WILLIAMS. How about the colleges under the grant-in-aid type of programs we have?

Mr. KARANT. We have not been able to compile such a list, but we have every reason to believe that there is that kind of research going on all over the United States. We have not gone into it in elaborate detail, but we have enough indications to suspect that that $8 million exercise at Oklahoma City, if that is the amount, is quite a boondoggle.

Mr. WILLIAMS. In other words, the point I want to make is, is this duplication of efforts being made by other agencies of Government?

Mr. KARANT. I cannot answer that factually. We suspect it is, but we cannot prove it.

Mr. WILLIAMS. All right, sir.

Mr. KARANT. The record is full of similar waste. An airline electronics expert recently showed that the FAA has for years been spending anywhere from 5 to 10 times too much for its radio-navigation ground facilities. Incidentally, we were so surprised at the wonderful job done by Mr. Poritsky of the Air Transport Association. We got permission to reprint his whole report in our magazine, which we did.

Why should this agency buy jet transport aircraft—costing nearly $5 million each—to train their airline inspectors? Particularly when, as spokesmen for the airline pilots have pointed out, the companies' own highly skilled check pilots and chief pilots are far more capable at evaluating airline pilots than are the FAA check pilots.

The FAA is currently spending hundreds of thousands of dollars—project little guy—trying to redesign parts of the general aviation airplane, another task, I submit, more appropriately the responsibility of private industry.

Those are notes I made as a result of these hearings. We thank you for your attention. We will be very glad to answer any questions we can.

Mr. WILLIAMS. On the assumption that Mr. Halaby's program is put into effect and the total amount of savings, his most optimistic figure of savings to the Government, turns out to be correct, what will be the percentage of reduction in the overall cost of the operations of the Federal Aviation Agency?

Mr. MONROE. I haven't done a calculation on that, but if he is going to save $3.5 million a year out of his total budget of almost $800 million, this is a fraction of a percent. It is insignificant.

Mr. KARANT. I think I took a crack at it once on the basis of one runway at Dulles, and that would have paid for it for the rest of our lives.

Mr. WILLIAMS. You haven't gotten to the Jetstar yet.

Mr. KARANT. I am not going to, unless you want to.

Mr. WILLIAMS. No; we won't get into that. I think that has been pretty well covered by the other body.

Mr. KARANT. Mr. Chairman, I am sorry the gentleman is not here, I believe it was Mr. Jarman or it was Mr. Devine who kept asking about everybody calling the weather unusual at their location. I think it ought to be said when you once get in the airspace, as you know, all the weather is unusual; and you had better know what it is, because you are moving pretty fast. That is why all the people expressed such concern.

Mr. WILLIAMS. On page 2 of your statement you say:

> We have only touched briefly on our view of where the responsibility for weather observation and development should be placed. We think it ought to lie exclusively with the Weather Bureau. We have treated this problem in some detail in a separate document which we supplied to Members of Congress last year.

Would you have the briefing responsibility placed exclusively in the Weather Bureau?

Mr. KARANT. Not necesarily. The position we took there, however, was that all meteorological services should be in the hands of the Weather Bureau.

Our requirement should be stated to them emphatically, and they should provide this information as best as they can, because their money is being dissipated in many fields.

Mr. WILLIAMS. A number of the users have suggested that they be placed in the Federal Aviation Agency. I assume what they have in mind is that the Weather Bureau man would get the weather information together and hand it to the FAA man, and the FAA man would brief the pilots.

Mr. KARANT. That is a practical thing. We are doing that now. The thing we are talking about here is FAA weather deficiencies in the basic system.

Mr. WILLIAMS. Would you like to comment on the suggestion that was made a few moments ago by Mr. Lawton, that perhaps it might be well to consider making the Weather Bureau an independent agency, independent of the Department of Commerce?

Mr. KARANT. Yes, sir. That is the position we took with the old CAA, too. Yes, quite so. We have quite a bit of understanding by the Weather Bureau on the part of Mr. Lieurance and his people, who understand the aviation weather problem rather deeply. As you know, in a Government agency you can save so much and no more when you are under the control of another agency above you.

Mr. WILLIAMS. Do you feel there could be any savings accruing to the taxpayer as a result of that type of reorganization?

Mr. KARANT. I don't know. We recommended that to the CAA and we got the FAA. Let Mr. Monroe answer that.

Mr. MONROE. One of the problems we have had with this Weather Bureau thing is that we think for the same amount of money that we are expending at the present time for weather services we can provide a far better weather system for all users, aviation and non-aviation alike, military and civil, and what have you, if we will concentrate this resource in one location and start in making the most of it instead of dissipating it among some 10 or 11 different Government agencies.

This is why we think that it should be concentrated in the Weather Bureau, because the basic problem in our view is that Weather Bureau does not have enough facilities to take a decent inventory of the pres-

ent weather so that they can turn around and tell us what even the future weather is going to be like a few hours from now with any degree of reliability along areas which do not have weather observations.

So we think if this thing can be concentrated, and we recognize this is an overhaul that is pretty substantial, that we will all of us profit out of it. We might not save a lot of money, but we would certainly get a far, far better weather system than we have now or, if we are going to stand with the present system we have got, we should save money and lots of it.

Mr. WILLIAMS. I take it from the remarks that you have made that if legislation were introduced into the Congress which would provide for making the Weather Bureau an independent agency, that we would have your full support.

Mr. MONROE. Yes, sir.

Mr. WILLIAMS. There is one other phase of this problem that I think perhaps you might want to comment on.

You touched on it briefly in your statement, but you did not go into any great amount of detail. That is the question of the frequencies that would be guarded under the program that has been submitted by Mr. Halaby. If a single frequency should be assigned to a Manicom, would that be sufficient to meet the needs of general aviation?

Mr. KARANT. Mr. Kayne worked on that aspect of it. Do you want to say something about it?

Mr. KAYNE. Mr. Chairman, on the basis of the Manicom, it would be only at a very low activity or at a relatively low activity location. I think the answer to that would probably be yes; but again this is a curbstone opinion, because this is a technique which has not yet been tried. If we are talking of a location which has relatively higher order of business, then we would assume that we might have a part-time facility with more than one frequency. But the one frequency situation would be a rather low activity location, and it is conceivable that the one channel could handle that.

This does leave deficiencies, though. The emergency frequency, for example.

Mr. WILLIAMS. I was going to mention that. There are two emergency frequencies, as I understand.

Mr. KAYNE. The 121.5 for civil and the 243.0 for the military. So that if we have only one channel in the equipment, the emergency frequency would be lacking at that place and that one channel could only be used for terminal communications in the immediate vicinity of the airport. You could not possibly try to handle en route communications in addition on that channel. It would strictly be a local type service.

Mr. WILLIAMS. Gentlemen, unless you have something else to add, I have no further questions.

Mr. KARANT. We are mumbling here among ourselves about the one statement we recommended on the flight service station. We have a statement in here that says—

the station should have radio communications on the minimum number of channels, probably no more than three.

Then we went on with other points.

Mr. WILLIAMS. I have not read the text of your main statement, but I am informed that on page 12 that the description of the flight service station modernization needs appears to be quite comparable to the proposal which has been made by Mr. Halaby at this hearing. Would you like to comment on that?

Mr. KARANT. Yes. We made up that proposal of ours, the document I just read from, I believe preceded the FAA proposal. We discussed our proposal with them a number of times and many of them a number of times, and many of them were favorable to the basic points that we made. I believe that there is some relationship between the two.

We do think that what Mr. Halaby has come up with is a step in the right direction, and we want to cooperate with the FAA and help work out this system, whatever it turns out to be.

Mr. WILLIAMS. I thank you gentlemen for your testimony.

Mr. KARANT. Thank you very much.

Mr. WILLIAMS. I believe our next witness is one of our longtime friends, formerly with the Federal Aviation Agency, Mr. James T. Pyle.

STATEMENT OF JAMES T. PYLE, FOR NATIONAL PILOTS ASSOCIATION

Mr. PYLE. My name is James T. Pyle. I appear here as a director of the National Pilots Association. This organization represents several thousand highly skilled professional and nonprofessional pilots who use aircraft for the furtherance of their business as well as for purely recreational reasons. The National Pilots Association is a nonprofit organization and is operated purely for purpose of representing its members' interest in a constructive—and I would like to emphasize that word—constructive and responsible manner. All officers and directors of this organization are elected by the membership at an annual election.

The National Pilots Association is sympathetic to the desire of the Federal Aviation Agency and the Bureau of the Budget to achieve economies in the operation of the air traffic system in the United States. We note that it has been the policy of the Federal Aviation Agency to decrease the number of flight service stations during the past 10 years as technical developments have made remoting more economical and practical. This program has been going on for a long time now and we are not convinced that at this very moment the present number and location of flight service stations should be frozen and no further consolidations or changes be made. Or, in other words, a policy of continued retrenchment under certain conditions may well be advisable and possible.

On the other hand, we are willing to see continued changes in the flight service station network, provided first that the essential services are improved and the costs are reduced. As we appear here as the representative of a large group of active general aviation pilots, who use aircraft for cross-country transportation, may we confine our remarks to what we believe are the essential services a flight service

station should perform. These may be divided into two general classifications—namely, preflight and inflight.

The preflight service of an FSS should include:

1. Weather information: (*a*) Present weather at point of origin, en route, and at destination, and, incidentally, at the alternate, for IFR operations; (*b*) forecasts for the same area.
2. Preflight planning including information from the Airman's Guide, Flight Information Manual, and notams.
3. Filing of flight plans.

Once in the air, the pilot needs to have:

1. Weather information, en route, at destination, and his alternate.
2. Ability to report position.
3. Direction-finding assistance in the event of an emeregency.

There are other services which a flight service station could or could not perform, depending upon the demand and the size of the staff at the FSS:

1. Flight assistance—particularly for communications backup in IFR. Or, for example, the inability, when you are on a certain frequency, to communicate with the center on that direct pilot-controlled frequency. Quite often you have to fall back on a flight service station.
2. Airport traffic advisories—on request only.
3. Flight-following service—on request only.
4. Control of airport lights and monitoring of navigation aids.
5. Additional duties—and this is an idea we have come up with—such as consolidation of certain functions now performed by general aviation district offices including giving of examinations, aircraft inspections, and accident investigations. What I am really talking about is housekeeping, putting them all in one location. It might be a convenience to the pilot and the community.

The needs of the general aviation pilot for adequate, accurate, and accessible weather services are paramount. Weather accidents are probably the most serious and baffling problem faced by general aviation. No action should be permited to aggravate this problem.

In order to perform these services the National Pilots Association suggests that the flight service station network be set up on the following general outline:

1. We support the FAA proposal for a network of hard-core hub flight service stations manned by FAA employees on a 24-hour basis and giving full service as at present in the way of preflight and en route services as outlined above. These hub FSS's would be surrounded by facilities tailored to the requirements of the number of local pilots and could range from part-time FSS's to teletype and phone facilities connected to a hub FSS and manned or serviced by local employees. I think these were pretty well described by Mr. Halaby.

We also welcome and endorse the suggestion that new planning standards be developed for combined towers and FSS's. This would extend tower service to airports which would not now be eligible under present standards.

Mr. Chairman, I would like to make a comment, because I do agree with the point that Mr. Rand made that under certain conditions a combined station is overloaded, and really can't do adequate service either as a tower facility or as a flight service station. However, I

think there might be considerable merit in giving thought to a somewhat lower activity location where you could have a combined tower service and flight service station which would really meet a requirement and not overload the personnel. This, I think, is the idea you were trying to get across.

Mr. WILLIAMS. Could that be done by changing the criteria?

Mr. PYLE. Yes, the planning standards of 24,000 annual operations would have to be changed. Now this may not be proper. This, the Agency will have to take a position on; but this is a thought which might need some requirements, particularly on a part-time operation basis.

2. In order to maintain and even improve the quality of the weather service available to the general aviation pilot, we recommend that at least some weather observation and briefing service be maintained at almost all of the present FSS sites. In some cases non-Federal employees could be trained and engaged to do this work.

3. I commend Mr. Halaby's concept of manicoms and AID's, and his intention to implement a test program of both of these ideas. I would hope that this test would be a thorough test and that it would be implemented in each region so that there would be all kinds of localities that would be the subject of an adequate test program. I think this is most important.

In other words, if we are going to test, let us test it realistically.

The above plan would provide for some remoting of present flight service stations although certain would be operational on a part-time basis. We think care should be taken that if remoting is done some provision should be made to remote other frequencies than the FSS standard of 122.1 megacycles. If 126.7 megacycles and 135.9 megacycles are not remoted also in some locations, there will be undue and, in fact, untenable congestion on 122.1. Present frequencies are overloaded and perhaps they should be expanded in number.

You will note that in earlier paragraphs we have suggested that general aviation district offices be consolidated with some present flight service stations. This would be only at the larger airports, of course, but we feel this consolidation of facilities could lead to important economies in overhead and utilization of personnel plus increased convenience to airmen.

With the plan as outlined above, we believe important economies can be achieved in the FSS system as we know it today. We believe service will be tailored more to the needs of the individual communities.

In conclusion, I would like to indicate our concurrence with the position taken by the aviation officials of the New England States which, I believe, made a statement here yesterday—in essence, the same position we are taking. I would only question one point that they suggested, that unicom frequency, 122.8, be available at the manicom and AID's, particularly the latter. I would assume that the standard FSS frequency would be available at the manicom's. This I am not quite clear on, as to how the Agency intends to set this up. But I think this New England officials' position is a logical approach and, I feel, is in basic agreement with that of the NPA and, in most instances, with the FAA.

So, Mr. Chairman, I conclude and I am available for any questions that you might have.

Mr. WILLIAMS. Thank you, Mr. Pyle. In view of your remarks about tower criteria, do you feel that there is a need for a change of some kind in those criteria?

Mr. PYLE. I think, Mr. Chairman, that there are certain locations that might well be looked at from the standpoint of intense activity during the day that would not require necessarily 24-hour service. Most towers are today on a 24-hour basis. As a result, when you cut down your operation part time, the number of hours a day you operate, you might well find different planning standards would be applicable and logical.

Mr. WILLIAMS. Do you feel that this is a problem that the FAA should give attention to?

Mr. PYLE. Yes, sir; I do. I think they try to continuously review the planning standards, but sometimes this process of review may not take place quite as frequently as perhaps it should. It is a hard job.

Mr. WILLIAMS. Do you feel that the tower criteria are too rigid, by any chance?

Mr. PYLE. No, sir; provided this review process does take place. The purpose of the planning standard, I think, is in order to implement an orderly program and to make it possible to come up to the Congress with certain facility programs of a certain size, based on logical criteria.

In this respect, it serves a very useful purpose; but I don't think it can ever be standard. It has to be continuously reviewed to be sure it is responsive to the needs. I do not know how long that 24,000 operation standard has been in effect.

Mr. WILLIAMS. I have one further question, and that has to do with the Weather Bureau situation. Would you concur with the previous witness's suggestion that consideration be given to making the Weather Bureau an independent agency?

Mr. PYLE. Mr. Chairman, that is a pretty broad question. I would like to answer it in the affirmative. It is my personal belief that the important——

Mr. WILLIAMS. Mr. Pyle, you have had rather extensive experience in government and as the head of the old CAA, and then in the Federal Aviation Agency. I think quite frankly you are well qualified to speak on this subject. If you do not mind, we would like to have your candid opinion.

Mr. PYLE. I will avail myself of the opportunity.

Quite frankly, Mr. Chairman, I feel that the time has come when the weather service should be an independent operation. It would thereby attain increased stature in the Government, before the Congress. It would be able to get badly needed research and development funds which are not, frankly, made available today.

But I think, if we go this route, I think we should take a good, hard look at combining all weather service, military, civil, NASA, and other agencies of Government. There should be one for all. Just as I feel, frankly, that all traffic control, all towers, should eventually be operated only by the Federal Aviation Agency and, I think, the military gradually phasing out their operations in favor of this concept.

Mr. WILLIAMS. I don't know how far you can go in speaking for your organization, but would you contemplate that legislation along those lines would have support of your organization.

Mr. PYLE. Yes, sir.

Mr. WILLIAMS. Mr. Pyle, I have no further questions. We thank you very much for giving us the views of the National Pilots Association. You have always been a great deal of help to this committee. We want you to know that we appreciate it.

Mr. PYLE. I appreciate the opportunity to come back and testify before you. I would like to say that this committee and yourself, Mr. Chairman, was a tremendous help to me when I was down in the FAA. Anything I can do to contribute to your work, I will do gladly.

Thank you.

Mr. WILLIAMS. Mr. Bill Lawton. Is he here? Mr. Lawton represents the National Business Aircraft Association.

STATEMENT OF WILLIAM K. LAWTON, EXECUTIVE DIRECTOR, THE NATIONAL BUSINESS AIRCRAFT ASSOCIATION, INC.

Mr. LAWTON. My name is William K. Lawton, executive director of the National Business Aircraft Association. I am a licensed commercial pilot and also hold airline dispatcher's certificate. A description of our organization occupies the first page of the testimony we have presented in writing.

In our remarks, we point out several things. One is, that the proposal concerns not just 42 stations. The FAA's proposal concerns 70 stations, of which they named only 42. So this is a much more widespread proposal than has been so far publicly mentioned or discussed. The 70 stations represent a sizable percentage of the existing flight service stations.

We mention the major needs in our testimony of general aviation, one of which has not been particularly emphasized in previous testimony, but which we believe is of major importance. That is the need for a comprehensive system of constantly updated, accurate aeronautical information regarding airports, airways, navigational aids, obstructions, or other hazards to flight which are newly created, which are marked or lighted or unmarked or unlighted. I refer here to the Notam system.

The flight service station provides one of the basic sources of this information for the general aviation pilot. In order to make a flight, the pilot should check the station, not just rely on, if he does receive such, the Airman's Guide. But this requires a daily check. As a matter of fact, the notices to airmen have provided one of the constant problems for the aviation community, and the method of their compilation and distribution has recently been revised. They are extensive, they are lengthy, and they are very important to the airmen.

Without the flight service station having them available for the man to read, he will be subject to operating in ignorance and therefore in danger. We commented also upon the lack of weather reporting and what weather reporting and weather observation means to the aviation community. It means that at those hours when there is no other observer on duty that the airport cannot be used by a scheduled air-

line under instrument approach conditions. This means that the investments made by the Government in instrument landing electronic systems, approach and runway lights, planning, charting, publishing instrument approach procedures, are wasted during those hours when instrument airline approaches cannot be made because of lack of weather observations and their collateral terminal forecasts.

These same airports, under these same conditions, cannot be used by general aviation aircraft as an alternate airport, one they might plan to use in case their destination airport becomes closed for any reason.

Further, the absence of weather observations also precludes the Weather Bureau from issuing airport terminal weather forecasts for those periods of time a qualified weather observer is not on duty.

Thus, without on-the-spot weather observations, without forecasts of terminal weather, all segments of civil aviation are directly affected by the proposed consolidation of many of the flight service stations.

Appended to copies of this testimony is a list of flight service stations proposed for consolidation which are located at airports which have published instrument approaches. Please note that in some cases there is a proposed total abandonment of all weather reporting services. I believe that the impact upon instrument approaches of the lack or diminishing of weather reporting service is a serious one and deserves the utmost consideration of the committee in their judgment.

It is the belief of the NBAA that the roles of weather observation, reporting and forecasting are, and should be, the responsibility of the U.S. Weather Bureau. We believe that the various Government agencies, such as the FAA, Agriculture, Interior, and so forth, should act more forcefully as claimant agencies. We believe that the proposed FAA consolidation of flight service stations, as far as weather observation and reporting functions are concerned, will actually cost the Government more than FAA believes it can save.

The needed replacements to take and report observations on the same basis as are now taken at airport locations with instrument approaches will require Weather Bureau expenditures of money hiring personnel, purchases of equipment, which will be, we are certain, in excess of any FAA saving. Further, the funding of the U.S. Weather Bureau for the time period in which the FAA consolidations are proposed is not such that they can support even the replacements that are needed.

We are faced, in the name of economy, with losing an existing and needed weather service which provides basic information necessary for all aviation operations. These losses come at a time when even the existing network and services are in dire need of immediate improvement and expansion.

We have mentioned the importance of the Notam's. We point out that these include the conditions of airports and the runways, the presence of unusual obstructions on the airports, the planned closing down of navigational aids for maintenance. It includes the operations of military aircraft at low levels and high speeds across civil flight paths. It includes the opening or closing of joint use areas, even to notifications that flights are temporarily restricted from flying near places where prominent political dignitaries are present.

The numbers and extent of these notices to airmen are voluminous and all embracing. Failure to read and to know them can lead to serious safety incidents and also to the filing of violations.

Mr. WILLIAMS. Mr. Lawton, let us go back to your statement:

> The current FAA proposal to consolidate 70 of these stations, of which 42 were designated by name, makes various claims as to how FAA will continue providing without derogation of safety, the same or nearly the same or equivalent services.

Where did you get the figure of 70?

Mr. LAWTON. I believe this was mentioned in the original number named on February 4 at a meeting which the FAA called to inform the users of their decision.

Mr. WILLIAMS. Do you know whether that is still contemplated?

Mr. LAWTON. In view of what Mr. Halaby has stated in the past few days, I don't believe so. We have noted in the FAA's announcements that the move to consolidate FSS stations are for stated reasons of economy. These economy moves are made, we have been informed, in line with overall economy cutbacks in personnel in many branches and agencies of Government.

We are seriously concerned that the FAA's proposal, however valid some of its technical reasons may be, tends to shift some of the economy back from the FAA shoulder of Government to the U.S. Weather Bureau shoulder of Government. We are concerned because we know that the U.S. Weather Bureau's shoulder is seriously suffering from a historic financial anemia. We are further concerned with the direction FAA has chosen to meet a very serious and needed economy demand from the President.

We believe that a review of the FAA's total budgetary commitments will reveal that the prime responsibility of the FAA to insure the safety of aircraft and the efficient utilization of airspace has been led into some channels which may be classed as interesting but not essential.

It is also pertinent to note at this juncture that the aviation community and perhaps many other parts of America's transportation system is faced with a Government policy which seeks to cut down essential services with the one hand and at the same time the other hand is attempting to establish additional charges for these services.

There have been suggestions made that some of the present flight service station functions could be taken over by other than Federal agencies. Particularly mentioned are those services in connection with weather observation, weather reporting, and preparation of weather maps, dissemination of weather information by teletype, and distribution or posting of aeronautical information.

We believe that the control, supervision, and support of interstate commerce is a clearly stated function of the Federal Government. We believe that any major steps taken to dissipate or shift any of these Federal responsibilities would be in contravention of constitutional requirements.

We believe that the delegation of the aeronautical services now provided by flight service stations to other than Federal agencies would result in increased economic support demands from those State or local governments and with no collateral reduction in present Federal economic support demands.

In this connection, Mr. Chairman, and with your permission, I would like also to have included in our remarks a copy of an editorial written by the president of NBAA, Mr. John Winant, making comments upon user charges and the general public in which it is pointed

out that it is our belief that every man, woman, and child in the United States is a direct beneficiary of civil aviation conquest of time and distance, and we feel that there are some shortsighted people in certain branches of Government who feel that because a person does not fly that he does not benefit from civil aviation.

We challenge this view and call your attention to it, sir.

Mr. WILLIAMS. It may be included.

(The editorial referred to follows:)

[NBAA News Report, May 1964]

USER CHARGES AND THE GENERAL PUBLIC

The costs of airman's competency examinations, aircraft airworthiness inspections, certification of airmen, and a large share of the costs of air traffic control systems are some of the governmentally supplied services which should be defrayed by "user charges" on civil aviation * * * so states the Bureau of the Budget and the General Accounting Office in Washington.

This governmental argument is based on their simple justification that "four out of five Americans never fly" and that, therefore, the general public is carrying an aviation-cost tax burden from which they derive no benefit.

We believe, strongly, to the contrary.

We believe that every man, woman, and child in the United States is a direct beneficiary of civil aviation's dramatic conquest of time and distance. Whether the civil flight be airline, business, instructional, police, firefighting, crop control, or pure pleasure, these flights benefit those who never see an airplane, go near an airport—much less fly.

Besides the transport of passengers—governmental, diplomatic, military, commercial, financial or religious—whose missions directly affect every person in the United States, civil aircraft carry each year millions of ton-miles of mail, air express and aircargo destined for those four out of five who never fly. The efficient, expedient flow of the Nation's business, which has an effect on every man's livelihood, is, increasingly, dependent these days on airline and business aviation. Apart from dramatic mercy-drug dashes and disaster reliefs provided by all types of civil aviation, there is the daily prosaic, but important, patrol line flying which assures steady, uninterrupted delivery of oil, natural gas, gasoline, and electricity to the four out of five who never fly.

Civil aviation has done little, it appears to me, to refute the bureaucrat's shortsighted arguments that the general public must fly in order to receive direct benefits from airworthy aircraft, efficient air traffic control, competent pilots and mechanics or an airport system.

NBAA believes that it is about time that civil aviation tells its story with all the facts and vigor at its command.

Won't you join with us?

Sincerely,

JOHN H. WINANT.

Mr. LAWTON. In closing, I may point out the necessity for increased amounts of weather observation places has been emphasized by the FAA's recent decision to inaugurate instrument approaches at airports which today have no instrument approaches, and this is planned to be done by using Vortac stations which were planned to be used only for en route navigation and which happen to be located in the vicinity of a small airport.

We at NBAA have urged this program upon the FAA and last September the Administrator approved this. As a result, we now see a doubling of the number of airports which will be available under instrument flight conditions to general aviation aircraft. This is an economy program, because here we will have instrument approaches at literally pennies of cost in relationship to the approaches we now have to have erected through electronic instrumentation, and so on, at other airports.

This is an economy program which can double the number of instrument approach airports for general aviation.

Collaterally with this comes the need for good and improved weather information. We hope that as a result of this subcommittee's hearing's and evaluations of the comments made by the almost sum total of civil aviation, air carriers included, that directions will be given to the FAA to expand, not cut down, upon the weather observation reporting network and to supply the aeronautical information services that general aviation is dependent upon.

Thank you very much, sir.

If there are any questions, I will try to answer them.

(The full statement follows:)

STATEMENTS OF NATIONAL BUSINESS AIRCRAFT ASSOCIATIONS, INC.

National Business Aircraft Association, Inc., is a nonprofit, independent, member-directed aviation organization founded in 1947 as the Corporation Aircraft Owners Association and is incorporated under the laws of the State of New York.

Our national headquarters are located at 344 Pennsylvania Building, Washington, D.C.

NBAA's regular membership is composed of companies and individuals who own and operate aircraft for their business purposes. The association was organized to represent the aviation interests of those persons, companies, corporations, or other forms of private business enterprise and has enlarged its membership to provide associate membership to persons or companies supplying goods and services to the business aircraft owner or operator.

Among the fields in which NBAA is concerned are improvements in airways and airports, better weather service, expansion in communications and air navigation facilities, higher standards of airport services, improved aircraft parts distribution, equitable tax rulings for business aircraft operations, greater recognition of the airplane as a necessary tool in modern business and industry, better air traffic control procedures, professional status for qualified business pilots, and aircraft designed to meet the special requirements of business flying.

The problems brought about by the recent FAA announcement that some 70 flight service stations were to be "consolidated" with other flight service stations have raised questions we believe which are far beyond considerations of just these 70 stations.

They have raised questions the answers to which could provide a national policy determination which the aviation community, the general public, and the Congress could subscribe, support, and understand.

These answers must be based upon a more complete understanding of the role of aviation—and general aviation in particular—upon the transportation and commerce of the Nation.

The questions concern the legitimate needs of civil aviation in order to fulfill its many missions in safety. They raise questions of details such as: What Government entity should provide and disseminate weather observations, formulate and distribute weather forecasts; by what means should they be disseminated and how should they be financially supported? What are Government's responsibilities to see that airmen are provided with information concerning obstruction lights being out at airports; about electronic navigational aids being closed down; about vagaries in navigational aids accuracies; about the conditions of airports and runways; about new hazards erected into the navigable airspace: about high-speed, low-level military aircraft in their areas?

WHAT ARE THE BASIC NEEDS OF CIVIL AVIATION FOR DAILY OPERATIONS?

Because aircraft fly through the atmosphere, there is a basic need to know—in advance—what type of atmospheric conditions the pilot and his passengers may expect to fly in. This knowledge affects the pilot's decision as to the route of flight, the altitude, the speed of the aircraft, the amount of fuel needed, the alternate routes or airports he may be able to use, the time of departure or time of arrival, the numbers of passengers or amounts of cargo he may carry, and sometimes even the type of aircraft he will use for the flight.

We believe that there is an almost instinctive realization on the part of all persons that all aviation has a mandatory requirement for many types of weather information. However, the methods and systems by which these requirements are met or attempted to be met, is not common knowledge.

A second major need for civil aviation is a system comprising a combination of rules and procedures, instrumentation and personnel which will enable aircraft to maintain constant separation from each other in flight and to take off, fly, and land under all types of visibility conditions.

A third major need, related to both the first and second needs, is for an air-ground communications system which will enable the pilot to receive and transmit messages concerning weather information, traffic information and instructions, and other information which could have an effect on the safety of his flight.

A fourth major need is a comprehensive system of constantly updated, accurate aeronautical information regarding airports, airways, navigational aids, obstructions, or other hazards to flight which are newly created, which are marked or lighted or unmarked or unlighted.

A fifth major need is for some type of national system of airports, airparks, and airstrips which will accommodate the many various types of civil and military aviation services to as many communities as have need for them.

WHO NEEDS THESE AERONAUTICAL SERVICES?

Flight service stations—at the present time—are the major and sometimes only source of four of these five needs for 98 percent of the civil aircraft that fly in the United States.

These 98 percent of the civil aircraft are usually referred to as the general aviation fleet. They number about 37,000 aircraft. They are used for a variety of business, industrial, commercial, agricultural, private transportation, instructional, and recreational purposes. These aircraft range in type from multiengined turbojets, include turboprops, and multi- and single-engined piston aircraft from types used in air carrier work down to the one-man home-built aircraft.

These aircraft fly more than 12 million hours per year in comparison to the 4,300,000 hours flown by the scheduled air carriers.

These general aviation aircraft fly on Federal airways and they also fly across unmarked and poorly mapped terrain. They fly at night as well as day. They fly in all types of weather. They are, in most instances, equipped with two-way radio and many are instrumented for flight in moderate all-weather conditions.

The flight service stations are the information contact points for general aviation long before a flight ever takes off. They are the prime contact point for the general aviation aircraft en route flying under visual flight rules. They are an important source of information for aircraft entering into many landing areas where there are no towers or other types of communications available.

They have also been assigned the role of acting as aerial lifesavers for the unfortunate, usually inexperienced pilot, who becomes lost, disoriented, or who otherwise may need in-flight information or guidance.

The scheduled airlines are not as dependent upon the flight service stations as are the aircraft of general aviation and to some extent the aircraft of the military.

The vital functions of provision of weather information and forecasts, airport terminal conditions, and en route communications is covered for the airlines by an excellent system of flight dispatchers, company radio networks, airline meteorologists, who take the same basic information received in flight service stations and screen it, evaluate it, refine it, and use it for the sole purpose of providing needed and qualified information essential to their airline pilots.

General aviation has no such network of private services. They depend on those now provided only by the flight service stations.

In addition to acting as a disseminator of information, the current role of flight service stations is to act also as a collector of information. Many of these stations take weather observations, inspect airports for landing conditions or receive status information from nearby airports for transmittal throughout the aeronautical information system.

Also collecting weather information are Weather Bureau airport stations and observers at military airports throughout the country. These observations are further supplemented by a patchwork of part-time weather observers supplied by airlines, or part-time weather observers paid for by the Weather Bureau and by weather reporting machinery just now becoming effective in measuring and automatically reporting basic weather data.

WHAT SERVICES ARE PROVIDED BY FSS TO AVIATION?

Of the five major and basic aviation needs:

(1) Weather information.
(2) Air traffic separation.
(3) Air-ground communications.
(4) Aeronautical information.
(5) Airports.

Flight service stations now provide, in varying degrees, support to the first four.

The current FAA proposal to "consolidate" 70 of these stations (of which 42 were designated by name) makes various claims as to how FAA will continue providing, without derogation of safety, the same, equivalent, or nearly the same or equivalent services.

The FAA maintains that Weather Information services will be not greatly affected. They have publicly stated to groups protesting several of the proposed consolidations that the Weather Bureau was planning to provide, full-time 24-hour-a-day weather observation services. These statements were directly contrary to any plans that the Weather Bureau had made known to us when we conducted our detailed analysis with them of the impacts of the FAA propsals upon each of the 42 FSS stations.

There will be—unless immediate funding action and increased personnel authorization is directed for the Weather Bureau—a reduction in hours and places where weather observations will be made.

What is the impact upon civil and military aviation, not just general aviation, occasioned by the loss of weather observations made on a 24-hour basis at these airport FSS stations?

First, it means that for those hours there is no weather observer on duty that the airport cannot be used by a scheduled airline under instrument approach conditions. It means that the investments made by Government in instrument landing electronic systems, approach and runway lights, in planning, charting, publishing instrument approach procedures are wasted for those hours during which airline instrument approaches cannot be made because of lack of weather observations and collateral terminal forecasts.

These same airports, under these same conditions, cannot be used by general aviation aircraft as an alternate airport—one which they might plan to use in case their destination airport became closed for any reason.

Further, the absence of weather observations also precludes the Weather Bureau from issuing airport terminal weather forecasts for those periods of time a qualified weather observer is not on duty.

Thus, without on-the-spot weather observations, without forecasts for the terminal weather all segments of civil aviation air directly effected by the proposed consolidations of many of the flight service stations. Appended to copies of this testimony is a list of flight service stations proposed for consolidation which are located at airports which have published instrument approaches. Please note that, in some cases, there is proposed a total abandonment of all weather reporting services.

We have spoken so far only about the impacts of weather observations on the all-weather landing portions of civil flight.

From the many hundreds of weather observations made around the country—the majority of them at places away from airports—meteorologists are able to construct weather maps indicating conditions which are then present near the surface of the earth. These ground reports are augmented by radiosonde upper air reports, by aircraft reports, and by reports from globe-circling weather satellites.

From this wealth of information the Weather Bureau forecaster attempts to predict what type of weather may be reasonably expected in various parts of the world.

Despite satellites and computers, despite advanced meteorological techniques, despite a global network which interchanges information with other countries the weather forecaster, is not able to do a job that is satisfactory for today's aviation, and in some cases even for today's picnics.

Aviation today operates under two types of flight rules. The most frequently used by general aviation are the visual flight rules which require that the aircraft remain clear of the clouds and have at least a mile of forward visibility. Distances from clouds and amounts of visibility required under VFR can also

vary depending whether or not the aircraft is flying under air traffic control instructions in controlled airspace.

The pilot, in planning his flight, must be able to decide whether or not he can proceed under VFR to his destination if he does not have an instrument rating or his aircraft is not equipped for operating under instrument flight rules.

Here is a vital weather requirement for all of aviation. Do the weather observations indicate that the weather is now and has been suitable for VFR flight? What do the area forecasts (based upon past weather observations) say that the cloud heights and visibilities will be over the planned route of flight or over alternate routes of flight? What do the terminal airport forecasts predict for cloud height and visibility and planned time of arrival?

Unless these flight planning questions can be answered with a high degree of accuracy, the VFR pilot is forced into taking some type of calculated risk if he decides to make the trip.

Unfortunately, because of the present-day system of observations and weather forecasts, many VFR pilots have learned that even what they have today is not adequate, the forecasts are unreliable, and the forecaster's opinion usually taking a discourging view.

We see some of the tragic results of the present system's weather forecasting inadequacies in our dairy newspapers. Some of these general aviation accidents associated with weather are the results of the VFR pilot failing or being unable to check the en route weather prior to departure. Some of these weather-associated accidents can be traced to a VFR pilot's determination not to reverse his course and return to areas of better weather. Some of these accidents are also caused because the pilot received an erroneous forecast.

A second weather-associated function of flight service stations is to provide weather briefings either in person or by telephone to general aviation pilots. Using Weather Bureau-provided forecasts, the FSS personnel read and explain or provide copies of the forecasts over the counter to general aviation pilots.

Some type of weather briefing service must be maintained. The question of the day appears to be: What governmental agency will maintain weather briefing services, to what extent, at what locations, and by what means?

If not FAA flight service stations, then the Weather Bureau should be charged with the responsibility. Or, if the U.S. Weather Bureau cannot provide the services should they be delegated to the States, the communities, the airports, or to private industry?

It is the belief of NBAA that the roles of weather observation, reporting and forecasting are and should be the responsibility of the U.S. Weather Bureau. We believe that the various Government agencies—such as the FAA, Agriculture, Interior, etc.—should act more forcefully as claimant agencies.

We believe that the proposed FAA consolidation of flight service stations, as far as weather observation and reporting functions are concerned, will actually cost the Government more than FAA believes it can save. The needed replacements to take and report observations on the same basis as are now taken at airport locations with instrument approaches will require Weather Bureau expenditures of money, hiring of personnel, purchase of equipment which will be—we are certain—in excess of any FAA's savings.

Further, the funding of the U.S. Weather Bureau for the time period in which the FAA consolidations are proposed is not such that they can support even the replacements which are needed.

We are faced in the name of economy with losing existing and needed weather services which provide basic information necessary for all aviation operations. These losses come at a time when even the existing network and services are in dire need of immediate improvement and expansion.

OTHER AVIATION SERVICES AFFECTED

The function of air traffic separation which flight service stations now provide is severalfold. First, they act as communications relay stations for air traffic control centers which are unable to contact aircraft directly through their air traffic control communications system from the centers. Second, the flight service stations have a role, imposed upon them by the FAA's own decision, of providing information to aircraft flying in the vicinity of airports which have no air traffic control towers.

The first service—acting as a communications relay station for air traffic control messages—is being gradually phased out as an FSS major role. Peripheral communications, sites, connected to the air traffic control centers by telephone landlines or microwave, now enable the air traffic controller to talk directly to the en route aircraft on instrument flight rules as well as to other aircraft needing or desiring traffic instructions or information.

The second service—providing traffic information at airports without towers—has been widely criticized by most segments of aviation as being impracticable. We are in accord with that belief based upon observations and user comment.

The air traffic separation function of the flight service stations is minimal and lessening each day.

The air-ground communications functions of present flight service stations can be conducted at sites far removed from airports. This can be accomplished through the implementation of announced plans to provide remote receiving and transmitting facilities at present locations. We have seen the efficiency with which remote stations have provided air-ground communications with the centers and we are of the belief that this may be technically paralleled with the flight service stations.

However, the flight service stations have at present two aeronautical information service requirements. The first is communications abilities, the second is the FSS personnel's intimate knowledge of the geographical area in which he is located * * * his detailed information concerning prominent landmarks, proximity of airports to them * * * all of which have been called upon to provide emergency assistance as well as friendly orientation to aircraft.

Through a consolidation program this type of proven lifesaving service can be derogated. Flight service personnel cannot reasonably be held to maintain the current and detailed information over greatly increased geographic areas which is needed.

Other facets of aeronautical information now provided either in person-to-person briefing or by telephone concern the current operational status of both en route and terminal navigational aids which are used in VFR and IFR flights; the conditions of airports and their runways; the presence of unusual obstructions on the airports; the planned closing down of navigational aids for maintenance; the operations of military aircraft at low levels and high speeds across civil flight paths; the opening or closing of joint-use areas; even to notifications that flights are temporarily restricted from flying near places where prominent political dignitaries are present.

The numbers and extent of these notices to airmen are voluminous and all-embracing. Failure to read and to know of them can lead to serious safety incidents and also to the filing of violations. It is hard to conceive how a conscientious pilot can expect to have these notam's read to him over a telephone line—yet this is what the closing of flight service stations will mean * * * unless some adequate substitute is found.

SUMMARY, RECOMMENDATIONS AND COMMENTS

In reviewing the role of flight service stations we see that they are providing both weather observations and reports and are acting as disseminators of the final, albeit poor, product called weather forecasts for areas and terminals.

This function is vital and must be continued by some governmental agency responsible for making weather observations, reports and forecasts. These weather informations must be transmitted quickly and accurately—although not necessarily by the same agency which makes the observation or forecast. These observations, services, and forecasts must reach the aeronautical user at the place where he needs them the most: at the airport or operations office and en route.

If consolidation of flight services is accomplished, it must be accomplished without any loss of weather services which are shown to be needed for aviation purposes.

The flight services role in providing air-ground communications will not seriously be affected as far as the technical ability to communicate with aircraft in the same manner as at present. The losses in service may occur from or during (*a*) peak volumes of traffic, (*b*) peak periods of bad weather, or (*c*) failure to make provision for personnel training which will enable continuance of guidance services to disoriented aircraft.

If consolidation of flight services is accomplished, it must be accomplished without derogation to presently provided communications or emergency information service.

We have noted in the FAA's announcements that the move to consolidate flight service stations are for stated reasons of economy. These economy moves are made, we have been informed, in line with overall economy cutbacks in personnel in many branches and agencies of Government.

We are seriously concerned that the FAA's proposal—however valid some of its technical reasons may be—tends to shift some of the economy sack from the FAA shoulder of Government to the U.S. Weather Bureau shoulder of Government. We are concerned because we know that the U.S. Weather Bureau shoulder is seriously suffering from a historic financial anemia.

We are further concerned with the direction FAA has chosen to meet a very serious and needed economy demand from the President. We believe that a review of the FAA's total budgetary commitments will reveal that the prime responsibility of the FAA "* * * to insure the safety of aircraft and the efficient utilization of * * * airspace * * *" has been led into some channels which may be classed as "interesting" but not "essential."

It is also pertinent to note at this juncture that the aviation community—and perhaps many other parts of America's transportation system—is faced with a Government policy which seeks to cut down essential services with the one hand and at the same time the other hand is attempting to establish additional charges for these services.

There have been suggestions made that some of the present flight service station functions could be taken over by other than Federal agencies. Particularly mentioned are those services in connection with weather observation, weather reporting and preparation of weather maps, dissemination of weather information by teletype and distribution or posting of aeronautical information to airmen.

We believe that the control, supervision, and support of interstate commerce is a clearly stated function of the Federal Government. We believe that any major steps taken to dissipate or shift any of these Federal responsibilities would be in contravention of constitutional requirements. We believe that delegation of the aeronautical services now provided by flight service stations to other than Federal agencies would result in increased economic support demands from those State or local governments and with no collateral reduction in present Federal economic support demands.

We believe that the impacts of aviation are far more widespread than is generally realized. We believe that the benefits of aviation are received by every man, woman, and child in the United States whether or not that person ever sees or hears an airplane no less flies in one. If these benefits are to continue we must meet the growing use of aircraft and the growing numbers of aircraft with adequate supporting facilities. We cannot afford to go—as the current consolidation of flight service stations is concerned—in the opposite direction.

We must continue them or we must find substitutes for them at the places where services are needed.

Thank you.

FSS location	Weather observations performed by—				Affect on hours of instrument approach and/or terminal forecasts
	Now	Hours	Proposed	Hours	
Toledo, Wash.[1 2]	FSS	24	P/T	(3)	Yes.
Ely, Nev.[1]	WBAS	24	WBAS	24	
Sault Ste. Marie, Mich.	WBAS	24	WBAS	24	
Elizabeth City, N.C.	FSS	24	USCG	24	
Goodland, Kans.	WBAS	24	WBAS	24	
Zuni, N. Mex.	FSS	24	P/T	(3)	Yes (FCST only).
Sheridan, Wyo.	WBAS/FSS	24	WBAS	24	
Dodge City, Kans.	WBAS	24	WBAS	24	
Jackson, Mich.	FSS	24	FAA TWR	24	
Rochester, Minn.	WBAS	24	WBAS	24	
Manhattan, Kans.[2]	FSS	24	SAWRS	(3)	Yes (unpublished airline instrument approach)
Valdosta, Ga.[2]	FSS	24	S/P/T	(3)	Yes.
Scottsbluff, Nebr.	WBAS	24	WBAS	24	
Ephrata, Wash.[2]	FSS	24	Larson AFB	24	Yes (7 miles from municipal airport).
Palacios, Tex.	FSS	24	No replacement.		Yes.
Russell, Kans.	FSS	24	S/P/T	(3)	Yes.
Utica, N.Y.	FSS	24	FAA TWR	24	
Zanesville, Ohio [2]	FSS	24	S/P/T	(3)	Yes.
Montpelier, Vt.[2]	FSS	24	S/P/T	(3)	Yes.
Arcata, Calif.[2]	FSS	24	S/P/T	24(?)	Yes.
Yuma, Ariz.	WBAS/FSS	24	WBAS	24	
Marysville, Calif.[2]	FSS	24	SAWRS	(3)	Yes.
Elmira, N.Y.[2]	FSS	24	FSS TWR	24	
Poughkeepsie, N.Y.[2]	FSS	24	SAWRS	(3)	Yes.
Brunswick, Ga.[2]	FSS	24	SAWRS	(3)	Yes.
Fayetteville, Ark.[2]	FSS	24	S/P/T	(3)	Yes.
Anderson, S.C.[2]	FSS	24	S/P/T	(3)	Yes.
Tuscaloosa, Ala.[2]	FSS	24	P/T	(3)	Yes.
Dyersburg, Tenn.[2]	FSS	24	S/P/T	(3)	Yes.
Melboune, Fla.[2]	FSS	24	SAWRS	06-2000(?)	Yes.
Pensacola, Fla.	FSS	24	FAA TWR	24	
Myrtle Beach, S.C.	AF	24	AF	24	
Millville, N.J.[2]	FSS	24	S/P/T	(3)	Yes.
Mineral Wells, Tex.[2]	FSS	24	No replacement.		Yes.
Bluefield, W. Va.[2]	FSS	24	S/P/T	(3)	Yes.
Albany, Ga.	FSS	24	SAWRS	12	Yes.
Huntington, W. Va.	WB/FSS	24	WBAS	24	
Galveston, Tex.[2]	FSS/AMOS	24	SAWRS/AMOS.	12	Yes.
Meridian, Miss.	WBAS	24	WBAS	24	
Monroe, La.[2]	FSS	24	P/T	(3)	Yes.
College Station, Tex.[2]	FSS	24	P/T	(3)	Yes.
Imperial, Nebr.[2]	FSS	24	S/P/T	(3)	Yes.

Legend:
FSS—Flight service station.
WBAS—Weather Bureau airport station.
AF—Air Force.
USCG—U.S. Coast Guard.
P/T—Part-time stations and local citizens (seldom on 24-hour basis).
S/P/T—Combination of P/T and SAWRS (not always on 24-hour basis).
SAWRS—Supplementary aviation weather reporting station, manned by airline-airport personnel (usually not on 24-hour basis).
AMOS—Automatic meteorological observation system. Automatic measurement, recording, and transmission of altimeter, temperature, dewpoint, wind direction and velocity. No provision made for ceiling or visibility.

[1] Published instrument approach.
[2] Air carrier specified airport (regular, alternate, or provisional) only those affected by weather OBS. Loss are indicated.
[3] Undecided.

Mr. WILLIAMS. Mr. Lawton, I am sorry that all members of the subcommittee could not have been here to hear your testimony. I hope that the other members of the committee will take the time to read your prepared statement, as I intend to do. Your statement dealt at some length with the problem concerning weather, which, of course, is a very prevalent problem in the field of aviation.

You have heard the suggestion made here today and yesterday that the Weather Bureau should be made an independent agency. Are you prepared to comment on that?

Mr. LAWTON. Yes, sir. As a personal observation, not as an established policy of NBAA, although it well may be, I believe that the Weather Bureau should be an independent agency in the same category of independent offices as is the FAA, the Civil Aeronautics Board, and others. It is my personal belief that the Weather Bureau, because it serves a great diversity of other Government agencies, from Department of Defense, Agriculture, Interior, Maritime, and so on, as well as aviation, could do a much more effective job for the entire public and their weather needs than they do at present.

They are very much similar in their position today as was the CAA in 1956 and 1957 when they were under the protective wing of the Department of Commerce and with those types of protection we saw a very slow recognition of the needs of all of aviation which was recognized only after a series of very dramatic and tragic accidents, and brought forcibly home to the public that something had to be done.

We hope that this course will not have to be repeated and that we can, through enlightened guidance of committees such as yours, under your chairmanship, give some direction toward an analysis of this on the part of Congress so that the Weather Bureau should become independent.

Mr. WILLIAMS. Mr. Lawton, thank you for your testimony. As I have already mentioned, you will be the last witness for this afternoon. Although this is not an adjournment of these hearings but is simply a recess for a couple of weeks, I think perhaps it might be well for me in closing this afternoon, unless you have something else to present, to make one or two brief remarks as chairman of this committee.

I have been a member of the Committee on Interstate and Foreign Commerce for some 13 years. During this time our committee and subcommittees thereof have conducted numerous hearings into problems dealing with aviation. But in all the time I have served on this committee, this is the first and most extensive study of problems dealing almost exclusively with general aviation that I have experienced.

There seems to be a feeling on the part of the general public that our navigational aids, our airports, and our en route communications are designed or primarily for the use of commercial and military aircraft. This, of course, as all of us know, is a misconception; because, indeed, general aviation, which includes business aviation, pleasure flying, agricultural aviation and other phases, is a vital, integral, and necessary part of our entire aviation system.

I want to express appreciation on behalf of the committee for the wonderful cooperation that we have received, not only from the witnesses who have appeared before the committee representing communities and organizations, but also from the Government agencies—the Federal Aviation Agency, and the Weather Bureau—who have kindly given us their views on these subjects.

What the committee may have learned from these hearings, of course, I don't know. But there are a few things that have impressed me, not as an aircraft operator who uses the airways, but as a citizen and a Member of Congress. One is the fact that flight service stations are appreciated by the people back in the "hinterlands" as vital parts of their communities.

The flight service stations and their services are appreciated by everyone who uses the airways, including even the airlines. I personally have been greatly impressed by the tremendous amount of interest that has been shown by Members of Congress and others in the continuation of the present, or a better level of service to our pilots, whether it be done by the present system or some other system.

I have been impressed by the fact that everyone seems to hold the communicators and the Weather Bureau people in these flight service stations in the very highest regard.

While I have heard many criticisms of employees in other branches of the Government and many criticisms of people in the Federal Aviation Agency and the Weather Bureau, I have yet to hear the first adverse criticism of the services that are rendered individually by these FAA communicators and the people who serve with the Weather Bureau in these flight service stations, which I think attests to the wonderful acceptance that has been accorded these people by the public.

There is one other truth that the committee will recognize, I am quite sure, and that is that the element of safety is always inseparable from the success of our aviation operations. Though what constitutes safety, or what services are necessary in order to promote the best interests of safety are subject to different evaluations—and different evaluations in this instance as to the impact of the Administrator's program and the alternatives which have been suggested—we have been amazed at the exceptionally high level of service that has been rendered by these flight service stations to these fine communities, and the esteem in which the aviation community holds them.

I personally have reached this conclusion with respect to the action which has been taken by the Administrator without seeking to be overly critical, because indeed I recognize that we have a very competent, able, sincere, and energetic Administrator. But I am left with the impression, gained from the hearings thus far, that the action which was taken by the Administrator in February in announcing abruptly the closing of 42 flight service stations was made perhaps with insufficient background information on each individual station and its contribution to our system of aerial navigation and operation. Perhaps I am wrong, I don't know; but that is the impression that I have received.

That impression is bolstered by the fact that the Administrator has now admitted to this committee that he may have made mistakes in the selection of some of these stations. I compliment him on his willingness to entertain suggested alternatives to his program and his willingness, at least in one instance, to admit that he may have erred.

I go back to what I said a moment ago. Whatever may be the outcome of these hearings, I think the fact that the information which has been given to this committee has been made public and is now subject to distribution, not only to the flying community, but to the public in general, is going to have a wholesome effect on aviation; and I think it is going to bring about a better understanding by the public of the vital role that is played by general aviation. To that extent, I think these hearings thus far have certainly been worth while.

The committee will stand adjourned until 10 o'clock a.m. on May 26.

(Whereupon, at 4:10 p.m., the committee recessed to meet again at 10 a.m. on Tuesday, May 26, 1964.)

FLIGHT SERVICE STATIONS

TUESDAY, MAY 26, 1964

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND AERONAUTICS
OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1334, Longworth Building, Hon. John Bell Williams (chairman of the subcommittee) presiding.

Mr. WILLIAMS. The subcommittee will come to order, please.

I notice we have several Members of Congress present this morning and the subcommittee will be pleased to hear each of you gentlemen. We will start with the gentleman from New York, the Honorable Samuel Stratton. We welcome you to the hearing Congressman.

STATEMENT OF HON. SAMUEL S. STRATTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. STRATTON. Mr. Chairman, I appreciate the opportunity to appear hear today to comment on the Federal Aviation Agency's proposed plan to consolidate and remote certain flight service stations throughout the country, three of which are located in New York State at Elmira, Poughkeepsie, and Utica.

The Elmira flight service station, for example, which is located in Chemung County, N.Y., and which serves Penn Yan and other areas located in my own congressional district, presently employs 11 persons to provide on a 24-hour basis such services as air-ground communications, navigational aid control, continuous weather broadcast, military flight service, weather observation, weather data interchange, air traffic teletype, remote voice transmissions for the Ithaca, Watkins Glen, Wellsville, N.Y., and Stony Fork, Pa., navigational radio stations, and essential safety services to many area airports located in rugged terrain with extremely changeable and adverse weather conditions.

This flight service station, like the others, is a primary, essential, and vital safety measure for general aviation, which comprises a large percentage of our civil aircraft, as well as for local Civil Air Patrol squadrons.

The services of flight service stations are also of great value in areas suffering from unemployment where communities are engaged in efforts to expand their existing industrial programs and to attract new industries to improve their own local economic pictures.

Elimination of the Elmira station would, I have been assured by my own constituents, have a very bad effect on Yates County and other

parts of my district. It would not only greatly hamper private flying in the area—a form of aviation that is especially valuable to us because we are not close to major commercial airports—but would also complicate our area's growing efforts to promote its local economy and reduce unemployment.

For all these reasons, Mr. Chairman, I urge this committee in the strongest possible way to do all in its power to prevent the consolidating and remoting of these stations, so as to maintain maximum safety for general aviation and to continue their vital services to local communities.

Mr. WILLIAMS. Thank you for your statement, Mr. Stratton.

Next I would like to call the gentleman from Kansas, Bill Avery.

STATEMENT OF HON. WILLIAM H. AVERY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. AVERY. Thank you, Mr. Chairman. I would like to add my support to the testimony given by other Kansans relative to the directive of the Federal Aviation Agency that flight service stations be closed in four Kansas communities and in 38 other cities throughout the country. These gentlemen, who are interested businessmen and users of the facilities of private aircraft, have presented several important factors which I feel should be considered by the committee before action is taken to eliminate the flight service stations.

Since more private aircraft is manufactured in Kansas than in any other State in the Union, flight information becomes even more significant. It has been called to your attention by these gentlemen appearing before you that it is the pilots and passengers of private aircraft who are the principal beneficiaries of any flight service station. A great deal of emphasis has been placed upon the value of flight information in the reduction of hazards which have occurred in the past due to mechanical and technical complications arising from the unusual and oftentimes severe weather conditions experienced throughout Kansas.

Further, since Kansas is in the geographic center of the United States, we have much more air traffic generated than would be assumed to use the facilities in our State. Thus, the flight service stations serve more than those concerned with local farm and business interests. It has also been pointed out that today light aircraft accounts for 90 percent of the air miles flown nationally.

Mr. Chairman, I respectfully request that these factors be taken into consideration by your committee when evaluating the justification for these valuable flight service stations.

Mr. WILLIAMS. The subcommittee was pleased to hear your statement, Congressman.

I would like to call on the very able Congressman from Michigan, the Honorable Victor Knox.

STATEMENT OF HON. VICTOR A. KNOX, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. KNOX. Mr. Chairman, I appreciate the opportunity of presenting this statement in connection with your investigation of the proposed closing of a number of Federal Aviation Agency flight service

stations across the country. Since this program is of vital concern to every community affected, as well as to all pilots and passengers in the field of general aviation, the subcommittee is to be commended for the serious study it is making of the matter.

May I preface my discussion by saying that I am heartily in accord with the aims of the FAA flight service station consolidation program, if the aims are to achieve real economy of operation without any derogation of flight safety. However, I feel the specifics of the program must be carefully studied to see whether they truly achieve these aims.

There seems to be some confusion about the number of stations being proposed for closing. It is my understanding, however, that 41 are presently scheduled for closing, an additional 28 are to be named later this year, and eventually the present number of 297 flight service stations is proposed to be cut in half, through consolidation with existing stations and "remoting" of functions from these stations to locations where closures are scheduled. We have, of course, already witnessed a reduction of the number of stations from a peak of 464 about 1950 to the present 297, even without the present closing program.

Naturally, the subcommittee and the FAA are best equipped to consider the nationwide impact of the proposed program. However, in hopes that it will help you in this task, I should like to set forth some of the factors surrounding the proposed closing of one of the stations, at Sault Ste. Marie, Mich., the district which I represent.

The flight service station at Sault Ste. Marie located at the municipal airport, employs 10, and is located adjacent to the U.S. Weather Bureau Station. I understand that the fact that there is a well-manned and fully equipped weather station presently located at Sault Ste. Marie made the FSS particularly susceptible to closure. I also understand that the Sault Ste. Marie flight service station is to be consolidated with one at Pellston, Mich., with services "remoted" from the location. Pellston is about 75 miles south of Sault Ste. Marie, and is in the Lower Peninsula of Michigan. The nearest other FSS to Sault Ste. Marie is at Marquette, Mich., about 125 miles due west. The total distance between Marquette and Pellston is also about 125 miles to the southwest. This would thus leave a sizable portion of the eastern Upper Peninsula of Michigan without a flight service station within 50 miles.

Another factor which is of great importance, perhaps more so than raw mileage figures, is the nature of the topographical and weather variations within the area concerned. This factor is of critical importance in the case of Sault Ste. Marie. Lake Superior, of course, is one of the great weathermakers and weather shapers on the continent, and Sault Ste. Marie and vicinity are located at the foot of the lake, and thus receive much of the brunt of what is "cooked up" over its vast stretches. Additionally, due to topographical variations in the vicinity of Sault Ste. Marie, particularly the role played by the St. Mary's River as a "weather funnel" in combination with the Laurentian Mountains immediately to the north in Canada, causes great variations in current weather conditions at Sault Ste. Marie from those being experienced even a few miles to the south. For instance, there is usually a much higher susceptibility to local fog conditions nonexistent concurrently to the south. By the same token, there are

often heavy rain or snow conditions at Sault Ste. Marie that are extremely localized.

While Sault Ste. Marie is not one of the major air traffic centers of the Nation, the air traffic activity is substantial, as over 11,500 different operations were recorded by the flight service station there during fiscal year 1963. The types of aircraft activity are extremely varied and general aviation is a growing field of activity, just as throughout the Nation. Sport flying is increasing in volume, as is the volume of flying vacations, especially in the use of Sault Ste. Marie as a point of embarkation and debarkation for flying and fishing trips into the vast Canadian wilderness to the north.

Against this background, some conclusions can be drawn about the possible effects of loss of the flight service station at Sault Ste. Marie. The primary loss, so far as general aviation in the area is concerned, will be that of face-to-face pilot briefings on the ground and aircraft advisories direct from Sault Ste. Marie. Naturally, with the weather bureau located there, there will be no loss so far as regular forecasts or observation is concerned. However, it is my opinion, and that of a great many experienced pilots and others close to the general aviation field, that there may well be a substantial loss of margins of safety in emergency and quasi-emergency situations, especially under localized weather conditions. As what I have mentioned previously would indicate, this area is considered wonderful flying country, but it can also be very tricky on occasion even with the presence of a local full time flight service station. There has been some talk, I understand, of instituting a service designated Manicom to provide a two-man, part-time satellite service at locations like Sault Ste. Marie if the consolidation program is carried out. It would seem to me that this would be an absolute minimum service to provide the pilots of the area, since the absence of any direct contact at Sault Ste. Marie seems to admit too high an element of risk under the considerations I have outlined.

In addition, there are the economic factors which deserve some consideration. Initially there would be the loss of 10 regular paychecks to the community, which at best might be slightly offset by additional Weather Bureau expenditures. The indirect effect of this loss is difficult to measure but is substantial nonetheless. Also difficult to measure, but even more substantial would be the loss of the community through reduced or curtailed use of the municipal airport, especially by flying vacationers, sportsmen, and tourists. Naturally, it is impossible to measure in dollar terms the possibility, however slight, of loss of life or grievous injury through reduction of the safety margins at the Sault Ste. Marie Municipal Airport.

In conclusion, it is my hope that the subcommittee will find useful the facts I have outlined in determining the validity of the flight service station closing program nationally. So far as Sault Ste. Marie is concerned, I would hope that complete closing of the station will not be necesary. Perhaps through a reduction in force substantial savings could be realized without compromising the safety of the flying public. At the very least, a Manicom setup should be provided and be fully operational before any projected closing of the Sault Ste. Marie flight service station. Once, again, I wish to emphasize that I am in full accord with the economy aims of the FAA so long as true savings result with no loss of safety. However, I am sure that a more

acceptable solution can be found than emasculation of the flight service station program with the attendant risks such a step may well entail.

I appreciate the courtesy shown me by the subcommittee in its attempt to get all pertinent facts on the record.

Mr. WILLIAMS. Thank you for a fine statement Mr. Knox.

The gentleman from Minnesota will be next, the Honorable Albert Quie.

STATEMENT OF HON. ALBERT H. QUIE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mr. QUIE. Thank you Mr. Chairman. I wish to be on record as opposed to the proposed elimination of 42 of the 299 flight service stations now operating under the Federal Aviation Agency. I am opposed to removal of all of these stations in principle, as it will in my opinion work a hardship on private pilots of aircraft and could very conceivably lessen the safety of private air travel. I am specifically opposed to removal of 2 of the 42 flight stations, namely, those at Rochester, Minn., and at La Crosse, Wis.

The flight service station located at the Rochester Municipal Airport is almost exactly in the center of my congressional district, the First District of Minnesota. The La Crosse station is immediately across the Mississippi River from my congressional district's eastern border and serves many southeastern Minnesota private pilots, particularly in the well-populated Winona County as well as in Houston County, and to an extent in Fillmore County.

I will deal basically here with the situation at Rochester, as that station is actually in my district and because of Rochester's unique characteristics as a city it seems to me to be of great importance. I might add, however, that the Rochester flight service station is in a position to serve a good many smaller airports in the area among them Austin, Owatonna, Faribault, Albert Lea, and Red Wing, all located in my congressional district. In addition, there are many so-called "flying farmers" in southeastern Minnesota, who base their planes on their farms but are reliant on the Rochester station for certain data.

I mention the La Crosse station, the smaller airstrips and the flying farmers with the hope that their importance will not be minimized by this committee. However, for the sake of brevity, I will describe at length only the operation immediately in Rochester, Minn., which is the most important reason for retaining the flight service station which is now based there.

Mr. Chairman, as I have said, Rochester, Minn., has many unique characteristics. It is one of the fastest growing cities in Minnesota. Between 1950 and 1960, the U.S. Bureau of the Census shows that it grew from about 28,000 people to more than 40,000. The Rochester Chamber of Commerce estimates that the city is growing at the rate of about 2,000 persons a year, so that it might well be in the neighborhood of about 48,000 people now. In addition, there are fast-growing suburbs, estimated at a population of about 7,000 people. These are part of the Rochester community, but happen to lie outside its city limits.

However, Rochester has much more unique characteristics than merely rapid growth. It is believed that on any given day of the year, an average of between 7,000 and 8,000 transients are in the city. This is caused in part by tourists and in part by businesses which have grown rapidly there, but by far the greatest cause of transient population is the world-famed Mayo Clinic, which gives medical care to nearly a half million people every year.

As a result, Rochester has extremely unique air transportation for a city its size. In 1960, the city completed construction of an airport which cost in excess of $3 million and has facilities capable of handling, I believe, any commercial aircraft now flying. It has a large, modernistic, and spacious air terminal. A large Weather Bureau station is based at the airport.

Rochester is served by Northwest Orient, Braniff, and Ozark Airlines. As many as 30 commerical flights daily are scheduled. According to the Rochester Post-Bulletin, the local newspaper, more than 50 percent of the city's air travel is generated by the Mayo Clinic.

By no means all of this air travel is by commercial flight, however. In many emergency cases, so-called air ambulances bring patients to the Mayo Clinic, landing and taking off from Rochester Municipal Airport. These are, of course, classified as private flights. Many patients arrive by private or chartered air service.

In fact, Mr. Chairman, while no breakdown of the type of flight is available, Rochester Airport statistics for 1963 show that there were 41,224 private, nonscheduled flights recorded there during that year, which gave Rochester Municipal Airport a rank of 193d in the Nation in this classification. In addition, there were 16,626 air carrier operations, giving Rochester Municipal Airport a rank of 111th in the Nation.

Total operations for the year were 54,039, which was an increase of 14 percent over 1962. And, in 1962, operations increased 15 percent over 1961.

It is obvious that flight operations at Rochester are increasing at so rapid a rate that we may expect a 100-percent increase about every 6 years at the current rate.

There is a strong indication, however, that the rate may be increased and accelerated. Rochester Methodist Hospital is now in the process of building a new, $7 million hospital. St. Marys Hospital has announced its intention of building a huge new eight-story addition to what is already the largest privately operated hospital in the world. These additions are only partially to meet current need and are based in large part on anticiptaed future needs, which mean more patients.

Other industry is also increasing in Rochester. International Business Machines has a large plant there which employs 2,300 persons. IBM executives regularly use Rochester Municipal Airport and company-owned planes for direct contact with other IBM facilities around the Nation. There are other industries basing company planes there and the city of Rochester is continuing to seek other large industries. It has the facilities as a city to attract rather large industries and it may be expected that others will eventually be based there.

In addition to increasing commercial, privately owned business, medical and private flights of other types, Rochester Municipal Airport is the home of Gopher Aviation, Inc., which has several func-

tions. One is the repair of aircraft for which purpose flights are made there with regularity. Another function is a flight instruction school, at which novice pilots are taught to fly. Gopher Aviation also operates a charter service and sells aircraft.

Not counting Gopher Aviation, however, there are 290 persons employed at Rochester Municipal Airport. The annual payroll is $1.5 million. Of this total, seven are employed in the flight service station, at an annual cost of just $32,000, according to the statistics provided me by Mr. N. E. Halaby of the Federal Aviation Agency in a letter dated January 31, 1963.

According to another statement of Mr. Halaby, made before this subcommittee on May 12, 1964, the aim of the FAA is "safety with economy." I am convinced that this is the true and sole aim of the FAA and I commend them on this position. However, I feel that in light of the facts which I have submitted, plus others of importance which I have mentioned only briefly, the FAA is in error in proposing to discontinue the flight service station at Rochester, Minn.

This view is shared by Dr. E. D. Henderson, of the Mayo Clinic. I select Dr. Henderson's views because he is both a private pilot himself and because he testifies as to the importance of charter and private aircraft to the Rochester medical center. Dr. Henderson writes:

MAYO CLINIC,
Rochester, Minn., March 12, 1964.

Hon. ALBERT H. QUIE,
House of Representatives,
Washington, D.C.

DEAR SIR: I am as interested as anybody in economy in government, but I would like to say that I feel that the published intentions of the Federal Aviation Agency to close down 42 flight service stations in this country seems to me to be very poor economy indeed.

I am a licensed private pilot and know from personal experience the value of these stations to general aviation. These men are, at all times, most helpful to all private and business pilots. If the results of the hearings which I have read in the pilot magazine are correct, it seems that the Appropriations Subcommittee has missed the point about the necessity for accurate and up-to-date weather information for safe flying in this country. In addition, these people give accurate weather forecasting suggestions to pilots and record and broadcast reports from pilots.

Having on many occasions been briefed both by telephone and personally by flight service station personnel, I can testify to the vast superiority of the person-to-person briefing which is given so well by the flight service stations. I am afraid that if these stations are shut down and remote telephone briefings are given, a fairly large number of occasional pilots are going to stop flying. As it is, general aviation is increasing yearly at an accelerating rate and I believe this is healthy for the country.

The thing that really concerns me is the fact that I feel that this plan to close up flight service stations is largely a trick by the bureaucrats to indicate their necessity for maintaining a large budget for the Federal Aviation Agency. There are many other areas in the activity of the Federal Aviation Agency which could be curtailed with much less effect on the general aviation public and on safety and convenience of air travel.

Specifically, the Rochester station is one of those which is designed to be closed. I am sure that you must know that a large number of patients are brought into and taken out of Rochester every year by charter and private aircraft. The presence of a flight service station at the Rochester Airport is invaluable to the pilots of these aircraft and, of course, to the patients. I am sure that any pilot of any experience will testify as to the importance of these stations to safe and efficient flying.

There is a large amount of information available about this subject. If you are interested, I would suggest that the Aircraft Owners & Pilots Association,

4650 East-West Highway, Bethesda, Md., can give you documentations for my point of view. I would appreciate it if you would at least let Mr. Albert Thomas, the head of the Appropriations Subcommittee of the House know that there are a large number of aviation enthusiasts who are very concerned about this problem.

Sincerely,

E. D. HENDERSON, M.D.

Mr. QUIE. Mr. Chairman, I cannot overstress the fact that not only has air travel at Rochester enjoyed great gains in the past, but that these increases in flights and in numbers of passengers are increasing at a rapid rate.

So that the members of the subcommittee may have a more complete insight, I have here a report which appeared in the Rochester Post-Bulletin on November 21, 1963.

Mr. WILLIAMS. Without objection it will be placed in the record at this point.

(The article follows:)

[From the Rochester (Minn.) Post-Bulletin, Nov. 21, 1963]

PROGRESS KEYNOTES AIRLINE SERVICE HERE

(By Gerald Kahlert, Post-Bulletin staff writer)

Progress is the spanking new Rochester Airport terminal with a dining room and a fluted roof.

Progress is a speedy jet.

Progress is the radio signal of the instrument landing system.

All are innovations for Rochester's scheduled airline passengers since their first flight from the city 35 years ago Friday.

On that date—November 22, 1928—four businessmen and a doctor climbed aboard two planes, a single-engine Stinson and a Ford trimotor, roared off the runway at Lobb Field (now a housing area) and whiled away 7 drafty hours to Chicago.

In the 35 years since, more than 1.5 million passengers have landed or taken off from Rochester airports. Here are a few of the changes in service:

Facilities.—Then—"Passengers were in no hurry," says Don Swenson, airport manager, and then its only employee. "They got out when they landed, stretched their legs and got their ears popped open again—those old trimotors were kind of noisy."

Today—travelers use the $4 million, jet-age airport, opened in 1960. They enter the terminal where a dining room and a newsstand are available, and a cocktail lounge is under construction. Their entrance is aided under cover of either of two long concourses, and the flow of baggage never crosses the passenger line.

Employees.—Then—as the only airport employee, as well as its manager, Swenson sold tickets, operated the radio, hauled baggage, observed the weather and shoveled snow off the runways in the winter.

Today—a staff of 290, with an annual payroll in excess of $1.5 million, operates the airport's control tower, three airline ticket and reservation points, two rent-a-car agencies, the flight service station, weather bureau, and an emergency flight service, among others.

Weather factors.—Then—telegrams were sent to Rochester when planes left Minneapolis or Chicago and Swenson could only guess their time of arrival. He wasn't always notified when a flight was canceled due to bad weather.

Today—new equipment (the instrument landing system) enables craft to land under conditions of visibility twice as severe as in the past. Radio signals now draw the plane to the center of the runway at a 2¾° angle of descent, allowing planes to touch down here under a 200-foot ceiling and when visibility is limited to one-half mile.

Schedules.—Then—Universal Airways had once-a-day flight, both ways between Minneapolis and Chicago via Rochester and several Wisconsin cities.

Today—three scheduled airways—Braniff, Northwest Orient, and Ozark—fly 23 sorties in and out of Rochester daily. Non-stop and one-stop flights run in all directions from the city to dozens of other United States and Canadian cities.

Flying time.—Then—7 hours to Chicago; 50 minutes to Minneapolis. Today—the fan jet that breezed into Rochester from Chicago for the first time last Saturday was in the air for less than an hour. You can fly to Minneapolis in less time than it takes to drive across town at 5 p.m. any weekday.

Passengers noted the changes and made Rochester their port of call more and more often, reaching an annual rate of 1,000 by 1936 and 100,000 by 1957.

The millionth passenger boarded or stepped off a plane here in 1958. No. 2 million should be here in about 4 years.

In one category—safety—there have been no changes since that first flight. Both aircraft that took off from here on November 22, 1928, made the Chicago trip safely. No aircraft landing or departing since has ever had an accident in the process.

Mr. QUIE. Mr. Chairman, in conclusion I wish to call special attention to the final paragraph of the preceding report from the Rochester Post-Bulletin:

> In one category—safety—there have been no changes since that first flight. * * * No aircraft landing or departing since has ever had an accident in the process.

I know that all of us devoutedly hope that this happy situation continues. And I submit, Mr. Chairman, that if the FAA has seen fit to station seven men in the flight service station at Rochester, Minn., to help maintain safety in the past, that in light of the dramatic growth of air travel in Rochester there is absolutely no reason for terminating that safety service now.

I respectfully request that the Rochester, Minn., flight service station be stricken from the list of those to be closed and that thoughtful attention be given to the continued operation of the flight service station at La Crosse, Wis.

Mr. WILLIAMS. That was a very comprehensive statement, Mr. Quie. We thank you for appearing here this morning.

I would now like to call Congressman Charles Goodell, of New York. Please proceed, sir.

STATEMENT OF HON. CHARLES E. GOODELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. GOODELL. Mr. Chairman and members of the subcommittee, I welcome this opportunity to express my deep convictions regarding a particular effect of the proposed consolidation of flight service stations in the United States.

One effect could be the closing of the station located at the Chemung County Airport, located between Elmira, N.Y., and Corning, N.Y. I have the honor to represent Steuben and Schuyler Counties which are served by this airport and which are home to many of the very capable private pilots using the facilities there.

There can be no question but that the Federal Aviation Agency, as all agencies, should explore all means to limit unnecessary expenses and to curtail spending when it can be done consistent with the high standards of safety and public welfare which we must maintain. I favor, therefore, the efforts being made to utilize the latest technical advances in communications and air traffic control systems to consolidate operations while maintaining essential aviation services.

I cannot agree, however, that the remoting of the station at Elmira to Williamsport, Pa., or to Wilkes-Barre, Pa., meets these criteria.

Mr. Chairman, in a communication to me dated April 13, 1964, the eastern region of the Federal Aviation Agency reported the following:

> With reference to your inquiry of April 8, 1964, the following are the annual flight service activities recorded for 1963 for the three facilities mentioned: Elmira, 50,846; Williamsport, 36,363; and Wilkes-Barre, 32,402.

It is obvious on the face of this report that the greatest activity is being conducted at the Elmira station at the Chemung County Airport.

I am sure that the bulk of this activity is due to the great number of private and corporate aircraft using the Chemung County Airport. There is in the area a continuing and increasing interest in air travel, primarily due to the tremendous activity nearby at the "soaring capital of the United States." The result, quite naturally, is that the reported activities of the station are increasing each year.

This report raises, therefore, the question as to why the station should be "remoted," to use the language of the FAA to another station where activity is considerably less. I do not have an answer to that question. I have been informed, again under date of April 13, 1964, that the matter is being studied further. Final decision, I was informed on that date, would be made in about 60 days.

I would like to call the attention of the members to the following facts, stated here briefly:

1. The Elmira FSS serves 14 area airports, in addition to Chemung.
2. There is no Weather Bureau office in the immediate area.
3. Use of the FSS increased 11 percent in calendar year 1962 over the previous year and 16 percent the following year. The report for the first quarter of 1964 shows a 30-percent increase over a comparable period the previous year.
4. If the FSS at Elmira were remoted to Williamsport or Wilkes-Barre, there would be no weather reporting service at Elmira. If the FSS at either Williamsport or Wilkes-Barre were remoted to Elmira, weather information facilities would remain at those stations.

The proposed closing, Mr. Chairman, would have a substantial adverse effect on a number of area industries, including many supplying precision products for our national and defense needs. In many cases private, corporate, or chartered aircraft are used to meet the demands of speedy delivery. These aircraft depend on the FSS for across-the-counter briefing so helpful to safety.

I urge your subcommittee to maintain this service, insofar as it is in your power to do so.

Mr. WILLIAMS. Thank you, Mr. Goodell. The subcommittee appreciates your presentation here today.

I believe the distinguished Senator from South Carolina just entered the room. Senator, would you care to present a statement?

STATEMENT OF HON. STROM THURMOND, A U.S. SENATOR FROM THE STATE OF SOUTH CAROLINA

Senator THURMOND. Thank you, Mr. Chairman and members of the committee. It is a privilege to have this opportunity to present to you my views concerning this matter which you have before you today. I have followed with interest since February the development of the plans of the Federal Aviation Agency to consolidate these

flight service stations in an effort to bring about a more economical operation of this program. However, my study of these plans and my conversations with people in the Federal Aviation Agency and the affected communities has convinced me that the changes in my State at Myrtle Beach and Anderson, S.C., would jeopardize the safety of civilian pilots and their aircraft. To date I have seen nothing which would persuade me otherwise, and various Members of Congress from other States seem to have assessed their own flight service stations in a like manner. With the rapid development of aviation in this country, it is my hope that in the review of these steps by the FAA some alternate plan may be found which could possibly serve the requirements of economy, while at the same time not violate the principle of safety which the Congress had in mind when these stations were spread across the country. I do not doubt that the FAA has found some stations which it would not be feasible to continue in operation. On the other hand, it is difficult for me to understand why no cutbacks are scheduled at over 100 stations with less airline passenger movement than 1 of the facilities in my State which is to be discontinued. I feel sure that the able members of this committee will make a careful study of the problem and that their findings will serve the best interests of all concerned. In closing I would like to request that the committee accept for the record two papers prepared by the Chambers of Commerce of Myrtle Beach and Anderson which define some of the local aspects of this problem as it affects these two stations and perhaps others across the country. Permit me to thank you for this opportunity to present my views for your consideration.

(The papers mentioned follow:)

FACTS AND FIGURES SUPPORTING THE NEED FOR MAINTAINING THE FEDERAL AVIATION AGENCY FLIGHT STATION AT MYRTLE BEACH

(Compiled by Air Service Committee, Greater Myrtle Beach Chamber of Commerce, Carl Pridgen, chairman)

The Greater Myrtle Beach Chamber of Commerce believes that the recent decision of the Federal Aviation Agency to close the Myrtle Beach flight service station does not represent the public interest and fails to consider the present and future needs of aviation in the Grand Strand area. We believe that the recommendations requesting a reversal of this decision are supported by many facts and figures, including official statistics published by the Federal Aviation Agency and the Civil Aeronautics Board.

The Myrtle Beach Municipal Airport boarded more air carrier passengers last year than 102 other airports that are scheduled to maintain their FAA flight service stations, according to air traffic figures published by the Federal Aviation Agency and the Civil Aeronautics Board. Statistics for origination of air carrier passengers for all airports are listed in the FAA–CAB publication "Airport Activity Statistics of Certified Route Air Carriers" (which is available to the public from the U.S. Government Printing Office). Issued in January 1964, the book covers the 12-month period ending June 30, 1963. These airports and their number of air carrier passenger boardings are listed on page 2 of this report.

A total of 6,048 air carrier passengers (an average of 16.6 per day) were boaded at the Myrtle Beach Airport in the fiscal year ending June 30, 1963, the published figures show. In view of these facts, it is difficult to understand what criteria the FAA used in deciding to close the Myrtle Beach station while, at the same time, deciding to maintain 102 other stations that obviously had much less activity than the Myrtle Beach Airport. It is also interesting to note that not a single airline passenger was boarded at 46 of these 102 airports.

The 6,048 count for Myrtle Beach represents only air carrier passengers whose flights originated at Myrtle Beach. It does not include thousands of additional Grand Strand itinerant passengers who used aircraft other than commercial airlines. Last year, an estimated 13,680 itinerant aircraft used the Myrtle Beach Airport facilities. For 6 months of the year, the Myrtle Beach Airport has more itinerant passengers than any other in South Carolina.

Air safety is of vital importance in the decision to maintain the Myrtle Beach flight service station. During the past 10 years, the services of the local FAA station have saved approximately 100 lives. In 1963, the station's action saved 29 people from almost certain disaster; they were passengers aboard a Marine DC–3 that was flying lost over the Atlantic. The most recent disaster was averted in February 1964, when the Myrtle Beach station saved four passengers and a twin-engine Piper Aztec aircraft that was lost over the ocean. These examples illustrate the important air safety role of the FAA facility and its personnel.

The development of aviation in the Grand Strand and surrounding areas is dependent on an adequate program of air safety and flight service. One of the fastest growing areas of the State, the Grand Strand now attracts $50 million in annual tourist income. New construction for the area totaled more than $10 million in 1963. Myrtle Beach's per capita income rose to $2,080, higher than any city in South Carolina. With no railroad passenger service, it is important that air transportation be developed to its full potential at Myrtle Beach and the Grand Strand.

The above facts clearly point out the need for the Federal Aviation Agency to reverse its decision to close the Myrtle Beach flight service station. This station must be maintained if the public interest is to be served.

A RESOLUTION

Whereas it has come to the attention of representatives of the Anderson Chamber of Commerce, the Anderson County Airport Commission, and the city of Anderson that the Federal Aviation Agency proposes to remove the flight service station from the Anderson County Airport and replace the facility with a remote control service; and

Whereas the city of Anderson and the whole Anderson area over the past several years have experienced a marked population growth and expansion and are, at the present time, in the midst of tremendous growth and development. Industries in the Anderson area continue to expand and a number of local industries and business concerns now use, as an integral part of their operation, the service of private planes and private pilots continually flying in and out of the Anderson County Airport; and

Whereas it is the considered opinion of many persons, including pilots and their associates, that the best interest of Anderson and Anderson County Airport will not be served if the remote control service is installed for the Anderson County Airport.

This curtailed and remote service would not be satisfactory for the following reasons:

(1) Accurate weather briefiings would not be available for either inbound or outbound traffic. During certain seasons of the year severe local storm conditions can exist here which would not exist at the Greer Airport where the service is proposed to be moved, and it would be hazardous to planes and life itself during these periods to try to utilize the Anderson County Airport under direct control from Greer.

(2) The Anderson County Airport has served extensively as a training place for the flight instruction program of Air Force ROTC at Clemson University, and inasmuch as these young men are being trained for service to their country, it is imperative that the flight service facilities remain at the Anderson County Airport for their benefit.

Now, therefore, be it

Resolved by the Anderson Chamber of Commerce, the Anderson County Airport Commission and the city of Anderson, That this group representing much of the thought and opinion of the entire area strongly urges the Federal Aviation Agency to maintain a flight service station in operation at the Anderson County Airport, serving Anderson, the Anderson County area, Clemson University, etc., and also including numerous private planes, many of which are used by indus-

try and business to move in and out of the Anderson area in rapid order. We sincerely urge that reconsideration be given to this problem and that the flight service station be left as it presently is at the Anderson County Airport.

LOUIS JACKSON,
President, Anderson Chamber of Commerce.
Z. W. MEEKS,
Manager, Anderson Chamber of Commerce.
SAMUEL L. PRINCE,
Chairman, Anderson County Airport Commission.
———— ————,
Secretary, Anderson County Airport Commission.
JOHN W. GLENN,
Mayor, City of Anderson.
H. M. WILSON,
Clerk, City of Anderson.

Mr. WILLIAMS. The subcommittee was indeed honored to have your statement this morning, Senator.

Let us now move on.

Our next witness will be Mr. David Teetor, executive director, National Aviation Trades Association.

You may proceed, Mr. Teetor.

STATEMENT OF DAVID TEETOR, EXECUTIVE DIRECTOR, NATIONAL AVIATION TRADES ASSOCIATION

Mr. TEETOR. Thank you, sir.

I am David Teetor, executive director of the National Aviation Trades Association. It gives me great pleasure to appear before your distinguished subcommittee on behalf of more than 400 general aviation sales and service organizations and 27 State affiliate organizations representing general aviation businesses.

These businesses serve general aviation in such areas as aircraft sales, maintenance and technical trades, aerial application, transportation, airport operations, as well as related activities associated with aviation insurance, fuel, parts, et cetera.

These aviation businessmen support this association because they want representation on a democratic basis. They are interested in how Government agencies spend their money and, of course, they are naturally interested in the protection and promotion of the general aviation industry. Most of these businessmen are in aviation because they enjoy it and also because most of them fly their own airplanes.

In addition, we have a responsibility to our customers to see that the products they have are safe and efficient and can provide transportation.

On March 13, 1964, we wrote the chairman of this distinguished subcommittee concerning the Federal Aviation Agency flight service station consolidation program. Attached is a copy of that letter, the last paragraph of which reads as follows:

We emphasize that we do not quarrel with FAA's desire to cut costs and even remote and remove some facilities. However, it seems clear to us that not only was very little investigative work done before the announcement, but also, in few, if any, cases was industry or the community even consulted about the move. In view of the continuous flow of evidence and protests received by our association, we strongly urge the House Subcommittee on Transportation and Aeronautics to investigate immediately FAA's role in this consolidation program, and suggest that public hearings be held at the earliest moment.

Our files are thick with complaints from responsible individuals throughout the United States regarding this FAA program. We note that in the initial announcement, FAA expressed a desire to cut budget costs. This was in line with the President's request for all Federal agencies to review their budgets and cut expenses.

In a letter to NATA—exhibit B—FAA expected an annual savings of $1,500,000. We certainly feel that any saving is commendable, and do not quarrel with FAA's position if it is justifiable. Further, we do not come to complain because this is something that "happened in our back yard."

In our research, we discovered that the amount of work that FAA did before announcing this program may be an example of gross negligence and mismanagement. In such flight service stations as Fayetteville, Ark., Arcata and Marysville, Calif., Dodge City, Kans., Monroe, La., Meridian, Miss., Elmira, N.Y., Zanesville, Ohio, Huntington, W. Va., and Sheridan, Wyo., we note an apparent lack of specific investigation by FAA. Examples are outlined on pages 2 to 6 of the attached. That was the letter that we sent on March 13. In it we give specific evidence, with minutes of meetings held by FAA officials, that show they couldn't begin to answer questions asked by community leaders.

On the basis of these examples, we are certain there may be others, and since our association is interested in such expenditures and cost reductions, we would like to think that thorough investigation has been done.

We would like to ask some other questions relating to other activities of the agency. In 1961, 18 percent of fatal general aviation accidents were due to visual flights carried into unfavorable weather conditions. This percentage ties for first place of all fatal accidents that year. In other words, weather is a pertinent factor to aviation safety.

One of the biggest problems we have is accurate weather forecasting. As any pilot knows, weather conditions can change rapidly. One of the roles the flight service station plays is providing weather information. This was particularly interesting to us, in the testimony given by Mr. Lieurance, Chief of the Weather Bureau, when he gave the reason behind why they joined with the FAA in a cooperative weather program. He said they were looking for more "retail outlets." If Mr. Lieurance was looking for more retail outlets and this was the reason they joined with the agency in 1960 to provide weather services at flight service stations, I am wondering what can be gained by cutting out these retail outlets, as he referred to them, because the development of the art has been slow.

We know that the only way to accurately check the weather is to have as many weather stations as possible. If a station is remoted, it is impossible to give instant, on-the-spot reporting of deteriorating or improving weather conditions. This is an important consideration in sparsely populated areas or areas having rolling or otherwise unfavorable terrain.

Please note also that on page 1 of the attached, an average of 150 saves per month has been accomplished by the flight service station. One of the primary functions of these stations is the utilization of direction finding equipment which can lead a pilot to safety if he becomes disoriented. We know that the cost of remoting direction

finding equipment is prohibitive, and as a result we will lose this kind of service. We are also curious to know how much it will cost to scrap this equipment, and how much new direction finding equipment is in warehouses awaiting installation.

It is my understanding that the Doppler direction finding units cost about $20,000 apiece. If the primary purpose of the FAA is to foster and promote civil aviation growth and safety, we seriously question the advisability of removing what we consider to be part of a grassroots navigational and safety system.

We have also noted that interest that the Weather Bureau is also cutting costs and removing its facilities in several areas.

The Chamber of Commerce of the United States recommended a $29.4 million cut in the FAA flight standards service program. They also recommended a $2 million cut in its medical standards program, stating in a press release, "Much of the FAA medical standards work is duplicating work done by the military." We raise these points merely because we wonder whether there are other areas where more effective reductions could be made without placing the burden directly on general aviation.

It is interesting to note that a message by Mr. Halaby on March 17 stated:

> The initial phase of the flight service station study is complete, and 42 stations which can be consolidated for services with adjacent flight service stations have been identified.

According to a report prepared by the Fayetteville, Ark., Chamber of Commerce, 10 of these flight service stations also had a weather bureau, 8 had towers, 2 had both, and 26 cities would be without any of these facilities. We would like to ask whether FAA is acting in the best interests of safety and promotion of civil aviation.

In questioning FAA's managerial abilities, we want to substantiate why we think that in the case of the FSS consolidation program they are not acting in the best interests of general aviation. Please note what the General Accounting Office has said about FAA expenditures, in these articles from Aviation Daily. We merely reprinted several of these articles from the Aviation Daily with regard to FAA expenditures. We also have quoted a rather elaborate breakdown of the total FAA research and development appropriation for the fiscal year 1964 which we think is interesting because when we get to the end of the budget statement, we notice, for example, such projects as $1,107,000 for a general aviation cockpit program. This program has been generally disliked by the entire general aviation community.

We would like this congressional subcommittee to look at where more than $44 million is being spent, then consider whether the needs of 85,000 general aviation aircraft flying in the Nation's skies today are being met. Equipment for these aircraft is expensive and many times the cost is borne directly by the user.

In looking over the research and development budget above, we wonder how many of these items are more important than getting better and more accurate weather forecasts, direction finding steers to disoriented aircraft, and otherwise providing information generally disseminated by the FSS. We are not even questioning the number of lives saved as a result of the FSS program.

I would like to add in closing that the National Association of Air Traffic Specialists made a point regarding the Office of General Aviation Affairs. This office was created under Mr. Halaby's administration, and our association commended this move. We have felt for some time that the Federal Aviation Agency is primarily air carrier oriented. We have the feeling that if the Office of General Aviation Affairs under the administration of Mr. William J. Schulte had been consulted about this that we wouldn't be having these hearings today. Like the National Association of Air Traffic Specialists, we would also like to recommend that there be a better chain of command in the Agency and that Mr. Schulte's office be given greater authority to do the necessary job, so that general aviation, which is the largest user of the Nation's airspace, can have a voice in the Federal Aviation Agency's policies.

Mr. Chairman and members of the subcommittee, I consider it a pleasure to have had an opportunity to present our views this, and we also wish to commend you for holding these hearings.

Thank you very much.

(Mr. Teetor's exhibits and attachments follow:)

[From Aviation Daily, Apr. 2, 1964]

WASTE CHARGED IN FAA SEMIAUTOMATIC FLIGHT INSPECTION PROGRAM

Alleged weaknesses in planning, contracting, and administering of the semiautomatic flight inspection program of the Federal Aviation Agency has resulted in additional costs of $944,000, the General Accounting Office has charged. According to the auditors, a major portion of the additional costs could have been avoided by the development of a proven system before undertaking the production of additional systems.

In addition, the Comptroller General said in a report to Congress, the possible savings of about $720,000 will not be attained as a result of the "failure to purchase a leased computer, used in connection with the program, in December 1960, when it was offered for purchase at a special discount price." GAO rejected FAA's claim that continuing changes and modifications during 1960 and 1961 in the flight inspection program made the purchase of the discounted computer inadvisable. The agency holds to the conclusion that later studies showed that the computer did not have the capability to meet data processing requirements of the program.

To avoid "unnecessary costs" in future development programs, GAO recommended FAA establish procedures requiring thorough planning, the establishment of realistic project goals, and the development of prototype models or systems in order that areas of "undue technical risk" may be identified and eliminated before the production of operating models or systems is undertaken.

Agreeing that the basic facts set forth in the auditors' report are correct, FAA said a "thorough study" of the airborne receiver-transmitter equipment was underway to overcome the existing problems in the development of the program. In addition, FAA conceded, further procurements of such equipment for production systems would be deferred until after a prototype system has been thoroughly tested and evaluated.

[From Aviation Daily, Apr. 3, 1964]

GAO ISSUES SWEEPING SLAP AT FAA WEAKNESS

Government auditors have released a report on "weaknesses" in the policy and practices of FAA in many of its operations. The wide-reaching review of the General Accounting Office which included criticism of FAA on a score of subjects, was filed with Congress with a promise that GAO will continue its

surveillance of the agency to see whether corrective action, already taken or under consideration by FAA reaps results. Outline of the report:

FAA-operated aircraft used for transportation purposes that have resulted in increased costs.

The leasing of "costly" twin-engine aircraft for administrative, job performance, and proficiency flying without a "justification clearly establishing a need" for that type aircraft.

The leasing of aircraft under a lease/purchase contractual arrangement without obtaining price proposals from a second company whose aircraft met the prescribed specifications.

The unnecessary expenditure of Government funds for the purchase from commercial sources of aircraft engine parts that could have been obtained from excess military stocks.

Certain personnel practices that precluded the attainment of maximum utilization of maintenance and flight personnel.

Lack of an accounting system for determining aircraft operating and maintenance costs.

The report specifically noted that FAA used eight Agency-owned C–45 Beechcraft for various flying needs instead of renting aircraft of a comparable size and type. This policy resulted in additional costs of $147,000 during fiscal year 1962. When these aircraft were phased out of operation, FAA rented on an exclusive-use basis, eight fully equipped Queen Air 80's at a total cost of $116.25 a flight-hour including inspection, repair, and fuel costs. In addition, the Agency obtained an option permitting it to purchase the aircraft at $171,889 each, less 58 percent of the rental payments. GAO said FAA documentation relating to the Queen Airs does not set forth any specific reasons why aircraft of this type is needed for the purposes rented.

In another instance, GAO said, excessive costs of about $21,800 were incurred by the failure of an FAA contracting officer to request an analysis of and to adequately evaluate, the "reasonableness" of a contractor's price proposal for increases in rental charges and purchase prices of aircraft after certain modifications in the aircraft were made by the contractor.

Also the Agency was chastized for not attaining optimum utilization of manpower and aircraft as a result of establishing at certain maintenance bases concurrent working hours for flight and ground personnel. This caused certain aircraft to be inoperative at times because inspections and maintenance had to be pulled during duty hours of flight personnel.

The auditors found several instances where the utilization of FAA-operated aircraft resulted in additional costs and a potential liability resulting from transportation of what appears to be unauthorized personnel. Specifically, GAO charged the following:

A DC–3 with nine passengers on a flight from Columbus, Ohio, to New York made a landing at Morristown, N.J., for "the personal convenience of the passengers who were relatives of FAA employees."

The pilot of a C–54H "deviated from his planned itinerary" from Washington to Detroit and made an "unauthorized" stop at Indianapolis for the purpose of transporting his brother and brother-in-law. The three, plus another passenger, were slightly injured when the plane crashed short of the runway at Indianapolis.

A rented Mooney Mark 20 "carrying an FAA employee and three of his friends" traveling on "other than Government business" crash landed on a planned flight from Youngstown, Ohio, to St. Louis, Mo.

A C–45H on a flight between Washington and Boston collided with a runway marker at Jamaica, N.Y., while taxiing for takeoff on the return flight. Aboard was a passenger, employed by the U.S. Weather Bureau, who reportedly stated he "had an interest in aviation and that his family lived in Boston."

A DC–4, officially recorded as being on a logistic transport flight from Atlantic City, N.J., to Miami, carried 10 passengers one way and only 8 passengers on the return trip.

A C–45H transported four passengers, "including two persons on vacation who were not FAA employees," from Washington to Miami. The same four persons made the return flight 3 days later.

[From Aviation Daily, Apr. 6, 1954]

GAO Charges FAA Waste in ARTC Computer Operations

Citing inadequate administration, the General Accounting Office has reported that FAA has spent $47,600 more than it should have in operating computer equipment at its air route traffic control centers in Washington and Boston.

The GAO report said that FAA failed to establish adequate management control over the administration of rental contracts for the computers and thereby incurred unnecessary cost of $30,000 at the Washington center during calendar year 1962. It said the balance of the $47,600 was lost by FAA's failure to obtain rent-free program-testing time at both centers. GAO said that after it pointed out the errors to FAA, some $8,800 was recovered from the computer contractors.

The GAO auditors also found that the two centers had made faulty reports on when the equipment was inoperative and had scheduled the computer operations in an uneconomical manner so that at the Boston center an average of only 11 flight plans and related flight progress strips were processed during the daily last hour of computer operation.

GAO proposed a study to determine whether the benefits delivered from the current operating schedules of the automatic data-processing systems justify the additional costs of operating the equipment during periods of low air traffic activity. In reply, FAA said that estimating and predicting "unexpected peaks" was difficult and since the Government had purchased the equipment since GAO made its survey the proposed study was no longer appropriate.

The GAO also said the computer equipment could be programed to automatically compile flight activity statistics by desired categories during the processing of flight progress strips, thus greatly reducing the manual workload of assistant controllers.

The report also found that in the Washington center certain data relating to the operation of the computer system was being recorded in duplicate. FAA maintained the information was needed for two different functions but GAO said it believed that the summarizing of the same data separately by two employees, even though the data may be used for different purposes, was a duplication of effort.

[From Aviation Daily, Apr. 29, 1964]

FAA Should Train Own Maintenance Technicians, GAO Says

Government auditors said it would be less expensive if in the future FAA would either hire or train its own personnel when skilled technicians are needed to maintain new technical equipment rather than placing the work in the hands of a contractor. This conclusion was drawn by the General Accounting Office which said a recent review of FAA practices in contracting for technical services for its electronic air traffic control simulator systems resulted in excessive costs of $628,000 over a 4-year period.

Despite the assurance of FAA Administrator Halaby that he planned to replace contractor employees with civil service workers and not to renew a contract with Aircraft Armaments, Inc., for technical services which expired in November 1963, FAA extended the AAI agreement until June 30, 1964, the Comptroller General said. The alleged reason for failure to switch this work to its own employees was the Agency's claim it did not have a sufficient number of adequately trained employees to maintain the equipment, FAA told GAO.

"We believe," the auditors said, "that where there is a continuing need for maintenance of equipment by technicians, as in the case of the FAA * * * systerm, it would be to the advantage of the Government to avoid the high cost of contractor-furnished services" and hire or train its own employees for such work "within a reasonable time after the delivery of the equipment and the completion of the initial operating period."

The GAO examination showed also that additional costs of about $19,400 were incurred for the development and maintenance of the simulator systems because "of the Agency's failure to provide certain Government-furnished equipment and the unnecessary payments of subsistence allowances and fees." GAO proposed that FAA have the contracts audited to determine the propriety of the allowances and fees. In response, Halaby said all costs claimed by the contractor would be audited prior to making final payments.

Please do not construe this as our attempt to discuss the FAA budget. We are interested only in pointing out deficiencies that may exist in an effort to salvage the FSS program.

Finally, the FAA research and development budget for the present fiscal year is quoted below:

Research and development, fiscal year 1964

	Thousands
Total research and development appropriation	$44,046
I. Air traffic control activity	26,033
A. Air traffic control operations program. Air traffic control separation criteria; development of NAS operational procedures; facility design requirements; ground clearance redundant control light system; automatic broadcast of routine noncontrol instructions in the terminal area; development of measure of control load, control capability and optimal sector design; air traffic analysis; economic analysis.	655
B. Data display program. Modifications to en route data display system; data display subsystem, NAS; modification of terminal displays; character generation and display.	5,749
C. Data processing program. System experimentation and design support, terminal; data processing subsystem, NAS; advanced radar traffic control system (ARTS) with stored-program alpha-numerics (SPAN); compiler for an ATC-oriented programming language; systems engineering support for ATC design.	14,815
D. Data acquisition program. Interference elimination and reduction; ATC weather on radar; ASDE system improvements; ASR and ARSR performance assurance; FAA radar beacon transmitter site equipment; ATCRBS ground system monitor; beacon code processors; airborne radar beacon equipment; advanced data acquisition system; airport blind spot surveillance; radiation hazards affecting NAS operations; CAS/PWI techniques.	3,801
E. Data transfer and communications program. Transistorized audio amplifiers; improvements to present communications equipment; data communications system design; digital input/output devices; ATC radar remoting; modernization of VHF/UHF air-ground RF systems; modernization of HF point-to-point antennas; VHF/UHF radio relay link systems; advanced communications techniques.	1,013
II. Navigation activity	7,985
A. Approach and landing program. Category III evaluation of Minneapolis-Honeywell altimeter with BLEU landing system; Regal vertical guidance landing system; design variations for ILS localizer antenna for category II and III; ILS glide slope improvement program; Flarescan vertical guidance landing system; category II and category III landing instrumentation and displays; low cost ILS system; ILS ancillary items improvement; lightweight altimeter for landing; improvement of ILS system performance during inclement weather conditions; glide slope waveguide array; capture effect glide slope improvement; glide slope site improvement; ILS category III monitoring; multielement glide slope array; reliability analysis for category III landing system; domestic category III automatic landing system; category III landing system airborne engineering; category III landing system localizer.	5,049

Research and development, fiscal year 1964—Continued

	Thousands
II. Navigation activity—Continued	
B. Short distance navigation program	$2,093
IME in-service improvements; doppler VOR in-service improvements; area coverage navigation displays; utilization of self-contained navigation systems in the domestic environment; pressure altimeter; general purpose DME transponder; compatible maximum accuracy DME system; precision VOR; doppler VOR transmitters; doppler VOR antenna system; No. 2 experimental doppler VOR test facility; helicopter RHO/RHO navigation system; airborne radar for helicopter navigation; improved conventional VOR antenna; siting criteria for doppler VOR/Tacan; doppler VOR monitoring.	
C. Long-distance navigation program	263
Investigate loran "C" receivers for civil use; development of long-distance VHF communications system; atomic clock navigation system investigation.	
D. Performance assurance program	580
Improved Tacan/DME monitor; snow effects on Vortac performance: ASR and ARSR performance assurance; ILS flight inspection guide light; 15 cycle recorder and jitter eliminator; radio frequency interference system development.	
III. Aviation weather activity	985
A. Weather data handling program	729
Pilot-to-forecaster service test; automatic weather broadcasts; detailed design of weather data handling subsystems.	
B. Weather data presentation program	206
ATC weather data display system; airport weather data display system; weather data presentation.	
C. Applied research and analysis program	50
System experimentation and evaluation.	
IV. Aircraft safety activity	5,600
A. Airframe program	1,032
Fuel containment under survivable crash conditions; fire-resistant materials in powerplant installations; thermal criteria for construction materials; studies of crash fire problem; crash fire ignition suppression systems for large aircraft; crashworthy integral fuel cells; the economy of safety; determination of survivable crash loads envelope; integrity of airframe structure under crash conditions; dynamic testing of aircraft seats; improvements in ground operation of aircraft; studies of loads measurement; improved windshield visibility; windshield structural requirements; power spectral gust-design procedures; structural and mechanical integrity criteria for V/STOL aircraft; structural stability after bird strike; bomb resistant structures.	
B. Propulsion program	953
Fire extinguisher systems; fire tests of full-scale small turbine engine installation; model powerplant fire tests; powerplant fire tests of full-scale turbofan installation; powerplant fire detection reliability studies; powerplant firewall study; investigation of aircraft lightning protection measures; minimization of aircraft crash fire hazards, propulsion systems; blade vibration stresses; thrustmeters; investigation of bird ingestion; hazard of carbon monoxide in exhaust heat exchangers.	

Research and development, fiscal year 1964—Continued

	Thousands
IV. Aircraft safety activity—Continued	
C. Equipment program	$612
Cargo compartment fire protection criteria; bomb or explosive detectors and countermeasure techniques for aircraft; aircraft flight recorders; aircraft maintenance recorder; cockpit voice recorder; evaluation of accelerometers; crash locator beacons.	
D. Flight program	777
Takeoff, approach, and touchdown data recorder; protection of light high performance aircraft; helicopter height velocity diagram; aircraft icing protection; study of laminar flow control on high speed aircraft; evaluation of angle of attack indicating systems; takeoff performance indicator/director; CAR-3 design-induced pilot error.	
E. General aviation cockpit program	1,107
Human factors basic study; cockpit industrial design; general aviation cockpit display and control simulation; control systems analysis; pilot training and evaluation; low-cost integrated airborne navigation/communication equipment; attitude displays; navigation displays; aircraft support.	
F. Noise supression program	627
Noise control and suppression.	
G. Aircraft development program	492
Local service transport design study; local service transport economic study.	
V. Airports activity	1,603
A. Airport design program	334
Pendant cable support system for runway arresting gear and airport firefighting equipments and techniques.	
B. Airport visual aids program	1,269
Lighting and marking for all weather instrument operations; airports lighting and marking for general instrument operations; lighting and marking for V/STOL operations.	
VI. Aviation medicine activity	1,840
A. Air traffic controllers and air crew members: Physiological stress, fatigue, and aging factors relating to proficiency	510
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D. Civil aviation: Passenger and crew emergency procedures, oxygen equipment and safety measures	190
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NATIONAL AVIATION TRADES ASSOCIATION,
Washington, March 13, 1964.

Re consolidation of Federal Aviation Agency flight service stations.

Hon. JOHN BELL WILLIAMS,
Chairman, Subcommittee on Transportation and Aeronautics, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR MR. WILLIAMS: On February 4, the Federal Aviation Agency announced that in the process of modernizing airways communications and cutting the budget, 42 flight service stations would be converted to remote control facilities, consolidated, or completely removed. The press release announced that President Johnson had approved the move, which would save $30,000 to $40,000 per station, or about $1,470,000.

We heartily endorse the concept of achieving economies in order to cut the Federal budget, and realize that such moves must affect various programs. We do not criticize the FSS consolidation program simply because it is in our back yard. We endorse some phases of the program, but seriously question whether FAA has done adequate research before implementation of this far-reaching move, and whether other possibilities have been sufficiently explored.

Several organizations and individuals have commented on this program, nearly all objecting strenuously. Please note the following:

1. National Association of Air Traffic Specialists, whose primary object is "to serve the flying public well, doing our best to promote safety of life and property," indicates that the consolidation program would adversely affect the safety of general aviation aircraft and personnel:

"Few of the average of 150 'saves' per month by FSS would have been possible under the 'octopus' concept of system planning. Of 455 'saves' documented for the 3-month period, April 1 to June 30, 1963, there were 412 involving single engine civil aircraft. Three hundred ninety-eight pilots requested help because they were hopelessly lost with a fast diminishing fuel supply. Ninety-three of these were reoriented and guided to a safe landing utilizing ground-based direction finders (VHF/DF) and 211 were located and directed to a safe landing by reference to lights, landmarks, and terrain features. This technique is highly successful when the flight services specialist is responsible for a normal flight service area within a radius of 50 to 75 miles from his station."

2. The Aircraft Owners and Pilots Associations, claiming 100,000 members, observed that "the ultimate cost of Dulles Airport—$175 million—would pay for the retention of this part of the safety program for 119 years" (from "Comments and Recommendations on the Future Role of FAA Flight Service Stations," Feb. 17, 1964).

3. National Business Aircraft Association released a synopsis and history of the flight service program in a special report 64–5 of February 20, including the following:

"At 21 of these locations there will be—NBAA analysis shows—a reduction in the hours during which weather observations will be available. * * *

"In normal practice, qualified general aviation instrument pilots seldom, if ever, will depart for a destination airport without—at least—an area, if not a terminal, forecast."

4. NATA also registered its objections to the program in a press release and letters to Administrator Halaby and Associate Administrator for Programs David Thomas, pointing out that the action was not in the best interests of general aviation and threatened emergency direction finding procedure, weather reporting, and overall aviation safety, safety and air navigation being two of FAA's primary functions.

5. One of the primary objects of the FSS is to give pertinent weather information. Statistics readily show that weather is the largest single contributing factor to aviation accidents. In areas of rapidly changing weather, mountainous terrain, and sparse population, the manned FSS performs a very necessary and basic safety function.

The consolidation program would compound an existing problem—obtaining accurate weather information at a specific time and location. Accurate forecasting services are practically nonexistent. The FAA program calls for not only remoting weather facilities but also utilization of part-time personnel, both local, FAA, and Weather Bureau. This does not appear to us to be the best approach to this vital function.

FAA estimated savings of $1,500,000, but we felt that activities of the Aeromedical Center in Oklahoma City, and NAFEC in Atlantic City, N.J., could have been cut without affecting the primary scope of FAA services (exhibits A and B).

FAA also sees no connection between the overall Agency budget cut and that made in this area. Yet the total overall estimated budget cut for the the fiscal year 1965 is $1,900,000, of which $1,500,000 involves FSS consolidation. It is significant that the amounts are almost equivalent, indicating that FAA is bent upon reduction in areas at the true grassroots of aviation. We also feel that the anticipated budget savings are erroneous, as in the case of the Sheridan, Wyo., FSS (see p. 5). You will note that based on the FAA figures, savings would not even reach the break-even point for 12½ years. We strongly suspect similar conditions prevail elsewhere in the program.

Further, FAA's letter of March 2 says, "We are well aware that the remoting of a station results in loss of some ancillary airport services not primary functions of a station. This is to be regretted, but in the final analysis the airport so involved is then no different or less useful than thousands of other airports where no station has ever been or ever will be located. This naive remark is almost the same as saying that because Bridgeton doesn't have an airport there is no reason why our airport aid program should build one for Kingston. This is only a minor point. FAA by its own regulations (amendment 60–24 to pt. 60 of Air Traffic Rules, par. 60.18—see exhibit C pars. (2) and (3)) has converted FSS stations to more than the original intention, and has in this regulation requested that aircraft use them as advisory services at a 5-mile check-in point before entering the area. These same stations have VHF direction finders, which have saved many lost aircraft by giving them accurate magnetic bearing steers to a landmark, airport, or the facility itself. Also, FAA has budgeted for this direction-finding equipment and we would like to know what they have done with this program when they start consolidating and removing FSS facilities.

Finally, does the Agency fully expect to keep the cost down when they remote? In the case of Bluefield, W. Va., the FSS is half a mile from the airport, and it is planned to remote it to Charleston, W. Va., to an old building which may not even be adequate. How can it sustain the additional load? It seems conceivable that in the future they may request additional funds for this facility to function adequately.

We offer the following evidence to substantiate our claim that FAA has not adequately evaluated the consolidation plan:

1. *Arcata, Calif., FSS.*—Business communities using these services, including chambers of commerce, pilots, and others are extremely concerned about the proposed remoting. The FSS gives airport information and is strategically located in Humboldt County, where weather and terrain conditions make it almost mandatory to have accurate and timely weather information. Arcata has the reputation of being probably the most fogbound area in the world. Its airport has been the location of experimental work by many military services on full blind instrument landing and takeoff systems. Frequently it has "zero zero"—conditions ceiling on the ground and no forward visibility. In addition, it is in very mountainous terrain. California, with more aircraft than any other State in the Union, has been constantly threatened with the loss of aviation services. Our association and others feel that consolidating this station would immediately affect adversely the safety and well-being of passengers, pilots, and community.

2. *Fayetteville, Ark., FSS.*—Community members including aviation users oppose removal of this station, and evidence clearly indicates that such action would immediately affect safety and well-being of community, pilots, and aircraft. Even weather information in this area might be jeopardized; the Northwest Arkansas Times, of Fayetteville, said on February 6, "As long as carrier service continues into and out of Fayetteville, the Weather Bureau will provide some kind of weather service, but an FAA official added that he could not speak for the Weather Bureau."

Of the 82,651 aircraft operations for the calendar year 1963 in the Fayetteville FAA FSS advisory area, 35,987 operations were handled at the Fayetteville airport. The next competitor in total aircraft operations was Springdale, with 12,354 (see exhibits D–1, D–2, D–3).

3. *Marysville, Calif., FSS, Yuba County Airport.*—Letters to NATA from the Linda-Olivehurst Civic and Commerce Association, city of Yuba City, its planning commission, Yuba County airport manager, and Yuba County indicate that the remoting of this station would affect the safety and well-being of military, pri-

vate, and airlines aircraft because of the resulting loss of direction-finding equipment and weather advisory service. Yuba County airport would also lose the visual flight service for traffic control at the airport. Multimillion-dollar construction in the area indicates an increase of air travel, further necessitating retention of this greatly needed facility (see exhibit E).

4. *Huntington, W. Va., FSS.*—Letters from an NATA member and the following from a newspaper article indicate the community feeling:

"We must protest this decision (to remove Huntington FSS) primarily on the grounds that the alleged and relatively small projected economy justifies neither the decrease in the margin of safety the change represents, nor the inconvenience that will result for general aviation in the area. The abandonment of new facilities cannot be justified by the proposed savings" (exhibit E, a form letter). Here again, weather and terrain make it mandatory to retain this facility to protect lives and property in the air and on the ground. The article also says, "We have a new facility already available and the FAA did not find it necessary to save us $46,000 annually by spending several hundred thousand building new facilities elsewhere."

5. *Meridian, Miss., FSS.*—Remoting would immediately result in curtailment of service at the airport for airline, military, and general aviation aircraft. This is the latest traffic count for Key Field:

	Itinerant	Locally based
General aviation	8,653	1,976
Military	10,816	7,644
Airlines	7,869	
Total	27,338	9,620
Grand total	36,958	

A prerequisite for the vitally needed instrument landing system at Key Field is a control tower. The FSS fulfills this function. If it is consolidated, a control tower must be built at this airport. If the station is lost, it is questionable whether much of the traffic will be able to use this facility and possibly airline services will be curtailed.

6. *Elmira, N.Y., FSS.*—Correspondence from NATA member W. E. Johnson, secretary-treasurer of Elmira Aeronautical Corp., and other evidence indicates that the citizens and aviation community feel that the decision to remote this station would jeopardize safety of persons and aircraft on the ground and in the air. FAA on short notice held a meeting in Elmira to inform citizens regarding the consolidation program. In spite of this handicap, about 70 persons attended, including representatives of government, industry, and flying organizations. All civic groups opposed the program, and these points were made:

(*a*) FAA personnel could not even specify what facility Elmira would be remoted to.

(*b*) They could not tell why Elmira was selected for remoting.

(*c*) They could not explain what local groups had been consulted before the program.

(*d*) Since the program was to save money, interested community people asked why, if no jobs would be cut, they could arrive at a $40,000 saving. Personnel could not answer this but said they would try to get the answer.

(*e*) General aviation in the area is growing, and demands for service will increase. FAA felt sure this had been considered.

(*f*) Members of the aviation community stated that many articles in general aviation publications by FAA stated that a large percentage of general aviation accidents directly result from poor preflight planning and poor or marginal weather. FSS and the Weather Bureau play an increasingly important role in fulfilling needed advisory and briefing functions in their attempt to cut down this hazard. FSS are a direct link to the pilot and help to make certain that he has the proper information.

(*g*) In addition to the Chemung County Airport, Elmira FSS also provides service to 14 other airports within a 70-mile radius. Activities have increased as follows:

	Percent
1962 over 1961	11
1963 over 1962	16
January 1964 over January 1963	24

Wilkes-Barre and Williamsport, Pa., have been mentioned as possible locations for the Elmira FSS. Elmira performed 31,431 functions (aircraft contacted, flight plans filed, pilot briefs, etc.), compared with 24,059 in Williamsport and 19,399 at Wilkes-Barre. The latter is served by a U.S. Weather Bureau station, so if the Wilkes-Barre FSS were remoted, pilots in that area would still have the benefit of Weather Bureau service, whereas Elmira would have nothing.

7. *Sheridan, Wyo., FSS.*—Protests over the loss of the station have come from the Sheridan Chamber of Commerce, local citizens, and the Wyoming State Senate. In 1963, a sizable number of both visual and instrument flight rules plans was filed at the Sheridan station, the only one in the immediate vicinity. Its location is extremely important to the safety of aircraft crossing or approaching that part of the Rocky Mountains. I know the value of these services in this sparsely populated area with few navigation aids. It is almost mandatory to have this station available to give accurate and immediate weather information and navigation aids. We question the advisability of remoting for the purpose of saving money, since we do not believe an actual saving will result, based on FAA's own figures.

Sheridan has seven GS–9 employees, at about $9,000 a year, making a total annual personnel cost of $54,750.

Remoting the Sheridan FSS to Caspar would involve these minimum annual costs:

3 Weather Bureau GS–9 employees, GS–9, at $8,000	$24,000
1 Crazy Woman VOR control line, 135 miles, at $3/mile/month	4,860
1 Sheridan VOR control line, 160 miles, at $3/mile/month	5,760
1 Sheridan flight service control line, 160 miles at $3/mile/month	5,760
1 foreign exchange line, $3 month flat charge	3,600
1 additional Caspar FSS man, GS–9, $8,000	8,000
Total	51,980
Present cost of Sheridan	54,750
Minimum annual cost	—51,980
Difference	[1] 2,770

[1] This estimated savings does not include an estimated $35,000 cost of installation. It would take about 12½ years to break even, on the basis of these figures.

We emphasize that we do not quarrel with FAA's desire to cut costs and even remote and remove some facilities. However, it seems clear to us that not only was very little investigative work done before the announcement, but also in few if any cases was industry or the community even consulted about the move. In view of the continuous flow of evidence and protests received by our association, we strongly urge the House Subcomimttee on Transportation and Aeronautics to investigate immediately FAA's role in this consolidation program, and suggest that public hearings be held at the earliest moment.

Respectfully submitted.

DAVID TEETOR, *Executive Director.*

EXHIBIT A

NATIONAL AVIATION TRADES ASSOCIATION,
Washington 5, D.C., February 11, 1964.

Hon. NAJEEB E. HALABY,
Administrator, Federal Aviation Agency,
Washington, D.C.

DEAR MR. HALABY: On February 4 I attended an FAA meeting which was conducted by Dave Thomas in the interest of informing the aviation industry about its flight service station monetary reduction program.

I had noted with interest that you had made several statements in the past relating to FAA's budget reduction. I interpreted your remarks to mean that if FAA cut its budget, then certain services would have to be discontinued which included flight service stations. I construed these remarks to be aimed primarily at general aviation as a threat for all its yelling and screaming about FAA expenses, and would not be a policy that would be necessarily carried out. We now find that this is not the case as all.

I think that you know NATA has really tried to monitor the Agency's programs maturely and intelligently. We have picked few bones with FAA during the past 2 years; in fact, we have put most of the blame for our ills directly on industry's shoulders. We do feel, however, that in light of the criticism which has come from all portions of the industry toward certain programs being conducted—NAFEC and your Aeromedical Center—that certain budget reductions could have been better made in these areas than at the grassroots of our weather and navigational system.

We note that the Agency is shooting for an annual savings of some $1,470,000 by remoting and reducing the number of flight service stations. In the same vein, your proposed budget reduction was $1,900,000, and it looks as though the savings are coming from the one place we need the most, and since we regard safety as paramount, we legitimately wonder why weather stations seem to be under the ax. We, of course, realize that some of these flight service stations are not essential, and we certainly do not quarrel with an FAA cutback in this area if it is proven without a shadow of a doubt that the services being changed or reduced are not needed.

Our association must go on record as opposing this move and we would appreciate your immediate attention to the matter.

Sincerely yours,

DAVID TEETOR, *Executive Director.*

EXHIBIT B

FEDERAL AVIATION AGENCY,
Washington, D.C., March 2, 1964.

Mr. DAVID TEETOR,
Executive Director, National Aviation Trades Association,
Washington, D.C.

DEAR MR. TEETOR: This will acknowledge receipt of your letters of February 11, 1964, addressed to Mr. Halaby and Mr. Thomas, concerning the FAA flight service station program.

We appreciate receiving your comments and will make them available to the National Aviation Weather Systems Study (Navwess) Group for consideration as the review of the flight service station role continues.

Meanwhile, let me reiterate that the FAA aim is to provide necessary aviation services at minimum cost and on a reasonable cost versus benefits basis. When it is demonstrated that we can render much the same inflight and preflight services in a particular area with one manned flight service station instead of two—and the remoting technique has been proved effective—then we feel an obligation to consolidate the two facilities in the interest of economy. We are well aware that the remoting of a station results in loss of some ancillary airport services which are not primary functions of a station. This is to be regretted but, in the final analysis, the airport so involved is then no different or less useful than thousands of other airports where no station has ever been or ever will be located.

The figure of $1,470,000 you refer to is the estimated one-time capital cost, at an average of $35,000 per station, to remote the first 42 stations that have been identified to date. The net annual savings to the Government after consolidation of the 42 stations is estimated at $1,500,000. Thus, the capital cost of this share of the program will be recovered during the first year. We are unable to reconcile your $1,900,000 figure with any in the fiscal year 1965 budget. As you know, the 42-station consolidations program will not be completed for another 12 to 24 months—therefore, the savings are not fully reflected in the fiscal year 1965 budget.

The levels of the FAA research and medical programs have no direct bearing on the decisions relating to the flight service program. The various and individual programs must of necessity stand on their own merits before the reviewing authorities within and outside the Agency.

Your interest in these matters is appreciated. If we can be of further service, please let us know.

Sincerely yours,

LEE E. WARREN,
Director, Air Traffic Service.

EXHIBIT C

(6) *Final approach.*

(i) When approaching to land on a runway served by a functioning instrument landing system (ILS), large fixed-wing aircraft equipped with a functioning ILS instrumentation shall be flown so as to remain at or above the glide slope between the outer marker and the middle marker; *Provided*, That when the VFR distance-from-cloud criteria require interception of the glide slope between the outer marker and the middle marker, large fixed-wing aircraft shall be flown so as to remain at or above the glide slope altitude between the point of interception and the middle marker.

(ii) When approaching to land on a runway served by visual glide slope devices, fixed-wing aircraft shall be flown so as to remain at or above the glide slope until arrival at the runway threshold.

(7) *Departures.* Aircraft taking off shall be operated as follows:

(i) Pilots shall, prior to departure, familiarize themselves with any departure procedures established by the Federal Aviation Agency and shall comply with such procedures upon departure.

(ii) When departure procedure altitudes for a particular airport are not specified and unless otherwise required by the VFR distance-from-cloud criteria, large fixed-wing aircraft shall be flown so that a climb is made as rapidly as practicable to at least 1,500 feet above the surface; *Provided*, That the Federal Aviation Agency may specify a different rate of climb for a particular type of aircraft when a greater advantage in noise reduction can thereby be achieved with no derogation of safety.

(c) *Airports without control tower.* Aircraft being operated to or from an airport not served by a control tower shall be operated in accordance with the following rules:

(1) *Approaching to land.* When approaching for landing, fixed-wing aircraft shall be flown so that all turns are made to the left unless the airport displays light signals or standard visual markings of a type approved by the Federal Aviation Agency and which indicate that all turns are to be made to the right. When approaching for landing, helicopters shall be flown in a manner which avoids the flow of fixed-wing aircraft.

(2) *Departures.* Pilots of aircraft operating from an airport shall conform to the traffic patterns established for that airport.

(3) *Communications.* Aircraft being operated to or from an airport not served by a control tower, but at which an operative Federal Aviation Agency Flight Service Station is located and so depicted on the current appropriate Sectional Aeronautical Chart of the U.S. Coast and Geodetic Survey, shall be operated in accordance with the following:

(i) Pilots of aircraft having radio equipment permitting two-way radio communications with the Flight Service Station shall maintain such communications when within 5 statute miles of the uncontrolled airport for purposes of receiving airport advisory information; *Provided*, That for instrument flight rules operations, air traffic control may require otherwise.

(ii) Pilots of aircraft having radio equipment permitting reception only from the Flight Service Station shall maintain a listening watch on the appropriate frequency when within 5 statute miles of the uncontrolled airport for purposes of receiving airport advisory information.

2. By amending section 60.60 to add the following definitions:

Airport traffic area. An airport traffic area is that airspace within a circular limit definied by a 5 statute mile horizontal radius from the geographical center of an airport at which an operative airport traffic control tower is located and extending upwards from the surface to, but not including 2,000 feet above the surface.

Large aircraft. Aircraft of more than 12,500 pounds maximum certificated take-off weight.

Person. Means an individual, firm, copartnership, corporation, company, association, joint-stock association, or body politic; and includes any trustee, receiver, assignee, or other similar representative thereof.

This amendment shall become effective December 26, 1961.

(Section 307 of the Federal Aviation Act of 1958 [72 Stat. 749; 49 U.S.C. 1348])

N. E. HALABY, *Administrator.*

Issued in Washington, D.C., on September 22, 1961.

(Published in the Federal Register [26 F.R. 9069], on September 27, 1961.)

EXHIBIT D1

FAYETTEVILLE FLYING SERVICE,
Fayetteville, Ark., February 24, 1964.

DAVID TEETOR,
Executive Director, National Aviation Trades Association,
Washington, D.C.

DEAR MR. TEETOR: In reply to your letter of February 14, we certainly appreciate your effort on behalf of the industry concerning the proposed consolidation program of the Federal Aviation Agency flight service stations.

We really appreciate your prompt reply in connection with our request to use your releases. We are going to use everything in our power to retain these stations that are in the public interest. We appreciate your point of view and welcome your support.

The FAA in announcing the 42 stations that are included in the presently proposed consolidation states:

"The consolidation action of these 42 stations follows a painstaking analysis by FAA of the role of the flight service station in tomorrow's air traffic control system. Participating in this analysis was the U.S. Weather Bureau, which has a direct interest in certain FAA facilities for weather observation and reporting purposes. None of the 42 stations being consolidated are needed for either function. The Weather Bureau will arrange to gather and disseminate data, when or where needed, by other means. Both agencies are interested in providing the same services at less cost."

I don't believe that this statement is entirely true as applied to our situation here at Fayetteville. We are dependent upon the FAA flight service station at Fayetteville for all of the various services, as well as weather collecting and distribution. We have no other source. These people apparently are trying to ignore their responsibility in almost every area except air traffic control.

We are compiling information and preparing a brief in detail to present to the FAA, to our congressional delegation, and other interested parties. We will forward you a copy when completed. In the meantime we are enclosing copies of correspondence, newspaper clippings, and a summary of facts in connection with our local situation.

Thanking you very kindly, I am

Sincerely yours,

RAYMOND J. ELLIS, *Owner.*

EXHIBIT D2

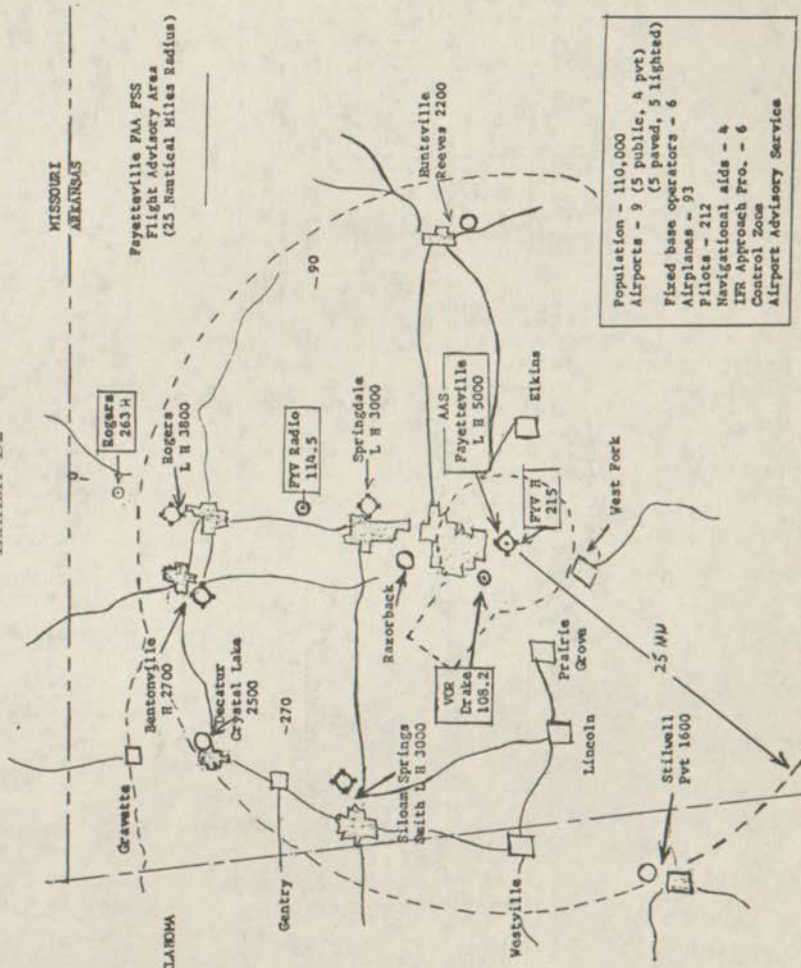

MISSOURI
ARKANSAS
OKLAHOMA
Fayetteville FAA FSS
Flight Advisory Area
(25 Nautical Miles Radius)
Rogers
263 H
Rogers
L H 3800
Bentonville
H 2700
Decatur
Crystal Lake
2500
Gravette
Gentry
-270
-90
FYV Radio
114.5
Springdale
L H 3000
Razorback
Bloom Springs
Smith L H 3030
VOR
Drake
108.2
AAS
Fayetteville
L H 5000
Huntsville
Reeves 2200
Elkins
FYV H
215
West Fork
Prairie
Grove
Lincoln
Westville
25 MW
Stilwell
Pvt 1600
Population - 110,000
Airports - 9 (5 public, 4 pvt)
(5 paved, 5 lighted)
Fixed base operators - 6
Airplanes - 93
Pilots - 212
Navigational Aids - 4
IFR Approach Pro. - 6
Control Zone
Airport Advisory Service

EXHIBIT D3

Summary, aircraft/passenger operations, Fayetteville FAA FSS advisory area, calendar year 1963

City and State	Airport	Number of aircraft	Number of pilots	Corporation aircraft	Fixed base operation	Total aircraft operation	Total passenger operations
Bentonville, Ark	Municipal, Runway 2,800 feet	10	18	2	3	5,840	8,760
Decatur, Ark	Crystal Lake, 2,500 feet (lights)	4	8	2		6,570	8,541
Fayetteville, Ark.[1]	Drake Field, Runway 5,000 feet (lights)	26	60	6	6	35,987	70,610
Do	Razorback (private), 1,900 feet	6			5	3,650	4,380
Huntsville, Ark	Reeves (private), 2,200 feet	1	3			730	1,314
Rogers, Ark	Municipal, Runway 3,800 feet (lights)	14	45	2	3	8,760	12,264
Siloam Springs, Ark	Municipal, Runway 3,000 feet (lights)	11	26	3	2	8,030	10,439
Springdale, Ark.[1]	do	20	48	8	2	12,354	17,295
Stilwell, Okla	(Private) 1,900 feet	1	4			730	1,168
	Total	93	212	23	21	82,651	134,771

[1] From airport log.

EXHIBIT E

YUBA COUNTY AIRPORT,
MARYSVILLE, CALIF.,
February 24, 1964.

NATIONAL AVIATION TRADES ASSOCIATION,
Washington, D.C.

GENTLEMEN: The attached enclosure has been mailed to all interested parties in the Marysville Flight Service Station area. It is my contention that every segment of aviation must fight this degradation of safety that the Federal Aviation Agency is attempting to force on general aviation.

The facts contained in the enclosure pertain to the Marysville Flight Service Station, however, many will apply to any flight service station in the United States.

I will welcome your support and the support of the organization you represent, also any comments or criticism.

Sincerely yours,

ROBERT E. GOULD, *Manager.*

EXHIBIT F

HUNTINGTON AIRPORT, INC.,
Huntington, W. Va.

DEAR ———: Having heard the Federal Aviation Agency's rationalization of the removal of our flight service station at Tri-State Airport in Huntington, W. Va., I remain unconvinced.

I just protest this decision, primarily, on the grounds that the alleged and relatively small projected economy justifies neither the decrease in the margin of safety, the change represents, nor the inconvenience that will result for general aviation in this area. The abandonment of new facilities cannot be justified by the proposed savings.

I question the "remoting" of a station over a treacherous mountainous terrain notorious for low-hanging fog and unpredictable off-season weather.

No amount of rationalization can justify a detrimental program of reducing payroll to personnel and services to aviation. Nowhere, more than in West Virginia, is Appalachia distinguished by depressed areas economically and our efforts to attract aviation-oriented business and industry are bound to feel the adverse effects from publicity of the FAA's action.

Please convey to the FAA, and reinforce in your own way, my protest of a decision, which looks very much like false economy and not in the public interest.

Sincerely,

———— ————.

Mr. WILLIAMS. Thank you very much.

Mr. Friedel?

Mr. FRIEDEL. I have no questions, Mr. Chairman.

Mr. WILLIAMS. Mr. Devine?

Mr. DEVINE. I have no questions, Mr. Chairman.

Mr. WILLIAMS. Mr. Teetor, you made a remark that I think is echoed throughout the general aviation community. That is to the effect that the Federal Aviation Agency appears to be airline oriented. By that do you mean that the agency appears to neglect the needs of the general aviation industry in favor of the airline operations?

Mr. TEETOR. I think so. I think Mr. Halaby was on the right track, and I think he is a very able administrator, and he recognized this problem when he created the Office of General Aviation Affairs, but the Office of General Aviation Affairs is frequently bypassed.

Those in the general aviation branches of the Fights Standards Service are frequently not consulted. The things that they are interested in, as far as general aviation is concerned, never filter up to the Office of General Aviation Affairs. There seems to be no organization in this area.

Mr. WILLIAMS. Mr. Teeter, I notice that you represent, among others, aerial applicators.

Mr. TEETOR. That is true.

Mr. WILLIAMS. How much attention has been given, in your opinion, by the Federal Aviation Agency, to the problems of aerial applicators during this administration?

Mr. TEETOR. Very little. As a matter of fact, we were witnesses in other hearings held by Senator Ribicoff on the pesticides problem. It was brought out in the hearing that our association had been asking for some regulations from the Federal Aviation Agency since 1955 to set better standards for aerial applicators and get away from the waiver system.

Even more recently we have noted two universities, which I think have been leaders in this field, trying for better research and development for aerial application. One is from your home State, the Mississippi State University, and the other is Ohio State University in Columbus.

I know that Mr. Cornish, from Mississippi State, had contacted the FAA, and also our association. I certainly know your sentiments on this. They need funds. They have a fantastic research department down there and are most anxious to get the necessary aid from the industry to develop safer and better aerial application equipment.

The FAA, as far as research and development is concerned, does not seem to have interest in this, so far as budgeting funds for this kind of activity. We don't understand it.

Mr. WILLIAMS. Do I assume from what you have to say that the FAA seems to be devoting too much time to the exotics and not enough to the less glamorous?

Mr. TEETOR. That is our impression from practically every angle.

Mr. WILLIAMS. How many agricultural aircraft do we have in the United States? Do you know?

Mr. TEETOR. I would say nearly 4,000.

Mr. WILLIAMS. That estimate has ranged from as low as 4,000 to as high as 6,000, hasn't it?

Mr. TEETOR. Yes.

Mr. WILLIAMS. Do you know approximately how many were manufactured exclusively as agricultural aircraft, such as the Piper Pawnee, the AG Cat, the Snow Applicator, and how many are in operation which are old, such as converted Steermans and others?

Mr. TEETOR. I would say this year, and we don't have any recent statistics—this is just a ball park figure—I would say roughly 30 percent of the agricultural aircraft are of an older vintage or were not designed as agricultural aircraft.

Mr. WILLIAMS. That would include Super Cubs and Super Cruisers?

Mr. TEETOR. Yes. We have a lot of converted World War II aircraft used in forestry service work, also included in those figures. That might make it a little higher. We have the TBM's, AJ's, HA's, and I don't know what other kinds, used strictly for borate bombing, and this kind of thing.

Mr. WILLIAMS. It is generally conceded, I am sure, that numerous FAA employees are assigned to the problems of airlines. We have a great number of inspectors and others who devote their entire atten-

tion to the problems of the airlines, to airline safety, navigation, and so forth. You have indicated that there is a section that has been set aside for general aviation headed by Mr. William Schulte.

Can you tell me, if you know, how many people in the Federal Aviation Agency are assigned exclusively to the problems of agricultural applicators?

Mr. TEETOR. There couldn't be more than two or three assigned directly to this problem.

Mr. WILLIAMS. Do you know anyone assigned?

Mr. TEETOR. I don't know anyone who has this as a full-time occupation in the Agency. I can't name any in that category. I can name some that are at least aware of the problems and who know something about the industry. That is, as far as Washington headquarters is concerned. There may be others out in the field, but even the Agency itself has admitted that the reason they didn't have a regulation governing aerial application was because they didn't have enough people that were familiar with that segment of the industry. They couldn't enforce the regulation.

Mr. WILLIAMS. Would I be correct in making the statement that in aerial application, we have the highest fatality rate, the highest injury rate, of any other segment of aviation?

Mr. TEETOR. That is not true today. In the last 10 years the accident rate has improved considerably, mostly just by the way the industry has governed itself. I think they have done a tremendous job. The accident rate has fallen gradually for the last 10 years, even though the number of flying hours has gone up steadily.

Mr. WILLIAMS. What other segment of aviation would have a higher accident rate?

Mr. TEETOR. I doubt if there would be another segment that would have the exposure to risk that aerial applicators would have.

Mr. WILLIAMS. That is the point I want to make. Even though they have improved, they still probably have the highest accident rate of any other segment of aviation?

Mr. TEETOR. Comparatively, yes. That is a true statement.

Mr. WILLIAMS. Would it be safe to say that they receive less attention from the Federal Aviation Agency than any other segment of aviation?

Mr. TEETOR. I think so.

Mr. WILLIAMS. Mr. Springer?

Mr. SPRINGER. No questions.

Mr. WILLIAMS. Mr. Teetor, thank you very much. I want to congratulate you for a splendid statement. I am sorry that we did not have the time to go into the various exhibits which you have included with your testimony. These appear to be quite pertinent and certainly apropos to the hearing.

Again, let me thank you for your testimony which you have given to the committee.

Mr. TEETOR. Thank you, sir.

Mr. WILLIAMS. The next witness will be Mr. Edward H. Cockerham, executive director, Air Traffic Control Association.

STATEMENT OF EDWARD H. COCKERHAM, EXECUTIVE DIRECTOR, AIR TRAFFIC CONTROL ASSOCIATION

Mr. COCKERHAM. Mr. Chairman, we appreciate the opportunity to testify, and the American custom which allows the citizenry the opportunity to advise the Congress of their opinions on matters affecting the general public.

The Air Traffic Control Association is a professional organization representing 7,000 air traffic controllers in the centers and towers. Our members are not directly engaged in the provision of services normally provided by air traffic service personnel employed in flight service stations, except in those 67 facilities commonly known as combined stations and towers.

Mr. WILLIAMS. Are all of your members employees of the Federal Aviation Agency?

Mr. COCKERHAM. No, sir. We have approximately 390 members of the military. We have approximately 200 people who are employed in industry, such as the Air Transport Association, the AOPA, and so forth. We also have a number of industrial organizations, a number of the airlines, electronics firms, and so forth, which support our activities.

Mr. WILLIAMS. Thank you.

Mr. COCKERHAM. Our primary interest lies in the fact that the services provided by flight service stations are an integral part of the total air movement system and that changes in the role of the flight service station have an impact on the system.

Briefly, the primary function of the flight service station has changed since 1957. The stations formerly served as the communications link between instrument flight rule flights and traffic control facilities, providing separation during IFR operations.

The remoting of communications capability into control facilities has reduced the IFR contacts for FSS's from 5.5 million in 1958 to 0.9 million in calendar 1963. The change in function was recognized by FAA and supported through continued funding by Congress.

Flight service stations absorbed the flight plan handling function for the military services that had formerly been provided by military flight service. New functions were established, such as weather briefing and VFR flight plan following. VFR contacts increased from 3.7 million in 1957 to 6.6 million in 1963, an increase of almost 100 percent. Combined IFR–DVFR flight contacts, and in FAA publications on statistics these are combined, and VFR contacts in 1957 were approximately 10 million, and in 1963 they were still approximately 7.7 million, a 23-percent decrease overall. Understand, this was primarily brought about by the fact that they were no longer operating as a communications agent primarily between the IFR pilot and the control center.

Flight plan handling in 1957, in both categories, was approximately 1.3 million, and in 1963, approximately 3.9 million, an increase of 200 percent since 1957. It is our contention that the increase in flight plan handling more than offsets the decrease in contacts, from the standpoint of the overall workload. All forecasts and trends indicate future growth in those categories of traffic, primarily in the business and general aviation category.

We suggest, gentlemen, in your deliberations that you beware of comments about what general aviation and business users do or do not want and let the statistical record speak for itself. The individual users filed those flight plans and made those communications contacts because of a desire for information and service. Very few of these contacts were required by compulsion. Actually, in dealing with flight service stations, the DVFR contacts, where the pilot is about to enter a defense zone, is about the only one that I can think of that is a compulsory contact. Normally, if he is on an IFR flight plan, these will be made with the center through their communications system.

There has been a change in basic function, but the overall workload has increased and there is every reason to believe that demands for these services will continue to increase.

We are hopeful that some semblance of agency-to-user personal contact can be maintained. Traffic control centers are located generally in remote areas. The control tower is up 5 to 10 flights of stairs. The major people-to-people contact between the users of the service and the Federal Aviation Agency occurs at the flight service station. When you reduce from 300 to 150 stations or less, you are losing 50 percent or more of this personal contact. Consider carefully the educational benefit of these contacts for the fledgling or even the seasoned general aviation pilot.

I would like to elaborate on this point a bit. Practically the only contact people in traffic control facilities have with the pilot is on the microphone. It is very difficult to establish a complete understanding. We find in our association it is highly advantageous to get pilots and controller groups together. Often we have as many as 200 and 250 people appear at what we call pilot-controller forums for a discussion of aviation and air traffic control matters. We feel that a great deal more of this should be done on the part of the agency and all people involved in the aviation industry.

If we can communicate and develop understanding, we can improve the degree of safety in this highly complex system.

A reduction in costs for personnel is the basis of hoped-for economy under the FSS consolidation plan. Economy plans are generally overly enthusiastic about expected savings that just do not materialize. Shifting people about into newly created positions from one activity to another, without a reduction in total numbers, just cannot result in an overall monetary saving no matter how brightly the picture is painted for the particular activity. Very careful analysis and study should be conducted in specific detail to prove out the theory of this plan that costs to the Government will be reduced.

I would like to elaborate a little bit, Congressman Williams, on the point you brought up previously in this hearing, that you cannot remote the existing services, and when I say "services" I am speaking of frequencies, from these stations to another station at a remote location and staff that central facility with an adequate number of personnel, and provide the same level of service that you are providing today in the present system.

This study should be followed by implementation in a given area and tested over at least a 6-month period to determine if an overall monetary saving of significance can be accomplished. Unless the saving is significant, the plan should be abandoned. There does ap-

pear to be some immediate economic benefit to be derived by reducing some 24-hour operations to 12 hours in flight service stations and to 16 hours in some small activity towers. These reductions can be made without further extensive planning or testing or great derogation of service.

The FAA plan visualizes the establishment of a manicom with two air traffic specialists assigned to cover an 84-hour per week operation. This would not permit any time for keeping up manuals of operations, handling correspondence, initial training, refresher training, and other essential functions required to maintain competency of service. While it is granted that weather observations can be satisfactorily performed by anyone of normal intelligence and capability, we wish to point out that when you start becoming extensively involved in air-ground communications and the operation of teletype machines and communications equipment, you are becoming an integral part of the air movement system and specialization is important to the maintenance of the outstanding safety record for normal operations and is absolutely essential in the handling of emergency situations that require almost complete total system understanding on the part of the ground personnel.

Any study on the role of the flight service station is both incomplete and unrealistic that does not include the removal of the flight service station function from the tower cab itself. The towers were not designed to accommodate the FSS equipment, the additional noise from teletypes and additional radio communications is sometimes intolerable to personnel. To illustrate this point, if myself, Mr. Teetor, and another individual were all giving testimony at the same time you would have a problem essentially the same as a control tower operator has in a combined station and tower in that there are three or four conversations going on at the same time. It is a very difficult thing to pick out the information that is important to your particular operation.

Another disadvantage is the fact that it is highly unlikely that the pilot will climb five flights of stairs to receive a briefing on weather, notam service, and other information.

There is an additional problem in that the CS/T does not provide all the services of a full-fledged flight service station; however, the pilots do not know that, nor do they realize that when in contact with a CS/T, their requests receive secondary consideration because of the press of duties in the tower. This, I think, derogates the safety in the system in that the pilot would expect, when he calls a flight service station, to get the same service from one that he gets from another. However, this is not possible in the combined station and tower.

We firmly believe and recommend that where airport locations qualify under the existing criteria, there should not be a combination of services provided in the tower cab. It is a matter of record within the Federal Aviation Agency that operational personnel have held this belief for a number of years. However, action on this problem has been delayed because of indecision, pending studies, and so forth. I will not elaborate further on the combined facility other than to state that we have additional material available on this air safety problem

that will be made available to members of the committee. These documents have been previously mentioned in this hearing.

I would like to make a general comment on economy within FAA and ask a question.

Why is the major emphasis on economy always focused at the level where service is provided to the public? Within the FAA budget today there are programs and studies that do not deliver service to the public, and I suggest that these are the areas most worthy of exploration. We are not saying that these are projects that should not be undertaken by someone in Government. But we are saying that the intent of the Federal Aviation Agency, as we see it, was to be a service organization. To mention a few of these nonservice areas, the development of the SST, medium-type carrier aircraft and Project Little Guy that produced a cockpit for the light plane that costs more than the light plane itself.

We feel very strongly that the FAA was intended to be a service organization interested in those elements of providing service that produces safety in the air movement system, and that by focusing attention in areas outside of this basic responsibility, the proper attention and authority is not going to be focused on the initial program.

When Congress approves these added projects, it is, itself, by that approval, inflating the FAA budget over and above the funds necessary to provide basic services to the flying public and for the protection of the taxpaying citizen who chooses to travel by air or is unfortunate enough to live under the busy approach lane to an airport.

If you want to hold the line on the FAA budget, insist that it remain in the area of providing basic service. If the Congress determines that public need requires FAA to continue to be involved in other than the provision of basic services, be prepared for an annual budget approaching $1 billion within the next 5 years.

That concludes my statement, gentlemen. I would be glad to answer any questions that you might have.

Mr. WILLIAMS. Thank you, Mr. Cockerham.

Mr. Friedel, do you have any questions?

Mr. FRIEDEL. No questions, Mr. Chairman.

Mr. WILLIAMS. Mr. Springer?

Mr. SPRINGER. I want to ask one question, Mr. Chairman, but I will pass for just a second.

Mr. WILLIAMS. Mr. Devine?

Mr. DEVINE. No questions, Mr. Chairman.

Mr. SPRINGER. As I understand it, you are against this particular change. What did you think of Mr. Halaby's alternative?

Mr. COCKERHAM. In other words, approximately 150 stations as opposed to 110 in the original plan?

Mr. SPRINGER. Yes.

Mr. WILLIAMS. And I presume the institution of the so-called Manicom system.

Mr. COCKERHAM. The Manicom, as I understand it, is a two-man station operating on the basis of 7 days a week for, we will say, 84 hours. This, with two men, gives us 80 hours of operational time, not including annual leave and sick leave, and this type of thing. It is my own personal opinion that people cannot remain proficient and

adequately cover Manicom under these circumstances, with two people. I think it would be impossible to provide the level of service that should be provided.

You are talking, I think, about three or possibly four people. You can't run one of these operations, Mr. Springer, without having the necessary manuals and directives available and up to date, so on and so forth. This absolutely cannot be done by two people, in my opinion.

Mr. SPRINGER. That is all, Mr. Chairman.

Mr. WILLIAMS. Mr. Cockerham, you have brought up a very pertinent point in mentioning that these flight service station personnel are the FAA's chief personal contact with the public. Is that a fair statement?

Mr. COCKERHAM. I believe this; yes, sir. I think that one of the real problems in aviation today is the lack of contact between people in FAA providing service and the recipient of that service which generally, of course, is the pilot.

As you know, the consolidation program involving centers placed these centers in rather remote locations from the public area. For example, the center in Jacksonville, Fla., was moved from the airport out into the swamps, in a little town about 30 miles north. No pilots, air carrier, general aviation or otherwise, who come into the Jacksonville Airport will drive 30 or 35 miles up into the swamp country to visit with these people, look over the facility and discuss matters pertaining to air traffic control.

Another good example is the one in Cleveland, moved to Oberlin, completely away from the aviation activity. Again, the tower is up 5 or 10 flights of stairs, and we just do not have a very close contact between the public, the users of this service, and those people who are providing it. We tell our people whom we represent: "The controller needs to get out from behind the mike and talk to these people to improve this understanding, so that when they do communicate on the radio there will be complete understanding between the two." It is essential to air safety.

The fledgling pilot, Mr. Williams, as you know, may have passed a test, as a result of an intensive study course, but when he goes out to make that first solo flight, or subsequent flights, and gets into the navigation area, there should be someone to answer any and all questions that he might have, either prior to flight, when he is on the ground, or in case he should get lost or into an emergency circumstance while he is in the air.

Our airline pilots, people like yourself and myself, we got our basic flying training prior to World War II, many of us, in the light-plane, general aviation area. This is the broad base of our aviation system. This is where we train people and interest people in aviation, overall, who move into our air carriers and into the military, into the flying part of the business.

I think we should do everything we can to encourage this activity. I think the flight service station is the focal point and the information point in these major cities.

Mr. WILLIAMS. Mr. Cockerham, adequate flight planning in advance of a flight is always a good life insurance policy, isn't it?

Mr. COCKERHAM. Yes, sir.

Mr. WILLIAMS. I have found from my own experience that in planning a flight where I may have several alternate routes that would be available to me, I am prone to do a better job of planning my flight if I go to a flight service station and talk with the personnel in the service station who have the weather information directly in front of them than I do by telephone.

Is that pretty general throughout the industry?

Mr. COCKERHAM. I think, speaking from my own experience, as well as a pilot, that on the telephone, and I have used this through military flight service drops and so on, people on the other end, when you are consolidated, they are busy. They are talking to you, but while they are talking to you there is another phone ringing and someone else wants to talk to them, also. So he is anxious to get rid of you, if you want to put it this way, so that he can get to this other responsibility.

There is definitely a derogation of service. You walk into the station and you have all of these weather reports laid out. You can, if this man is tied up with someone else, browse around and come up with some conclusions of your own. In my opinion, this is the way flight planning should be done. If you will read the CAB report on the recent Mohawk Airline crash up at Rochester, the contention of the Board was that these people did not take the proper care in planning for this flight in looking into the weather.

I think this is a good example. The reason was not because of any desire on the part of the pilot, but the information was not immediately available to him. You will not get, on the telephone, the kind of service that you will get from personal contact. We wouldn't be having this hearing today if you could get the information that you folks felt you needed through correspondence or on the telephone. So I think the people-to-people contact is a very important thing.

If anybody could prove that there was a significant savings in this plan—and I think it should be tested, frankly, to either prove or disprove that, fine. When you weigh one against the other, it might be to our advantage to go into it, but I think it should be proved beyond a shadow of a doubt before any wholesale program would be initiated.

I am, frankly, Congressman, skeptical—in the experience of the last 5 years—from the standpoint of economy on pronouncements that certain things are being done in the interest of economy. History proves to us in the last 5 years that these things that were done for economy have not provided this element of economy, either in the savings of personnel or expenditures of funds.

Mr. WILLIAMS. Before any attempt is made to install the manicom system in lieu of the present flight service station system, don't you feel that it should be known how many frequencies the manicoms will guard, and just how the system will operate?

Mr. COCKERHAM. Absolutely.

Mr. WILLIAMS. In other words, pin it down to facts and figures; how many lines will have to be remoted to cover all of these frequencies?

Mr. COCKERHAM. I would like to point out that in one project in the FAA they experimented with nine different methods of a local area office to determine what is the best local administrative setup

to have in operation of, shall we say, local areas like Jacksonville, Fla., and Miami, Fla.

I think, frankly, this is wise on the part of the Administrator, that he is seeking a solution to a problem, and he wants to be sure that he gets the right one, the right solution. I am a little amazed, in view of past efforts on matters of this kind, that they would, shall we say, leap off into a program of this magnitude without, shall we say, some experimentation at the operational level and determine exactly whether or not there is going to be a saving, whether or not it is going to provide adequate service to the public.

Frankly, without having engineers and people available to go into all of this, no individual can sit here and say whether it will or whether it won't. But I can say on the basis of experience I am highly skeptical that you can provide anywhere near the same degree of service under this plan.

Mr. WILLIAMS. Are there any further questions?

If not, thank you, Mr. Cockerham.

Mr. COCKERHAM. Thank you.

Mr. WILLIAMS. The next witness is Captain Bartling, Air Line Pilots Association; accompanied by Captain Smith and Mr. Basnight, air safety representative.

STATEMENT OF JOSEPH H. BARTLING, CHAIRMAN, AIR TRAFFIC CONTROL COMMITTEE, AIR LINE PILOTS ASSOCIATION; ACCOMPANIED BY A. E. SMITH, CENTRAL SAFETY CHAIRMAN; AND THOMAS BASNIGHT, WASHINGTON REPRESENTATIVE

Mr. BARTLING. Thank you, Mr. Chairman and gentlemen of the committee.

I am Capt. Joseph H. Bartling, chairman of the Air Traffic Control Committee of the Air Line Pilots Association. I have with me Capt. A. E. Smith, central safety chairman for one of the local service airlines, and Mr. Thomas Basnight, our Washington representative, who is both a private pilot and an air traffic controller.

My own background extends to more than 22 years of scheduled airline flying and a depth of interest through this period of time in the matter under consideration by the committee. I have asked Captain Smith to assist me because the local service airlines are the ones more seriously affected by the FAA's decision to close a number of flight service stations.

Since the FAA issued a press release outlining a program to close some 42 flight service stations, we have met on two occasions with FAA and have discussed with them and other users of the flight service stations the seeming incongruity of their two-point program—improving service to airmen by reducing the FSS and the number of employees manning them. We have been informed of the fact that FAA is reconsidering the closing of a number of these stations, but prior to this time have not not been informed as to locations; therefore, our presentation must be a bit more broad than we would have cared to make it.

First of all, we must consider that we were invited by FAA to discuss the closing of flight service stations as a means of achieving additional economies within FAA. We were not asked, nor were

we given access to, proposed budget figures for other areas where economies may have been achieved at a lesser penalty to the overall aviation community. Had we been offered an opportunity to comment on the overall program, we might well have suggested economies in the research and development area, in the investigative and inspector areas, and I think we certainly would have recommended discontinuance of heavy staffing of regional and subregional offices as being of undue financial burden considered in the light of existing safety levels in the air transportation system.

The flight service station is an outgrowth of the U.S. Lighthouse Service, which actually operated the first radio and visual navigational aids. Fundamentally, the flight service station and its associated Navaids should perform essentially the same service to the airmen as does the Coast Guard through its lighthouse and notice to mariner service to the mariner. Truly, many additional services have been grafted on through the years. One of these has been observing, recording and reporting of aviation weather at locations where no airport weather station is available.

FAA is not unique in this respect. The National Park Service, Forest Service, citizens groups, Coast Guard, State and local governments all participate to some extent in assisting the U.S. Weather Bureau in weather observing and reporting. However, the degree to which the flight service station has augmented the Weather Bureau's aviation weather service is of greater importance, we believe, than is, for example, the extent to which the U.S. Coast Guard has augmented the Weather Bureau's activity. In fact, Weather Bureau personnel are carired aboard Coast Guard vessels on iceberg patrol and on ocean navigational stations for the very purpose of providing expert weather observing, reporting, and analysis.

Even so, no one will deny that the FAA employees receiving on-the-job training and classroom training dealing with aviation and the effect of weather upon aviation is obviously a better qualified weather observer-reporter than would be some interested, civic-minded citizen who would look upon it as an avocation, or some employee of an organization who would have to look upon his weather work as a collateral rather than a primary duty.

Of the more than 550 airports served by scheduled airlines in the United States, some 250 do not have a U.S. Weather Bureau airport station and many of these rely on the FAA flight service station for weather data. If the decision is made to discontinue a large number of flight service stations, we urge in the interest of the traveling public's safety that the Administrator working with the Chief of the U.S. Weather Bureau will assure that no flight service station located at an airport served by scheduled air transportation, fulfilling the requirements of a public certificate of convenience and necessity, will be taken out of service until a way is found for the Weather Bureau to budget for, acquire, train, and staff an appropriate airport weather station at the same locality.

Another area where FAA's continuance of flight service stations would be of assistance to the overall aviation community would be in relieving congestion. For example, were there a flight service station located at one of the airports other than Washington National in the Washington area, it is quite likely that general service aviation air-

craft would make considerable use of such an airport. We might even suggest that Administrator Halaby consider putting a flight service station in the general aviation terminal at Dulles as one means of developing traffic at that airport.

Mr. WILLIAMS. May I interrupt at that point?

Mr. BARTLING. Yes.

Mr. WILLIAMS. There has been some talk about the possibility of the Federal Aviation Agency taking over Bolling Field and making it an extension of the Washington National Airport, and directing most of the general aviation traffic into Bolling. With the suggestion you have made, it might well be that the flight service station would be moved to Bolling under those circumstances. If that were done, do you feel that that would relieve considerably the traffic that now goes into Washington National and eliminate a lot of the congestion?

Mr. BARTLING. I think there is no question of that, Mr. Williams. I think this would be a very acceptable idea from our standpoint.

Mr. WILLIAMS. It seems to me that Washington, being as large a city as it is, is very, very poor in general aviation airports. One of the most crying needs in this area now appears to be a general airport that would be available to general aviation, located fairly close to town. I think it might be well for this committee and the Federal Aviation Agency, and any other appropriate committees of Congress, to look into the desirability of acquiring Bolling Field for that purpose.

Would you feel that would be a commendable objective?

Mr. BARTLING. It certainly would be, Mr. Williams. I am sure you will get the full support of the Air Line Pilots on any proposal of this sort.

Mr. WILLIAMS. Thank you, sir.

Mr. FRIEDEL. I think they could avoid a lot of this overcrowding that exists at Washington National if they would shift a few more flights to Friendship Airport. They are just begging for business there.

Mr. BASNIGHT. Congressman Williams, if I may, in response to Mr. Friedel's remark, we certainly agree with him. There were well over 900 flights operated out of Washington National last Friday on one runway, due to the others being closed for construction. This is crowding the issue a little too much.

Mr. FRIEDEL. There is no question in my mind that Washington National is overcrowded now. A lot of these scheduled airlines could be shifted to Friendship.

Mr. BASNIGHT. You will notice we were very cautious in our remarks about Dulles not to say that it would be the best general aviation airport in the area.

Mr. FRIEDEL. I understand.

Mr. WILLIAMS. You may proceed.

Mr. BARTLING. If there are no further questions, I will continue.

While our particular interest in retention of FSS service goes to assuring adequate weather observing, recording, and reporting, we cannot help but be cognizant of the services performed for the air taxi operators, the executive airplane fleet, and other segments of general aviation which serve to provide connecting passengers and,

in so doing, extends the services we perform for passengers using the scheduled airline fleet.

We are also aware that a certain amount of training for the next generation of airmen is necessary. Therefore, we look upon the removal of flight service stations at airports having control zones which would lose them with the decommissioning of the flight service stations, and at airports where there is no airport Weather Bureau station, as a step backward in the fulfillment of FAA's obligation for safety to the aviation industry.

We are only too keenly aware of the potential collision menace between local airport flights operating just barely clear of clouds and an airliner making an approach on instruments, if one is not informed of the other. We can certainly have a dangerous situation. We would like to see some expansion of the type of service provided by the flight service station in such cases.

We would look upon it as a good thing if the committee could carry forward a program through the Congress to clearly outline areas where the U.S. Weather Bureau has responsibility, where it is not meeting this responsibility, and to also look at the overall FAA program to see if in fact it would not be a more realistic and economical reduction to cut back in other areas mentioned rather than in the flight service station program at this time.

To point up the matters which we believe FAA should consider in decommissioning an FSS station, we would cite four of the points presented by Capt. B. V. Hewes, our representative in Atlanta, Ga., appearing before an FAA hearing officer on the matter concerning decommissioning of the St. Simons Flight Service Station:

(1) Due to the airport being within one-half mile of the coastline, we frequently have light plane traffic flying VFR down the coast. As this is easy navigation, pilots with a low level of experience get caught in weather they cannot handle and appear over the airport VFR, with no radio, in the worst weather conditions imaginable. This often happens when an air carrier is shooting an approach.

(2) The presence of large flocks of sea gulls on the airport requires a visual observance that cannot be given on a land line from Jacksonville.

(3) The present staff of the facility is doing an outstanding job of airport reporting. They have prevented accidents or incidents on many occasions.

(4) Due to the short runways and poor approaches, only marginal safety conditions exist at this airport. It is good to know there is always someone on duty.

I believe these clearly outline to the committee areas of concern that are the rule, not the exception, to the airline pilot.

We very much appreciate your allowing us to present our views to the subcommittee, and would welcome an opportunity to offer additional comments in other areas where economies may be achieved once we are informed on FAA's programs.

I might add at this point that we would be happy to have some of the air carrier inspectors transferred to general aviation for Mr. Teetor, and we also agree with Mr. Cockerham that there should be a great deal more controller-pilot personal acquaintance and relationship.

Thank you, Mr. Chairman.

Mr. WILLIAMS. Thank you, Captain.

You mentioned Mr. Hewes' testimony on St. Simons. That is Brunswick, Ga., isn't it?

Mr. BARTLING. Yes.

Mr. WILLIAMS. I am advised when Mr. Hewes testified, that he made a very strong plea for the retention of the Brunswick Flight Service Station at St. Simons. But I understand also, and I believe this was testified to by some of the representatives from Brunswick when they appeared before the committee, that as far as ALPA was concerned, the other 41 could be closed. In other words, he emphasized there would be absolute necessity for retaining the one at Brunswick, and said as far as ALPA was concerned, the rest could be closed.

Since you represent ALPA, does ALPA disavow that statement or do they consider Captain Hewes qualified to testify in regard to the other stations?

Mr. BARTLING. I think, Mr. Chairman, I better field this question to Mr. Basnight, since he is a little better acquainted with this situation.

Mr. BASNIGHT. Captain Hewes is one of our excellent representatives at the local level. I am certain that in his mind's eye he was seeing his local area, which is the Atlanta area, and he did not speak for us nationally, therefore we disavow, for the organization, the recommended closure of the other 41 flight service stations.

Mr. WILLIAMS. I wanted to get that on the record.

You mentioned in your statement, Captain Bartling, on page 1, that you had met on two occasions with FAA and you had discussed with them and other users of the flight service stations the seeming incongruity of their two-point program. The Air Transport Association, in their testimony, testified, or at least left me with the impression, that insofar as airline operations were concerned, there was very little use of the flight service stations by their people.

To what extent do the airlines make use of flight service stations?

Mr. BARTLING. Mr. Chairman, I think that Mr. Smith, who has a very close personal relationship in this field, should answer this question.

Mr. SMITH. Thank you, Mr. Chairman.

We, on the local service airlines, use flight service stations to a great advantage. The first and most important use is more accurate weather reporting. Another important use is traffic advisories around uncontrolled airports. We operate into airports where that is the only facility on the airport, and we also operate into airports where there is no FAA facility on the airport. We feel that we are much safer where the flight service station is on the airport in contrast with the one with no FAA facilities.

Mr. WILLIAMS. Then do I understand that while minimum use may be made of these flight service stations by the trunklines, there is a great need for the retention of these flight service stations to serve local service operations?

Mr. SMITH. Yes, sir.

Mr. WILLIAMS. And local service carriers do make considerable use of the flight service stations?

Mr. SMITH. Considerable use; yes, sir.

Mr. WILLIAMS. Mr. Friedel?

Mr. FRIEDEL. No questions.

Mr. WILLIAMS. Mr. Devine?

Mr. DEVINE. No questions.

Mr. WILLIAMS. What carrier are you with, Captain?

Mr. SMITH. Piedmont Airlines.

Mr. WILLIAMS. You fly through the mountainous areas of the Carolinas and that section, don't you?

Mr. SMITH. Yes, sir; Bluefield, W. Va., and so on.

Mr. WILLIAMS. I would presume that in that section of the country you have numerous localized ground fog conditions, don't you?

Mr. SMITH. That is right, plus what we consider unusual wind conditions, varying wind conditions that need accurate reporting.

Mr. WILLIAMS. Would you elaborate on what terminal facilities are required for local service carriers?

Mr. SMITH. Are required?

Mr. WILLIAMS. Are required and needed for local service carriers.

Mr. SMITH. I am not sure I quite understand the question. We operate into some airports with absolutely no facilities other than our company radio receiver.

Mr. WILLIAMS. Let's put it this way: What facilities are needed for the maximum safety in operation of local service carriers?

Mr. SMITH. Control towers, and control zones. That is what we need at all airline stops. The flight service station is not as good as a control tower, but it is far better than no assistance at all.

Mr. WILLIAMS. What you are talking about, then, in a sense, is an increase instead of a decrease in the terminal service, and the availability of service.

Mr. SMITH. Yes, sir. The view of our pilots is that we are being asked to do more and more with less and less, by the removal of these facilities.

Mr. WILLIAMS. Could you inform the committee whether or not this is true with respect to all of the airlines throughout the country, local service and trunklines as well?

Mr. SMITH. We just had a meeting yesterday of all the local service safety representatives, and the general feeling of the whole group was that we do not want these removed and that they are an aid to us. We would rather keep them.

Mr. WILLIAMS. Are there any further questions?

If not, thank you, gentlemen, for your testimony today.

Mr. BARTLING. Thank you, sir.

(The following letter was received for inclusion in the record at this point:)

Hon. DON CLAUSEN,
Congressman, First Congressional District of California,
Washington, D.C.

DEAR DON: We would like to expand on the Air Lines Pilots Association comments before the Aviation Subcommittee of the Interstate and Foreign Commerce Committee, U.S. House of Representatives, in the following manner:

First, we would like to endorse the entire statement of Capt. Joseph Bartling, chairman of the Air Traffic Control Committee of the ALPA.

Second, we would like to state that the ultimate goal of the ALPA would include complete navigation aids and adequate airport facilities at all airports served by scheduled air carriers.

Third, we suggest full consideration be given to the fact that though the airport in question may not provide a high density of traffic, there remains the truth that a great number of passengers are being carried through the intermediate station now having substandard navigation aids and/or airport facilities.

In closing, may we state that this seems economically feasible because there is general feeling in the industry that our next and most important market increase is in the area presently served in the local service concept and its related importance to the overall transportation growth.

Only by increasing navigation aids and facilities can we increase the safety and encourage and improve upon schedule reliability and its benefits to the traveling public and the economic stability of our industry.

Sincerely,

Capt. O. J. BANKS,
Chairman, Pacific Air Lines, Air Lines Pilots Association, Council No. 3.
Capt. EXLINE BROWN,
Pacific Air Lines.

Mr. WILLIAMS. Mr. A. B. McMullen, executive vice president of the National Association of State Aviation Officials, will be the next witness.

STATEMENT OF A. B. McMULLEN, EXECUTIVE VICE PRESIDENT OF THE NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS (NASAO)

Mr. MCMULLEN. Mr. Chairman, I am A. B. McMullen, executive vice president of the National Association of State Aviation Officials, commonly referred to as NASAO, whose membership is composed of the aeronautics commissions and departments of the various States.

Before proceeding with my prepared statement, I want to state, Mr. Chairman, that all NASAO officers and members join me in commending you, Congressman Harris and the members of your committee, first for your very active interest in aviation and the time you have devoted to investigating the effect the closing or consolidating 42 flight service stations as proposed by FAA would have on the safe and efficient operation of aircraft; and, second, for your successful efforts in obtaining the adoption of legislation which would prohibit the Federal Aviation Agency from closing any additional FSS stations during fiscal 1965.

Mr. Chairman, I wish to strongly and heartily endorse your previous suggestion that this committee and the FAA promptly undertake a study to determine what action should be taken to preserve Bolling Air Force Base as a general aviation airport. I can think of no action or development that would be of greater importance to Washington or the United States.

The association appreciates the opportunity provided us to submit our views with respect to the current plans of the Federal Aviation Agency to remote, consolidate, or eliminate many flight service stations throughout the United States.

Mr. WILLIAMS. Mr. McMullen, for the benefit of the committee, how many States have a designated State aviation official?

Mr. MCMULLEN. Forty-three, of some type. About three-fourths of them are independent commissions or departments, composed of a board of commissioners appointed by the Governor.

Mr. WILLIAMS. These are representatives of the State governments, are they not?

Mr. McMULLEN. That is right. They, in turn, of course, employ the director and such employees as the Legislature has made provision for, budgetwise and otherwise.

The association functions the same as the American Association of Highway Officials, which represents the various State highway departments, or the Council of Chief State School Officials which represents the various departments of education. The National Association of State Aviation Officials represents the departments of aviation in various Sates.

During the tenure of office of the present FAA Administrator, it has been seldom necessary to voice a complaint that was rather frequent in years gone by; namely, that the FAA or the CAA, its predecessor agency, had not consulted with the industry and airspace users on a matter of vital concern to them.

We are not advoctaing that the FCC should obtain approval or permission before moving ahead with its programs and projects, but we feel very strongly that the Agency should take advantage of all of the operating, technical, and administrative experience that is available both within and outside the Agency.

In this case, this hearing might never have taken place had FAA consulted with interested and affected persons regarding proposed changes in the flight service station network prior to making a final decision. Certainly some very worthwhile suggestions and recommendations have been submitted by industry groups and users since the February 4 announcement of the planned consolidation of 42 flight service stations.

These suggestions and recommendations, which have resulted in FAA's reconsideration of several of the 42 stations, could have been received just as readily before, as they were after FAA's decision was announced.

Inasmuch as NASAO members have not been advised of the reasons for selection of specific stations among the 42 scheduled for consolidation, even after the February 4 notice, nor informed the detail as to how information regarding weather, flight plans, air traffic, and airports, is to be provided when individual stations are deactivated or remoted, it is impossible for the association to submit other than general recommendations or comments at this time.

NASAO's primary interest in the FSS program and network is the capability to provide all pilots—novice and professional—with the accurate weather information, navigation, communications, and airport advisory services, necessary to assure safe and efficient utilization of their aircraft.

The type of facility—the title of the person—or whether the service is provided by the Federal Government is secondary, although there are advantages to this type of information being provided by or under the direction supervision of a single agency.

Therefore, we are not arbitrarily opposing the consolidation of flight service stations. As a matter of fact, several directors of aeronautics in States affected have reported that the remoting of communications will have relatively little adverse effect on safety of operations in their respective States, provided adequate weather observation and reporting personnel and facilities are maintained.

In the February 4, 1964, news release issued by FAA, it was stated:

> The consolidation action of these 42 stations follows a painstaking analysis by FAA of the role of the flight service station in tomorrow's air traffic control system. Participating in this analysis was the U.S. Weather Bureau, which has a direct interest in certain FAA facilities for weather observation and reporting purposes. None of the 42 stations being consolidated are needed for either function.

From the number of persons that have subsequently protested this action by FAA, it would appear that the analysis was not as thorough as it might have been—and that there is definite disagreement on the statement that none of the 42 stations are needed for weather observation and reporting.

For many years, every agency and organization concerned with the safety of flight, whether Federal, State, or industry, has carried on a continuing program of educating pilots regarding the need, and encouraging them to file flight plans, obtain all possible information on en route weather, the procedure to follow if lost, and other safety measures designed to lower the accident rate, and reduce the tremendous amount of time and money expended annually in searching for down aircraft. To take away any facility providing such information and service, without providing a satisfactory alternate, would be highly detrimental to the aviation industry.

FAA has stated that the basis for the present consolidation of 42 flight service stations is economy. NASAO members are somewhat skeptical that any substantial saving will result in most cases, since FAA plans no reduction in personnel as a result of the consolidation, and considering the landline and maintenance costs of remote control, and the cost of moving personnel, families, household goods, and so forth.

FAA has suggested that State and local governmental agencies and fixed-base operators should assume a portion of the responsibility and cost of providing weather and airport information, and communications facilities.

While this suggestion may merit consideration, it will take time to explore and develop. At the moment, NASAO members are of the opinion that a very limited amount of experienced and reliable manpower could be made available in the immediate future from either State aviation agencies, airport management, or fixed-base operations, although several States already operate a variety of navigation aid and communications facilities, and others pay telephone toll charges from outlying airports to FAA facilities in an attempt to encourage pilots to file and close flight plans.

As previous witnesses have pointed out, these people should be pretty well trained for this particular purpose, and, of course, there is the item of the budget. You can't expect these people to volunteer their services on a day-after-day basis without some remuneration.

Most State agencies and airport owners would require time to obtain approval of needed appropriations and/or operating funds.

Although approximately 1,500 airports and FBO's man and operate Unicom stations, which provided local weather and airport advisory information, it is believed that relatively few airport or fixed-base operators could or would accept the responsibility or the

cost of operation of "manicoms" or "airport information desks," on a regular schedule, as proposed by FAA.

At many small airports, the manager and fixed-base operator are one and the same person, who normally handles all or much of the instruction and charter work. This would often leave the gas-pump boy to handle weather observations and to provide flight information.

In this connection, NASO is of the opinion that the U.S. Weather Bureau should have general supervision over all weather facilities and personnel engaged in weather observing and reporting, with that Agency making arrangements to utilize the facilities and personnel of other agencies, and industry, when a financial saving can be accomplished without unduly compromising reliability and accuracy.

In view of the foregoing, NASAO recommends that any deactivation, remoting, or consolidation of flight service stations be done on a station-by-station basis, and that any major changes in the air navigation and communications system be undertaken as a long-range program.

Also, that a pilot program to test the feasibility and practicability of the "manicom" and "AIDS" theory be conducted prior to wholesale decommissioning of additional flight service stations.

In other words, we should find out whether this theory is practical or not before beginning a wholesale decommissioning program.

State and local officials and user groups should be afforded full opportunity to participate in the development of plans and programs, and to comment on proposals to consolidate or decommission individual stations.

It is also recommended that other methods of economy be explored. For example, service might be provided on a part-time basis; that is, during daylight hours, or on a one or two 8-hour-shift basis each day, where traffic is relatively light during the hours of darkness.

Further economy might be accomplished by curtailing specific services now provided by flight service stations, particularly those located in small towns or isolated areas, thereby reducing the personnel required.

The flight following service might be deemphasized. Airport advisory services should be on a voluntary, on-call basis, rather than requiring by regulation that pilots obtain traffic, landing, and taxiing advice and instructions from an FSS employee, who may be located in a basement or backroom with no view of the airport landing area or surrounding airspace.

Another method of economizing which we feel FAA should explore, and which might permit expansion, rather than reduction, of weather and other types of advisory service, would be the use by FAA of less expensive hardware than that presently being purchased. This applies to other facilities as well as flight service stations.

We believe various States have already demonstrated this method of economy. Following are specific examples which are taken from a paper presented by S. B. Poritzky, manager, Navigation Division, Air Transport Association of America, during a symposium "The Smaller City Airport," sponsored by that association on June 4, 1963—less than a year ago. After making a careful study of comparative costs and operational efficiency of State and federally owned facilities, Mr.

Poritzky said—and I quote from the booklet entitled "The Smaller City Airport," from the minutes of this symposium. He said:

> Let's * * * use the TVOR as a case in point * * * the new building for an FAA TVOR—Cost: More than $55,000. * * * Compare this to the building in which Minnesota houses dual VOR's. * * * The price: $10,000. Less than one-fifth of FAA's cost.
>
> FAA budgets $18,000 for runway end identification light installation. The State of Minnesota budgets $3,000 for lights to serve exactly the same purpose.

Mr. WILLIAMS. With respect to the building in which the TVOR is housed, does the $10,000 building serve exactly the same purpose and is it equally as satisfactory in its operation as the $55,000 building?

Mr. MCMULLEN. The $55,000 building as I understand it, is large enough to provide for future installation of equipment if and when it is needed. I suppose it is more goldplated than the State building, but from the outside appearance they look very similar, except for size.

Mr. WILLIAMS. What about the runway end identification lights? Do the cheaper lights serve exactly the same function and as efficiently and as well as the more expensive lights that you mentioned in the second item?

Mr. MCMULLEN. I will cover this in a second paragraph, Mr. Chairman.

A 75-megacycle fan marker—

> FAA's estimate $250,000. The State of Nebraska estimates about $3,250 for a dual marker, complete (about one-eighth the FAA cost).

We always have the question you asked when we make these cost comparisons. Mr. Poritzky investigated the very thing that concerns you, the reliability on the operating efficiency of the FAA and State equipment.

He said:

> Let's look at operational availability of some * * * non-Federal facilities * * * FAA's VOR system had an operational availability, in fiscal year 1962, of 98.17 percent. Nebraska's Ainsworth single VOR facility had an operational availability of 98.14 percent—(its) McCook, Nebr. (VOR), 98.83 percent. Nebraska's single station H facilities over the same period had an operational availability of 99.63 percent as opposed to FAA's 99.14 percent.

It was still better.

Mr. WILLIAMS. What does the H mean, a high frequency?

Mr. MCMULLEN. No, it is low frequency. The most commonly referred to H facility is the former four course range, where the four courses have been removed and it is just a homer, serving for homing and communications purposes.

These figures indicate that air navigation and communications aids can be purchased at prices far less than what FAA is paying, and that they can provide as good or better operational service. If you save only 50 percent on the purchase of an item, you can buy twice as many for a given amount of money.

Mr. WILLIAMS. May I point out another instance where it appears that savings could be affected so far as hardware costs are concerned. That is the FAA attempt to standardize these control towers.

As I understand it, a minimum of $30,000 is being allocated to each tower being built now, and a great portion of that cost goes into a rather unique and elaborate architectural design being applied by the Federal Aviation Agency when a simple cab on top of the tower in many instances would serve the same purpose.

Have you had a chance to look into the FAA tower building program?

Mr. McMULLEN. Only in a general way, Mr. Chairman. I do not consider myself competent to comment on either design or cost, although just from general observation, from what I do know about it, it appears more costly than is necessary in many cases.

Mr. WILLIAMS. I have been advised, as a matter of fact, by people in the Federal Aviation Agency, that they feel that in many cases a $50,000 tower would serve the same purpose as some of these elaborate $300,000 and $400,000 towers being built by FAA.

Mr. McMULLEN. That has been proven by experience. We have operated out of those priced towers for years. It is just like these other facilities, you can get by with much cheaper equipment if you want to.

State and local units of government now share the cost of providing many aviation facilities and services. Their participation in the Federal aid airport program is one example—the preceding paragraphs contain references to several States that provide air navigation and communications facilities to supplement the Federal airways system.

We believe State and local governments would favorably consider sharing even greater costs if given opportunity to jointly study, plan, and coordinate projects and programs with Federal agencies.

In this connection, Mr. Chairman, NASAO has strongly recommended that approach lights, even a small homer, and low expense visual guide slope indicators be included in the Federal aid to airport program as eligible items. In that way, the community would immediately pay for half of the installation cost as their share of the project and then operate them the same as they would operate the airport after they are installed.

In that way, it would save the Federal Government considerable expense and would make it possible to provide more and more of these general aviation airports with these kinds of aids which would make them available 24 hours a day instead of just under VFR conditions.

We feel if you spend money to pave the runways and to install runway lights, then you ought to install the necessary approach aids so that you can use the airport in marginal or instrument weather.

In this connection, I would like to read excerpts from a letter dated April 14, 1964, in which Mr. Charles A. Lynch, director of the Montana Aeronautics Commission, advised the FAA Kansas City regional office how the FSS cutback in service could affect a very unique service that commission provides all Montana pilots.

For the purpose * * * of doing a service to the pilots of Montana, to enhance the use of flight plans in VFR flight, to assist in minimizing the needs for search and rescue operations, and to more fully utilize the facilities of the FAA flight service stations, the Montana Aeronautics Commission inaugurated in April 1963 a Montana pilot flight plan service for the registered pilots in the State, permitting them through the use of Aeronautics Commission telephone toll cards, issued to the chiefs of all FAA flight service stations here in Montana, to utilize (the nearest FSS) for the purpose of filing or closing flight plans and securing weather briefings.

This program, though costly * * * has been widely accepted, and generally expounded as a service of value to the flying public. (A comparison of the number of flight plans filed during the 10-month period following inauguration of this service—with the number for the same previous period of time—showed

that the additional flight plans filed as a result of the service exceeded 2,000.)

* * * the average (telephone) cost (to the State) for this service has been 74 cents per flight plan. Very obviously, if a number of flight service stations were to be remoted, the pilot would be forced to call the "hard core" station. This, conceivably, would greatly add to the cost of the individual telephone call and could in the end, create a prohibitive burden to the point where the service might have to be curtailed by the Montana Aeronautics Commission.

The policy (of the Montana Aeronautics Commission) has always * * * (been) to work and cooperate with the Federal Aviation Agency. This, I believe, has been very actively demonstrated in the FSS location on Beaverhead County Airport at Dillon, Mont. * * * (where approximately) $80,000 was provided by the Montana Aeronautics Commission from its airport facility development fund for the construction of the building.

This, I believe, to be exemplary of the desire of the aviation public in Montana to work with the Federal Government in the establishment and retention of a sound and throughly safe aviation system.

* * * may I say, that if the entire picture relative to air-space utilization and the placement of navigational facilities in the great State of Montana, which I might add is first in the Nation in the business use of private business aircraft, is not perfectly clear to the officials of the central region office of the FAA and to those in position of command relative to policy at the Washington level, may I cordially invite you to participate with us at some time during the coming summer of 1964 in a low elevation, light aircraft tour of all the FAA facilities in the State of Montana.

(NOTE.—FAA has subsequently started a low-level flight survey in the mountainous areas of Montana.)

I believe this illustrates the need for discussion between the FAA, the users, and others, before they make a decision with respect to these 42 stations.

NASAO is strongly in favor of economy in government at all levels, but making, as well as saving, money is important in our free enterprise systen of government. It is our opinion that fostering the development of general aviation merits particular attention at the present time, and that modernization of the air navigation and communications network, with greater emphasis on services to general aviation is long overdue.

The Federal Aviation Act directs the Administrator to encourage and foster the development of civil aeronautics and air commerce in the United States and abroad, and FAA should place greater emphasis on the development of the industry, particularly the general aviation segment.

Weather is aviation's greatest killer. Better weather information, from more locations, and to all pilots, regardless of their location, should be a major objective. In connection with the latter, Mr. Chairman, I know that you and members of the committee are aware of the fact that reception of VHF omnisignals and voice communication is governed by three main factors: (1) altitude of the aircraft above the omnistation or location of the VHF transmitting antenna; (2) distance from the station; and (3) mountain terrain and other line-of-sight obstructions.

This means that hundreds of airports cannot obtain weather and other information from omnistations, and there are large areas, particularly in mountainous States, where these facilities are of no value, for either navigation or communications purposes at relatively low altitudes, where much of general aviation flying is conducted.

Most of the old 4-course L/MF ranges have been deactivated, and NASAO does not generally oppose the elimination of the four-course feature from the remaining L/MF facilities. However, the association is strongly opposed to the removal of the L/MF facilities where they are needed as H facilities for navigational aid and communications purposes, and we are much concerned regarding FAA's continued moves to eliminate these much needed facilities which are already installed and paid for.

I would like to use this map of Montana to illustrate what I have referred to. Here is an ominstation in a relatively flat area, with the distance shown by a circle, approximately 45 miles from the station, where you can pick up communications or hear the signals from the station at 1,000 feet altitude.

The second ring is approximately 60 miles, from the station, at which you can pick up the signal, from 2,000 feet.

Now let's go over into the mountainous area. Here are shown nine omnistations all located within a relatively small area. Even from 1,000 feet altitude, you can only pick up the signals within the red-lined areas. That means that large areas in the western part of Montana, where you really need communications and navigational aids, receives no services from these stations at the lower altitudes.

The point I make here is that we still need the low frequency stations. We are very much opposed to the removal of the low frequency stations which provids signals right down to the surface in all the valleys and crevices of the mountains. You can see that from a particular station you might only get a signal for approximately 2 miles in one direction and out to 20 miles up the valley in which it is located. Sometimes within 5 miles of a station you will not get a signal, you will not get the weather information.

On the above map of Montana the dots show the flying farmer and ranch airports. This is something few people have knowledge of. All the agricultural States are dotted with flying farmers who own their own airplanes and keep them on their farm or ranch, using them as another farm vehicle for transportation, crop-dusting, or cattle-counting and so forth.

With this sort of a situation, this means that a farmer located in the central areas between omnistations cannot tune in on this facility to find out what the weather is before he begins a flight. He would have to get up to 2,000 feet, 60 miles from the station, and if he was farther from the station he would probably have to go up 4,000 or 5,000 feet to pick up the station.

So we strongly recommend that the FAA not proceed with the decommissioning of these low frequency ranges in the same manner that they are planning on decommissioning the flight service stations.

NASAO's policy in this respect has been a matter of record for a number of years. Revised as of October 1961, the policy presently reads:

> Except for the deletion of the four-course feature where there is no longer a substantial demand therefor, no low frequency radio range now operating (1961) in mountainous terrain should be decommissioned unless some other existing radio navigational and communications facility provides equal service at all legal flight altitudes, whether IFR or VFR, within the area normally served by the low frequency facility proposed to be decommissioned.

The present omnistation does not give the coverage in mountainous areas that the L/MF facility does.

In flat terrain where omniranges provide a satisfactory air navigational aid to reasonably low flight levels, sufficient low-frequency radio facilities should be retained to provide complete weather and flight information coverage to all airports and aircraft.

Mr. WILLIAMS. Mr. Springer has a question.

Mr. SPRINGER. How will you remedy the situation you are talking about?

Mr. MCMULLEN. By retaining the low-frequency aids, and there are now about seven or eight still in Montana. One of them is located at Livingston, another one at Whitehall. These two were recently included in a list to be decommissioned by the FAA. You can see that right now these low-frequency ranges provide the only low-level coverage, for information, communications, and navigational aid. Anyone flying in these valleys can tune in and get a fix on the low-frequency range or get weather information. I do not know whether you understand, Mr. Springer, but you can only pick up a very-high-frequency signal on a line of sight. In other words, if a station were located here on the floor, you could not hear it behind the desk. You could hear it on a line of sight over the desk. That same principle applies in these mountains. The reason you can hear a signal for a longer distance to the south of the Missoula, Mont., omnistation is because the valley is open to the south, whereas the mountains to the west blank out reception about 2 miles away.

Mr. SPRINGER. Are you saying that Mr. Halaby is going to discontinue these without performing some other service; that he is going to abandon service? That is not the way I understand it.

Mr. MCMULLEN. That is right. That is what we recommend not be done. But the stations in the mountainous areas——

Mr. SPRINGER. Excuse me. Let me ask you this: Is it your understanding that the Administrator is going to abandon the service without replacing it with some other service?

Mr. MCMULLEN. Slowly, yes. We have opposed this. I understand they have changed their minds about decommissioning these low-frequency H facilities at Livingston and Whitehall after they found out how much opposition there was by the State and the local users.

Mr. SPRINGER. Let us say anyplace. Is he suggesting that he decommission some of these flight service stations without replacing it with another service?

Mr. MCMULLEN. You said, "Flight service stations." Is that what you meant or did you mean the low-frequency stations?

Mr. SPRINGER. Let us take both of them, either one of them, service stations or low-frequency stations.

Mr. MCMULLEN. Speaking with respect to the flight service stations, Mr. Halaby, as I interpret his remarks before the committee and in the industry briefings he has recently conducted, is of the opinion that they will provide a satisfactory service in some way. Members of NASAO would have no objection to that, if they could provide a comparable service in some other way. One way, for example, is if you had a control tower on an airport where there was a flight service station.

If the control tower personnel could be increased and the facilities increased to where they could provide comparable service to that the FSS was providing, we would have no serious objection to flight service stations being decommissioned there, if it could save a substantial amount of money.

Mr. SPRINGER. I guess our understanding is the same, then, that if there is a service that is as good or better as the service presently provided, you would have no objection.

Mr. MCMULLEN. That is right.

There is one other point in connection with these low-frequency ranges that we are concerned with, in addition to providing service anyplace, anywhere, at any altitude in the mountainous areas.

We want enough of these stations retained throughout the entire United States to provide complete coverage for the dissemination of weather information, search and rescue, civil defense, and air defense flight movement directives to airports and aircraft. That is the only way you can get this kind of information disseminated through an aviation communications network, down to the ground, to all the airports and all the airplanes flying at low levels, by retaining a network of these low-frequency stations.

They do not have to be as close together as they were when they served as a primary aid for airways, because the power can be increased enough to provide complete coverage. It has been determined that 88 stations—and there were originally about 420 of these low-frequency stations throughout the United States—88 stations, we think, would be sufficient to provide the civil defense, search and rescue, and weather information that should reach any airport or any airman, regardless of any altitude.

In addition to the 88 additional stations needed to provide communications coverage in the United States, you would probably have to retain more in the mountainous area. Probably somewhere around 150 stations altogether should be retained.

To continue Nasao policy:

> Where L/F radio ranges are to be converted to H facilities, the voice communication feature should be retained to provide for the broadcasting of weather, traffic, and other appropriate information, and the H facility should be available for ADF navigation and instrument approaches.
>
> The power output of low-frequency facilities retained in operation should be increased, where feasible, and where necessary to provide complete coverage for the dissemination of weather information, search and rescue, civil defense, and air defense flight movement directives to airports and aircraft.

In conclusion, the general aviation segment of the industry increased approximately 15 percent last year and, given reasonable encouragement and assistance, the sale and use of general aviation aircraft may be expected to steadily increase during the next decade, and beyond.

If we are able to expand this segment substantially, and I think we can, it will do much to offset the planned curtailment of military aviation programs and the unemployment that may result.

We have only to note the prosperity and national economic benefits that have resulted during the growth of the automotive, the pleasure boat, the radio, television, and similar industries, to visualize what a healthy and booming general aviation industry could do for the United States.

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These potential economic benefits to the Nation should be considered carefully and balanced against the possible savings that might be obtained by a cutback in the FSS or any other FAA program or service that adds significantly to the safety and utility of general aviation aircraft.

Mr. WILLIAMS. Does that conclude your statement?

Mr. MCMULLEN. Yes, sir; it does.

Mr. WILLIAMS. Mr. Springer, have you any questions?

Mr. SPRINGER. No questions.

Mr. WILLIAMS. Mr. McMullen, you have covered the subject matter thoroughly. I would like to compliment you on a very excellent presentation.

I believe that concludes the list of witnesses that we had scheduled for today.

Incidentally, that concludes the list of lay witnesses that we have scheduled on this subject. Tomorrow we had requested the Administrator of the Federal Aviation Agency to come over and to wrap these hearings up, so to speak, and we hope we will be able to conclude these hearings altogether tomorrow with his appearance.

Thank you very much.

The committee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 11:55 a.m., the subcommittee recessed, to reconvene, at 10 a.m., Wednesday, May 27, 1964.)

FLIGHT SERVICE STATIONS

WEDNESDAY, MAY 27, 1964

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND AERONAUTICS
OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1334, Longworth Building, Hon. John Bell Williams (chairman of the subcommittee) presiding.

Mr. WILLIAMS. The subcommittee will come to order, please.

This morning the Subcommittee on Transportation and Aeronautics plans to conclude its hearings on the present and future role of the flight service stations with the second appearance of the Administrator of the Federal Aviation Agency, Mr. Halaby.

Mr. Halaby, I believe you indicated to me that you have a prepared statement. Is that correct?

STATEMENT OF NAJEEB E. HALABY, ADMINISTRATOR, ACCOMPANIED BY DAVID D. THOMAS, ASSOCIATE ADMINISTRATOR FOR PROGRAMS; LEE E. WARREN, DIRECTOR, AIR TRAFFIC SERVICE; AND D'ARCY HARVEY, FEDERAL AVIATION AGENCY—
Resumed

Mr. HALABY. Yes, sir; I have a statement to make if the committee wishes or we can go right to questions, either way.

Mr. WILLIAMS. Proceed.

Mr. HALABY. Mr. Chairman, we have reviewed the testimony presented to this committee in the last 2 weeks and witnessed the procession of interested citizens and organizations which appeared here. We know that you appreciate the interest of these people coming to Washington to press their cases and explain their problems. I want to say, too, that we appreciate the efforts these people have made. We need their help as well as yours in refining our ideas and programs.

I have noticed also the floor debate last Thursday on our FAA appropriations bill. An amendment was made to this bill which I gather was intended to prevent the closing of any flight service stations during fiscal 1965. This matter will be looked into carefully by the executive branch when the bill becomes law and we will of course comply with all appropriate legal principles.

Mr. WILLIAMS. The Senate hasn't yet concurred in that. We realize that.

Mr. HALABY. Yes, sir. I understand that. I might say that, if anybody should ask us, we are not too happy with the appropriations bill in that it cuts our research and development 50 percent at the

very moment that we have gotten the program into its tightest condition, from $42 to $21 million, and in the same bill over $5 billion is voted for other kinds of research and development, that do not have to do with the safety of our public.

It also cuts our facilities and equipment budget for towers, radars, very important navigation and communications facilities, by 33 percent in the tightest budget we have ever presented, with a reduction in personnel. For the first time in the history of the FAA a lower budget was presented than the previous year. So above and beyond the provision that we must continue facilities that we do not think are necessary are some very deep slashes in our whole research and development program and our facilities and equipment program. I guess it would only be honest of me to say that we feel that that is a most serious step and one that will set us back and cripple our research and development program.

In general, may I say that we would hope the Congress would not at this time, while hearings on the merits of the FSS program are still underway, make it impossible for us to do any work during fiscal 1965 or to proceed confidently with the preliminary arrangements which will be necessary during that period should this program that we have outlined be as desirable as we think it is.

As you know, we never indicated that any of these flight service stations would be closed immediately or arbitrarily and in the program I presented to you I believe the earliest consolidation was over a year away, so that the word "continuation" in the House bill we hope was not intended to make it impossible for us to start what we think is a very hardheaded program of safety with economy.

In analyzing the testimony before this committee on the flight service station program we have seen a number of questions that need clarifying. I would like to address myself first to some of these basic questions and then be available to answer any questions you have.

To begin with, I would like to clarify the questions about the background for our February 4 announcement listing 42 flight service stations to be consolidated.

The entire national airspace system has been the subject of study over the past several years and flight service stations, being a subsystem of that system, have received their due share of analysis.

In three studies in particular flight service stations have been directly concerned. One, entitled "The Role of the Flight Service Station," was completed in 1962 and was a general study of the system.

The second study, which developed the concept of common aviation service stations, colloquially known as CASS, involved a cost analysis of flight service stations and some developmental plans for the future flight service station system. This study was completed in September 1963.

The most elaborate study was the national aviation weather systems study. This was a joint FAA-Weather Bureau effort commenced in the summer of 1963 to look at the entire aviation weather system and to make recommendations on its optimum use and future development. As one phase of this study, the possible duplication of weather facilities at certain locations by flight service stations and Weather Bureau stations was examined. In the course of this study it became possible to identify a number of flight service stations which could be remoted

without substantial loss of weather services, and the 42 stations mentioned in our February press release were among this number.

The proposal to consolidate these stations has brought a great deal of criticism. Much of it was the kind of criticism always associated with the closing of any Federal facility. Misunderstanding, I guess, also is the source of some of this difficulty and it must have been our fault because it may not have been understood how deep and broad the study of the weather needs at these locations had been, or the ways in which these weather needs could be met.

Some of the criticism, however, cut deeper and went to the merits of our program. It became quickly apparent that a full-scale flight service station consolidation program would have to be based on considerations beyond the scope of the Weather Bureau-FAA study, which was limited largely to weather considerations, because of the greatly desired local terminal services other than weather services that would be affected by any program.

The program I described to you 2 weeks ago is the product of several months of intensive study of these other needs, particularly for terminal services. The Manicom and AID facilities which I described earlier as replacements for remoted flight service stations are designed to meet the need for these local services.

I hope this brief explanation clarifies the relationship between the several studies which have been made in the past, the announcement in February of the 42 stations to be remoted, and the program we have proposed to this committee. That program, I want to emphasize, rests on the foundation of several years of careful research and hard thought about the problem of bringing up to date, to meet modern traffic and use modern technology, of the flight service subsystem.

Incidentally, we now have 15 years' experience in how to close flight service stations without cheating on safety. It has been a hard experience, as any proposal to change the status quo is a hard experience.

One question which came up frequently during the first part of these hearings related to the spacing criteria for the approximately 150 hard-core service stations in our proposed program. Actually, these criteria are not the product of an exact exercise in geometry. They do not permit us to space stations in such a way that the distances between them will be completely uniform.

The existing FAA network has stations in it closer together than 50 miles and stations along routes as far apart as some 170 nautical miles. In identifying the hard-core sites we will need, of course, to stay within this existing broad framework. We will select our hard-core stations basically in terms of activity. Where selection by activity gives us two stations closer than about 100 miles, however, we will eliminate the lower activity stations. We will thus be able to disperse the hard-core stations more uniformly around the country.

This does not mean that there will not be stations farther apart than 100 miles. It does mean that sparsely settled areas of the country will retain more full-time hard-core stations than could be possible if we used activity alone as the criterion.

It also means, and this is the important point, that the system will retain the maximum communication and direction-finding coverage nationwide.

Another question which came up frequently during these hearings had to do with the basis of our cost estimates. I would like to give you as precisely as I can a summary of these costs as we currently estimate them, and an indication of what is included in these estimates.

Within the continental United States we have 297 flight service stations. We intend to retain about 154 of these facilities as hard-core stations. Six more will become combined station-towers. Of the 137 sites remaining, about 85 will become Manicom's and about 30 will become AID's.

Mr. Chairman, I think it might be useful to give you a sort of a box score we have. I have just seen it this morning myself, so I will keep one copy, if I may and perhaps the members of the committee could see it. It says what I am just saying now in tabular form.

Mr. WILLIAMS. Does that give us a breakdown of which stations will become AID's and which will become manicom stations?

Mr. HALABY. The numbers; yes, sir.

Mr. WILLIAMS. Does it give us a breakdown on the individual stations?

Mr. HALABY. No, sir. I presume that the committee wants to leave to the executive branch the execution of the program and it also presumably does not want to get into individual station questions.

Mr. HARRIS. Why shouldn't we get into individual station questions, Mr. Halaby? After all, we represent the people of the United States. We represent the people of our various areas who are concerned, and why shouldn't we have information from you as the Administrator about what happens to an individual station? If you have the information to justify your action at any particular station we are entitled to the information.

Mr. HALABY. Well, sir, I give each year in connection with our appropriations request a list of place names where we would install a tower or any other kind of facility and that is the normal legislative process. When we apply criteria, which is part of executing a program, I don't believe there is any precedent for each individual site selection being debated by a committee of the Congress.

Mr. HARRIS. Well, we are making that a precedent if that is the case, and I do not agree that it is a precedent. We have had it over the years, not only in the matter of aviation, but with reference to weather, post office buildings, airports, hospitals, and the innumerable programs that we have, and this proposition of sort of dancing around over the lot just simply doesn't strike me as the right kind of approach to it.

I don't mind saying in all frankness that I was inclined to do what I could, and I started last week, as did Mr. Williams and others, to help straighten this thing out, but I want to tell you we got shifted all around the lot and when we were being moved around on the floor of the House by the Appropriations Committee with nothing to go on except "Just leave it to us and we will bring it out," it didn't satisfy the Members of the House, and I don't think that is the way to do it.

The chairman himself, as much as I like him and respect him, and he is a very warm friend of mine, and a great man, a great Member of the Congress, very able Member, would only say, "We will work it out. I will see that we work it out. We will get Halaby down here in your committee room in the morning."

I said, "Well, now, Mr. Chairman, in the morning the bill will be passed. It's gone." And I just think that we are entitled to more information, if you will pardon my frankness, on this thing, and we are entitled to more information about what is going to happen to the stations at Arcata, and at Brunswick, Ga., and these other programs.

If you have this program worked out to where you know how it will serve the best interests of all the country you should have the information to explain what is going to happen to an individual station when it is scratched out.

I want to help in this program, as I said on the floor of the House, but you came to us and told us, if I remember correctly, that you were taking this action because the Appropriations Committee directed you to do it.

Mr. HALABY. I remember, sir, the language of the two appropriation reports.

Mr. HARRIS. On the floor of the House last week, admittedly, there was language in the report, as they carried it last year, but they also then came back and said it was up to you to not close this station or that station. We don't like to be shifted around and have the responsibility to go from one to the other.

Frankly, I got the impression out of the whole thing of hearing you and hearing them that an accord or agreement has developed between your Agency and the Appropriations Committee to do certain things to certain areas of this country with these stations without giving the people in those areas an opportunity.

Mr. HALABY. Mr. Harris, if that is so I would like to end it right now. They have cut my budget most severely.

Mr. HARRIS. I have complained of that.

Mr. HALABY. They cut 1,500 positions out of a budget already cut below the present and projected level, and if that is an agreement I would love to end it right this minute because it hurts very badly.

Mr. HARRIS. I complained about it bitterly on the floor of the House, if you read the Record.

Mr. HALABY. Sir, all I got was a continuation of stations that we believe we can do without with safety and economy.

Mr. HARRIS. You told us you had no intention of closing any station down in the next 12 months. Did you do that or not?

Mr. HALABY. I said that in the last testimony and I repeated it again here this morning, sir.

Mr. HARRIS. If we are going to get to that let's find out what the facts are then. What we are trying to do with this action that we are taking is to say that you are not going to take the whole thing out of flight service stations, and you told me in our discussion of it that you would have to go to the high priorities and therefore the bulk of it would have to come out of the program to close the stations. Wasn't that true?

Mr. HALABY. If that is your understanding of my statement I apologize for misleading you. What I intended to say was that, with a cut of 1,500 positions out of our appropriation request, which was cut $10 million, with a cut of $25 million out of a request for $75 million, which had already been cut at the Bureau of the Budget level, and with a cut in research and development, we would have to reprogram everything and that one of the items where we knew we

could save money and one of the highest priority areas for cutting, or the lowest priority for retaining, was some of these flight service stations.

Mr. HARRIS. And then you mentioned 600 jobs.

Mr. HALABY. Yes, sir; that is what I said in here. We can save from 570 to 750 positions, depending on how far our extended program can be carried.

Mr. HARRIS. You gave every indication that these 600 jobs would very likely first come out of flight service operations immediately, beginning July 1.

Mr. HALABY. If that is your understanding of what I said, sir, I misled you.

Mr. HARRIS. That is what I understood about it, and you take 600 jobs—I think the report of the Appropriations Committee was 594, but approximately 600 jobs—and multiply it by what you told us was the average cost per man, then of the $10 million in operation the major part of it would come out of this appropriation.

Now, turning over to the other item where they cut 33 percent, which I think was a mistake, I will join you on that and I told the Appropriations Committee so the other day, but they cut out the extension of facilities, which meant that you didn't have the funds during this time to bring about the remoting of this from one area to the other and consequently you would have no funds to bring about the facilities for remoting the information, no funds then to carry on the flight service station, and therefore the information could not be available at all and your program could not have been carried out.

You would have been justified and should have taken the position that the Appropriations Committee and the Congress had cut out this service. I do not believe that that is the right thing and the right way to go about bringing in the program. I am not saying you were responsible for it. You explained about yourself, but I think what you said you would do and what the Appropriations Committee said they would do would have automatically terminated this service in these 42 areas of the country and in my judgment it would get us into a situation, with another 100 coming later on, where we are doing something in an area that I think would be the greatest destructive operation that we could bring about in the field of aviation.

I am glad to have this chance to clear these things up because what I was trying to do, No. 1, was to keep them from being closed down, with the squeeze on both ends, which they had brought about with what I understood your position would be and with thier limitation and restriction, and get this in a position where you could go to the Senate Appropriations Committee and work this thing out as it should be.

If you are going to bring it about as you have announced to us that you were, it should be on a gradual basis, as I said on the floor of the House the other day, but you shouldn't take the action and just with one fell swoop say: "We are going to cut off this service and we are going to end it all at once." With all the complaints we are getting here, we are trying to do something about it in this committee in an effort to help the Congress come to some solution.

Mr. HALABY. I think I understand your objective, Mr. Harris. I think the problem that I have is that we prepared a plan which we

presented here 2 weeks ago. I am trying to spell out some of the details of that plan here now. That plan assumed that the tightest budget we had ever presented——

Mr. HARRIS. I don't deny that. I compliment you for it. I want you to know that.

Mr. HALABY (continuing). Would be passed without a substantial cut, and it assumed that we would have to work with the number of positions requested. It further assumed that we would have $5 million in the program with which to commence the relocation and consolidation of the flight service stations.

Mr. HARRIS. How would you have it with what they did with your statement to me?

Mr. HALABY. Now we are getting to the heart of the matter. The question of reprograming $75 million down to $50 million is just going to be the toughest job we have ever had down there.

Mr. HARRIS. All right. We gave you something the other day on the floor of the House to point up the difficulty you were having with the whole thing on this one item which, in my judgment, was the only way we could have been successful with any amendment at that time; and with the House having taken a position of what they wanted to do in this direction, certainly now I think you would be thoroughly justified in getting it straightened out and clarified in the Senate and I think you would have a little better reception in the Appropriations Committee.

Mr. HALABY. I hope so, Mr. Harris, and I will certainly do everything I can to persuade the Senators and later, when you vote again on the appropriation, you gentlemen. The irony of this is, and I guess this is you might call a third-year man's lament, that for all of the economy that we have actually achieved we are now getting beat over the head for doing it in the wrong places and in the wrong way.

We have reduced the projections of personnel for this rapidly expanding agency in its first 3 years from 57,000 positions to 45,500, and I ask you if there is any other agency in Government who has been able to show that much reduction in its 5-year projections through productivity. We have actually reduced the number of positions, in the last 6 months, 1,150 positions.

Mr. HARRIS. I said that on the floor of the House.

Mr. HALABY. We have cut 8 out of the 28 air route traffic control centers, and I can show you abrasions, contusions, and lacerations from cutting out those 8. We have reduced personnel here in Washington 16 percent and no other agency has done that. We have reduced positions in Atlantic City 14 percent and nobody else has done that. So what do you get for your efforts toward economy? You get a $10 million cut in operations, you get a 35-percent cut in facilities, and you get a 50-percent cut in R. & D., because we didn't put any cut insurance in there, I suppose, but that is the situation.

I want to go ahead and reduce unessential services at these flight service stations, provide services at other places where they don't have them now and need them, and still save $3 million and almost 600 people.

What do I get for that? "Continue," and the implication is, "Don't change anything." Maybe that wasn't the intention, but if you read

the language it looks as though: "Halaby, go home and don't fool around with any more economies."

Mr. HARRIS. Let me say to you, Mr. Administrator, that I would suggest that you probably could do yourself a little good by sitting down in your office by yourself and thinking this thing over a little bit.

Mr. HALABY. I will do that, sir.

Mr. HARRIS. But I don't think you are going to get very far with this kind of attitude before this committee or before the Congress. I indicated a moment ago that I wanted to be helpful to you. If I get what you mean here, you are a little bit upset because we got an amendment through the other day saying that you couldn't close these stations down right now beginning July 1, that they should be continued during the next fiscal year.

Mr. HALABY. But that rejects the programs that we are considering here.

Mr. HARRIS. No, sir, it does not reject the program because you told us sitting in that chair where you are that you would not close down one station in the next 12 months.

Mr. HALABY. Yes, sir.

Mr. HARRIS. We are trying to keep the Appropriations Committee and your Agency from doing what you told us you would not do.

You said, and Mr. Thomas himself said on the floor of the House, and to me, there was no intention of closing the stations down until after the next 12 months, from 12, he said to 15 months. You said from 12 to 24 months, phasing them out.

Now, what we said here was if that is the program, as you explained here and if, as Mr. Thomas and his committee said, that they don't intend for them to be closed down for another 12 months, that it would take 12 to 15 months to do it, all we want you to do is to do what you said you would do, and I don't think you are justified at all in saying that this was an indication that the Congress was doing something contrary to what you had recommended.

I do think that you should follow through on it logically and tell the Appropriations Committee of the Senate, "Here is the dilemma that we are in. Here is what the House said. We can't carry out the program with the funds that are included in the bill of the House and therefore we are going to have to have a reinstatement," and show them exactly what it would take to do it, and this is what the House intended, because this is what was said.

That is what I had in mind as my objective in taking this approach, because you saw that if I had offered an amendment to restore the money at that particular time I would not have been successful and we would have been worse off than if I hadn't offered anything at all, because to get that one defeated would have tied the hands of the Appropriations Committee completely.

Mr. HALABY. Mr. Harris, I understand your position. I agree with it and support it and will do exactly as you said with respect to the Senate. What we want to do now is proceed with this program within our budgetary limitations, whatever they may turn out to be, both within the executive then and the legislative branch.

Mr. HARRIS. In my judgment you could take and should take the position before the Appropriations Committee to start with, "$5.4 million of the $10 million in operations should be restored."

The Appropriations Committee of the House cannot do anything else but go along with it because that is precisely the total amount that would be involved, with the action that the House took the other day.

Therefore, for the next 12 months you then could continue with this flight service station you have as you said you intended to, and in the meantime say to the Appropriations Committee of the Senate, "This is the program they outlined to us that we have to do. Now they have cut our appropriations for facilities. Unless we have some restoration of that to put in these facilities, which the House evidently meant when it adopted this amendment, we cannot remote this information from station A to station B, and, therefore, we are justified in having a restoration of that cut." This would be a substantial amount, whatever you are able to sell them on.

I think we gave you a lot of leverage to go over there and say why you should get it restored.

Mr. HALABY. I thank you, sir, and I hope and trust you will be right. Our proposal here is quite a bit more specific than when we came before you before.

We would like at this time to proceed immediately with our experimentation on these manicom's and aid's which are untried and are innovations. We would like to start with whatever budgetary resources we have available to plan on the program presented to this committee, which I hope in principle and in terms of policy it will approve.

When we come down to actual locations, I must have misjudged the committee in presuming that it wanted to leave to the executive branch the flexibility of site selection on the basis of need and economy as it has in the past. Each year we submit to the Appropriations Committee the equipment, facilities, and locations where we are using the appropriations.

If you, sir, would like a tentative list of those places where we intend to apply the hard core, combined services station tower, the tower plus Weather Bureau station, the tower-aid stations, the Weather Bureau, the manicom, and the aid, these eight categories on this table, if you want to go into that site by site I will be glad to tell you the status of our thinking.

Mr. HARRIS. No. 1, we have never asked your Agency or any other of the regulatory agencies which come under our jurisdiction to give us an annual itemized, detailed action of your administrative action point by point.

Mr. HALABY. Yes, sir.

Mr. HARRIS. I think that would be too much for us to try to keep up with. I think it would be an unusual burden for you as you are trying to reduce personnel here in Washington, but let me remind you we are in hearings now on this program that is of great interest all over the United States. We have had from you an explanation of what you propose. You told us you had 297 stations. You told us you were closing down 42.

Now, you have modified that some. I don't know whether it is 41, or more or less, but obviously there could be some adjustments and should be.

On the other hand, you told us that you were going to try to work out 150 of these stations and then have satellite stations all around. In other words, we are in the midst of getting information from you as an Agency to serve the people as to just what you are going to do.

Now, since we are doing that I think the committee is entitled to this information. Did you know that insofar as GSA is concerned they cannot construct one building or make a change in a building, regardless of how small it is or how large it is, until they work the thing out and get the approval and submit it to the legislative committees and get their approval before they can move on any one of them.

I think if we were to ask you to do that we would be going beyond our authority, or what should be our authority, and make it an impossible situation for administration. What we have been trying to do is to bring about expeditious and better administration, but I quote to you what is the law with reference to some committees regarding the approval of plans of the agency of the Government over which they have jurisdiction, and we are just asking you on this one program where you are having a rather drastic modification, and no doubt most of it justified—I don't question that—for the information.

Mr. HALABY. Well, sir, first, it seems to me that we are here for the purpose of talking about the policy regarding this system. Secondly, we are talking about the procedure whereby we apply that policy and the criteria with which we apply it. I have always thought that that was the role of this committee and that they directed us through the law and guided us through their hearings and the legislative history.

Mr. HARRIS. We try to cooperate.

Mr. HALABY. Yes, sir.

Mr. HARRIS. I hope that is a better word for it.

Mr. HALABY. You legislate, and you guide, and you enlighten, and you cause us to correct when we are wrong. You do what the Constitution says.

Now, as I view the Constitution, it says after you have legislated and appropriated that you are holding each one of us responsible for carrying out the oaths of office in executing the programs, and when the Department of Defense closed a number of facilities here and there they proceeded about the same way we did with these kinds of stations. They have a great deal more executive power than we do.

Mr. HARRIS. And they themselves have come in for some serious criticism and we have bills, I will say very frankly, in the Rules Committee right now that have gone down the drain just because of the way the Department of Defense has treated certain members. I don't want you to get in that position.

Mr. HALABY. I hope I am not there now. I am wondering. However, Mr. Harris, may I come back to one thing I think that is basic to what apparently was a misunderstanding in communications from me to you.

That was that we do not intend, so long as we have our present authority and our requested appropriation, to close out any flight service stations in the coming 12 months. The only time under which we would even think of it would be if the bill as passed by the House

is passed by the Senate. We intend to go to the Senate and try to persuade them that our request was justified, that our whole program as well as this specific program is right.

Mr. HARRIS. I remind you before you go any further there if the bill as passed by the House is passed by the Senate, then you can't close those stations down in the next 12 months. There will be a necessity for you to continue them.

Mr. HALABY. I will leave that additional feature to the future and to the lawyers who will determine various technical points about it, but let me talk about the future positively here.

What we are trying to do is to have a better flight assistance service in more places at the right times and still save annual recurring $3 million a year and almost 600 positions. That to me is almost like motherhood. We must all be for that. The question that it seems to me we ought to debate here is how to do it, and this chart is an attempt to be a lot more specific than we were last time.

I think the committee felt that we were hiding something or hadn't thought it through or maybe weren't ready to be complete in our presentation. This is as specific as we can get and, as we said 2 weeks ago and say again today, we would want to try a little before we do all these things. Particularly, we want to have a look at how this Manicom and AID station really works, because all we have now is some fairly practical opinions and estimates and analyses of how it would work.

If I could come back to these cost estimates. A lot of people have sort of cavalierly stated without any fact or basis for doing so, that we can't possibly achieve these savings. I would like to get right down to brass tacks on that.

As I say, 297 present flight service stations would become 154 flight service stations of the future, the hard core. Six will become combined station-towers. Of the 137 sites remaining, 85 will become Manicom's. This is a part-time flight service station. Thirty present sites will become airport information desks. The remaining 22 will be served by existing facilities. At 15 of these there is a Weather Bureau station as well as a tower. At seven there is a full-time Weather Bureau station. This program will eliminate the need for about 700 positions, which will mean a savings of about $6.2 million in annual operating costs. That is the total amount that could be saved by those actions. To do that we need nonrecurring capital costs to establish this network of $5 million.

This total assumes the remoting of all VOR/122.1 communications channels, and the provision of two Federal employees at each Manicom site. The total includes estimated costs of dismantling existing stations, landline rentals, telephone and teletype rentals, modifications of the control stations to handle the remoted activity, the additional staff which will be required at control stations, and the cost of relocating these employees.

We believe we have considered all of the costs which will be involved in inaugurating this phase of the program, and thus we feel that the $6.2 million annual savings indicated is a firm figure.

Mr. WILLIAMS. Did you take into account the loss that would be incurred in the resale of the present radio equipment in these service stations, in disposing of that equipment?

Mr. HALABY. If I could give you the answer to that in just a moment, I will, sir. What I am trying to give you is the full picture. We can save $6.2 million just by consolidating those stations in the manner I have just outlined.

Mr. WILLIAMS. That is annually?

Mr. HALABY. That is annual recurring savings. These aren't just speculations by my Washington staff. We got down to the working level, grassroots specialists in the regions, and they looked over particular examples and verified that we could make these kinds of savings. We went over the savings item by item, and we have a stack of cost data if the committee wants to go into that detail and we will make those volumes available.

After redesigning this current system, the status quo, by remoting the 137 stations and replacing them with Manicom and AID facilities, we want to extend the existing system. If we are permitted to extend the Manicom and the AID service to nonstation locations, that is, where we don't have them now, outside of the 297, as we propose, we would of course give up some of this $6.2 million in savings.

For example, if we add 90 two-man Manicom's at locations where there is now no Federal facility, the annual cost would be $2 million. Adding 350 AID stations where there are today no Federal facilities would cost $1.3 million annually, so if you subtract this $3.3 million for additional facilities, new weather and terminal advisories, subtract it from the $6.2 million, you get $2.9 million as the net annual operating cost savings. We would have to add $1.7 million worth of facilities and equipment cost to the $5 million that is already in our current budget before the Congress.

We get a total capital cost of the entire program of $6.7 million, and that would be spent over the next 2 years and after it is spent could be recovered in 2½ years. Thereafter you would have completely amortized the additional capital cost and would be on a $3 million a year savings level.

We can't forecast, Mr. Chairman, whether budget priorities within the Government, that is, the executive branch and the Congress, as a whole will permit us to complete this extended program to the degree we think it is justified, but if it can be done it will allow savings of $3 million annually while we are adding 400 terminal advisory facilities around the country where none now exist.

Now, the Chairman has asked about the fate of the equipment currently in use at flight service stations to be remoted. This equipment will either be placed in storage and used in the maintenance and replacement of the hard care stations, as we do in all our supply activities, or it will be left in place where it is now for continued use by the Manicom, the AID, or if local authorities wish to purchase it as surplus we will attempt to make those arrangements.

Mr. WILLIAMS. How much equipment do you have in these flight service stations now, the capital outlay, radio equipment?

Mr. HALABY. A typical station?

Mr. WILLIAMS. Yes, sir.

Mr. HALABY. I think I know but I better double check on that. A round number, Mr. Chairman, is a total equipment cost of $100,000 at a typical station.

Mr. WILLIAMS. Is that radio communications equipment?

Mr. HALABY. It is the whole works. It is mainly communcations. It also has the meteorological observing equipment.

Mr. WILLIAMS. The meteorological observing equipment, I presume, would be kept?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. The radios are the things that would be replaced by the Manicom's?

Mr. HALABY. Well, where there is a Manicom, and to the extent needed, the communications would be left or modified and to the extent it was not needed it would be taken out and put in our supply inventory to be used as the hard core stations need the item in the future.

Mr. WILLIAMS. If you are going to have one frequency on the Manicom, and I believe you indicated it might be 122.9 or perhaps some other selected frequency, a Manicom operation would simply be the same thing as a Unicom operation. In other words, the equipment requirement would be nothing more than for the purchase of Unicom equipment?

Mr. HALABY. Sir, where a Manicom replaces a present flight service station we have to take the needs of that locality, what is there in use, and work it out station by station, but the frequency is different; yes, sir.

Mr. WILLIAMS. You indicated in your first testimony here that you will have one frequency, a Manicom frequency. Going on that assumption, couldn't a person purchase a Unicom which would guard this Manicom frequency for somewhere in the vicinity of $300?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Are you going to use $100,000 radio to perform the function of a $300 radio?

Mr. HALABY. No; I thought we were talking about the case where the flight service station became a Manicom.

Mr. WILLIAMS. Yes; that is what I am talking about.

Mr. HALABY. And we eliminated the equipment that wasn't needed by the Manicom, stored and supplied the rest of it.

Mr. WILLIAMS. That is right. So you are going to substitute a one-frequency Manicom for your present radio equipment which transmits on a half dozen channels.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. So that all you will need at a Manicom station will be the same type of equipment that is now used for Unicom purposes—one channel, broadcast and receive—and you can buy those just about anywhere for around $300, can't you?

Mr. HALABY. I believe you can, yes, sir.

Mr. WILLIAMS. With the purchase of a $300 piece of equipment you are going to abandon, or put to some other use, somewhere from $50,000 to $75,000 worth of equipment. Are you subtracting the difference between the $50,000 or $75,000 from the $300 and charging that against the cost of the transition to this other operation?

Mr. HALABY. I am going to ask Mr. Thomas and Mr. Harvey to indicate more precisely and specifically than I can just what you would have at the Manicom. We have two kinds of Manicom's, one a new one established de novo, so to speak, and then we have one where there used to be a flight service station. Mr. David Thomas.

Mr. THOMAS. Mr. Chairman, at the location where there is nothing now and where we would establish the Manicom operation we would establish the light, cheap transreceiver—one trade name is Gonsett—that type of equipment is very cheap and very economical.

Mr. WILLIAMS. In effect that is the same thing as a Unicom.

Mr. THOMAS. Unicom.

Mr. WILLIAMS. Same equipment.

Mr. THOMAS. Same equipment, precisely.

Mr. WILLIAMS. That is at your new station?

Mr. THOMAS. That is at the new station. At the presently located stations where we have the flight service station we now have VHF transmitters and receivers already there in place. It is our view that it would be more economical to leave the transmitter and receiver, there in place. It is better equipment, with higher power, and it is already hooked up to the microphone console, the wind instruments and so forth.

Mr. WILLIAMS. So that what you would be doing would be to use this $50,000 or $75,000 equipment, reduce it to one frequency, and have it perform the same function that you can get a $300 piece of equipment for?

Mr. THOMAS. No, sir.

Mr. WILLIAMS. How many channels are you going to guard in these Manicom stations?

Mr. THOMAS. Generally it would be one. The $100,000, Mr. Chairman, is the original capital cost. It does include all the frequencies. It does include the consoles. It does include the monitoring gear and includes many of the things that would be taken out.

As to the actual cost of the receiver and transmitter that would be used there, the receiver is probably $400, because it is a good one, $400 to $500. A transmitter would be $2,500 to $4,000. They are both very good pieces of equipment. But the $100,000 investment that we put in when we originally went in includes everything, the control lines, monitoring capability, etc.

Mr. WILLIAMS. What is the initial cost of the radio equipment in the average flight service station?

Mr. THOMAS. We will have to furnish this precisely, but our best judgment right at the moment is around $100,000 for the entire array, initial cost installed.

Mr. WILLIAMS. When you abandon that $100,000 worth of equipment it wouldn't bring enough on the market to pay for hauling it to the junkyard, would it?

Mr. THOMAS. The monitor equipment is moved. The control for the VOR is just moved to another location. The additional equipment will be in our supply and used in other locations. They are common equipments and we use literally hundreds of thousands of these receivers.

Mr. WILLIAMS. As to the transreceiver equipment that guards these 8 or 10 frequencies in flight service stations, approximately what is the capital outlay in that case?

Mr. THOMAS. Sir, we will have to get it precisely.

Mr. WILLIAMS. I mean your communications equipment.

Mr. THOMAS. Right. I can only give you an approximation, but it would be roughly $30,000 worth of transmitters and about, oh,

$2,500 to $3,000 worth of receivers. Most of those would be transferred out.

Mr. HALABY. May we get an equipment list with the original price and depreciated value in the next few minutes? I will ask one of my colleagues to do that.

Mr. WILLIAMS. I think it might give us a clearer picture of the overall cost of this thing.

Mr. HALABY. We don't happen to have with us the equipment list and the depreciation rate on those items.

Mr. WILLIAMS. If you go through with this plan, how much more capital outlay is going to be required and how many increased personnel are going to be required to operate the hard core stations over and above what you now have?

Mr. HALABY. There will be additional personnel at some of the hard core stations. That has been taken into account in the net saving in personnel. There will be somewhat more maintenance, too, because there will be more remoted communications through there, but it won't be about the same total because they were maintained in their old sites. They will be relocated to the central site.

Mr. WILLIAMS. I didn't mean to get you off course in your testimony.

Mr. HALABY. No, sir. I think it is very important, and, Mr. Warren, would you go now and let's take a typical flight service station, the total complement, the original cost per category. Would that be all right?

Mr. WILLIAMS. Yes.

Mr. HALABY. Category cost, and then how long it has been there, and what our depreciation rate on it is, and we will try to have it back here very shortly.

(The following information was supplied for the record:)

Typical cost for installation of an FSS facility

Electronic equipment in place	$77,000
Construction materials in place	35,000
Total	112,000

These figures are new costs at current prices. As a general rule, this equipment is depreciated over a 15-year period. The equipment involved in the consolidation program will average about 7½ years in age. Its depreciated value is thus about 50 percent of its new cost.

Electronic equipment

1. 2-position air-ground console with control and switching panels for 4 VHF, 3 UHF air-ground communication channels and control and monitoring of 8 Navaid facilities: Cost	$2,500
2. VHF/UHF air-ground transmitters and receivers with associated amplifiers, control and switching units, Navaid control and monitoring equipment, interconnecting cables and coaxial cables: Cost	32,500
3. Teletype equipment to provide circuits A, C, B: Equipment cost	12,500
Installation costs	25,000
Total electronic equipment cost	47,500
Test equipment	3,000
Freight cost	1,500
Total	77,000

Construction equipment

Construction materials:	
Power and control cable	$2,000
Miscellaneous electrical materials	1,500
Miscellaneous mechanical materials	500
Engine generator and associated items	10,000
Wind equipment and altimeter setting indicator	1,000
Antenna support tower and miscellaneous structural materials	1,000
Total	16,000
Construction cost	17,000
Construction materials	16,000
Freight	2,000
Total	35,000

Mr. SPRINGER. Mr. Halaby, from just listening to all that has taken place here and over on the floor of the House, what you are apparently trying to do is sort of the same situation I was in about 2 years ago when the president of an aviation group out in my area, the president of a large company, wrote to me continuously rather burning letters about the cost of Government, and I could never go in his office but what he would bring the subject up.

Well, last year he wrote me one of these letters but very fortunately I just laid it on the desk. I didn't answer it, and about 3 or 4 days later one of the vice presidents wrote me a letter about the cutback in certain operations the Government was making which would apply, in effect, to that company. I didn't do anything except take the president's letter with no comment and send it to the vice president and took the vice president's letter and sent it to the president with no comment. The next time I went in there there was an entirely different atmosphere around there, may I assure you.

I understand what you are trying to do and may I say that I think Congress commends you for any effort that you may make to save money. I can understand your position. I think what the chairman has been driving at this morning, and the chairman of the subcommittee, and the questions that have been asked in these hearings while I have been here is a different problem.

I am not sure the fundamentals yet are on top of the table. Let me see if I can just get the fundamentals for a minute, and just talk to me as a layman, not as an Administrator of your agency?

First of all, as I understand, you are not trying to take away service in this changeover. Is that true?

Mr. HALABY. We are taking away service at some hours in some places.

Mr. WILLIAMS. Would the gentleman yield at that point?

Mr. SPRINGER. Yes.

Mr. WILLIAMS. There is also a reduction in terminal services contemplated, is there not?

Mr. HALABY. Unfortunately, we haven't had an opportunity to show you the whole plan, but just a simple answer to your question is that we believe we are not taking away essential services at essential times where a large number of the public——

Mr. SPRINER. May I go to the second? We talked about the first and you said, "Yes, there will be some services taken away. We don't believe they are essential." That is a straight answer.

May I come to the second point? Under the plan which you envision for the future do you believe that this overall will be improved service over the service presently rendered?

Mr. HALABY. It will be improved in both quality and quantity, but a few persons, a very few, particularly those who fly at night, which is a small fraction, will not have as many terminal services as would be convenient to them, and rarely and occasionally as would be needed by them.

Mr. SPRINGER. Now you have what? In the neighborhood of 400,000 private operators? Is that a fair figure, or is it 10 times that many?

Mr. HALABY. We don't know. We are trying to canvass the number of pilots.

Mr. SPRINGER. Can you give us an estimate?

Mr. HALABY. The best estimate we have is around 300,000 to 400,000 private plane pilots.

Mr. SPRINGER. How many of those will operate at night? What percent? Two percent? Ten percent? Twenty percent?

Mr. HALABY. All we have is our own experience and a chart that shows that the number of those filing flight plans between the hours of sunset and sunrise is a very low number. That is one measure.

Mr. SPRINGER. What percentage does that show?

Mr. HALABY. For example, from 6 a.m. to 6 p.m., 88 percent of the flight plans are filed, 12 percent after that time.

Mr. SPRINGER. After 6 p.m. in the evening?

Mr. HALABY. Yes, sir. If you take 10 hours, 7 a.m. to 5 p.m., 79 percent of he flight plans are filed. If you take 8 hours, from 8 a.m. to 4 p.m., 65 percent of the flight plans are filed.

In some areas there is almost no business at night.

Mr. SPRINGER. Let me just go quickly to this and see if we can round out this picture. You call it the Manicom system. Is that your proposal?

Mr. HALABY. Yes, sir.

Mr. SPRINGER. Can you point just briefly, one, two, three, four, how the Manicom system will be an improvement over the flight service station system now in existence?

Mr. HALABY. I will try, sir. First, we would put the Manicom's at a number of sites where we have a present flight service station, and I don't think it is fair to say that that would be an improvement. It would be in fact a reduction in the service during those hours where we don't think public service is required.

Mr. SPRINGER. Will it be an improvement then in the service during the hours that 88 percent of the people are flying? Will it be an improved or better service?

Mr. HALABY. We think it will be an adequate service. I don't think we could say it would be an improved service. We think it will be an adequate service.

Mr. SPRINGER. Will there be any diminution here of safety involved?

Mr. HALABY. The pilot who is lost and is out of range of one of the hard core flight service stations, 154 of them, cannot get direction-finding from a Manicom. On the other hand, if he is in communication, those Manicom men will know the local territory and can within their capability and the pilot's give him directions relating to safety.

Second, they might have to wait a little longer to get on the party line and in that sense there would be less service in the view of the private pilot.

Mr. SPRINGER. Now, yesterday here, and I am looking for these things that look obvious, the people who were in the mountainous areas were complaining that there would be a substantial, important, less service. Is that true?

Mr. HALABY. You have to take each case, but I think in general they would have to show that the less service was at night and perhaps in some delays in communications due to the congested frequencies. They would also have to take into account that there would be 400 places in the mountains, on the desert, or on the coast where there wasn't any federally supported service at all prior to this program. So what might be one man's sweet may be another's bitter here. The man who has to fly at night, for example, may not communicate with the station that he used to communicate with in the manner he used to, so he won't like it and he will be bitter about it.

On the other hand, at 400 places serving thousands of pilots there will be something sweet where there was nothing at all before.

Mr. SPRINGER. Let me get straight another fundamental. What you have said is there will be, in the areas where there is the greatest number of flights—I take it you are talking about on the coast and the areas where you can get off the ground—improved service or better service. Is that correct?

Mr. HALABY. We think at hard core stations, 154 stations, there will be as good and probably better service due to the installation of direction-finding equipment and so on, and due to the fact that they will have more remote communications outlets consolidated in them.

At many Manicom's the service will be slightly reduced. At many other Manicom's and AID's there will be services where there were none before.

Mr. SPRINGER. Just take Brunswick, Ga., for example. Are you familiar with that situation? That has been raised here. Will the service be less at, in, and around the area of Brunswick as heretofore?

Mr. HALABY. I am going to get a little help on Brunswick, sir, and I am going to ask Mr. Thomas and Mr. Warren to comment on Brunswick, Ga.

Mr. THOMAS. Mr. Springer, Brunswick, Ga., would not continue the same service the same hours as it does now. It is one of those that would be converted to a Manicom and its en route service would be remoted to Jacksonville, but the en route pilot would probably get a little better service since he would be handled by a larger and busier station. During the daylight hours at Brunswick, Ga., he would get essentially the same service as he gets now. He would not get it during the night hours.

Mr. SPRINGER. But he would get better en route service?

Mr. THOMAS. The en route service pilot really wouldn't know the difference. When he calls Brunswick the man on the microphone would be in Jacksonville instead of Brunswick. It should be a little better because we consolidate more facilities.

Mr. SPRINGER. What about the terminal service?

Mr. THOMAS. The terminal service 16 hours a day would be essentially the same as he is getting now. For the small hours of the morning there would be no terminal service at Brunswick.

Mr. SPRINGER. He would have no terminal service at all?

Mr. THOMAS. Yes; from 2 o'clock in the morning there is no terminal service, like there is not now at some 7,000 airports.

Mr. SPRINGER. In other words, there are 7,000 airports that do not have terminal service?

Mr. THOMAS. Right.

Mr. SPRINGER. So you have roughly then presently 297 service flight stations? Is that about right?

Mr. THOMAS. We have 297 within the 48 States and we also have 275 control towers. These overlap each other at some locations so there is not a total of 500 airports that do now have service.

Mr. SPRINGER. You are going to close about 45 of them; is that correct?

Mr. THOMAS. Yes.

Mr. SPRINGER. And you are going to use the Manicom system on those 45; is that correct?

Mr. THOMAS. Some of them; yes, sir.

Mr. SPRINGER. What are you going to do with the rest of them?

Mr. HALABY. I think Mr. Harris referred to the fact that there is some doubt about the exact number, and the reason there is that we have done a lot more work and we think we probably made a mistake on 3 or 4 of those stations by selecting those to be remoted elsewhere, and with regard to those, they would continue to be hard core stations among the 154. With regard to the rest, they would become Manicom's and be on a part-time basis.

Mr. SPRINGER. 154. Let me get this straight. At 154 you are not going to make any changes; is that correct?

Mr. HALABY. In fact, we are going to improve those in two respects. We are going to go ahead and install further equipment in them, consolidate within them remote transmitter receiver sites, and add a limited number of people, so in that sense those 154, the hard core, will be improved in their capability.

Mr. SPRINGER. They will not be substantially changed?

Mr. HALABY. No, sir.

Mr. SPRINGER. It is the 45 that are in question, or about that number, 40 to 45 that are in question. Those then will become Manicom stations; is that correct?

Mr. HALABY. Most of them; yes, sir.

Mr. SPRINGER. Most of them will.

Mr. THOMAS. Some of them become AID's.

Mr. HALABY. Some of them become AID's.

Mr. SPRINGER. This is my final question. I think there is a lot of confusion, Mr. Halaby. I have an expert in the field sitting on my left and we talked about this yesterday and I said the way I understood your first testimony was that you felt this would be an improved system, and his answer to me was, "Why don't they experiment and find out if it is going to be improved," before you put it in and that sounded pretty reasonable to me, unless you can do it in 12 to 15 months. Try this out and see. I think the alarm that has gone up is that there is going to be a lot less service here to these people and they are not sure about what is going to happen, and I think this order to abolish the 40 to 45 raised the big alarm.

At least this testimony comes in here, and when I asked them these questions it isn't for lack of diligence; they just don't know what

the manicom system is going to do for sure. This is the alarm I think that has gone up among them, that they probably aren't going to receive service, or it is going to be reduced service, or it is not going to be a service adequate to serve them, and I think this testimony is going to clear it up a little bit, that you don't intend to do this overnight.

This is true, isn't it, that through your experience in the next 12 months your manicom will do the job.

Mr. HALABY. Yes, sir; I think your use of the word "alarm" is very cogent on it.

Mr. SPRINGER. From the way it appeared in the testimony there is a lot of alarm. I am not a pilot, but I was just trying to get this straight as to what procedure you are going to have before the manicom system is installed. I don't say that your proposal is wrong. I think you are to be commended if this is what the Appropriations Committee has forced you to do. Over a period of time you are trying to do the best you can with it and I think you ought to be commended for that, but I think that if you can relieve this alarm that is in everybody's mind that this service is going to be substantially reduced or wiped out, you will have done a great deal toward alleviating this situation. Thank you.

Mr. HALABY. I think your questioning has been most helpful in elucidating that. May I be very candid with you for a moment? I think this is a little bit like a number of alarm boxes being pulled in many, many locations and several associations who felt an obligation to pull alarms have acted. It is not these 42 stations that are creatin gmost of the mischief. It is the knowledge that behind them there are additional stations to be changed, and some of them are in very poor congressional districts.

It is the background, because one of the associations has published a list of what I intended to do some months ago and the members have looked at this list and said, "This facility going to be closed? This is essential. It is my district," and so on and so forth. So there is a great deal more smoke here than fire, and I guess what I failed to do is two things.

One, and maybe this should be in the bureaucrat's primer, you should close things one by one, never in a large group, because we have closed 150 of these stations as they became obsolescent over the last 10 or 12 years. The second is I should have been a lot clearer and more precise about what we wanted to do than I was in this first announcement.

Mr. SPRINGER. May I just ask one further question. In the areas of the 150 or 160 that have been closed have you substituted adequate service for those areas, what you believe is adequate?

Mr. HALABY. Yes, sir.

Mr. SPRINGER. You have?

Mr. HALABY. Yes, sir. Under the program we are presenting here, of course, we haven't closed a thing. This is all prospective. There hasn't been a single flight service station closed. To my knowledge there hasn't been a single flight service station remoted. There hasn't been a single flight service station employee moved in anticipation of a move. There has been a lot of activity, but no action, and I think that is important because it proves that we are sincere here.

We are not jumping the gun. We are not bypassing the committee or the Congress.

We are proceeding in a deliberate fashion. I also gave Mr. Harris my pledge that there weren't going to be any moves to close stations within the next 12 months. I repeat it again now that what we would like to do is move ahead on this program by testing in a couple of areas these new kinds of facilities, Manicom and AID, by proceeding with our plans and our program for remoting some of the flight service stations into the hard-core stations, that we get congressional and executive branch approval for expanding that service to places it is not now provided, and to give you a modern flight service station system in about 2 years, when all of these actions that we tried to explain here will have been taken.

Mr. SPRINGER. That is all, Mr. Chairman.

Mr. HARRIS. Mr. Chairman, following up Mr. Springer's interrogation, I think your acknowledgment of some of the difficulties is probably explanatory of some of the reaction we have had. As an example, I have a copy of your announcement of February 4. In that announcement you just said that you were going to close these stations down and remote control facilities. There was no explanation at all, and these people now, unless they get the benefit of this hearing, have no information as to what is going to happen to them.

I suspect if you would take either one of these that you single out in here and find out from that particular location how they feel about it they will say all they know is they are going to have their station closed down and it is going to be taken away from them.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Wasn't that the original intent of the announcement?

Mr. HALABY. Our intent was originally, last November, to remote these stations——

Mr. WILLIAMS. And leave them without terminal service.

Mr. HALABY. Oh, no, sir. The Weather Bureau advisory would be provided for in a different fashion and the unicom would probably spring up through local self-help.

Mr. WILLIAMS. At the time this announcement was made the manicom plan had never cropped up, had it?

Mr. HALABY. No, sir.

Mr. WILLIAMS. And that was a development which followed the announcement?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. In view of that and the fact that you listed some 42 specific stations in the February 4 announcement, are we to assume that this announcement is now null and void?

Mr. HALABY. No, sir.

Mr. WILLIAMS. And that the manicom system supplants it?

Mr. HALABY. If you will, sir, what I told you 2 weeks ago, what I am saying today, is that our plan modifies this announcement, but it doesn't make it null and void. We can still, Mr. Chairman, eliminate these flight service stations and have a safe and sound system. It won't be the same as before. The Weather Bureau could contribute weather services. The local people could provide Unicom-type services, and the world would go on without these 42 stations.

But we are trying to do better than that. All of these would either be a flight service station, hard core, hand full, or second, a Manicom, or one of these airport information desks.

Mr. WILLIAMS. I believe you have broken down the 297 existing stations into the various categories?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Since you have listed your 297 stations and you have indicated to the committee that you plan to put stations where no stations now exist, does this take into account these additional stations?

Mr. HALABY. No, sir. This is simply what would happen to the present 297.

Mr. WILLIAMS. Could you give the committee information as to where these 154 hard core stations will be located, which stations will be converted to Manicoms, which specific stations will be converted to AID stations?

Mr. HALABY. Well, sir, I can. I am not sure you want it, but if the chairman wishes it and wants to look it over and decide what to do with it that is fine with me.

Mr. WILLIAMS. The announcement of February 4 was quite specific as to stations which would be closed. I think it might be well for the committee to have the information as to which stations are going to go through this transition into some lesser type station.

Mr. HARRIS. Mr. Chairman, I would like to follow through on that and ask that you give us that information together with the additional information of the additional stations—I assume Manicom stations or satellite stations—that you are going to have to round out your whole program.

Mr. HALABY. I cannot give you that because it has not been approved within the executive branch nor has it been submitted to the Appropriations Committee. I can give you the criteria, the kinds of stations that we have in mind. The mention, as you so well know in this committee, that the Federal Government might do something in a particular locality becomes an absolute guarantee that the Federal facility or part of one will be put in. I certainly am not authorized to do that either by the President or the Budget Bureau, and normally we would do that in the course of justifying our appropriations. But if the committee wishes, we can provide the list relating to the existing 297 stations and you can determine what you want to do with it.

Mr. SPRINGER. Mr. Chairman.

Mr. WILLIAMS. I think that would be information the committee would need. Mr. Springer.

Mr. SPRINGER. Mr. Halaby, I don't know how much help you have, and the Department of Defense is something else, but they closed one of the four city depots in the entire country in my district 3 years ago. However, they did send someone into the community some 6 months ago to acquaint them with the fact and explain why it was being closed, and in the end the community accepted it because it was explained to them they didn't need but three. The other three were not. The community accepted it very well and went into manpower retraining, but I think this public relations job that went before made the job much easier for myself and Senators Douglas and Dirksen than it would have been if they had all of a sudden issued an announce-

ment to the community that this was going to be done without any further preliminaries.

I don't know whether you can do this or not, but I think it was one of the finest public relations jobs. Although it was regrettable, everybody accepted it. There is just one other question.

Mr. HALABY. We have learned a lot about public relations in the last few months, sir, and I hope we apply it in the future. I was advised before starting these economy moves, "Boy, you are going right into a hornet's nest. It happened in 1954 and you will never succeed," and I suppose if I devoted as much ingenuity and energy to the public relations part of our work as we have done to the substance of this program we might have been able to achieve much more results.

I think it is also important for you to know that today one association that proposes a 36-percent cut in our whole budget has been most vociferous in any kind of economies in this area. I think it is also fair to observe that we have here a program that is part of an overall program.

We have to modernize this whole system of ours. When we closed 8 out of 29 air route traffic control centers, out of 8 times up, we got murdered on 1, and we went out and talked to the communities, and I think the day before this announcement we had people in the field.

Also with all the men in this room who represent the associations, there is an association of employees who work at these flight service stations. They knew this was coming and we discussed the problem with them. The small plane owners and pilots are represented here. They had spread the alarm, so there was a lot of alarm, but I think it would have worked out better if I had been more specific and precise and, second, gone about it one by one instead of using a massive approach.

Mr. SPRINGER. There is just one more question. You mentioned criteria a minute ago. Let me ask you this question: Would you agree that more flexibility in criteria for providing terminal services is a necessary objective?

Mr. HALABY. Yes, sir; and part of decentralizing the agency which we have just about completed now, and that was the main reason we could save 18 percent of our Washington headquarters positions, is to give to the regional directors in Los Angeles, Kansas City, Fort Worth, et cetera, more flexibility and more discretion in taking into account local conditions.

For example, in Mr. Clausen's district we have had many discussions about the Arcata Flight Service Station. It is a very unique situation in terms of weather, in terms of the total installation there. My regional director and some of his men have visited the site and they are making recommendations about what ought to be there, so we are getting more and more of it out of Washington, but of course hearings like this bring it right back in and bear on all of the interests of all the different groups.

Mr. SPRINGER. Thank you, Mr. Chairman.

Mr. WILLIAMS. Do you have more questions? Had you concluded your statement?

Mr. HALABY. I had several other points if you want them.

Mr. WILLIAMS. All right.

Mr. HALABY. I have a statement that, to be honest with you, Mr. Chairman, I have not had reproduced because I haven't studied it carefully, but if the committee is running out of time I could submit it later in the day for the record. I will tell you what it covers.

It tries to get to the point of what the relationship between safety and service and economy is because that is the dilemma that plagues this agency 24 hours a day and it goes to the very point of whether we have derogated from safety, which I think many have charged in the hearings. I have approximately five triple spaced pages that I would like to go over, but you may prefer to have me put it in the record.

Mr. WILLIAMS. I don't know whether we are going to be able to conclude at this morning's session or not. Would you be avaliable this afternoon?

Mr. HALABY. I can't until about 4, sir. I have an appointment with the National Academy of Science on the sonic boom problem in Oklahoma City.

Mr. WILLIAMS. I would suspect that some of the questions would generate even more questions. I have quite a number that I would like to have cleared up for my own information. I would suspect that that would bring on more questions.

You say you can't be here until 4 o'clock?

Mr. HALABY. No, sir, I couldn't.

Mr. HARRIS. Did I misunderstand you? Did you say that you had a 4 o'clock appointment with them?

Mr. HALABY. No, sir; I have three appointments between now and 4. I can shift them, but they are people from out of town and would be very hard to break. I will do whatever the committee wishes.

Mr. HARRIS. I don't think you should break them at all. I think it is just a question of whether or not the members would want to question you.

Mr. WILLIAMS. We can proceed until about 12:30.

Mr. HARRIS. I have said all I had to say.

Mr. HALABY. All right. Let me very quickly go through these points which were intended to pick up points made in the hearing. Service and safety are necessarily interdependent. Congress has imposed on us the responsibility of providing service to the public, and the justification of that service can only be that it promotes the development and safety of air commerce.

In any program which contemplates a reduction of service the central and overriding question must be: What is the effect on safety? Since the program we have proposed here will, in fact, reduce service in some locations at some times, it is important to identify precisely the possible impact on safety.

I would like you to look at a chart which shows you schematically the precise areas in which service will be curtailed. You will then be in a better position to assess the impact on safety.

That is this chart here and I believe it is the one you have in front of you. It is both qualitative and quantitative and we would like to make that a part of the record if it is agreeable to you, sir.

(The information referred to follows:)

Comparison of existing and proposed service

Present system—Flight service stations	Proposed system						
	Hard core	CS/T	Tower-WBAS	Tower-AID	WBAS	Manicom	AID
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroute communications	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enroute flight assists (DF/Radar)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Terminal flight assists	Yes	Yes	Yes	Yes	No	[1] Yes	No
Airport advisory	Yes	Yes	Yes	Yes	No	Yes	No
WX observations	Yes	Yes	Yes	Yes	Yes	Yes	[2] Yes
Face-to-face briefings	Yes	Yes	Yes	[3]	Yes	Yes	[3]
100 percent of activity served	Yes	Yes	Yes	Yes	Yes	[4]	Yes
Total (297)	154	6	15	13	7	85	17

[1] Possibly less range.
[2] As needed.
[3] Telephone.
[4] 60 to 90 percent.

Mr. HALABY. In some quarters we have heard that because the station was being consolidated we are taking out the navigation equipment. First let me point out there will be no reduction in existing navigation aids, in radars, in the instrument landing system, in lights, in towers, VOR's, and the like.

This first column on the chart shows the major services now being performed by our 297 flight service stations.

Columns 2 through 8 show the system as we propose it and the kinds of services that will be available and will not be available. You will note first of all that there will be no important effect on en route communications.

Mr. WILLIAMS. Except one, Mr. Halaby, 126.7 would not be available to the manicom station, is that correct?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. There will be only one frequency available.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Whereas now you can call flight service stations on half a dozen frequencies.

Mr. HALABY. Right. I don't know the significance of that, because I believe when anyone in the air is in danger he gets the party line, so in terms of safety this capability will still be maintained. In terms of convenience, that is another matter.

Mr. WILLIAMS. If the 122.9 crystal is inoperative for some reason, then the pilot can't reach any Manicom station, can he?

Mr. HALABY. He will be within reach of a flight service station almost at all times if he has the altitude——

Mr. WILLIAMS. Of course he wouldn't be able to get terminal weather at the Manicom station?

Mr. HALABY. The Manicom station has the terminal weather and it reports it to the flight service station and he can get it from the flight service station.

Mr. WILLIAMS. To the extent that there would be a single frequency available at a Manicom, that must necessarily be taken as a reduction in service, for whatever that might be worth.

Mr. HALABY. Yes, sir, I certainly agree with that. But we do not believe it is an important reduction. Virtually all general aviation aircraft who want to come into airports are equipped with a VOR receiver and a 122.1 transmitter. There are a lot of agricultural aircraft and others that don't have any communications equipment, as you know.

We will be remoting intact the VOR/122.1 channels. More advanced aircraft can, in addition, use frequencies such as 126.7 and 135.9. These channels will be retained at hard-core sites and some reduction in low altitude coverage on these channels will result.

We don't think this will have a substantial effect on general aviation users. What is being eliminated is not the opportunity to communicate, but the convenience—in a few areas, at a few altitudes, and for advanced aircraft—of being able to communicate on more than one frequency. Manicom sites will be equipped with an additional channel over which terminal communications will be provided.

The next category on the chart is "En route flight assists," the second item down. This refers to locating and steering lost or disoriented pilots by radar, direction-finding equipment or other navigation aids. This may be distinguished from the next category, "Terminal flight assists," in which a flight service specialist, familiar with local geography, guides lost or disoriented pilots in the immediate vicinity of the airport.

With respect to en route flight assists, the program will not reduce any of this capability. Plans for location and coverage of radar and direction finding equipment were not made to fit the FSS program. On the contrary, the spacing criteria for the FSS program were designed to facilitate the placement of DF equipment which, in conjunction with radar, will provide optimum geographic coverage.

Next on the list is "terminal flight assists." Here we find some reduction in service. At the approximately 85 manicom sites, there will be Federal employees familiar with the local terrain, but the station will not be open around the clock and the radio there may not have the range that the existing radio has. The existing flight service station at this site today can communicate with pilots about 50 miles away; the manicom will be able to reach him at a distance of about 15 miles. Beyond that, lost pilots will have only the assistance of the en route facilities (DF, radar) of the nearest hard-core station.

There is, of course, some room for flexibility here. If our on-the-spot appraisal of a given location indicates that local geography warrants more range than is possible with the unicom, we will leave the existing radio there, and there will be no reduction in range.

You will note that at the approximately 24 locations shown in columns 6 and 8, there will be no terminal flight assist service. In these areas, lost pilots will have the assistance of the nearest hard-core station, hundreds of installed navigation aids, their maps, and their own ability.

Coming down to the category of "airport advisories," the chart indicates that this service will continue at all but the 24 locations listed in columns 6 and 8. This is a reduction in service at these low activity locations.

The only two practical reductions in weather observation will be at the 17 aid sites in column 8 where terminal observations will be

taken probably only on request and at the 85 manicom sites where, though observations will be taken on a regular basis, they will not be taken during the night hours when the station is closed.

Face-to-face briefings will be available at all but the 30 locations listed in columns 5 and 8. At these locations, pilots will be required to obtain flight briefings via telephone.

Mr. WILLIAMS. In regard to that, Mr. Halaby, do you feel that it is advisable for a pilot to get a face-to-face briefing if possible?

Mr. HALABY. I think it is helpful and for some people it is very desirable.

Mr. WILLIAMS. Yes, sir.

Mr. HALABY. Others can communicate just as well over a phone.

Mr. WILLIAMS. In your Airman's Guide you make that suggestion, don't you?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. If you don't mind I would like to read it. It is on page 50 of the Airman's Guide, preflight briefing.

> Every pilot, either VFR or IFR, is urged to visit the nearest FAA flight service station prior to departure for a preflight briefing and to file a flight plan. If a visit is impracticable, telephone calls are welcomed. Telephone briefing, however, lacks the direct reference to maps and charts which is always desirable and helpful.

Surely you still hold to that theory?

Mr. HALABY. Yes, sir; absolutely right. Whether it is indispensable and essential is the question.

Mr. WILLIAMS. Does not being desirable and helpful also contribute to safer operations?

Mr. HALABY. It could.

Mr. WILLIAMS. So that in eliminating these face-to-face briefings at these 30 stations there will be to some extent, indeterminate of course, a compromise with safety?

Mr. HALABY. I think "compromise" is an excessive word, sir. I think that under certain conditions with certain individual people——

Mr. WILLIAMS. Compromise means a serious reduction in safety. No, I would agree with you, but there is a reduction to some extent, however small it might be, in the level of safety that results from having to use telephone briefings.

Mr. HALABY. Yes, sir; I think that is a fair statement and there is certainly a derogation of convenience for those who aren't carrying a map, as they should, for those who want the encouragement and the warm and friendly kind of guidance that they get out of these people. and the only question is whether this is essential in all of these places or not.

I think it is fair to say that is a reduction in service, but I don't believe it is a compromise in safety because there are so few people who come in and do that. I guess it is maybe 20 percent of the hundred percent of our service, and so many people would rather pick up the phone and call and look at their own maps, that for the greatest number it seems to be not as personal or as warm, but it is meaningful.

The last item on the chart refers to the percentage of activity which occurs during the hours a given facility is open. The only reduction here is in the 85 manicom sites where the facility will be open only

about 8 to 12 hours a day and will thus only be able to service about 60 to 90 percent of those who may desire service.

Where a given location falls within these ranges will depend, as I said earlier, on the time-activity curve for that location and on the kind of assistance we may be able to get from the local airport operator. If the operator is willing to stand the expense of a man or two, the hours of operation could be considerably extended.

This chart identifies, Mr. Chairman, the programed or intended reductions in service under the plan we propose. These are services which, in our best and most careful judgment can be eliminated or scaled down without disturbing the overall safety of the system. But they are reductions in service and may, as the chairman suggested, have some isolated impacts on safety. I wanted to lay them out clearly for you in order that you could see exactly what we were working with.

In judging the impact on the safety of the overall system, it is important to keep in mind that the extended program I mentioned a few minutes ago may make it possible to add, at locations where there is now no federally supported terminal service to general aviation of any kind, several hundred facilities of the kind identified here in columns 7 and 8.

One final thought: We believe this is a sound program and should be implemented. We need the help of this committee in making implementation possible. We cannot move ahead freely with the program in the face of restrictive language in the House-passed appropriations act. We believe a strong favorable report from this knowledgeable committee will operate to preserve for us the freedom we need to execute the program and to realize the safety and economic benefits of this program.

Mr. HARRIS. Mr. Chairman, I want to at this point to say in my judgment Mr. Halaby does not understand what the restrictive language is intended to do and what its purpose was. I think the record should be made clear that the language referred to does not in any way interfere with or restrict their efforts to proceed with the kind of a program that he has outlined to us heretofore and again reiterated today.

The restrictive language only says that these stations that are now in existence shall be continued during the next 12 months, the next fiscal year. Now, Mr. Halaby has said for the record today that he can't do this program right off. He said in his original announcement it would take 1 to 2 years. He said before us here today it would take 12 months and more, and so I suggest to you, Mr. Halaby, that you should take the restrictive language in the spirit it was intended, under the conditions and circumstances that exist which brought it about, and if it is thought that this program can be carried out and will better overall service, make more efficient service, and the demands will be met, and yet economies achieved, there is nothing in the restrictive language that will keep you from doing it.

What we were driven to the corner on was the fact that we were faced with the reduction of $10 million in operation over against your information to me, and what I thought I had a right to believe, that you were going to take the swoop immediately on these stations and start cutting them down and would cut them down the beginning

of this fiscal year with this kind of program, plus the fact that you did not have the funds that you asked for to provide these facilities for the remoting of this information to carry out the program, so I don't think that you should pursue this matter on the basis that we intended to restrict your activity at all.

We merely insist that you not cut these things down immediately, or be forced to accept the action of the Appropriations Committee, but that you proceed on the gradual basis that you intended. I tried to emphasize this in the clearest language and if the revision is made, which I am satisfied will be made, as it makes its way through the Congress, clearing up this matter, I think you will be able to carry out your program, and I hope you will accept it in that light.

Mr. HALABY. I thank you, sir. I guess my reaction was one of being told to continue and taking that to mean do nothing, which was the wrong interpretation.

Mr. HARRIS. I don't believe you will find anywhere in any statement that I made on the floor of the House that I said don't do anything. I said don't do it right now.

Mr. HALABY. We took it that way and took it wrong obviously, but the other side was we are going to get the rest of us carved out, so that was our problem. I thank you for this interpretation and it is most encouraging.

Mr. WILLIAMS. Had you concluded your statement, Mr. Halaby?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Let's see what we are dealing with. We are dealing with an annual operational savings estimated to be $2.9 million. Is that right?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. This is a key service that is rendered to general aviation, isn't it?

Mr. HALABY. No, sir.

Mr. WILLIAMS. Isn't this the Agency's main person-to-person contact with general aviation?

Mr. HALABY. Main person-to-person contact in communication with respect to flight; yes, sir.

Mr. WILLIAMS. All right. So this service is primarily for general aviation—I am speaking of terminal services now—although they are used by the airlines and others.

Mr. HALABY. They are for all users of the air space.

By the military, local service carriers, air taxi, irregular carriers, all of them, and general aviation.

Mr. WILLIAMS. What is the total cost of the operation of the flight service stations system at the present time?

Mr. HALABY. It is 3,850 traffic control personnel and approximately $48 million to operate the 297 stations in the 48 States. To be specific about your last point, 64 percent of the services in terms of aircraft operations at towers is general aviation, 12 percent military, 24 percent air carriers, so all three use it and the biggest number of users is general aviation.

Mr. WILLIAMS. What did you say the total cost was?

Mr. HALABY. 3,850 personnel and approximately $48 million.

Mr. WILLIAMS. $48 million?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. So this means a reduction of approximately 4 percent in your budget?

Mr. HALABY. About 6 percent, yes, sir.

Mr. WILLIAMS. What percentage of your total budget would $2.9 million amount to?

Mr. HALABY. I don't know what the total budget is going to be, sir.

Mr. WILLIAMS. What did you submit?

Mr. HALABY. At the current level it would be a very small percent.

Mr. WILLIAMS. What percentage of your total budget is made up of R. & D.?

Mr. HALABY. A very small percent, less than any other technical agency in the Government, a fraction of NASA and DOD.

Mr. WILLIAMS. What was the amount requested for R. & D.?

Mr. HALABY. $42 million.

Mr. WILLIAMS. I believe you said the Appropriations Committee cut that in half, $21 million.

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. What is the cost of operating NAFEC?

Mr. HALABY. I can give you that figure, but we do a large number of tests there. If you are thinking of the actual number of people and the support of the facilities itself, I can supply that figure for the record, sir.

Mr. WILLIAMS. Would you give us a curbstone guess at what it costs to operate NAFEC?

Mr. HALABY. We had approximately 1,550 people. We eliminated roughly 250 positions which leaves about 1,300. NAFEC is, as you know, a World War II naval air station converted over the last 6 years to the National Aviation Facilities Experimental Center. There is a larger number of aircraft there and those costs are fairly high, and then there is contract work going on there. The total cost to operate NAFEC last year was about $37.5 million. It is a substantial portion of the $40 million R. & D. budget.

Mr. WILLIAMS. Approximately how much money?

Mr. HALLABY. We were just authorized to modernize it by the Congress last year and we have some $5 million to start building a facility comparable to any of the space of Defense R. & D. facilities.

Mr. WILLIAMS. Could you give us an estimate as to how much money has been spent on NAFEC in the last 3 years, since you have been Administrator?

Mr. HALABY. The actual operation of NAFEC, or total R. & D.?

Mr. WILLIAMS. Total R. & D.

Mr. HALABY. Total R. & D. has averaged about $50 million, so it is in the order of $150 million.

Mr. WILLIAMS. What specific things can be pointed to as accomplishments for the expenditure of this $150 million?

Mr. HALABY. A very substantial list, Mr. Chairman, and I will be glad to submit it for the record.

Mr. WILLIAMS. Let's nail it down. What has been accomplished at NAFEC that we can put our finger on in the last 3 years?

Mr. HALABY. Would you like the list of accomplishments?

Mr. WILLIAMS. I would like it, but I am curious because I have heard a number of people say that very little has been accomplished.

Mr. HALABY. I think many, many people are impatient and con-

temptuous of research and development. They think it is a search for why the grass is green and why airplanes fly. They have no compunction whatsoever of voting $40 million to NASA for aeronautical research, but they have a terrible time thinking of our spending $40 to $50 million on a system that has now got $1,200 million invested in it, so I welcome the opportunity.

The first and biggest job at NAFEC is to try to mechanize and automate the airspace utilization system, ATC as it used to be called. The only way that we can continue this progress we have been making in preventing midair collisions, in assuring safe and delay-free traffic, is to move into mechanical and electronic backup for our controllers in the centers, the radar approach, and the towers. That has been the central heart of the job and that is the one that would have to go on regardless of how much appropriations were voted. It would be delayed and crippled with low appropriations. It would be expedited and facilitated if we had adequate appropriations, so that is the main bulk of the work.

Mr. WILLIAMS. What has been accomplished along those lines in the last 3 years?

Mr. HALABY. Well, look at the safety record. Look at the improvements that have gone into the center in radar approach control.

Mr. WILLIAMS. What automated equipment has replaced human equipment in the last 3 years that was developed at NAFEC?

Mr. HALABY. May I submit a list for the record and just give you a couple off the top of my head.

Mr. WILLIAMS. Yes, sir.

(The information referred to follows:)

FAA RESEARCH AND DEVELOPMENT ACCOMPLISHMENTS

Following is a list of some of the recent accomplishments made possible by the Agency's research and development program, in close coordination with operating elements of the Agency. The developmental phases of the Agency's R. & D. effort are done largely in Washington; the testing phase is conducted at the National Aviation Facilities Experimental Center (NAFEC):

Slush on runways

The effects of runway slush on the takeoff characteristics of jet aircraft were identified by NAFEC tests. The results have been disseminated to and are in use by civil and military pilots of jet aircraft.

Radar beacon

FAA research and development has produced a discrete aircraft identify and automatic altitude reporting radar beacon system. This will make it possible for the traffic controller to determine from his radarscope the identity and altitude of aircraft. The system has been accepted by the military, the air carriers, and is now the international standards.

Military and air carrier operators have programs underway to replace (or convert) present airborne transponders with the type descibed above. Small, lightweight, altitude reporting transponders meeting the national standard developed by the Agency are now available to the general aviation public for use in light aircraft.

Airport lights

Airport lighting systems developed by the FAA are now an integral part of the landing aids in use at national and international airports. These include: approach, runway, touchdown zone, centerline runway, and taxiway lights. Over 50 civil and military airports have installed lights of these types since the national standards were established by the Agency. The low-cost lighting aids for use at lower activity airports which are now available from industry, also incorporate many features developed under Agency sponsorship.

Among other things, some of these lights will allow aircraft to land under lower weather minimums than would otherwise be possible.

Aircraft arresting gear

Developments and tests of aircraft arresting gear suitable for civil aircraft have been completed which demonstrate the feasibility of arresting the landing roll of jet aircraft of the size used in commercial air carriage. Agency implementation plans will be based on the performance characteristics provided by this research and development effort.

Simultaneous parallel instrument approach procedures

Procedures have been developed which permit two aircraft to approach and land simultaneously on parallel runways spaced 5,000 feet or more apart. These procedures are now in use at Chicago O'Hare Airport. Other airports are being prepared for this same service. The procedures have been adopted for international use.

Air-ground communications

Developments are now in use providing long-range very high frequency air-ground communication service for flights from New York City to San Juan at ranges far beyond previous capabilities. This is a forerunner of installations to serve other long-range routes.

The transition from 100 to 50 kilocycles spacing between air-ground frequencies to effectively double the number of channels available for operational use is well underway, with Agency-developed amplifiers, antennas, transmitters, and transceivers, being incorporated throughout the national system.

Improved radar displays for airport terminal and air traffic control facilities

A radarscope display providing improved readability in brightly lit rooms and the capability of displaying aircraft position, identity, and altitude data in letters and numbers is now being installed at the Atlanta (Ga.) control tower. This installation is the prototype of improved displays which will be installed at other principal airports throughout the Nation.

Air traffic control switching systems

Telephone switching systems developed by the Agency are used by all Agency terminal and en route air traffic controllers to provide instantaneous selection of circuits to military control towers, weather offices, airline dispatchers, and the many other aviation ground facilities.

Air traffic control simulation

The air traffic control simulator facilities maintained at NAFEC are used in the development of improved procedures for preventing collisions between, and expediting the flow of air traffic. The simulator makes it possible to develop new traffic control procedures without experimenting with actual aircraft and without costly ground installations.

Procedures developed in this fashion are in use in areas such as Chicago; Washington, D.C.; Rome, Italy; and Athens, Greece, to name a few specific applications.

A joint NASA/FAA program permits the presentation on our simulator of radar targets from NASA's supersonic transport simulator at Langley Field, Va. This allows pilots operating the simulated SST at Langley Field to experience realistic air traffic control situations based on actual airport sites within the country.

North Atlantic operation (SPANAT)

Considerable Agency effort has been put into systematic improvement of the navigation, weather, air traffic control, and communications services supporting flight operations in the critical North Atlantic area.

Airport traffic control tower design

Airport designers are now guided by the detailed control tower characteristics which have been adopted by the industry on the basis of recent Agency experiments. These control towers provide excellent visibility of the airport surface and the surrounding airspace, and incorporate other features necessary to provide safe and expeditious movement of airport traffic.

Improved instrument landing systems

At many of the Nation's airports, Agency-developed equipment has improved the safety of flight operations in adverse weather. For example, wave guide

localizers, and capture effect glide slope equipment permit instrument landings under weather conditions which would have precluded landings under older equipment. With this kind of equipment in place, safe instrument landings can be made under a ceiling of 200 feet and with visibility as low as one-half mile.

Mr. HALABY. The radar displays that are now going into the new centers, along with some of the communications links and the techniques for using them, are instances of development products which have been tested out and simulated at our experimental facility. These products are not only applied in the United States, but all around the world. Studies using our NAFEC simulation environment for location of let's say the New York airport, in the New York area, or an airport in the Los Angeles area, have been prime inputs to airport construction plans. All of the techniques relating to traffic flow are proved out here under simulated conditions before you actually apply them to live traffic. Radar beacon transponders and the improvements in beaconry that we have had to work out with our own military, air carrier, and general aviation usings, and with the British, are among the R. and D. products which are now in use. For example, the beacon for the small planes that is now looking very good in terms of performance.

Now moving over into the nonair traffic control area, we have done experiments on airport lighting, on airport braking conditions, slush, for example, which have produced equipment and knowledge being widely used. We have conducted arresting gear tests which have proved the feasibility of arresting large large aircraft with hook and cable techniques. There seems to be quite a public demand on the basis of these tests, for the installation of arresting gears at various airports so that if a takeoff is abortive or a landing is over shot there will be a safety hook that would arrest the airplane.

Mr. Chairman, there is a long list of accomplishments and a very important list of projects underway which I would be glad to cite. I would welcome a special hearing of this committee developed entirely to the research and development program. If it could be held immediately, I would regard it as one of great public service. There are many who say that this type of research and development is a boondoggle. Yet they are quite prepared to see $5 billion in space exploration and $5 or $6 billion in defense R. and D, and regard that as absolutely essential. I am absolutely at a loss to understand it. I can't understand that attitude.

Mr. WILLIAMS. How much of that research and development is devoted to problems of general aviation, problems exclusively dealing with what we might call general aviation.

Mr. HALABY. You can't break these into categories, Mr. Chairman. You can't say general aviation is in a box here, military in a box here, air carriers in a box here. This is a whole system.

Mr. WILLIAMS. The development for an arresting gear you wouldn't charge against general aviation, would you?

Mr. HALABY. If I know what you mean by general aviation, that is, nonmilitary, nonair carrier aviation.

Mr. WILLIAMS. Light plane aviation.

Mr. HALABY. Oh, well, light plane aviation is a part of general aviation. There are quite a number of turboprop and jet aircraft in general aviation now. They are not a large number, but they are an

increasing number, and this is applicable to those business aircraft, those air taxi and irregular air carrier aircraft. Even the arresting gear is applicable to them.

Mr. WILLIAMS. How much has been spent on the so-called project Little Guy?

Mr. HALABY. I can give you the exact figure to date. We have paid to contractors over the past 3 years $371,812. In addition, we have four or five people in the Agency working on the project. It is the first work that has been done on a total cockpit system. The idea is to take what we have learned from the Army, Navy, and Air Force, over $100 million worth of experimentation in a similar area and perhaps a billion dollars since World War II, and try to make it available to the little guy in aviation.

Mr. WILLIAMS. What has been the accomplishment of that program?

Mr. HALABY. Well, sir, we can show you the cockpit layout.

Mr. WILLIAMS. I have seen them.

Mr. HALABY. We can fly you in an airplane with a couple of the instruments in it. The industry of course is very much against it.

Mr. WILLIAMS. I understand it would take the Kennedy or Rockefeller family to be able to equip a plane with this Little Guy project. What is the cost of a full panel under the Little Guy project?

Mr. HALABY. There isn't any full panel. This is a research project. This is research and development into making it simpler and safer for the individual to fly instruments. Instead of just sticking to the status quo system of using World War II instruments and doing it the hard way we have tried to make a little breakthrough as we have in medicine, and in space, and in missiles, and all other ways, a little breakthrough for the little guy in aviation. It is bitterly resented because the equipment manufacturers and others who don't want this kind of change, don't think the Federal Government should be experimenting in this field at all, should leave it completely alone.

I will take full personal responsibility for spending that money to try to get a better instrument system for the 350,000 small plane pilots in this country. If they don't like it, if it is unpopular, then I may be wrong; but I am convinced that we need some work on this.

Mr. WILLIAMS. Has there been any general acceptance of the results of this program?

Mr. HALABY. There are no results yet. We just feed out reports on what can be done. We are all disappointed at the costs of any segment of the things. But how do you ever yet anywhere in life? You experiment. You try. You put up a goal and you work toward it piece by piece.

Mr. WILLIAMS. I am not against experimentation.

Mr. HALABY. A lot of people are.

Mr. WILLIAMS. I am just asking what some of the results have been.

Mr. HALABY. A lot of people just blink at billions for defense and space, but wince at a few hundred thousand dollars for civil aviation research, and I don't understand it.

Mr. WILLIAMS. The same story can be applied to the straining at $2.9 million savings a year on the flight service station budget, and swallowing about a $900 million measure in other services.

Mr. HALABY. I think that is quite different. The only way you can make any substantial savings in our present $753 million request is

by little items of $1 million here, $2 million here, and they mount up. The amount we saved on the consolidation of the traffic control centers isn't a huge amount, but together with the others it is.

Mr. WILLIAMS. The problem that is posed to this committee is whether or not the service that is available to the pilots will be reduced to the point of impairing safety. We commend you on your efforts of course to effect economy. We realize that you would save some, I believe you said, $50 million a year by cutting out the flight service stations service all together, but nobody would ever advocate that.

On page 6 of your original testimony you said in the last sentence on the page, with respect to flight service stations:

> We are thinking in terms of a minimum of 100 miles between stations to insure an adequate communications network with direction-finding capability.

Do you mean a minimum, or a maximum?

Mr. HALABY. Well, sir, if you give us a little flexibility on it, which I think we all want, it will average about a hundred miles, and in some cases it will be a little bit more and in other cases it will be a little bit less, but the idea was that no one would be out of range for en route communications of a hard core station more than about 100 miles.

Mr. WILLIAMS. More than about 100 miles?

Mr. HALABY. Yes, sir.

Mr. WILLIAMS. Statute or nautical?

Mr. HALABY. I guess our whole system is laid out in nautical miles. Mr. Chairman, did you mean the confusion between maximum and minimum? We didn't want anybody in the air to be more than 100 miles away from a flight service station, or are we getting into sematics here?

Mr. WILLIAMS. We are. Do you mean "approximately" when you use of the term "minimum"?

Mr. HALABY. He doesn't like my explanation. He says each station with a hundred miles or more from the next one.

Mr. WILLIAMS. Each one would be a hundred miles or more?

Mr. HALABY. You put it your way, Mr. Harvey.

Mr. HARVEY. You had it in your statement. The lower activity station is at least 100 miles or more from a station of higher activity.

Mr. WILLIAMS. What will be the maximum number of miles between any two stations as is presently contemplated?

Mr. HARVEY. In the hard core there is no maximum.

Mr. HALABY. He means as implemented what is the longest distance between the two nearest flight service stations.

Mr. HARVEY. The longest distance I know of along a route in the existing system is 170 nautical miles.

Mr. WILLIAMS. That brings me to this question because I think this is something that should be cleared up. To get back to a situation that prevails down in my area, if you don't mind, you have Meridian on the list to be closed; you have Tuscaloosa on the list to be closed; and you have Monroe on the list to be closed. That leaves one station between Birmingham and Shreveport, and that will be the station at Jackson. It is 250 miles from Jackson to Birmingham where there will be no station if you eliminate Meridian and Tuscaloosa. It is 210 miles from Jackson to Shreveport where you won't have a station. If you eliminate McComb, which I understand is probably on the second list, then you won't have a station

between Jackson and Baton Rouge, which is 150 miles, and going to the north if you eliminate Greenwood, which I understand is also on the second list, you won't have a station between Jackson and Memphis, which is about 210 miles.

Aren't you going to create quite a void?

Mr. HALABY. We have a tower scheduled for Meridian. Monroe has one now. There would be Manicom's in those areas. We feel it would be adequate service.

Mr. WILLIAMS. As I understand it, the same thing applies at Pensacola where you will have a void in the location of these hard core stations.

Mr. HALABY. Mr. Chairman, you can't eliminate the other 140——

Mr. WILLIAMS. I realize that, but I am taking you at your word in the initial statement that you gave to the committee. You said:

> Approximately 150 present flight service stations locations will be selected. We are thinking in terms of a minimum of 100 miles between stations to insure an adequate communications network with direction-finding capability.

Does that mean 100 miles between Manicom's, between AID's, or between Manicom's and hard core stations?

Mr. HALABY. I remember when I was a little boy they said if you sliced up a snake that other snakes would grow out of it.

The whole system of coverage here is composed of flight service stations. There they are. Obviously some go above 100 and some below 100 in the distance from the nearest station and we gave you the round number of about 100 miles between stations, but right in the midst of that are all the Manicom's and AID's, and that map of the United States looks like a case of small pox, when covered by all of these Federal facilities. I think you have to look at the whole thing—I know I have to—as distinguished from one category or one region.

Mr. WILLIAMS. I am just trying to get at what you mean by the sentence:

> We are thinking in terms of a minimum of 100 miles between stations * * *.

Mr. HALABY. We presented that very candidly and I hope fully and carefully in connection with that testimony. That is a map of the United States. It shows how they would be deployed with approximately 100 miles separation between them, in some cases less and in some cases more.

Mr. WILLIAMS. Do you contemplate that there would be in any case a separation of 200 miles?

Mr. HALABY. I, to be honest with you, didn't know there was one as far apart as 230 miles, Mr. Chairman, and I will have another look at it, but if we provide adequate service it doesn't shock me to hear that one hard core station is 230 miles from another. Remember, some people say there is a radiation hazard in the United States. There is so much radar, so many communications going out now between the military, the space, and the civil, that they may saturate the spectrum.

Across that area particularly the idea that one of us flying alone in an airplane is lost because there are 230 miles between two stations of a particular kind is just not the case. There are hundreds of military stations down there, Army, Navy, and Air Force. There are towers. There are centers. The Memphis center there is conducting surveillance over that whole area all the time. The Montgomery

rapcon is working the area. I guess I just have to say that the systems covered under this scheme in our view would be adequate.

Mr. WILLIAMS. Mr. Halaby, I am sorry, I have a number of other questions I would like to pose, but apparently I am not going to be able to. But, I would like to ask one further question before I leave.

Yesterday during the hearings on the flight service stations a number of witnesses had rather glowing compliments for your administration for your establishment of the general aviation section or service within the Federal Aviation Agency. This component of your organization, which is headed by Mr. Schulte, was identified as the place where general aviation could receive full consideration, but it was charged at least by one witness who appeared here, that in practice the general aviation service is often bypassed even when the staff work has a direct bearing on general aviation. Would you like to comment on this, particularly with reference to Mr. Schulte's role in the decision to reduce the number of flight service stations?

Mr. HALABY. Well, sir; I take full responsibility for this and I wouldn't want to point to any individual or any group in the Agency. Whatever value or detriment is in this program that I presented is attributable to me and no one else. Mr. Schulte has participated in this from the beginning and has been very helpful.

I guess it is fair to say, Mr. Chairman, that there are not a large number of people within a government agency who want to reduce that agency, personnel or budgetwise. It is not a natural instinct. There is not enormous enthusiasm, so there are a large number of people and associations who resist any kind of change, and that is the basic problem that we found with the centers and with the flight service stations, but I think most of them are loyal and are attempting to help.

There is a kind of campaign in the industry to reorganize the FAA and I have had a number of letters from very respectable people suggesting that the Assistant Administrator for General Aviation become in effect the Deputy Administrator and even some that he become the Administrator, and this rises and falls as those who feel they are not being heard enough get frustrated and get active.

The fact is that before a matter of importance to general aviation comes up for any kind of decision, each of the sections and functional services of the Agency take that into account through hearings, through private informal discussions, through the Administrative Procedure Act implementation, and in the cases that I know about almost without exception—there probably are a few exceptions—where it affects general aviation, Mr. Schulte, Mr. Reynolds, Mr. Stimpson, Mr. Lovering, all of these fine men who are in the general aviation affairs staff, are consulted.

Having invented the idea of setting it up, I guess now I can be the father of the suggestion that it ought to be enlarged, but I guess I think it is about right and I guess I think they are quite influential in the Agency, as they should be. The fact that Mr. Schulte is legislative liaison is quite significant, because he is in contact with you gentlemen who represent not only the general public, but that special public called general aviation.

Mr. WILLIAMS. Mr. Halaby, I was looking through this statement of this witness to find specifically what he did say, but just in the

little bit of time I have had I don't find it in his prepared statement. It must have been in a statement he made off the cuff.

Mr. HALABY. I get a lot of letters, Mr. Chairman—it may be the same thing—that say "Put Schulte in charge of flight standards and air traffic service, and aviation, medicine, and R. & D.," and sort of put under him a column of general aviation functions and separate the military and the air carrier. It is just absolutely impossible to organize it that way and that is because I think the proponents of this don't understand we are trying to systemize rather than fragment our functions.

Mr. WILLIAMS. Mr. Halaby, the bells have wrung for a quorum call. We are going to have to adjourn. I had hoped I might have a chance to ask about a trial balloon that was sent up yesterday with respect to Bolling Field, which received attention in the press, but I suppose we will have to forgo that at this time.

Mr. HALABY. I can give you a quick answer. My predecessor worked out the elimination of Bolling and Anacostia, which were interfering with and congesting air traffic over the area. It is my understanding that at that time—one of my colleagues advised me a few minutes ago—that he did not think it would be desirable to have a general aviation field there. As far as I know the possibility is very remote, even if we all wanted to do it. It will be declared surplus to GSA. They will consider transferring it to any one of a number of agencies. I am told they intend to transfer it to the Land Redevelopment Agency for low-cost housing, and apartments, and so on. We will be lucky if we can keep the structures low enough so that they don't interfere with Washington National traffic.

Mr. WILLIAMS. I think a very good way to keep the structures low enough might be to extend Washington National Airport across the river and take in Bolling as a part of Washington National Airport. However, we don't have time to get into that now.

Mr. HALABY. We have, as you know, been working very hard to get other sites, Beltsville, Fairfax, and other areas that seem more realistically practicable.

Mr. WILLIAMS. It seems to me that it is a shame to have the millions of dollars that have been spent on Bolling Field to go down the drain.

Mr. HALABY. As an aviator I agree with you. As a member of the administration I would have to find out what the administration intends.

Mr. WILLIAMS. Thank you, Mr. Halaby. The subcommittee has received various items for inclusion in the record. Without objection, they will be placed in the record at this point.

The committee will stand adjourned.

(The material referred to follows:)

STATEMENT OF HAROLD G. VAVRA, DIRECTOR, NORTH DAKOTA AERONAUTICS COMMISSION, BISMARCK, N. DAK.

My name is Harold G. Vavra. I am the director of the State of North Dakota Aeronautics Commission with offices at Bismarck, N. Dak. I have held this position continuously since 1947.

I am familiar with the Federal Aviation Agency's operations of flight service stations in North Dakota, as well as surrounding upper Midwest States, since the agency was established by the Federal Aviation Act of 1958.

I am also familiar with the operation of similar flight service stations in this area by the former Civil Aeronautics Administration, which preceded the Federal Aviation Agency.

REDUCTION PROPOSAL

As I understand the matter before this subcommittee, the Federal Aviation Agency proposes to cut back from 297 basic flight service stations to about 100 hard core stations, with perhaps another 40 to 80 substations in high density areas.

Under this proposed cutback, the State of North Dakota would probably be entitled to 2 hard core stations out of the 100 being proposed. At the present time, North Dakota has 6 full-time flight service stations and 2 remoted stations, for a total of 8.

NORTH DAKOTA OPPOSED TO CUTBACK

The North Dakota Aeronautics Commission is opposed to the reduction or elimination of any flight service stations in the State. The average separation between flight service stations in North Dakota is 100 to 125 miles. This separation provides a minimum type of coverage for general aviation aircraft for communications and weather information. In North Dakota, we cannot permit a major cutback without a sacrifice in aeronautical safety, for general aviation flight operations.

FEDERAL AVIATION AGENCY BUDGET PROBLEMS

After considerable study, I am positive that Mr. Halaby's proposed cutback of approximately one-half of the flight service stations in the United States, is not going to solve his budget problems in the House and Senate Appropriations Committees. As a matter of fact, elimination of all the flight service stations and the 3,800 positions involved, would not save enough money to take care of the FAA's budget problem with Congress. It will take at least double that saving to fit in the SST (Super Sonic Transport) funding program in the FAA's budget.

What is upsetting the apple cart is the SST (Super Sonic Transport) research and development funding program, which was dropped into the FAA's budget and will require up to $100 million per year for the next 7 or 8 years ($1 billion total). Congress has put the lid on the FAA's total appropriation, thus, this new SST (Super Sonic Transport) research program geared to spend $100 million annually out of FAA's budget, has the very real capabliity of reducing all other present expenditures in the entire FAA by about one-eighth. This could amount to a reduction of about 6,000 employees.

The SST funding program, within the FAA's budget, is causing serious if not disastrous problems, by its fast acceleration and its long-term nature (up to 10 years).

To show why the FAA is in real budget trouble, I show below the nature of the SST moneys appropriated out of the FAA's budget as follows:

Amounts appropriated by Congress for SST research and development

Year of fiscal budget:	
1962	$11,000,000
1963	25,000,000
1964	60,000,000
1965 (estimated)	100,000,000

NOTE.—Total amount needed over 10 years, about $1,000,000,000.

It is obvious that it is impossible to throw a $1 billion 10-year program into an agency the size of FAA (approximately $700 million budget per year) without major dislocations and elimination of some of the basic services of the Agency to the flying public. To continue in this direction is a management error.

There is only one agency big enough in the U.S. Government that can absorb this amount of new long-term programing and appropriations, with possible minor cutbacks, to make room for the additional money. That Agency is the Department of Defense (Air Force, etc.).

With Congress and the administration acting with an economy frame of mind, they are not going to increase the overall budgets, but fit any new programs into existing budget ceilings and tell the Agency to figure out what to eliminate, to balance the budget.

The military budget being in excess $40 billion, can find places for a $100 million expenditure annually, such as required by the SST and not suffer at all, since it is a small percentage of the overall. Not so with the FAA.

North Dakota is, therefore, opposed to the elimination of the present FAA flight service stations here.

I have discussed this matter with Lyn Hanson, director of the South Dakota Aeronautics Commission. He agrees, in our approach, that the flight service stations should remain in operation, and that action should be taken to correct the basic budget problem facing the FAA. The only cure in sight, is to unload the entire SST program and its billion dollar funding requirement into some other agency, such as the Military Establishment.

The administration's Eugene Black report, recently released, confirms our suggestion that the SST should be funded and developed by some other agency and not the Federal Aviation Agency.

Editor Robert Hotz, in the April 13 issue of Aviation Week, echos our point of view: "President Johnson's experience with major aircraft development programs has undoubtedly convinced him that no goal of such financial ad ntechnical magnitude as the supersonic transport program can be justified to Congress or the American taxayers, unless, it has some ultimate value for national defense."

The President has appointed a new advisory board with Secretary McNamara as its head to study the SST and whether there is a military requirement.

It is my suggestion, that the Federal Aviation Agency makes every possible effort to get the SST development appropriation out of the FAA budget and eventually transferred to an agency with sufficient funds, such as the Military Establishment, that it (the military) could absorb this fantastic $1 billion for research and development of the SST.

Unless this is done, I can see nothing in the long-range future, but a major retrenchment and possible collapse of the Federal Aviation Agency's services involving interstate commerce, such as the flight service stations and other services now available.

The reason why it is practically impossible to budge Congress (Appropriation Committees) out of more money is the rapidly expanding appropriations, since the Federal Aviation Agency took over the old Civil Aeronautics Administration.

The Civil Aeronautics Administration, in the 1956 fiscal year, had a total appropriation of $169,320,500 which included $23 million of Federal aid airport funds. Out of this amount, the CAA operated over 300 flight service stations and provided all other services. Now let's take a look at the record:

Fiscal year	*Appropriation*	*Federal airport funds included*
1956	$169, 320, 500 (CAA)	$23, 000, 000
1957	245, 425, 136 (CAA)	30, 000, 000
1958	352, 506, 000 (CAA)	25, 000, 000
1959	515, 287, 000 (FAA)	30, 000, 000
1960	567, 995, 000 (FAA)	57, 500, 000
1961	707, 424, 000 (FAA)	80, 000, 000
1963	780, 000, 000 (FAA)	75, 000, 000

The above shows that the annual appropriations since 1956 have increased 360 percent. The CAA could operate 300 fligth service stations within an annual budget of $169 million in 1956. Now the FAA says, with an annual budget of about $780 million, there is a lack of money for the flight service stations? I disagree. The money is being absorbed by the SST program, which never should have been programed into the FAA budget in the first place, because of its huge long-term liability.

Before the existing flight service station complex is cut to ribbons, I hope that every effort will be made to resolve the FAA's budget along the line suggested in this testimony. North Dakota for one, does not have the funds available to finance the operation of any FAA flight service station or pay the teletype or A.T. & T. line charges for network operations.

The services provided by flight service stations are for the most part used by "general aviation aircraft" and airlines operating in interstate commerce. It therefore appears reasonable to expect the Federal Government to provide the necessary services for interstate commerce, which is a basic function of the Federal Government.

STATEMENT OF WALTER R. BROWN, EXECUTIVE VICE PRESIDENT, ALBANY CHAMBER OF COMMERCE

The Albany Chamber of Commerce, the city of Albany, the Dougherty County Commission of Roads and Revenues, and the pilots of the Albany area vigorously oppose the removal of the flight service station from the Albany Municipal Airport.

General aviation in the city of Albany and its environs is greatly disturbed over the proposed removal of the flight service stations. We realize that economy is the reason behind this proposed closure, and that economy in Government spending is an important objective. We, of course, are the taxpayers who put up the money in the first place and we are pleased to see efforts being made to use it conservatively.

But we think that economy should not be balanced against safety. There are many pros and cons in the arguments regarding removal of the flight service stations, and we have tried to see both sides. Almost every pilot in the area has stated emphatically that the safety element should override the economy factor, that lives are more important than dollars.

We realize that the primary function of the flight service station is in-flight communication and that the factor which we stress, that of safety around the airport itself, is in no way related to the FSS original function.

We also believe that usage has brought the flight service station into a vital area of protection to aircraft in the vicinity of the flight service station. No amount of argument can make us believe that a remoted FSS can possibly give us the safety factor established by a dedicated group of knowledgeable specialists on the spot.

Nor can the remoted FSS give us the weather briefing which we receive from across-the-counter briefing by experts right there where we are taking off, flying, or landing. Pilot reports and volunteer weather observations, utilization of flight desks or fixed base. Operators cannot possibly provide the safety factor given us by our own FSS specialists.

Here at Albany (like everybody else, of course) think we have special problems. We have a busy general aviation segment. We have student training. We have airlines, two of them, inbound and outbound many times a day. We also have Army aircraft from Army aviation centers, both fixed and rotary wing, using Albany airport as a practice field. We have Turner Air Force Base utilizing our air space and omni for many types of flying in strategic and tactical aircraft ranging from T-33's through RC-130's and KC-135's to B-52's. One of Albany's busiest runway approaches overlaps one of Turner Air Force Base's busiest runway approaches.

We feel that there are ways of achieving the cutbacks in expenditures other than the derogation of the safety of our pilots and the innocent people flying with them, by the removal of our flight service station.

We urge you to reconsider this move in the light of lives, not dollars, saved.

Therefore, we earnestly request this honorable body consider our plea to retain the flight service station in Albany and the others named to be closed by the Federal Aviation Agency.

STATEMENT OF MR. C. A. MCKINNON, MANAGER, IBM FLIGHT OPERATIONS, DUTCHESS COUNTY AIRPORT, POUGHKEEPSIE, N.Y.

The closing of the Poughkeepsie Flight Service Station would severely restrict the operation of our company's aircraft at the Dutchess County Airport. At the present time, we are operating two Fairchild F-27 turboprops, one North American Jet Sabreliner, and one Aero Commander. These aircraft fly approximately 800 hours per year, with the flights originating and terminating at the Dutchess County Airport. Our operation is a 7-day-a-week, 24 hours a day operation with frequent departures and arrivals between 6 o'clock in the evening and 6 o'clock in the morning.

The runway length at the Dutchess County Airport is extremely short for our operation. For the turbine powered aircraft, only one runway is available. It is essential that we have accurate information on wind velocity and directions just prior and during "land and approach." Strong crosswind conditions are a critical factor in landing, and requires continuous communication with the flight service station on final approach in order to insure adequate safety.

Without 24-hour-a-day weather service, our operation would be extremely handicapped since we require IFR capability for completion of flight schedules.

If the flight service station is removed from Poughkeepsie, our operation will be limited to the extent that we would have to consider relocating the operation at one of the major New York airports. Even this would not be a realistic solution as the majority of our working trips require operation through Poughkeepsie where our company has one of its largest manufacturing installations.

It is my personal opinion that every possible consideration should be given to find a means of keeping the present flight service station at Poughkeepsie.

FULKERSON AVIATION, INC.,
Gillette, Wyo., May 15, 1964.

Hon. JOHN BELL WILLIAMS,
Chairman, Transportation and Aeronautics Subcommittee, House of Representatives, Washington, D.C.

DEAR REPRESENTATIVE WILLIAMS: Substantiating my appearance yesterday, May 14, before your committee on behalf of the Sheridan, Wyo., flight service station, I should like to endorse the testimony and presentation of Mr. Marvin W. Stevenson, director of Wyoming Aeronautics Commission.

As airport manager and an officer of the airport board for Gillette-Campbell County Airport and flying service operator here for over 25 years, I have been closely associated with the CAA and later FAA development of services and communications and in particular with the Sheridan Flight Service Station.

Sheridan Flight Service Station has been of invaluable assistance to me and to our pilots on numerous occasions under deteriorating weather conditions when alternate airports were either impractical due to distances involved or were inaccessable because of 13,000-foot mountains in between. Under these conditions, only trained personnel with on-the-spot observations and direct radio contact with the pilot can suffice. I feel that the removal of this Sheridan facility would leave a serious and dangerous void in the national airways network system. This void would cover some 50,000 square miles or roughly the northern half of our rugged and mountainous State of Wyoming.

From an economic standpoint, the cost factors do not appear to justify this curtailment of a vital facility. Of the seven persons now employed at Sheridan and presumably considered a saving in remoting this station, we find that two would need to be hired to increase the operation of the Sheridan Weather Bureau from 16 hours per day operation to 24 and 1 additional would be needed in the extra workload of the station assuming the remoted duties of Sheridan. Of the net gain of four personnel, the cost of remoting the station plus the leased wire service charged for remoting would entail expenses that would make dollar savings minimal or nonexistent.

We urge that dollar savings, if any be carefully weighed against the safety factors involved and the inconveniences to the air traveling public and trust that with all things considered the Sheridan Flight Service Station may be retained in its present form.

Respectfully yours,

JAMES T. FULKERSON.

[Telegram]

ALBANY, GA., *May 26, 1964.*

Re flight service station here.

Hon. JOHN BELL WILLIAMS,
Chairman, Subcommittee on Transportation and Aeronautics,
House of Representatives, Washington, D.C.:

On March 25, 1964, the City Commission of the City of Albany went on record opposing the closing of our local flight service station due to the effect it was felt this would have on our community, and copies of the resolution protesting the studied closing were furnished to the Federal Aviation Agency, the honored Senators from this State, and the honored Representative from this district. This telegram is therefore directed to you to reaffirm the city's request for reconsideration of the order closing this valuable safety service at the local airport, and is tendered for such consideration as you and your colleagues may feel it warrants.

S. A. ROOS, *City Manager.*

FEDERAL AVIATION AGENCY,
Washington D.C., April 27, 1964.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: I share the concern that you express in your letter of April 16 regarding the future of the flight service station. For the past year we have been giving the flight service station matter a thorough review. This has been at the direction of the Appropriations Committees of the House and Senate. The President has also expressed his belief that we could manage with fewer stations without derogating safety.

I strongly believe that basically the consolidation plan for flight service stations is correct. Remoting stations offers the opportunity to make considerable savings for the Government. However, a number of very good questions have been raised by the industry concerning terminal services at airports, the adequacy of weather reporting and information, and other functions which the flight service station presently performs.

To consider the many objective questions and suggestions made by the industry, I invited industry user groups to a meeting on April 6. The future roll of the flight service station is part of the national airspace system was fully explored at that time. The conclusions of three independent studies which I had FAA personnel perform were presented to the group. In order to give the industry time to consider these ideas, a second meeting was called for April 22. At this session the Agency had the benefit of hearing the thoughts and suggestions of the user groups.

When I appear before the Transportation and Aeronautics Subcommittee in May, I plan to present the results of these meetings, our studies, and our future plans for the flight service stations. I welcome this opportunity to appear and explain the consolidation program to the committee.

Although the consolidation program was announced in February, it was stated that no consolidations would take place from 12 to 24 months; therefore, I am sure the committee will have ample time to consider this question and report its findings before any consolidation actually takes place.

Sincerely,

HAROLD W. GRANT
(For N. E. Halaby, Administrator).

CITY OF ANNISTON, ALA.,
June 8, 1964.

Hon. KENNETH A. ROBERTS,
House Office Building,
Washington, D.C.

DEAR CONGRESSMAN ROBERTS: In reference to your letter of May 14, 1964, we wish to submit the enclosed reports. Part 1 is a quotation of a recent letter of Mr. G. L. Rand, executive director, National Association of Air Traffic Specialists (NAATS), which more or less explains the capabilities and activities of flight service system and the association's thinking toward any changes. Part 2 concerns the Anniston Flight Service Station.

In addition to this report compiled by our airport manager we would like to make some observation in reference to the flight service stations system and the Anniston Municipal Airport.

The present-day flight service station bares little resemblance to those which were originally placed into service some 20 or 30 years ago. This is due to the fact that the FSS has kept pace with the development of aviation needs both as to the aircraft performance and utility and the increased number of pilots and higher degrees of pilot proficiency. Flight service stations perform ancillary terminal functions such as advisory services, personalized pilot briefings, flight plan handling, and weather observations. The importance of weather observations by flight service stations should be emphasized since all flight service stations with the exceptions of those locations which have a co-located weather bureau, make hourly observations and more if necessary. These are disseminated over lease line teletype circuits nation-wide.

The Airport Advisory Service, which designated flight service stations now perform, provides essentially the same tower service at locations that presently cannot qualify for the inauguration of a control tower service. The FAA cri-

terion, which has to be met before a control tower can be installed at a particular location, is 24,000 transient arrivals and departures of aircraft per year. This Airport Advisory Service which was developed by the FAA would disappear from the Anniston Municipal Airport should the Anniston FSS be removed from its present location.

The personalized pilot briefings and flight plan handling that has been mentioned in previous correspondence needs clarification and emphasis. The flight service specialist who provides this service has been duly certified by the U.S. Weather Bureau as competent to provide pilot weather briefings, both during actual flight and prior to flight. These men are also required to have an intimate knowledge of the terrain which affects weather conditions (within 400 nautical mile radius of their prospective stations), the pilot weather briefer also has to be able to judge or size up the capability of a pilot planning a flight in order to determine if a briefing should be that for an airline captain or a student pilot. This cannot be done adequately over a telephone to someone who cannot be seen and is perhaps 100 or so miles away. Additionally pictorial weather maps or related material cannot be shown to the pilot receiving the briefing over some telephone or other stopgap measures.

Interviews with user groups at locations where flight service stations have always been remoted to another location indicate without question that service has been derogated in spite of the best efforts of FSS people. A case in point is La Grange, Ga. Since that facility was closed and remoted to Anniston, flying activities from La Grange has fallen off sharply. Several aircraft accidents have occurred at the La Grange Airport since the FSS was closed and four fatalities have resulted. Needless to say no weather is reported from La Grange any more, and the once published instrument approach has since been abolished by the FAA. With the exception of the foreign exchange telephone from La Grange to the Anniston FSS, pilots in the La Grange area have been left on their own. Further remoting or consolidation of the Anniston FSS to still some other location would compound the problems that already exist.

Many companies and individuals have purchased aircraft within several years for use in their various businesses and enterprises under the impression that the important services provided by the network of FSS would be available to them as a part of the FAA program to promote and foster the growth of aviation. If these services are now to be denied them then aviation in all its aspects would suffer extending all the way through the aviation businesses, support businesses and eventually to the aircraft manufacturers themselves.

The flight service station system and the FSS at Anniston are to be commended for their work. Many pilots owe their lives either directly or indirectly to flight service stations which are conveniently located and to the highly trained and dedicated personnel who man them.

Your continued interest in the retention of these facilities at Anniston Municipal Airport is appreciated.

Sincerely,

CLAUDE DEAR, *Mayor.*

PART I

STATEMENT OF NATIONAL ASSOCIATION OF AIR TRAFFIC SPECIALISTS, INC., BETHESDA, MD., ON "SAFETY THROUGH SERVICE; GENERAL AVIATION AND THE FLIGHT SERVICE STATION"

BACKGROUND

The flight service system of today had its beginning in the era of the air mail service, 1918 to 1927. This was followed by the pre-ATC period of 1928 to 1934 which saw the planning and implementation of the first Federal airways system of navigation aids, emergency landing fields, and communication stations. By 1935 the requirement for positive control of IFR en route traffic and of both IFR and VFR traffic in congested terminal areas was fairly well established and the Federal Government went about the business of satisfying this requirement. Effective control of air traffic required reliable communication between the pilot and the controller. This was first accomplished by relaying clearances and position reports through appropriate communications stations. Air Carrier aircraft worked through "company radio," military aircraft worked through either military radio or INSACS (forerunner of the present FSS). General Aviation aircraft depended entirely upon the INSAC. Only the aircraft in the terminal areas talked directly with the controller.

As time marched on the volume of traffic increased tremendously, HF communication was supplanted by VHF and UHF, the VOR replaced the Adcock four-course range as the primary nav aid, and direct controller-pilot communication with IFR aircraft was developed by implementing a comprehensive system of peripheral communications outlets. The FSS system continued to serve VFR flights and acted as a backup for the controller in cases of failure of the direct controller-pilot channels, which is not infrequent. In this process of evolution the flight service stations assumed a new role which amounts to furnishing for general aviation the same briefing, dispatching, and flight following services as the air carrier company system and the military base operations offices. The only significant difference is that the general aviation pilot still retains the authority and accepts the responsibility for beginning, canceling, or diverting a flight. Flight service specialists have undergone intensive training in navigation, aviation weather, pilot briefing, aircraft operating characteristics, terrain familiarization, and emergency procedures. A high percentage of the journeymen are themselves licensed pilots.

GROWTH OF GENERAL AVIATION

Since World War II the general aviation fleet has grown steadily while the air carrier and military fleets have shown a decline. In calendar year 1963 general aviation accounted for 64 percent of all aviation operations while the air carrier and military accounted for 24 and 12 percent respectively.

AVIATION WEATHER AND THE FSS

The observation, analysis and dissemination of aviation weather is the primary responsibility of the U.S. Weather Bureau.

The FAA participates in this program by installing and operating the major weather teletypewriter networks, by making 24-hour aviation weather observations and furnishing public weather service at 213 flight service stations, and by furnishing pilot weather briefer services at all flight service stations. Flight service specialists are trained to the same proficiency level as Weather Bureau observer-briefers at first order Weather Bureau offices; are examined and certificated by Weather Bureau quality control officers. This assistance to the Weather Bureau is furnished as an adjunct to their primary duties and costs the taxpayer nothing extra.

SCOPE OF SERVICES FURNISHED BY FSS

Flight service stations perform a number of functions related to air safety plus a few ancillary services for other Government agencies simply because the staff is there and available, resulting in an overall saving to the taxpayer. The following is a listing of the more important services furnished:

FSS function:	*User group affected*
1. Emergency assistance to aircraft.	General aviation.
2. Pilot weather briefing	Do.
3. Flight plan program	General aviation, military aviation.
4. Search and rescue coordination.	General aviation, military aviation, air carriers.
5. Handling and distribution of weather information.	Do.
6. Radio dissemination of weather.	Do.
7. VFR flight following program.	General aviation.
8. Pilot weather reporting program.	General aviation, military aviation.
9. Notice to airmen program.	General aviation, military aviation, air carriers.
10. Pilot education	General aviation.
11. Public relations with flying public.	Do.
12. Written exams for pilot license.	Do.

CONCEPTS OF SYSTEM PLANNING

Early in 1961 the FAA conceived a plan for a modest reduction in the number of air route traffic control centers by expanding the use of remote communications outlets, leasing more and longer telephone control lines, and the concentration of controller personnel in fewer locations. The plan is nearning completion with little apparent derogation of the quality of the control of IFR traffic. The claimed monetary savings could do with some close scrutiny by an agency other than the FAA. The same planning group, within FAA, failing to realize that flight service stations furnish an entirely different type of service to a different segment of the aviation community, operating for the most part under VFR, are advocating the same type of centralization, to a far greater degree, in the flight service system. Their proposal involves removing personnel from a vast number of FSS, remoting the Navaids and communications outlets to central "hub stations" to replace two to four existing stations, and increasing the staff of the "hub station" to handle the additional workload. We call this the "octopus" concept of planning. The anticipated monetary savings would not be realized until the third year, then are subject to some question. The statement has been made that the primary function of an FSS is en route communication and that there is no limit to the number of stations that can be remoted without derogating safety. We disagree with this statement for the following reasons:

1. The flight service system accounted for 455 documented "saves" during the 3-month period April 1 to June 30, 1963. During this period 398 lost aircraft were oriented and directed to a safe landing, 93 by the use of VHF/DF equipment and 211 by reference to lights, landmarks and terrain features. This latter technique is highly effective only when the flight service specialist has responsibility for a normal service area within a radius of 50 to 75 miles from his station. Modern VHF/UHF direction finding equipment has been provided in prior year appropriations, adequate to provide complete coverage in the navigable airspace of the United States if installed in the present FSS system of approximately 300 stations. DF equipment cannot be remoted except at prohibitive cost; must be operated from a position within a few hundred feet of the equipment installation. This equipment has been coming off the manufacturer's assembly line since mid-1963 but the installation program has been held in abeyance. The proposed ultimate system of approximately 100 stations will provide only 30 to 40 percent DF coverage.

2. The effectiveness of preflight briefing is impaired when it must be done by telephone as opposed to over-the-counter briefing because pictorial presentation of weather, plotting charts, navigational computers, terrain profiles, current FAA publications, regulations, danger area charts, etc., are not available to the pilot.

3. Alternative arrangements for aviation weather service (part-time, SAWRS, AMOS, etc.) are inferior to the existing 24-hour first order service provided by the FSS at no additional cost to the taxpayer.

4. Many control zones will have to be canceled and airports will lose their instrument approach procedure because of lack of communication capability.

5. The ability to "talk a pilot down" by the sight and sound method would be lost by remoting. We cite a recent example at Mineral Wells, Tex. (scheduled to be remoted to Fort Worth). On March 9 the weather deteriorated to "ceiling 100 feet, sky obscured, visibility one-quarter mile, snow, snow pellets, fog, wind 300 degrees (WNW) 16 knots with gusts to 24." Three single engine civil aircraft caught in this weather were talked down by a flight service specialist at the Mineral Wells FSS by standing outside the station building using an extension microphone. The entire action took place between 0954 and 1021 CST. The aircraft and pilots involved were: N7980D BE–35, pilot Gene C. Head, Fort Worth, Tex.; N3825D C–182, pilot Eugene C. Morris, Post Office Box 88, Shreveport, La.; and N5775W PA–28, pilot Roger L. Burk, Long Beach, Calif. These were not novice pilots and could have made a semblance of an instrument approach off the VOR, but could not see the airport when right over it.

6. Airport advisory service now furnished by many flight service stations where there is no airport control tower will no longer be available. Safety will be impaired by a return to the old practice of several agencies on the field issuing airport information for the same airport at the same time over different communication channels (airline radio, Unicom, etc.). Two fatal mid-air collisions between air carrier and general aviation aircraft in the vicinity of the airport in good weather furnished the impetus for the establishment of the service in the first place.

ALTERNATIVE MEANS OF EFFECTING ECONOMIES

The NAATS agrees that a balanced budget and a "lean and clean" operation are both desirable goals, and that the FAA should do its part to cooperate with the Congress and the President. The simple emasculation of the flight service system is not the most logical way to effect economies with the least derogation of safety. First let us take a hard look at the amount of money being wasted in the fields of management, research, and analysis. The cost of maintaining the air traffic system should be examined and weighed against any increases in safety it actually buys, as well as industry cost figures for similar maintenance programs. After exhausting these possibilities and moving on to the operating facilities let us consider the entire air traffic service. Each low and medium activity VFR tower should be considered for 16-hour operation. Each flight service station should be reexamined in the light of what it is doing for general aviation, and placed in one of the following categories:

(*a*) Hard-core hub stations (small, medium, or large hub) with an aggregate of total annual flight services at or above the median for the 408 stations and CS/T listed in the publication FAA Air Traffic Activity for fiscal year 1963.

(*b*) Intermediate activity stations where services can be reduced to 16 hours per day (0600 to 2200 local time) with a modest reduction in staffing and no serious derogation of safety. These stations should be provided with VHF/UHF direction-finding equipment.

(*c*) Low-activity stations, in the lower 10 percent of the rank order of total annual flight services of the 408 stations and CS/T for fiscal year 1963, which would be remoted to adjacent FSS provided monetary savings would outweigh any impairment of safety resulting from the removal of personnel.

Locations should also be selected for satellite general aviation service stations, equipped with a briefing counter, pictorial displays, service A receiving only printer, direct FAS line to a hub station, and two-way radio communication with aircraft on 122.1 and 121.5 megacycles. These stations would be staffed for periods of 8 to 16 hours per day depending on the volume of general aviation traffic.

Last, and just as important, is the opportunity to effect savings and improve the quality of both tower and FSS services by decombining all of the 67 combined station/towers. The case for decombining has been stated very clearly in two papers published by the Air Traffic Control Association, the first dated October 15, 1963, reporting the findings of a technical panel at the eighth annual ATCA meeting in Dallas, Tex., and the second, entitled "The Combined Station/Tower Dilemma" in the March issue of the Journal of Air Traffic Control. The NAATS and ATCA are in complete agreement on this question. These papers do not go deeply into the economics of decombining, however, at a low-activity VFR tower the removal of all FSS functions by remoting to an adjacent FSS would usually permit placing the tower on 16-hour operation with a minimum VFR tower complement. As for services to general aviation, the quality of pilot briefing would be improved because the man at the other end of the line would have the full array of pictorial displays to assist him. This is not possible in a tower cab because of space limitations. The briefing a pilot receives over the local interphone or telephone from a CS/T leaves much to be desired. We also note that the savings per man to be realized by reduction in tower staffing would exceed the savings per man resulting from reduction in FSS staffing because of the difference in grades.

The FAA has recently released changes to airway planning standard No. 3 which indicates the policy to be used in decombining a CS/T. As part of these changes it states, "When overall costs are approximately equal, the airport with the greatest number of active based aircraft shall be selected for the location of the station." The NAATS disagrees with this policy for the following reasons: Usually the CS/T location will have more based aircraft than an adjacent FSS (this is why the tower is there in the first place). The CS/T location will already have a tower and a U.S. Weather Bureau facility. Pilot weather briefings and terminal assistance will already be taken care of by these two facilities. To improve the service to the maximum extent the policy should provide that decombining normally be carried out by remoting the FSS functions to an adjacent flight service station regardless of the difference in number of based aircraft.

The NAATS recommends that the program of decombining, which was started at one time and then halted, be resumed and followed through to completion prior to or coincidental with any changes to be made to the FSS system.

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PART II

I. The Anniston Flight Service Station, herein described as FSS, is located physically on the Anniston Municipal Airport. The building is situated on ground level with easy access to the flying public. The FSS has long been known as the "front door" of the Federal Aviation Agency. There are presently 13 employees assigned to the Anniston FSS. Of this number, 10 are air traffic specialists and 3 are electronic technicians. At the present time the city of Anniston is engaged in an extensive airport moderniztaion program. Our present plans call for construction of a new terminal building. Also planned is the construction of a new building to house the Anniston Flight Service Station, as well as other airport buildings, taxiways, and lighting.

II. The Anniston FSS brings into this city an annual payroll of $75,000. This represents base salary only. Due to overtime as necessitated and holidays worked the figure would probably be nearer $80,000. All of the Anniston FSS personnel either own their homes or rent homes in this immediate area.

III. Other airports within the Anniston flight plan, search, and rescue area include—

(1) Talladega Municipal Airport, Talladgea, Ala.
(2) Gadsden Municipal Airport, Gadsden, Ala.
(3) Lee Bros. Airport, Annison, Ala.
(4) Heflin Airport, Heflin, Ala.
(5) McMinn Field, Weaver. Ala.
(6) LaGrange Municipal Airport, LaGrange, Ga.
(7) Valley Airport, West Point, Ga.
(8) Lanett Municipal Airport, Lanett, Ala.
(9) Roanoke Municipal Airport, Roanoke, Ala.
(10) Reilly Army Airfield, Fort McClellan, Ala. (military tie-in with direct communications to Anniston FSS).

V. The following aeronautical services are provided by the Anniston FSS on an equal basis to scheduled airlines, all military services, and general aviation aircraft; their pilots and flight crews:

(1) Hourly weather observations and special weather observations as required.
(2) Pilot preflight weather briefings.
(3) Scheduled radio weather broadcasts.
(4) Control and monitor four radio navigational aids, or visual omni ranges. Two of these are remotely controlled, one being located in LaGrange, and the other in Gadsden, Ala.
(5) Flight plan filing and transmission via national leased line teletype circuits.
(6) Flight following service to aircraft in flight.
(7) Airport advisory service to aircraft arriving at or departing from Anniston, Talladega, and LaGrande, Ga., airports.
(8) Emergency flight assistance service to aircraft in flight.
(9) Initiates and coordinates search and/or rescue operations as required.
(10) Administers written examinations for private pilot certificates.
(11) Provides pictorial weather displays for aviation public.

VI. Aircraft "saves" provided by the Anniston FSS: During the past 2 years the Anniston FSS has provided emergency assistance to over 30 aircraft which were operating under visual flight rules. I estimate property saved in terms of monetary value to be well in excess of $1 million. A conservative estimate of the number of people involved in these saves is placed at 65. Of course there can be no estimate in terms of money for human lives.

These "saves" are documented and on record. A large majority of them can be directly linked to the mountainous terrain in the Anniston area. Anniston is located in the foothills of the Appalachian Mountains surrounded by hazardous terrain with the highest point in Alabama located only 7 miles southeast of the Anniston Municipal Airport. Most general aviation pilots fly at lower altitudes and cannot be picked up by radar or direction-finding equipment from some remote facility. These pilots can only be efficiently assisted by a local facility with personnel who have an intimate knowledge of their local area. With the influx of more weekend and nonprofessional pilots into the aviation field the need for a local flight service station with knowledge of local terrain and weather is becoming more important and cannot be remoted without adversely affecting both safety and service.

At this point, may I make reference to some specific items previously listed. Reference section V, item (1) hourly weather observations and special observations as required.

A. Air carrier operations

The Anniston Municipal Airport is served by Southern Airways, Inc., a duly certificated and scheduled air carrier. Southern Airways has eight operations daily utilizing the Anniston Municipal Airport and several utilizing the Gadsden Municipal Airport. Quite frequently extra flights are operated to provide additional service to military personnel stationed at nearby Fort McClellan. These flight operations depend upon the Anniston FSS for up-to-the-minute and extremely accurate weather observations for their flights. During instrument flight weather conditions and marginal conditions when instrument approaches are in progress, the weather information provided by the Anniston FSS is invaluable to the operations of Southern Airways, Inc.

B. Military operations

The weather observing and reporting capability of the Anniston FSS makes many military flights possible into and out of Reilly Army Airfield at Fort McClellan which would otherwise be impossible during instrument flight weather conditions. Briefly, these flights are handled in the following manner: Arriving military flights at Reilly Army Airfield utilize the FAA navigational and approach systems until the approach is completed, then the aircraft either land at Anniston Municipal Airport or proceed under visual conditions to Fort McClellan. Reilly Army Airfield has no navigational or approach systems of their own. Military aircraft departing Reilly Army Airfield depend upon the Anniston FSS to file their flight plans with air route traffic control and receive subsequent instrument flight rule clearances through the Anniston FSS. After actual takeoff, the navigational aids controlled by Anniston FSS are utilized for flight. The Anniston FSS also serves the Anniston Army Depot for military cargo flights as well as a scheduled stopping point for military air evacuation hospital flights.

C. General aviation aircraft

The same weather capabilities of the Anniston FSS as mentioned above, allows many business and/or corporate aircraft to complete flights into or out of Anniston Municipal Airport which would otherwise be impossible if the Anniston FSS were not collocated at the Anniston Municipal Airport. If these business flights had to be canceled or postponed due to inadequate FSS facilities at Anniston, it is clearly evident that business and economic interests in our surrounding cities and communities would suffer, since almost all our major industries either own, lease or have access to aircraft which they depend upon as a vital business tool. Listed below are only a few of the major industries in our area which utilize business aircraft:

1. Monsanto Chemical Co.
2. B. F. Goodrich Co.
3. Lee Brothers Corp.
4. Callaway Mills.
5. Soderhamm Co.
6. Dixie Mining Co.
7. Burlington Mills.
8. LaGrange College.
9. Rush Engineering Co.
10. Dresser Manufacturing Co., Inc.
11. Wakefield's Clothing Co.
12. Commercial Refrigeration Co.
13. Skating Rink Supply Co.
14. George O. Mabry Machinery Co.
15. Weaver & Sons, Inc., steel.
16. Vinson Flying Service, agricultural applicator.
17. Quality Overhaul Co.
18. Pennsylvania Reading Co. (Blue Ridge).
19. National Distillers.
20. Sears, Roebuck & Co.
21. L. A. Draper & Son.
22. U.S. Pipe & Foundry.
23. Manufactured Stone Co.
24. Colonial Pipe Lines, Inc.
25. Cable Vision, Inc.

Additionally, the following types of commerce are conducted either on or through the Anniston Municipal Airport:

Scheduled airline transportation.
Aircraft sales and rentals.
Flight instruction.
Charter and air taxi service.
Fuel, repair, and overhaul services.
Aircraft storage facilities.
Two fixed-base operators.

CONCLUSION

The Anniston FSS not only plays a vital role in the overall structure of the Federal Aviation Agency, but its facilities and services to this city and surrounding communities are invaluable. In the airport modernization plans which the city of Anniston have already embarked upon, the Anniston FSS is to serve as the nucleus of our airport program. If the Anniston FSS should be consolidated with those of some remote location, the progress we have made in aviation in Anniston will suffer a serious setback, indeed, it will cut the very heart out of our airport modernization plans. Further, the scheduled air carrier, Southern Airways, Inc., which serves this locality will suffer immediate financial loss, due to inability to complete flights into and out of Anniston Airport should the Anniston FSS be taken from us. Business and corporate owned aircraft will be unable to complete many of their flights for the same reason. I can only speculate as to the impact on the nearby military installations of Fort McClellan and the Anniston Army Depot, no doubt it would be severe in nature.

From the latest figures available the growth of aviation in our section of the country is constantly upwards. More aircraft are being manufactured each year, more pilots are being certificated, more aviation support services are being required and more records are being set by airline passengers. In view of the present growth rate and the projected growth rate of aviation, it seems inconceivable to me that plans would be undertaken to remove such an installation as the Anniston FSS from us. Conversely, it appears more such installations are needed, not fewer.

I should like to allude to some previous figures contained in this report, which I believe should make the wisdom of retaining the Anniston FSS startlingly clear. It costs the Federal Government from $75,000 to possibly $80,000 per year in salaries to keep the Anniston FSS operating 24 hours per day. On the other hand, the Anniston FSS has saved the American public over $1 million in aircraft property and approximately 65 human lives by their actions during aircraft emergencies.

Where else can the American taxpayer obtain such a bargain for each tax dollar expended?

MILLVILLE, N.J., *May 11, 1964.*

Hon. JOHN BELL WILLIAMS,
House Office Building,
Washington, D.C.

DEAR MR. WILLIAMS: Because it is impossible for me to attend the hearing anent the curtailment of FAA service at the Millville Municipal Airport may I ask that a copy of my letters to varying interested parties be entered and made a part of the record.

In addition to the thoughts expressed in the letters, there is another: In the event of attack, all of the major airports along the eastern seaboard are only minutes apart. They certainly would all be vulnerable. Millville can accommodate many hundreds of planes. It is a class 4 airport and is located on an expanse of over 900 acres. This, I would think, places it in a strategic position in the defense movement. And if we are determined to remain strong I would like to think that those who are responsible for our strategy may want to include it as a part of our defense movement.

I will appreciate your interest and cooperation.

Very sincerely yours,

RUSSELL S. CAREW.

APRIL 24, 1964.

Hon. HARRISON A. WILLIAMS, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: I am aware that you have been approached by letters from some who are concerned about the edict from the Federal Aviation Agency that will eliminate the flight service station here at Millville, N.J. To these protests I add my own.

The move is aimed at economy. I find no fault with that in theory, but will it result in economy? And is economy, if it really is economy, to be placed above the human safety factor?

A letter to you from the FAA Administrator N. E. Halaby dated January 31, 1964, states that the expected result of closing the FAA facilities at Millville will result in an annual savings of $101,000. A letter from FAA Office, Eastern Region, John F. Kennedy Airport, and signed by Oscar Bakke and directed to Congressman Milton W. Glenn, states there will be a saving of $95,000 a year. The March 1964 AOPA magazine states that FAA has announced that there will be a saving of between $30,000 and $40,000 a year but that it will cost at least $30,000 to effect the remote control from Millville to Philadelphia. Will there be a saving? How much?

My interest stems from my time as a city commissioner when the airport came under my jurisdiction. I still maintain that interest. I am concerned now with the economics from the standpoint of the city but mostly my interest evolves, at present, from the safety factor.

I have talked with pilots—not the Sunday flier, but men who look objectively at the planned curtailment of the present service. They are in agreement that the remoting of this service to Philadelphia will further jam an already jammed situation. This augers well for a lesser safety situation. Economy is well, but if even one life is endangered as a result, then the whole purpose is defeated.

In the letter to you from Mr. Halaby he referred to the hearings of both the House and Senate Appropriations Committees and points out that the Senate committee report stated:

"The committee also agrees with the House committee's proposed reduction of the large number of flight service stations and urges the Administrator to proceed with the reduction and consolidation of these manned stations. *Their retention should be based solely on their essentiality for safety.*"

The italicized is my point.

Pilots with whom I have talked say that Philadelphia, being jammed as it is, lacks detailed information, that it is hurried and difficult of interpretation, which in turn, could make for confusion, which in turn, may provoke a tragedy of such nature as to render the chase after a saving foolhearty.

And again back to saving. If the saving is based upon the elimination of personnel and the fact that they will not be eliminated but transferred, then how much will the actual saving be?

Here at Millville, there are many corporations, e.g., Armstrong Cork Co., Owens Illinois Glass Co., T. C. Wheaton Glass Co. and many other companies that fly planes into our airport. Some of these planes are valued at over $1,500,000. They are deserving of the best facilities that can be provided. The contemplated move can't possibly benefit them.

I get the impression that everything accomplished in the services for aviation is aimed at the established airlines. I have no quarrel about that, but if the concentration is in that direction to the neglect of essential consideration for the so-called private plane, then I think we are, figuratively speaking, becoming a bit myopic. Particularly when commercial flying represents less than 10 percent of the whole picture.

Why? You may ask will the remoting to Philadelphia curtail and perhaps endanger the local situation. We will lose our 24-hour-a-day weather observation. If so there can be no instrument landings within the realm of safety.

At Millville the year 1963 saw more than 20,353 flight plans originated. Of the 403 stations in the country Millville ranks 66 as opposed to Philadelphia 89. The median contact, countrywide is 17,961. Millville 26,023. This pertains to IFR–VFR and DVFR.

Millville is immediately contiguous to over 100,000 population.

The use of the airport and its flight service is constantly increasing and we, here at Millville, are awake to the realization of the role we must play to maintain the progress thus far achieved. To snatch away from us, at this time, so vital a necessity as is proposed, is to destroy the initiative and enthusiasm so necessary in the maintaining of a "forward look." For a community this size I know that the airport has been maintained far beyond what ordinarily could be expected. It served, during the war, as a high-altitude fighter base. It could be that the Armed Forces may need it again. Should such need occur the Government would find it operable, not neglected. To destroy the enthusiasm and initiative that has made it so could result in appreciable increased cost to bring it back to a standard required in the defense movement. It could be that, in the interest of economy, the Government may be "pouring in at the bung and letting it leak out at the spigot."

Two things are concerned, economy and safety. I feel that both interests are better served, for the long pull, by not hampering our effort to continue a service so vital to the welfare of those who depend upon aviation.

Sincerely,

RUSSELL S. CAREW.

WHITE PINE CHAMBER OF COMMERCE AND MINES,
May 11, 1964.

Mr. W. E. WILLIAMSON,
Clerk, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. WILLIAMSON: Enclosed is a brief containing resolutions in opposition to the Federal Aviation Agency's plans to close the VOR stations at Currant and Mina, Nev.

It is requested that this brief be entered as testimony in the hearing to be held May 12, 13, and 14, 1964, of the Subcommittee on Transportation and Aeronautics of the House of Interstate and Foreign Commerce Committee.

Sincerely,

ROSS M. PRINCE, *President.*

THE STATE OF NEVADA,
Carson City, May 4, 1964.

Mr. N. E. HALABY,
Administrator, Federal Aviation Agency,
Washington, D.C.

DEAR MR. HALABY: The State of Nevada strongly objects to the pending new reduction of Federal Aviation Agency VOR stations, particularly, the elimination of the Currant and Mina facilities.

Objections were discussed by Mr. Lew L. Gourley, representing this office, together with other interested Nevadans, at a public hearing held by the Federal Aviation Agency in Tonopah, Nev., March 18, 1964.

Your representative reported at the Tonopah meeting that the sole criterion used in arriving at the decision to close the stations was the actual count of instrument flight plans filed for these stations.

All pilots present at the hearing testified that these facilities are used extensively as VFR navigational aids, rather than IFR aids. Although there is limited instrument flight in the part of Nevada concerned, as compared with other parts of the United States, these stations have definitely saved a number of lives of pilots and passengers in planes flying under marginal weather conditions.

The Currant and Mina VOR stations are located in an area of mountainous terrain with elevations ranging from 4,500 feet in the valleys to more than 12,000 feet in the mountains. The area is subject to rapidly changing weather conditions. For these reasons, it is our belief that the Currant and Mina facilities are essential to the safety of general aviation in this State. It is, therefore, requested that the decision to close the facilities be reconsidered.

Cordially,

GRANT SAWYER, *Governor.*

RESOLUTION OPPOSING THE REMOVAL OF THE CURRANT AND MINA VOR STATIONS

Whereas it has come to the attention of the Board of Commissioners of White Pine County, Nev., that the Federal Aviation Agency proposes to remove the Currant and Mina VOR stations from service; and

Whereas the county of White Pine is dependent to a large extent on air transportation; and

Whereas the continuance of and safety of aviation in this area depends upon reasonable radio navigational facilities; and

Whereas the removal of the Currant and Mina VOR stations would create vast unattended areas in mountainous terrain which is subject to rapidly changing weather conditions; and

Whereas the industrial development of the White Pine County area will require, as an integral part of its operation, the service of commercial and private planes continually flying in and out of the area; and

Whereas it is the opinion of the board of commissioners that the Currant and Mina facilities are being used extensively, despite records of use by pilots flying under instrument conditions to the contrary: Now, therefore, be it

Resolved by the Board of Commissioners of White Pine County, as follows: That the board of commissioners sincerely requests and strongly urges the Federal Aviation Agency to maintain and continue operations of the Currant and Mina VOR stations in Nevada.

O. P. FORMAN,
Chairman, Board of White Pine County Commissioners.

Attest:

BOYD K. SMITH, *County Clerk.*

RESOLUTION OPPOSING THE DISCONTINUANCE OF RADIO NAVIGATIONAL AIDS FOR AVIATION AT CURRANT AND MINA, NEV.

Whereas the City Council of Ely, Nev., has been informed that the Federal Aviation Agency proposes to discontinue and remove the VOR stations at Currant and Mina; and

Whereas the city council has been informed by competent advisers that removal of these facilities would create a hazard to flying in eastern Nevada; and

Whereas Ely is located in a comparatively remote area and depends to a large extent upon aviation for transportation; and

Whereas pilots throughout the State of Nevada report extensive use of the stations under VFR conditions and without filing flight plans, but frequently under marginal weather conditions or nighttime flying, and in remote mountainous areas lacking in navigational aids; and

Whereas pilots report that the Currant and Mina facilities are essential for safe flying in the area; and

Whereas the City Council of the City of Ely desires to express strong opposition to the closing of these VOR facilities: *Now therefore, be it*

Resolved by the City Council of the City of Ely, Nev., as follows: This city council sincerely requests and strongly urges the Federal Aviation Agency to maintain the Currant and Mina VOR stations in operation.

BRUCE R. THIESSEN,
Mayor, City of Ely.

Attest:

J. E. HEALD, *City Clerk.*
By C. SERTIC.

MAY 11, 1964.

To Whom It May Concern:

The White Pine County Chamber of Commerce and Mines opposes the scheduled closing down of Federal Aviation Agency VOR facilities at Currant and Mina, Nev.

The reasoning of our request for maintaining these stations is based on actual use and need of the facilities by general aviation. At a public hearing in Tonopah, Nev., March 18, 1964, a number of pilots from throughout the State reported that the stations are used extensively by pilots flying under visual flight rules (VFR).

The Federal Aviation Agency representatives at the Tonopah hearing reported that the sole argument for closing the stations is that there is limited use of the stations by pilots filing instrument flight rules (IFR) plans. It was reported that the FAA does not take into consideration the use of the stations by pilots flying under VFR rules or those not filing flight plans. Private pilots in this area do not generally fly under IFR weather conditions because of the mountainous terrain and extreme and violent weather conditions. However, even under VFR conditions, marginal weather or nighttime flying is made much safer by the use of the Mina and Currant stations. It is recommended the FAA study use of the facilities by pilots flying under VFR conditions and by pilots who do not file flight plans involving the two stations.

These VOR stations are located in mountainous, high-altitude country which is subject to rapidly changing weather conditions. There are no alternate

facilities available. Near the Currant station, no other radio facilities can be contacted because of the obstruction of radio transmission by high mountains. The Mina station is useful when flying between Reno and Tonopah because of the limited space available to fly between restricted areas. Other stations usually cannot be received along the route, even though two, Coaldale and Tonopah, are relatively close.

The two stations have been credited with saving the lives of a number of pilots and passengers. The most recent positive save was on April 3, 1964. On a nighttime flight, a private pilot became lost between Tonopah and Ely. He contacted Ely through the Currant VOR station and received instructions which brought him in safely. It was subsequently determined that at the time of radio contact, he was on collision course with 11,000-foot Ward Mountain.

Transient pilots, who are not familiar with this area of Nevada, can easily become lost in the maze of mountains. This has happened many times. These stations were initially intended for the safety of pilots, and should be continued for such.

The reasons given by the FAA for closing down the stations are lack of use and economy. We have seen that the stations are used, despite FAA records of IFR flight plans to the contrary. The argument for economy is also subject to question. First, the major cost of these facilities was in construction and installation. Routine maintenance involved in continuing the stations is minor in comparison to the original cost. In the second place, approximately 60 miles of telephone line was constructed between Ely and the Currant station. The FAA reportedly entered into a contract with the Bell of Nevada to construct this line and reportedly will be required to continue annual payments on the line even though the stations may be closed. If this is the case, there would be serious doubts as to the economic benefits to be realized by closing this station.

The central eastern part of Nevada depends to a great extent on air travel—by both commercial and private planes. The population of the Ely vicinity shopping area is approximately 10,000. Any reduction of aviation facilities would create additional safety hazarads, and thereby, curtail aviation in this part of the State.

All estimony from the general public, pilots, aviation interests, the Ely City Council, the White Pine County Board of Commissioners, civic organizations, and the Governor of Nevada is in support of continuing the Currant and Mina VOR stations. It is requested that this brief and the attached letters and resolutions be entered as testimony in the hearing May 12, 13, and 14, 1964, before the Subcommittee on Transportation and Aeronautics of the House Interstate and Foreign Commerce Committee.

ROSS M. PRINCE,
President, White Chamber of Commerce & Mines.

MAY 11, 1964.

To Whom It May Concern:

The White Pine Committee for Economic & Industrial Development has been informed that the FAA plans to close down the Currant and Mina VOR stations. This committee opposes the closing of the stations for the following reasons:

1. These stations are essentially for the safety of aviation in an area of rugged mountains and extreme weather conditions.
2. It has been reported by many pilots that these stations are used extensively under VFR conditions and without filing flight plans.
3. The economy of White Pine County depends to a large extent upon its transportation services. Commercial and private aviation is needed in this area because of the remote position of our county.
4. New industry, considering the possibility of entering this area, would definitely consider good air transportation an essential requirement.
5. Removal of the Currant and Mina VOR stations would create an unsafe condition for aviation in the area. This, in turn, would tend to reduce aviation activity in the area.

For these reasons and many others not listed, it is requested that the FAA reconsider its announced intentions to close down the Currant and Mina VOR stations.

It is requested that this letter be entered as testimony in the hearing May 12, 13, and 14, 1964, of the Subcommittee on Transportation and Aeronautics of the House Interstate and Foreign Commerce Committee.

T. J. CAVIGLIA,
Chairman, White Pine Economic & Industrial Development Committee.

MAY 11, 1964.

To Whom It May Concern:

The purpose of this letter is to express opposition to the scheduled closing down of the Currant and Mina VOR stations and the future remoting of the Ely flight service station.

The FAA reasons for closing these stations is that they are not used sufficiently, and for economy reasons the VOR stations should not be continued. The FAA has considered only IFR flight plans filed for the VOR stations. Nevada pilots do not generally fly in this area under IFR conditions because of mountainous terrain and violent weather. Many pilots, including myself, use these facilities as VFR navigational aids in broad daylight and night time and under marginal weather conditions.

Attached is a map showing approximate locations of VOR and FSS stations in and near Nevada.[1] It can be seen that removal of the Currant station and remoting of the Ely station would create vast areas in Nevada where there are no navigational facilities.

At present, even with existing facilities, eastern and central Nevada is a difficult area to cross by plane. It is my experience that there are more facilities and safer conditions flying through Canada to Alaska than to fly across eastern Nevada. The FAA, in pursuit of its objectives of promoting safety in aviation, should consider the installation of more stations rather than the closing down of the existing limited facilities.

It is requested that this letter be entered as testimony in the hearing May 12, 13, and 14, 1964, of the Subcommittee on Transportation and Aeronautics of the House Interstate and Foreign Commerce Committee.

W. B. KOHLMOOS,
Private Pilot License 1292777.

WHITE PINE FLYING SERVICE, INC.,
East Ely, Nev., May 5, 1964.

To Whom It May Concern:

We would like to register a very strong protest against the proposed discontinuance of the Mina and Currant, Nev., VOR facilities for the following reasons:

Lack of navigational facilities for general aviation in remote areas.

If the Mina and Currant VOR's were discontinued it would leave a very large area in the State of Nevada with no navigational aids. In the type of terrain we have in Nevada it is very essential for the sake of safety that we have these navigational aids. These VOR's are used constantly by general aviation in VFR flying and numerous lives have been saved many different times by the use of these facilities.

General aviation safety.

Aviation safety is effected greatly by adequate navigational facilities. Removal of these would create a flying safety hazard due to lack of these facilities in this remote area. If these were removed it would leave a very large gap without any navigational facilities in flying through Nevada. In the East and Central part of the United States where there are no mountains to contend with, navigational aids are not nearly so essential as they are here in mountainous terrain. Also in the East and Central United States there are a lot of commercial broadcast stations and low frequency radios aids which can aid pilots on their flights. Here about the only thing we have to depend on is the VOR facility, and if two of these are removed we will have nothing. This definitely creates a safety hazard and defeats the very purpose of the FAA.

[1] The maps was placed in the subcommittee files.

It is our strong belief and opinion that more navigational aids are needed in Nevada and not less. We strongly urge and recommend that the Mina and Currant VOR's remain in service.

Yours very truly,

WENDELL D. ROSS,
Ely Airport Manager.

THE COLUMBIA GAS SYSTEM, INC.,
New York, N.Y., May 12, 1964.

Mr. W. E. WILLIAMSON,
Committee Clerk, House Committee on Interstate and Foreign Commerce, Longworth Building, Washington, D.C.

DEAR MR. WILLIAMSON: This statement concerns the FAA proposal to close the Chemung County Airport Flight Service Station, Elmira, N.Y., as part of the FAA's remoting program.

We are always interested in any effort toward economy in Government and will support such efforts whenever possible. However, we believe that proposals to close Government installations should be judged on an individual basis. With respect to the FAA remoting program for flight service stations, the moneys which might be saved by closing a flight service station must be balanced against the possible loss of aviation safety.

We are advised by our pilots that in the case of the Chemung County Airport it is very difficult to forecast local weather conditions because of the influences of terrain, the position of the Great Lakes and frontal movements through the area. Weather conditions change rapidly and vary greatly in a relatively short distance. The experienced personnel at the Elmira Airport Flight Service Station have been very helpful in advising our pilots on local weather conditions and the ability to conduct safe flight operations in and out of the airport. They believe that the alternate service to be provided under the FAA program would not be adequate and that closing this station would definitely reduce the safety of general flight operations into this airport. As we do not intend to lower our own safety standards, regardless of FAA action, we would necessarily have fewer landings and more overflights at Elmira. Of more significance to us and to the region served by this airport is the possible effect upon industrial growth in the area.

Good communications and transportation are essential for industrial plant locations. Most businessmen will not consider a plant site at which safe airport facilities are not reasonably accessible. Operating companies of the Columbia Gas System provide gas service in the Elmira region, and we have a keen interest in and promote industrial expansion and growth in this area. We believe the loss of this necessary airport service and the reduction of air safety would make it more difficult to attract new industry to this part of New York State.

For the above reasons we are convinced that it would not be in the public interest to close the Chemung County Airport Flight Service Station.

We respectfully request that this statement be included in the record of the proceedings on the proposed consolidation of FAA flight service stations before the Aviation Subcommittee of the House Committee on Interstate and Foreign Commerce.

Very truly yours,

JOHN W. PARTRIDGE.

CROSSVILLE, TENN., *April 10, 1964.*

Hon. JOE L. EVINS,
House of Representatives,
Washington, D.C.

DEAR MR. EVINS: Since you are a member of the subcommittee that recently held hearings on the Federal Aviation Agency 1965 budget, I thought perhaps you might be interested in the views of someone close to the problem. I am forwarding a copy herewith of a letter to the executive director of the National Association of Air Traffic Specialists, an organization that represents approximately 75 percent of the personnel who man the flight service stations operated by the agency. This letter expalins my views on the subject in a rather concise way.

As you know, I have been in the employ of the FAA and predecessor agencies for the past 25 years and have been chief of the Smithville and Crossville stations for the past 15 years. May I call to your attention that the continued operation of the facilities the agency is proposing to close will not personally affect me in any way. I am interested only from the point of view of the safety of flight and in the satisfaction of a job well done. It is difficult for those who have not had the experience to imagine the deep satisfaction and the good feeling inside when you have saved an aircraft from having an accident and probably saved the lives of those aboard.

It is my fond hope that the Congress will see fit to provide the necessary funds for the continued operation of those facilities for the coming fiscal year and as far in the future as these facilities serve such a useful purpose. With the rapid growth of the general aviation segment of the industry, I can see nothing but a continuing demand for the services we provide in the future.

Sincerely yours,

JAMES N. DENSON.

CROSSVILLE, TENN., *April 10, 1964.*

MR. GEORGE L. RAND,
Executive Director, National Association of Air Traffic Specialists,
Bethesda, Md.

DEAR MR. RAND: It seems to me that a very significant point is being completely overlooked in the controversy over the proposed flight service station "retrenchment" program. The point I have reference to is the percentage of the overall FAA budget this projected saving represents. According to my mathematical figures this comes to just under 0.002 percent.

There is no doubt that some minor adjustments need to be made in the present system. This is not a new development but is a condition that exists at all times. The aviation industry is an ever-changing thing and the agency must plan on a continuing basis to meet these changing needs as they occur. Therefore the Agency program must be flexible.

The wholesale closing of facilities, some of them quite busy, is not the logical solution to budget economy. The services performed by the vast majority of these facilities constitutes a major contribution toward flight safety in the areas affected. The services provided are approximately 80 percent for the benefit of the general aviation segment and cannot be obtained by this group from any other source.

If this program represented a significant saving in the overall Agency budget it would still be open to question. This is not one of the Agency programs that is of doubtful value. To those of us who are engaged in the operation of these facilities there is no doubt of the value of the services rendered. We have witnessed too many occasions when pilots of light aircraft have become hopelessly lost and whose only hope of survival was the nearby flight service station whose orientation assistance could locate the aircraft and direct him to a safe landing. The majority of these incidents have been made a matter of record but drama of the event cannot be written into a report. What has not and cannot be made a matter of record is the number of lives that have been saved by preventing a flight into adverse weather conditions by thorough preflight or inflight weather briefing and wise counsel. The intangible value of this type of service rendered cannot be accurately estimated.

Figures representing the total cost of operating all the domestic and international flight service stations are not available to me but I daresay these figures would represent only a very small percentage of the overall agency budget.

The Federal Aviation Act, among other things, charged the Agency with the responsibility for promoting safety of flight. The Agency can not accomplish this objective by reducing necessary services. Closing of the facilities the Agency has announced as scheduled to be closed will, to a large degree, adversely affect flight safety. The safety record of the general aviation segment is an enviable one. The flight service stations operated by the Agency have been and are now making a major contribution toward that record. It is difficult to conceive of the Agency seriously considering carrying this program to a final conclusion on the basis of a saving so insignificant. The logical conclusion is that the program is illogical.

Sincerely yours,

JAMES N. DENSON,
Chief, Crossville FSS.

BUSINESS COMMERCIAL AVIATION,
Kansas City, Mo., March 25, 1964.

Hon. JOE L. EVANS,
House of Representatives,
Washington, D.C.

DEAR SIR: The approach taken by the Federal Aviation Agency to reduce its expenditures during fiscal year 1965 is ill-conceived, political, and contemptuous of general aviation safety and advancement.

I agree with the Aircraft Owners & Pilots Association that substantial reductions in the FAA budget are both possible and desirable. However, Administrator Halaby has reacted as might be expected, by cutting services to the public but not cutting his bureaucracy in any way.

Flight service stations should be increased, not reduced. AFSS is the only contact with weather information, traffic control, etc., that is available to many pilots. There are obvious examples of FAA fiscal recklessness:

1. A "Boeing 720 jet airline for training purposes."
2. The useless National Aviation Facilities Experimental Center at Atlantic City.
3. Mr. Halaby's Jet Star; why not economize here?
4. FAA's supervision and surveillance over aircraft and electronic equipment suppliers.

I suggest that you consult with members of the Congressional Flying Club, AOPA, and other general aviation groups before you take the FAA word that the 42 flight service stations can safely and economically be cut, or consolidated, as the FAA prefers to call it. Furthermore, I urge that you take every possible step to keep politics from influencing the decision. (I notice that Kansas, traditionally Republican, stands to lose more flight service stations than any other State. I personally use these stations regularly and would sorely miss them if they were remoted.)

Respectfully yours,

DUANE N. HEFNER,
Midwest Manager; Member: Aircraft Owners & Pilots Association, National Pilots Association, National Aeronautics Association, and Kansas City Aero Club.

(Whereupon, at 12:45 p.m., the committee adjourned subject to call.)

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