

## U.S. NAVY

The following-named officers of the Naval Reserve for temporary promotion to the grade of rear admiral, subject to qualifications therefor as provided by law:

## LINE

Ralph S. Garrison	John H. Hoefler
Stewart W. Hopkins	Jim K. Carpenter
States M. Mead	William S. Mallard
Chester H. Taylor, Jr.	Alvin A. Peterson
Edelen A. Parker	Dallas F. Jordan

## MEDICAL CORPS

Robert A. Conrad, Jr.  
Richard H. Klene  
Robert E. Switzer

## DENTAL CORPS

Francis J. Fabrizio

## SUPPLY CORPS

Charles W. Shattuck	James E. Gay
Leslie T. Maiman	Paul N. Howell

## CHAPLAIN CORPS

Ray C. Tindall

Rear Adm. Rufus L. Taylor, U.S. Navy, having been designated, under the provisions of title 10, United States Code, section 5231, for commands and other duties determined by the President to be within the contemplation of said section, for appointment to the grade of vice admiral while so serving.

## U.S. MARINE CORPS

The following-name officers of the Marine Corps for permanent appointment to the grade of major general:

Louis B. Robertshaw	Paul J. Fontana
Rathvon McC.	John H. Masters
Tompkins	George S. Bowman, Jr.

The following-name officers of the Marine Corps for permanent appointment to the grade of brigadier general:

Raymond G. Davis	Donn J. Robertson
Edward H. Hurst	Lowell E. English
Charles J. Quilter	Alvin S. Sanders

The following-named officer of the Marine Corps Reserve for permanent appointment to the grade of brigadier general:

Russell A. Bowen

## HOUSE OF REPRESENTATIVES

THURSDAY, APRIL 21, 1966

The House met at 12 o'clock noon.

The Reverend William Logan, associate pastor, Aldersgate Methodist Church, Alexandria, Va., offered the following prayer:

John 3: 16-17: *For God so loved the world, that He gave His only begotten Son, that whosoever believeth in Him should not perish, but have everlasting life.*

*For God sent not His Son into the world to condemn the world; but that the world through Him might be saved.*

Let us pray.

Our gracious Heavenly Father, we bow before Thee with grateful hearts for our many blessings. We thank Thee for our great Nation with all its opportunities, resources, and people. Grant that we may do our part to make our land truly deserve its greatness.

Let us never take for granted the freedom that is ours; nor persuade ourselves that because freedom is our heritage it belongs to us and cannot be taken away. Rather let us treasure it, realizing that it cannot survive without

faith in Thee and in the worth and dignity of every human life.

May these chosen persons begin their duties this day in a prayerful state of mind. Grant them the wisdom and strength to meet perplexing issues. Give them courage to take a stand for what they believe is right for all men even if it is unpopular. Grant them humility that they will not seek power for themselves or even for the Nation, if it involves trampling on those in an inferior position.

Give us a sense of Thy ever-present nearness. May we all be conscious, in this age of great change, of the need for divine help, and be directed to think, speak, and do only what Thou wouldst have us do. We ask it in Thy holy name. Amen.

## THE JOURNAL

The Journal of the proceedings of yesterday was read and approved.

## ANNIVERSARY OF SAN JACINTO DAY

Mr. PATMAN. Mr. Speaker, I ask unanimous consent to extend my remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. PATMAN. Mr. Speaker, Texans remember the victory of San Jacinto just as they remember with pride the other stirring events of the struggle for Texas independence. Remembering our origins is part of our heritage as Texans, and a proud heritage it is.

Today, the San Jacinto Battleground, on the ship channel about 22 miles east of bustling and prosperous downtown Houston, is a quiet and lovely State park, a favorite picnic spot, and a place of great interest to students of history. Nearby, the battleship *Texas* is permanently moored.

Scenes of the decisive struggle that transpired here are recalled by the stone markers which dot the San Jacinto Battleground. Here it was that Sam Houston fell wounded, his horse shot dead from under him. There it was that Santa Anna camped with his troops, and under a tree which once grew on this very spot he was brought a prisoner to the victorious Sam Houston.

Visitors to the battleground are inspired by the massive 570-foot San Jacinto Monument which is topped by a gigantic Texas star and faced with Texas fossilized buff limestone. Inside the monument, an elevator takes visitors to an observation room. Circling the base of the monument are carvings and inscriptions which tell the dramatic story of the Texas revolution. Inside the base of the monument is housed the San Jacinto Museum of History, operated for the State of Texas by the San Jacinto Museum of History Association, a nonprofit educational organization. The museum was furnished and equipped by the donations of public-spirited Texans.

It was on March 11, 1836, that Sam Houston arrived at Gonzales to take

command of the little force of about 400 men which was to be the nucleus of the Texas army of defense. Two days later, news of the fall of the Alamo that came to Gonzales led to a retreat. Similar disheartening news from James Walker Fannin came to Houston when he was on the Colorado, and though his army had been increased by recruits he nevertheless retreated again, despite much counsel to the contrary.

He finally halted to wait for the movements of the victorious Mexican enemy in the rough country on the upper Brazos.

After a delay of 2 weeks, Houston and his men crossed the Brazos. Almost at the same moment, with an advance guard of 750 men, General Santa Anna made a crossing farther down the river, and moved toward the temporary capital of Harrisburg. Houston marched toward the same point. During all of this weary time he had been doing what he could to minimize the forces of the enemy and to train and encourage his men.

It was on April 20, 1836, that with 783 men he overtook Santa Anna who had an almost equal force. They met where Buffalo Bayou enters the San Jacinto River. For an entire day, broken only by an indecisive cavalry skirmish, the two small armies lay within each other's view.

Santa Anna was reinforced by 500 men the next morning, April 21. The Mexicans became overconfident and were surprised in their camp by an attack in the afternoon. They were completely defeated in an engagement which lasted only 15 minutes. Almost the entire Mexican force was killed or captured, while the Texans lost only 6 men killed and 25 wounded. Sam Houston himself, shot through the ankle, was among those who were wounded.

Santa Anna was taken prisoner. He was persuaded to sign an order for the retreat of his other forces, an order already anticipated by the Mexicans. Sam Houston wrote a clear account of his campaign, and advised President David Burnet that Santa Anna should be used as a hostage for the preservation of the peace. He then left his victorious army in order to seek medical attention in New Orleans.

He soon afterward returned to Texas where he was elected President. He took the oath of office at Columbia on October 22, 1836. A few months later he secured the recognition of the new Republic by the U.S. Government.

The valor of the Texans on that day at San Jacinto is one of the great achievements in our struggle for independence that will be remembered forever. Today we salute the memory of those who fought so bravely and so well in a cause which we will always revere.

## TEXAS INDEPENDENCE: THE CONTINUING STRUGGLE

Mr. PATMAN. Mr. Speaker, I ask unanimous consent to extend my remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. PATMAN. Mr. Speaker, I think it is very appropriate that the excellent speech of our Peace Corps Director, the Honorable Jack H. Vaughn, delivered recently at the University of Texas, be inserted in the CONGRESSIONAL RECORD on April 21—San Jacinto Day—a proud day in Texas history.

His speech follows:

**TEXAS INDEPENDENCE: THE CONTINUING STRUGGLE**

Distinguished guests, ladies, and gentlemen, happy birthday. I accept your award of recognition as much in awe as I do with pride.

In pride, of course, because I am aware that the recognition of this university and of this student body is neither lightly given nor hastily withdrawn. For such an honor, I am eternally grateful—and since I am young enough to expect that eternity is still a long way off, I intend to be grateful for a long, long time.

I am in awe, however, of a university which holds its people's independence to be a process, rather than a fact. To do so is to do more than merely honor and observe a proud tradition. It is to enrich and keep it young, as well. In so doing you challenge yourselves, which is inspiring—but you challenge your guest speaker to an imposing standard, so if I rise sufficiently to the occasion, count it as my own heartfelt award of recognition to a very special spirit here, of which it is an honor to be a part.

Birthdays seem to cluster about this time. My daughter, Kathryn, is 18 years old today.

I told a friend—an easterner—about Texas Independence Day and of the occasion for my visit here. He said, "Thank heavens Sam Houston didn't wait 15 days more. St. Patrick's and Texas simultaneously? The Nation would never survive."

Never a colony or a territory, Texas seems to have come to the Union with something a little extra: Texas came to the Union, an American legend in its own right. It gave our Nation more than its massive land and vigorous people. It brought the legend along, too—enriching the heritage of every American, then, and in succeeding generations.

I come to claim a share of that heritage for 18,000 Americans from every State in the Union: the Peace Corps. I shall trust to Texas' generosity for the occasion, for this week was our birthday too. Yesterday the Peace Corps was 5 years old.

It was more than a birthday. It was an Independence Day, as well.

The Peace Corps had to fight for its own independence, too. Formidable opinion in our early days would have had the Peace Corps tucked away within another agency. We were determined to make our own way—and we put up a good scrap.

We almost lost.

But we won and retained our independence because we had a strong champion in a Texan who was chairman of our National Advisory Council as well as Vice President of the United States. It was Lyndon Johnson who spearheaded the fight for Peace Corps independence in the conferences and confrontations which were the healthy battles of our beginning.

Another Texan, Bill Moyers, carried the fight for a strong Peace Corps still further, guiding and aiding Sargent Shriver in gathering the best ideas available from Members of Congress even before the original Peace Corps legislation went up to the Hill.

Thus did Texans fight for the independent beginning the Peace Corps needed if it were to succeed at all.

In that moment, we chose our course. No people, through their government, had ever

placed such faith in themselves. But John F. Kennedy's challenge was as new and as fresh as the spirited men and women who came to volunteer. We could not meet that challenge with old, known courses. Rather, we said with Robert Frost:

"Two roads diverged in a wood, and I—  
I took the one less traveled by,  
And that has made all the difference."

New problems required new solutions. Thus, we took new directions. The Peace Corps would not be a body of technical advisers and experts, but workers to share the burden, and to lead.

Nor would we turn our hand to projects we decided others might need—but rather to aid in doing things that our host nations wanted done.

Moreover, we steered clear of commissaries and special housing, hardship allowances and private transportation.

A new service required a new tradition. To this we turned.

What a towering task we faced. To appreciate the terms of human existence wherein the Peace Corps works, let us return briefly to your own history.

Texans came to this land for room to flourish and grow. They declared their independence to fight for the very principles which today are cherished by countless peoples throughout the world. They committed themselves to freedom—and to a long struggle for independence. They won—and they built on that base.

In nations everywhere today, like struggles for independence are underway.

But there are tragic differences. In the early days, Texans had strong leadership. Moreover, the people had mobility. They could rise from one social class to another. They insisted on having a voice in their own destiny, and they did.

Not so, the new nations on the move. Traditions there are not the stuff from which new worlds are conquered. People have been isolated as much by physical distances as by social isolation.

Texans fought as Americans, enriched by our Nation's exciting new heritage of optimism. That they knew what they wanted should be no surprise to us.

For Texans, freedom had value. In freedom, they beheld the power to change human conditions.

But, as President Johnson asked at Freedom House last week:

"What does freedom mean—when famine chokes the land, when new millions crowd upon already strained resources, when privilege is entrenched behind law and custom—when all conspire to teach men that they cannot change the conditions of their lives?"

The President was speaking of the lands in which we serve.

And in every one of those lands—no matter the nation—no matter the skill we bring—in every one of those lands the Peace Corps serves a single cause.

That cause is peace.

Yet in each year of our life we are finding reason to grow more skeptical of that virtuous word: "Peace."

I believe that peace in modern times presents a treacherous illusion. For peace should signify that men are free to act in their own best interest, within the limits of justice—that they are free to cope, to choose a course, to match wits.

But bitter irony, then, when peace offers no options for a better life—when peace offers indeed, no better way of life than war.

Nevertheless, such is the lot of people in almost every land wherein we serve.

Make no mistake—they are independent. Yet they guard their Nation's freedom with deeper conviction than they guard their own. They have been taught all about sovereignty—but they have learned nearly

nothing of personal liberty—and hence, of freedom.

Peace has concerned them as nations. It has given them nothing, as human beings. We serve human beings. Peace Corps volunteers grapple with the hard, mean issues of survival, down where people live. At such levels the battles of peace are won or lost.

In such battles, the tactical objectives are measured in terms of knowledge imparted, faith created, and confidence restored.

Therefore, when we in the Peace Corps ask to share in Texas' heritage, we do not come just to learn of your struggle for independence. That battle was won.

For us in the Peace Corps, Texas independence is not nearly as important as what Texans have uniquely made of their independence. In that there are lessons for us to absorb and turn to service overseas in what surely has become our mission: imparting utility and human dignity, to peace.

Moreover, I believe the Peace Corps can learn some things from Texas which you may not even recognize in yourselves—but which it is our business to recognize—and use, if what we are about is to be done well—or even done at all.

To wit: Texas is a remarkable social revolution, and has been for decades. There is a newness and vigor in this society. Like it or not, Texas writes its own rules. It is a society of youth—a society of achievement.

Texans may appall some easterners the way easterners may appall some Englishmen. Never mind. The spirit which appalls may at times be a tool of our trade. (Even the very unalarming trend to urbanity I have noted recently in young Texans bound for—or better, bound to—Eastern schools, doesn't mitigate that spirit one bit. Put spurs to some of these young men behind their button-down boots and grey flannel jeans and you find them talking dreamily of land and cotton and cattle, and even of Houston.)

Next, Texas is the frontier State. People move here as if they were forever moving on. Indeed, Texas has been an eternally new frontier almost from its inception—and this is indeed may have been one of its most significant assets in the struggle to impart meaning to its independence. Now it is at the very forefront of the newest frontier, in space.

Moreover, Texas has been possessed of a sense of pragmatism—a belief that it is important to move at something, piece by piece, if it is ever to be done at all. In the Marine Corps, we used to call that "pickin' 'em up and layin' 'em down," one foot at a time, mile after endless mile.

Next, you might as well accept and live with a sense of gregariousness—which makes Texans happily mindful of people more than of things.

In addition, I suggest one crowning success in their struggle for meaningful independence with which Texans ought to be genuinely satisfied:

In the last 20 years, Texas appears to have accepted and become justly pleased with its Spanish ancestry.

One out of every five Texans is of Spanish descent. As Congressman HENRY GONZALEZ has told the world, in Texas the name Gonzalez is as common as Smith.

All through this State, particularly in the South, things Spanish glisten colorfully as never before.

The architecture around us, the names on mail boxes, yes, and the school enrollments and club memberships, all bear witness to the oneness with which Texans of all ancestries have applied themselves to impart human dignity to Texas independence.

Moreover, Texas has moved into working, harmonious relationship with its neighbor to the South, on terms and to an extent undreamed of less than a generation past.



Texans have done all this because they would that it be so—for Texans have become too busy—and perhaps, too prosperous—to just waste valuable money, time and energy in prejudice and false pride.

Texans have another quality—an outgrowth surely of the continuing struggle for independence, and yet perhaps it is the very essence of that struggle.

It mystifies outsiders.

I have in mind your intricate relationship with freedom. It is an unfathomable love. It is so powerful that it is often defended from view, and protected lest it be misunderstood and attacked. Yet that jealous protection of deep personal faith is precisely the way of the ghetto.

And in that noble tradition, I suggest that Texas is truly freedom's ghetto.

I could stop right there with a list of reasons why Peace Corps volunteers ought to make good use of your traditions.

But there is something else for them to learn from Texas—not from the people, but from the legend itself.

We have discovered that legends and myths are as serviceable to freedom as are jobs and dollars.

In many of the lands in which we serve not only is there precious little time to cope with their history; there is also precious little history to cope with their times. In such instances, our problem is actually one of nation building.

Thus, when a nation is so fragmented that its people speak over 250 dialects, volunteers teaching English throughout the land are doing more than establishing a means of communication between people. They are building a nation.

Legends and myths are what make a political entity out of a geographic location. They also can make states out of valley districts, and nations out of regions. When a people begin to think that their nation is, they begin to think of what it can become.

As did the men at Washington-on-the-Brazos 130 years ago today.

We in the Peace Corps claim a share of their heritage for reasons as unabashed as they are shameless:

Peace Corps volunteers throughout the world are building a legend of their own—and they know it.

The Peace Corps began on odds as high as Travis' 1 to 33 at the Alamo. They have never risen to Houston's 4 to 1 at San Jacinto. Indeed, a Peace Corps volunteer in India stands at an even 1 to 1 million.

The Peace Corps will not refuse to consider any assignment for which we have authority under law—and it is my fondest hope that that will come to mean any nation anywhere in the world, whether it wishes us well or wishes us ill—so long as its government wants help for its people, of the brand we can supply.

Moreover, President Johnson yesterday expressed interest in Peace Corps aid to the beleaguered and gallant people of Vietnam. We look forward, of course, to the day when volunteers can be of service to human beings in all lands which have borne the brunt of violence and terror, not only in southeast Asia, but throughout the world.

Peace Corps volunteers will build traditions where they find the need to build them—but they will build them to fit the needs at hand. There are no rules, neither of high policy nor of politics, for the men and women who serve our cause.

Are they too few?

Eighteen thousand have served or are serving now. Not enough to make a dent in human misery.

It took just 20,000 Texans to begin the tradition which convenes us here today.

Moreover, the number of volunteers will grow—not in the dim future, but now.

Thus, a quarter of a million men and women can have served during the next 10 years.

We shall hold them to high standards, for we must have utmost confidence in their judgment and the ability to endure confusion and despair in others as well as in themselves.

But in such numbers, and under those terms which we have established—such will be a force ready to export the unique vigor which Texas has found in its independence. And as Texas sows, she shall reap.

When Peace Corps volunteers return from overseas, they constitute a body of rare young people accustomed to tough responsibilities for their years.

Overseas they may be the people called to build new traditions of the human spirit.

But at home, they are the very people upon whom existing traditions can safely repose.

Texas, for example, is the most bilingual State in the Union.

And the Peace Corps is the most bilingual of all Federal services. If better Spanish is your need, why not call upon Americans who truly have lived the language, to teach it and to work closely amongst those who need to communicate in Spanish.

Texas is a melting pot whose people ask what a man has done and can do, not who his family is and where he came from. Ask our veterans what they have done, but be prepared to sit and listen awhile.

Texas is a State where a bright young man can be elected to the State legislature at the age of 23. The Peace Corps is an outfit whose bright young men can revive the spirit of a village or a town, at the age of 21.

Texas is the place where Mexicans died serving on both sides at the Alamo. It was Peace Corps volunteers and they alone who risked fire to serve the wounded and were trusted by both sides at Santa Domingo.

Texas is a legend of ever new frontiers for all Americans. The Peace Corps is a legend of service to freedom for all mankind.

I like to think that these two legends will be a part of each other, for fruitful generations yet to come.

On this my first full day of service as Director of the Peace Corps, I am honored to receive your award of recognition.

On this my first day as a Texan—I'm mighty glad we gave it to one of our own.

Thank you.

#### PARTICIPATION SALES ACT OF 1966

Mr. STEPHENS. Mr. Speaker, I ask unanimous consent to address the House for 1 minute and to revise and extend my remarks.

The SPEAKER. Is there objection to the request of the gentleman from Georgia?

There was no objection.

Mr. STEPHENS. Mr. Speaker, before the Banking and Currency Committee we have the Participation Sales Act of 1966. I support this bill because I believe that in proposing this legislation, President Johnson asked for the next logical step in a time-tested policy of substituting private for public credit—a policy which is in the best interest of the Nation, and which contributes directly to the sound financing of the Federal Government.

This is not a new policy. It goes back to the mid-1950's. It carries the endorsement of Democrats and Republicans, of people in government, and out of government.

Let me tell you just a few things that have been said about this policy:

In his budget message of January 1955, President Eisenhower said:

Private capital will be gradually substituted for the Government investment until the Government funds are fully repaid and the private owners take over responsibility for the program.

In 1961, the Commission on Money and Credit—a commission set up by the Committee on Economic Development, an independent group of businessmen interested in the Nation's economic welfare had this to say on the subject of substituting private for public credit:

The choice among types of credit programs should be made on the basis of which will be effective at the least cost and which will interfere least with the private financial system. Where it can be effective, a loan guarantee type of program should take preference over the direct lending type of program.

That Commission by the way was chaired by Frazar B. Wilde, chairman of the Connecticut General Life Insurance Co., and it included among other illustrious members our present Secretary of the Treasury, Henry H. Fowler.

In 1962, President Kennedy's Committee on Federal Credit Programs had this to say on the subject of substituting private for public credit:

Accordingly, the Committee believes that Federal credit programs should, in the main and whenever consistent with essential program goals, encourage and supplement, rather than displace private credit.

That Committee was headed by Douglas Dillon, then Secretary of the Treasury, and included William McChesney Martin.

This legislation, which provides the effective and efficient and economical means to continue this vital program of substituting private for public credit, deserves our support. For my part I support it wholeheartedly.

#### COCHON DE LAIT FESTIVAL

Mr. LONG of Louisiana. Mr. Speaker, I ask unanimous consent to address the House for 1 minute and to revise and extend my remarks.

The SPEAKER. Is there objection to the request of the gentleman from Louisiana?

There was no objection.

Mr. LONG of Louisiana. Mr. Speaker, in the Eighth Congressional District of Louisiana, which I represent, there is a town noted for its French traditions, for its southern hospitality and its bons vivants. This town is one like many others in the State. The town to which I am referring in this instance is Mansura, La., located in the Parish of Avoyelles, which celebrates its 106th birthday this year.

Mansura is said to have been named by ex-soldiers of Napoleon, early settlers, who had been with him on his Egyptian campaigns and saw a resemblance between the Avoyelles prairie lands and Mansura, Egypt.

The people of Mansura are characterized by hard work and hard play. Six

years ago, to celebrate the town's centennial, the citizens revived an old French custom known as the cochon de lait. The literal translation of "cochon de lait" is suckling pig, but in Mansura the words connote the town's annual festival where many 20- to 30-pound pigs are roasted over open hickory fires and the accompanying fun and gaiety is enjoyed by all the townspeople and visitors from miles around.

The pigs are constantly turned on a spit for 6 to 8 hours until they have attained a golden honey brown and the excess fat is thoroughly drained. The aroma is breathtaking and the flavor is never to be forgotten.

Mr. Speaker, the exclusive title of "La Capitale de Cochon de Lait" was made into law May 24, 1960, by the wishes of the mayor, Kirby Roy, Jr., and the town council and signed by the Governor of Louisiana.

The document now stands in the town's city hall in recognition of Mansura's exquisite culinary art in the French tradition.

The resolution reads:

Whereas the town of Mansura is one of the oldest French settlements in the State of Louisiana; and

Whereas the town of Mansura wishes to preserve the customs and traditions of its ancestors; and

Whereas the preparation of the cochon de lait is a time-honored custom peculiar to the locality and surrounding area; and

Whereas the culinary artistry used in the preparation of this delicacy is admired by people throughout the world: Now, therefore, be it

*Resolved by the House of Representatives of the Legislature of the State of Louisiana (the Senate concurring), That the town of Mansura is hereby recognized as La Capitale de Cochon de Lait of the world.*

Mr. Speaker, let me take this opportunity to invite all who love good food and fun to attend the cochon de lait in Mansura, La., April 29 to May 1.

#### IS IT NECESSARY TO WEAKEN OUR FORCES IN EUROPE?

Mr. SIKES. Mr. Speaker, I ask unanimous consent to address the House for 1 minute and to revise and extend my remarks.

The SPEAKER. Is there objection to the request of the gentleman from Florida?

There was no objection.

Mr. SIKES. Mr. Speaker, the Vietnam war has placed a heavy drain upon the U.S. military forces and equipment. It becomes an even more serious matter when we find it necessary to withdraw skilled personnel from our forces in Europe in order to assure the proper buildup of U.S. fighting forces in Vietnam. This is disturbing from a number of viewpoints. One is the impact upon our allies in Europe. The French have created a very unsettled situation by disavowing their NATO commitments. The U.S. forces are the mainstay of allied strength. The U.S. forces already had been deprived of some of their effectiveness by drawdown of equipment for the war in Vietnam. Now a withdrawal of trained personnel will have a further de-

moralizing effect in Europe and this action will broaden the invitation for the Russians to start trouble.

It is a sobering thing that U.S. action in a small country like Vietnam should put such a strain upon the resources of our Armed Forces. It is now obvious that an additional involvement anywhere in the world, or a general broadening of the conflict in southeast Asia, would require a general mobilization. This, despite the fact that more than half of each \$100 billion annual budget goes into defense. None of this is lost on the Communists.

There is a source of trained manpower which is being disregarded by the Pentagon. For some unaccountable reason, it is not policy to use the Nation's trained reservists in the current crisis. For years units and individuals have maintained a state of readiness in order that the Nation may have the advantage of their skills in time of crisis. Yet, we see ourselves become more and more deeply involved in the Vietnamese conflict and no reservists are called. It is time for a frank assessment of the situation. If the Pentagon does not intend to use the reservists in time of war, it could be said there is no justification for the continued expense of maintaining the Reserve components. In any event, the Pentagon should spell out to the Congress and to the Nation its plans for utilization of the Reserves.

#### ISN'T THERE A DANVILLE SOMEWHERE THAT WANTS POVERTY MONEY? TWO DOWN—FOUR TO GO

Mr. GOODELL. Mr. Speaker, I ask unanimous consent to address the House for 1 minute and to revise and extend my remarks.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. GOODELL. Mr. Speaker, overzealous Federal poverty officials at OEO apparently crave a community called Danville in the United States that needs poverty money. A month ago, OEO pressed Danville, Ind., a community of 3,287, to set up a community action board to receive and administer poverty funds. Local citizens resisted, causing Senator BRICH BAYH to inquire of OEO, "Why Danville?"

The reply came back to Senator BAYH that Danville, Ind., needed a community action program because they had 1,339 families with annual incomes under \$1,000 and 1,979 families receiving aid to dependent children—ADC. On this basis, continued OEO officials, who could deny Danville help? Pressing the matter further, an OEO official visited Danville and to his consternation discovered that their poverty statistics did not match Danville, Ind. Quickly recovering, regional poverty officials answered:

Those figures are for Danville, Ill.—an understandable mistake.

The only difficulty came when it developed that the poverty figures were not for Danville, Ill., either. At this point, I

suppose OEO officials said: "There must be a Danville that fits our pattern of poverty." Sadly, however, a check of the population division of the Census Bureau indicated there were only six Danvilles in the country and none of them fitted the poverty profile prepared by OEO.

Perhaps the news media could now, as a public service, assist Federal poverty officials, who dearly wish to help a Danville, by running—apropos of Peter Pan—the following nationwide ad: "Isn't there someone out there, from a Danville somewhere, who believes?"

#### LEGISLATIVE PROGRAM FOR WEEK OF APRIL 25

Mr. GERALD R. FORD. Mr. Speaker, I ask unanimous consent to address the House for 1 minute.

The SPEAKER. Is there objection to the request of the gentleman from Michigan?

There was no objection.

Mr. GERALD R. FORD. Mr. Speaker, I ask for this time for the purpose of inquiring of the distinguished majority leader as to the program for the remainder of the week and what is to be programmed for next week.

Mr. ALBERT. Mr. Speaker, will the gentleman yield?

Mr. GERALD R. FORD. I yield to the distinguished majority leader.

Mr. ALBERT. Mr. Speaker, in response to the inquiry of my distinguished friend, we have no further legislative business this week, and we shall ask to go over to next week upon the announcement of the program for next week.

The program for next week is as follows: Monday is District day. There are no District bills. Monday we have programmed H.R. 12617, amending the act providing for economic and social development in the Ryukyu Islands, with an open rule and 1 hour of debate.

On Tuesday the Agriculture Appropriation Act, 1967.

Wednesday and the balance of the week, H.R. 10065, Equal Employment Act of 1966. Open rule, 2 hours of debate.

H.R. 13881, transportation, sale, and handling of dogs and cats for research purposes. Open rule, 2 hours of debate.

This announcement, of course, is made subject to the usual reservation that conference reports may be brought up at any time.

#### ADJOURNMENT OVER

Mr. ALBERT. Mr. Speaker, I ask unanimous consent that when the House adjourns today it adjourn to meet on Monday next.

The SPEAKER. Is there objection to the request of the gentleman from Oklahoma?

There was no objection.

#### DISPENSING WITH CALENDAR WEDNESDAY BUSINESS

Mr. ALBERT. Mr. Speaker, I ask unanimous consent that the business in order on Calendar Wednesday of next week be dispensed with.



The SPEAKER. Is there objection to the request of the gentleman from Oklahoma?

There was no objection.

#### REPUBLICAN POLICY COMMITTEE STATEMENT ON THE AMERICAN MARITIME INDUSTRY

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Arizona [Mr. RHODES] may extend his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. RHODES of Arizona. Mr. Speaker, at a recent meeting of the House Republican policy committee a policy statement regarding the American maritime industry was adopted. As chairman of the policy committee, I would like to include at this point in the RECORD the complete text of this statement:

#### REPUBLICAN POLICY COMMITTEE STATEMENT ON THE AMERICAN MARITIME INDUSTRY

America is facing a crisis of major proportions with respect to its vital merchant marine. At the close of World War II, this country had a merchant marine fleet of over 3,500 vessels. By 1951 there were 1,955 active U.S.-flag ships. Today there are only 1,000, including those reactivated for the Vietnam war, and most of these are over 20 years old and near the end of their economic life.

The United States had dropped to 12th place among the world's major shipbuilding nations. Russia, on the other hand, has risen from 12th to 7th place as a maritime nation and is presently building an even larger merchant marine which she intends, by her own admission, to utilize as an instrument of foreign policy.

On January 1, 1966, the United States had only 45 ships under construction. And President Johnson's budget for fiscal 1967 provides only \$85 million for our merchant marine ship construction. This represents a cut of \$47 million from appropriations for the current year. It would permit construction of a maximum of 13 new ships. It is both significant and tragic that the administration's total maritime budget for 1967 set a 7-year low. Although the 1965 state of the Union message promised "a new policy for our merchant marine," nothing has materialized and the bickering and confusion among the various governmental agencies continues and grows.

By contrast, Russia boasts a merchant fleet of almost 1,500 vessels. Most are new and efficient ships built since 1950. Soviet orders for new ships rose from 225 in 1962 to 673 in 1964. Moreover, the Soviet Union is utilizing its satellites, and the Free World at a substantial cost in hard currency, for its merchant fleet expansion. For example, East German shipyards are scheduled to supply 399 merchant vessels. The Polish yards are working on Soviet orders for timber carriers and tankers.

The inadequacy of America's shipbuilding program is further highlighted by the fact that Japan has 199 merchant ships under construction, Great Britain 184 vessels, West Germany 176, and Sweden 44.

At the same time that our shipbuilding effort is lagging and our World War II reserve fleet is growing older and more dilapidated, the expanding war in Vietnam is putting the U.S. merchant fleet under tremendous pressure. Tonnage volume to Vietnam has leaped from 300,000 tons per month to 800,000 tons per month. Almost 470

ships are now under direct operational control of the Military Sea Transportation Service and most of these are engaged in the seafight to Vietnam. Moreover, because U.S. ships were not available, MSTS had to look to foreign-flag vessels for help.

Much of the present problem is attributable to the fact that several years ago Secretary of Defense McNamara decided that he could reduce the role of ships in the defense picture. According to McNamara, air transport could be substituted as a primary military supply vehicle. Now, just 4 years after this disastrous management decision, two out of every three soldiers in Vietnam had to be transported by ships and, as of January of this year, 98 percent of the supplies and cargo for the war went in by ship. The fact that it would take 260 of the C5A planes to carry the load of a single ship, and air transportation, if utilized, would cost 5 or 6 times as much per ton-mile, further dramatizes our need for and dependency upon ships.

At the same time that shipping presents a grave problem for us, both Communist and free world ships continue to carry goods to and from North Vietnam. In 1965 there were 199 free world ship arrivals in North Vietnam. Of this figure, 107 involved ships flying the flags of NATO countries. We know from our own experience that shipping, and the cargo that it brings to Vietnam, is an all-important factor in the prosecution of the war. Supply problems have hampered our effort. By the same token, Communist and free world ships have supplied much of the goods and military supplies that have made it possible for the North Vietnamese to continue the war. Certainly, at a minimum, the penalties and restrictions imposed upon ships that engage in Cuban trade should be imposed upon those who trade with North Vietnam.

The merchant marine shipbuilding effort in this country must be increased. Unless this is done, our defense commitments throughout the world will be in jeopardy. Indeed, our national survival may depend upon the shipping that should be under construction but which the Johnson-Humphrey administration has scuttled. We demand that steps be taken to correct this disastrous situation. If the present trend continues, this country that once boasted the greatest merchant fleet in the world, will be left on history's shore waiting for ships that never come in.

#### WHAT'S HAPPENED TO PATRIOTISM?

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Ohio [Mr. ASHBROOK] may extend his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. ASHBROOK. Mr. Speaker, the April issue of the New Guard, the magazine published by Young Americans for Freedom, contains a timely and provocative article entitled "What's Happened to Patriotism?" by Dr. William Jay Jacobs, who received his doctorate in history at Columbia University and who is currently assistant professor of education at Rutgers, the State university of New Jersey. One cannot help but see a relationship between the efforts of some to debunk this Nation's historical achievements and heroes and the current antics of the draft-card burners, the flag dese-

crators and some protestors of our firm policy in Vietnam. Fortunately, however, the United States has never suffered from a dearth of heroes, and as fast as our historic men of daring are seemingly interred, new figures take their place.

It must be discouraging to the debunkers of our American heritage to consider the case of Sp. Daniel Fernandez of Los Lunos, N. Mex., who hurled himself upon a Vietcong grenade, thus saving the lives of several comrades. Mr. Jose Fernandez, his father, stated that his son was very generous and always volunteering for something, but the last thing he would want is to be known as a hero.

I wonder how the downgraders would handle the heroism of Pfc. Milton Lee Olive, of Chicago, whose last gesture in this life, like Daniel Fernandez, was to fall on an exploding grenade. A quiet, religious youth, Milton Olive, like the heroes of our past, was described as being devoted to his duty and always wanted to do more than his share.

To grateful and patriotic citizens, every serviceman who willingly gives his life for this Nation is a hero. And for those who, for whatever reason, would belittle our precious heritage in the eyes of our youth, let them ponder these words from the last letter of Pfc. Hiram D. Strickland of Graham, N.C.—a letter to his family found in his personal effects—a letter he would never mail:

I'm writing this letter as my last one. You've probably already received word that I'm dead and that the Government wishes to express its deepest regret. Believe me, I don't want to die, but I know it was part of my job. I want my country to live for billions and billions of years to come.

I want it to stand as a light to all people oppressed, and guide them to the same freedom we know. If we can stand and fight for freedom, then I think we have done the job God set down for us. It's up to every American to fight for the freedom we hold so dear. If we don't, the smells of free air could become dark and damp as a prison cell.

Don't mourn me, Mother, for I'm happy I died fighting my country's enemies, and I will live forever in people's minds. I've done what I've always dreamed of. Don't mourn me, for I died a soldier of the United States of America.

God bless you all and take care. I'll be seeing you in heaven.

Your loving son and brother,

BUTCH.

To help restore patriotism to the position of honor it enjoys among our servicemen in Vietnam, I include the article, "What's Happened to Patriotism?" in the RECORD at this point:

#### WHAT'S HAPPENED TO PATRIOTISM?

(By Dr. William Jay Jacobs)

Unlike Prof. Eugene Genovese, my colleague at Rutgers, the State university of New Jersey, I do not "welcome the prospect of a Vietcong victory in Vietnam." Further, I am dismayed (as he is not) to observe that consistently, almost automatically, the word most calculated at faculty meetings to induce the smirk, raised eyebrow, or knowing smile is—"patriotism."

At least in the schools, patriotism has been "out" during recent years. It is unsophisticated and unfashionable, so that only a borderline minority of "warmongers" or "squares" would dare dredge from the past such relics as: "Don't give up the ship," "I



only regret that I have but one life to give for my country." "We have met the enemy and they are ours." They have disappeared from the textbooks, from the lexicon of popular literature, and, with few exceptions, from the minds of the young.

There was a time, albeit in the innocence of the 19th century, when Americans were less cynical. They leaned heavily on a common body of national allusions and shared a common frame of reference. Then, children from all parts of the country, all social classes, and many religions partook of a common "American mythology." In the schools they learned the drama of American history. From songs and Fourth of July orations they learned patriotic rhetoric—"The Army and Navy Forever," "Three Cheers for the Red, White, and Blue," "Liberty and Union now and forever, one and inseparable," "Our country—right or wrong." Finally, from their grounding in McGuffey Readers they learned—memorized, if you will—"Breathes there the man with soul so dead/Who never to himself hath said/This is my own, my native land."

In today's enlightened times we have renounced the thrilling mythology of our past. In place of McGuffey's Arnold Winkelreid ("Make way for Liberty!" he cried; Made way for Liberty, and died!"), we have substituted the insipid banalities of "Run, Dick, run!" "Go, Spot, go!" and "The grocer is your friend." In our history books the Pilgrims and Captain John Smith have been modernized into a pair of innocuous real estate agents, pondering sites for urban renewal. War, when it is discussed at all in these books, is usually avoidable, always senseless and stupid. Accordingly, those who died fighting in America's past conflicts for such abstractions as "honor" and "the flag" were apparently mistaken or, at best, simply naive.

How did patriotism fall into such disrepute?

Part of the onus must be borne by that most unfortunate of breeds, the "progressive educator." From the time of Plato's Republic, the basic task allotted to the school in Western civilization was the induction of the young into society, a society aspiring to perpetuate itself. Even in the United States, Horace Mann and Henry Barnard sold to a skeptical public the notion of a "common school" (open to all and free to all) by emphasizing the role such a school could play in developing a composite nationality, cementing the loyalty of disparate immigrant groups through a common educational experience. But by the 1930's the direction of educational leadership had changed. "Progressive" educators, often heavily indebted to Freudian psychology, set out to liberate the psyche as others before had sought to liberate the mind. The child, they reasoned, must be allowed, within the supportive atmosphere of the group, to "express" himself spontaneously, without regard to the inhibiting standards imposed artificially by tradition. Competition was supremely bad, cooperation and "love" supremely good. Understandably, for children apprenticing to love their fellow men (forgetting meanwhile that their fellow men might hate their affluent guts), "Don't fire till you see the whites of their eyes," seemed scarcely proper fare. Far more suitable was the trivia that passed for education until Conant and Keppel (nudged by Sputnik) demonstrated that a field trip to the waterworks or a book about "Little Charley's Baby-Sitter" might, indeed, be educating for "life-adjustment" while failing to educate for mental excellence. Remarkably, in 1966, there are still those—I teach with some—who prattle about "teaching children, not subjects," "group dynamics," and "getting along with people."

The triumph and reign of progressive education, with its mawkish femininity and distaste for nationalist fervor, helped to iso-

late patriotism from academic respectability. Equally as significant, perhaps, was the demise, first from the curriculum, then from American letters generally, of an entire species—the hero.

Debunking biographers, fashionable in the twenties, seriously undermined the stature of historical figures. Columbus emerged a mendacious visionary whose cruelty in Haiti presaged the Nazi death camp; Washington became a pompous hypocrite with royalist cravings; Paul Revere had won laurels for a ride he didn't complete. Similarly, John Hancock was a profiteer, Andrew Jackson was a backwoods barbarian. Even Lincoln was caricatured as a small-town politico and, in the bargain, a vicious white supremacist. After admitting the element of truth in all of this debunking, it is important to ask—what was substituted following the destruction of the old heroes?

According to Max Rafferty, State Superintendent of Schools in California, today's hero, if there is one, is fashioned in the image of ourselves:

"He is 'Daddy' in the second grade reader who comes mincing home with his eternal briefcase from his meaningless day in his antiseptic office just in time to pat Jip the dog and carry blond little Laurie into the inevitable white bungalow on his stylishly padded shoulders.

"He is 'Mommy' in the third grade books, always silk-stockinged and impeccable after a day spent over the electric range, with never a cross word on her carefully made-up lips and never an idea in her empty head."

As Rafferty declares, we have debunked the hero to make room for the jerk.

Closely related to debunking biographers in the work of overwhelming the hero were the "analytic historians," beginning with James Harvey Robinson and Charles A. Beard. As Howard Mumford Jones puts it, "The school of social historians has substituted movements for personalities, conflicts of economic interest for dramatic events, sociology for the romance of personal endeavor, and citizenship for hairbreadth escapes by sea and land." Consequently, instead of romantic gestures and heroic deeds today's history books are crammed with stock market graphs and interminable dronings on principal reasons for the rise of sectionalism.

No wonder history has become the most thoroughly disliked subject in the schools. The engaging old schoolbooks, movingly written by Bancroft and Prescott and Motley, exposed children, without condescending to them, to the emotional richness of the past. The heroes were all there—pioneers and Puritans, Daniel Webster, General Custer, Roger Williams. And along with them, in the McGuffey and Appleton readers, those legendary half-magical figures—William Tell and "The Soldier of the Rhine," Huck Finn, Tom Sawyer. Horatius at the Bridge, Ivanhoe. It is probably true, as Prof. Ray Allen Billington charged recently in the Saturday Review, that Patrick Henry never rocked the Virginia House of Burgesses with the cry, "If this be treason make the most of it." But does it matter? What is really crucial is that in our passion for "objective analysis" and historical revision we have stripped history of its glamorous personalities, its exciting events, its pageantry, and successfully transformed Grant and Lee, Hoover and Roosevelt into faceless abstractions bobbing helplessly in a sea of powerful movements and uncontrollable socioeconomic "trends." By debunking heroes while overlooking the human drama in their deeds we have confirmed for our children the judgment of Mouse when, to dry Alice's gigantic tears, he began reading history aloud, since it was, he said, the driest thing he knew.

#### MEDIOCRITIES

The hero passed into limbo, too, because he became the darling of alien philosophies.

Hitler and Mussolini usurped heroism, literally clothing themselves in knightly armor to mesmerize their populations into loyalty. (Some of the new African leaders have done the same.) Regrettably, America's response to totalitarian hero worship was only half right. On the one hand we rejected the Nietzschean superman, but on the other, with every good intention, we accepted those ludicrous sops—Tom and Sally. Farmer Brown, and the "friendly bus driver"—insufferable bores, mediocrities whom no child could possibly idolize, or hate, or for that matter care about in the least. Two decades ago the "supermen" were crushed; the mediocrities linger on.

Finally, the hero vanished because 20th century liberals wishfully embraced an "international" solution to world problems. Since 1945, the Afro-Asians, the French, and now the Germans have provided us with abundant, often unpleasant reminders that nationalism remains the most dynamic force of our day. Still, liberal critics like Professor Billington are unconvinced. In the article mentioned earlier, Billington decries the stupidity of American textbooks for speaking of "our armies" and "our people." This, he says, is "destructive of international understanding" and should be eliminated "in the interest of world harmony." When, asks the professor, are we going to "discard hoary legend" and stop repeating "the tired clichés that inspired our grandfathers." Nor, in describing the American Revolution, should we speak of "patriots," warns Billington, since this is—"a biased word." How very odd that no commentator of Billington's persuasion has yet been produced by communism, our century's only truly international movement.

#### SOME DANGERS

Patriotism unquestionably has its dangers. There are always selfish interests eager to use the stirring phrases, the mythology of American history for their own purposes. Among the Nation's pressure groups there are scarcely any—Left or Right—not instantly prepared to cite the words of Washington or Jefferson, Lincoln or Kennedy to further programs they favor. In the process they are willing, not infrequently, to label someone else un-American.

It is a mistake, however, to view patriotism as inevitably egocentric or synonymous with closed-minded partisanship. Judiciously incorporated into powerful, dramatic narrative it can be important in restoring romance to the study of American history. Part of this romance is evoked by the historian's ability to recapture a mood in words, thereby making the past relevant and real. As F. Scott Fitzgerald once said, "For a transitory enchanted moment, man must have held his breath in the presence of this continent, face to face for the first time in history with something commensurate with his capacity for wonder." It is the sense of wonder they communicate to readers that explains why Gibbon and Parkman, Herodotus and Macaulay are still read and enjoyed, while the tortuous monographs of academic historians are relegated to "compulsory reading" shelves.

The romance of American history can become manifest in another way—in a feeling of pride in the Nation, a lesson learned in the school or never learned. It is too late when a soldier is confronted by his leering Chinese captors to discover that loyalty and justice and honor are more than sentimental claptrap.

For the schools it is not yet too late. The patriotic emotion is still there. John Glenn, a modern hero, says he gets a funny feeling deep inside when the flag goes by. Briefly, after Khrushchev withdrew his missiles from Cuba, Americans could feel 10 feet tall—and over some radio stations patriotic music was



played without interruption. Emotional attachment is a first step. Recently, new informational materials have appeared, including books and pamphlets from the American Heritage Foundation and exciting visual devices prepared by the Wemyss Foundation of Wilmington, Del. They make history live. Moreover, they anticipate, at last, the establishment of the history of American liberty as a "living tradition," even now inescapably molding the national character. In the hands of American writers dedicated to exploring its greatness, that tradition offers a bottomless reservoir of inspiration.

All of this is predicated on the restoration to American history of its inherent vitality and fascination. It is not unreasonable or excessive to ask that the Nathan Hales, not the cynical defeatists, be made to live again for American children. The alternative is a generation of young people susceptible to those, like Professor Genovese, who look forward to the victory of our enemies.

#### FREEMAN SHOULD BE REPLACED

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Illinois [Mr. FINDLEY] may extend his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. FINDLEY. Mr. Speaker, for the good of the American farmer, Orville L. Freeman must be replaced as Secretary of Agriculture. Where he belongs I am not sure, but certainly not in the Government's top agricultural position. The Office of Secretary carries with it tremendous discretionary power over farm markets, and it makes no sense to leave in that position a man who expresses pleasure when farm commodity prices go down and whose use of Government stockpiles to drive down farm prices and keep them down forces the farmer to take a double dose of inflation.

For years I have urged that the powers of the Secretary of Agriculture are too awesome to trust to any mortal being, and I have warned that this authority, in the wrong hands, would some day be turned against the farmer. That sad day has come.

For the first time in memory a U.S. Secretary of Agriculture has bragged about a drop in farm market prices. His statement was printed on April Fool's day, but it was no joke. The drop came at a time when farm income was still way below parity, and that made Mr. Freeman's glee doubly disturbing.

Government action driving down farm prices doubles up inflationary problems for the farmer. The farmer must pay prices for things he needs which go up with inflationary pressures, but he gets his income from market prices for his commodities which are deliberately forced down and held down by Government action.

Hog prices are, of course, still above average for the moment, but surely the Secretary Freeman's memory is long enough to recall hogs at 15 cents not long ago. The American farmer can put up with low prices occasionally if he can look forward to other times when prices are up.

Corn dumping has cost farmers millions of dollars in market income recently.

According to USDA reports just received, the Government dumped 159 million bushels of corn during the 4-week period ending March 18. This reduced to 202 million bushels USDA's uncommitted inventory.

This dumping was an unconscionable effort to depress the cash price of corn and club farmers into reluctant compliance with the Government's so-called voluntary feed grains program.

Timed as it was, this dumping must be interpreted as a brutal plan to force sign-up. If the administration had followed an orderly program of liquidating stocks—spreading the sales evenly throughout the months following the harvest peak—corn prices could be 10 to 20 cents a bushel higher.

From October 1, 1965, the beginning of the new crop year, through March 18, 1966, CCC sold 296,844,000 bushels of corn for unrestricted domestic use, plus an additional 53,758,000 bushels for export. These heavy marketings, made in direct competition with sales by farmers, have forced midwestern corn prices down at least 10 cents per bushel at a time when there would normally be a seasonal rise in the cash price of corn.

This astounding situation is without precedent. Under Secretary Freeman's direction, the Department is vigorously engaged in a series of actions which are depressing farm prices. Moreover, a vigorous propaganda campaign is being waged by the Department and by the administration to pin the blame for inflation on agriculture.

The astounding and unprecedented campaign against our farmers comes at a time when farm prices are only around 82 percent of parity—the goal established years ago as the measure of fair farm prices.

Not only is the Secretary and the Department taking action to beat down farm prices which are 18 percent below parity on the whole. Mr. Freeman has predicted farm price declines, which under powerful Government pressure, are taking place and he has expressed gratification over this development. In the New York Times of March 31, a story by William M. Blair stated that Mr. Freeman took pleasure in predicting a decline in farm prices. He stated:

It was the first time in the memory of Federal farm officials that a Secretary of Agriculture indicated that he was pleased with a decrease in farm prices."

Imagine the response from union officials and union members if a Secretary of Labor took action to lower wages and expressed gratification over the results.

Let me detail briefly some of the steps which the Department and the administration have taken in their campaign to hurt farm prices. They have—

Sold a tremendous quantity of corn to beat down feed grain prices;

Restricted exports to beat down the price of hides;

Authorized an increase in cheese imports;

Curtailed pork purchases by the military;

Urged the housewives to buy less food; and

Waged an increasing propaganda campaign to give the impression that farm prices are a major inflationary force.

Moreover, the Secretary of Agriculture has had the effrontery to ask the Congress for legislation which would give him the authority for the permanent management of farm prices. I am referring to identical bills introduced in the House and Senate—S. 2932 and H.R. 12784. This proposal ostensibly is to give the Secretary the means of accumulating reserves for the food-for-freedom program. When examined, however, the scope and sweep of Mr. Freeman's request is almost as great as the so-called omnibus bill of 1961—H.R. 6400. In this, the Secretary embodied the supply-management concept which would have given the Department of Agriculture control over almost every phase of agricultural production and marketing.

The bills to which I have referred would have the effect of setting aside existing legislation, including the major farm bill passed last year. The Secretary could ignore the laws now in effect with regard to price support levels, marketing quotas, and acreage allotments for almost any agricultural commodity in order to maintain and establish reserves. There would be no restrictions on the sale of Government-owned agricultural commodities save those now in effect. These certainly are no real barriers, as we have learned, to Federal sales which lower market prices. The so-called stockpile bill also would actually let the Department of Agriculture go into the business of processing, handling, and transporting any agricultural commodity. One may say that the Department of Agriculture would not use this power but, in view of Mr. Freeman's campaign against farmers and farming, I am not so sure. We must assume that, if the authority is granted, it will be used.

The bill would put the farmer on the dole from now on out and woe eventually to the producer who angered the bureaucrats. As I see it, H.R. 12784, in its present form, is a bill to help destroy the independence of the American farmer and to make him a ward of the Federal Government henceforth.

Some may argue that I am using the crystal ball and am trying to read Mr. Freeman's mind. In this connection, let me refer them to an exchange which took place between the Secretary and Representative QUIE, of Minnesota, when the former was testifying before the House Agriculture Committee on the food-for-freedom program.

The Secretary stated frankly that:

If we are going to buy in by the Government when we have too much production, we have got to recognize that we will have to sell back when prices are stronger.

Mr. QUIE then commented that:

The Department of Agriculture now is more the voice of the consumer than it is of the farmers.



The transcript quoted Mr. Freeman as saying:

I am disturbed about that, but I plead guilty in the sense that the Department is an important consumer service agency and that it will continue to be so.

Anyone familiar with developments during the past several months must realize that the administration's attempt to put the blame for inflation on the farmers is a phony.

I am not defending food prices. There is a big spread between the price which the farmers receive and the retail prices, but I do know that food prices are cheaper in the United States today than in any major country in the world. For example, the consumer in this country spends about 19 percent of his disposable income for food, disposable income being defined as the income left after taxes and certain fixed costs are paid.

Let us contrast this figure with food costs—using the same yardstick—in some other countries: Britain, 27 percent; Sweden, 27 percent; France, 30 percent; West Germany, 36 percent; Italy, 43 percent; Japan, 43 percent; Yugoslavia, 46 percent; and the Soviet Union about 50 percent.

This is possible only because of the marvelous productivity of American agriculture, a productivity in glaring contrast with the inability to produce abundantly in the Communist countries. Over the years, the efficiency of American agriculture has enabled us to ship millions and millions of tons of food-stuffs to needy areas abroad, food which may have prevented chaos in many nations.

While American agriculture is efficient, in many ways it has not been rewarded for this efficiency. Farm income has consistently lagged behind urban income. In 1965, the farm population had only \$1,510 per capita to spend after taking care of necessary items. On the other hand, the city dweller had \$2,405, or \$900 more than his rural brother.

Farm debt rose \$3.4 billion in 1965 to a total of \$39.4 billion, a record. Every year there are about 90,000 fewer farmers on the land. Every year the cost of doing business goes up.

Food prices are 111.4 percent of the 1957-59 average and the whole cost of living index is around the same figure. But let us take a look at the base period itself. In this period, farmers got only about 83 percent of parity for their products. In other words, the base period, itself, is not a true measure of the situation.

With the realization that the United States must use its farm surpluses and techniques to deal with the world's food deficit, many of us felt that the farmers would at last come into their own. They could get a fair price in the marketplace. Their contribution to the economy, to foreign policy, and to national security should be recognized. Farming would be put upon a sound and stable basis.

Agriculture is our most important single industry. Farmers spend nearly \$45 billion every year in production costs and for consumer goods. More people are employed in agriculture than in the combined employment of the public

utilities, automobile, transportation, and steel industries.

The administration's campaign against the American farmer will have far-reaching and disastrous results. The comparatively low prices for corn means, within the next few months, low prices for hogs, poultry and, in time, livestock. So it goes and I might point out that industry and business in the farming areas and outside also will be hard hit eventually.

Recently, my attention has been called to the fact that farm net income this year probably will be up by \$1 billion, which seemingly is put forward as proof that Mr. Freeman does care for the producers. I am unconvinced. All this projected increase comes from an increase in payments to farmers which, overall, will total more than \$3.5 billion. Government payments, year in and year out, are a most unstable foundation for agriculture. They depend on the whim of the executive branch of the Government and on the decision of each Congress. They are a poor substitute for cash in the marketplace.

The departure of Mr. Freeman would not in itself put American agriculture on a sound basis for solid market development in the future, but it would certainly be a hopeful and necessary beginning toward that end.

#### MR. FORD'S TIMELY CHARGE OF MISMANAGEMENT

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Illinois [Mr. FINDLEY] may extend his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. FINDLEY. Mr. Speaker, many of us who are concerned over the question of whether we can afford both the frills of new Great Society programs and the financing of the Vietnam war, without runaway inflation or even higher taxes, were greatly impressed by the thoughtful and sober statement made recently at a news conference by the distinguished minority leader, Mr. GERALD R. FORD, of Michigan, during the Easter recess.

The occasion for Mr. Ford's statement was twofold—the birthday anniversary of Thomas Jefferson, who as President, cut taxes and reduced the national debt, and the 15th of April, when most of us had to file our Federal income tax returns for 1965. Mr. Ford cited the roll-call record of this body to show that on domestic nondefense spending measures, an average of 93 percent of the Republicans had voted for savings and 82 percent of the Democrats had voted for spending more, and inevitably higher taxes.

The distinguished minority leader very carefully pointed out that we Republicans in the House of Representatives, though outnumbered two-to-one, have consistently voted President Johnson every penny he has asked for in support of the war in Vietnam and the national

security. But in charging the Democratic majority, except for a handful of Jeffersonian Democrats, with being a "blank check Congress" for the Democratic administration, he served notice that we Republicans do not intend to countersign blank checks forever even in the defense area. He cited reports from South Vietnam of mismanagement by Pentagon planners and rightly warned that such shocking errors of judgment cannot be condoned merely for the sake of national unity. These management mistakes—and more—have been confirmed since by Secretary McNamara himself and, more significantly, by independent and reputable observers on the scene, among them the correspondents of CBS and the New York Times.

Under leave to extend my remarks, I include the full text of Mr. Ford's excellent statement and a few corroborating reports from the press and the networks in the RECORD at this point:

STATEMENT BY REPRESENTATIVE GERALD R. FORD

Yesterday was the birthday of Thomas Jefferson. Today is the anniversary of Abraham Lincoln's death. Tomorrow, as most of us are unhappily aware even without this reminder, is Great Society tax day—the deadline for filing your Federal income tax returns for 1965.

President Johnson is in Mexico City today unveiling a statue of Abraham Lincoln, so I suppose it will not be amiss for me to say a few words in praise of Thomas Jefferson.

Jefferson, though he called himself a Republican, is regarded now as the father of the Democratic Party. Lincoln, the first Republican President, was himself a great admirer of Jefferson, saying that "the principles of Jefferson are the definitions and axioms of free society." For his part, Jefferson declared that "every difference of opinion is not a difference of principle. We are all Republicans; we are all Federalists."

So without quibbling about labels, let me merely note that we are all today indebted to Thomas Jefferson for one major contribution to our system of government. He was the Founding Father who started the two-party system. You might say that, as Vice President, he was the first minority leader here on Capitol Hill. And the country has prospered under the two-party system which developed—thanks to Jefferson—outside the provisions of the Constitution. It added another and most important check and balance to our experiment in self-government.

As to Jefferson's principles, during his Presidency he cut Federal spending, reduced taxes, repaid \$33 million of the national debt, and repealed the excise tax on whisky. Whether he was the last Democrat or the first Republican to do this I will leave for historians to argue.

There certainly can be no argument, however, about the differences of principle that divide our two parties in this lopsided 89th Congress. There is no doubt which is the spending party and which is the prudent party. Nevertheless, we keep hearing noises from the direction of the White House that we 140 Republicans in the House of Representatives, outnumbered more than 2 to 1, are wrecking the Johnson-Humphrey administration's earnest efforts to economize and head off higher taxes. The President pleads with us and with the housewives and businessmen and the farmers and labor leaders to sharpen our pencils and help him halt inflation.

Well, I have sharpened my pencil on my income tax forms, so let me show you a little simple arithmetic:

At this moment, there are 293 Democrats and 140 Republicans in the House. That is



a 2-to-1 majority with 13 votes to spare. Even the liberal Democratic study group in the House of Representatives boasts enough members to outvote the Republican minority.

In the Senate there are 68 Democrats, including WAYNE MORSE, and 32 Republicans. That's also a two-to-one majority with four votes to spare.

In short, this is a blank check Democratic Congress which can do virtually anything it pleases, or anything President Johnson pleases, whether the Republican loyal opposition likes it or not. Such lopsided legislative majorities can spend your money, raise your taxes—and that's exactly what this blank check Democratic Congress is doing.

And remember, no matter what President Johnson says or how fervently he pleads with the housewives to stop buying steaks, the responsibility for Federal spending and for Federal taxing rests with the Congress. This blank check Democratic Congress will have to face the American voter in November, and the people will know who are the spenders and who are the savers.

They will know because there will be roll-calls on every spending bill that comes to the House of Representatives which offers any hope of saving a single wasted dollar of your money.

We asked President Johnson at the outset of this session to put wartime priorities on his wartime budget requests. So far he has refused. We have gone along with our elected Commander in Chief on everything he has asked to support our fighting men in South Vietnam—but when I read what is happening over there and how we are running short of bombs despite all the billions we have voted for defense, I wonder how long we can underwrite shocking mismanagement in the name of national unity.

We are certainly going to take hard second looks at all the rest of the Johnson-Humphrey spending proposals when the Congress resumes.

Now here is the record on nondefense spending rolled up by the blank check Democratic Congress thus far this session: On six key money measures, an average of 82 percent of the Democrats have voted for higher spending and, inevitably, higher taxes. (See table.)

On the same six rollcalls in the House of Representatives, an average of 93 percent of my Republican minority colleagues have stood up for economy and the now dwindling hope of holding off inflation and higher Federal taxes for future April 15's.

We were faced with three new spending proposals, all having some merit in normal times but steamrollered through the blank check Democratic Congress by lopsided majorities. Then we tried to trim excess fat from three appropriation bills which came to us before the recess. Some of these proposals were worthy, and they had powerful advocates. But we are at war—and not doing too well with it. So again the roll was called. Again the result was the same. Ninety-three percent of the Republicans were for saving; 82 percent of the blank check Democrats were for more spending.

Who votes for higher taxes? Democrats—4 out of 5 of them. We cannot expect to stop this steamroller without substantial help from any Jeffersonian Democrats still left in the Congress—and it doesn't look like there are very many of them left.

But we are going to make the record clear for the people to judge in November, and I predict that the next Congress will be known as the check-and-balance Congress instead of the blank check Congress. I am confident that here in the legislative branch, at least, this country will have the right kind of leadership next year to meet the mounting array of dilemmas and disasters at home and abroad.

Who votes for higher taxes?  
SIX ECONOMY ROLLCALLS IN THE HOUSE, 1966  
[In percent]

	Democrats voting for spending more	Republi- cans voting for cuts and saving
5-percent cut in Interior appropriations, Apr. 6, 1966.....	88	95
5-percent cut in Post Office-Treasury appropriations, Apr. 6, 1966.....	93	89
\$12,000,000 supplemental for rent subsidies, Mar. 29, 1966.....	75	95
\$750,000 new authority for HUBERT H. HUMPHREY house, Mar. 22, 1966.....	76	95
\$4,600,000 new authority for Alaska Centennial, Mar. 2, 1966.....	79	94
\$9,500,000 new authority for Florida "Interama," Feb. 3, 1966.....	83	87
Average.....	82	93

NOTE.—Total strength: 293 Democrats versus 140 Republicans—2 seats vacant.

#### U.S. PAYS \$21 FOR BOMBS IT SOLD AS JUNK AT \$1.70

The United States paid a West German firm \$21 apiece for bombs which the German firm had bought from the Air Force as junk for \$1.70 each 2 years ago, the Pentagon acknowledged yesterday.

Despite the fact that the Germans sold back the bombs—needed in Vietnam—for more than 12 times the purchase price, the Air Force claimed there was a saving in the transaction.

Bombs of the same type—750-pounders, cost \$440 when bought new today, a spokesman said.

Defense Secretary Robert S. McNamara mentioned Thursday that bombs had been repurchased from the Germans, who bought them to use the nitrate in them for fertilizer. He was replying to newsmen's questions in regard to House Republican Leader GERALD R. FORD's charge that administration "mismanagement" had created ammunition shortages in Vietnam.

The firm—Kaus & Steinhausen Co., of Schwinge, Germany—bought 7,562 of the 750-pounders for \$12,376 in 1964 after they had been declared surplus. The Air Force bought back 5,570 of them for \$114,500.

The repurchase need came about when the Defense Department decided to send B-52 jets against the Communists in Vietnam. The 750-pounders had been disposed of in the belief that the giant bombers, which normally are armed with hydrogen bombs, would have no use for the conventional bombs.

On that basis, the Air Force was authorized in 1963, to dispose of excess 750-pounders stored in Europe. The reasoning was that the European storage space could be better used.

The Vietnam missions assigned to the B-52's last summer changed all that because the bombers were being loaded with 750-pounders at 30 tons a clip.

#### REPORT FROM SAIGON BY PETER KALISCHER, CBS NEWS, APRIL 19

U.S. Air Force sorties in South Vietnam have been cut drastically from over 400 to less than 100 a day in the past week because of a dire lack of ammunition and explosives, CBS News learned unimpeachably today.

There is no bomb shortage; there is only a shortage of what makes the bombs go off—fuses, pins and some timing devices. And there is even a shortage of 20-millimeter cannon shells.

This correspondent learned that since mid-April Air Force bombers have been taking

off half loaded. Only emergency missions and those in direct support of ground force operations are being flown.

Apparently, the shortage, foreseen but not avoided, is now about to be remedied with tons of missing parts on the way. But they are not here now.

[From the New York Times, Apr. 20, 1966]

**AIR FORCE RAIDS—INFORMED SOURCES IN SAIGON ASSERT NUMBER OF SORTIES IS DRASTICALLY REDUCED—DISPUTED BY PENTAGON—INTENSITY OF STRIKES AGAINST THE FOE IN SOUTH VIETNAM ALSO REPORTED CUT BACK**  
(By Nell Sheehan)

SAIGON, April 19.—The U.S. Air Force has drastically reduced the number and intensity of its bombing raids against Communist forces in South Vietnam over the last 13 days because of a shortage of parts for bombs and other explosive ordnance, informed sources said today.

Since April 6, when the reduction went into effect, the number of Air Force attack sorties in South Vietnam has shrunk to about 43 percent of its former level. The amount of bombs and other munitions being expended has similarly dropped.

A sortie consists of an attack on a target by a single aircraft.

Reserve supplies have recently dwindled so alarmingly that some U.S. airbases in southeast Asia are now operating on a few days' supplies of certain munitions, the sources said.

(In Washington, the Pentagon termed the report of shortages "misleading.")

#### USE OF ROCKETS FALLS

Before April 6 the Air Force was averaging about 185 sorties daily. The planes were dropping about 1,000 bombs each day on Vietcong and North Vietnamese troops in South Vietnam.

Since then the sorties have averaged approximately 83 daily and the number of bombs dropped has averaged about 400 a day. The number of 2.75-inch air-to-ground rockets being fired has fallen from 2,800 for the week ended April 1 to 98 for the week ended April 15.

The sources said that further economies were being achieved by sending planes out with fewer bombs and other items of ordnance than normal. This technique, called "light loads," decreases the intensity of the attack.

#### WARNINGS TO PENTAGON

Air Force officials in Vietnam, the sources said, have repeatedly warned the Pentagon over the last 4 months that munitions were not arriving fast enough to meet requirements. So far, supplies have not been adequately increased, they said.

The sources, who are qualified but cannot be named, said that the shortage to explosive ordnance was somewhat widespread. It includes rockets and 20-millimeter cannon shells used by fighter-bombers in strafing as well as bomb fuses, without which the bombs will not explode.

The sources declined to explain in detail the reasons for the shortage, which they attributed to a failure of enough supplies, to arrive here from the United States. They said the shortage was definitely not due to faulty distribution of ordnance within South Vietnam.

Nor have political disturbances within South Vietnam been responsible for the shortage, these sources said. Earlier this month the airbase at Da Nang, 385 miles north of Saigon, was unable to obtain munitions at the port there because Buddhists and rebellious military units had set up roadblocks, but this problem was cleared up within a few days, it was said.

The amount of munitions required by the Air Force in Vietnam has soared over the last year as the United States has built up

its military power here. Air Force sorties have increased from a few hundred a month earlier last year to an average of more than 1,300 a week this March.

#### ORDERS FROM WASHINGTON

Air Force officials here today would not discuss the shortage. They said they had received orders from Washington not to talk about the matter.

An official military spokesman would only say that the Air Force had enough munitions in South Vietnam "to meet all operational requirements so far, and we anticipate that the Air Force will be able to meet these requirements in the future."

Air Force officials here, it was said, decided to reduce the number and intensity of combat sorties when it became obvious they were beginning to use up their critical reserve supply of munitions.

The Air Force maintains a 15-day to 30-day supply of munitions within South Vietnam in the event of a major expansion of the war here, such as a large-scale intervention by Communist China. It is considered unwise to allow this reserve to become too low. If a major conflict did break out, the Air Force might then run out of munitions.

#### SAVINGS IN LIVES SEEN

Sources here said that a number of high-level conferences had been held in the last week in an attempt to find ways of remedying the shortage. The Air Force, these sources said, may soon begin emergency flights of ordnance from the United States.

So far, the sources said, there are still enough usable bombs and other munitions within South Vietnam to take care of priority military targets and to support American and Vietnamese ground troops in direct contact with the guerrillas.

The reduction has largely affected so-called preplanned bombing raids against suspected Communist troop concentrations, supply depots, and other bases.

The heavy use of airpower against such targets has been part of United States strategy in Vietnam. The theory is that constant bombing will harass the Vietcong and North Vietnamese, lower their morale, and help prevent them from massing for large-scale assaults, thus saving American lives.

#### EFFECTIVENESS IS QUESTIONED

Other military observers here question the effectiveness of this strategy and contend that it has been responsible for killing and wounding large numbers of peasants caught in the raids.

Under policies instituted by the Defense Department in recent years, maintaining large stockpiles of munitions overseas is considered uneconomical. Instead munitions are transported to an area as they are required.

This system ties the fighting units closely to their supply line and necessitates careful planning long in advance, a smooth-running transportation network and sufficient factory production to meet requirements.

Sources here said that the vast bulk of munitions was shipped to Vietnam by sea and that it took 4 to 5 weeks, or more, from the time the munitions left the factories until they were unloaded at the docks here.

The U.S. Air Force carries about 40 percent of the burden of the air war in South Vietnam.

The rest is maintained by the South Vietnamese Air Force, the Marines, and Navy planes from 7th Fleet carriers. So far as is known, there has been no reduction in sorties being flown by these forces.

#### GERMAN DENIES SHARP DEALING

(Special to the New York Times)

BONN, April 19.—The owner of the West German company that sold 5,570 bombs back

to the United States at nearly 13 times the original purchase price emphatically denied today that he had engaged in sharp business practices.

"I have made absolutely no profit on the transaction," Karl Kaus, owner of Kaus und Steinhäuser, asserted in a telephone interview.

The U.S. Defense Department, in urgent need of munitions for the Vietnam war, recently repurchased for \$21 apiece, the 750-pound bombs it had sold to Kaus und Steinhäuser for \$1.70 each.

Mr. Kaus said that the repurchase price had been determined by "American auditors in Washington and also here in our plant."

The Defense Department in Washington has said that it considers the repurchase a good deal because new bombs cost about \$440 each. The bombs originally cost \$330 each.

#### STILL BELONGED TO UNITED STATES

The bombs were still officially American property, the German businessman explained. By contract, the U.S. Government keeps title to the bombs until they are fully dismantled.

Mr. Kaus asserted that the difference between what he paid for the bombs 2 years ago and what he sold them for just covered his expenses in storing, securing, and guarding the bombs, taxes to the West German Government, and losses incurred by their removal.

He said that the United States had wanted to buy back 2,000 more bombs but that they had been found to be in poor condition.

The company dismantles surplus bombs and sells the scrap to metal fabricating firms and the chemical components to fertilizer manufacturers.

#### STATEMENT BY HOUSE MINORITY LEADER GERALD R. FORD

A week ago, in reiterating that the Republican minority in the House had given the President every penny he has asked for defense purposes, I raised a question of serious shortages and inadequate advance planning by the civilian managers in the Pentagon which, according to widely publicized reports by reliable and patriotic Americans close to the scene, have been and still are hampering the stepped-up level of combat operations in Vietnam.

These reports, coincident with serious internal disturbances in that troubled country, came as something of a surprise to me, to a great many Members of the Congress, of both parties, as well as to the millions of Americans we are here to represent. We had been told in October 1963, by Secretary of Defense McNamara, that most Americans would be out of South Vietnam by the end of 1965. We had been assured, again by Mr. McNamara early last year that neither more combat troops nor more money would be needed in South Vietnam. Late last year, the Defense Secretary returned from a personal inspection of the situation there to say, "We have stopped losing the war." And we have been told ever since that the situation was improving day by day.

So it produced something of a sonic shock wave when suddenly the front pages of the newspapers and the radio and television newscasts were full of reports of internal unrest, attacks on Americans, and curtailment of combat operations against the Communist enemy. These were variously attributed to supply tieups, shortages of essential equipment, and civil disturbances in South Vietnam. Evidence mounted, and continues to mount, that the Pentagon planners were not adequately prepared to cope with the kind of limited, nonnuclear type of military operation for which they have supposedly been reorganizing since the end of the Eisenhower administration, with much fanfare about modern management methods.

When I raised the question of mismanagement, Mr. McNamara quickly—perhaps too quickly—sought to smother it by sheer weight of computer-like statistics. He called a quickie press conference that afternoon and personally declassified large areas of secret information about U.S. bomb loads and backlogs. This information was presumably classified on the grounds of national security and potential value to the enemy. It was not the first time he has removed the "secret" label when criticism of the Pentagon came too close for comfort.

In the course of Mr. McNamara's news conference to discredit his critics—who have never supposed or suggested that any of his mistakes were deliberate or dishonorable—the Secretary found himself partially confirming our concern. He admitted that the Air Force had to buy back 750-pound bombs which had originally cost U.S. taxpayers \$330 apiece, were sold as surplus to a West German fertilizer firm 2 years ago for \$1.70 apiece, and have now been recovered for \$21 apiece. If this is good management, I am mistaken about the meaning of the word. If there was no bomb shortage, was this transaction really necessary?

Mr. McNamara also denied there is any shipping shortage affecting Vietnam. Yet only last Monday there were reliable reports—one headlined "United States Again Short of Viet Ships" from the April 18 Journal of Commerce—that the Government is trying to get 20 or more additional vessels from private shipping companies. It is a known fact that ships have been stacked up for weeks as far away as Manila waiting to unload their Vietnam cargoes. Mr. McNamara cites figures on post exchange supplies delivered to Saigon in answer to allegations that our airmen haven't enough bombs.

He says there is no ship shortage, only shortages of dock facilities. I am not interested in playing word games, nor am I interested in playing politics with this serious situation. I am only interested—and I think every Member of the House and Senate, Democrats and Republicans, is also interested—in seeing that the billions for defense we have unhesitatingly voted is well and wisely spent and that every American sent 10,000 miles from home is given all the support and supplies he needs to protect himself, defend all of us, and bring the war to a swift and satisfactory end.

There has never been any doubt in my mind that every one of my colleagues in the House and Senate, regardless of party, agrees completely on this point. I am proud to see such distinguished Americans and distinguished Democrats as Senator STENNIS say, as he did on a national television network last Sunday, that his Preparedness Subcommittee has found evidence of "mismanagement" in Pentagon planning for the war. I am encouraged to hear that Mr. McNamara conceded before the Fulbright committee that we have some "temporary dislocations of supplies" in South Vietnam because that means that he is going to do something about it. I am informed that he sent his chief of Air Force logistics to Saigon to investigate what he calls the nonexistent bomb shortages and to eliminate them. That's what we want.

But I am deeply concerned that Mr. McNamara, in his Senate testimony yesterday, brushed off the concern of millions of patriotic Americans as "all this baloney." I share this concern, and I shall continue to express it. I think such able Members of Congress as Senator STENNIS, Chairman GARMATZ, of the House Merchant Marine Committee, and Congressman ORIS PIKE of the House Armed Services Committee, share it. I know that many responsible newsmen here, covering the Pentagon and sharing risks with our fighting men in Vietnam will continue to express their concern because that is our obligation to the American people.



Now here are just a few of the reports that have come in to corroborate the question I raised a week ago:

1. New York Times Correspondent Neil Sheehan, in a front page story from Saigon yesterday, reported that since April 6 "the number of Air Force attack sorties in South Vietnam has shrunk to about 43 percent of its former level"—from 185 daily sorties dropping about 1,000 bombs on Communist targets to an average of 83 sorties and 400 bombs. Rocket firings, according to this reliable report, have fallen even more spectacularly from 2,800 a week to 98. Mr. Sheehan says further that our planes are being sent out against the enemy with light loads—which is another way of saying more American manpower is being exposed to combat risks with less firepower. The New York Times dispatch states that "Air Force officers in Vietnam have repeatedly warned the Pentagon over the last 4 months that munitions were not arriving fast enough to meet requirements" and so far they are still inadequate. This has nothing to do with recent civil disturbances at South Vietnamese ports nor with the internal distribution system our fine military field commanders under General Westmoreland, according to Mr. Sheehan's sources. This New York Times report was called to Mr. McNamara's attention in the Senate hearings yesterday and he called it "baloney."

2. Earlier, CBS News Correspondent Peter Kalischer, quoting what he called an "unimpeachable" source, reported from Saigon that "a dire lack of ammunition and explosives" has forced a cutback in U.S. Air Force sorties from over 400 to less than 100 per day. Kalischer said the critical shortage was not in bombs but in fuses and other key parts that make bombs usable. He also reported a shortage of 20-millimeter cannon shells and planes taking off half loaded. "Only emergency missions and those in direct support of ground forces operations are being flown," CBS News said. This and other careful reports from trained war correspondents on the scene also, apparently, come under Mr. McNamara's category of "all this baloney."

3. The long-range management of our overall defense effort can be faulted for its failure to adequately anticipate the needs of the American merchant marine, a subject which we discussed at some length yesterday at the House Republican policy committee press conference. As recently as the start of this year, Mr. McNamara testified that our merchant fleet was adequate for our defense needs and reaffirmed his earlier preference for airlift. Yet this week the administration is reportedly trying to scrape up 20 or more additional U.S.-flag carriers, and the current budget includes funds for replacement of only 9 to 13 of the World War II merchant ships that form the bulk of our dwindling merchant marine—now fallen to about 1,000 vessels, mostly old, while the Soviet Union has 1,500, mostly new, and 673 more building or on order. In this connection, I note that Mr. McNamara yesterday brushed off questions by the distinguished Senator from Kansas, Senator CARLSON, about the resale of surplus items by NATO nations. He said it was all "World War II equipment junk." It's a sad fact this is true of much of the merchant marine that he considers perfectly adequate. But our alarm over shipping is more "baloney."

4. The authoritative magazine, *Aviation Week*, in a series of articles by a Marine Corps Reserve pilot who spent 2 months in Vietnam reports in technical detail on a wide range of ordnance and ammunition shortages, deficiencies and deterioration. The publication, *Aviation Daily*, in its April 19 issue summed up the misstatements Mr. McNamara has made in recent weeks and concluded that "he has managed to almost meet

himself coming back on some of the stories he has presented to the public."

Mr. McNamara has a great gift for figures. He is extremely agile in the use of words. As I said previously, I am not the least concerned with playing word games. I have not myself used the word "baloney" to characterize disagreements among equally patriotic Americans. We in the minority in this Congress cannot selectively declassify information which has been stamped "Secret" in order to substantiate the serious questions raised about the safety and support of our fighting men in Vietnam and the future security of our country.

We must, therefore, depend in large measure on the kind of responsible, independent reporters I have cited for firsthand information on the situation in Vietnam. I for one do not regard them as "baloney." Whether you call these examples mistakes of judgment, mismanagement, poor planning, faulty foresight, bad bungling or just plain goofs, I don't care. Whether they are "alarming" or "distressing" or "shocking" or whatever word you prefer—they are intolerable as long as they endanger any American soldier, airman, sailor, or marine. They are intolerable as long as we, by asking questions of the Pentagon and persisting after answers, can compel or speed up remedial action. This is the joint duty of the responsible press and the responsible representatives of the people. I intend and hope they intend to continue this duty. It is not "baloney."

#### CUBAN MILITARY TRAINING, SI— MILK FOR SCHOOLCHILDREN, NO

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Minnesota [Mr. NELSEN] may extend his remarks at this point in the Record and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. NELSEN. Mr. Speaker, on February 9, 1966, I wrote the President urging him to reverse the decision of our Government to send money through a United Nations agency to train Cuban Communists in military-related subjects. The letter was prompted by authoritative reports that \$1,240,000 is to be channeled to Cuba through the U.N. More than half of this money is to be spent teaching subjects like military communications, radar, electronics, and computer training at the University of Havana. The school is open only to Communists and Cuban militiamen, and it is operated by Russian and Cuban Reds. Some of the money is also to go to help build a million dollar agricultural research station.

As I wrote the President, it seems to me some existing American programs which he would like to cut back, like the school lunch and milk programs, are far more worthwhile and needed than either of these Cuban projects. Certainly, there's no sense in financing the military educations of those sworn to destroy us.

With permission, I will insert the text of my letter to the President at this point in my remarks:

FEBRUARY 9, 1966.

THE PRESIDENT,  
The White House.

MY DEAR MR. PRESIDENT: I was utterly shocked by revelations on the House Floor

on February 1, indicating that our Government plans to send \$1,240,000 through a United Nations agency to the Government of Cuba, which plans to spend more than half of it providing military-related training to Communists, using Russian and Cuban military teachers. As I understand it, the University of Havana technological branch, which is open only to Communists and Cuban militiamen, will provide training in military communications, radar, electronics, and computers, with the U.S. Government footing 40 percent of the project cost. As if this were not enough, the rest of our Government's contribution is to assist in building a \$1.1 million agricultural research station near Havana.

According to statements made on the House Floor, the sizable contribution of the U.S. Government is entirely voluntary on our part, but Ambassador James Roosevelt, the delegate to this particular U.N. agency, has advised our Government will not demand rejection of the projects nor will the United States withhold its share of the costs. Ambassador Roosevelt is quoted as saying he merely intends to "place on the public record the Government's objection in principle."

Mr. President, tyranny, bloodshed, and chaos have been part of the lot of the Cuban people and many of their Latin American neighbors ever since the Communists seized Cuba. As a matter of fact, about 1 month ago some 82 Communist parties from three continents met in Cuba to plot the more effective subversion of the Western Hemisphere, Asia, and Africa. On these bases alone, the United States contribution to these improper projects should be withheld.

The fiscal 1967 budget which you recently presented to the Congress calls for cutting back the school milk program by \$82 million, the school lunch program by \$19 million, the agricultural research program by \$70 million and the agricultural conservation program by \$120 million. I would respectfully suggest that every single one of these programs is far more worthwhile and needed than is either the building of a million dollar agriculture facility near Havana or the financing of the military educations of those bent on our destruction.

In view of all these reasons, and because of the Government's heavy spending commitments at home and elsewhere in the world, I urge the immediate reversal of the Government's decision to contribute to these projects. Knowing you will want to investigate this further, I am enclosing a tearsheet from the CONGRESSIONAL RECORD which includes the appropriate remarks on which this letter to you is based.

Sincerely yours,

ANCHER NELSEN,  
Member of Congress.

CUBA TO RECEIVE U.S. FUNDS THROUGH  
AGENCY OF U.N.—AMERICAN AID TO TOTAL  
\$1.2 MILLION—ROOSEVELT PUTS TENTATIVE  
OK ON PROJECT

(By Edward W. O'Brien)

WASHINGTON.—A United Nations agency which receives 40 percent of its money from the U.S. Treasury is planning to give \$3,100,000 to Cuba, with more than half of the aid funds allocated to strengthen the University of Havana's technological faculty.

The United States, through Ambassador James Roosevelt has informed the U.N. agency it will not demand rejection of the project, nor will the United States withhold its \$1,240,000 share of the cost.

TRAINS ENGINEERS

The university's technological branch trains engineers and others and is headed by Russian and Cuban military personnel. Only Communist Party and militia members are permitted to attend.



"Cuban technology is specifically oriented toward training in computers, electronics, and other areas of endeavor which Fidel Castro has stated are related to the military potential of Cuba and particularly to radar and military communications," according to the Citizens Committee for a Free Cuba, Inc., an anti-Castro organization of prominent Americans.

In 1963, the U.N. special fund headed by Paul G. Hoffman, proposed an aid project for Castro's Cuba but dropped it after an angry outcry in Congress and State Department opposition.

Last Tuesday, Ambassador Roosevelt, who represents the United States on the U.N. development program governing council that passes on special fund projects, said this Government's opposition in 1963 was a gimmick and didn't mean a thing in the whole concept of the fund.

#### PUBLIC RECORD

Mr. Roosevelt said he will "place on the public record the Government's objection in principle" to the new project but will do nothing else to block the project or cut off the customary 40-percent contribution by Washington.

U.S. payments to the U.N. special fund are voluntary. The fund will spend over \$150 million this year.

Mr. Roosevelt said the United States nominal opposition to the Cuban project is not based on the Castro regime's communism but on the theory that Cuba's shortage of technical experts was caused by the Castro regime itself, which has caused thousands of Cubans to flee.

The new aid project was proposed by Mr. Hoffman, who maintained that U.S. support "must be kept free of ideological and political considerations."

Of the \$3,100,000 total \$2 million will go to the university and \$1,100,000 for an agricultural research station near Havana.

#### ULTIMATE TOTAL

An ultimate total of \$25 million in U.N. aid to Cuba is being discussed. Whether it materializes will probably depend largely on congressional and public reaction to the first portion.

Brazil and Paraguay strongly objected to helping Castro through the U.N. Both countries are among the principal targets of Communist subversion directed from Cuba.

A Communist tricontinental congress of subversion which brought together top-ranking Reds from many countries, ended in Havana less than 2 weeks ago. At the congress, Cuba was formally designated as a headquarters of Communist subversion in Latin America, Asia, and Africa. The citizens committee said it is alerting Senate and House Members to the U.N. project in the hope of bringing about cancellation of U.S. support.

"Should the U.N. proposal be approved, backed by U.S. support and money, we will have succeeded in underwriting the subversion of the Western Hemisphere," the committee has told its members.

On February 25, I received a reply from Douglas MacArthur II, Assistant Secretary of State for Congressional Relations, to whom the President referred my letter. According to Mr. MacArthur, no part of our contribution to the U.N. agency making these grants will be used to pay for projects in Cuba. The State Department maintains the Cuban projects will be financed entirely from the contributions of other countries.

The Department says it is to our overall advantage to continue contributing to this U.N. agency since it has approved a total of 604 development projects in

92 nations. Of this total, only 2 projects have been approved for Cuba while 591 have been approved for free world nations.

The Department also points out that our Ambassador to the Special Fund, James Roosevelt, did place our objections to the Cuban project on the record. In other words, when the military infiltrators trained at the University of Havana lead their revolutions of terror in Latin America in the years ahead, we can remind everyone proudly that "we told them so."

Mr. MacArthur's reply continued with statistics showing that the Soviet-bloc countries, including Cuba, had paid more into the Special Fund and the technical assistance program than they had received from them. The reply neglected to mention the fact that the United States contributes approximately 10 times the amount of money to the Special Fund than the combined total of the Soviet bloc. How much have we received or even requested in return?

At this point, I will insert the full text of the reply from Mr. MacArthur, after which I will comment further:

#### DEPARTMENT OF STATE,

Washington, D.C., February 25, 1966.

HON. ANCHER NELSEN,  
House of Representatives.

DEAR CONGRESSMAN NELSEN: Your letter to the President of February 9, 1966, expressing your concern over the United Nations assistance to Cuba, has been referred to the Department of State for reply.

The United Nations Special Fund, now a part of the United Nations Development Program (UNDP), has approved, since 1959, a total of 604 projects in 92 nations. Of this total, only 2 projects have been approved for Cuba, whereas 591 have been approved for free world nations.

At its most recent meeting in January 1966, the UNDP's governing council approved a special fund project for assistance to the faculty of technology of the University of Havana. The project calls for \$2,096,500 in special fund money over 5 years, including \$176,800 to be paid by Cuba in cash. In addition, Cuba has promised to provide personnel, services, land, buildings, and equipment in the amount of \$23,500,000.

The United States opposed this project from the beginning. When it came before the governing council in January 1966, Ambassador James Roosevelt argued that Cuba's shortage of technicians and engineers is due mainly to Cuba's own policies, which have caused large numbers of well-qualified people to leave the country. He said we did not believe an international fund should be called upon to remedy deficiencies for which the Government seeking assistance is directly responsible.

The UNDP has a ground rule that projects shall not be approved or rejected for political reasons alone. Furthermore, to avoid political debate, which could tie up approval of projects indefinitely, the governing council has not taken formal votes on individual projects.

So after placing our objections to the Cuban project on the record, we did not request a specific vote because to do so might jeopardize other projects of special interest to friendly countries. For example, since 1959, 12 projects have been approved for China (Taiwan), 10 for Korea, and 1 for Vietnam, despite vigorous objections voiced by Soviet-bloc representatives.

We also took into account the fact that the U.S.S.R. and its 10 satellites, including Cuba, have contributed a total of \$11.8 million to the Special Fund since its inception, while

allocations from the Fund for projects in the Soviet bloc (including the 2 Cuban projects) amount to slightly over \$9 million. Moreover, Soviet-bloc contributions to the other arm of the UNDP—the technical assistance program—have amounted to \$27.3 million, in contrast to the \$3.5 million of allocations approved for bloc countries. In other words, the funds provided by the Soviet bloc more than cover the projects financed by the UNDP in the bloc countries, including Cuba.

No part of our contribution to the Special Fund will be used to pay for projects in Cuba. They will be financed entirely from the contributions of other countries.

I trust that this information clarifies the situation with respect to United Nations Special Fund assistance to Cuba. If you should desire further information, please let me know.

Sincerely,

DOUGLAS MACARTHUR II,

Assistant Secretary for Congressional Relations.

Mr. Speaker, at no point in this reply did the State Department deny that these funds are going to help train Cubans in military-related subjects—a peculiar enterprise for a peacekeeping organization like the United Nations.

Cuba is more than half a billion dollars behind in paying her share of the U.N. debts in the Congo and Middle East operations. This raises some interesting questions why Cuba should get special help from an organization she refuses to support as agreed. Where is the logic or the sense of fairplay in this proposition that some U.N. members have no say as to how their contributions are spent while other members can refuse to pay if they do not happen to agree with the programs?

Also, the so-called free world nations the State Department thinks are receiving so much more help include Algeria, the Congo, Ghana, the United Arab Republic, Haiti, Cambodia, and Indonesia. I think many of us can properly question the inclusion of these countries in the "free world" category.

The State Department maintains:

No part of our contribution to the Special Fund will be used to pay for projects in Cuba. They will be financed entirely from the contributions of other countries.

Mr. Speaker, I certainly do not claim to be an expert in the field of United Nations funding procedures. However, I do know that the United States contributes 40 percent of the money for the Special Fund. Now this Fund has a certain amount of money to spend, and no amount of paperwork magic is going to change that amount. All we are really doing is contributing more heavily than would otherwise be the case to projects in other countries so that these other countries can contribute our share to Cuba.

In 1963, an assistance program for Cuba was sidetracked because of the resulting indignation of the public and the Congress. But, since most State Department programs never die, they just hibernate; this one is back, along with another. I would hope that public disclosure of the current plans will serve to bury these plans a little deeper this time. If this is not the case, I intend to bring the matter up again when the House considers the foreign aid bill this year.



Mr. Speaker, to conclude my remarks today, I will insert a memorandum prepared at my request by the staff of the House Committee on Foreign Affairs concerning U.N. assistance to Cuba:

COMMITTEE ON FOREIGN AFFAIRS,  
March 16, 1966.

#### U.N. ASSISTANCE TO CUBA

Two projects have been approved for Cuba, financed from the U.N. Special Fund to which the United States contributes about 40 percent of the sum raised, not counting local resources made available for projects by recipient governments. The first project is for expansion of an agricultural experimental station in Santiago, Cuba, calling for an allocation of \$1,157,000 from the Special Fund, including \$114,500 to be paid by Cuba in cash. The second project, approved in January 1966, involves assistance to the faculty of technology of the University of Havana and calls for \$2,096,500 in Special Fund money including \$176,800 to be paid by Cuba in cash.

A subcommittee of the Committee on Foreign Relations of the Senate held hearings on the United Nations Special Fund with particular reference to the agricultural research project in Cuba on February 18, 1963. There was criticism of (1) Cuba's failure to pay its pledged amounts to the Special Fund, (2) her other delinquencies on U.N. accounts, (3) the question of U.S. funds in the Cuban project and (4) payments to the fund in currency of the donor country. There were no reports or recommendations stemming from the hearing and as far as I have been able to ascertain, no further action was taken. The official U.N. financial report and accounts for the year ended December 31, 1964, and report of the Board of Auditors (the latest report available) still list the project and show the amount of \$1,157,600 earmarked for it. It also shows that Cuba owes \$74,100 of the \$109,100 total obligations for local costs. According to the same report, Cuba is fully paid up on its pledges to the special fund as of December 31, 1964.

With the exception that Cuba has now paid its pledged amounts to the special fund, the other criticisms made by the Senate apply to the project just approved in January 1966. Total arrearages by Cuba, in the Congo and Middle East operations, for which they were assessed plus the regular budget assessment, amounted to \$596,063 at the time of the Senate inquiry. The latest reported total arrearage as of December 31, 1964, amounted to \$690,633. The point was made and continues to be made that not one American dollar is used in the Cuban projects because the dollars are put in a segregated account, and other countries convertible currencies are used instead. The pertinent part of the Senate testimony relative to this follows:

"Senator SYMINGTON. Are you saying that when we put money into the special fund we reserve the right to say where the money is to go; to what country?"

"Mr. GARDNER.<sup>1</sup> We have made no such formal reservation.

"What I am saying, Senator, is that we have received assurances in this case that the American dollars in our segregated account will not be used, and that Mr. Hoffman intends to use the currencies of other countries.

"Senator SYMINGTON. Doesn't that automatically mean therefore, that more of our American dollars will go to other countries?"

"Mr. GARDNER. That is correct.

"Senator SYMINGTON. Then the statement is ridiculous from the technical standpoint of bookkeeping.

"Mr. GARDNER. But the other countries are not Communist, so that no American dol-

lars or personnel or equipment will be used in this project."

The other criticism involved a discussion of payments to the Fund in convertible versus nonconvertible currency. The U.S. dollar as well as other free world currencies are convertible; bloc country contributions to the Fund are largely nonconvertible. In other words, when the U.S.S.R. contributes rubles to the Fund, they are used to pay salaries and other expenses of Russian technicians, or for purchases of goods and supplies from Russia. Similarly, the amounts cited for the two projects to be paid by Cuba in cash, \$114,500 and \$176,800, respectively, are paid by Cuba in Cuban pesos, which have a very limited circulation. Another significant point is that Russian rubles, and Cuban pesos, and other such currencies, of doubtful value, don't measure their real contribution because they are so overvalued in terms of real purchasing power.

In connection with the recently approved project, the Department of State maintains that since 1959, a total of 604 projects were approved in 92 nations of which 591 have been approved for free world nations. This overstates the case. The latest U.N. financial report referred to above lists current projects underway in Algeria, Congo (Brazzaville), Ghana, United Arab Republic, Haiti, Cambodia, Indonesia. Some may question the inclusion of these countries in the free world category.

#### ORDER REDUCING DEFENSE PURCHASE OF PORK ORIGINATED IN DEPARTMENT OF AGRICULTURE

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Minnesota [Mr. NELSEN] may extend his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. NELSEN. Mr. Speaker, prior to his departure to South America for a 10-day trip to explore ways of expanding our country's foreign agricultural aid programs, Secretary of Agriculture Freeman engaged in an incredible series of activities designed to depress the price of farm commodities here at home.

In a recent article by Nick Kotz which appeared in the April 17 Minneapolis Tribune Mr. Kotz explains the role played by the Department of Agriculture in the recent order of the Department of Defense reducing by 50 percent the purchases of prime pork products for our armed services. In this fine example of research and reporting Mr. Kotz points out:

Defense and Agriculture sources both confirm that Agriculture recommended the reductions of purchases and Defense merely was carrying out the White House level decision.

I wish to point out as another in a series of administrative actions taken by the Secretary of Agriculture to combat inflation at the expense of the American farmers.

I commend Mr. Kotz's article to the attention of my colleagues since it does point out how the handling of this Defense Department order could have worked to the advantage of commodity market speculators who deal in pork belly futures. Since public information on this pork purchase reduction order was not made available until 7 weeks

after it was issued, any speculator who knew of it could have "sold short" and then bought back after the effect of the cutback in purchases forced a decline in hog prices.

The article follows:

#### DEFENSE DEPARTMENT PORK CUT ORDER MAY HAVE HELPED SPECULATORS

(By Nick Kotz)

WASHINGTON, D.C.—The Johnson administration's failure to announce publicly its decision to reduce Government pork purchases may have permitted some individuals to use valuable "inside information" affecting the commodity markets.

Carrying out a White House-directed anti-inflation decision, the Defense Department has ordered the armed services to reduce by 50 percent over the next 6 months its purchases of prime pork products—pork chops, bacon, and ham.

The order was issued February 17, yet farm leaders, farmers, the news media, and the general public did not learn about the order until 7 weeks later.

Yet, Defense Department officials acknowledge that the information undoubtedly had been routinely passed along by Defense Supply Agency employees to various persons in the meatpacking and processing industry.

Agriculture officials state flatly that anyone possessing the information early would have at least a theoretical advantage in speculating on the pork bellies commodity market.

The Agriculture Department itself goes through elaborate procedures to insure that valuable market information is made public at a time when markets are closed and no one will be given an unfair advantage.

An Agriculture Department spokesman said the Defense Department should have made public the order, but that responsibility rests with the Defense Department.

Paul H. Riley, a Deputy Assistant Secretary of Defense, said the Agriculture Department should have advised Defense if it was wise to make the order public.

"I don't think we really considered that [effects on the commodity market]," said Riley.

"Maybe we should have. It might have been inadvertent on our part. We decided to play the whole thing on a low key."

The order went from Paul Ignatius, Assistant Secretary of Defense who is the Defense supply boss, to his counterparts in the various armed services.

The Defense Department still refuses to release copies of the entire order, and will only answer questions about it and read selected portions from it.

Department officials contend the order is an interdepartment memorandum and therefore not public information.

The Minneapolis Tribune has obtained a copy of the order, which also calls for cuts in Government purchases of certain canned fruits and vegetables.

In addition, it calls for efforts to obtain meat for troops overseas by barter agreements, rather than shipping the beef and pork from the United States.

The memo reveals that the Department was preparing anti-inflation moves as early as mid-January.

The Defense Department order stems from President Johnson's efforts to hold back inflation.

The decision was made at the White House level with principals involved besides the President including the Council of Economic Advisers, John Schnitzler, Under Secretary of Agriculture, and Cyrus Vance, Under Secretary of Defense.

Defense and Agriculture Department sources both confirm that Agriculture recommended the reductions of purchases and Defense merely was carrying out the White House level decision.

<sup>1</sup> Hon. Richard N. Gardner, Deputy Assistant Secretary for International Organization Affairs.



The economic theory was that fewer Government purchases would mean greater supply in the market, and greater supply relative to consumer demand would result in lower consumer prices.

This particular anti-inflation action was taken because prices of hogs and pork products were at their highest levels in years.

Riley said one disadvantage of issuing a press release would have been that it would have stirred up complaints about the action.

Concerning problems in taking anti-inflationary moves by cutting Government purchases, Riley commented: "If you go one way, one part of the economy criticizes you; if you go another way, someone else criticizes you."

What was the status of information concerning the order during the 7 weeks following its February 17 issuance?

The first general news stories concerning the order appeared on April 6, following stories in two trade journals based on initial information gained from persons connected with either the packing industry or the commodity market.

A delegation of farm leaders met last week with Defense and Agriculture Department officials to protest the cut in pork purchases.

These farm leaders, including top officials of the hog raising industry, all said they did not know of the order until reading news stories on April 6 and April 7.

Defense officials contend the information was available to anyone who requested it.

Officials of the Defense Supply Agency further state the order was not a secret and they assume their employees routinely spoke about the matter with the various major meat packing concerns.

"Where industry is concerned, I sure don't like to surprise them," said Smith. "We like to let them know of changes [in purchasing plans]."

Smith said he knows inquiries about the order were made to his office at least 3 weeks ago.

Charles Shuman, president of the American Farm Bureau Federation, contends farmers were unfairly surprised.

"In the absence of a general announcement," said Shuman, "speculators 'in the know' were given a tremendous advantage. Farmers were being hit when they didn't even know they were being hit."

Farm bureau officials explained their theory of how insiders could have benefited in commodity speculation.

The Defense Department annually purchases about 2 percent of U.S. pork supplies including about 30 million pounds of bacon, 15 million pounds of pork chops, and 8 million pounds of ham.

A speculator in the pork bellies market who knew these purchases were going to be sliced in half would sell short, on the assumption reduced Government purchases of bacon would lead to lower market prices for bacon and hogs.

The speculator then would buy back after prices had dropped.

The price of May futures pork bellies on the Chicago Commodity Market rose slightly in the few days following February 17. But the February 17 price of 46.07 cents per pound had dropped to 44.67 on March 1.

Farm Bureau officials contend farmers also were at a market disadvantage if packers knew there was going to be a reduction in Government buying and farmers did not know.

Farmers would lack this knowledge in deciding what was the best time to market their hogs.

The price of hogs has declined markedly since a high last December.

Alex Caldwell, Administrator of the Agriculture Department's Commodity Exchange Authority, said he believes the Government decision to cut pork purchases would have had an effect on the pork bellies commodity market.

Another Agriculture Department spokesman contended the change in Government purchasing plans would be just one factor in a pork bellies futures market which is excessively speculative.

#### WASHINGTON SNOW JOB

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Illinois [Mr. ERLBORN] may extend his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. ERLBORN. Mr. Speaker, there is a certain confusion among many of the people who live in my district and a certain suspicion that there are people in our Government who would like to eat their political cake and have it too. These are the ones who would have us believe that it is necessary for this country while fighting a war to spend billions of dollars in an antipoverty program. All this, while businessmen are complaining that they cannot hire as many people as they would like to hire.

I said that people are confused. Some of them, I am sorry to say, are becoming cynical—a condition which I believe is of grave concern.

The reasons for these conditions were outlined in an editorial which appeared in a recent issue of *Suburban Life*, a newspaper published in La Grange, Ill., and which circulates widely through my district. I place it in the RECORD under an extension of my remarks:

[From the *La Grange Park (Ill.) Suburban Life*, Mar. 24, 1966]

#### WASHINGTON SNOW JOB

Every wind that blows from the east brings to our ears the anguished cries of Washington politicians about the plight of the United States and how the war on poverty will bring this Nation to the pinnacle of the Great Society.

Left and right we hear of how bad off we are, how millions are walking the streets looking for employment, and how their families are one step ahead of starvation.

But from the Illinois Labor Department comes word that the unemployment compensation tax rate notices will show lower rates for thousands of employers.

"The taxes are lower in 1966 because employment has been high and unemployment and total benefits have been low in recent years. Although the average weekly benefit amount increased from \$38.61 in January 1965, to \$43 in January 1966, total benefits paid decreased \$1.6 million, from \$10.6 million in January 1965, to \$9 million in January 1966.

"The volume of unemployment compensation claims is at the lowest level in many years. Number of unemployment compensation claimants in each of the first 3 weeks in February 1966, was the lowest since comparable weeks in February 1966," states the news release.

Manpower Trend, a publication of the Illinois State Employment Service for the Chicago area states, "The continuing economic upswing in the Chicago standard metropolitan statistical area at the beginning of 1966 cushioned the usual postholiday cutbacks, resulting in a less than average drop of 69,500 in nonagricultural wage and salaried employment during December-January period. The 2,674,900 level was a record for the month, with 92,900 more at work in January 1965.

"The high level of manufacturing activity was the main factor in this excellent beginning."

In this area, at least, there are plenty of jobs open for skilled help.

And industry has not waited for Uncle Sugar to pass out the sweets. It has taken it upon itself to upgrade and institute new apprentice training programs.

Because of this, industry is getting what it wants, skilled help. And it is getting it now, not when the costly and bulky Federal programs slowly move their trainees into the employment picture.

But the wagers of the war on poverty must continue to paint a dark picture in order to justify the expenditure of the huge sums of money they are pulling from the taxpayers' pocketbooks.

#### NOISE POLLUTION

The SPEAKER. Under previous order of the House, the gentleman from New York [Mr. KUPFERMAN] is recognized for 60 minutes.

Mr. KUPFERMAN. Mr. Speaker, an increasing amount of attention has been focused recently on the problems of water and air pollution. After many years of study and concern in these two areas, this country is just now beginning to take concrete steps toward cleaning our water and air. Many of my colleagues have been as concerned with those problems as I have been.

Another serious environmental problem which demands our immediate attention is that of excessive noise. I call it "noise pollution."

Accordingly, I have today introduced a comprehensive bill to provide for a study of the complex noise situation in the United States with a view toward finding ways and means of eliminating unnecessary noise and of determining the effect of noise in general on the inhabitants of our cities and towns.

My bill, which I include in full at the end of this statement, would establish an Office of Noise Control within the Office of the Surgeon General. The Office, headed by a Director and assisted by a noise control Advisory Council, would provide grants to the States and local governments to research ways and means of control, prevention, and abatement of noise. The Office of Noise Control would cooperate fully with existing Federal agencies presently working in the specific field of jet noise abatement, and would prepare, publish, and disseminate educational materials dealing with the control, prevention, and abatement of noise.

Unlike water and air pollution, the threat of excess and uncontrolled noise is not widely recognized as a serious and immediate problem. This "noise gap" is unfortunate.

To primitive man noise was a warning signal indicating danger. Loud noises caused a fear reaction in man, and history tells us of the early employment of noise as a psychological weapon in battle. Perhaps the first record of the effect of noise dates back to the Biblical story familiar to all when the walls of Jericho were caused to fall by the blasts of many hundreds of trumpets and shouts from many people.

Concern over the increase of noise and moves to retard its increase date back to



the period of the comfort-sensitive Greeks of Sybaris. Indications are that the noise problem, in general, has been recognized from the beginning of the industrial revolution, as one that would ultimately require solution.

In America one of the most complete surveys of the noise situation was made in New York under the auspices of *Forum* magazine as far back as 1926-28. Under the direction of Dr. E. E. Free, a study was made of the principal sources of noise in New York City, which led to recommendations of various methods of eliminating specific excessive noises.

Dr. Free suggested a number of laws to control important sources of unnecessary noise including, for example:

The owner of any automobile or truck, street car or other vehicle found on inspection to be emitting unnecessary noise because of loose parts or bad adjustment shall be subject to heavy fine.

Effective beginnings were made on a national scale as well. For example, the National Safety Council made studies of human reactions to noise, with particular attention focused upon the effect and relationship of noise and automobile accidents. At the same time a committee appointed by the American Society of Mechanical Engineers studied methods of measuring the noisiness of machines with respect to definite terms in specifications for the manufacture of machines.

Countless other committees and individuals studied particular problems of interest, including a joint group under the sponsorship of the American Telephone & Telegraph Co., and the National Electric Light Association which explored noise interference with phone conversations.

The first official body in the United States ever appointed to undertake a thorough scientific analysis of the noise problem was the New York City Noise Abatement Commission. Appointed by New York City's mayor in October of 1929, the commission was charged with the responsibility of studying the complex noise situation in New York City. It was directed to report to Dr. Shirley W. Wynne, New York's commissioner of health, on the effect of noise on the city's inhabitants and to explore ways and means of eliminating unnecessary noise. The work of the noise abatement commission culminated in an impressive 303-page report entitled "City Noise," which was published in September of 1931.

The commission channeled its efforts in five major areas by appointing committees to deal with the effect of noise on human beings, noise measurement, practical application of remedies, building code and construction, and finance.

Much of what we know today concerning noise and noise control we owe to the exhaustive work of the New York Noise Abatement Commission.

Many basic observations and conclusions supporting the detrimental effect of excessive noise were set forth in the report. For example, evidence from the commission's studies supported findings that excessive noise destroys efficiency, interrupts minimum requirements of sleep, can cause deafness, severely strains the nervous systems, is extremely costly,

inhibits the normal development of infants, is the cause of accidents, and interferes with school programs.

These represent only a few of the detrimental effects of excessive noise cited by this early commission.

In 1929, the first portable sound-level meter, called a noise meter, was born. Noise measurements were made at 138 test points or stations in New York City and over 10,000 observations were made by the commission's traveling noise laboratory in an effort to make a complete scientific survey and analysis of city noise. The blast of the air hammer, the roar of riveting, and the blare of the automobile and truck horn, together with numerous other noises, were measured by trained experts and then reduced to matters of common human experience and reflected in decibel-intensity above the threshold ratios.

Specific recommendations were made by the commission with respect to specific excessive noise sources including: automobile horns, traffic control, automotive vehicles, elevated and surface electrical lines, and street surfaces.

With respect to noise in buildings, the characteristics and places of the buildings were studied as well as the treatment of indoor noise sources.

It was then believed that one way to escape the noisiness of the city was to build higher buildings which would rise above the sounds. Little did we imagine the multitude of equally as high buildings that we have today, which serve as echo chambers for the amplification of sound waves from the streets below and the sky above.

A few of the recommendations of the 1929 commission became realities by way of amendment of the local New York City charter and code. Mufflers were required, horns were only to be used in an emergency, and several other provisions against unnecessary noise were enacted.

The basic law dealing with noise control in New York City as it exists today is set forth in section 435-5.0 of the administration code. It is set forth below:

Section 435-5.0 Unnecessary noises prohibited.—(a) Subject to the provisions of this section, the creation of any unreasonably loud, disturbing and unnecessary noise is prohibited. Noise of such character, intensity and duration as to be detrimental to the life or health of any individual is prohibited.

(b) The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this section, but any enumeration herein shall not be deemed to be exclusive:

1. The sounding of any horn or signal device on any automobile, motorcycle, bus, streetcar or other vehicle while stationary, except as a danger signal when an approaching vehicle is apparently out of control, or, if in motion, only as a danger signal after or as brakes are being applied and deceleration of the vehicle is intended; the creation by means of any such signal device of any unreasonably loud or harsh sound or the sounding of any such device for an unnecessary and unreasonable period of time.

2. The operation of any radio, phonograph or use of any musical instrument in such a manner or with such volume, particularly between 11 p.m. and 7 a.m., as to annoy or disturb the quiet, comfort or repose of persons in any dwelling, hotel or other type of residence.

3. The keeping of any animal or bird which by causing frequent or long continued noise shall disturb the comfort and repose of any person in the vicinity.

4. The use of any automobile, motorcycle, streetcar, or vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling, or other noise.

5. The blowing of any steam whistle attached to any stationary boiler except to give notice of the time to begin or stop work or as a warning of danger.

6. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor vehicle or motor boat engine except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.

7. The erection, including excavating, demolition, alteration or repair of any building other than between 7 a.m. and 6 p.m. on weekdays; except in case of urgent necessity in the interest of public safety and then only with a permit from the commissioner of buildings, which permit may be renewed for a period of 3 days or less while the emergency continues. (Subd. b. par. 7, amended by L. 1963, ch. 100, sec. 396.)

8. The creation of any excessive noise on any street adjacent to any school, institution of learning or court while the same is in session, or adjacent to any hospital, which unreasonably interferes with the workings of such institution, provided conspicuous signs are displayed in such streets indicating that the same is a school, hospital or court street.

9. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, boxes, crates, and containers.

10. The shouting and crying of peddlers, hawkers and vendors which disturb the peace and quiet of the neighborhood.

11. The use of any drum, loudspeaker or other instrument or device for the purpose of attracting attention to any performance, show or sale or display of merchandise by the creation of noise.

12. (Repealed by L.L. 1948. No. 64, October 1.)

(c) Violations.—Any person who shall violate any of the provisions of this section shall be punished as follows: Upon conviction for the first offense, by a fine of not less than \$5 and not more than \$10 or by imprisonment for 1 day; upon conviction of every offense thereafter by a fine of not less than \$10 and not more than \$25, or by imprisonment for 10 days, or both. (Subd. e as amended by L.L. 1942, No. 50, October 29; L.L. 1954, No. 2, March 12; L.L. 1954, No. 125, December 15.)

(d) Exemptions.—This section shall not apply to the operation or use of any organ, radio, bell, chimes, or other instrument, apparatus or device by any church, synagogue or school. (Subd. d as added by L.L. 1941, No. 55, July 15.)

Similar local statutes have been enacted in other States. These statutes have not been immune to questions as to constitutional validity. A major area of concern to attorneys across the Nation has been the validity of regulations which prohibit the operation of sound trucks and sound amplifying devices. The U.S. Supreme Court in *Saia v. People of the State of New York* (334 U.S. 558, 68 Sup. Ct. 1148 (1948)) held invalid a city ordinance, under which a member of a so-called religious sect, Jehovah's Witnesses, had been convicted for using a sound truck in a public park without a permit from the chief of police. In its rationale the Court cited prior decisions striking restraints on the right of free speech in violation of the 1st amendment



which is incorporated in the 14th amendment as against State action. The Court stated in its 4-to-4 majority opinion, by Mr. Justice Douglas:

We hold that section 3 of this ordinance is unconstitutional on its face, for it establishes a previous restraint on the right of free speech in violation of the 1st amendment which is protected by the 14th amendment against State action. To use a loudspeaker or amplifier one has to get a permit from the chief of police. There are no standards prescribed for the exercise of his discretion. The statute is not narrowly drawn to regulate the hours or places of use of loudspeakers, or the volume of sound (the decibels) to which they must be adjusted. The ordinance therefore has all the vices of the ones which we struck down in *Cantwell v. Connecticut* (310 U.S. 296; *Lovell v. Griffin* (303 U.S. 444); and *Hague v. CIO* (307 U.S. 496).

It is not my purpose here to consider the many legal questions surrounding freedom of speech and the control of noise. It may be helpful, however, to state some conclusions which Charles S. Rhyne, former president of the American Bar Association, has reached in his exacting work entitled "Municipal Control of Noise—Sound Trucks, Etc.," and published by the National Institute of Law Officers in 1947, pertaining to municipal regulation of sound devices:

First, it has been demonstrated that previous restraints, standing alone, upon civil liberties guaranteed and protected from abridgment by the Federal Constitution will not be tolerated. If there is a previous restraint, such as requiring a license or permit from a public official, the issuance of such a license or permit must be governed by definite specific standards which do not allow censorship of any kind.

If no civil liberties are involved then the regulation will be examined for its reasonableness and the extent to which it "prohibits" or "regulates" the activity.

Finally, it may be stated that commercial advertising through the use of sound trucks is of such a differing nature from other uses that it can be legally and completely banned from city streets.

There is set forth at the end of this statement a copy of the applicable statement from Mr. Rhyne's Municipal Law, 1957.

The National Institute of Municipal Law Officers has further set forth in its book by Charles S. Rhyne three "model ordinances" which would regulate and prohibit, first, certain uses of sound trucks, second, certain uses of sound advertising from aircraft and, third, unnecessary noise and, which together with the annotations provided, make excellent reference sources for cities in their exploration of ways to draft or improve their existing codes.

President Johnson has voiced concern over the entire problem of environmental pollution. In 1965 the President asked his Science Advisory Committee's Environmental Pollution Panel to report on this problem. Their report of November 1965, entitled "Restoring the Quality of Our Environment," dealt in the main with air pollution. Among the various specific recommendations of the President's Committee, however, was B28, which reads as follows:

We recommend that the Federal Government encourage the development and adop-

tion of codes governing noise insulation in apartment buildings. Pollution of apartments by noise from either adjacent tenants or outside sources is a national common place. At least two counties have effective codes regulating this problem. Local governments should have access to codes which they can adopt with adequate reliance on both their effectiveness and their reasonableness.

I am not suggesting at this time, Mr. Speaker, that we write national codes dealing with regulation of excessive noise on a local level although we can suggest them. In my view, the model codes set forth by the National Institute of Municipal Law Officers together with existing local codes in various States would provide an adequate starting point for development of more comprehensive local laws dealing with noise. The fact remains, however, that we must have effective regulations concerning excessive noise and which specify among other things quantitatively the noise levels that constitute violations.

For example, in the city of New York at the present time a contractor is free to operate machinery at harmful noise levels at any time between the hours of 7 a.m. and 6 p.m. Anyone who has been awakened at 7 in the morning to the deafening tune of an air compressor or pneumatic drill outside his window knows the frustration if not neuroses which construction noise may cause. I am not suggesting that the construction—which is inevitable in a rapidly expanding city—be curtailed. Sensible regulations on the machines used in construction will, however, go a long way toward preserving our health and peace of mind. For example, I am informed that machinery noise may be greatly reduced by a simple device called a "residential quality silencer," an item which could be attached to an air compressor unit and would cost no more than \$200.

An argument for not controlling construction noise during the daytime has been that the work is only temporary. I submit that the needs and pace of city building are such that we will be faced with continuing construction for some time to come.

Other countries, including England and West Germany, have long recognized the need for legislative control of machine and construction noise and have taken significant strides in this area. In this regard, I am attaching at the end of this statement a report entitled "Construction Noise: Neglected Health Hazard," by one of America's leading anti-noise exponents, Robert Alex Baron, who is a constituent of mine.

Complaints from a goodly number of my constituents led me as a then New York City councilman to introduce in 1964 a bill, which died in committee, in the New York City Council to amend section 435-5.0—heretofore set out in full—of the New York City Administrative Code in an attempt to abate excessive machine noises, such as those from air conditioners. The language of the amendment proposed to include among those unnecessary noises prohibited:

12. High frequency or high pitch sounds due to the operation of any machinery situated on or near the roofs of the buildings

and regardless of whether such sounds are intermittent or continuous in duration.

Approximately 10 months later the insensitivity of the New York City Transit Authority to the needs of residents in the area of the Avenue of the Americas at 55th Street, New York City, as pointed out in the New York Times, in allowing machinery to be used without mufflers or with ineffective mufflers so that the constant high noise level had a deafening and nerve shattering effect, caused me to introduce the following further prohibition and regulation, which died in committee:

13. The operation of any machinery in or over any street unless equipped with a muffler or other device which will effectively prevent loud or explosive noises therefrom. A loud or explosive noise shall be any sound in excess of 90 decibels at the source.

14. Every air compressor utilized in or on any street must have a silencer or a muffler in good working order.

In February of this year, 1966, as my last action as a New York City councilman, I introduced in the New York City Council an amendment which would limit the playing of transistor radios without the use of an earplug in public places, including the subways and buses. The prohibition reads as follows:

12. The operation or playing in any public place, including but not limited to, public transportation, private transportation available to the general public (excluding taxis and limousine service), public beaches and city streets, of any radio in such a manner as to be audible to anyone other than the owner or carrier of the radio. The operation or playing of such a radio as aforesaid with the sound reception limited to an earplug or hearing aid shall not be a violation of this provision.

Sec. 2. This local law shall take effect immediately.

This bill is still pending in the committee on General Welfare of the New York City Council and has received the editorial support, among others, of the New York Daily News.

As the President's Environmental Pollution Panel suggests, substantial regulations must be enacted on a local level to abate excessive noise on "the inside" as well as the outside. Small but significant steps in this direction have been taken.

The Polytechnic Institute of Brooklyn has been working on proposals which would include in the new New York City Building Code provisions for the combat of noise in multiple dwellings. Their analysis of their purpose is set forth in their letter to me of July 20, 1964, hereinafter set forth at the close of this statement.

In addition to reducing the amount of airborne noise to comfortable levels, the proposed Polytechnic code seeks to abate the "impact noises" which come from various pieces of mechanical equipment and ventilation ducts.

In this regard the National Bureau of Standards has published a monograph—No. 77-1964—entitled "Sound Insulation of Wall, Floor and Door Constructions." This publication contains acoustical test results on over 100 building constructions and is, I believe, of immense value in



helping builders to erect buildings with good sound insulation.

Guidelines such as this, it is hoped, will revise the present trend toward the use of thinner construction for lower cost or even safer construction, but without regard to "sound" problems. With the realization that so many more people are moving to the cities, together with recognition of the rapid population expansion if not explosion, we must insure privacy and peace through quiet apartments which are the homes of our people.

While my bill does not now suggest national regulatory codes, it would provide Federal funds to assist the State and local governments to begin their own programs of noise control. In addition, the bill would provide funds for financing a comprehensive and energetic educational campaign to arouse public consciousness to the evils of noise and the advantages of a more quiet environment.

Before we can properly educate the public on the evils of noise, however, we must know more than we presently do about it. We must engage in an open-minded, immediate, and comprehensive research program into the causes and effects of noise on men, women, and children from a psychological, physiological, sociological, and biological point of view.

Actually a good deal of knowledge concerning the effects of noise has been gained through the diligent efforts and detailed work of several groups which have organized to voice their concern.

#### AEROPLANE NOISE

Probably the catalyst to the exploration of the effects of excessive noise was the jet airplane. Aviation noise was a problem to early aviators long before it became a problem to the average citizen on the ground. Today, however, the citizens living within a 5-mile radius of the modern jet-age airport share a very common and vital interest in noise abatement. It may be recalled that not too long ago Newark Airport was dramatically closed by complaints of a fearful and hostile community. Ever since then the aviation authorities have been sensitive to noise problems and the impact of community relations to aviation operations. A serious interest in this problem was displayed by the National Research Council and the Armed Forces in the form of a Committee on Hearing and Bio-Acoustics, known as CHABA, the committee responsible for advising the military forces on all facets of noise problems.

The report of the Committee on Science and Astronautics pursuant to House Resolution 133—October 1960—after careful study of testimony given during its hearings by acknowledged experts in the field of jet aircraft noise stated—House Report No. 2229, October 1960—the following conclusions:

A great deal of noise research is underway in the Government, but there appears to be a lack of common orientation except in the Armed Forces, NASA, and CHABA.

The NASA noise research program has been level budgeted for the past several years and will continue as a level effort, although noise problems are more acute than ever.

More research and development effort is necessary and additional research tools are necessary, before a set of noise criteria can be drafted, around which industry can design aeronautical and space vehicles.

There is no important, highly qualified Government group specifically charged with the responsibility for formulating noise criteria.

I strongly support the noteworthy work of my colleague from New York [Mr. TENZER] in his effort to abate aircraft noise.

I have had similar problems in my own 17th Congressional District of New York on helicopter noise, which disturbs the residents of Sutton Place, Turtle Bay, Murray Hill, Kips Bay, and all of Manhattan East. My constituents, Millicent Brower and William Gold, Esq., have been tireless workers on this question.

My bill includes proposals to centralize research projects to reduce aircraft noise under the National Aeronautics and Space Agency, and to authorize the F.A.A. to reimburse municipalities and airline and airport owners and operators for part of the cost of land acquisition or technical modifications to reduce jet noise.

Problems of aircraft noise are discussed below in the subject heading "Understanding Noise."

Moreover, my bill specifically provides that the Office of Noise Control should collect from other Federal agencies data relating to noise control, prevention, and abatement. It further provides that the Office of Noise Control shall cooperate with and fully coordinate its programs and activities with the programs and activities of other Federal agencies with responsibilities in this field. We must pool our resources and energy to develop the common orientation which the Committee on Science and Astronautics has said is lacking. The Office of Noise Control would accomplish this essential step in the comprehensive attack on noise.

#### UNDERSTANDING NOISE

Noise has been defined simply as an unwanted sound. It really has two aspects. Subjectively, noise is something we feel inside or hear and recognize, such as a train whistle. Objectively, noise is a form of energy in the air, invisible vibrations that can enter our ear and make us "hear something."

Noise may be measured in various ways. One way is to measure the deafening effect by the use of an audiometer. Another, and perhaps more common method is to record the noise level directly in decibels.

The decibel—known as "dB"—is a dimensionless unit used to describe levels of acoustic pressure, power, and intensity. It is a logarithmic ratio between two sound pressures. In other words, a difference between two sound-pressure levels of 10 decibels means a relative increase of sound energy of 10 times the lower level, not an arithmetic increase of 10 points. A doubling of the apparent noise level means the sound energy has been multiplied by 10.

Octave bands are arbitrary spreads of frequencies useful for rating noise hazards since some frequencies are more

likely to cause hearing damage than others.

Industrial noise levels generally range from 75 to 125 decibels and higher. It is usually recommended that above 85 decibels industries institute hearing conservation programs.

The sound of everyday conversation is about 60 decibels. Small communities on the outskirts of the urban areas may have a rumble of about 30 decibels by day and 23 decibels by night.

While the relationship of noise levels and human tolerance is to some degree subjective, it is generally agreed that 130 decibels is the maximum noise bearable for human ears. This level would approximate the sound of jets in an airport. It should be noted, however, that prolonged exposure to less—say 110 decibels—may well result in loss of hearing.

It has been stated that one man's music is another man's noise. Certain sounds, however, are every man's noise. This is more clearly understood when one begins to appreciate what noise can do to people, both psychologically and physiologically.

The U.S. Supreme Court in *Public Utilities Commission v. Pollak* (343 U.S. 451 (1952)) decided that the constitutional rights of District of Columbia transit patrons were not violated by the broadcasting of news, music, and commercials in buses and trolleys. Mr. Justice Douglas' dissent demonstrates the indignity that many feel at being part of a "captive audience" for noise.

English radio audiences recently heard Jack de Manio interview the well known Dr. John Anthony Parr. Their brief discussion was on noise and ill health and, I believe, is of great value in appreciation of the effects of noise. It is set forth herein:

#### THE DOCTOR SAYS NOISE DOES AFFECT YOUR HEALTH

Well, Doctor, I know noise irritates, but can it have any real effect on our health?

Yes it can, in fact it is only of latter years that the problem has received any intensive scientific study. One experiment conducted in France submitted a group of soldiers to a loud noise for 15 minutes. They were then tested and to everybody's surprise it was discovered they were color blind for over an hour. Another set of experiments were carried out in Germany where they found that excessive continuous noise could set up inflammation of the stomach.

Why should noise upset our health?

Well, it's all due to an inborn alarm system that we have. A sudden loud noise spells danger and we react. In fact we automatically get ready either to defend ourselves or for flight. Our muscles tense and we jerk, our abdominal blood vessels contract to drive extra blood to our muscles and this produces that feeling of the stomach turning over, and in an instant the liver releases stores of glucose to provide fuel for the muscles which may have to fight or run. This internal upheaval if repeated again and again is exhausting physically and mentally, and ultimately can cause a nervous breakdown and then it is but a step to contracting one of the stress diseases.

But surely we can get used to noise?

Yes, that is true, but only at a price. One cannot ignore a noise, only put oneself in a condition in which we do not make any obvious reaction. It means keeping all the muscles tense so that we are not jumping up and down like a human yo-yo, and

keeping ourselves in this state of permanent tension leads on to mental stress. What is more, we become less and less efficient.

Less efficient? That's quite a point, how does this come about?

Well, as you know only too well Jack, noise can be measured in phons. A noisy office is 70 phons and a tube train is only between 80 and 90 and you wouldn't expect anybody to do any serious brainwork in a tube train; at 80 to 90 phons the level of noise almost prohibits the use of the telephone. Some experiments carried out in America showed that a copy typist doing routine work in a noisy office has her efficiency reduced by a fifth. Whilst her boss doing brainwork at his desk is one-third less efficient. As a result, less work is done, mistakes increase and accidents happen.

Tell me, Doctor, have you a special noise that drives you mad?

By golly there is, the sound of the telephone at 3 in the morning. It literally hurls me out of bed, throws me against the wall and sets me jumping up and down, by the time it's finished I am too exhausted to speak above a whisper. I want the phone equipped with a dulcet tone which eases me into consciousness and does not cause me a violent physical assault.

Karl D. Kryter, a consultant to Bolt Beranek & Newman, Inc., Cambridge, Mass., and a pioneer in the effects of noise, sets forth interesting and helpful comments in an article entitled "Psychological Reactions to Aircraft Noise," appearing in *Science*, volume 151, pages 1346-1355, March 18, 1966, which may aid in our understanding of noise. In a comparison of different noise sources he states:

One way to estimate the impact of aircraft noise upon a community is to compare the perceived noise levels for sounds generated by aircraft with those for the other community noises; such a comparison is presented in table 12. It is difficult to draw a single curve to represent the noise from jet aircraft, particularly following takeoff. Different aircraft have somewhat different flight characteristics, and reductions in engine power at various stages after takeoff reduce the noise level. On the other hand, the take-off noise depicted is for short- and medium-range jet aircraft, but longer range, more

powerful jets generate higher noise levels than the takeoff noise levels shown in table 12. As may be seen in table 12, jet aircraft noise is greater by an order of magnitude than other common noises, and it is, therefore, not surprising that communities near airports complain about it.

These and related experiments have shown, nevertheless, that people exposed to the noise object to it, the specific noise levels found acceptable being a function of the activity the person is engaged in. For example, the judged "threshold of annoyance" is found to vary, for steady-state sound, between 40 and 90 PNdb, depending upon whether the person was a "conference room" worker, a clerical worker, or a worker in a machine shop (15). Somewhat similarly it has been found that, in a community, the threshold of annoyance due to intermittent real-life sounds (from aircraft, automobiles, and so on) varies between about 50 and 90 PNdb. (See table 12, end of this statement.)

While extensive research has been devoted to the measurement and the evaluation of causes and effects pertaining to jet aircraft noise, not enough attention has been given to the evaluation and effects of other sounds. What we must do is engage in a procedure that will permit a study of intercomparisons of sounds of widely different character. For example, the sounds of helicopters, dishwashers, air conditioners, automobiles, factories, and so forth. In other words, we must study how "noisy" various sounds are rather than how "loud" they are.

The well-known Dr. Samuel Rosen, consulting ear surgeon at Mount Sinai Hospital, New York, along with four of his colleagues from Germany and Egypt, completed dramatic research concerning the relation of noise to hearing loss and coronary heart disease, which I believe most helpful in understanding the effects of noise. His discussion of the problem is included at the end of this statement.

In three separate studies made of the primitive Mabaan Tribe in the jungle of southeast Sudan, it was demonstrated that, with aging, their hearing in high

frequencies maintains considerably higher levels when compared to similar population groups in New York. The Mabaan environment is almost free of noise, with ambient noise level measuring 34 to 40 decibels on the C scale. The Mabaans are known to be free of hypertension throughout life. They enjoy freedom from coronary attacks and experience minimal atherosclerosis. It was surprising to learn that at 500 to 6,000 cycles per second hearing is significantly more acute in all Mabaans aged 10 years through 70 years than in people of the same age who live in the United States. We have come in the United States to accept loss of hearing as a byproduct of growing older. The facts indicate, however, that exposure for a long period of time to excessive noise is a leading cause of loss of hearing in older people. By way of prevention we must act now to curb this dreadful and unnecessary trend.

As I have heretofore stated, many of the people in my district have voiced increasing concern over the shattering clap of the helicopters which transport airplane passengers several times daily between the Pan Am Building and Kennedy Airport. They complain that sleep necessary for their children as well as themselves is constantly being interrupted. The noise from the blades and engine of the huge helicopter used in the shuttle also interferes with the rest required by so many of the bedridden patients confined in the hospitals directly below the path of the flights.

In a recent interview with Dr. Stanley Mohler, medical consultant to the FAA on noise problems, I learned of an interesting sample of noises taken only 3 months ago in the east area of my district over which the helicopter flies. I would like to include at this point in the Record a table which graphically displays in decibels and octave frequency a comparison of three common sources of noise together with Dr. Mohler's brief explanation:

[Legend: H—Helicopter noise; T—Taxi noise, New York City; BR—Brass Rail Restaurant, New York City]

Decibels re 0.0002 dyne S/C m <sup>2</sup>	Octave centerline frequency										
	31	63	125	250	500	1,000	2,000	4,000	8,000	16,000	31,500
100											
95											
90	T	T	HH	HH							
85	HH			HH							
80			T		HH						
75				T							
70	BR	BR				BR					
65			BR	BR	T	HH					
60					BR	T	BR				
55							HH				
							T	BR			
								HH			



[Legend: H—Helicopter noise; T—Taxi noise, New York City; BR—Brass Rail Restaurant, New York City]—Continued

Decibels re 0.0002 dyne S/C m <sup>2</sup>	Octave centerline frequency										
	31	63	125	250	500	1,000	2,000	4,000	8,000	16,000	31,500
50								T			
45											
40								T HH BR		T	
35											
30										HH BR	
25											HH BR
20											

## NEW YORK CITY—NOISE IN FOUR LOCATIONS

Noise samples were taken on February 16, 1966, in the Brass Rail Restaurant (near Times Square), inside a taxicab driving through Manhattan, and inside two commuter shuttle aircraft (one jet powered and one piston powered).

The above measurements are portrayed in the attached illustration. The noise samples were taken by the Federal Aviation Agency.

The illustrations show that the lower frequencies contain most of the sound energy with regard to the three vehicles. The restaurant contained relatively little sound energy in the lower frequencies. The curves for all four locations follow relatively similar patterns in the mid- and upper-frequency ranges.

Occupants of shuttle helicopters are exposed to similar noise energies as those illustrated in the attachment.

Another aspect in the evaluation of the effect of noise is the fact that noise is expensive. The early New York City Commission noted the inefficiency caused by noise among industrial workers and office personnel. In a July 1960 issue of Popular Mechanics magazine, in an article entitled "What Price Noise" it was stated:

An estimated \$2 million is lost each day to industry because of decreased efficiency and lost man hours caused by noise.

In a 1961 ASD—Aeronautical Systems Division of the U.S. Air Force—Technical Report No. 61-160, entitled "Reaction to Aircraft Noise," Welden Clark concluded, after a thorough review of office noise studies, that the largest single effect of noise in offices is the interference with communication. This interference is not only time consuming and therefore costly, but frustrating as well.

While the exact cost of excessive noise is difficult to measure in dollars and cents, it is clear that it greatly inhibits good working conditions. Since there is ample authority to support the fact that excessive noise can cause permanent hearing loss, it may be concluded that the cost of hearing aids should be added to the increasing cost of noise. This is not to say, however, that hearing loss caused by excessive noise will always be restored by use of a hearing aid. It is at this point the victim truly appreciates the cost of noise, and it is not only in monetary terms.

Another area in which noise has been identified as having a damaging effect is on our streets and highways. We know, for example, that one truck with a defective muffler can produce a roar equivalent to 90 or 100 passenger cars traveling simultaneously.

New York State became the first State, to my knowledge, with a workable anti-noise act when in July 1965 Governor Rockefeller signed legislation which prohibits and defines excessive noise on the public highways. The act defines as excessively noisy, a vehicle which produces a sound of 88 decibels or more on the A scale. State Senator Max Berking, sponsor of the act, said when the bill was passed:

Noise in the larger cities has mounted an average of 1 decibel a year for the past 30 years. In New York City 40 percent of the excessive noise is caused by trucks with defective exhaust systems.

April 7, 1966, the World Health Organization celebrated its 18th anniversary with the theme "Man and His Cities." Dr. M. G. Candau, Director-General of the World Health Organization, demonstrated a keen awareness to the increasing threat of noise to our health and well-being in his World Health Day message which follows:

Over the last 100 years, mankind doubled in numbers, but during the same period the world's city population increased 5 times.

These figures illustrate the swift advance of urbanization that is so characteristic a feature of the world today. In this process, health may tend to be forgotten. World Health Day 1966 is to draw attention to the human needs—particularly the mental health needs—of our complex urban settings today, and also to the contribution that health workers in cooperation with other professional people can make toward creating a more harmonious, human environment in cities of today and tomorrow.

All over the world, the mushrooming city growth has given rise to slums and shanty towns, in which as much as one-third of today's city population are herded together in conditions contrary to the requirements of healthy living. But even when a minimum of basic physical requirements are met, the modern city threatens the health of its citizens in a number of ways.

Many a person coming to the city from the country has to learn to put up with less space, less daylight, less fresh air, less green-

ery, more noise, but less liberty to make noise. Both work and play are different. Old established patterns of communal living are disrupted. The newcomers may fail to keep up with city ways, and adjustment problems of various kinds may arise. Psychosomatic and neurotic disorders are undoubtedly largely associated with the congestion and noise, the hectic rhythm of city life, its vast anonymity, and its many strident appeals to the individual to this or that. Furthermore, as a counterpart to the glamour of the modern city, to its employment possibilities, its educational wealth and its cultural achievements, we have delinquency, crime, prostitution, alcoholism, and the excessive use of drugs.

The health worker clearly has his part to play in dealing with these problems. At the present state of knowledge, many questions still remain unanswered in this field. But much can be done, by the professions, the authorities, and by civic groups, but also by the citizens at large to make our cities better places to live in.

## OUR ATTITUDE TOWARD NOISE

Our attitude toward noise must be dictated by our knowledge of what it is and what it can do to us. The first conclusion as to the effect of noise reached by the English report of the Committee on the Problem of Noise in its July 1963 report to Parliament reads as follows:

Since health is defined as "a state of complete physical, mental, and social well-being and not merely absence of disease and infirmity" there is no doubt that noise affects health.

Excessive noise is not merely something to adjust to or tolerate. We must not take the attitude that excessive noise from aircraft, construction and demolition sites, motor vehicles, industry surface transit, and other sources is the price we pay for growth. I do not agree with those that profess that compensation for the injuries caused by excessive noise is to be found simply in the overall benefits of progress.

I urge a more realistic approach to the problem of noise. We should compensate our citizens living near airports by contributing to their efforts to soundproof their homes. We should legislate effective and comprehensive codes on a local level which specify quantitatively the noise levels which will result in violation of the law. Above all, we must recognize

noise as a substantial and immediate threat to our health and well-being.

A leading acoustical authority, Lewis Goodfriend, estimates that New York City noise could be reduced as much as 80 percent. This statement is found in the article on "The Sound of Sounds That Is New York," by Harold C. Schon-

berg in the New York Times Magazine of Sunday, May 23, 1965. All those who have researched the noise problem tend to agree that a good deal may be done to reduce excessive noise.

It is time for this country to undergo introspection regarding its attitude toward noise. We must act now so that in

a few years we will not be caught in the too often experienced dilemma of having to say, "We should have done this long ago."

We must no longer turn a deaf ear to the problems of excessive noise. We must open our eyes to the serious problem of noise today.

TABLE 12.—Typical levels of intermittent noise produced by vehicles (an increase of 10 PNdb is usually equivalent to a 100-percent increase in subjectively judged noises)

[Legend: A—Passenger car, 15 to 25 miles per hour; B—Passenger car, 50 to 60 miles per hour; C—Truck or motorcycle, maximum highway speed or accelerating; D—Diesel freight train, 30 to 50 miles per hour; E—4-engine propeller aircraft approach power; F—Turbo fan aircraft approach power; G—Short 8 medium range fan aircraft takeoff power]

ESTIMATED LEVEL AT COMMUNITY HOUSES TYPICALLY NEAREST SOURCES OF NOISE

Outdoor perceived noise level (PNdb)	Distance from vehicle (feet)					
	50	100	200	500	1,000	2,000
130.....			G			
120.....	E	F	F			
110.....	D	E		G	G	
100.....	C	D	E	F		G
90.....		C	D	E		F
80.....	B	B	C	D	E	E
70.....	A	A	B	C	D	D
60.....			A	B	C	
50.....				A	B	C

H.R. —

A bill to provide for a comprehensive program for the control of noise

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Noise Control Act of 1966."

TITLE I

Office of Noise Control

SEC. 101. (a) (1) There is hereby authorized to be established, within the Office of the Surgeon General, an Office of Noise Control (hereinafter referred to as the "Office").

(2) The Office shall be headed by a Director who shall be appointed in accordance with the civil service laws.

(b) It shall be the duty and function of the Office to—

(1) administer the programs authorized by sections 102 and 103 of this title;

(2) assist the Secretary of Health, Education, and Welfare, and the Surgeon General, in the planning and carrying on of any activities which relate to noise, its control, prevention, and abatement, and with respect to which such Secretary or the Surgeon General has or assumes any duty, function, or responsibility;

(3) collect, from other Federal agencies as well as from other sources, data relating to noise, its control, prevention, and abatement;

(4) prepare, publish, and disseminate educational materials dealing with the control, prevention, and abatement of noise; and

(5) in its discharging duties, functions, and responsibilities, to cooperate with and coordinate its programs and activities with the programs and activities of other Federal agencies which have or assume any duty,

function, or responsibility, for or relating to noise, its control, prevention, and abatement.

Grant to States

SEC. 102. (a) For the purpose of enabling the Director to make grants under this section to States for the purpose of providing programs of noise control, research into the causes and effects of noise and of providing programs for the investigation of existing causes of excessive noise in our environment and research into new techniques of controlling, preventing, and abating noise, there is authorized to be appropriated \$3,000,000 for the fiscal year ending June 30, 1967, \$5,000,000 for fiscal year ending June 30, 1968, \$7,000,000 for fiscal year ending June 30, 1969, \$9,000,000 for the fiscal year ending June 30, 1970, and \$9,000,000 for the fiscal year ending June 30, 1971.

(b) (1) From the sums appropriated pursuant to subsection (a) for any fiscal year, the Director shall reserve an amount (not in excess of 2 per centum of such sums) which he shall allot among Puerto Rico, the Canal Zone, Guam, American Samoa, and the Virgin Islands, in accordance with their respective needs for funds to carry out the purposes of this section. From the remainder of such sums the Director shall allot to each other State an amount which bears the same ratio to the amount of such remainder as the population of such State bears to the total of the populations of all of the States of the United States.

(2) The amount of any State's allotment under paragraph (1) for any fiscal year which the Director determines will not be required for such fiscal year in carrying out the State plan (if any) approved under subsection (c) shall be available for the reallo-

ment from time to time, on such dates during such year as the Director may fix, to other States in proportion to the original allotments to such State under such paragraph for such year, but with such proportionate amount for any of such States being reduced to the extent it exceeds the sum the Director estimates such State needs and will be able to use for such year for carrying out the State plan; and the total of such reductions shall similarly be reallocated among the States whose proportionate amounts were not so reduced. Any amount reallocated to a State under this paragraph during a year from funds appropriated pursuant to subsection (a) shall be deemed a part of its allotment under paragraph (1) for such year.

(3) The amount of each allotment to any State for any fiscal year under this subsection shall be available to such State, if such State has a plan approved by the Director under subsection (c) in effect on the first day of such fiscal year, to pay not more than 75 per centum nor less than 33 per centum of the total cost of carrying out the State plan. In the case of any State, which on such first day does not have such a plan and has not previously received a planning grant under this sentence, the Director may pay to such State not more than \$35,000 nor less than \$10,000 for the purpose of enabling such State to prepare a plan under this section and establish a noise control program, and any amount so paid shall be charged to the allotment of the State to which it is paid.

(c) (1) Any State which desires to receive a grant under this section (other than a grant authorized under the last sentence of subsection (b)(3)) must prepare a State plan which is approved by the Director pursuant to this subsection.



(2) The Director shall approve a State plan under this section if he finds that such plan—

(A) establishes or designates a single State agency (hereinafter referred to as the "State agency") as the sole agency for administering or supervising the administration of the plan, which agency shall be the agency primarily responsible for the coordination of State programs and activities related to noise control;

(B) provides for such financial participation by the State or communities therein with respect to activities and projects under the plan as the Director may by regulation prescribe in order to assure continuation of desirable activities and projects after termination of Federal financial support under this section;

(C) provides for development of programs and activities for carrying out the purposes of this section (as set forth in subsection (a)), including the furnishing of consultative, technical, or information services to public or nonprofit private agencies and organizations engaged in activities relating to noise control, and for coordinating the activities of such agencies and organizations to the extent feasible;

(D) provides for consultation with and utilization, pursuant to agreement with the head thereof, of the services and facilities of appropriate State or local public or nonprofit private agencies and organizations in the administration of the plan and in the development of such programs and activities;

(E) provides such methods of administration (including methods relating to the establishment and maintenance of personnel standards on a merit basis, except that the Director shall exercise no authority with respect to the selection, tenure of office, and compensation of any individual employed in accordance with such methods) as are necessary for the proper and efficient operation of the plan; and

(F) provides that the State agency will make such reports to the Director, in such form and containing such information, as may reasonably be necessary to enable him to perform his functions under this section and will keep such records and afford such access thereto as the Director may find necessary to assure the correctness and verification of such reports.

(3) (A) The Secretary shall not finally disapprove any State plan, or any modification thereof submitted under this section without first affording the State reasonable notice and opportunity for a hearing.

(B) Whenever the Director, after reasonable notice and opportunity for hearing to the State agency administering or supervising the administration of a State plan approved under this subsection, finds that—

(i) the State plan has been so changed that it no longer complies with the provisions of paragraph (2), or

(ii) in the administration of the plan there is a failure to comply substantially with any such provision, the Director shall notify such State agency that no further payments to the State under this section (or, in his discretion, that further payments to the State will be limited to projects under or portions of the State plan not affected by such failure), until he is satisfied that there will no longer be any failure to comply. Until he is so satisfied, no further payments shall be made to such State under this section (or payments shall be limited to projects under or portions of the State plan not affected by such failure).

(C) A State which is dissatisfied with a final action of the Director under paragraph (2) or (3) may appeal to the United States court of appeals for the circuit in which the State is located, by filing a petition with such court within sixty days after such final action. A copy of the petition shall be forthwith transmitted by the clerk of the court to the Director, or any officer designated by

him for that purpose. The Director thereupon shall file in the court the record of the proceedings on which he based his action, as provided in section 2112 of title 28, United States Code. Upon the filing of such petition, the court shall have jurisdiction to affirm the action of the Director or to set it aside, in whole or in part, temporarily or permanently, but until the filing of the record, the Director may modify or set aside his order. The findings of the Director as to the facts, if supported by substantial evidence, shall be conclusive, but the court, for good cause shown, may remand the case to the Director to take further evidence, and the Director may thereupon make new or modified findings of fact and may modify his previous action, and shall file in the court the record of the further proceedings. Such new or modified findings of fact shall likewise be conclusive if supported by substantial evidence. The judgment of the court affirming or setting aside, in whole or in part, any action of the Director shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in section 1254 of title 28, United States Code. The commencement of proceedings under this subparagraph shall not, unless so specifically ordered by the court, operate as a stay of the Director's action.

(D) Notwithstanding any other provision of this section, the Director shall refuse to make a grant for any fiscal year to any State for the purpose of carrying out a plan of such State approved under subsection (c), if the Director finds, after reasonable notice and opportunity for hearing to the State agency administering or supervising the administration of such plan, that a lesser sum of State and local funds will be expended on the noise control program of such State during such year than was expended on such program for the preceding fiscal year. Any final action by the Director under this subsection may be appealed by any State dissatisfied by such action in the same manner as that provided under subsection (c) (3) (C) for appeals from final actions of the Director under subsection (e) (2) or (3).

(E) Payments of grants under this section may be made (after necessary adjustment on account of previously made underpayments or overpayments) in advance or by way of reimbursement, and in such installments and on such conditions, as the Director may determine.

(F) As used in this section, the term "State" means a State, Puerto Rico, the District of Columbia, the Canal Zone, Guam, American Samoa, or the Virgin Islands.

#### Research and demonstration projects

Sec. 103. The Director is authorized to make grants to any public or nonprofit private agency, organization, or institution, or to engage by contract the services of any such agency, organization, institution, or of any individual—

(A) to conduct research into the causes and effects of noise, the means which may be employed for its control, prevention, and abatement, such research to include a study and evaluation of biological, physiological, sociological, sociocultural, and psychological factors which are, or may be, significant to an understanding of noise, its causes and effects, or its control, prevention, and abatement;

(B) to provide training of professional and technical personnel in the approaches, methods, and techniques for the proper control, prevention, and abatement of noise;

(C) to establish and conduct demonstration projects to develop and evaluate new techniques, approaches, and methods in the control, prevention, and abatement of noise, such projects to include development of specialized courses in colleges, universities and other institutions of higher education, relat-

ing to noise, its causes, effects, control, prevention, and abatement.

(D) (1) To the extent he deems it appropriate, the Director shall require the recipient of any grant or contract under this section to contribute money, facilities, or services for carrying out the project for which such grant or contract was made.

(2) Payments under this section pursuant to a grant or contract may be made (after necessary adjustment, in the case of grants, on account of previously made overpayments or underpayments) in advance or by way of reimbursement, and in such installments and on such conditions, as the Director may determine.

(E) The Director shall make no grant or contract under this section in any State which has established or designated a State agency for purposes of section 102(c) (2) (A) unless the Director has consulted with such State agency regarding such grant or contract.

(F) For the purpose of carrying out the provisions of this section, there is authorized to be appropriated \$5,000,000 for the fiscal year ending June 30, 1967, \$7,000,000 for the fiscal year ending June 30, 1968, \$10,000,000 for the fiscal year ending June 30, 1969, \$12,000,000 each for the fiscal year ending June 30, 1970, and the following fiscal year.

#### Noise Control Advisory Council

Sec. 104. (a) For the purpose of advising the Director on matters bearing on his responsibilities under this title and of reviewing all project grants proposed to be made under section 102, there is hereby established in the Department of Health, Education, and Welfare a Noise Control Advisory Council (hereinafter referred to as the "Council") to consist of nine individuals to be appointed by the Secretary of Health, Education, and Welfare (hereinafter referred to as the "Secretary") without regard to the civil service laws. Members of the Council shall be selected from persons who are not otherwise in the full-time employ of the United States and who are skilled in medicine, psychology, government, law or law enforcement, social work, public health, or education, or who have demonstrated particular interest in the special problems of noise control, prevention, and abatement.

(b) Each member of the Council shall hold office for a term of three years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and (2) the terms of office of the members first taking office shall expire, as designated by the Secretary at the time of appointment, three at the end of the first year, three at the end of the second year, and three at the end of the third year after the date of appointment. No individual shall be eligible to be appointed as a member of the Council after he has served as a member of the Council for two terms.

(c) Members of the Council shall, while attending meetings or conferences of the Council, be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$75 per diem, including travel time, and, while so serving away from their homes or regular places of business, they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses Act of 1946 (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(d) The Council shall report not less often than once each fiscal year to the Secretary and to the Congress on the work of the Office and other Federal agencies in the field of noise control, prevention, and abatement.

(e) (1) Not less often than once each fiscal year, the Council shall submit to the Secretary and to the Congress a report containing full and complete information on (1)



the work and activities of the Office, (2) the work and activities relating to noise control, prevention, and abatement of other agencies of the Federal Government, (3) and the work and activities relating to noise control, prevention, and abatement of the States, and the role assistance provided under this title has played in such work and activities. The Council may include in any such report such suggestions and recommendations as it deems advisable, including suggestions and recommendations which would encourage and assist local communities in the establishment and expansion of noise control programs. The first such report submitted shall cover the period beginning on the date of the establishment of the Office and ending as short a time before the making of such report as is feasible, and each following report shall cover the period beginning with the day following the last day covered by the preceding report and ending as short a time before the making of such report as is feasible.

(e) (2) In addition to the annual report, the Council is authorized to submit to the Secretary and to the Congress such reports, containing such information and such recommendations, as the Council deems advisable.

#### TITLE II

##### *Declaration of policy of aircraft noise control*

SEC. 201. It is the finding of Congress that the impact of aircraft-generated noise upon millions of persons beneath or near the flight paths of such aircraft interrupts and disturbs the peace and quietude of homelife, interferes with public assemblies, and, in general, seriously disrupts the community life, all of which the citizens have a right to enjoy; that the extensive operation of jet-powered aircraft is contributing to the excessive pollution of the air creating thereby a hazard to the health and welfare of the public; and that the operation of aircraft and airports is the cause of various nuisances to nearby residents. It is therefore declared to be the policy and intent of Congress to abate and alleviate the disturbance and annoyance caused by the operation of aircraft and airports, and to control, prevent, and abate excessive noise from other sources.

##### *Amendment of Federal Aviation Act of 1958*

SEC. 202. Section 302 of the Federal Aviation Act of 1958 (49 U.S.C. 1343) is amended by inserting immediately after subsection (i) the following new subsection:

##### **"AIRCRAFT NOISE AND POLLUTION CONTROL SERVICE; POWERS AND DUTIES OF ADMINISTRATOR**

"(j) (1) There is hereby established in the Agency a Service to be known as the Aircraft Noise and Pollution Control Service. There shall be at the head of such Service a Director who shall be appointed by the Administrator subject to the civil service and classification laws. The Administrator shall delegate to the Director of the Aircraft Noise and Pollution Control Service the powers and duties of the Administrator relating to the elimination of noise created by aircraft, to the reduction of dangers of air pollution from the use of aircraft, and the protection of communities in this country from excessive interference or annoyance due to the operation of aircraft.

"(2) The Administrator shall conduct research and investigations, including the investigation of complaints, cooperate with local civic organizations and municipalities, and coordinate and consolidate current research projects to accomplish the following purposes:

"(A) Develop a workable measuring system for correlating the intensity and quality of aircraft noise with the distress to people on the ground caused by such noise.

"(B) Develop quieter aircraft through research and development in the fields of airframe and powerplant design and in the field

of vertical takeoff and landing equipment for aircraft.

"(C) Develop a comprehensive body of knowledge concerning methods and devices for aircraft noise abatement, including but not limited to, mechanical devices such as noise suppression devices for aircraft engines and ground baffle systems, procedural techniques applied through air traffic control systems such as preferential runway systems and greater ascent and descent angles for aircraft, and administrative procedures for aircraft noise abatement through local zoning regulations, airport site selection, and encouragement of appropriate land use by both Government and private persons in areas near airports and along present and proposed flight lines.

"(D) Coordinate research relating to aircraft noise abatement.

"(E) Foster the rapid evolution of non-air-pollution aircraft.

"(F) Determine the immediate cause and develop a solution for such other nuisances, arising from the operation of aircraft or airports, as may, from time to time, come to the attention of the Director.

"(3) (A) The Administrator shall, with due regard to safety, establish such rules and regulations as may be necessary to require the maximum utilization of aircraft noise elimination techniques and devices, the maximum utilization of techniques and devices for the reduction of the amount of pollution deposited in the air and for the abatement or elimination of such other conditions which constitute a nuisance to the public.

"(B) The Administrator shall, in his sound discretion, reimburse domestic air carriers for such sum as he may deem appropriate, and within the available appropriation of funds, up to 30 per centum of the actual expense involved in modifying existing aircraft or purchasing new aircraft designed to comply with any rule or regulation promulgated under this section.

"(C) The Administrator shall, in his sound discretion, reimburse the owners or operators of any airport for such sum as he may deem appropriate and within the available appropriation of funds, up to 30 per centum of the actual expense involved in modifying such airport to comply with any rule or regulation promulgated under this section.

"(D) The Administrator shall, in his sound discretion, reimburse the State or any municipality for such sum as he may deem appropriate, and within the available appropriation of funds, up to 90 per centum of the actual expense involved in acquiring land surrounding an airport or along present or proposed flight lines when such land is acquired wholly or in part to reduce the effect of noise, glare, or other annoyance from the operation of such airport; the Administrator may, by agreement, condition such grant on the preservation or use of such land for such public purposes as conservation parks, and roads; reimbursement may be provided for land previously acquired if it is so dedicated."

(d) That portion of the table of contents contained in the first section of the Federal Aviation Act of 1958 which appears under the heading "Sec. 302. Organization of Agency," is amended by striking out "(j) Supergrades." and insert in lieu thereof "(j) Aircraft Noise and Pollution Control Service; Powers and Duties of Administrator."

Mr. Speaker, for serious students of this subject, the following will be of great interest:

##### **COMMENTS OF ROBERT ALEX BARON ON CONSTRUCTION NOISE AND SUGGESTED LANGUAGE FOR NOISE CONTROL REGULATIONS**

Robert Alex Baron has long been an outspoken leader in the fight for noise

abatement. He is founder of the Upper Sixth Avenue Noise Abatement Association and is a member of the Noise Abatement Society of England. On May 13, 1966, he will address the 14th International Congress for Noise Abatement in Baden-Baden, Germany, on the problems of noise abatement in America.

Comments and suggestions of Mr. Baron follow:

##### **CONSTRUCTION NOISE: NEGLECTED HEALTH HAZARD**

(By Robert Alex Baron)

The American public is not being told the truth about noise pollution, and furthermore, is encouraged to believe the myths that prevent an intelligent attack on a problem that grows menacingly worse each year.

As one who is actively involved in a campaign to abate urban noise, especially construction noise, I am appalled at the barbaric callousness with which children, the elderly, all segments of the population, are exposed to possibly damaging and lethal dosages of noise and asked to accept this torture as a "necessary evil."

If this language sounds extreme, please note this excerpt from Western Germany's new law for protection against construction noise: "It is necessary to control the intimidation of the public by construction noise \* \* \* noise exceeding the limits of what could be considered human endurance."

What is this construction noise that is called "intimidating?" It is the noise generated by the air compressors, pneumatic drills, cranes, powersaws, cement mixers, and ramming devices necessary for demolition and construction. It is sound of a degree found in noisy factories, subways, and near four-engine bombers. It is unwanted sound that can be legally maintained from 7 a.m. to 6 p.m. (and through the night by special permit) 6 days a week, week in and week out for many months and years. It is noise legally defined as "temporary" and "necessary" and thus excluded from the laws of nuisance.

In an attempt to abate the 100-plus decibels of a 3-year construction project outside my midtown Manhattan apartment and office, I canvassed every area of city government, progressing from the policeman on the beat to the commissioner of health and ultimately the mayor. Finding only indifference and ignorance, I extended my search for relief from the nagging noise to the Governor's office and finally the U.S. Public Health Service. I also joined the Acoustical Society of America and communicated with noted experts in the field of acoustical science and engineering.

Imagine my amazement when I discovered the American public is completely at the mercy of the construction industry, that no program exists on any level of government to cope with construction noise, and what is even more alarming, that the predominant attitude of American engineers, lawmakers, and the courts abets any degree of construction noise as a "natural right" of that industry. Where "social utility" is involved, public suffering is "the price of progress."

This in spite of the World Health Organization's call upon metropolitan planners and environmental health officials "to insure that both in the general urban environment and in dwellings, noise and vibration are kept to acceptable levels," because "noise and vibration are known to exert deleterious effects on numerous organs of the human body, especially the nervous system."

The public neglect is not mirrored in private industry and in agencies of the Federal Government dealing with outer space and the Military Establishment.

Private industry, made conscious of noise by a half-billion dollars in workmen's compensation claims, and by additional millions



lost by noise-induced fatigue and inefficiency, is sponsoring factory-noise control research, hearing conservation programs, and industrial noise symposia.

Not community noise, but the noise environment of space and military personnel is the concern of the doctors, acoustical engineers, psychologists, and a host of other specialists working to understand and tame noise for NASA and the Armed Forces.

Why isn't the Earth-bound public entitled to the same acoustic attention as the man on the Moon?

What must we do to rectify this neglect? The first step is to face the question of values: does or does not the American public have the right to an acoustically desirable environment in which to live, to work, and to relax?

If the prevalent "public-be-damned" attitude were challenged, the public could be educated to recognize the harmful effects of noise and to reject the myth that present noise levels are a necessary "price of progress."

Even with the present neglect, the construction industry has access to reduced noise equipment and techniques. But that industry, indifferent to the public's comfort, and protected by law (construction noise is specifically excluded from existing noise codes) prefers to maintain the noisy status quo. Unless there is a demand for protective legislation, silenced equipment will not be able to compete with unimproved models and will remain relatively unused. By the same token manufacturers will not be encouraged to continue the development of noise-reduced machinery for public use.

President Johnson is calling upon the Great Society to launch a massive reconstruction of cities, to make them more livable for the four out of every five Americans who will live in them by 1980. If we do not address ourselves now to the problems of construction noise, how will we survive the years of 100-plus decibel environment created by the thousands of jack hammers, rock drills, compressors, ad nauseum, that will be used to do the job?

We live in a world of constant international and domestic crisis. It is more important than ever before that our ear drums, nervous systems, and hearts, be spared the unnecessary stress of raw noise.

#### SUGGESTED LANGUAGE FOR NOISE CONTROL REGULATIONS

(By Robert Alex Baron)

##### RULE 1. SOUND LEVEL MEASUREMENTS

Section A: Wherever the continuous noise level in an area makes it difficult to hear a loud spoken voice at a distance of 1 foot or where there exists active noise sources which produce high noise levels, sound level measurements shall be taken.

Section B: Wherever the continuous overall sound level exceeds 85 decibels, measured on the C-scale, flat network, of a sound level meter, octave band measurements shall be made as part of a more detailed study of the noise conditions. This sound level survey shall be repeated at 6-month intervals, or more frequently depending upon changes in plant conditions.

##### RULE 2. HEARING CONSERVATION CRITERIA

Section A: Continuous steady noise having a duration of 5 hours or more per day, 5 days per week, shall not exceed the levels for any of the octave bands listed in table I [not included in RECORD], in the 40-hour-week column. Immediate control methods shall be initiated if these standards are exceeded.

Section B: Continuous noise levels having a duration of 25 hours per week or less shall not exceed the levels of sound for the octave bands listed in table I. Immediate noise control methods shall be initiated if these standards are exceeded.

Section C: For short-term exposures to noise the criteria in table I [not included in RECORD] shall not be exceeded unless noise control methods are instituted. The maximum noise level permitted for any exposure in any octave band level however short in duration other than impact noises shall be 135 decibels.

##### RULE 3. NOISE CONTROL METHODS

Section A: Whenever it is feasible to do so, noise sources shall be eliminated or suppressed or the noise levels reduced by engineering methods. These methods shall include substitution of noise producing operations with quieter methods or operations; isolation of the noise source; total enclosure of noise source; general acoustical treatment of the work area; and suppression at the point of dissipation.

##### RULE 4. LIMITATION OF EXPOSURE

Section A: Permitted weekly exposures for high levels of sound which cannot be reduced or suppressed by control methods shall conform to the levels specified in table I [not included in RECORD].

Section B: If the time interval between impact noises is less than 1 second, the noise shall be considered as continuous. If the time interval between impacts is more than 1 second, the weekly exposure shall be in accordance with table I [not included in RECORD].

##### RULE 5. AUDIOMETRY

Section A: All employees who work in areas in which high noise levels exist, or are suspected, shall be given a preplacement ear examination which shall include an audiogram. Audiograms shall be taken under proper conditions by competent technicians. Audiograms shall be taken at least once every 6 months for all workers subjected to high noise levels during the course of their normal occupations, or more frequently if there is a significant decrease in the acuity of hearing.

##### RULE 6. PERSONAL PROTECTIVE DEVICES

Section A: Wherever it is not feasible to reduce the noise levels to those specified in table I [not included in RECORD] by noise control methods or limitation of exposure, then personal protective devices shall be provided and used.

Section B: Ear protective devices when needed shall be provided, fitted, and maintained by the employer.

Section C: Ear protective devices shall be fitted or determined individually and shall be initiated by and subjected to adequate medical supervision.

Section D: The user or wearer of ear protectors shall be indoctrinated as to the proper use and the limitations of ear protection devices.

Section E: The attenuation of sound by ear protection devices shall be greater than that needed to keep sound exposure levels below those specified in table I [not included in RECORD]. 40-hour-week column, or if this is not feasible then the protective devices shall maintain levels which can be used in accordance with the weekly exposure limits specified for various levels in table I [not included in RECORD].

##### RULE 7. MEASURING INSTRUMENTS

Section A: All instruments and methods of measurement used for noise surveys or in noise control or hearing conservation programs shall conform to applicable specifications outlined in the American Standards and their revisions.

224.3-1944. Sound level meters for measurement of noise and other sounds.

224.10-1953. Octave-band filter set for the analysis of noise and other sounds.

224.5-1951. Audiometers for general diagnostic purposes.

##### RULE 8. RECORDS

Section A: Records of all noise surveys and studies and results of individual audiometric determinations shall be maintained by the employer and shall be available upon request to the employee concerned.

[From the Archives of Otolaryngology September 1965, vol. 82, pp. 236-243, copyright 1965, by American Medical Association]

##### HEARING LOSS AND CORONARY HEART DISEASE

(By Samuel Rosen, M.D., and Pekka Olin, M.D., New York)

Our first study in 1960-61<sup>1</sup> among members of the Mabaan tribe in southeast Sudan revealed their superior hearing. At 500 to 6,000 cycles per second hearing is significantly more acute in all Mabaans aged 10 through 70 years than in people of the same age who live in industrial areas of the United States.<sup>2</sup> Except for the bleat of a goat and other sounds of nature, the Mabaans live in a dramatically quiet, almost silent atmosphere. The bombardment of excessive noise in our culture and the virtual absence of such in theirs could be one of the factors responsible for their superior hearing.

Generally, hearing loss and increase in blood pressure occur with aging in healthy persons of the United States,<sup>3</sup> while the Mabaans' systolic and diastolic blood pressures remain the same at 75 as at 15 years of age, and coronary heart disease is unknown in this tribe. The Mabaans probably have minimal generalized atherosclerosis and greater elasticity of the small arteries.<sup>4</sup> We saw no varicose veins or thrombosis, no bronchial asthma, duodenal ulcer, nor ulcerative colitis. Rheumatic heart disease was not found among the children. The Mabaans are well nourished, their posture is erect at all ages, and their body musculature is well developed and firm. We saw no obesity. They seem to age more slowly and live longer than we do and remain agile in their seventies and eighties.

Their diet is frugal. The main food is a ground millet, which they eat as a wet mash and from which they also make beer. They eat fish, nuts, and wild dates. They possess a few scrawny cattle, a few pigs, and goats which are never slaughtered intentionally but are eaten as they die. A few small eggs are available and are given to the youngest children. Their mean average cholesterol is 160 milligrams per 100 milliliters in contrast to ours of 250 milligrams per 100 milliliters. They are physically very active, especially the women, who perform the heaviest work carrying firewood and water on their heads for long distances. They do not smoke. In two separate studies with our group Dr. T. A. Baasher<sup>5</sup> of the Clinic for Nervous Disorders, Khartoum, and senior psychiatrist of the Republic of the Sudan assessed their lives to be singularly free of stress as we know it. There is, however, always the real fear of wild animals and poisonous snakes and concern over

<sup>1</sup> Rosen, S., et al.: "Presbycusis Study of a Relatively Noise-Free Population in the Sudan," *Ann. Otol.* 71:727, 1962.

<sup>2</sup> Glorig, A., et al.: "Some Medical Implications of the 1954 Wisconsin State Fair Hearing Survey," *Amer. Acad. Ophthal. Otolaryng.* 61:160-171, 1957.

<sup>3</sup> Lasser, R. P., and Master, A. M.: "Observation of Frequency Distribution Curves of Blood Pressure in Persons Age 20 to 106 Years," *Geriatrics* 14:345, 1959.

<sup>4</sup> Jansen, G., et al.: "Vegetative Reactions to Auditory Stimuli: Comparative Studies of Subjects in Dortmund, Germany, and the Mabaan Tribe in the Sudan," *Trans. Amer. Acad. Ophthal. Otolaryng.* 68:445-455 (May-June), 1964.

<sup>5</sup> Baasher, T. A.: Personal communication to the author.

whether the millet crops will last through the rainy season. Acute hearing is necessary for survival, so they have learned to listen since early childhood.

(Submitted for publication April 8, 1965. From the Mount Sinai Hospital and New York Eye and Ear Infirmary, consulting otologist (Dr. Rosen), and the Department of Otolaryngology, University of Helsinki, Finland (Dr. Olin). Read before the combined meeting of the sections on otolaryngology of the College of Physicians of Philadelphia and of the New York Academy of Medicine, March 17, 1965. Reprint requests to 101 East 73d Street, New York, 10021 (Dr. Rosen).)

Occasionally when a few Mabaans leave their area to live in the big city—Khartoum—they become prone to hypertension, hypercholesterolemia, coronary heart disease, and the stresses incident to big-city life.

High-frequency (12 to 24 kilocycles) studies,<sup>6</sup> conducted in 1962, again revealed

the Mabaan's hearing acuity to be far greater than that of similar age groups in New York, Dusseldorf, Germany, and in Cairo, Egypt. In 1961 Glorig and Davis<sup>7</sup> called our attention to an air-bone gap with aging and reported a 12 decibel air-bone gap at 4,000 cycles per second at age 55 in healthy persons in the United States who had not been exposed to noise. This is the typical air-bone gap seen in conductive loss.

Table 3 shows these same high-frequency medians in relation to those obtained in the Mabaan tribe and in the United States. It is interesting to see how much more superior the Mabaans' high frequency hearing is as compared to ours and again how much more superior these two groups are as compared to either Finnish hospital. This applies to medians and to the percentage of response of each frequency.

TABLE 3.—Comparison of medians (high frequency: 12 to 24 kc)

[MNO=median not obtainable; NR=no response]

	Age 40 to 49				Age 50 to 59			
	Mabaan	U.S.	Experimental hospital	Control hospital	Mabaan	U.S.	Experimental hospital	Control hospital
12 kc	35 db 100%	50.7 db 95%	70 db 85%	87.5 db 62%	53.6 db 98%	77.9 db 82%	88.8 db 59%	MNO 42%
14 kc	55 db 94%	83.7 db 70%	92.5 db 51%	MNO 38%	67.5 db 86%	MNO 38%	MNO 19%	MNO 12%
16 kc	89.6 db 57%	MNO 28%	MNO 10%	MNO 3%	MNO 31%	MNO 3%	NR 0%	NR 0%
18 kc	MNO 18%	MNO 7%	NR 0%	NR 0%	MNO 8%	NR 0%		
20 kc	MNO 4%	NR 0%			MNO 2%			
22 kc	MNO 0.9%				NR 0%			
24 kc	MNO 0.9%							
Number	108	105	39	37	108	117	97	105

#### SUMMARY AND CONCLUSIONS

In résumé, the experimental hospital patients, aged 50 to 59, heard 500–4,000 cycles per second by air-conduction better than patients aged 40 to 49 in the control hospital. At 12 kilocycles in the experimental hospital the 50- to 59-year-old patients heard as well as the 40- to 49-year-old patients in the control hospital. If the Glorig and Davis explanation of the conductive air-bone gap as a gradual diminution of elasticity of tissue inherent in aging is correct, then the much smaller air-bone gap at 4,000 cycles per second in the experimental hospital would again suggest that these patients age more slowly than those in the control hospital.

Just what is the effect of this apparent accelerated aging process in the patients in the control hospital? One of the principal structural effects seems to appear in the cardiovascular system giving rise to generalized atherosclerosis and coronary heart disease. This study shows that the difference in hearing in the two hospitals parallels the difference in the incidence of coronary heart disease. One must wait for the further passage of time and, with it, the occurrence of more cases of coronary heart disease to confirm this association. Therefore, it is very important to have autopsy evidence in these cases as to the state of the carotid and vertebral arteries and also the arterial and capillary blood supply to the inner ear, since diminished blood supply could alter cochlear function.

At what age does the long incubation period in the pathogenesis of atherosclerosis and coronary heart disease begin? If our vascular theory of hearing loss is plausible,

<sup>6</sup> Rosen, S., et al: "High Frequency Audiometry in Presbycusis: A Comparative Study of the Mabaan Tribe in the Sudan With Urban Populations," *Arch. Otolaryng.*, 79: 18–32 January 1964.

then young people (10 to 29 years) in a population where there is a high incidence of coronary heart disease should have less acute hearing for the high frequencies (12 to 24 kilocycles) than a similar young age group in a population area where the incidence of coronary heart disease is low.

Pursuing this final question we recently made a pilot study of two such groups of young people (10 to 29)—one in a remote area of east Finland near the border of the Soviet Union and the other in the mountains on the Dalmatian coast of Yugoslavia. The

40- to 59-year-old people in east Finland are notoriously hypercholesteremic (mean 297 milligrams per 100 milliliters) and have the highest incidence of coronary heart disease in Finland, whereas the 40- to 59-year-old Yugoslavs have a much lower mean blood cholesterol level (183 milligrams per 100 milliliters) and one of the lowest rates of coronary heart disease in all of Europe.

The young Yugoslavs hear the high frequencies better than the young Finns. In the 10- to 19-year range, the Yugoslavs hear better at 18 kilocycles, and in the 20- to 29-year-old groups, the Yugoslavs hear better at 14, 16, and 18 kilocycles (table 4). Does the poorer hearing of the Finns in the age range 10 to 29 years reflect the beginning of the long pathogenic vascular process that may eventuate in atherosclerosis and coronary heart disease?

Enos, Holmes, and Boyer<sup>13</sup> dissected the coronary arteries of 300 soldiers killed in action in Korea. The average age was 22.1 years. They found gross evidence of coronary disease in 77.3 percent of the soldiers. The disease varied from "fibrous" thickening to complete occlusion of one or more of the main branches.

It is at this point that the otologist may be able to make a contribution to the increasing data being gathered on the chief enemies—atherosclerosis and coronary heart disease. Pursuing our research further, as we are presently doing, we may be able to say as otologists that the preventive treatment of atherosclerosis must begin long before the evidence of diminished hearing of the high frequencies can be observed. It is not enough for the 40-year-old man, conscious of his expanding waistline and the coronary deaths of his friends, to begin a regime based on polyunsaturated fats and daily exercise and moderation of work, play, ambitious goals, etc. It is perhaps prudent to begin this educational process with young children. Many cardiologists have suggested the hypothesis that diet control should begin early in life. Our studies, showing the early signs of cochlear changes in children and young adults, point an otological finger to the value of this hypothesis.

(Dr. Johan Runeberg, chief of Nikkila Hospital, Helsinki, and Dr. Paavali Allvirta, chief of Kellokoski Hospital, Helsinki, and the African Medical and Research Foundation cooperated in this study, and Karen Siegel, M.A., staff audiologist, assembled the data.)

TABLE 4.—Percentage responding with medians at 12 to 20 kilocycles, of the total number tested in Dalmatia, Yugoslavia, compared to east Finland

	12 kilocycles		14 kilocycles		16 kilocycles		18 kilocycles		20 kilocycles	
	Percent	Median	Percent	Median	Percent	Median	Percent	Median	Percent	Median
Age 10 to 19:										
Dalmatia (36 cases).....	100	27.1	100	34.1	96	48.8	87	75.5	35	(1)
East Finland (21 cases)....	100	25.0	100	38.1	95	46.3	71	82.5	14	(1)
Age 20 to 29:										
Dalmatia (22 cases).....	100	32.0	100	45.8	91	70.8	46	(1)	5	(1)
East Finland (21 cases)....	95	30.5	95	55.0	71	85.0	10	(1)	0	(1)

<sup>1</sup> Median not obtainable.  
<sup>2</sup> Statistically significant.

[Summary of remarks to the American Medical Association, Dec. 4, 1963, at Portland, Oreg.]

#### THE TRAUMA OF EVERYDAY NOISE

(By Lee E. Farr, M.D., the University of Texas Graduate School of the Biomedical Sciences, Houston, Tex.)

The problem of intrusive noise is a newsworthy matter of general and public interest

not limited to the past several months since this program was organized. While the word "noise" seems meaningful to all, it is impossible to define "noise," as it is generally used, in terms of any of the physical parameters of sound waves. As Kryter points out in his monograph, the most acceptable definition and the one which particularly applies in

<sup>13</sup> Enos, W.; Holmes, R. H.; and Boyer, J.: "Coronary Disease Among U.S. Soldiers Killed in Action in Korea," *JAMA* 152: 1090–1093 (July 18) 1953.

<sup>7</sup> Glorig, A., and Davis, H.: "Age, Noise, and Hearing Loss," *Ann. Otol.*, 70: 556–571, 1961.



this discussion, characterizes noise as "unwanted sound." While the definition is subjective, so are many of the reactions of the individual to this type of physical experience.

There is no doubt that the intensive and effective campaigns for control of industrial sound levels have alerted people to the effects of adventitious sound. The advent of the jet age with increases in the number of arrivals and departures of planes at airports accompanied with the dramatic noise increase of the jet engine with attendant wide publicity has further sensitized persons to noise. The speech interference effects of a jet plane flying over a home have resulted in uncounted and very numerous instances of frustration—sometimes this was over the telephone and sometimes during a TV or radio broadcast. These more dramatic noise sources, jet planes, helicopters, heavy trucks, pavement pneumatic hammers have served, in part, to direct attention away from the home to the office, factory or community at large, both for the source of noise and the measures which can be used to control it. While the campaigns have generally been concerned with noises of a type and intensity that are capable of causing damage to hearing with no other factor operating, they focused attention also on the effects of noise in reducing efficiency of persons in a wide variety of commercial, industrial, and clerical operations.

I ask you to come back into the home and re-examine the home environment with me to see what has transpired there during the period since 1938 when McCord, Teal and Whittridge wrote an excellent article on noise and its effects on human beings. In 1938 they could say that air conditioning and noise prevention have a definite relationship in controlled human environment. They state and I quote: "It follows as a natural consequence that occupants of buildings living in artificial atmospheres and thus not dependent on open windows and doors will in some measures be protected against extraneous noise arising from traffic, nearby buildings or low flying aircraft." They continue, "the multiple and insidious ill effects of noise constitute an inadequately recognized baneful influence on the lives of many millions of persons throughout the country, especially those who live in urban areas . . . noise deafness constitutes the most serious and tangible of the ill noise effects (echoes), but there is in addition, a host of scarcely measurable injuries made evident by neuroses, loss of sleep, excessive fatigue, emotional disturbances and the like that jeopardize the complete well being of most persons, and in which noise may well play a part."

It is these latter phenomena with which I am concerned. This statement could have been written today and I strongly suspect tomorrow, without loss of applicability, for McCord, Teal and Whittridge could not foresee the extreme ingenuity which would develop various domestic devices, each of which would contribute to noise in the home, or the prosperity over a period of time which would make possible the equipping of most homes with one or more of these devices.

The kaleidoscopic change of household sound sources which are capable of continuing and augmenting some types of disability problems is very characteristic of rapidly advancing technology as we have today. The full cycle from first arousing community action at a point distant geographically and in time to the individual but returning to him through household intrusion has resulted in the newer technology giving rise to a new responsibility for the doctor—perhaps even a new area of special medical attention—individual home environment of which noise is one component.

The hypnotic power of numbers, statistical means, catchword phrases and appeals to the body politic seems to have bemused

physicians in meeting several of their most serious challenges of today. Individual control of a persons' immediate environment to promote health and well-being or to avoid or mitigate illness, must be recognized as the physicians responsibility and prerogative and not an area of specific exercise of community police powers or extension of community health services. Personal environmental control must be prepared to go far beyond community responsibility that the environmental circumstances may be selectively modified as required by the specific individual. While in principle, modern technology has made this possible, application of this knowledge to solution of or even the recognition of specific medical problems other than those permitting a statistical approach has been too frequently lacking. Knowledge of types and capabilities of room air filters, single faucet ion exchange water purifiers and control of household noise is not in the store of information generally available to or widely used by the doctor. Individual variation, a familiar fact to physicians, demands application of specific environmental controls for some persons which are not required by others who, however, may adequately be protected by measures appropriate to the large majority. As I have previously indicated, among the unadvertised contributors to the detriment of man's environment is everyday noise—that is noise encountered in the home and in ordinary transit. While for most individuals most of the time, noise of this intensity level may be completely tolerable, for others, it may be the triggering action setting off disturbances or preventing satisfactory control of disturbances and diseases commonly related to stressful situations. That heterogeneous everyday noise in the home environment is increasing to a new intensity in many situations can be attested to by an evening at home spent listening for it or by a stroll through too many of the newer larger apartment developments.

Let me further clarify the noise of which I am speaking and its effects. There are two types of noise effects with which we have to deal—the effect of noise which is of an intensity sufficient unto itself to cause acoustic damage if the period of action be long enough and the effects of noise which is not of such intensity or of such duration but may be of particular annoyance. In some instances noise of the first type, such as a jet plane may be capable of provoking acoustic damage and at the same time by its unexpected intrusion into personal environment have a very high annoyance value. As a general measure it can be said that other things being equal, the more intense a given noise the more annoying it is. In a similar fashion, sounds of higher frequencies are more annoying than a pure tone at 250 cps of equal loudness. The stimulus or noise as a producer of physical events is admirably characterized by the convulsive response of the patient with tetanus to a noise in his environment. With the underlying disease not manifest when the patient is quiet in a quiet environment by merely snapping the fingers the disease not only becomes clearly evident but this tetanic spasm becomes a matter of major concern and must be controlled. The trauma is clear and evident.

Unlike this provocation, the circumstances of annoyance which are frequently present at home lead to an encountered sequence of events which is usually decidedly unclear. But the absence of an immediate response does not necessarily indicate any absence of trauma. The late effects of radiation have pointedly forced us to look to chains of events which may result in manifest disease or disease exacerbations long past the period during which the noxious agent is applied and a response that gives no awareness of the immediate agent.

The trauma of which I speak may perhaps be better characterized as psychological since it results from perception of sensation which in turn under the specific conditions of the individual reacts to develop or to reinforce psychosomatic patterns of disability. The result of these reactions may be finally evident in an increase in symptomatology referable to the gastrointestinal tract, altered response to a common allergen, development of migraine attacks or any of the other manifestations of psychic stresses mediated through psychosomatic channels. How frequently does this type of happening occur and result in an exacerbation of illness related to a duodenal ulcer or colitis? How frequently is a well designed therapeutic regimen upset by intensive or aggravating noise triggering mechanisms which regimen otherwise would be effective in promoting a subsidence of symptoms. How well does the physician know these important components in the patient's home environment, of which he must be aware, to ascertain if impersonal factors of this type are making the disease pattern worse? How many alternatives does he have to solve this environmental control problem. While he is aware of color and light, heat and cold, what about noise and quiet?

Let us examine the manufacture of noise in a typical American household by several of the appliances which are in widespread use today. First, the examination will be from the standpoint of capability of production of acoustic damage. The estimates which I present were obtained by actual measurement in an apartment in Houston, Tex. The rooms were as large or larger than might be expected to be found in most homes and the furniture was that of the householder. A few of the more common noise sources were measured. In general, only those noises were measured which are produced at a constant level and which are dependent solely upon the use of the device. While measurement was made of a hi-fi unit, this was for comparison purposes only. Such a unit will vary in its production of sound depending on the user and the circumstances. In general a teenager will use it to produce a louder sound than will an adult with reasonably intact hearing. The noise produced by a hi-fi, radio or TV is therefore controllable by the immediate user and presumably adjustable to a level which is pleasing to him.

Traumatic everyday noise is, in general, sound generated by the acts of another and over which the captive listener has little control. A vacuum cleaner or dishwasher, however, produces a certain level of noise by its operation and thus cannot be reduced by operation at half power without sacrificing greatly the efficiency of the unit. If we examine the living room we find it to be satisfactorily quiet at a 50-decibel level. A vacuum cleaner run in this room will produce a noise at a level of 73 decibels at the user's ear when the nozzle is fully engaged on the rug. When, however, the nozzle is lifted so air can be drawn into it with high volume, the noise level rises to 81 decibels. This is not a low level of noise. The occupants of this dwelling playing a hi-fi at an intensity which one might call at the threshold of loudness, but well below a vibrant level, found it produced 80 decibels 6 feet from the instrument. In the kitchen there were a large variety of noise producing devices. Only those were tested which seemed to produce the greater sound. The kitchen was not as quiet as the living room though there were no extraneous sound sources, but the air conditioner, a central unit, seemed more noisy. The vent fan over the stove, a single speed unit mounted in a metal canopy on the wall and ceiling, operated to produce a sound level of 84 decibels. When the dishwasher was run



simultaneously the level rose to 88 decibels, and, if at the same time, the sink garbage disposal unit was turned on, sound production rose to 91 decibels measured at the lower and steady level of sound effects of the disposal unit. At peak noise levels for the garbage disposal unit the total sound production was over 100 decibels. Thus, we see that in the kitchen we can produce sound at such a level of intensity that if one were exposed to it for a full working day over an interval of time, acoustic damage would result. I point this out merely to emphasize how increments, each perhaps acceptable in itself, can reach a sum which is unacceptable.

[From Municipal Law, 1957]

SECTION 26-65. SOUND TRUCKS AND SOUND AMPLIFYING DEVICES<sup>1</sup>

Cities must cope with the problem of controlling loud and unnecessary noises but any regulation or suppression of sound trucks and other sound amplifying devices must be effected within the framework of the constitutional protection of freedom of speech and assembly.

Municipalities generally have the power to regulate or prohibit unreasonably loud disturbing and unnecessary noises.<sup>2</sup> "Noise" is construed to mean an unreasonable noise that disturbs the community.<sup>3</sup> Municipal attempts to control certain kinds of noise have been struck down as invalid.<sup>4</sup> But an ordinance prohibiting any noise of any kind "by crying, calling or shouting, or by means of any whistle, rattle, bell, gong, clapper, hammer, drum, horn, or similar mechanical device, for the purpose of advertising any goods, wares or merchandise" or attracting customers has been held valid under a city's power to regulate traffic and the use of streets and of public places for selling merchandise.<sup>5</sup> The prohibition against outcries for sale of merchandise has also been upheld under the city's power to preserve the peace and good order and to suppress nuisances.<sup>6</sup>

The use of sound amplifiers and vehicles with sound-amplifying devices are regulated by police ordinances of cities and such police power regulations have been upheld as not

being in violation of free speech, freedom of worship, or the constitutional privilege to communicate thought.<sup>7</sup> The Supreme Court of Colorado has upheld a city ordinance prohibiting the use of sounding devices or the employment of "any loud or offensive device or performance as a means of advertising or attracting a crowd" which was enforced against a minister preaching at a crowded city corner with the use of a loudspeaker.<sup>8</sup> In distinguishing the *Cantwell* case<sup>9</sup> which involved the requirement of a license from a public official but did not involve either a breach of the peace or citizen's complaints of being disturbed, the Colorado court found the defendant's conduct amounted to a breach of the peace and was disturbing to tenants and property owners in the neighborhood, and concluded that: "In the administration of the ordinance in the present case we see no attempt, overt or hidden, to override constitutional guarantees. We believe the people of Montrose have the right to protect themselves from concentrated and continuous cacophony."

It has also been held that the enforcement of an ordinance prohibiting a loud speaker or a public address system on a vehicle against one who used a loud speaker to broadcast recorded sermons did not infringe upon his constitutional rights under the State or Federal Constitution where it appeared the broadcast was very noisy and disturbed public schools and citizens and could be heard for blocks.<sup>10</sup> An ordinance providing for a permit costing \$25 for the use of a sound truck or loud speaker on the streets was held to be reasonable and not violative of free speech guarantees where the ordinance could be construed as making the issuance of the permit mandatory upon payment of the fee.<sup>11</sup> An ordinance requiring a license for the operation of an advertising sound machine was held valid with respect to labor union representatives.<sup>12</sup> But authority to regulate public parks does not vest power to prohibit the use of loudspeakers in the vicinity of a park.<sup>13</sup>

In the leading case on sound trucks,<sup>14</sup> the Supreme Court of the United States ruled that a city cannot require a permit, issuable in the discretion of a police chief, for the use of a sound truck by a religious sect in a public park. By dictum the Court indicated that a city may restrict the use of sound trucks as to time, place, and volume of sound. The majority opinion of the Court was based in part upon this reasoning: "We hold that section 3 of this ordinance is unconstitutional on its face, for it establishes a previous restraint on the right of free

speech in violation of the 1st amendment which is protected by the 14th amendment against State action. To use a loud speaker or amplifier one has to get a permit from the chief of police. There are no standards prescribed for the exercise of his discretion." Emphasizing strongly the element of previous restraint on freedom of speech entailed in the permit requirement of the ordinance and finding that "loud speakers are today indispensable instruments of effective speech," the Court said: "The right to be heard is placed in the uncontrolled discretion of the chief of police. He stands athwart the channels of communication as an obstruction which can be removed only after criminal trial and conviction and lengthy appeal. A more effective previous restraint is difficult to imagine."

An ordinance making unlawful the operation of a sound truck with a sound or noise producing device upon city streets in certain sections of the city and at certain times was upheld upon evidence of the nuisance character of the sound truck and its creation of traffic hazards to motorists and pedestrians.<sup>15</sup> Another antinoise ordinance barring inter alia, the use of mechanical loudspeakers or amplifiers on trucks or other moving vehicles for advertising purposes, except where specific license is received from the police department" was also upheld as a proper exercise of the police power, the court enunciating the proposition that a city "may prohibit or condition as it deems proper the use of city streets as a place for the carrying on of private business."<sup>16</sup> This is consistent with the view expressed by the Supreme Court of the United States that "It is well established that the highways of the State are public property—that their use for purposes of gain is special and extraordinary, which, generally, at least, the State may prohibit or condition as it sees fit."<sup>17</sup>

These conclusions may be reasonably drawn from the sound truck decisions: (1) previous restraints upon civil liberties will not be tolerated; (2) where civil liberties are not involved, police power measures will be upheld if they are otherwise reasonable; (3) commercial advertising through the use of sound trucks on city streets can be legally prohibited.<sup>18</sup>

EXCERPT FROM STATEMENT OF CHARLES W. HARPER, DIRECTOR, AERONAUTICS DIVISION, OFFICE OF ADVANCED RESEARCH AND TECHNOLOGY, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, BEFORE THE SUBCOMMITTEE ON ADVANCED RESEARCH AND TECHNOLOGY, COMMITTEE ON SCIENCE AND ASTRONAUTICS, HOUSE OF REPRESENTATIVES, MARCH 1966

[Charts referred to in the text were not included in manuscript submitted.]

Engine types using hydrogen as fuel: Although these high values are theoretically possible, no conclusive evidence exists that they can be realized in practice. In 1967 Lewis Research Center will be engaged

<sup>15</sup> *Brachey v. Maupin*, note 7 supra.

<sup>16</sup> *Maupin v. Louisville*, 284 Ky 195, 144 SW2d 237 (1940).

<sup>17</sup> *Stephenson v. Binford*, 287 US 251, 77 L ed 288 (1932), and cases cited there. See also *Schneider v. Irvington*, 308 U.S. 147, 84 L ed 155 (1939), dictum as to commercial solicitation; *Stodder v. Rosen Talking Machine Co.*, 241 Mass 245, 135 NE 251, 22 ALR 1197 (1922), barring playing loudly of phonograph in doorway of business establishment; *Weber v. Mann*, 42 SW2d 492 (Tex Civ App 1931), holding a radio is not a nuisance per se; *Grantham v. Gibson*, 41 Wash 125, 83 P 14 (1905), enjoining playing of certain musical instruments to detriment of hotel business.

<sup>18</sup> See Nimlo Report No. 123, op. cit. note 1 supra.

<sup>1</sup> For complete discussion of subject see Nimlo Report No. 123, Municipal Control of Noise—Sound Trucks—Sound Advertising Aircraft—Unnecessary Noises—Model Annotated Ordinances (1948).

<sup>2</sup> *Matteson v. Eustis*, 140 Fla. 591, 190 So 558 (1939), operation of rip-saw in backyard sustained conviction for disturbing the peace; *Louisiana v. Bottoms*, 300 SW 316 (Mo App 1927), shouting by a preacher at a religious meeting.

<sup>3</sup> *State v. Cantieny*, 34 Minn 1, 24 NW 458 (1885).

<sup>4</sup> *Louisiana v. Bottoms*, note 2 supra, loud shouting at intervals by a pastor during evening church services held not a disturbance of the peace or violation of ordinance; *Baum v. Cooper*, 131 NJL 574, 37 A2d 830 (1944), invalidating an antinoise ordinance; *Stoffel Seals Corp. v. Tuckahoe*, 206 Misc 597, 134 NYS2d 114 (1954), holding invalid and discriminatory an ordinance barring operation of machines producing any noise audible outside the premises; *People v. Arkow*, 124 NYS2d 704 (1953), holding a properly functioning home air conditioning unit did not violate an ordinance prohibiting loud, disturbing and unnecessary noises; *People v. Rochester*, 44 Hun (NY) 166 (1887), singing religious songs on streets not a violation of ordinance forbidding disturbing noises.

<sup>5</sup> *Goodrich v. Busse*, 247 Ill. 366, 93 NE 292 (1910).

<sup>6</sup> *New Orleans v. Fargot*, 116 La 369, 40 So 735 (1906).

<sup>7</sup> *Kovacs v. Cooper*, 336 US 77, 93 L ed 513, 10 ALR2d 608 (1949); *Haggerty v. Kings County* 117 Cal App2d 470, 256 P2d 393 (1953); *Hamilton v. Montrose*, 109 Colo 228, 124 P2d 757 (1942); *State v. Headley*, 48 So2d 80 (Fla 1950), upholding arrest of candidate for political office for using vehicle with loud speaker; *Brinkman v. Gainesville*, 83 GaApp 508, 64 SE2d 344 (1951); *Brachey v. Maupin*, 277 Ky 467, 126 SW2d 881, 121 ALR 969 (1939); *Posner v. Cooper*, 83 NYS2d 460 (1948). But see *Lovell v. Griffin*, 303 US 444, 82 L ed 949 (1938); *Hague v. CIO* 307 US 496, 83 L ed 1423 (1939); *Cantwell v. Connecticut*, 310 US 296, 84 L ed 1213 (1940).

<sup>8</sup> *Hamilton v. Montrose*, note 7 supra.

<sup>9</sup> *Cantwell v. Connecticut*, note 7 supra.

<sup>10</sup> *Brinkman v. Gainesville*, note 7 supra.

<sup>11</sup> *Posner v. Cooper*, note 7 supra.

<sup>12</sup> *Faria v. Violette*, 32 F. Supp. 239 (Mass. 1940).

<sup>13</sup> *People v. Caponigri*, 189 Misc. 9, 6 NYS 2d 577 (1938).

<sup>14</sup> *Saia v. People*, 334 US 558, 92 L. ed. 1574 (1948). But see, *Kovacs v. Cooper*, note 7 supra.



actively in research on the fundamentals of hydrogen combustion as related to achieving the high values of specific impulse desired.

Operating problems research contains within it the two disciplines of operating environment and system dynamics research. Operating environment research combines all of the meteorological research, such as radiation hazards, rough air characteristics determination, clear air turbulence detection, etc., as well as the aircraft noise research which is discussed at some length in following paragraphs. The system dynamics research recently has been given explicit recognition in view of its rapidly increasing importance. This includes the very important research related to integration of the pilot into a new aircraft in a way to insure a satisfactory total system.

#### NOISE RESEARCH

Noise research, both local noise and sonic boom, is of primary concern to us. Noise is already compromising aircraft performance, utilization, and safety. It is obviously pointless for NASA research to continue on advanced aircraft if they cannot achieve public acceptance because of the noise associated with their operation. Chart 8, "Aircraft Noise Source Research" (fig. NASA RA 65-2206), outlines the NASA noise research program insofar as noise control at the source is concerned. Activities grouped under basic source studies refer to those studies directed at obtaining an understanding of exhaust noise sources in a jet. Many cut and dried attempts to suppress exhaust noise have failed to do this without excessive cost in efficiency, weight, and complexity. It is clear a more basic understanding of the mechanism of noise generation is required if a major reduction in noise generation is to be achieved. The problem is a complex one. Thus, aside from its own in-house studies of jet acoustics NASA has contracts with four universities and one industry member, all taking different experimental and theoretical approaches toward reaching this understanding.

It must be admitted that even a full understanding of the mechanism of noise generation does not guarantee a solution can be found, but it is certainly a prerequisite. Fortunately, for the moment, the jet exhaust noise during approach and landing has been overshadowed by the fan-compressor noise emitted from the inlet. We say "fortunately" because it appears this noise is more amenable to control than exhaust noise. NASA is continuing its in-house studies with small laboratory compressors and air inlets to determine how the geometric details of the inlet, fan, and stator affect the noise generated and emitted from the front of the engine. In fiscal year 1966 a design study by industry will be completed giving a full-scale inlet design based on research data obtained from the laboratory tests; fiscal year 1967 should see construction and ground test of the full-scale unit. In fiscal year 1968 construction of a large scale three stage compressor will be completed and laboratory research with this equipment to extend the current smaller scale research program on compressor noise will be underway by fiscal year 1967. Finally, NASA has reactivated an industry sound suppressor program initiated some years ago but abandoned before the noise problem became acute. This experimental system will be completed and flown on the NASA 990 during fiscal year 1966. If the effectiveness is determined to be significant both in the sense of noise suppression and operational acceptability, the program will be expanded to apply the same principles to other engines.

Research on the noise source is but part of the NASA research activity. NASA, working with FAA and industry, is examining the possibilities of moving the source away from the observer through steeper descent during approach to landing and steeper climbout

after takeoff. With regard to steep descents it must be recognized that the safest approach to a landing is a flat one using considerable power, although it is also the noisiest to an observer. Departures from this create a more difficult problem for the pilot.

NASA research will be directed at determining what aircraft characteristics can be changed to prevent this piloting problem from becoming unacceptably difficult, what new flight information might be required for the pilot and what new piloting techniques might be required or beneficial. A very wide range of possibilities exists, of course, ranging from simply changing flight techniques, through the development of new guidance systems or, finally, to major aircraft modifications. All of these possibilities are being examined. The steep climbout is a somewhat different problem. The climbout angle is fixed by the payload; any improvement in aircraft characteristics which could increase climb angle would allow also an increase in payload if no change in climb angle were taken. Thus, while NASA research will continue on means of improving aircraft characteristics, both aerodynamic and propulsion, which affect climbout it is clear that some regulatory action is required to prevent these from being translated directly into more payload. Chart 9 "Perceived Noise Levels Civil Turbojet and Turbofan Aircraft" (fig. NASA RA 65-1870), illustrates what could be accomplished in the way of reducing ground observed noise if it proves possible to use steep descent and no climbout procedures.

In chart 10, "Approximate Annoyance Zones" (fig. NASA RA 65-1872), we have summarized the target goals by combining all effects. Here we have used 100 PNdB as a beginning annoyance level since annoyance from lower noise levels seems to be eliminated by normal house construction. At this time it appears that annoyance may be restricted ultimately to between 2 and 3 miles from the airport during approach and 3 to 4 miles during takeoff. It would seem very likely that community planning will be required in order to assure that land usage in these areas will not be such that extreme sensitivity to noise exists.

#### FLIGHT DYNAMICS

Flight dynamics, the study of the motion of an aircraft about its average flight path and the control of this motion by the pilot or automatic control system, represents the other major research activity within operations research. Until now flight dynamics research has been loosely divided between the advanced research disciplines of aerodynamics and operations, but it has become evident that it is a major problem requiring special attention. The trace on the bottom of chart 11, "Cockpit Acceleration, Rough Air Flight" (fig. NASA RA 65-2212) shows one example of the problems; this is the acceleration, or "g", trace of a jet transport flying in rough air and is a case where the pilot control input is coupled with the rough air motion to cause an increasing pitching oscillation finally resulting in an uncontrollable drive. The upper trace shows the "g" history taken from an NASA piloted simulator used to study the same problem.

POLYTECHNIC INSTITUTE OF BROOKLYN,  
Brooklyn, N.Y., July 20, 1964.

HON. THEODORE R. KUPFERMAN,  
New York, N.Y.

DEAR COUNCILMAN KUPFERMAN: Your letter of June 26, 1964, addressed to Mr. Corrae has been brought to my attention.

As Commissioner Birns indicated to you in his letter of June 23, 1964, we are proposing the incorporation of provisions for the control of noise within multiple dwellings in the new building code being prepared for the city of New York. Although provisions of this kind are included in the codes of a number

of foreign countries, they are something of a national innovation here. While there has been considerable controversy over these provisions, we have been encouraged by the fact that the prospect of controls in the city has evoked a large amount of positive public reaction.

The noise control provisions in multiple dwellings are presently limited to the control of noise transmitted by air from apartment to apartment (airborne) and, secondly, by transmission through the structure (impact, vibration). However, the noise control provisions we are proposing include among them several covering the installation of cooling towers and other roof machinery. In this we attempt to control the vibration of such machinery which, in turn, will retard the amount of noise emanating from them (both internally and externally).

We have discussed, at some length, the element of external noise. It was interesting to find in our studies that there were provisions in some communities for the control of such noise through performance standards. We found this in Chicago, Ill., Warwick, R.I., and Fair Lawn Borough, N.J., as well as in New York City. The regulations in Chicago and Warwick are part of the zoning laws and that in Fair Lawn Borough appears to be a local ordinance. We also find similar provisions in the New York City zoning resolution under section 42-21 applicable to manufacturing districts (as is the case in the other communities). From the above, it would appear that the control of external noise is generally regarded as a zoning problem rather than a building code problem. As yet, no final decision has been made concerning the possibility of writing workable, adoptable regulations on external noise. I hasten to add, however, that even if the decision to proceed in this direction is made, we do not anticipate completion of the code before next spring. Secondly, there is some doubt as to the extent one can make provisions retroactive. Thus, our code would not seem to offer a solution to your immediate problem.

If we can be of any further assistance to you, please let us know.

Very truly yours,  
CHARLES E. SCHAFFNER,  
Vice President for Administration.

#### REACTION OF PEOPLE TO EXTERIOR AIRCRAFT NOISE

(By Leo L. Beranek, Karl D. Kryter, Laymon N. Miller)

[Figures referred to cannot be reproduced in the Record.]

Since 1949, our firm has been engaged in various programs of investigation concerned with: propeller and jet aircraft noise; engine noise suppression on air bases and in flight; sound propagation through the atmosphere and over terrain; reaction of people in offices and communities to aircraft noise; and planning of air bases and surrounding residential communities to minimize noise nuisance. Our work has been sponsored by the U.S. Government, the Port of New York Authority and to a lesser extent by other airport agencies.<sup>1 2 3</sup>

<sup>1</sup> A. C. Pietrasanta and K. N. Stevens, "Noise Exposure in Communities Near Jet Air Bases," Noise Control 4, No. 2, pp. 29 ff (March 1958).

<sup>2</sup> "Studies of Noise Characteristics of the Boeing 707-120 Jet Airliner and of Large Conventional Propeller-Driven Airliners," report prepared for the Port of New York Authority, Bolt, Beranck & Newman Inc., Cambridge, Mass., October 1958.

<sup>3</sup> "Studies of Noise Characteristics of the Comet 4 Jet Airliner and of Large Conventional Propeller-Driven Airliners," report prepared for the Port of New York Authority, Bolt, Beranck & Newman Inc., Cambridge, Mass., October 1958.

Each airport and the communities surrounding it constitute a special situation. A full evaluation of community disturbance by aircraft operations requires detailed knowledge of many factors. These factors differ from airport to airport and include such diverse items as distance of the nearest populated areas from the ends and the sides of runways, type and density of air traffic, runway utilization operational procedures of the airlines, prevailing type of home-building construction, socio-economic status of the communities involved, and motivation and attitude of the residents toward the airport. Conclusions drawn for one airport and its activities in relation to the surrounding neighborhoods are not specifically applicable to other airports.

The prediction of the annoyance of a neighborhood to a change in operations from that airport is not altogether hopeless. We have written several papers giving preliminary guidance on this subject. The present paper is another progress report along these lines. It makes use of the relatively new method of rating the perceived "noisiness" of an aircraft noise by means of units called the PNdb.<sup>23,24</sup> It also takes into account the

statistical nature of the noise produced in a neighborhood located off the end of a runway.

The assessment of the change in annoyance in a neighborhood adjacent to an airport due to a change in aircraft operation from that airport involves at least the following steps:

1. The assignment of a "perceived noise level," in PNdb, to aircraft operations over each part of a community. This quantity may be the result of direct statistical measurement of the aircraft noise or it may be computed from a knowledge of noise data on individual aircraft and from a knowledge of the projected operations.

2. The comparison of the statistical pattern of the expected perceived noise levels for the new situation with that for some known situation. If the existing annoyance situation for the airport under consideration is already known, the effect of introducing a different type of aircraft, or of preferential runway systems, or of limiting operations to certain heights or times of day or year may be judged.

#### PERCEIVED NOISE LEVELS

Although the measurement of human reactions is a complex problem, some orderly relations between the readings recorded from

physical instruments and the feelings people experience when they are exposed to sound have been established. One such relation developed during these studies<sup>23,24</sup> is the perceived noise level in units of PNdb. This quantity expresses in a compact way the measure of "noisiness" that is implicit in a listener's reactions to the sounds of aircraft and yet it is measured on a scale that is roughly comparable to the more familiar scales of physically-measured noise levels. The detailed manner in which perceived noise levels (PNdb) are computed from measured noise levels (db) is given by an example below.

The perceived noise level takes into account the distribution of power as a function of frequency, i.e., the frequency spectrum of a sound. In particular, the perceived noise level of a sound reflects the fact that people judge higher frequencies to be more annoying or less acceptable than lower frequencies when factors such as "meaning," novelty, adaptation, etc., are held constant. The method of computing perceived noise level follows the concepts and structures, but not the loudness function, developed by S. S. Stevens<sup>25</sup> for calculating the loudness level of a complex sound.

TABLE 1.—Conversion of octave-band sound pressure levels in decibels to octave-band perceived noisiness in noys

Sound pressure levels in decibels re 0.0002 microbar	Frequency band—								Sound pressure levels in decibels re 0.0002 microbar	Frequency band—							
	20 to 75	75 to 150	150 to 300	300 to 600	600 to 1,200	1,200 to 2,400	2,400 to 4,800	4,800 to 10,000		20 to 75	75 to 150	150 to 300	300 to 600	600 to 1,200	1,200 to 2,400	2,400 to 4,800	4,800 to 10,000
20							0.6	1.0	86	10.2	15.9	21.0	26.0	26.0	34.0	53.0	86.0
30				0.5	0.5	0.7	1.2	2.1	87	11.1	17.0	22.5	28.0	28.0	36.0	57.0	92.0
40			0.6	1.0	1.0	1.4	2.4	4.3	88	12.1	18.3	24.0	30.0	30.0	38.0	61.0	97.0
45			0.9	1.5	1.5	2.0	3.3	6.0	89	13.1	19.5	26.0	32.0	32.0	41.0	65.0	103.0
50		0.6	1.4	2.1	2.1	2.9	4.7	8.5	90	14.2	21.0	28.0	34.0	34.0	44.0	70.0	110.0
51		0.6	1.6	2.2	2.2	3.0	5.1	9.0	91	15.3	22.0	30.0	37.0	37.0	47.0	75.0	117.0
52		0.7	1.7	2.4	2.4	3.2	5.4	9.7	92	16.5	24.0	32.0	40.0	40.0	50.0	80.0	124.0
53		0.8	1.8	2.6	2.6	3.5	5.8	10.5	93	17.0	26.0	34.0	43.0	43.0	53.0	85.0	132.0
54		0.9	2.0	2.8	2.8	3.7	6.2	11.0	94	19.5	28.0	36.0	46.0	46.0	57.0	91.0	141.0
55		1.0	2.2	3.0	3.0	4.0	6.7	11.8	95	21.0	30.0	39.0	49.0	49.0	61.0	97.0	150.0
56		1.1	2.4	3.2	3.2	4.3	7.2	12.5	96	22.5	32.0	42.0	53.0	53.0	66.0	104.0	160.0
57	0.5	1.2	2.6	3.4	3.4	4.6	7.7	13.4	97	24.0	34.0	45.0	57.0	57.0	71.0	111.0	170.0
58	0.6	1.3	2.7	3.6	3.6	5.0	8.2	14.4	98	26.5	37.0	48.0	61.0	61.0	75.0	119.0	180.0
59	0.6	1.5	3.0	3.9	3.9	5.3	8.7	15.4	99	28.0	40.0	51.0	65.0	65.0	80.0	127.0	191.0
60	0.7	1.6	3.2	4.2	4.2	5.7	9.3	16.5	100	30.5	42.0	55.0	70.0	70.0	86.0	135.0	203.0
61	0.7	1.5	3.4	4.5	4.5	6.1	10.0	17.6	101	32.5	45.0	59.0	75.0	75.0	92.0	144.0	215.0
62	0.9	2.0	3.7	4.8	4.8	6.5	10.7	18.8	102	35.0	49.0	63.0	80.0	80.0	98.0	159.0	228.0
63	1.0	2.2	4.0	5.2	5.2	7.0	11.5	20.0	103	38.0	53.0	67.0	86.0	86.0	105.0	165.0	242.0
64	1.1	2.4	4.3	5.6	5.6	7.5	12.3	21.3	104	41.0	56.0	71.0	92.0	92.0	113.0	175.0	256.0
65	1.2	2.6	4.7	6.0	6.0	8.0	13.1	22.7	105	43.0	60.0	76.0	98.0	98.0	120.0	187.0	273.0
66	1.4	2.9	5.1	6.5	6.5	8.6	14.0	24.0	106	46.0	64.0	82.0	106.0	106.0	128.0	200.0	290.0
67	1.6	3.2	5.5	7.0	7.0	9.2	15.0	25.6	107	50.0	68.0	88.0	113.0	113.0	136.0	213.0	310.0
68	1.8	3.5	5.9	7.5	7.5	9.9	16.0	27.4	108	53.0	73.0	94.0	120.0	120.0	145.0	226.0	328.0
69	2.0	3.9	6.3	7.9	7.9	10.7	17.2	29.3	109	57.0	78.0	100.0	129.0	129.0	155.0	240.0	348.0
70	2.2	4.3	6.8	8.4	8.4	11.5	18.5	31.3	110	61.0	84.0	106.0	139.0	139.0	165.0	260.0	370.0
71	2.5	4.7	7.3	9.0	9.0	12.2	19.8	33.4	111	66.0	90.0	114.0	150.0	150.0	177.0	275.0	395.0
72	2.7	5.1	7.8	9.6	9.6	13.0	21.0	35.5	112	71.0	96.0	122.0	166.0	166.0	190.0	293.0	420.0
73	3.0	5.6	8.4	10.3	10.3	14.0	22.5	38.0	113	76.0	103.0	130.0	170.0	170.0	203.0	315.0	445.0
74	3.4	6.1	9.0	11.0	11.0	15.0	24.0	40.5	114	82.0	111.0	139.0	181.0	181.0	215.0	335.0	470.0
75	3.8	6.6	9.7	11.8	11.8	16.0	25.7	43.0	115	87.0	119.0	148.0	192.0	192.0	230.0	360.0	500.0
76	4.2	7.3	10.5	12.7	12.7	17.0	27.5	46.0	116	93.0	125.0	158.0	205.0	205.0	245.0	380.0	-----
77	4.6	7.9	11.2	13.7	13.7	18.3	29.5	49.0	117	100.0	134.0	169.0	220.0	220.0	260.0	405.0	-----
78	5.0	8.5	12.0	14.7	14.7	19.5	31.5	51.0	118	106.0	145.0	180.0	237.0	237.0	280.0	435.0	-----
79	5.5	9.2	13.0	15.8	15.8	21.0	33.7	55.0	119	113.0	155.0	192.0	255.0	255.0	300.0	465.0	-----
80	6.2	9.9	14.0	17.0	17.0	22.5	36.0	59.0	120	120.0	165.0	204.0	275.0	275.0	320.0	500.0	-----
81	6.7	10.8	15.0	18.3	18.3	24.0	38.0	63.0	125	170.0	225.0	280.0	385.0	385.0	440.0	-----	-----
82	7.3	11.7	16.0	19.5	19.5	25.5	41.0	67.0	130	235.0	315.0	390.0	510.0	510.0	-----	-----	-----
83	8.0	12.7	17.1	21.0	21.0	27.5	44.0	71.0	135	325.0	425.0	-----	-----	-----	-----	-----	-----
84	8.7	13.8	18.3	22.5	22.5	29.5	47.0	76.0	140	450.0	-----	-----	-----	-----	-----	-----	-----
85	9.4	14.8	19.5	24.5	24.5	31.0	50.0	81.0	-----	-----	-----	-----	-----	-----	-----	-----	-----

The rating scheme using perceived noise level (in PNdb) was derived from studies in which people judged the relative annoyance value of pure tones and narrow bands of noise. The weights assigned to the various frequency components of a sound and the method of calculating PNdb are not based upon judgments made of the noise from airplanes.

However, we conducted a series of experiments in which people judged the relative acceptability of the flyover noise made by

various jet and piston engine aircraft. The data from these judgment tests revealed that PNdb values calculated from a knowledge of the spectra of the aircraft sounds involved tended to underestimate by a few decibels the relative noisiness or unacceptability of the noise from the jet aircraft. Nevertheless, the perceived noise level predicted the acceptability of the jet and piston aircraft noises more accurately than did other methods, as will be shown in more detail in a later section of this article.

Perceived noise levels in PNdb have several useful interpretations. Suppose, for example, that airplane P has a perceived noise level of 110 PNdb and an overall sound pressure level of 105 db, and suppose that air-

plane J has a perceived noise level of 120 PNdb and an overall sound pressure level of 105 db. These numbers say that on the sound-level meter the two noises measure alike. However, when presented to listeners J is found to be 10 PNdb more noisy than P. To be perceived equal in noisiness to airplane P, the overall sound pressure level (in decibels) of airplane J would have to be reduced by 10 db without changing the spectrum and duration of the noise. If this were done, the perceived noise level would

<sup>23</sup> See footnotes on page 8758.

<sup>24</sup> K. D. Kryter, "Scaling Human Reactions to the Sound From Aircraft," paper to be submitted to the J. Acoust. Soc. Am. 1959.

<sup>25</sup> S. S. Stevens, "Calculation of the Loudness of Complex Noise," J. Acoust. Soc. Am. 28, 807-832 (1956).



drop from 120 to 110 PNdb and the overall sound pressure level from 105 to 95 db.

It is also possible to estimate the relative magnitude of the subjective noisiness of two sounds. The magnitude of subjective noisiness is measured in units called noys.<sup>4</sup> There is a direct relationship between the "noisiness," in noys, and the perceived noise level, in PNdb, which will be explained below. Thus, in our example, airplane P has a perceived noise value of 139 noy (110 PNdb) and airplane J, 275 noy (120 PNdb). Airplane J can be said to sound about twice as noisy as, or in other terms, 100 percent noisier than, airplane P, inasmuch as the numerical magnitude of J (275) is nearly double that of airplane P (139) on the noy scale. This does not mean, however, that in a given neighborhood twice as many people would express dissatisfaction with airplane J as with airplane P.

#### COMPUTATION OF PERCEIVED NOISE LEVELS (PNdb)

The perceived noise level is a single number computed from octave-band sound pressure levels according to the following procedure. The unit is the PNdb.

The first step is to convert the sound pressure level in each of the eight octave bands to "noisiness" in noys by means of the appropriate column in table 1. These values of octave-band "noisiness" are summed:

$$\sum N = N_1 + N_2 + N_3 + \dots + N_8 \quad (1)$$

Then the "noisiness" in noys of the total noise is given by

$$N_T = N_m + 0.3(\sum N - N_m) \quad (2)$$

where  $N_m$  is the largest value of "noisiness" for any one of the eight bands and  $\sum N$  is the sum given by equation (1).

This total noisiness  $N_T$  in noys is finally converted to total perceived noise level in PNdb by means of the formula:

$$\text{Number of PNdb for total noise} = 40 + 33.3 \log_{10} N_T \quad (3)$$

As an example, assume the following octave band levels for a certain jet aircraft flying overhead at 500 feet:

SPL in db re 0.0002 microbar	
20-75-----	97
75-150-----	96
150-300-----	101
300-600-----	101
600-1200-----	102
1200-2400-----	103
2400-4800-----	102
4800-10,000-----	95

From table 1 we find that—

$$\sum N = 24 + 32 + 59 + 75 + 80 + 105 + 159 + 150 = 684 \text{ noys}$$

$$N_m = 159 \text{ noys}$$

$$N_T = 159 + 0.3 \times 525 = 316 \text{ noys}$$

$$\text{Perceived noise level} = 123 \text{ PNdb.}$$

#### STATISTICS OF AIRCRAFT OPERATIONS OVER COMMUNITIES

In order to evaluate the amount of noise exposure for a given community situated near an airport, a noise survey must be made at a number of representative positions in that community. The noise data are usually recorded on a specially designed magnetic tape recorder and are taken back to the laboratory for detailed analysis. In addition, the range and angle of elevation of each aircraft as it passes by the observer are recorded with a special camera. Care must be taken to ascertain that the sample observations are representative of the regular activity at the airport over an extended length of time.

In the laboratory the peak in sound pressure level as recorded during the flight is

determined from the magnetic tape in each of eight octave frequency bands. The peak sound pressure levels are then converted to the peak perceived noise levels. The peak PNdb data may then be presented in a number of ways. One is to plot histograms (distribution curves) at each location in the community for each season of the year and for day, evening, and night operations. These histograms can be converted to the levels that would have occurred if the plane had flown directly overhead, if that is desired. One such plot of the noise produced outdoors for certain aircraft in communities around one international airport is given in figure 1.<sup>2</sup> Using the data given in figure 2 for the approximate noise reduction of outside noise provided by a typical one-family frame house, the plot of figure 3 is obtained for the noise indoors.

We do not know whether feelings of annoyance are caused by all levels of noise in a distribution like those of figures 1 and 3 or whether the top 50 percent or top 25 percent or some other percentage disturbs people. We know from neighborhood studies that it is generally not the isolated, exceptionally noisy airplane that sets the level of annoyance in a community, but rather sustained activity over a period of time. As a guess, we would say that the 25 percent level in figures 1 and 3 should correlate reasonably well with neighborhood annoyance.

The curves of figures 1 and 3 give the PNdb as though all the airplanes went directly over the head of the observer who took the data. In actual fact, aircraft generally do not fly a straight course after takeoff but deviate to one side or the other depending on the specific flight path, the wind, and the destination. This deviation has the effect of reducing the levels of the distribution curves and this reduction will be greater the greater the distance of the observer from the start of the takeoff roll. At a distance of 4 miles from the takeoff roll, for example, the standard deviation of the distribution of horizontal position of the airplanes may be several times greater than the mean altitude. Thus sound propagation to the observer may be severely influenced by vertical wind and temperature gradients and other weather effects. In figure 4, we show four 25 percent lines: two for outdoor and two for indoor levels with two of these representing airplanes in overhead flight and two adjusted to represent scatter of flight paths after takeoff. Neither the particular overhead nor the scatter situation shown in figure 4 may be typical at other airports.

The curves shown in figure 4 are fairly general, assuming the particular types of operation that normally exist out of New York International Airport. For an airport that primarily serves cities within 1,000 miles, with the type of propeller aircraft in common use in 1958 and the customary loading factor experienced in the United States, the contours are about 2 PNdb lower than the curves of figure 4.

#### SUMMER VERSUS WINTER AND VIBRATION VERSUS NOISE

The evidence available to us from studies in neighborhoods indicates that the feelings of annoyance or disturbance in a neighborhood varies from month to month approximately according to figure 5. The annoyance due to operations is higher in the summer than in the winter, rising to a peak in June, July, and August when windows are open due to the summer heat.

In figure 5 we see that the ratio of the annoyances with windows open (June, July, and August) to those with windows closed (November through March) is called O/C. We have evidence that an equivalent reduction in annoyance could also be achieved by

reducing the noise levels of the aircraft by about 8 PNdb. Computations based on the change in spectra of propeller aircraft noise caused by the noise-reducing characteristics of framehouses (figure 2) reveal that the difference between open and closed windows is about 8 PNdb.

These results permit another important conclusion; namely, that house vibrations separate from audible noise do not seem to cause significant annoyance even with the windows closed. If house vibrations were the controlling factor then the annoyance would be the same whether the windows were open or closed because houses are shaken about the same amount whether the windows are open or closed.

The conclusion stated above is consistent with testimony given in the Newark trial in 1957. Most people gave as the reason for their annoyance that their sleep was disturbed or that they experienced interference with telephone, speech, radio, or the audio of TV.

#### DAYTIME VERSUS NIGHTTIME

In our previous writings<sup>1, 6, 7</sup> we have reported that annoyance is more likely to arise in the nighttime (after people have retired) than earlier in the evening and is more likely in the evening than in the daytime. At one airport we made a sample study of the hourly distribution of annoyance over a 9-month period and of the hourly distribution of takeoffs for the same time period. The results are given in figure 6. We see that the ratio of annoyance to takeoffs is very low during the daytime between 0700 and 1800 hours. In the early evening, i.e., 1800 to 2200, the ratio increases. In the brief period between 2200 and 2400 hours (the retiring period) the ratio of annoyance to takeoffs abruptly rises still further. Between 0100 and 0200 the ratio drops considerably and between 0200 and 0700 the ratio drops to a relatively low value. It is expected that the low rate of annoyance between 0200 and 0700 may be nonlinearly associated with the very small amount of activity in this period.

We have consistently observed that a daytime-nighttime difference of 10 db (or PNdb) is required to keep the around-the-clock community annoyance about the same.<sup>1</sup> Daytime annoyance appears to be at about the same level as that experienced in the evening when the daytime-evening difference in noise level is about 5 or 6 PNdb.

#### LANDINGS VERSUS TAKEOFFS AND SUCCESSIVE DAYS OF EXPOSURE

The relative importance of takeoffs and landings in causing annoyance is shown by a typical month's operation over a given community in table 2. A negligible percentage of annoyance was caused by landings. Also, the expressed annoyance due to takeoffs was small during the first day of a series in which takeoffs passed over this community. (Whether takeoffs or landings pass over a given community depends of course on the wind direction and other operational variables.) The amount of expressed annoyance generally increases on the second and third days of a series. Expressions of annoyance are more likely to occur on days of poor visibility. All of these factors are illustrated in table 2.

<sup>1</sup> See footnote on page 8758.

<sup>6</sup> K. N. Stevens, W. A. Rosenblith, and R. H. Bolt, "A Community's Reaction to Noise: Can It Be Forecast?" Noise Control 1, No. 1, pp. 63-71 (January 1955).

<sup>7</sup> K. N. Stevens, A. C. Pietrasanta, et al., "Procedures for Estimating Noise Exposure and Resulting Community Reaction From Air Base Operations," WADG technical note 57-10 (Wright-Patterson Air Force Base, Ohio, April 1957).

<sup>4</sup> See footnote on page 8759.

<sup>2</sup> See footnotes on page 8758.

TABLE 2.—Aircraft activity over one community

[Each day's total is expressed as percentage of 1 month's total. Monthly totals of takeoffs and landings were about equal]

Date	Daily takeoffs as percentage of monthly total	Daily landings as percentage of monthly total	Weather	Daily expressed annoyance as percentage of monthly total expressed annoyance
1				
2				
3		0.2		
4		.1		
5		2.2	6 to 15 knots, clear	
6				
7	2.0			
8	11.1		15 knots, clear	7
9	20.8		15+ knots, clear	19
10	16.1		6 to 15 knots, rain, haze	47
11		17.0	15+ knots, rain, haze, ILS	2
12	2.0	3.8		
13	.3	3.3		1
14		2.8		1
15	9.2		6 to 15 knots, fog, ILS	2
16	.3	5.1		
17	.9			
18		11.0	6 to 15 knots, ILS	1
19		17.8	15+ knots, ILS	
20		21.6	6 to 15 knots, ILS	
21		14.0	15 knots, clear	
22	9.3			
23	11.4		6 knots, clear	3
24	.8			1
25	.7			
26		.1		
27	14.5		10 knots, smoke, ILS	15
28				
29	.6	.2		1
30		.1		
31		.7		

TABLE 3.—Indoor perceived noise levels for propeller airliners and for Boeing 707-120 and Comet 4 jet airliners

Distance from aircraft (feet)	Composite large propeller airliner		Boeing 707-120 airliner		Comet 4	
	Takeoff (meto power) PNdb	Landing PNdb	Takeoff (8,000 pounds thrust) PNdb	Landing PNdb	Takeoff (7,350 r.p.m.) PNdb	Landing PNdb
400	96	83	109	99	107	99
600	93	79	105	94	103	94
800	90	75	101	89	99	90
1,000	88	73	97	86	96	86
1,200	86	71	94	83	94	83
1,400	84	69	91	80	92	80
1,600	83	68	89	77	90	78

We observed from actual measurements on propeller aircraft operations that the perceived noise level for instrument landings (of propeller aircraft) was about 19 PNdb lower than the takeoff noise over this community. A difference of 18 PNdb should cause a very great difference in annoyance, just as table 2 shows.

#### EXTRAPOLATION TO NEW SITUATIONS

The key item needed in order to extrapolate from an existing situation around an airport to a new situation where a different type of airplane is involved is a new distribution curve of the type shown in figure 1. Before we can make up a new distribution curve, we must know the variation of the peak PNdb levels with thrust and altitude and the manner in which the new aircraft will fly. Evaluations of this type have been performed on the Boeing 707-120, the Comet 4 and the Caravelle I jet airliners and have been reported in the literature.<sup>2,3,4</sup> Some esti-

mate must then be made of the variability in altitude and azimuth for each of the airplanes expected to use the airport. Then the percentage of operations of each type of aircraft and the estimated range of loadings must be ascertained from the airlines. When all of these data are available, new graphs like figures 1, 3, and 4 can be computed and serve as the basis for a new evaluation.

Tables 3 and 4 present a brief summary of perceived noise levels for takeoffs and landings of the two types of jets now operating into airports on the east coast and for an average large propeller aircraft. The takeoff data reflect typical power cutbacks after takeoff.

We see immediately that if jet aircraft were to replace propeller aircraft and if they were permitted to follow the same flight routines as the propeller aircraft, the perceived noise levels indoors in communities near the airport would increase by 10 or 12 PNdb. (See table 3.) An airport operator would be unlikely to disregard this magnitude of predicted change.

One solution to the problem is for the airport operator to specify an altitude that will give a PNdb level not exceeding the PNdb level at the average altitude for propeller aircraft. For example, if it were found that

propeller aircraft were flying over the near edge of a community at a height of 600 feet, it would be logical to require that the jet fly past that same point at over 1,200 feet if annoyance is to be maintained at about the same level.

Another solution is to require that the thrust of the aircraft engines be reduced when flying over neighborhoods. For example, with one jet airplane, the perceived noise level drops 2 PNdb for a thrust decrease of 1,000 pound per engine, or 4 PNdb for a decrease of 2,000 pound per engine, and so forth.

Obviously, another way to reduce the possibility of increased annoyance following the introduction of noisier aircraft into an airport is to limit the operations to daytime, or to periods between 7 a.m. and 10 p.m.

Another solution is to specify a PNdb number (as measured under the flight path) not to be exceeded over inhabited areas. Presumably a different number should be specified for daytime than for nighttime. Tentatively, the Port of New York Authority has specified 112 PNdb measured outdoors under the flight path as the maximum permissible level for operations between 7 a.m. and 10 p.m.

Another situation of interest is the system of preferential use of certain runways. Such a system has been in use at the three principal airports of the Port of New York Authority for about 4 years.

Comparison of a similar airport without the preferential runway system with one of the New York airports shows that the annoyance there as judged by our studies during the past year without the preferential runway system was 99 percent of the 4-year average, while at a New York airport with the preferential runway system during the last year only it was 80 percent of the 4-year average.

Still another way to limit annoyance, if space permits, is to locate the start of take-off roll as far as possible from the community that the airplane will fly over. An additional mile will give the 707-120, fully loaded on a standard day with zero headwind, about an additional 600 feet of altitude, or a reduction of 9 to 12 PNdb in the perceived noise level, depending on the weather.

It is apparent that whenever a new type of aircraft is to be introduced each airport operator should first determine what perceived noise levels in the communities surrounding his airports are exceeded by the noisiest 25 percent of flights. Then he must predict the increase (or decrease) in perceived noise levels that will result from the introduction of the new aircraft. If the increases in perceived noise levels are above what he thinks are allowable, he must take one or more of the remedial actions listed above.

#### VALIDATION OF PERCEIVED NOISE LEVEL RATINGS

To validate the PNdb method for rating the noises of aircraft, judgment tests were performed by our firm under a variety of controlled circumstances. An immediate purpose of these judgment tests was to determine the relation between the sound pressure levels of jet aircraft and piston aircraft that would produce equal amounts of perceived noisiness. The sounds of jet aircraft that were used were from the Boeing 707-120, equipped with JT3C-6 engines and FS-152 noise suppressors; the Comet 4, equipped with Avon RA-29 engines with noise suppressors; and the Caravelle I, equipped with Avon RA-26 engines without noise suppressors. The sounds of propeller aircraft were from the Douglas DC7 and the Lockheed Super Constellation. The sounds were recorded on magnetic tapes and were played back over loudspeaker systems. Various kinds of human judgments were performed,

<sup>2,3</sup> See footnotes on page 8758.

<sup>4</sup> L. N. Miller and L. L. Beranck, "Survey of the Takeoff Noise Characteristics of the Caravelle Jet Airliner and of Conventional Propeller-Driven Airliners," Noise Control 3, No. 6, pp. 42 ff (November 1957).

<sup>5</sup> L. N. Miller, L. I. Beranck, and K. D. Kryter, "Airports and Jet Noises," Noise Control 5, No. 1, pp. 24-31 (January 1959).



TABLE 4.—Outdoor perceived noise levels for propeller airliners and for Boeing 707-120 and Comet 4 jet airliners

Distance from aircraft (feet)	Composite large propeller airliner		Boeing 707-120 airliner		Comet 4	
	Takeoff (meto power) PNdb	Landing PNdb	Takeoff (8,000 pounds thrust) PNdb	Landing PNdb	Takeoff (7,350 r.p.m.) PNdb	Landing PNdb
400.....	112	101	126	117	125	117
600.....	108	96	122	113	121	112
800.....	105	92	118	108	117	109
1,000.....	103	90	115	104	114	105
1,200.....	101	88	112	101	112	102
1,400.....	99	86	109	98	110	99
1,600.....	98	84	107	96	108	97

TABLE 5.—Differences between ratings of noise from propeller and from jet aircraft determined by various methods

[The ratings were determined for the sounds when they were judged to be subjectively equally noisy. A negative value in a column indicates that the rating of the jet by that method was lower than the rating of the propeller aircraft.]

Measurement method	Meter with frequency-weighting networks				Perceived noise level (PNdb)	Loudness level (phon)	Equal listener response curve (db)	Speech interference level (db)
	C network (db)	A network (db)	P network (db)	N curve (db)				
Outdoor.....	-11.2	-2.5	+4.0	-1.5	-2.2	-5.0	-5.2	+7.5
Indoor.....	-12.2	-6.0	+1.3	-6.0	-4.4	-7.0	-8.2	+9.4
Average.....	-11.7	-4.3	+2.7	-3.8	-3.3	-6.0	-6.7	+8.4

some involving individual listeners and others involving large groups of listeners simultaneously. In part of the tests, indoor spectra were used; in the others outdoor spectra were used. The details of the tests and their outcome are given in references 2, 3, and 4.

The exact noise spectra that were reproduced through the loudspeakers at the ears of those judging the "noisiness" were rated, when the listeners judged them to be equally noisy, by seven different schemes as follows:

1. Sound pressure level as measured with the C weighting network on a standard sound-level meter.<sup>10</sup>

2. Sound pressure level as measured with the A weighting network on a standard sound-level meter.<sup>10</sup>

3. Sound pressure level as measured on a sound-level meter with a special P network. The P network is relatively unknown in the United States, but it is found on some European instruments for measuring "broadcast background noise."<sup>11</sup> The P network gives heavy stress to the higher frequencies relative to the low.

4. The perceived noise level in PNdb.

5. Loudness level (LL) in phons.

6. A process of weighting the sound according to the equal listener-response (ELR) curve.<sup>6,8</sup> (Note: This method was originally developed for indoor listening but for noise levels measured outdoors. The comparisons made here on its suitability do not include this case. The method is not as suitable, as shown here, either for both listening and

measuring sound levels indoors or for both listening and measuring sound levels outdoors.)

7. Speech interference level (SIL) in decibels.

Table 5 shows the difference in decibels between the ratings of propeller and jet aircraft by each of these seven methods, when the jets sounded just as noisy as the propeller driven aircraft. If we accept the human judgments as valid, a positive number in table 5 means that the method indicated at the head of the column overestimates the "noisiness" of the three jet noises relative to the propeller noises. A negative number indicates that the method underestimates the "noisiness" of the jets relative to the props. The N curve results shown in table 5 will be discussed in the next section.

Inspection of table 5 shows that the perceived noise level method (PNdb) and the method using the P network come the closest to the human judgments. The PNdb method underestimates the "noisiness" and the P network method overestimates it, each by about three units. Use of the A network is not far different from the PNdb method, leading to estimates low by about four units. The loudness level and the methods using the equal listener response curve and the C network yield estimates low by 6 to 12 units. Finally, the speech interference level is an estimate which is high by about eight units.

We have decided to use the PNdb method for several reasons. First, it is equalled in accuracy only by use of the P network. Second, it is based on a solid foundation of basic psychological experiments reported in the literature. Third, the overestimates of the noisiness resulting from the P network would put a penalty on the airport operator. Fourth, the PNdb method may be more nearly correct than the judgment tests because with familiarity, the jet noise in the home may

be a few PNdb less noisy than when presented in the laboratory.

We participated in direct listening comparison tests conducted on July 25, 1958, by the Boeing Airplane Co. in Seattle wherein listeners familiar with jet noise were used. Those tests involved the same types of jet and propeller airliners included in the laboratory studies discussed above, operating under various controlled conditions of flight. This opportunity was greatly appreciated because it afforded a situation that could be of tremendous value in our evaluation of the general validity of the data we were obtaining in the laboratory.

Our personal observations at the Boeing tests verified, at least to ourselves, that the PNdb method of rating is not at variance with the results of listening to sounds from those aircraft under real-life conditions.

#### A METER TO MEASURE PERCEIVED NOISE LEVEL

It would be very convenient to be able to determine the perceived noise level of a sound directly from a single meter reading. This notion, of course, is the same as that behind the design of the A, B, C, and P weighting networks for measuring loudness on a sound-level meter. Figure 7<sup>4</sup> shows the relative weighting that may be assigned in the electrical circuitry to the various octave bands, according to the several schemes for measuring or estimating sound pressure level, loudness level, and perceived noise level. The weighting function that we show for approximating perceived noisiness is clearly much different than those of the present A, B, C, and P networks that are available on some sound-level meters.

The N function in figure 7 is the response necessary to give the same meter reading for octave-band noises of different frequencies each of which has the same noisiness, namely 40 noys (see table 1). Practically speaking the weightings do not change appreciably for contours from 10 to 80 noys, a range corresponding to octave-band sound pressure levels from about 65 to 110 db. This range, we believe, covers the levels at which sounds are likely to become a "noise problem" so that a meter with the characteristic shown by the N curve should be useful as a general tool for estimating the noisiness of complex sounds. Our firm is in the process of designing such a meter.

Obviously, the use of a meter involving a network that weighs a sound spectrum in accordance with the N curve gives us an overall noisiness rating that bypasses part of the procedure involved in computing a PNdb—that part concerned with the way in which octave-band levels may be added to obtain a noisiness level over all bands. Nonetheless the N curve rating is on the average within 0.5 db of the PNdb value for these noises. This consistency between the N curve rating and PNdb is to be expected, of course, only among sounds that have nearly the same total bandwidth and have relatively continuous spectra.

In view of the relative accuracy with which both the A network and PNdb methods estimated the judgment test data (see table 5) it might seem reasonable to use sound-level meters with the existing A weighting network for measuring perceived noise level. However, certain sound-level meters are designed so that the A network is to be used with relatively weak sounds (below 40 to 50 db) whereas the noises involved in our tests had octave-band levels averaging 80 to 90 db. A more important restriction against using a meter with the A network as a general "noisiness" meter is the fact that while a

<sup>4</sup> See footnote on page 8759.

<sup>6,8</sup> See footnotes on pages 8760 and 8761.

<sup>10</sup> ASA standard Z24.3, sound level meters for measurement of noise and other sounds (American Standards Association, New York, 1944).

<sup>11</sup> Report of the 17th Plenary Assembly, 1954, of the International Telephone Consultative Committee (CCIF), vol. 4 (International Telecommunication Union, Geneva, 1956), pp. 127-130.

weighting function similar to the A function in figure 7 may predict fairly well the relative perceived noise levels for the spectra of certain jet and piston aircraft, the accuracy is fortuitous and it cannot be expected to handle with this same relative accuracy other types of sounds.

#### RECENT STUDIES IN EVALUATING AIRCRAFT NOISE AND ITS SUBJECTIVE EFFECTS

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[Figures referred to in article are not included in the Record]

#### ABSTRACT

Laboratory tests, aimed at refinement of the perceived noise levels as an objective measure of noisiness, have suggested possible modification in methods of calculating the perceived noise level to include effects of time duration and the presence of discrete tone components. Some of the problems associated with applying the results of these laboratory tests to better assess community reaction to aircraft noise are discussed. Recent field studies investigating category ratings and ratio scales of noise acceptability have demonstrated similarity in judgments of recorded and actual aircraft flyover noise signals. Comparison of these category ratings with those of British studies shows good agreement concerning levels at which a considerable degree of dissatisfaction is expressed—108 to 115 PNdb in the context of 20 to 30 flyovers per day. With respect to sonic booms, there is currently a lack of judgment data, obtained either by laboratory or field tests, which adequately define the parameters of sonic booms to which people are most sensitive. Problems and suggested approaches for additional sonic boom investigations will be discussed, including the need for subjective testing utilizing both actual booms in field studies and stimulated stimuli in the laboratory.

With widespread introduction and more extensive use of subsonic jet transport aircraft, greatly increased numbers of people have become exposed to aircraft noise. This exposure and the consequent widespread evidence of dissatisfaction have stimulated considerable interest in methods of relating man's assessment of aircraft noise to physical measurements of the noise. In particular, this concern has stimulated interest in the development of measures of rating noise in terms of "noisiness," "acceptability," and "annoyance." Now, with impending development of the supersonic transport, there is a need not only to refine scales for measuring man's assessment of aircraft engine noise, but also to develop and validate suitable scales for measuring man's assessment of sonic booms.

In this review we summarize the results of recent studies undertaken to improve procedures for rating aircraft flyover noise and describe some of the problems currently under investigation. We also discuss some of the problems faced in developing objective measures to evaluate man's assessment of more complex sounds, such as sonic booms.

#### REVIEW OF SUBJECTIVE RATING METHODS FOR AIRCRAFT NOISE

The effects of jet engine noise on people had received considerable attention by the military services in the decade before the introduction of civil jet transports. This concern arose out of the varied personal and community problems occasioned by the development of high-thrust military jet aircraft. Military-sponsored studies, completed prior to the introduction of civil jet aircraft, have stimulated the development of many of the techniques for measuring and describing

aircraft noise that have become widespread since the introduction of jet transports.<sup>1,2,3,4</sup> In turn, concern with developing measures for determining man's assessment of noise is a relatively old and basic problem of practical importance in a number of applied acoustic problems. Aircraft noise is not alone in stimulating interest in development of subjective scales. There is, for example, considerable current interest in developing and validating objective means of rating man's subjective assessment of automobile, truck, and motorcycle noise.<sup>5,6</sup> Much effort has gone into the establishment of suitable noise criteria for different human activities and work environments.<sup>7,8</sup>

Since the development in the 1920's of means for rapidly and accurately measuring sound pressure levels, there has been increasing interest in correlating physical measures of sound with resulting human responses. Several developments in this area of psychoacoustics should be mentioned since they contributed materially to current methods of evaluating aircraft noise. As one subjective description of noise, the concept of loudness as a measure of noise magnitude has received considerable attention. A key development in this realm was the now familiar Fletcher and Munson loudness contours for pure tones.<sup>9</sup> From these contours, the A, B, and C weighting networks were established and incorporated in sound level meters in the 1930's. These weighted frequency networks were then used to establish single-number criteria for different acoustic environments.<sup>10</sup> It was also quite frequently assumed, lending to the usefulness of such loudness contours, that the ranking of the acceptability of real life sounds could be correlated in terms of the loudness.

Later came the development of contours showing the relative loudness of broadband noise signals and the investigation of procedures for adding several tones or several frequency bands of noise. This work led to the methods of computing loudness estab-

lished by S. S. Stevens at Harvard and more recently by Zwicker.<sup>11,12,13</sup>

Another technique quite widely used in evaluating military aircraft noise in this country was the level-rank procedure for rating octave band noise spectra.<sup>1,2</sup> The level-rank concept utilized a family of curves plotted on octave band paper with the rank designating an area between two neighboring curves; the curves were based on results of the then existing laboratory experiments on loudness, annoyance, and speech interference. In practice, a measured or calculated noise spectrum was superimposed upon the level-rank curves and assigned the rank of the highest zone into which the spectrum protruded. In effect, this procedure assumed that the noise in different frequency bands contributes independently to the shaping of subjective response and that the effects of different bands of noise were not simply additive. The noise-level-rank concept was incorporated in empirical procedures for estimating community response to noise based on the correlation of certain physical aspects of the noise with observed case history experience.<sup>3</sup>

The development of the perceived noise level started with listening tests conducted in 1958 in which subjects compared recordings of the noise levels produced by large propeller aircraft with those produced by takeoffs of turbojet aircraft. Each subject was asked to adjust the sound level of one recording until it sounded as acceptable or as noisy to him as the sound of a reference aircraft noise record. The specific purpose of the tests was to determine whether the sound from the soon-to-be introduced commercial jet aircraft would be more or less acceptable to communities near airports than the sound from the propeller-driven aircraft then in operation. These tests indicated that then-current noise evaluation methods employing either a meter or a calculation of loudness could not predict accurately the judged noisiness of the sounds. Therefore, from studies of these tests and available information on the "annoyance" values of sounds of different frequencies by Laird and Coyne, and later by Reese, Kryter, and Stevens the "perceived" noise level was evolved.<sup>14,15</sup> The perceived noise level was expressed in units which we call perceived noise decibels, or PNdb. The perceived noise level in PNdb was proposed as an appropriate measure of the relative subjective acceptability or noisiness of complex sounds, and aircraft sounds in particular.<sup>16,17,18</sup>

<sup>11</sup> Stevens, S. S., "The Measurement of Loudness," *J. Acoust. Soc. Am.*, 27, 815-829 (1955).

<sup>12</sup> Stevens, S. S., "Calculation of the Loudness of Complex Noise," *J. Acoust. Soc. Am.*, 28, 807-832 (1956).

<sup>13</sup> Zwicker, E., "Über Psychologische und Methodische Grundlagen der Lautheit," *Acustica*, 1, 237-258 (1958).

<sup>14</sup> Laird, D. A., and K. Coyne, "Psychological Measurements of Annoyance as Related to Pitch and Loudness," *JASA*, 1, 158-163 (1929).

<sup>15</sup> Reese, T. W., K. D. Kryter and S. S. Stevens, "The Relative Annoyance Produced by Various Bands of Noise," *Psychoacoustics Lab., Harvard University* (Mar. 17, 1944) P. B. No. 27, 306, U.S. Department of Commerce, Washington, D.C.

<sup>16</sup> Kryter, K. D., "Scaling Human Reactions to the Sound From Aircraft," *J. Acoust. Soc. Am.*, 31, 1415-1429 (1959).

<sup>17</sup> Kryter, K. D., "The Meaning and Measurement of Perceived Noise Level," *Noise Control*, 6, 12-27 (September-October 1960).

<sup>18</sup> Kryter, K. D., K. S. Pearsons, "Judgment Tests of the Sound From Piston, Turbojet and Turbofan Aircraft," *Sound*, 1, 24-31 (March-April 1962).

<sup>1</sup> Rosenblith, W. A., K. N. Stevens, et al., "Handbook of Acoustic Noise Control," vol. II, "Noise and Man," WADC TR 52-204, pp. 179-200 (June 1953).

<sup>2</sup> Stevens, K. N., W. A. Rosenblith, R. H. Bolt, "A Community's Reaction to Noise: Can It Be Forecast?" *Noise Control*, 1, No. 1, 63-71 (January 1955).

<sup>3</sup> Stevens, K. N., A. C. Pietrasanta, et al., "Procedure for Estimating Noise Exposure and Resulting Community Reaction From Air Base Operations," WADC TN 57-10 (April 1957).

<sup>4</sup> Pietrasanta, A. C., "Noise Measurements Around Some Jet Aircraft," *J. Acoust. Soc. Am.*, 28, 434-442 (1956).

<sup>5</sup> Mills, C. H. G., D. W. Robinson, "The Subjective Rating of Motor Vehicle Noise," app. IX, Noise, Final Report Committee on the Problem of Noise, HMSO, London (July 1963).

<sup>6</sup> Galloway, W. J., "Selection of an Objective Measure for Motor Vehicle Noise," *J. Acoust. Am.*, 37, 1198 (1965).

<sup>7</sup> Baranek, Leo L., "Revised Criteria for Noise in Buildings," *Noise Control*, 3, 19-27, (January 1957).

<sup>8</sup> Sound Control, ch. 14 of "1961 Guide and Data Book," ASHRAE, New York.

<sup>9</sup> Fletcher, H., and W. A. Munson, "Loudness, Its Definition, Measurement, and Calculation," *J. Acoust. Soc. Am.*, 5, 82-108 (1933).

<sup>10</sup> Knudsen, V. O., and C. M. Harris, "Acoustical Designing in Architecture," John Wiley & Sons, Inc., New York (1950).



The concept of the perceived noise level is somewhat similar to the concept of loudness level in that it evaluates and sums the contribution of noisiness in each of a number of frequency bands covering most of the frequency range of sounds to which humans respond. The difference between loudness and noisiness scales lies in differences between the reference contours of equal loudness or noisiness.

Figure 1 shows a complete set of noisiness contours, resulting from the investigations of Kryter and Pearsons.<sup>19</sup> Figure 2 illustrates a typical difference between the equal noisiness contours and the loudness contours established by Stevens.<sup>20</sup> The difference between the loudness and noisiness contours is predominantly at high frequencies. In other words, for a high and a low frequency sound which are equally loud, the high frequency sound will be more annoying.

#### SOME APPLICATIONS

The perceived noise level scale is now widely used in this country and abroad for rating aircraft noise. Currently it has been proposed as a measure of the annoyance of aircraft noise in several national and international specifications.<sup>21, 22</sup> It is also often employed in defining the noise characteristics of new aircraft.

On the basis of information concerning the flight profiles of an aircraft as well as the noise characteristics, plus information concerning the noise attenuation through the atmosphere, perceived noise level contours can be prepared indicating the maximum levels occurring on the ground at positions beneath and to either side of the flight path. Sets of generalized noise-level contours have been prepared depicting the maximum levels expected during takeoffs and landings for many of the aircraft (fixed wing and helicopter) in current use in this country.<sup>23, 24, 25</sup> These contours provide information for estimating the reaction in communities exposed to aircraft noise and for planning suitable land uses in areas near airports.<sup>26, 27</sup> In these procedures the perceived noise level is coupled with information on the number of operations, runway utilization, and time of day to calculate a composite noise rating (CNR). The composite noise rating in turn may be used to estimate the response of residential communities. Figure 3 shows the empirical relationship that has evolved from extensive

studies of community-aircraft noise problems near a number of military and civil airports.

As initially developed, the perceived noise level scale rated the relative noisiness of sounds having similar temporal characteristics without strong discrete tone components. These limitations on the use of the perceived noise level scale have become more restrictive with the increase in landing noise problems and by the introduction of turbofan engines. Consequently they have stimulated study of more complex methods for comparing complex noises which may differ widely in time pattern and in discrete tone content.

Before discussing some of the results of recent laboratory tests aimed at increasing the accuracy of rating differing aircraft sounds, we might note first the practical application of some simple methods of estimating the perceived noise level. As Kryter has earlier noted, it should be possible to obtain a good estimate of the calculated perceived noise level for sounds having approximately the same bandwidth and frequency spectra by use of a sound level meter and a simple weighting network.<sup>17, 18</sup> To be most accurate, such a meter must be specially calibrated for each class of sounds for which it is used.

Both the A-network of the standard sound level meter and sound level meters incorporating weighting networks having the inverse shape of the 40-phon equal noisiness contour shown in figure 1 (N-network) have been used to estimate the perceived noise level of aircraft flyovers. Our recent experience has shown that with either the N-network or the A-network, the calculated perceived noise levels (as calculated from octave band noise measurements) may be approximated from the network readings with sample standard deviations of the order of 1 to 2 db. In some applications, this accuracy in estimating perceived noise levels is adequate. For example, this method may be entirely satisfactory in describing the noise levels in the vicinity of an airport where a variety of different aircraft are in operation. In such cases, we have observed that the noise levels per se due to jet aircraft operations may vary over quite wide ranges with typical sample standard deviations ranging from 5 to 8 PNdb obtained near well-defined takeoff and landing paths. In this case, the measurement error introduced by network readings of PNdb may be quite acceptable. The reduction in data analysis time per flyover permits a greater number of flyovers to be sampled, thus facilitating a better statistical description of the noise environment. However, it should be emphasized that such approximation procedures may lead to serious errors when measuring sounds having different bandwidths and sharply differing frequency spectra.

#### TIME DURATION

In examining the effects of duration on noisiness, Kryter and Pearsons reported several years ago results of some laboratory comparisons in which the time duration was varied for bands of noise and simulated and actual aircraft sounds.<sup>19</sup> Results of these tests indicated that doubling the duration of a sound (i.e., the time in which the noise signal is within 10 dB of the maximum level) increased its subjective noisiness by 4.5 dB. In other words, if one doubles the duration of a sound, then the level must be reduced by 4.5 dB to retain the same noisiness. The time pattern employed is shown in figure 4. Figure 5 shows a plot of the experimental data. The study included signals having durations of 1.5 to 12 seconds, presented at sound pressure levels in the vicinity of 100 dB. Similar results have also been observed for sounds having levels of 60 to 80 dB.

The extent to which this "trading" relation of 4.5 dB between duration and level for equal noisiness is applicable for longer

or shorter durations is not known, although one would suspect that for durations longer than 20 to 30 seconds the slope of the curve in figure 5 should decrease. We are currently undertaking additional studies in which the time duration of the stimuli is varied over a greater range.

On the basis of these laboratory tests one may define a duration-adjusted perceived noise level or "effective PNdb" defined as

$$PNdb_{eff} = PNdb + 15 \log \frac{t}{t_{ref}} \quad (1)$$

Now, the time duration of the noise signal produced by the flyover of an aircraft is determined by four major factors: (a) noise source characteristics of the aircraft, (b) distance and geometrical relationships between the aircraft and a ground position, (c) aircraft speed, and (d) sound attenuation characteristics of the atmosphere. For a given aircraft operating at a fixed power setting, the time duration will be approximately proportional to the aircraft speed. In practice, since variations in takeoff and climb speeds are often relatively small, variations in time duration are likely to be principally dependent upon distance from the aircraft.

As an example, figure 6 shows the time duration of several aircraft flyover signals plotted versus the ratio of the distance between aircraft and ground observer to aircraft speed. Data points are shown for computer-simulated takeoffs of a large transport aircraft at three different speed profiles encompassing a range of speeds after liftoff ranging from 150 to 230 knots. The same data points are replotted in figure 7 versus the distance between aircraft and ground observer. For a given slant distance, the time durations shown in the figure typically vary over a ratio of about 1.5 to 1. When the time durations shown in figure 7 are now interpreted in terms of the effective perceived noise level, by means of equation 1, we obtain the band of effective perceived noise levels shown in figure 8. At a given slant distance, the variation in duration resulting from changes in speed has resulted in a spread of effective perceived noise levels of 2 to 3 PNdb.

Also shown in figure 8 is the unmodified perceived noise level-vs-distance curve for this simulated takeoff condition. (In figure 8 we have taken 20 seconds as the reference time for modifying the perceived noise levels in accordance with equation 1. This choice of a reference is quite arbitrary; selection of a different reference time would merely have shifted the effective duration-modified perceived noise level with respect to the uncorrected perceived noise level curve.)

It is plainly evident from figure 8 that the time duration correction has significantly changed the slope of the curve relating perceived noise levels to distance. While the unmodified perceived noise level curve decreased at a rate of approximately 8 to 10 PNdb per doubling of distance, the effective perceived noise level curve decreases at a rate of only 4 to 5 dB per doubling of distance. When interpreted in terms of noise contours depicting the maximum perceived noise levels occurring on the ground under the flight path, we obtain the typical situations shown in figure 9. In the upper portion of figure 9 are shown the perceived noise level contours for a computer-simulated takeoff of a large turbojet transport aircraft. In the lower portion, the effective perceived noise level contours are shown for the same takeoff. The effective perceived noise level contours are well separated, indicating a very moderate change in noisiness for ground positions off to either side of the aircraft flight path. The extent to which this may hold true for signals of long duration remains to be substantiated by future laboratory tests.

<sup>19</sup> Kryter, K. D., K. S. Pearsons, "Some Effects of Spectral Content and Duration on Perceived Noise Level," J. Acoust. Soc. Am., 35, 866-883 (1963).

<sup>20</sup> Stevens, S. S., "Procedure for Calculating Loudness: Mark VI," J. Acoust. Soc. Am., 33, 1577-1585 (1961).

<sup>21</sup> SAE ARP 865 "Definitions and Procedures for Computing the Perceived Noise Level of Aircraft Noise," (1964).

<sup>22</sup> ISO/TC 43 (Secretariat-206), "Secretariat Proposal for a Procedure for Measurement and Description of Aircraft Noise in the Vicinity of an Airport."

<sup>23</sup> Bolt Beranek and Newman Tech. Report "Land Use Planning Relating to Aircraft Noise," published by FAA (October 1964). Also published by the Department of Defense as AFM 86-5, TM 5-365, NAVDOCKS P-98, "Land Use Planning With Respect to Aircraft Noise."

<sup>24</sup> Bishop, D. E., "Noise Contours for Short and Medium Range Transport Aircraft and Business Aircraft," FAA Tech. Report ADS-35 (1965).

<sup>25</sup> Bishop, D. E., "Helicopter Noise Characteristics for Heliport Planning," FAA Technical Report ADS-40 (1965).

<sup>26</sup> Bishop, D. E., "Development of Aircraft Noise Compatibility Criteria for Varied Land Uses," FAA SRDS Rept. No. RD-64-148, II (1964).



## DISCRETE TONES

The effect of discrete tones on the noisiness of complex noise signals has been studied by several investigators. They have noted that the presence of a pure tone in a band of random noise may cause the composite signal to be judged much noisier than a band of random noises having the same overall sound pressure level as the composite signals.<sup>15, 27, 28</sup>

Some recent work undertaken by Kryter and Pearsons has resulted in the curves shown in figure 10.<sup>29</sup> This figure incorporates some of the results of laboratory experiments interpreted in terms of corrections to be added to the observed levels of the frequency bands containing noise and a pure tone. This procedure suggests a relatively simple method to account for the additional noisiness resulting from the presence of a single pure tone. The perceived noise level of the complex sound would then be calculated on the basis of the corrected band pressure levels. The abscissa in figure 10 is stated in full, one-third or one-tenth octave bands as:

1. The tone-to-noise ratio (T/N) is dB when the tone is measured independently of the background noise; or

2. The ratio of the tone-plus-noise level to the level of noise in adjacent frequency bands (T+N/AN). In other words, this ratio represents the amount in dB by which the band containing the tone exceeds the level of adjacent bands.

Study of the figures indicate that octave band analysis is likely to be inadequate in detecting the presence of pure tones or in providing enough information to permit an accurate determination of the pure tone correction. For example, when the level of the octave band containing noise and the pure tone is 3 dB above the adjacent bands (T+N/AN-3 dB), the correction for pure tones may vary from 3 to 7½ dB. For a similar 4 dB protrusion for noise levels measured in one-third octave bands, the pure tone correction may vary from 2 to 6 dB. With the one-tenth octave band measurements, the correction is reduced to the range of 0 to 3 dB for a 3 dB protrusion. Thus, to fully account for the additional noisiness of pure tones, one may often have to utilize a more detailed frequency analysis than is normally employed in analyzing aircraft flyover noise.

The correction to the total perceived noise level for spectra similar to that encountered in aircraft flyover noise signals will rarely if ever approach that for the correction (from fig. 10) applied to the noise band containing the pure tone. In most practical cases, this correction to the total perceived noise level would be of the order of one-half or less of the correction for the individual band containing the pure tone.

Unfortunately, in the analysis of actual flyover noise signals, one does not encounter the relatively simple combination of steady state broadband noise and single pure tones. In flyover signals, several pure tones may be present; these tones may or may not be harmonically related. There may be significant frequency shifts in the pure tones due to Doppler effects. Additional difficulty is encountered because of the changes in abso-

lute level of the signal with time, accompanied by variations in the pure tone levels relative to the broadband noise. These variations are created by differences in the directional pattern of the multiple noise sources. Where narrow band frequency analyses are relied upon to separate pure tones from the broadband noise, frequency shifts and changes in noise levels with time may limit the sampling time. This in turn may restrict the choice of filter bandwidths or the accuracy with which one may determine the broadband noise levels.<sup>25, 30</sup>

Thus, it is often difficult to determine with any great degree of assurance, the appropriate measures of pure tones and noise necessary to make use of figure 10. The effect of some of these complexities on noisiness assessments have been investigated in the laboratory. We recently completed tests in which subjects compared the noisiness of broadband, continuous spectrum noise with the noisiness of the same band of noise including various combinations of pure tones. The pure tones, all harmonically related, were presented under steady state, frequency modulated, and amplitude modulated conditions. The frequency modulations at 5 and 25 percent varied at rates of 1 and 5 cps. The amplitude modulation at 100 percent also varied at rates of 1 and 5 cps. It was found that the judged noisiness of the complex sounds could be predicted with reasonable accuracy by the calculated PNdB values. The test results further indicated that no difference in calculation procedures is necessary to predict the additional effect of modulating and combining tones in noise. Thus, at least for the limited range studied, the presence of more than one discrete tone or a small amount of amplitude or frequency modulation is accounted for by the perceived noise level procedures.

Given the complexity of actual flyover signals and the measurement and interpretation problems associated with determining tone-to-noise, ratios, and time durations as well as absolute levels, it is quite possible for different investigators analyzing the same signals to arrive at somewhat different perceived noise levels. We have recently begun a study of some of the problems in analyzing flyover noise signals and interpreting them in terms of the latest laboratory information available on calculating perceived noise levels. We hope in this study to compare different procedures and evolve several suggestions for measurement procedures that will lead to more consistent reduction and interpretation of flyover measurements. It is probable that several procedures of differing complexity will be developed to meet the widely varying data applications.

## ABSOLUTE JUDGMENTS OF AIRCRAFT NOISE

Most of the judgment tests undertaken to determine the acceptability or noisiness of various aircraft sounds have used recorded noise signals as the stimuli. We recently undertook some field tests to determine if there were any significant differences in the judgments of relative noisiness of noise produced by actual flyover and by recordings of aircraft noise.<sup>31</sup> As a part of these tests, we also investigated the establishment of a category scale of acceptability for aircraft noises. In this investigation, subjects were asked to score the flyover noise on a scale having four categories of acceptability—"of no concern," "acceptable," "fairly acceptable," and "unacceptable." This testing is similar to British tests, such as the Farnborough test in 1961,

in which subjects were asked to rate the noise of aircraft or motor vehicles in terms of various "intrusiveness," "noisiness," and "annoyance" scales.<sup>5, 32, 33</sup>

For these field tests groups of subjects were assembled at two buildings located near major flight paths at the Los Angeles International Airport. Subjects judged actual flyovers both inside and outside of the test buildings. Recorded flyover noises were judged inside the buildings. Most subjects judged noise from both aircraft takeoffs and aircraft approaches.

One major advantage of such tests is, of course, the exposure to actual noise stimuli and the opportunity to place subjects in an environment more closely resembling a normal home or work situation. One drawback of such tests is the limited dynamic range and lack of control of the noise stimuli. Another disadvantage is the variability in judgments when making subjective magnitude tests. This variability is considerably greater than in tests in which subjects compared the noisiness of two sounds. Thus, the field tests are a relatively insensitive method for detecting differences in responses to other than major changes in the noise stimuli.

In both the relative and category judgment tests, we found little difference in judgments of actual flyovers and recorded flyovers of the same perceived noise level. We also found in both the relative judgment and the category judgment tests little difference in the judgments of takeoff noise compared to approach noise for the same perceived noise level. This latter finding is contrary to what might be expected on the basis of the effect of time duration since there were sizeable differences between the mean time durations of the approach noise signals and the takeoff noise signals (10 seconds compared to 16 seconds). One explanation for the similarity in judgments of approach noise and takeoff noise despite the difference in time durations is the probability that many of the approach flyover noise signals contained more pronounced discrete frequency components that the takeoff noise signals. This increased discrete tone content may have tended to increase the noisiness of the approach flyovers, thus offsetting the decrease in noisiness due to the shorter time duration.

The relative judgment test results indicated that a change of approximately 16 PNdB was required to double or halve the relative noisiness of the flyover signals. In originally developing the perceived noise level scale it had been assumed that 10 dB was required for doubling of noisiness. Thus, these test results indicate a more moderate change in the growth function of noisiness than originally assumed. As a result of the value of 16 PNdB required for doubling observed in these tests and a value of 13 PNdB observed for doubling in some recent British laboratory tests, we are undertaking detailed laboratory tests to determine more accurately the growth of noisiness as a function of sound pressure level.<sup>34</sup>

The major results of the category judgment tests are given in figure 11. This figure shows two curves representing the mean of indoor judgments and outdoor judgments. There is substantial displacement between

<sup>15</sup> See footnote 5 on page 8763.

<sup>27</sup> Little, J. W., "Human Response to Jet Engine Noises," Noise Control, 7, No. 3, 11-13 (1961).

<sup>28</sup> Wells, R. D., W. E. Blazter, Jr., "A Procedure for Computing the Subjective Reaction to Complex Noise From Sound Power Data," Paper L24, Proc. of the 4th Inter. Congress on Acoustics, 1962, Copenhagen (Organization Committee of the 4th ICA and Harlang and Toksuig, Copenhagen, 1962).

<sup>29</sup> Kryter, K. D., K. S. Pearsons, "Judged Noisiness of a Band of Random Noise Containing an Audible Pure Tone," J. Acoust. Soc. Am., 38, 106-112 (1965).

<sup>30</sup> See footnote 25 on page 8764.

<sup>31</sup> Galloway, W. J., "Frequency Analyses of Short-Duration Random Noise," Sound, 1, No. 6, 31-34 (Nov.-Dec. 1962).

<sup>32</sup> Bishop, D. E., "Judgments of the Relative and Absolute Acceptability of Aircraft Noise," J. Acoust. Soc. Am., 37, 1175 (1965).

<sup>33</sup> Robinson, D. W., J. M. Bowsher, W. C. Copeland, "On Judging the Noise From Aircraft in Flight, Acustica, 13, 324-330 (1963).

<sup>34</sup> "Social Survey in the Vicinity of London (Heathrow) Airport," Appendix XI, Noise, Final Report, Committee on the Problem of Noise, HMSO, London (July 1963).

<sup>35</sup> Broadbent, D. E., D. W. Robinson, "Subjective Measurements of the Relative Annoyance of Simulated Sonic Bangs and Aircraft Noise," J. Sound Vib. 1, 162-174 (1964).



the judgments of indoor flyovers and outdoor flyovers. This displacement indicates that for flyovers heard at the same perceived noise levels most observers will assign less acceptable ratings to the noise when heard indoors than when heard outdoors. The displacement between curves in figure 11 is approximately 14 PNdB in midscale, less than the 18 dBA difference between indoor and outdoor judgments observed in the Farnborough tests. In both tests, the shift between indoor and outdoor judgments is somewhat less than the magnitude of noise reduction provided by the particular test building structures.

Comparison of our category test results with the results from tests employing other category scales is somewhat difficult because of the semantic differences in the category scales and the context in which the subjects were asked to judge flyover noise. For example, in the Los Angeles tests, subjects were asked to judge flyover noise in the context that the flyovers would occur 20 to 30 times during the day and night. However, in the Farnborough tests, subjects were not instructed to interpret the flyover in terms of any particular number of occurrences. However, if we adjust scales for such differences by introducing weighting factors based on current estimates of the effect of number of occurrences on subjective judgments, we obtain the comparison shown in figure 12. In this figure, acceptability ratings are compared with the Farnborough intrusiveness judgments and the London Airport Social Survey annoyance ratings. In figure 12 both indoor and outdoor judgment curves are plotted vs the perceived noise level measured outdoors, assuming 20 PNdB as a representative building noise reduction value.

Although the category scales shown in figure 12 employ quite different sets of adjectives, there is reasonably good agreement among the three scales as to the magnitude of the noise levels rated with adjectives implying a significant degree of dissatisfaction—"unacceptable," "very annoying," or "very much (annoyance)." For situations where the number of flyovers is about 20 to 30 per day, the mean judgments for the three different tests indicate a significant degree of dissatisfaction at perceived noise levels in the range from 108 to 116 PNdB.<sup>35</sup>

In the context of 20 to 30 flyovers per day, this range in noise levels brackets the composite noise rating (CNR) of 115 shown in figure 3 as a lower boundary for the zone of community response to aircraft noise in which repeated and vigorous noise complaints might be expected. The CNR boundaries are based primarily upon case history experience. Thus, from both field experience and more formal category judgments of aircraft noise, there seems to be reasonable agreement concerning the levels of noise which are likely to create quite widespread dissatisfaction either on an individual or community basis.

There is considerable variability in the category judgments of aircraft noise. For example, in our acceptability tests, the pooled estimates of the standard deviations for the various sets of tests ranged from 7 to 9 PNdB.

<sup>35</sup> In fig. 12 judgment scores are correlated with the outdoor perceived noise level plus a weighting due to the number of flyovers equal to  $10 \log n$ , where  $n$  is the number of occurrences per day. The choice of  $10 \log n$  for the number of occurrences is suggested by empirical procedures for predicting community response to noise from aircraft operations. This choice is also supported in part by analysis of the London Airport Social Survey data. For these survey data, weightings of either  $10 \log n$  or  $15 \log n$  are equally valid statistically in correlating the number of flights per day and average peak noise level of the aircraft with the average annoyance.

Thus, in interpreting curves showing mean assessments of the noise, such as shown in figure 11 or 12, one should recognize that for any noise exposure, there likely will be found sizable proportions of people holding quite different opinions about the noise.

#### SONIC BOOM

The setting of acceptable limits for sonic booms experienced in a community critically influences flight planning and the economic operation of supersonic transports. The limits are important in influencing design of the aircraft and engines, since they determine the altitude at which the aircraft becomes supersonic and also set minimum altitudes for cruise flights at different speeds.

Laboratory judgment tests have provided some of the information needed to establish preliminary criteria for sonic booms. Professor Richards of Great Britain has investigated the relative effects of peak overpressure, rise rates, and fall rates for N-shaped waves similar to waveforms of outdoor sonic booms.<sup>36</sup> The stimuli for his tests were produced by small loudspeakers mounted in headsets with special seals to provide the necessary low frequency response. Because of the use of the headset, however, the stimuli were presented only to the ears thus eliminating any possible effect of the booms on the body. No tests were conducted with sonic booms as they might be experienced inside a house.

Other tests in Great Britain reported by Broadbent and Robinson with simulated indoor booms indicate that the upper limit for acceptable sonic boom overpressure is about 1.9 psf.<sup>37</sup> This was determined from judgment tests in which subjects rated the annoyance of sonic booms and aircraft flyover noise. The stimuli for these tests were provided by loudspeakers. The sonic boom signal was produced by a recording of a boom made inside a building. The level of this single recording was varied and the subject rated the different levels on an annoyance scale. Their results show that under indoor conditions, a sonic boom of 1.9 psf overpressure measured outdoors is equivalent to a flyover signal of 110 PNdB measured outdoors. It should be noted, however, that although the stimuli were produced by loudspeakers, the low frequency components and associated structural vibration effects were lacking.

Similar work in this country has been conducted by Pearsons and Kryter in which subjects adjusted the level of recorded aircraft noise or bands of noise until they were as acceptable as sonic booms heard indoors and outdoors.<sup>38</sup> The booms were produced by specially constructed 18-inch loudspeakers mounted in a concrete test chamber, 3.5 feet by 3.5 feet by 7.9 feet. The test stimuli included simulated outdoor booms with an N-shaped waveform and a recording of a sonic boom made inside a wood frame building during supersonic flyover. During a portion of the tests some window rattle was added to the indoor sonic boom by adding a window mounted in a plywood door for the chamber. With the addition of the window rattle, the test results indicate that a sonic boom of 2.3 p.s.f. measured outdoors is equivalent to a flyover noise signal of 113 PNdB measured outdoors. These results are in agreement with those of Broadbent and Robinson. The tests further indicated that sonic booms heard indoors are less acceptable than when heard outdoors. As with other laboratory tests, however, the structural vibration normally experienced inside a house was not included in the test stimuli due to the concrete chamber construction.

Within the last 2 to 3 years, rather extensive public opinion surveys have been conducted to determine individual (and

community) tolerance to sonic booms.<sup>39, 40</sup> As a consequence, we know quite a bit more now about reactions to sonic booms produced by current "small" supersonic aircraft. However, within the last 2 years, relatively little effort has been given to any systematic study to ascertain which parameters of a sonic boom signature are most significant in determining people's expressions of annoyance or acceptability. Consequently, we now know little more than we did several years ago about possible tradeoffs in reaction in terms of overpressure, rise time, wave shape, and boom duration.

There is particular need to increase our understanding of possible interactions of these parameters since most of our field and laboratory experience is with sonic boom signatures that differ in many waveform details from those expected from the supersonic transport.

The public opinion surveys show that people tend to be most critical of sonic booms while listening to them inside buildings. This finding is in general agreement with laboratory experience with simulated sonic booms. Thus, we should now find out more about man's assessment of sonic booms under indoor conditions. For these investigations, laboratory judgment tests utilizing well-developed test techniques and supplemented with field judgment tests offer a logical approach. The laboratory tests provide a means of determining man's relative assessment of annoyance to ranges and kinds of wave shapes not produced by current aircraft. Laboratory tests also offer a means of simulating the indoor wave shapes expected to be produced by sonic booms from supersonic transport aircraft.

Of course, there are technical problems involved in generating in the laboratory the wave signatures and associated structural vibrations expected from sonic boom excitation of buildings. However, the technical problems involved are certainly not major (nor costly) problems compared to other technical problems which are being solved in the development of a supersonic transport aircraft.

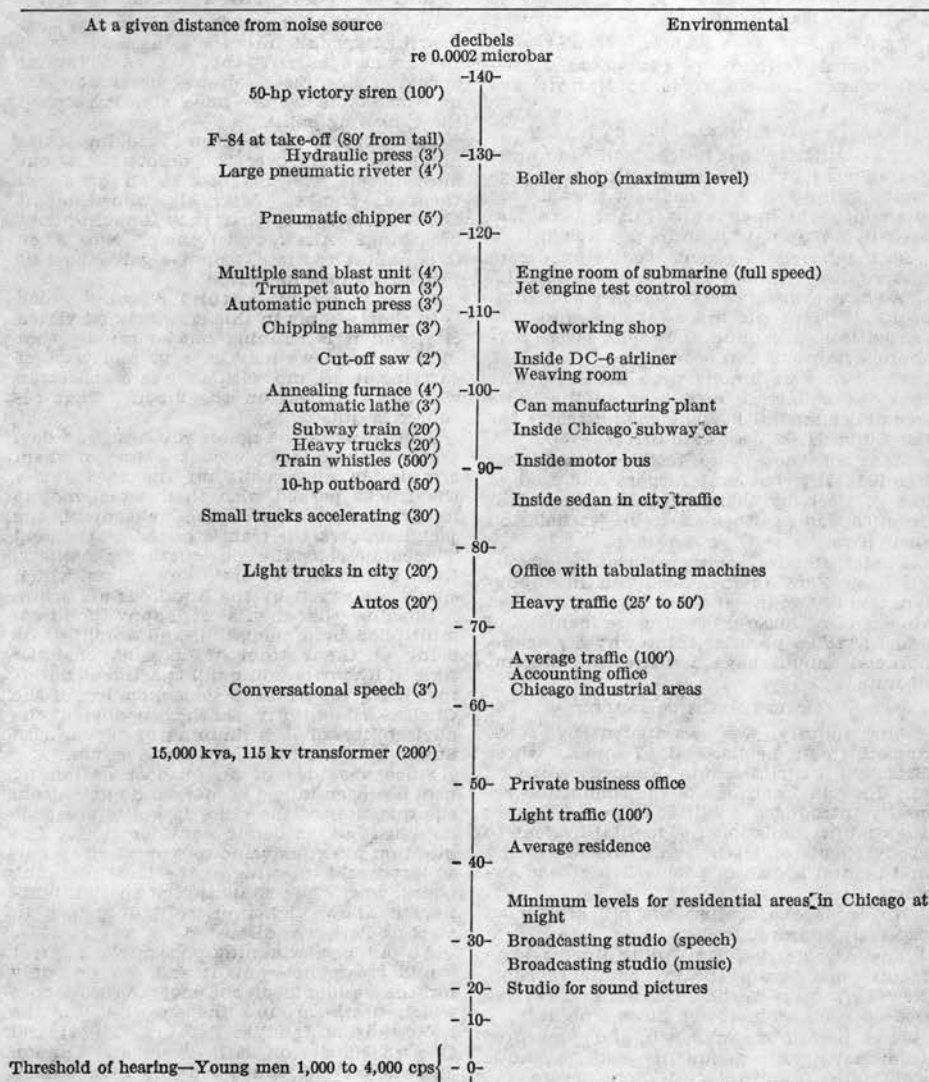
In looking at this problem, one is tempted to draw a parallel with some of the problems experienced during introduction of subsonic transport aircraft. As you may remember, the initial noise level specifications set up by some aircraft and engine manufacturers relied on a basic and simple measure of the noise, the overall sound pressure level. There was considerable dismay, surprise, and confusion on the part of some when the criteria which evolved for evaluating aircraft noise involved a weighting of the noise spectrum rather than a simple overall sound pressure level rating. Similarly, there is a tendency today for many to assume that the basic and most easily measured physical parameters describing the sonic boom wave shape must also be the most pertinent ones in governing man's reaction to the sonic boom. However, past experience in developing measuring scales to describe man's psychological and physiological reactions to noise show that man's reactions seldom scale simply with any single physical parameter of the stimuli and that several parameters of the stimuli must be considered. Thus, our present reliance on overpressure as a governing criteria on sonic boom acceptability may later have to be modified or replaced by consideration of other sonic boom parameters. It would seem reasonable indeed to explore possible needs for criteria modification now, rather than wait for accumulation of case history experience to suggest the need for revisions.

<sup>36</sup> Pearsons, K. S., K. D. Kryter, "Laboratory Tests of Subjective Reactions to Sonic Boom," NASA CR-187 (March 1965).

<sup>37</sup> Richards, E. J., "Sonic Boom Assessment," J. Acoust. Soc. Am., 36, 1036 (1964).

<sup>38</sup> Borsky, P. N., "Community Reactions to Sonic Booms in the Oklahoma City Area, AMRL-TR-65-37 (February 1965).

FIGURE 1-5.—Typical overall sound levels measured with a sound-level meter. (General Radio Co.)



#### VEGETATIVE REACTIONS TO AUDITORY STIMULI—COMPARATIVE STUDIES OF SUBJECTS IN DORTMUND, GERMANY, AND THE MABAAN TRIBE IN THE SUDAN

(Presented at the Special Scientific Program of the Committee on Conservation of Hearing and the Otosclerosis Study Group at the 68th annual session of the American Academy of Ophthalmology and Otolaryngology, Oct. 20-25, 1963, New York.)

(By Gerd Jansen, M.D., Dortmund Germany; Samuel Rosen, M.D., New York, N.Y.; J. Schulze, M.D., Dortmund, Germany; Dietrich Plester, M.D., Dusseldorf, Germany; Aly El-Mofty, M.D., Cairo, Egypt.)<sup>1</sup>

(NOTE.—All charts may be found in original report.)

In three separate studies made recently of the primitive Mabaan Tribe in the jungle of

southeast Sudan it was shown that, with aging, their hearing in the high frequencies maintains much higher levels when compared to similar populations in Wisconsin, New York, Dusseldorf, and Cairo. The Mabaan environment is almost free of noise, with an ambient noise level measuring 34 to 40 decibels on the C scale. Noise is undoubtedly a critical factor in the deterioration of hearing in the high frequencies with aging in industrialized and developed societies. Other contributory factors, such as diet, stress, climate, race, and genetic origin must also be considered. The connective tissue changes in the ear which occur in all body tissue with aging could be another factor contributing to the hearing loss.

The Mabaans are free of hypertension throughout life, have no coronary attacks and probably have minimal atherosclerosis. Such an ideal cardiovascular state may indicate a better blood supply to the cochlea and could also contribute to their superior hearing.

What possible effect can loud noise have on the capillaries in the body in general and on the capillaries which supply the cochlea in particular? Such experimental studies on humans had previously been done at the Max-Planck Institute in Dortmund, Germany. It was suggested by one of us (S. R.) that similar comparative studies be made among the Mabaans because their car-

diovascular tree is presumably better than that of the Dortmunders or other more industrialized and developed populations. In March of 1963 such a study was carried out by the authors in conjunction with newer auditory functional tests.

A sudden noise causes a number of reactions in the human body. In addition to the psychic shock, one winces, turns the head, holds the breath, closes the eyes for a short time. The breathing is accelerated, and other characteristic manners of behavior are induced by the noise. These facts indicate that extra-aural responses to noise occur. The purpose of this study was to investigate the effect of sudden noise on the vegetative nervous system.

A very important function of the vegetative nervous system is the regulation of the changing caliber of blood vessels. Thus, Lehmann and Tamm tested in humans the effect of noise on the pulse rate, blood pressure, vascular peripheral resistance and cardiac output. They found that a short or prolonged noise did not change pulse rate or blood pressure. But peripheral resistance or vasoconstriction of precapillary vessels increased at the onset of a noise and was found to persist as long as the noise persisted. Two-thirds of all subjects exposed to noise showed definite vasoconstriction, whereas about 20 percent of the subjects exhibited vasodilatation. It should be stated at the outset that none of the Mabaans of any age exhibited vasodilatation on exposure to noise.

Peripheral vasoconstriction was recorded plethysmographically by strain gage, or cuff at the end of the finger (fig. 1). The finger pulse amplitudes are recorded in quiet—for 1 minute. The average values of the pulse amplitude under quiet conditions decrease markedly during periods of noise, showing the vasoconstriction effect of noise.

Figure 2 shows vasoconstriction in percentage. The line 0 indicates the caliber of the blood vessels without noise. The irregular line demonstrates the changing caliber of blood vessels in tests during noisy periods. During the noise period of 5 minutes a sharp fall of the curve (24 percent) is seen, which means vasoconstriction. Following this 5-minute period of noise, vasoconstriction begins to disappear but may persist for 25 minutes before vasoconstriction has completely disappeared.

During the vasoconstriction there was a diminution of cardiac output, possibly a compensatory effect of the vasoconstriction. This reaction seems to be a physiological response to noise. Those reacting to noise with a vasodilatation showed an increase of cardiac output.

[From the New York Times, Mar. 19, 1966]  
JET NOISE STUDY CALLED "URGENT" BY JOHN-SON'S SCIENCE ADVISER—HORNIG URGES THE UNITED STATES TO SET UP PANEL TO ANALYZE PROBLEMS AT THREE MAJOR AIRPORTS

(By Evert Clark)

WASHINGTON, March 18.—A sweeping attack on jet aircraft noise was proposed to the President today by his chief science adviser.

It was the first acknowledgment that the problem has grown to such size and involves such conflicting economic interests that extensive Federal action is required.

A key proposal would create a high-level Federal study group to undertake "on an urgent basis" a systematic analysis of noise problems around the John F. Kennedy International Airport and the airfields at Chicago and Los Angeles.

Dr. Donald F. Hornig, the President's Special Assistant for Science and Technology, proposed the program by endorsing the recommendations made by a special panel that he had convened last October.

Members of the panel were drawn from the aircraft industry, the airlines, the field of land-use planning, and Federal and local governmental agencies.

<sup>1</sup> Dr. Jansen and Dr. Schulze are associated with Max-Planck Institut für Arbeitsphysiologie, Dortmund, Germany; Dr. Rosen is consulting ear surgeon at the Mount Sinai Hospital, New York, and at the New York Eye and Ear Infirmary; associate clinical professor of otolaryngology, College of Physicians and Surgeons, Columbia University. Dr. Plester is with the Hals-Nasen-Ohren Klinik, Medizinische Akademie, Dusseldorf, Germany; Dr. El-Mofty is professor at Ein Shams University, Cairo, Egypt.



The President noted recently in calling for a department of transportation that jet noise "is a growing source of annoyance and concern" to thousands living near large airports, and that the problem would worsen as jet use expands.

#### JOHNSON URGES DRIVE

He said that "it is clear that we must embark now on a concerted effort to alleviate" the problems. He asked Dr. Hornig, the Secretaries of Commerce, and Housing and Urban Development, and the heads of the Federal Aviation Agency, and the National Aeronautics and Space Administration to "frame an action program" for the attack.

Dr. Hornig said today the panel's recommendations would form the basis for his group's future work. The Federal study group urged by the panel will be a separate group.

The panel study was to a considerable extent "a result of concern over the environment of our people," Dr. Hornig said. Last November, a panel of the President's Science Advisory Committee, which he heads, included jet noise among the things that "pollute" man's environment.

Democratic Representative HERBERT TENZER of Nassau County, whose Fifth Congressional District lies just east of Kennedy Airport, was thanked today by the President for "your initiative" in presenting many aspects of the noise problem "to me and to my science adviser."

#### PROGRAMS TO BE DEVISED

The panel report proposes federally supported studies of the expected scope of the noise problem through 1975 and of the public and private programs needed to combat it.

It also proposes studies to reduce engine noise, to improve measurement of noise levels and to develop national and international noise standards.

Other recommended approaches are modification of flight patterns around airports, and the formation of a study group to investigate the Federal role in a coordinated program for land use in airport areas.

Mr. TENZER has pointed out that about 200 lawsuits, claiming damages of about \$20 million, are pending across the country as a result of jet noise. Most claim property has effectively been taken from its owners without due process.

He also has quoted Federal Aviation Agency figures that about 75 airports are now served by jets but that the number will grow to about 400 in 3 or 4 years.

#### SMALLER JETS EXPECTED

The panel's study noted that the recent introduction of smaller jets would rapidly increase the number of cities served. It also said "larger, higher performance, and potentially noisier" stretched versions of present jets and giant passenger planes, such as the civilian version of the C-5A, would compound the problem later.

The proposed supersonic airliner is not mentioned in the report. Dr. Hornig said the noise it would make in airport areas was not expected to exceed that of present jets, although it would have its own sonic boom noise problem away from landing and take-off points.

Reducing jet noise further through research and by altering flight paths does not look too promising, the panel indicated. Suppressing noise adds weight to a plane, reducing its moneymaking capacity and increasing its cost to airlines.

Federal attempts to encourage local bodies to keep housing developments away from airports have had little success to date.

Initiative for the solution of jet noise problems, the panel declared, "can effectively come only from a source not compromised by economic interests in conflict

with the major groups now involved—engine and aircraft manufacturers, airline operators, and local governments."

[From the New York Times, Mar. 13, 1966]  
JET NOISES LINKED TO PSYCHOTIC ILLS—  
INTERRUPT DREAMS VITAL TO HEALTH, EXPERTS SAY

(By Edward Hudson)

The possibility that residents of communities afflicted by jet noise may develop psychotic symptoms because their dreams are interrupted at night was raised here last week by a psychiatrist and a psychologist.

Both referred to recent studies on dream interruption which, the psychologist said, showed "dreams are very necessary to mental health." If people are awakened and prevented from dreaming, they said, severe psychotic symptoms can occur.

The two were among nine witnesses who spoke at a hearing held here by the State assembly's mental hygiene committee at the Bar Building, 42 West 44th Street.

Many of those who testified lived near Kennedy International Airport and told of loss of sleep by themselves and their children, as well as other effects of jet noise on their lives.

Daniel Rhodes, a representative of the Flatbush Park Civic Association in Brooklyn, told of two instances of threats of armed violence by noise-protesting residents and added: "It's a peculiar thing why my neighborhood should have a distressing amount of nuts."

#### YOSWEIN HEADS COMMITTEE

The inquiry was conducted by State Assemblyman Leonard E. Yoswein, whose Brooklyn district abuts Kennedy Airport. Mr. Yoswein, chairman of the committee, recently introduced a bill that would require the State commissioner of mental hygiene to study effects of jet noise on the well-being and mental health of people living near airports.

No one spoke against the bill and many expressly approved it.

The psychiatrist, Dr. Julius Buchwald, a faculty member of the Downstate Division, New York State Medical Center, said "everybody dreams at least five times a night."

If a person is awakened and prevented from having his dream, he said, psychotic symptoms from mild to more severe can occur. He listed these as paranoid delusions, psychoses, hallucinations, and suicidal and homicidal impulses.

Dr. Buchwald said in jet noise-affected communities laboratory experiments on dreams were repeated on a grand scale.

#### OTHER HARMFUL EFFECTS

Dr. Buchwald said jet noise could create other harmful effects. It can arouse nightmarish memories if linked to past experiences in sleep, he said.

The conscious perception of noise, he said, can lower a person's productivity and greatly reduce his sense of humor and ability to handle ordinary frustrations. Even perceived unconsciously, he said, jet noise can build up frustrations that later explode.

The psychologist, Dr. Howard M. Bogard, chief psychologist of Queens Hospital Center, said persons prevented from dreaming will tend toward true psychoses.

He urged a study of whether residents near airports lose out on dream time, whether such communities become disoriented by people moving away, and whether family life is disrupted because of interruptions in ordinary communication.

"I have heard of several instances of children running into houses absolutely terrified," he said. "People should not be subjected to intimidation by outside forces over which they have no control."

[From the New York, N.Y. Chelsea-Clinton News, Mar. 17, 1966]

#### POINT OF VIEW: THE INFERNAL RACKET

In the past year or two, a frightening fact has finally sunk into the consciousness of the average citizen—the fact that two of our vital natural resources—breathable air and drinkable water—have almost reached the vanishing point.

The experts have been wringing their hands for years over the despoliation, but most people who listened at all dismissed them as cranks. After all, who thought about air any more than they thought about breathing? Air was just there. Now when it is almost too late, fear has galvanized us into a readiness for action.

There is another natural resource which is in short supply in this crowded and varied city, and it is running out so rapidly that someday soon we may have to find ways of carrying it around with us like a spaceman will carry oxygen on the moon. That resource is quiet.

Just think of the noises you hear in a day. Some of them are pleasant. Most of them are simply an assault on the eardrums—the trucks parked with their diesel motors idling, the car horns, the helicopters, the jack hammers, the transistor radios, the loud TV commercials, the construction machinery. Even the sounds of children's voices, which singly are sweet, by the hundreds are a din.

Imagine the shouts of happy children, multiplied by a thousand, and amplified by being at the bottom of an echo chamber formed by surrounding tall apartment buildings has given pause to some members of the Chelsea community as they pondered the advisability of a swimming pool on 25th Street between 9th and 10th Avenues.

Since the idea of an outdoor swimming pool has been talked of more and more often, the question of the noise it would create is not just an academic consideration. The question of excessive noise was raised as well at last week's meeting of the local planning board, when the installation of special lighting to allow nighttime softball games in Chelsea Park was discussed.

An outdoor swimming pool on 25th Street would create noise night and day not only for the residents of the small brownstones which nestle around the site, but for the thousands of families living in Elliott and Chelsea Houses on 25th Street and London Terrace on the south side of 24th Street. The noise will rise over the small houses and ricochet between the 25th Street houses and the solid block-long 20-story wall formed by London Terrace.

Few of those apartments are air conditioned so that in the hottest weather, when the noise is loudest, people won't even have the choice of keeping their windows closed.

The city has occasionally shown concern in controlling noise. One of the most effective instances was the ban on blowing car horns except in emergencies. Another is banning noisy industry from residential areas. The most recent is the long-sought change in the building code regulations which now require materials used in new apartment buildings to stop sound between the apartments.

We hope the same concern will be shown on 25th Street.

RITA BIRD.

#### FAA DESERVES TO BE CONGRATULATED FOR PERMITTING JETS INTO NATIONAL AIRPORT

The SPEAKER. Under previous order of the House, the gentleman from Illinois [Mr. PUCINSKI] is recognized for 60 minutes.

Mr. PUCINSKI. Mr. Speaker, I have taken the time today to discuss with my

colleagues the beginning of a whole new era in the Nation's Capital which will commence Sunday when short-haul jets begin operating into and out of National Airport.

The Federal Aviation Agency and its Administrator, Gen. William F. McKee deserve the highest commendation for arranging this historic development in the Nation's Capital.

It is my honest judgment that any objection to short-range jets operating into and out of National is the height of provincialism.

Every major city in the world—Chicago, New York, Los Angeles, Miami, Houston, Baltimore, Paris, London, Rome, Moscow—has, Mr. Speaker, adjusted itself to the jet age, except the Nation's Capital.

We could no more stop jets from coming into National than we could insist that only horse-drawn carriages can operate along Pennsylvania Avenue.

The critics of the FAA fail to realize that Washington, D.C. belongs to all the people of this Nation, and the hundreds of thousands of visitors who travel to the Nation's Capital have a right to come here by the most modern form of travel—jet travel.

The thousands of businessmen and other busy people who must come to the Nation's Capital to transact urgent business have a right to come into this city by jet without losing valuable time on surface transportation from Dulles or Friendship.

What possible advantage can there be for any American to fly by jet from Chicago to Washington—a trip of only 1 hour and 30 minutes—only to see the time he has saved wiped away by a 1½-hour surface trip from either Dulles or Friendship to the Capital.

Progress is against those who would try to prevent the use of jets at National.

Furthermore, only the short-range three-engine jets are scheduled for National. There will be no four-engine jets operating at National. Both Dulles and Friendship will continue receiving these larger jets.

There will be 102 flights into and out of National or approximately 15 percent of the 630 daily landings and departures of the entire aircraft at National.

Regarding the question of noise level, the FAA has taken a whole series of steps to keep the noise level to a minimum.

There is no question that the people of Washington will have to get used to a different kind of aircraft noise. The jet does give a unique sound, but all of the tests heretofore have clearly indicated that the noise will not be louder and, in fact, it will be of shorter duration.

The FAA has altered both the noise abatement procedure at National as well as the approach pattern. The FAA will require departing aircraft to reduce thrust to provide the positive climb of 500 feet minimum or better. Jet aircraft will also have to remain over the rivers until they reach at least 3,000 feet altitude unless otherwise instructed by the tower.

There can be no doubt that adjustments will have to be made, but these

adjustments have been made in major cities throughout the world. It is cynical to suggest that somehow the National Capital should remain out of tune with the major cities of the world.

In my District on certain days, my constituents have to endure the jet landings every 40 seconds for as much as 3 hours at a time during rush hours when we have up to 280 aircraft landing within the rush hour period.

I would not want to suggest that this has not created severe hardships for my people, because, indeed, it has. No such density operation is being suggested for National.

Mr. Speaker, I have more than a passing interest in this problem. Chicago's O'Hare field has now reached its saturation point, and we must divert some of the operation to Chicago's Midway.

With the advent into National, United Airlines, and I am hopeful other airlines, will be able to transfer part of its short-haul operations from O'Hare to Chicago's Midway, thus reducing the congestion at O'Hare.

But even if I would not have a personal interest in this matter, I would still strongly advocate jets at National only because jets at National will help the economy of the District of Columbia. I have said repeatedly that we must find new job opportunities for the people of Washington, D.C. The advent of jets into National will indeed create, in time, new job opportunities as well as improve comfort for visitors to Washington.

Mr. Speaker, I have taken the time today because I would not want the FAA to think that by our silence those of us from the Midwest agree with the attitude recently made on the use of National by jets.

I am sure that time will prove that the advantages far outweigh the disadvantages of jets at National, and those who have been so quick to criticize FAA will discover, indeed, that they have been misinformed on this entire situation.

Mr. GETTYS. Mr. Speaker, I ask unanimous consent that the gentleman from Illinois [Mr. ANNUNZIO] may extend his remarks at this point in the Record and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from South Carolina?

There was no objection.

Mr. ANNUNZIO. Mr. Speaker, I am happy to join my distinguished colleague from the 11th District of Illinois, Hon. ROMAN PUCINSKI, who is responsible for securing this special order, in commending William F. McKee, Administrator of the Federal Aviation Agency, for his far-sighted decision to inaugurate jet service on Sunday, April 24, between Washington National Airport and O'Hare International Airport in my own city of Chicago.

The two- and three-engine short-haul jets that will be used will shorten considerably the flight time between the Nation's Capital and various major cities in the eastern half of the United States, including Miami, Memphis, St. Louis, Cleveland, Detroit, Minneapolis, New York, and Boston, in addition to Chicago.

This unprecedented and far-reaching decision of the Federal Aviation Agency was made after months of study on the impact jet service would have on air passenger traffic.

It was concluded that the use of short-haul jets would not only improve the air carrier service but would stimulate and facilitate the growth of the airports involved and would broaden and improve the service available to passengers.

Stuart G. Tipton, president of the Air Transport Association, predicted recently that the use of jets at Washington National Airport would "radically change the pattern of airline service on the east coast and much of the Middle West" and would brighten prospects for revival of Chicago's Midway Airport as a major terminal.

O'Hare International Airport is rated as the busiest airport in the country, and, therefore, the world, in terms of total air carrier operations. O'Hare assumed this top spot in 1962. By comparison, Midway Airport was rated 97th in 1962. In 1965, O'Hare still held the top spot, and Midway had climbed in 3 short years up to 46th place.

With O'Hare holding first place, and Midway growing by leaps and bounds, it is conceivable that in the very near future a third air carrier airport will be feasible, and, indeed, even necessary, to service Chicago. Serious consideration should, therefore, be given by the officials to sanctioning a third air carrier airport for Chicago.

The airline schedules for jet service at Washington National Airport effective April 24, show a total of 102 operations or 51 flights. There will be a total of 630 air carrier operations on April 24, of which 102 will be the short-haul jets. Broken down, this comes to 83.9 percent piston and turbo-prop operations, and 16.2 percent jet operations.

The jet schedules in general show 12 daily incoming flights from Chicago, of which 9 will be from O'Hare and the remaining 3 will be from Midway, and 13 departures for Chicago, 10 going to O'Hare and 3 going to Midway.

With the advent of 51 jet flights daily out of Washington National Airport, we stand on the threshold of a whole new concept in air passenger service. Again, I congratulate Administrator McKee, his associates, and all the others who have contributed to making this momentous progress possible.

#### MEDICARE—GREAT, BUT NOT PERFECT

The SPEAKER. Under previous order of the House, the gentleman from New York [Mr. FARBERSTEIN] is recognized for 20 minutes.

Mr. FARBERSTEIN. Mr. Speaker, July 30, 1965, is an historic day for all of us, for those of us who have already celebrated our 65th birthday and for those of us who pray to live to do so. It is on that day that President Johnson signed into law the most important social security bill since President Franklin Roosevelt signed the original Social Security Act 30 years ago. The new law increases social security benefits and makes other



improvements in the existing social security and public assistance systems, but, more significantly, it makes medicare a reality.

Two insurance plans for persons 65 years of age or over will go into effect July 1966. One is a basic hospital insurance program and the other is a supplementary voluntary health insurance program. The basic hospitalization program will provide inpatient hospital care, nursing home care, and home health services following hospitalization, and outpatient hospital diagnostic services to persons aged 65 or over who are eligible for social security or railroad retirement benefits. Hospitalization insurance will be financed by a payroll tax on active workers, their employers, and the self-employed. Congress can take pride that persons not eligible for benefits under social security or railroad retirement will receive the benefits of the basic plan if they already are 65 or will become so within the next few years. Their benefits will be financed from the general revenues of the Federal Government. Thus, there is no cost for this program to persons already 65 or over who are retired except, of course, the deductibles and the coinsurance they must pay when they are actually drawing down benefits under the program.

The other program, the supplementary health insurance program, covers doctors' fees and certain other medical and health services not provided in the basic plan. Enrollment in this supplementary program is voluntary and is open to persons aged 65 or over regardless of whether or not they are eligible for the basic hospital insurance program. The cost of this supplementary program to those wanting to participate in it is \$3 a month, or \$36 a year. The 7-percent increase in social security benefits more than covers this cost. The premium will be deducted monthly from the social security or railroad retirement checks for persons receiving such checks. Other persons wanting the supplemental plan will pay their premiums to the Government. The Government also will pay \$3 a month for each participant in the program. Let me say that this is, I believe, a good program—one which will meet the heaviest costs of illness. But, Mr. Speaker, let us be clear that it is also a limited program—to my mind only the "cornerstone" of the structure we must build in the future.

Certain forms of protection are omitted and certain limitations are imposed that will severely weaken the effectiveness of the programs in giving the aged the help they require to meet the high cost of their essential medical expenses. Congress should carefully review these shortcomings.

A most serious defect is the failure to offer protection against the cost of drugs and medicines. The basic hospitalization program does cover drugs normally furnished by a hospital or nursing home for the period a person is a patient there, but this ignores the tremendous need for drugs that the elderly have when they are not institutionalized. For the aged with their many chronic illnesses, drugs

are a frequent and often a daily necessity.

Since the end of World War II, there have been marvelous discoveries in the field of drugs; but when you go to the drugstore to have a prescription filled, these discoveries cost money. The high cost of drugs is a particular hardship on the aged who live on a small retirement income but who in the course of a year spend, on the average, well over twice what the average person spends on medicine. From every dollar an aged person spends on medical expenses, an average of 25 cents goes for drugs and medicines. Mr. Speaker, I, therefore, give my wholehearted support to the proposal that prescribed drugs be included in the supplementary health program for the aged. This addition would add about 75 cents to the monthly premium that an individual will pay, indeed a small sum for an item so vital to health.

I feel strongly that drugs to protect his health should not be denied any aged citizen merely because of his financial inability to purchase them. On April 13, 1965, I placed before Congress a drug stamp bill—H.R. 7424—that is designed to help the hardest pressed of our aged to obtain the drugs and medicines they need. Under the bill, persons aged 65 or more with an income below a certain level would purchase drug stamps and then obtain with these stamps prescribed drugs at approved retail drug stores. The stamps would be purchased at a fraction of their retail value and the druggists accepting the stamps would redeem them for their full retail value. In no case would a person pay more than 25 percent of the retail value for the stamps, so the most an eligible person would pay for each dollar's worth of prescribed drugs would be 25 cents. I urge my colleagues to give serious consideration to this plan.

I have also introduced a bill, on January 4, 1965—H.R. 993—that should help reduce the price of drugs and medicines for everyone. The bill proposes amending the Federal Food, Drug, and Cosmetic Act so that the labeling and advertising of drugs sold by prescription could not bear only a brand name but the generic name or established name must also appear. "Name" drugs often are more expensive than the same drugs without a trade name so that often brand name drugs are priced fabulously high merely because the consumer does not know their content. If, however, the established name of the drugs were known, persons could shop around to obtain the same basic drugs for less. Mr. Speaker, this practice, of course, would reduce the incidence of overpricing.

Now to pass on to other features of the hospital and health insurance plans with which I find fault. I utterly fail to understand why benefits are limited to persons who are at least 65 years of age rather than follow the benefit categories of social security. The age requirement for the receipt of hospital and health insurance benefits should be at least as low as that for drawing social security benefits. Retired workers and their dependent spouses can draw benefits at age 62,

and under the new law a widow can draw her benefits as early as age 60. I feel that the same rationale for permitting persons to draw social security benefits before age 65 is applicable equally for hospital and health insurance benefits.

Mr. Speaker, it seems obvious to me that the benefits of the hospital and health insurance programs should be extended to the disabled at age 60, the age at which widows can now draw social security benefits. Regarding the disabled, the social security program recognizes that total disability is no respecter of age, and, therefore, it imposes no age requirement for the drawing of disability benefits. The financial and health status of the totally disabled often closely resembles that of the elderly. Like that of the aged, the income of the totally disabled decreases sharply while the incidence of costly illness increases. The disabled are hospitalized frequently and in many cases their hospital stays are long. A survey conducted by the Social Security Administration in 1960 revealed that about 1 out of 5 disability beneficiaries under social security received care in a short-stay hospital in the survey year and, excluding hospitalization in long-term institutions, half of those hospitalized were in the hospital for 3 weeks or more. For these reasons, I plan to introduce legislation extending hospital and health benefits to the disabled at age 60.

It is quite true that age 60 is an arbitrary age selection and will still leave unprotected younger disabled persons. However, it is a beginning toward the rectification of the problem. This proposal is a logical extension of the amendments to the Social Security Act Congress enacted in 1965. I am confident that my colleagues will give serious consideration to my bill. I equally recognize, Mr. Speaker, that extension of medical protection to disabled persons regardless of age would not be acceptable to my colleagues.

I also do not think that the insurance programs offer sufficient protection against catastrophic illness. It is true that even among the elderly, relatively few persons are hospitalized for longer periods than that covered in the hospital insurance program. Thus, protection against longer stays could be provided with very little increase in the cost of the program—and just imagine what the protection would mean to those unfortunate few who are victims of long, financially exhausting illness.

Finally, Mr. Speaker, both the hospital insurance program and the supplementary health insurance program contain deductible and coinsurance features which I find objectionable. Under the supplementary medical care plan, the patient must pay the first \$50 and then 20 percent of all costs above this deductible. A patient may receive up to 90 days of hospitalization for an illness in the hospital plan but he must pay the first \$40 of the hospital stay and \$10 a day for the days after 60 days. Patients are entitled to 100 days of care in a nursing home but must pay \$5 a day after the first 20 days elapse. There is also a



deductible and coinsurance for outpatient diagnostic services. These features supposedly are to cut down abuses of the system. I think, however, that rather than discourage abuses, they encourage delays in seeking early care and are the severest burden on the aged who need help the most. Also, they make administration of the programs complicated and costly.

In conclusion, Mr. Speaker, I want to make clear that I believe the two insurance programs enacted for the aged are tremendous achievements. They are great, but not perfect. It was, perhaps, prudent to start these new programs with a measure of caution so that we can develop administrative and cost experience. But I trust this is only a beginning. Much remains to be done. I have set forth a few of the goals towards which we must strive if we are to give our aged population true security and adequate health care.

#### FAILURE OF THE U.S. GOVERNMENT TO PROVIDE TRUE LEADERSHIP IN FOREIGN POLICY EVIDENT IN EVERY CORNER OF THE GLOBE

The SPEAKER. Under previous order of the House, the gentleman from Alabama [Mr. EDWARDS] is recognized for 20 minutes.

Mr. EDWARDS of Alabama. Mr. Speaker, the failure of the U.S. Government to provide true leadership in foreign policy over the past 6 years is evident in every corner of the globe. But perhaps it is nowhere more serious than in Latin America.

The Johnson and Kennedy administrations have allowed events to drift from month to month. Our policy consists primarily of wishful thinking and hoping. The United States has failed to apply the imagination and initiative needed to fulfill a proper U.S. role in support of stability. As a result, Moscow communism is moving with ever-growing force into all of Latin America.

It has been said that one of the most pathetic tendencies in U.S. foreign policy is that we refuse to profit from lessons of the past, even from the recent past. And that view seems to be fortified by the facts.

Communist terrorism was being conducted in Vietnam as early as 1957. It was becoming steadily more serious all through the following years. And yet in 1963 the U.S. people were still being told that the problem was well in hand, and would be virtually done away with by 1965.

It was not until 1965 that the Johnson administration began to deal candidly with the seriousness of the problem, and one suspects that even today we are being fed a carefully measured diet of the truth about Vietnam.

As a result, the American people are shocked to learn of the tragedies which both we and the South Vietnamese people are undergoing in terms of loss of life and of productive capabilities.

And yet, instead of learning from this lesson, it appears that our Government is failing to face up to the boiling caldron evident in Latin America today, and is repeating the mistakes of southeast Asia.

After the Bay of Pigs fiasco President Kennedy assured the country and the world that the United States would not stand idly by to watch the export of Communist subversion from Cuba into Latin America.

In September 1962, President Johnson made similar statements, and went further, saying that the U.S. aim is to get rid of Castro and of Soviet influence in Cuba. He spoke of "remaining alert and fully capable."

This presumably is still our policy. And yet it is also our policy to avoid offending Russia in fear that this might cause hard feelings. And so we do things like signing new cultural exchange agreements with Russia soon after we have been treated to Russian violations of previous agreements.

#### THE MOSCOW-HAVANA AXIS

Nearly all major mistakes of U.S. foreign policy since 1961—from the Berlin Wall to Laos, and from the Dominican Republic to Vietnam—can be traced to our Government's tendency to minimize the extent and the guile of Communist involvement in trouble spots.

On one hand, while our stated policy is one of active opposition to Castro communism, on the other hand, our working policy planners appear to hold a fundamental belief that Moscow is really not interested in expansion of Russian influence, and we must, therefore, endlessly prove our good faith, and not offend anyone.

If it were true that Castro's revolution had no connections with communism, as many in the State Department believed until Castro himself said otherwise, then there might be no conflict between our public policy of opposition to Castro and our actual practice of trying to find accommodations with Moscow.

But the fact is that Castro's government has been associated with Moscow from the start, and the relationship has become closer in the past several months. And if the State Department were to state this fact clearly, and were to be candid regarding the aggressive nature of the Moscow-Havana axis, the result would be to emphasize the bankruptcy of U.S. policies going back to the Bay of Pigs.

With these inconsistencies and confusion the State Department is left with its obsession over finding accommodations with Moscow. We try not to notice the increasing Moscow ties with Castro.

Just as in 1963 and 1964 the Administration did not face up to dangers in Vietnam, it now cannot bring itself to face up to the dangers in Latin America.

Instead of dealing candidly with the American people, as the administration could do by telling us, for example, that Russia is pumping an estimated \$1 million each day into Cuba, the White House says nothing about Moscow's energetic, ambitious activities in Latin America.

Instead of helping to inform the people about the Havana Conference in January of this year, the administration says we need to engage in more trade with Communist nations and enter into new expressions of mutual good faith.

What about the Havana Conference?

It took place during the first 2 weeks in January while the Johnson administration carried through a pause in the bombing of North Vietnam in the vain hope that this would give the chance for Russia to influence Hanoi with its supposed peaceful intentions.

It was called the First Conference of the Solidarity of Peoples of Asia, Africa, and Latin America. The principal result was to demonstrate the determination of Communists to increase the pace of terror and subversion in Latin America.

And in the event that some might think the mood of the Conference was directed at overthrowing governments by legal, political means, it seems clear that the main Soviet aim was to give greater support to guerrilla leaders rather than to established Communist Parties of the various countries.

This is true because Latin American delegates to the Conference were not, in general, the Communist politicians. The "real stars," according to a French newspaper, were the "lean, bronzed men who had arrived from the guerrilla camps" of Latin America.

Even a Budapest newspaper said the delegations emphasized the firm grip of Castro-type revolutionaries.

Some 600 delegates and observers from 82 countries on three continents attended the Havana Conference. The Soviet delegation of 34 men was headed by Sharaf R. Rashidov, First Secretary of the Communist Party Central Committee of Uzbekistan.

A month before the Havana Conference, on December 9, 1965, the delegates met in Moscow and were told by Soviet Foreign Minister Andrei A. Gromyko, that the Soviet Union would do everything to "consolidate the front of struggle against imperialistic aggression."

The two supreme Soviet leaders Brezhnev and Kosygin issued a message of greeting to the conference saying:

The U.S. imperialists are challenging all progressive forces.

While our Government apparently still clings to the fiction that Russia is truly interested in peaceful coexistence, the Russian delegate, Rashidov, spoke before the Havana Conference on January 6 giving lip service to peaceful coexistence but then saying:

It is clear that there is not, nor can there be, any peaceful coexistence between the oppressed peoples and their oppressors.

In Communist terminology, of course, the United States is the oppressor nation. And in case there was any doubt as to the importance placed by the Conference on this theme, it was included in the same language in a special resolution passed at the closing session, January 15.

The final declaration of the conference called for support of the Vietcong in Vietnam and hailed their effort as an inspiring example.

#### MAXIMUM MILITANCY

The Havana Conference also included in its final declaration a clarion call for maximum militancy on the part of subversives in Latin America "who are fighting with arms in their hands against the



force of oligarchy which are in the service of the United States."

It mapped efforts for sabotage of U.S. investments in Latin America, and called for "liberation" of Puerto Rico and the Dominican Republic. And it called for "active, vigorous, and militant solidarity" through revolutionary action for the "complete liquidation of all forms of imperialist, colonial, and neocolonial oppression."

The Havana Conference was intended to be a starting point rather than a goal in itself. It arranged for establishment of regional groups to advance the stated aims. And accordingly, on January 19, only 4 days after conclusion of the Conference, there was set up a group called the Latin American Solidarity Organization consisting of 27 delegations.

The Latin American group met with Fidel Castro and Medro Medina of Venezuela, and decided to establish permanent headquarters in Havana with Medina as Secretary General.

It was not long before the new group began to function. On February 10 there was established a "Free Puerto Rico" Embassy in Havana. And on February 12 the group appealed for "a wave of sabotage against Yankee interests throughout the world."

One of the grave mistakes we have made in Asia has been our failure to recognize and to work with the elements there which are prepared to stand up against Communist aggression and in support of their own independence, until it is too late.

It sounded empty, for example, to hear Vice President HUMPHREY talk in March 1966, about the need to recognize our friends in Asia in their fight for independence, after 5 years of our neglect of those same free peoples of Asia.

Yet today we appear to be headed down the same road in Latin America. We have heard nothing from our own Government about the Havana Conference.

But Ambassador Ilmar Penna Marinho, of Brazil, Chairman of the OAS Council, says of the Havana Conference:

Except for the placing of nuclear weapons in Cuba in October 1962, no event threatens more dangerously the territorial and political integrity of our continent.

Most other members of the OAS Council take the same attitude. So does the Latin American press generally.

Responsible Latin American opinion recognizes the solid evidence of Communist subversion in Latin America.

There are at least 43 guerrilla training camps for Communist subversives in Cuba alone. These camps can train about 10,000 activists a year. The basic training period is 4 months.

Guerrillas come and go from these camps by means of the Soviet-financed Cuban fishing fleet as well as by other means. Cooperation between Cuban embassies and Soviet bloc embassies throughout Latin America is well known.

Last October authorities in Venezuela discovered an underground arms factory on the outskirts of Caracas with enough explosives to blow up the entire city.

Bandit groups and kidnapers with Communist objectives have been operat-

ing in Colombia, Guatemala, and Peru, for years. The same terrorism is taking place in these countries as took place in Vietnam starting in 1957, and continuing through 1964, all generally unknown to the American people.

Meanwhile, in the United Nations, the Soviet Union uses its diplomacy to mask its troublemaking. For example, it seeks to divert OAS complaints of Cuban subversion to the Security Council where the Soviet veto could kill any significant action.

And our own U.S. delegation to the U.N., instead of telling our country what the situation is, defends the continuation of the 40-percent U.S. contribution to the United Nations Development Fund, which in turn, is making \$2.1 million grant to Cuba.

Republicans Senator EVERETT DIRKSEN, of Illinois, and EDWARD GURNEY, of Florida, are among those who have worked to prevent this U.S. help to Castro Cuba. The State Department, however, says that if we blocked this assistance to Cuba we "would probably jeopardize other projects of special interest to friendly countries such as Vietnam, the Republic of China, and Korea."

In my opinion the State Department and the Johnson administration owe to the American people, and, indeed, to Latin America, an explanation of greater credibility than that.

#### THE BIG MYTH

Ever since 1961 there has been a myth circulating among the people who generally control U.S. foreign policy. It is that the world becomes more dangerous as the United States actively shows its determination to prevent or defeat Communist subversion.

Exactly opposite is the truth. Whenever the United States has demonstrated an intention to stop Communist aggressive tactics, the result has been peace and lessened danger of global conflict. This was the case in the Quemoy-Matsu incidents, the fight against Communist subversives in the Philippines, and Greece, and the Lebanon incident.

Whenever our determination has wavered or appeared to be in doubt, these are the times the world has become more dangerous. This was the case leading to the Korean war, and in Laos where our "accommodation" with the Pathet Lao led directly to strengthened Communist hold on the Ho Chi Minh trail which has made it possible for the Vietcong to conduct prolonged operations in South Vietnam.

When the Communist character of the Castro regime in Cuba first became clear, and he admitted it first publicly in 1961, effective action by the United States in helping to establish non-Communist Cubans in power would have lessened the dangers the world faces in Latin America today.

The Dominican Republic presents a case by itself, also. There, in April 1965, we did take action against an upheaval which was Communist infiltrated if not Communist originated. However, our efforts were clumsy to the extent that we forfeited the support of our natural allies because we ignored them.

The Johnson administration allowed itself to be inhibited by the cries of some, including some in the State Department, that the disorder had no significant Communist element. Debate raged in this country for days and weeks over whether Communists were involved or not.

It has recently been shown that Communists had a very significant part in the Dominican Republic revolt. And their only remorse is that they did not plan carefully enough. They have promised themselves to do better next time.

And there surely will be a next time. It is folly for we in this country to argue, as we are tending to do, over the question of whether these revolutionary upheavals are instigated by Communists or merely taken over and run by Communists once they are started.

The point is that Communists stand ready to move in at the first sign of disorder, and will do everything they can to take it over, agitate increased violence, and put their people in charge if they can.

#### THE WAY OUT

The road ahead will be difficult, at best. There are no easy solutions to problems which are infinitely complex. But clearly, this country will make no gains whatever so long as we so blindly refuse to profit from the past.

We have been making the same mistakes over again for so long that we must be the absolute despair of our natural friends in Latin America. One suspects this has already happened in Asia.

How can we go about minimizing mistakes and begin to act the part of a leader in Hemisphere affairs? How can we be a leader for peace and progress? Here are some of the things which would provide a beginning.

First. Let us not be overwhelmed by the Sino-Soviet split. Surely the Administration must know that the Chinese and Russian Communist leaders have differences which are based on relatively superficial ideas, rather than on basic purposes.

Both of these power centers are dedicated to the communization of non-Communist countries everywhere. Their differences are over tactics and timetable in the achievement of the same goal.

The Chinese approach is bellicose, crude, and blatant. The Russian approach is more in accord with the outside appearance of accepted standards of world diplomacy.

The Chinese are open and frank about their aims. The Russians like to appear peaceful. Their aims are usually camouflaged, and therefore are in reality the more dangerous of the two.

Second. While China appeared to be the dominant Communist influence in Cuba some months ago, it is now clear that Russian communism is in charge.

With approximately \$1 million in aid being poured into Cuba by Moscow every day, Castro is playing the Russian game. This should be made clear to the American people, along with the significance of the Havana Conference as a Moscow-engineered program for the militant subversion of Latin American.

Third. Some of the 82 delegations to the Havana Conference appear to have included officials of the countries represented. The information on this point is available.

We should withhold U.S. aid from those countries which may have sent official or semi-official delegations to the conference.

In this connection it should be added that the second Tri-Continental Conference, in other words, the follow-up to the Havana meeting, is scheduled to be held at Cairo in 1968, at the invitation of President Nasser.

Fourth. Instead of considering Latin American policies country-by-country and bit by bit, it is essential that we use the regional approach. We made the mistake in southeast Asia of considering Laos and Vietnam as two isolated countries as though they were on opposite sides of the world.

Now it often seems that we consider Cuba as one problem and Venezuela as another, with no relation between the two. We need to consider Latin America as a single area which is the target of a single objective as set forth at the Havana Conference.

In this connection it is important that we do everything we can to support the Organization of American States and guide it towards success in its work for strengthening the independence of Latin American countries.

Fifth. The American people should give greater public support to realistic Government policies with regard to Latin America, and should demand that key positions in the Government are filled with persons who do have realistic ideas.

A case in point is the case of Thomas C. Mann. Mr. Mann was appointed Assistant Secretary of State for Inter-American Affairs in November 1963. He did have, generally, realistic ideas of the kind which should lead to true U.S. leadership in the interests of peace and security.

In October 1965, he made a speech in San Diego which was labeled a "hard line" speech. He stressed the Communist threat, and said that collective intervention in Latin American states is justified if they are under attack by subversive elements responding to direction from abroad.

For comments such as these Mr. Mann was labeled "controversial." He was criticized by Senator FULBRIGHT, chairman of the Senate Foreign Relations Committee. And in January he was shifted out of the Latin American policy position into one limited to economic affairs.

#### CONCLUSION

The overall need in U.S. response to events in Latin America today is the need for true leadership. And one essential ingredient of true U.S. leadership is a candid approach by the Government to the people.

Let the Government demonstrate that we recognize the reality of the Latin American problem. Let us state clearly what the facts are, and what their significance is, and let us not hide behind bland statements of our own hopes.

We can be sure that while U.S. attention is riveted on Vietnam, Latin Ameri-

can Communists will use every means at their disposal to implement the declarations of the Havana Conference.

In this situation the non-Communists of Latin America cry out for our leadership. It is only the United States that can provide such leadership. And it is vital that we answer the call.

#### WE ARE ABOUT TO SEE IT HAPPEN AGAIN

The SPEAKER. Under previous order of the House, the gentleman from Oklahoma [Mr. ALBERT] is recognized for 15 minutes.

Mr. ALBERT. Mr. Speaker, I ask unanimous consent to revise and extend my remarks and include certain extracts and reports and other extraneous data.

The SPEAKER. Is there objection to the request of the gentleman from Oklahoma?

There was no objection.

Mr. ALBERT. Mr. Speaker, we have seen it happen again. Because they were in such a hurry to say "no" to every administration proposal, some of our Republican friends now find themselves in the embarrassing position of opposing one of their very own ideas.

I refer, of course, to the Participation Sales Act submitted yesterday by the President.

This is a plan to bring more of the private market into our Government lending programs. It has two purposes: first, to help us better use Government funds now tied up in various forms of loans and second, to stimulate growth and prosperity in the private sector of our economy.

Certainly this proposal is in the best traditions of the great free enterprise system.

But what happened yesterday? Without giving any attention to the historic position of the Republican Party, my good friend, the distinguished minority leader and some of his associates decided they had an issue. They pounced on it like a hungry animal. What is it that has happened to the distinguished minority leader lately? Do I detect a sense of political desperation in some of his alarming statements? Or is his objection in this instance just reflex action? Is it just blind adherence to the doctrine of "no-ism"? Is the respected minority leader suffering under a misapprehension about what we are trying to do? Is he really in pain or are his tears just crocodile tears? Whatever the reasons the American people are not going to be fooled by these tactics.

What a pity cooler heads did not prevail. Instead of shouting and name calling, my friend should have been examining the Participation Sales Act. Had they done this they would have found that it would accomplish exactly what responsible Republicans have been advocating for years.

In January 1954, President Eisenhower said in his budget message:

To encourage the substitution of private financing for Federal outlays in the areas of greatest housing need, I shall urge the Congress to authorize two new mortgage insurance programs, as well as to liberalize

certain existing programs \* \* \*. The policy of this administration is to sell the mortgages now held by the Association as rapidly as the mortgage market permits. Assuming satisfactory market conditions, receipts from these sales and from other sources in 1955 will exceed expenditures by an estimated \$166 million. This contrasts with net expenditures of \$379 million in 1953, and \$62 million estimated for 1954.

#### In January 1955:

Private capital will be gradually substituted for the Government investment until the Government funds are fully repaid and the private owners take over responsibility for the program.

The Federal National Mortgage Association will make commitments for immediate or deferred purchases of \$423 million in mortgages insured under the urban renewal, armed services, cooperative, and other especially urgent housing programs which I have specifically designated. Sales of mortgages together with repayments and other receipts, however, are expected to be \$255 million greater than expenditures.

In January 1956, President Eisenhower stated:

In addition, purchases of mortgages by the Association under its secondary market program are expected to increase in 1957 to \$290 million. Except for temporary Treasury loans, the funds required will be obtained from sale of debentures and stock to private investors, and the purchases are shown as trust expenditures, rather than budget expenditures. By the end of the fiscal year 1957, private purchases of stock will have made an excellent start toward the goal of replacing a Government activity with a private company.

Again in January 1958, President Eisenhower said:

With more realistic mortgage prices, it should be possible to restore the incentive for private financing originally intended under the Housing Act of 1954 and thus avoid the necessity for additional large amounts of new obligational authority to finance purchases of mortgages under this program and under programs for armed services and cooperative housing.

But the record only begins here.

Leading Republicans in private life—chairmen of the Nation's biggest banks, investment houses and industrial firms have recommended the substitution of private for public credit—the very heart of the Participation Sales Act.

The report of the 1961 Commission on Money and Credit was based on the principle that the private market should be gradually substituted for Government investment.

The Chairman of the Committee was Mr. Frazer B. Wilde, chairman of the Connecticut General Life Insurance Co., one of the Nation's largest.

Some of the other members were:

David Rockefeller, president of the Chase Manhattan Bank, one of the world's largest.

Gaylord A. Freeman, Jr., president of the First National Bank of Chicago, one of the largest financial institutions in the West.

Lamar Fleming, Jr., chairman of the board of Anderson, Clayton & Co., a large industrial firm.

Joseph M. Dodge, President Eisenhower's Director of the Budget and chairman of the board of the Detroit Bank & Trust Co.



But let me continue.

The very next year, in 1962, some of our most distinguished, outstanding, and knowledgeable public officials who participated in the Committee on Federal Credit Programs supported the principles now embodied in the Participation Sales Act. I will quote from a key recommendation of its report:

Accordingly, the Committee believes that Federal credit programs should, in the main and whenever consistent with essential program goals, encourage and supplement, rather than displace, private credit.

Government-financed credit programs should, in principle, supplement or stimulate private lending, rather than substitute for it. They should not be established or continued unless they are clearly needed. Unless the urgency of other goals makes private participation infeasible, the methods used should facilitate private financing, and thus encourage longrun achievement of program objectives with a minimum of Government aid.

This report was unanimous—signed by then Treasury Secretary Douglas Dillon and Federal Reserve Board Chairman William McChesney Martin, then Budget Director David Bell and then Chairman of the Economic Advisers Walter Heller.

Finally from the pens of some of the most knowledgeable House Republicans in the field of fiscal and monetary policies comes the strongest endorsement of all for what the President is trying to accomplish in the Participation Sales Act.

These Republican experts—and there were 10 of them in all—members of the Committee on Ways and Means, only 2 years ago urged the Government to embark on comprehensive program of asset sales.

The rollcall is long and distinguished: Representative John S. Byrnes, Representative Howard H. Baker, Representative THOMAS B. CURTIS, Representative Victor A. Knox, Representative JAMES B. UTT, Representative JACKSON E. BETTS, Representative Bruce Alger, Representative Steven B. Derounian, Representative HERMAN T. SCHNEEBELI, and Representative HAROLD R. COLLIER.

And here is what they said in pertinent part in the minority report on H.R. 6009 which was a bill to provide temporary increases in the public debt limit:

The administration also can always reduce its borrowing requirements by additional sales of marketable Government assets. This provides the Treasury with another "cushion."

For example, when the Secretary of the Treasury was before the committee on February 27, we suggested that it was incumbent upon the administration to show "good faith" before coming to the Congress for an additional increase in borrowing authority. We pointed out that the Government held about \$30 billion in loans, many of which were readily marketable. In fact, there was a very good market for many of these loans. Instead of increasing its offering of these loans to private lenders, the administration was then acting on the supposition that the Congress would automatically accede to a request for an increase in its borrowing authority.

It was also pointed out to the Secretary of the Treasury that the Government had other assets which might be liquidated, such as the stockpile of strategic materials amounting to about \$8.7 billion.

Our refusal to grant the administration's request last February produced "results." In the interim of less than 2 months the administration found that it could increase revenues from the sale of loans by an additional \$1 billion for fiscal 1963. Now, the administration estimates that it will realize \$2.028 billion—as contrasted with an original estimate of only \$0.929 billion less than 2 months ago.

These are the facts that the distinguished minority leader and some of his colleagues would have discovered about the Participation Sales Act if they had read before they condemned. I think they should be reminded just where they stand—in relation to where their party has stood for more than a decade. For they are long on words and short on memory.

I hope that once their memories are refreshed they will reaffirm their party's dedication to the free enterprise system and help us enact this enlightened item of legislation into law.

I say this because I think it would be good for the country.

Mr. JONAS. Mr. Speaker, will the distinguished majority leader yield?

Mr. ALBERT. I yield to the distinguished gentleman from North Carolina.

Mr. JONAS. The distinguished majority leader has not, of course, referred to me.

Mr. ALBERT. No, I did not.

Mr. JONAS. It is not my prerogative to speak for the minority—

Mr. ALBERT. The gentleman always makes an excellent contribution on any subject in which he interests himself.

Mr. JONAS. Thank you, sir. I appreciate those words and I shall try to make this constructive.

Will not the distinguished majority leader recognize that there is a great deal of difference in bringing in private capital to provide funds than having the Government provide the capital originally and then sell the mortgages at a discount? That is what is contemplated, if the gentleman will yield, in this act to which reference has been made. The taxpayers will be asked to pick up the difference between the market value of these mortgages and what investors in the private segment of the economy will pay for them.

Mr. ALBERT. Of course, what they will pay is speculative, but I think the substance of the minority views on H.R. 6009 will answer the distinguished gentleman; namely, what they were driving at was to prevent the necessity of the Government borrowing more money, and that is important. I think that is critical here. It will mean a lot of difference as to the future obligations of the Government of the United States at a time when interest rates are quite high.

Mr. JONAS. May I comment on that?

Mr. ALBERT. Surely.

Mr. JONAS. Of course, the report to which reference has been made was signed when the money market was quite different than what it is today. Today everyone admits that money is tight and becoming tighter, and interest rates are considerably higher today than they were then. The effect is that these mortgages to which my distinguished friend,

the majority leader, is referring to cannot be sold at par, and the taxpayers will have to subsidize them by putting up the difference.

Mr. ALBERT. The gentleman will understand, of course, that if the Government has to borrow money, it will be subject to the tight money situation to which the gentleman has alluded in his comments.

Mr. JONAS. May I say, and speaking for myself personally, I would like to have the Government sell all of these mortgages if it can sell them at par. But they cannot be sold at par. They have to be sold at a discount, and the only way they can be sold at all is for the taxpayers to put up the difference in money.

Mr. ALBERT. I think the answer is that whatever is best for the Government and will cost the Government the least in the long run will be the best action, and I think the administration will pursue this matter with that in mind.

Mr. JONAS. I certainly concur in the view that what is best for the country should be done, and I intend to support what I think is best for the country.

Mr. ALBERT. I know the gentleman does.

Mr. HALL. Mr. Speaker, will the gentleman yield?

Mr. ALBERT. I yield to the distinguished gentleman from Missouri.

Mr. HALL. Mr. Speaker, I appreciate the gentleman's yielding. I simply want to know when we are going to get this Presidential message I have been hearing about for 2 days.

Mr. ALBERT. Mr. Speaker, will the gentleman yield?

Mr. HALL. I yield to the gentleman.

Mr. ALBERT. We got the President's message yesterday.

Mr. HALL. It was not delivered to the Members.

Mr. ALBERT. I believe it was read yesterday. I think the gentleman will find it, if I am not mistaken, in the CONGRESSIONAL RECORD. I see the distinguished gentleman, the chairman of the Banking and Currency Committee, here, whose committee is very busy on this subject now.

Mr. PATMAN. Mr. Speaker, will the gentleman yield?

Mr. ALBERT. I yield to the gentleman.

Mr. PATMAN. We had hearings on this matter this morning. We had Under Secretary Ball, and the Director of the Bureau of the Budget, Mr. Schultze. We will have another meeting at 2 o'clock this afternoon. It is contemplated we will remain in session this afternoon until we dispose of this. If it is not completed today, it will be continued tomorrow.

Mr. ALBERT. Mr. Speaker, the gentleman will find it, I believe, in the CONGRESSIONAL RECORD.

Mr. PATMAN. Mr. Speaker, the bill to carry out the President's request will be forthcoming.

Mr. HALL. Mr. Speaker, if the gentleman will yield further, I was on the floor constantly yesterday. I did not leave, as I customarily do not. I did not know it was read, because had it been read I

would have honored the President's message, as I customarily do, with a quorum call, so that all might have heard it.

It may well have been submitted, it may well have been printed, but it was not read as a message in accordance with the custom that we have lately adopted for the President's messages, nor was it read on the floor of the House, because I sat here, alert and eager, to perform that function in honor of the President's words.

Mr. ALBERT. Mr. Speaker, I may be mistaken.

Mr. HALL. Mr. Speaker, I believe the distinguished majority leader is mistaken.

If he will yield further, I would like to know, of the chairman of the Banking and Currency Committee, if he plans to hear other than administration witnesses as he goes through the sessions?

Mr. ALBERT. Mr. Speaker, may I say I do not know whether we got a message or a communication. We did have a communication from the White House on that subject. Am I right?

Mr. PATMAN. We had a communication.

Mr. ALBERT. Mr. Speaker, I am sure we had a communication from the White House on this matter yesterday.

Mr. HALL. Mr. Speaker, I wonder if the chairman of the Banking and Currency Committee can answer the other question?

Mr. PATMAN. There was a communication.

Mr. HALL. Does the committee plan to hear other than administration witnesses?

Mr. PATMAN. That will depend on the wishes of the majority of the committee.

Mr. HALL. I presumed that would be the answer.

The SPEAKER. The Chair states that the message yesterday was an executive communication, which of course under the rule was referred to the Committee on Banking and Currency.

Mr. HALL. Mr. Speaker, the message was referred, then, without being read to the assembled House of Representatives?

The SPEAKER. It was not a formal message. It was a communication.

Mr. HALL. I thank the Speaker.

#### INTERGOVERNMENTAL COMMITTEE FOR EUROPEAN MIGRATION

(By unanimous consent, Mr. McCulloch was granted permission to address the House for 5 minutes, and to revise and extend his remarks and include extraneous material.)

Mr. McCULLOCH. Mr. Speaker, it was my pleasure to attend in November 1965, the 24th semiannual session of the 29 member governments of the Council of ICEM—Intergovernmental Committee for European Migration—held in Geneva, Switzerland. The U.S. congressional delegation, of which I had the honor to be a member, was composed of the gentleman from New Jersey [Mr. RODINO], the gentleman from Colorado [Mr. ROGERS], the gentleman from Massachusetts [Mr. DONOHUE], the gentleman

from Minnesota [Mr. MACGREGOR], and the Senator from Massachusetts [Mr. KENNEDY].

The needs for resettlement of some of the people of the world have materially changed in recent years but our Government and our citizens have continued to play a leading role in providing both material assistance and resettlement opportunities to refugees. In large part through special legislation well over a million refugees have been admitted to the United States of America since the end of World War II. I am proud, Mr. Speaker, of the leadership my country has provided for ICEM. I call to your recollection the part played by our late great colleague, Tad Walter, in conceiving and founding ICEM, and the contribution of our late great colleague, Chauncey Reed, in writing the constitution for this great organization.

In our changing times the problem of European refugees is vastly different from that which confronted us at the end of World War II. The unsettled conditions of the world, the existence of governmental systems based upon the denial of human rights, the denial of equal opportunity and the refusal to respect the dignity of the individual, all of these bear eloquent testimony to the continued need for our united efforts to resolve the problems of refugees.

The current situation and the present trends in European migration were ably reviewed before the Council in Geneva by ICEM's Deputy Director, Walter M. Besterman, who served as our counsel for 19 years. The record he made in serving the Judiciary Committee is well known to you all. The contribution he is now making in his post at ICEM has received acclaim and recognition worldwide.

For the information of the House, Mr. Besterman's address follows:

I

Mr. Chairman, I have been requested by the Director to review briefly with the Council Document MC/736 which contains a report on our operations in two, usually referred to as classic, fields of operations, namely, national migration and refugee migration. As you will have noted, the document is divided into two parts: "Chapter 1, National Migration," and "Chapter 2, Refugee Migration." I shall refer first to national migration.

The results of our operations in 1965 reflect, in our opinion, the situation which exists in the migrant-sending countries, the countries of Western Europe. They do not reflect the situation as it exists in the migrant-receiving countries where requirements of national policy—that is the willingness, the economic considerations, but also the ever-present generosity—represent an attitude of open doors. To state it with more precision, there are many overseas countries willing to offer hospitality to Europeans desiring to migrate at this time, although the numbers of such Europeans are diminishing.

Nevertheless, in our daily operations we are faced with a flow of people, who, even though benefiting from the prosperity of Europe of today, desire to seek new opportunities in new lands, hoping that life might be better there for themselves or for their children. It is the urge for betterment in faraway lands that probably goes back at least some 3,000 years: human beings will always be on the move. It is a demonstration of their vitality. They are entitled to express it and this community which comprises

governments believing in freedom of movement is the expression of recognition of the legitimacy of this ever-present desire for a change.

In the national migration sector we have achieved or are about to achieve—we still have 1 month to go of this year—the targets set forth in 1964 when we first presented to this Council our estimates of movements. The deviation from the target will not exceed 10 percent—a tolerable discrepancy when you consider that we have to estimate not only the possibility of movements but also the will of the individual to move at least 12 to 18 months ahead of time.

The various programs and related statistical data are a part of the paper before you and there is probably no need, Mr. Chairman, for me to review the items separately. There is, however, one important point to be made. In presenting to you, ladies and gentlemen, the figures reflecting our operations we are, of course, speaking of quantity. But in the area of our efforts to supply the Latin American countries with the most desirable type of migrant, that is the highly skilled migrant, the statistics do not reflect our achievements. I would respectfully submit that they do not reflect the significance of our operations, because in that particular field we are not dealing with quantity. We are dealing here in quality, and no statistician could report adequately on that particular aspect of our operations.

There is another aspect which weighs heavily on whatever we do in the field on national migration; it is the prosperity of Europe, the tight labor market for skilled, semi-skilled, and even unskilled workers. There are job vacancies in Europe far in excess of labor supply. That situation has created the phenomenon of intra-European migration in size unequalled in history. We have to agree, I believe, on certain terms before we proceed any further in assessing the role of overseas migration as compared to intra-European migration. The migrant seeking resettlement abroad seeks a new way of life, if not a new life. The intra-European migrant of today, with very few exceptions indeed, seeks to enhance his fortune for a few years and plans to return home. Well, whether he actually returns home, or moves to another foreign land, time alone will tell. Whether he finds satisfactory conditions in his home country upon return, particularly when compared to the conditions in which he lived temporarily, is again another story. Whether any country in Europe will impose the weight of a recession exclusively or even partially on the foreign workers, whether the sad story of the 1930's is at all likely to repeat itself and whether we might see again the trains in which foreign workers were shipped home, is one more of the question marks hanging over intra-European migration.

These and other questions are of considerable significance, economic and political, to Europe. No wonder the OECD has initiated a study in depth of the uniquely complicated phenomenon of intra-European migration.

Although it is conceded that efforts are made to afford the intra-European migratory worker virtually the same entitlements to social welfare protection as those enjoyed by the native worker, vast discrepancies exist in fact. Housing problems beset the intra-European migratory worker. The rather cruel rule "no house, no wife, no children" causes hardship due to separation of families and tends to produce mounting social problems. Acquisition of citizenship, the great symbol of achieved assimilation, is another facet of the unhappy situation in which many intra-European migrant workers find themselves. Reasonably expeditious naturalization, the rule of the countries offering permanent resettlement, is an exception in Europe, practiced in but very few countries.



These, Mr. Chairman, are only some of the highlights of the intra-European migration dilemma brought out recently by a renowned American scholar, Prof. C. P. Kindleberger, of the great MIT, the Massachusetts Institute of Technology, in a dispassionate, thorough analysis published in my country's leading political journal, *Foreign Affairs*. The danger to quote Professor Kindleberger as he sums it up, is "that the mass migrant of today will become a man without a country, one who has left one life and finds that he cannot stay where he is and cannot go home again. The problem of belonging," says Professor Kindleberger, "is difficult enough within one's own borders. Unless Europe achieves a social and political identity it may develop a problem of flying Mediterraneans, restless spirits with no home."

What the great Massachusetts economist is writing about, and what the OECD is concerned with, has not escaped ICEM's attention. We are aware of intra-European workers who, while still in the host country, approach our missions, the immigration officers of our overseas member governments and the voluntary agencies, with requests for counsel, advice and assistance in obtaining documentation enabling overseas migration in their desire to have the Gordian knot cut, rather than float between what has been abandoned as home and what has never become one. More and more of them just want to settle down, with their families, overseas, in a new abode.

Let me suggest, Mr. Chairman, that in analyzing our narrative and our statistics regarding national migration, it must be realized that many aspects of the current intra-European migration tend to increase ICEM's task in the sector of national migration overseas rather than to relieve us of it. I wish to inform the Council that ICEM's Director is aware of that situation. A recently constituted internal staff task force will attempt to establish ICEM's position in that regard so that we may be ready to respond to the wishes of the member governments whenever their interests would require our action.

Mr. Chairman, the primary purpose of chapter 2 of the report before you is to answer several questions frequently asked in the Subcommittee on Budget and Finance, in the Executive Committee and in this Council: Who are the refugees of today? Why do they become refugees? How many refugees are there?

I am most grateful to my good friend the distinguished representative of the United Nations High Commissioner for Refugees, Mr. Jamieson, for relieving me of about one-half of my task by having stated his high office's finding that the European refugees, contrary to certain unfounded beliefs, still exist, not in diminishing numbers, and still not only request but are most deserving of assistance.

In the paper before you there are set forth three conclusions reached from an assessment of the reasons causing the continuous appearance of European refugees.

The first stems from those political developments taking place since the end of World War II which have and are creating new sovereignties, new independent countries, based predominantly on religious and racial principles. I am speaking of former colonial possessions or former dependencies which have joined the family of free nations, have found recognition by other countries, and became members of the United Nations. In these countries there remains a considerable residue of persons of European ethnic origin who are the minorities, national or ethnic minorities, formerly the privileged ones, presently the underprivileged or, in plain words, the people who are not wanted there any more. There may be room for some differentiation as to whether they are subject

to persecution or to pressure. In fact, it would be but a play on words. In reality they become refugees because they not only desire, but must, eventually, leave the places of their historical abode.

Simple arithmetic tends to indicate that this is a continuing problem. That conclusion is inescapable if you but count noses or heads and keep in mind that not all of them will be able to leave within a year, or 2 years, or 5.

Our second conclusion relates to the well-known group of people who are not in accord with and do not accept the rule of the regimes installed in Eastern Europe in the post-war period. Registering their dissatisfaction and opposition to the regimes which do not believe in and do not adhere to principles of freedom, to free choice of employment and movement, these refugees stream into Western Europe, into the countries of temporary asylum, seeking permanent resettlement.

The third conclusion reflects the history of the last 20 years, the history of the efforts made by UNRRA, and by IRO, and by this organization which made it possible for well over two million refugees to be resettled in many overseas countries and in many countries of Western Europe. Opportunities exist now for their close relatives to join them. What these opportunities are to be attributed to is rather difficult to determine. It could be that certain governments of Eastern Europe have decided that it is better to let the people go for the simple reason that their departure would leave less mouths to feed, or would mean less communication between the refugees resettled in the free world and their relatives still enclosed in certain areas. Any other guess could be just as correct as these theories are. Nevertheless, the fact remains that these people now have the possibility to leave, and the long overdue and much desired family reunion could take place.

Thus, Mr. Chairman, in these three findings we have attempted to determine the motivations of the refugees and to answer the questions: Who are they, and why do they become refugees? Their numbers are reflected on page 8 of the document. Having gone back to the world refugee year, 1960, when the old static camps of unfortunate memory had begun to disappear and were being replaced by just a few camps presently in operation, camps in the nature of transit centers characterized by a fortunately short stay of refugees, we find that the level of movements remains practically stable. It differs from year to year by not more than 10 percent. Here then is the indication of both the continuity and the stability of the flow as another part of our assessment.

Having looked at the motives and the numbers of refugees, we have attempted to refine the categorization of refugees as first presented to the Council a year ago. We have found that it is possible to categorize the refugees for operational and budgetary purposes regardless of geographical areas, regardless of their location, as these considerations have, in our opinion, no bearing on either the legitimacy of their claim to refugee status or their eligibility for assistance as refugees. We have now based our categorization on the legal status of the refugees. In the proposed category No. 1 we place the refugee who, having found himself in an area of asylum, requires our services in terms of counseling, assistance in obtaining immigration documentation and expeditious movement to resettlement. In category No. 2 we propose to place the refugee who leaves the country of his residence with a visa to final destination and requires our assistance in transit only, in arranging his expeditious onward transportation. Then comes our new category No. 3 where we propose to assign displaced Europeans for many years re-

ferred to as "ethnic refugees." This is the group I tried to characterize in the terms of ethnic or religious minorities who, for a variety of reasons, are the victims of oppressive measures in the areas of their historical abode.

The last categories, No. 4 and No. 5, the first relating to Cuban refugees departing from Spain mostly to the United States, and the latter including solely the European refugees leaving China through Hong Kong, could also be placed in category No. 1 as they definitely are asylum seekers. For reasons of convenience rather than anything else these categories were separated. This administration believes that the problem of European refugees transiting through Hong Kong is nearing its final solution. It may continue for another 6 or 8 months, but probably would not extend beyond 1966. The problem of the Cuban refugees who, in a roundabout way, attempt to reach the United States via Spain may or may not be close to a solution, but it represents an entirely separate program. No ICEM funds are used for this program; the funds are derived from other sources; we offer transport services only, on a fully reimbursable basis. These are the reasons for treating separately categories No. 4 and No. 5.

It is the Director's hope, and we are glad to have obtained last week the endorsement of the Executive Committee in this respect, that our assessment of the reasons for the continuing flow of refugees, and their new classification, will meet with the approval of this Council, giving us an important instrumentality for an orderly arrangement of operations and their financing.

As to ICEM's current operations in the refugee sector, the most important occurrence that should be reported to the Council, I believe, has already been mentioned by Mr. Jamieson. I have in mind the performance of our organization when at something less than 2 months' notice we had to shift suddenly from medium to high gear of operations in Italy, where an unexpected influx of refugee asylum seekers exceeded well over threefold the estimates made earlier this year and based on last year's experience. I am glad to report that the vital cooperation of immigrant-receiving countries was immediately available; that ICEM's technical machinery permitting the missions of those countries to enlarge and expedite selection was ready to serve; that we were in a position to accelerate movements in a fashion which gives added strength to what the Director said this afternoon; namely, that this organization is in a position to give the countries of first asylum a guarantee that they will not be burdened with the expenses, the inconveniences and the problems of an accumulation of refugees to whom they accord temporary asylum. We are not developing a residue of refugees at this time, Mr. Chairman. This statement is, on my part, an attempt to obtain recognition for the overseas countries who have very recently amended their laws or regulations, opening the doors wider and in a more permanent fashion than at any time in the past. It is also a tribute to the partnership that exists between ICEM, the voluntary agencies and the Office of the United Nations High Commissioner for Refugees; the partnership which insures that this humanitarian machinery which your governments have built at high expense is equipped to render the services which are expected of us. Thank you, Mr. Chairman.

#### NATIONAL LIBRARY WEEK

Mr. DORN. Mr. Speaker, I ask unanimous consent to address the House for 1 minute and to revise and extend my remarks.

The SPEAKER. Is there objection to the request of the gentleman from South Carolina?

There was no objection.

Mr. DORN. Mr. Speaker, it is fitting and proper that this Nation observe National Library Week. It is fitting and proper that we honor all of those who make available to the American people the finest libraries in the world. Our librarians, custodians, trustees and all associated with our libraries should be honored for their dedication, devotion and loyalty to education and a search for truth.

One of the first acts of the totalitarian enemies of freedom is book burnings and censorship of learning. One of the greatest bulwarks of academic freedom is our libraries.

Mr. Speaker, the following editorial, which appeared in the *Easley Progress*, *Easley, S.C.*, on April 13, 1966, is a splendid tribute to our libraries:

#### NATIONAL LIBRARY WEEK

National Library Week is to be observed from April 17 through 23. It symbolizes a service and a need that are of the utmost importance in this complex modern world.

A library is many things. It is, first of all, a repository of the thoughts, the wisdoms, the failures and successes, and events great and small which marred or brightened the centuries which have passed. It holds, within its confines, the history of man and nature.

A library exists to provide knowledge and understanding. It has no limits—everything ever known under the sun is within its province. A library is timeless, in the sense that it embraces all of time.

A library offers the reader amusement, relaxation, the opportunity to quietly contemplate himself and the world around him. It provides, from its many voices, comfort or challenge, relief from care or stirrings of ambition—whatever may be one's needs or desires.

It is impossible to conceive of a world without libraries. Never in the endless reach of history has knowledge been so important. That is true of the knowledge that lies behind the miracles of science and invention which are transforming life more swiftly than we realize. And it is true, above all, of the knowledge that comes out of the past and that with the principles and attitudes and values that transcend the material and give true meaning to the existence and perpetuation of mankind.

#### MAY 1, NATIONAL TAX FREEDOM DAY

Mr. WYATT. Mr. Speaker, I ask unanimous consent that the gentleman from Florida [Mr. GURNEY] may extend his remarks at this point in the *RECORD* and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from Oregon?

There was no objection.

Mr. GURNEY. Mr. Speaker, today I am introducing a resolution into the House of Representatives to designate May 1, 1966, as National Tax Freedom Day.

The first day of May is indeed an occasion for celebration for the average American taxpayer. It is the first day of this year that he can call a dollar his own.

From January 1 until April 30, every dollar he earns belongs to the Government; he must pay it out in Federal, State, or local taxes. But, the amount he earns after May 1 is his to keep.

This is simply another way of saying that the average American's tax load is costing him one-third of his income, or 33 cents out of every dollar he earns.

Certainly, this day of relief throughout the land deserves to be marked appropriately, and the bill I propose would do this by giving it the status of a national holiday.

But, along with the celebration of emancipation from the yoke of taxation, this day is an occasion for some serious thinking about this Government that has grown so big that it takes a third of every American's income to support it. It will certainly cause some reflection for the taxpayer to realize that the year is 4 months gone before he can start working for himself and his family.

It is a day for the taxpayer to begin taking a closer look at what the Government has done with the fruits of 4 months of his labor. It should be a day for him to think about the waste of his money in poorly planned and badly administered programs that he did not approve of in the first place.

It is a time for the taxpayer to resolve to take action to see that the holiday will be held at an earlier date in the following years.

If my study of history serves me correctly, the Boston Tea Party was in protest against the excessive taxes levied on tea. The issues of excessive taxation and taxation without representation were the prime reasons sparking the Revolutionary War. The Crown had been arbitrary in its policies and unwilling to listen to the protests of the colonists.

The American people have a tradition of resenting high taxes used for purposes which they do not support. Today the American people feel that taxes are too high. There is also a widespread feeling among many Americans that they are being taxed without representation. All too frequently the Representatives of the people vote for expensive programs that the majority of the people back home do not want.

Just recently I sent a questionnaire to the citizens of my district asking their opinions on various national issues. The replies when tallied showed 82.5 percent of those answering to be opposed to most of the programs of the Great Society. When asked about specific issues, 84.5 percent did not approve of the handling of the poverty war, 84 percent felt that we should not continue the guns and butter economy, and 76.2 percent opposed the reinstatement of the excise taxes.

Because of the decree of one man and a small coterie of advisers in the administration, programs which large people feel to be unwise, mismanaged, and often purely political in purpose are being pressed upon them and financed by their tax money.

It is high time for the American people to become more indignant and to show their indignation about excessive

taxation without representation by electing people who will represent them instead of a chosen few in the Great Society.

#### NATIONAL SCHOOL SAFETY PATROL WEEK

Mr. TENZER. Mr. Speaker, I ask unanimous consent that the gentleman from Ohio [Mr. LOVE] may extend his remarks at this point in the *RECORD* and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. LOVE. Mr. Speaker, today I want to join with my colleagues who have introduced bills by introducing a joint resolution to provide for the designation of the second week of May of each year as "National School Safety Patrol Week."

As you know, the School Safety Patrol program was started many years ago and, since its inception, the traffic death rate of school-children has dropped nearly one-half, while the death rate of other age groups has doubled.

More than 16 million children, since 1922, have served as School Safety Patrol members safeguarding the lives of their fellow students. I know from the efficiency with which this program is conducted within my own district—Third, Ohio—it is an outstanding example of cooperation by school authorities, police departments, and motor clubs affiliated with the American Automobile Association.

Mr. Speaker, in view of the fact that traffic safety is one of the most critical problems we are faced with today, I recommend that we unanimously adopt a resolution designating the second week of May of each year as "National School Safety Patrol Week." I would like to recommend further that we continue to encourage the School Safety Patrol and pedestrian control programs and concentrate on other symptoms which contribute to the loss of lives on our Nation's streets and highways.

#### STATUTORY AMENDMENT ON ATTEMPTED DESTRUCTION OF PUBLIC AIRCRAFT

Mr. TENZER. Mr. Speaker, I ask unanimous consent that the gentleman from Ohio [Mr. LOVE] may extend his remarks at this point in the *RECORD* and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. LOVE. Mr. Speaker, there is currently a deficiency in the statutory law concerning the prosecution and punishment of one who fires on a military aircraft. His punishment now is determined by the amount of damage he caused. Consequently, a bullet hole in the wing of an SAC bomber would result in a maximum fine of only \$1,000 against the guilty party—18 U.S.C. 1361.



This situation actually occurred in my district—Third, Ohio—recently when a certain individual fired a rifle at armed military bombers taking off from Wright-Patterson Air Force Base because the noise from takeoff disturbed his peace. The resultant damage was holes in the wings of the aircraft, but a difference of only inches could have meant a major catastrophe. However, under present law, the man could only be fined a maximum of \$1,000 for this act.

Obviously, one who fires on a military airplane is not only risking the possibility of damage and destruction to over a million dollars in property, but is endangering the lives of many persons. If he misses the plane entirely, he currently cannot be prosecuted, and, if he does cause minor damage, the penalty is proportionately minor. However, in every instance the risk is very great, and a suitable deterrent is therefore necessary.

There is now a provision which provides a penalty of 10 years and/or \$10,000 for willful attempts to interfere with any national defense material, 18 U.S.C. 2155(a). This provision, however, requires a prior showing of an intent by the defendant to obstruct the national defense effort of the country itself, in order to prosecute him. As a result, one who fires on a military aircraft solely for his own purposes—that is, to prevent such flights due to their disturbing his peace and quiet, or his livestock—cannot be prosecuted under section 2155(a) because he had no intent to obstruct the national defense effort.

It is therefore imperative, Mr. Speaker, that we amend the statutes to provide a deterrent and an appropriate penalty for any future attempts. The most preferable procedure is to amend the existing sections with reference to civil aircraft, 18 U.S.C. 31, 32, and 34, as provided in the bill which I have introduced today.

#### JOSEPH P. McMURRAY INAUGURATED PRESIDENT OF QUEENS COLLEGE

Mr. TENZER. Mr. Speaker, I ask unanimous consent that the gentleman from New York [Mr. ROSENTHAL] may extend his remarks at this point in the Record and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. ROSENTHAL. Mr. Speaker, this coming Sunday, April 24, Queens College of the City University of New York will inaugurate Joseph P. McMurray as its fourth president. The good fortune of Queens College will be commemorated at that time, and well-deserved acknowledgment will be made of the career of a man who has been a dedicated public servant for many years.

President McMurray represents a new breed of college presidents. His experience has not been limited to the field of education, although he previously held the post of president of Queensborough Community College. Just prior to his appointment to Queens College in 1965 he had served as Chairman of the Federal

Home Loan Bank Board, a position he had accepted after a 2-year stay at Queensborough. In addition, Joe McMurray has given over 25 years of faithful and devoted service to the government in other capacities—he worked in the executive branch of the Federal Government for the Department of Commerce, the Federal Works Agency, and the National Resources Planning Board; he was with the legislative branch as administrative assistant to the late beloved Senator Robert F. Wagner, and on the staffs of two Senate committees; he then returned to his home State of New York where he served with the New York City Housing Authority; and subsequently as Commissioner of Housing for the State of New York.

During his quarter century of service to his country, his State and his city, President McMurray has acquired a vast and rounded experience which will bring to Queens College a new sophistication and depth. American colleges and universities are more and more active in service to all levels of government, in developing leaders, in educating and encouraging their students to actively participate, not only in local affairs, but in national and world affairs. To this development, President McMurray will bring special enthusiasm, ability, and conviction. He is a native New Yorker who knows his city, who acquired his education in the city, and who has been actively engaged in community, civic, and municipal affairs for a long time.

For a community to have an energetic, growing, and resourceful college is of great benefit to, and provides tremendous opportunities for, the residents. For that college to have installed as its president a man of such wide experience and varied accomplishments is a crowning achievement, bringing good fortune and distinction to the institution and to the community.

The city of New York and especially the borough of Queens, as well as the City University and Queens College itself—including the student body and the faculty, will be greatly enriched and much complemented by the installation of Joseph M. McMurray as president of the college.

I consider it an honor and a privilege to join with the many academic, civic, and political figures who will be paying well-deserved tributes to one of our outstanding citizens this Sunday, April 24.

#### THE 130TH ANNIVERSARY OF THE BATTLE OF SAN JACINTO

Mr. TENZER. Mr. Speaker, I ask unanimous consent that the gentleman from Texas [Mr. PICKLE] may extend his remarks at this point in the Record and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. PICKLE. Mr. Speaker, today marks the 130th anniversary of the Battle of San Jacinto. Few military battles in North America have had greater historic effect than that of San Jacinto.

The victory of the Texas Army near Buffalo Bayou led to independence of my home State and its later annexation to the United States. The Mexican War which followed resulted in the acquisition by the United States of most of this country's States in the Rocky Mountain and Pacific coast area.

The successive defeats of Texas fighting men at the Alamo, San Patricio, Auga Dulce, Goliad, Refugio, and Victoria in the spring of 1836 had created confusion among the military as well as the civilian population.

Santa Anna swept eastward across Texas with his army, thinking the war was over.

General Sam Houston's army, which had been bypassed and left in the rear of the Mexican Army, moved southeastward and on April 20, took a position opposite of Santa Anna's camp at the junction of the San Jacinto River and Buffalo Bayou.

At 4 o'clock in the afternoon on April 21, the Texas Army commenced its charge against the Mexican forces while Santa Anna took his siesta.

The Texans charged to the music of "Won't You Come to the Bower?" and with the battle cry, "Remember the Alamo," "Remember Goliad."

The Mexicans were routed with a loss—according to Houston's report—of 630 killed, 280 wounded, and 730 captured. Practically the entire Mexican force was killed, wounded, or taken prisoner. The Texas Army sustained a loss of 9 killed and mortally wounded and 30 less-seriously wounded.

General Santa Anna fled the battlefield, but was captured a day later.

I think that it behooves us as a nation to recognize the valor and determination for liberty and independence that provided the victory for the Texas Army.

It is the spirit of men fighting at San Jacinto as well as those who have fought under the American flag throughout our history that has kept this Nation safe for democracy.

Today, we are helping a small and defenseless nation to be able to choose its own direction. Today, we are in a gallant fight to repel an enemy which has slaughtered innocent civilians and has kidnapped or tortured.

We have put our own prestige and the future of free people everywhere on the line by firmly confronting aggressive communism in southeast Asia.

In view of the victory of the Texas Army on the banks of the San Jacinto River some 130 years ago, let us be strengthened in our present conflict against tyranny.

REMARKS OF JAMES H. BOREN, DIRECTOR, PARTNERS OF THE ALLIANCE PROGRAMS, AT THE BANQUET OF THE SAN ANTONIO FEDERATION OF WOMEN'S CLUBS, SAN ANTONIO, TEX., APRIL 14, 1966

Mr. TENZER. Mr. Speaker, I ask unanimous consent that the gentleman from Texas [Mr. GONZALEZ] may extend

his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. GONZALEZ. Mr. Speaker I have long been a supporter for the Alliance for Progress—a program which I consider crucial and important in our country's efforts toward peace. Recently, Mr. James H. Boren, the able director of the Partners of the Alliance programs, spoke in my home city of San Antonio. I feel that his address, delivered at a banquet of the San Antonio Federation of Women's Clubs, should be brought to the attention of you and my colleagues.

REMARKS OF JAMES H. BOREN, DIRECTOR, PARTNERS OF THE ALLIANCE PROGRAMS, AT THE BANQUET OF THE SAN ANTONIO FEDERATION OF WOMEN'S CLUBS, SAN ANTONIO, TEX., APRIL 14, 1966

It is a pleasure to be here in the beautiful HemisFair city of San Antonio on Pan American Day of 1966. As we reflect upon Pan Americanism we can certainly recall the pleasures which have come from the interplay of the music, the arts, the prose, and poetry which are among the treasures of the hemisphere. The thoughts which I wish to share with you this evening, however, focus upon a larger purpose of Pan American Week observances—the purpose of promoting genuine understanding and friendship among the peoples of the Americas.

When I speak of the peoples of the Americas, I am speaking in general terms, terms which conceptually include not only the leaders of the social and economic order but also those citizens of the hemisphere who live and work outside the groups which normally are involved in Pan American Day observances. It is of these people and of the need to broaden the base of participation in international operations that I speak to you this evening.

It was June 19, 1964, that here in San Antonio we formally launched the Texas Partners of the Alliance through which Texans and Peruvians are working together. The speaker for that evening in 1964 was the distinguished Peruvian Ambassador to the United States, His Excellency Ambassador Celso Pastor. I recall that on that evening special messages were read from President Fernando Belaunde of Peru, President Lyndon B. Johnson, Senators RALPH YARBOROUGH, and JOHN TOWER, and Gov. John Connally. I recall that your distinguished Congressman, HENRY GONZALEZ, was scheduled to be with us but had to send a message instead of personally participating because that was the day for the scheduled vote on the civil rights bill. I recall also that Mr. Edward Marcus, of Dallas, was presented as the elected chairman of the Texas Partners of the Alliance and that San Antonio's and the Federation's own Mamie Dial was elected to the State executive committee.

Many successful projects have been listed in the inventory of accomplishments of the Texas Partners since June of 1964 and your organization has played an important role in the progress made thus far.

I have not come to you this evening to thank you for what you have done. Rather, I have come to give recognition for what you have done, for your performance in this program has not been motivated by a desire for thanks or gratitude either from your Government or from the Peruvians whom you have helped. Your performance has been motivated by a desire to translate the goals and ideals of your organization into action.

The projects which have been completed by the Texas Federation of Women's Clubs had their birth in the village of San Jacinto de Mita in a beautiful but treacherous area of the Peruvian Andes. It was there, in 1962, that Alejandro Rojas, a young man "under 5 and 20," founded a community library for the benefit of the people of his little valley.

Alejandro Rojas, a campesino, arranged for a small one-room adobe hut to be used for the library. He built some crude shelves on which he placed a few well-worn magazines, a few paperback books, and a collection of Alliance for Progress pamphlets. The inventory of the library had a value of about \$5—but the pride of the people in their little "biblioteca" was beyond measurement in dollars and cents.

With arrangements made through our AID mission, a collection of 200 books, maps, and other materials were made available to the library. The impact of that addition to the library was great, largely because it was response to self-help. It was response to the initiative of a young campesino who had the spark of leadership. It was response "con dignidad"—with dignity.

Thus was born the "little library" project which has been your project. Your organization already has provided almost a score of rural villages with basic books and materials for the libraries being developed on a self-help basis.

The Texas Federation of Women's Clubs have been an important part of the Texas partnership with Peru, but you are being joined every day by more and more Texans.

High school students of Texas, through the Pan American Student Forum Clubs, have provided: Hand tools for training schools; materials for roofs, doors, and windows for village schools; pumps for village wells; outboard motors for dugout canoes to enable jungle villages to market their products; equipment for medical posts; chain saws for rural cooperatives, and pressure lanterns for night literacy classes.

The Texas electric cooperatives have provided 14 3,000-watt generators for rural educational programs—making possible evening literacy and other classes for villagers who must work all the daylight hours.

The Texas Medical Association has helped arrange for medical assistance in terms of doctors working in Peru on special programs. A young newsboy from Lima is alive today because of open-heart surgery performed in Houston through arrangements made by the Texas Partners. A 12-year-old girl from Iquitos on the Amazon faces a brighter future because of surgery in Houston which corrected several malfunctioning heart valves.

The Texas Hospital Association is presently completing a survey of hospital equipment which will be shipped to rural and *barriada* (slum) medical posts in Peru.

The Texas Farmers Union is presently developing plans for a broad program involving agricultural youth in Texas and Peru.

The Jaycees of Lubbock and Mr. Jim Clark, of Shallowater, and others of the Lubbock area, sent 1,200 feet of steel cable to a rural village in southern Peru. The longshoremen of the port of Houston provided free loading of the cable and will assist with other future Partners' projects. For years men of some villages have hand-walked steel cables over Andean rivers to get to the land which they tilled. The cable sent from the high plains of Lubbock is being used by villagers to complete a suspension bridge over which they will be able to walk to their fields—in safety and with dignity.

Educational institutions are providing scholarships for Peruvian students and Texas families will be helping by providing free room and board in their homes. The education committee of the Texas Partners, under the leadership of Ambassador Dick Rubot-

tom of SMU, is working with the Texas Good Neighborhood Commission and many institutions in developing an excellent educational program.

These are only illustrations of the range of activities of the Texas Partners of the Alliance which is moving forward under the outstanding leadership of Chairman Edward Marcus.

Today, the citizens of 30 States of the United States are developing partnerships with the people of 30 areas in Latin American countries. These are working partnerships where people can work together on identified self-help projects, technical assistance programs and educational and cultural exchanges. The Partners of the Alliance is a private sector program which, in part, seeks to translate into reality the stated principle that we, in the United States, can learn as well as teach, and receive as well as assist. For years we have paid lip-service to this principle but now we seek to give meaning to the words.

Though only 2 years old, the Partners of the Alliance program has been responsible for the flow of approximately \$3,500,000 in goods and services. We are proud of this material contribution of the private sector partnership committees. Of greater value, however, is that body of intangible values which comes from the personal involvement of the peoples of the Americas.

The Charter of Punta del Este, which is the great charter of the Alliance for Progress, calls for the active participation of the "peoples and governments" of the Americas. You, the Texas Federation of Women's Clubs have accepted the challenge of the Alliance. You have made a positive contribution through assisting rural villages in Peru with their self-help library programs.

It is a great privilege for me, in behalf of the Agency for International Development, to present to the Texas Federation of Women's Clubs this certificate of appreciation "in recognition of the leadership and significant contribution toward the attainment of the goals of the Alliance for Progress." This certificate, signed by David Bell, Administrator of the Agency for International Development and bearing the signature of the U.S. Coordinator of the Alliance for Progress, is presented with the hope that it shall serve not only as recognition for your past participation but also as a reminder that the challenge of the Alliance for Progress is a continuing one.

#### PRESENTATION

President Fernando Belaunde Terry, of Peru, made a speech in the Andean village of Chincheros in April of 1956. In that speech he gave an eloquent tribute to the people of his great country:

"Cada vez que observo desde alguna altura un villorio peruano hago la misma pregunta y obtengo la misma enaltecida respuesta." (Every time I look from some height upon a Peruvian village I ask the same question and I get the same inspiring answer.)

"As I look at the humble town with its colorful bell tower, I inquire of my guide: Who built the church? and the guide replies: 'The people built it.' Again I ask: 'Who built the school?' and he answers again: 'The people built it.'

"And following the winding dirt road amongst the mountains I ask once more: 'Who made this road?' and again, resounding now in my ears like a triumphal march I hear in these eloquent words the history of all of Peru's yesterdays, its present, and the prophecy of its future: 'The people built it.'

"The people built the road, the church, and the schools. The people raised the terraces and dammed the torrent. Once there was an earthquake and they recovered their debris and rebuilt their homes.



"And when it was required of them they gave of their sons to the army; and they suffered the nation's indifference without complaint."

"They were denied their ancestral rights of freedom to choose their own leaders and goals. Rulers were imposed upon them. Their properties and income were taken from them. But they could not be deprived of their traditions."

"And the people went on building roads, schools, and churches. Because, fortunately, though Peru's small villages have been forgotten villages, they have not forgotten their own heritage." And as you, the women of the Texas Federation of Women's Clubs look to your program planning for the period ahead, I wish to issue again the continuing challenge of the Alliance for Progress and the basic challenge of Pan Americanism. Sit not on the sidelines but continue to be participants in this great endeavor. Take pride in your accomplishments but recognize that we have only begun. It is at your level, the grassroots level, the level of the people to which we must expand our operations if Pan Americanism is to be more than the title of a jingle.

In closing, I wish to leave with you the thoughts of President Johnson when commemorating the fourth anniversary of the Alliance last year:

"Development is not just a matter of resources, or trade, or production or even crops. Rather, in some mysterious way, a people—because they have great leaders and because they have great hopes and because they are themselves great—an entire people begin to stir, and to sacrifice and to work. And when they move, a nation begins to move."

You have assisted in the forward movement of a people and I know that you will continue to accept the challenge of the alliance as partners in its implementation.

#### LEAVE OF ABSENCE

By unanimous consent, leave of absence was granted to:

Mr. MIZE (at the request of Mr. GERALD R. FORD), from April 25 through April 28, on account of official business as delegate to Inter-Development Bank Board meeting in Mexico City.

Mr. DELANEY (at the request of Mr. Boggs), on account of illness.

#### SPECIAL ORDERS GRANTED

By unanimous consent, permission to address the House, following the legislative program and any special orders heretofore entered, was granted to:

Mr. MICHEL (at the request of Mr. WYATT), for 60 minutes, on Monday, April 25, 1966; and to revise and extend his remarks and include extraneous matter.

Mr. EDWARDS of Alabama (at the request of Mr. WYATT), for 20 minutes, today; to revise and extend his remarks and include extraneous matter.

Mr. ALBERT, for 15 minutes, today.

#### EXTENSION OF REMARKS

By unanimous consent, permission to extend remarks in the CONGRESSIONAL RECORD, or to revise and extend remarks was granted to:

Mr. GATHINGS and to include extraneous matter.

Mr. KUPFERMAN to include tables and charts in his special order of today.

Mr. EVANS of Colorado.

(The following Members (at the request of Mr. WYATT) and to include extraneous matter:)

Mr. PELL.

Mr. FINDLEY.

Mr. CONTE.

(The following Members (at the request of Mr. TENZER) and to include extraneous matter:)

Mr. ANNUNZIO.

Mr. MOORHEAD.

#### BILL PRESENTED TO THE PRESIDENT

Mr. BURLESON, from the Committee on House Administration, reported that that committee did on this day present to the President, for his approval, a bill of the House of the following title:

H.R. 1746. An act to define the term "child" for lump-sum payment purposes under the Civil Service Retirement Act.

#### ADJOURNMENT

Mr. TENZER. Mr. Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 12 o'clock and 36 minutes p.m.), under its previous order, the House adjourned until Monday, April 25, 1966, at 12 o'clock noon.

#### EXECUTIVE COMMUNICATIONS, ETC.

2326. Under clause 2 of rule XXIV, a letter from the Assistant Secretary of Defense (Installations and Logistics), transmitting reports listing Army, Navy, Air Force, and Defense Supply Agency contracts negotiated during the 6 months ending December 31, 1965, pursuant to the provisions of title 10, United States Code, was taken from the Speaker's table, referred to the Committee on Armed Services, and ordered to be printed.

#### PUBLIC BILLS AND RESOLUTIONS

Under clause 4 of rule XXII, public bills and resolutions were introduced and severally referred as follows:

By Mr. ASHLEY:

H.R. 14576. A bill to promote and foster the development of a modern merchant marine by encouraging the orderly replacement and modernization of merchant vessels and for other purposes; to the Committee on Merchant Marine and Fisheries.

By Mr. BELL:

H.R. 14577. A bill to establish a U.S. Committee on Human Rights to prepare for participation by the United States in the observance of the year 1968 as International Human Rights Year, and for other purposes; to the Committee on Foreign Affairs.

By Mr. DYAL:

H.R. 14578. A bill to consent to the interstate compact defining the boundary between the States of Arizona and California; to the Committee on the Judiciary.

By Mrs. DWYER:

H.R. 14579. A bill to amend title 38 of the United States Code in order to establish in

the Veterans' Administration a national veterans' cemetery system consisting of all cemeteries of the United States in which veterans of any war or conflict are, or may be buried; to the Committee on Interior and Insular Affairs.

By Mr. EDMONDSON:

H.R. 14580. A bill to extend and amend the Library Services and Construction Act; to the Committee on Education and Labor.

By Mr. EDWARDS of Alabama:

H.R. 14581. A bill to make certain expenditures made by the city of Mobile, Ala., eligible as local grants-in-aid for the purposes of title I of the Housing Act of 1949; to the Committee on Banking and Currency.

By Mr. FARBERSTEIN:

H.R. 14582. A bill to extend the program of health insurance benefits under title XVIII of the Social Security Act to disabled individuals aged 60 or over who are entitled to monthly cash benefits under section 223 of such act, and individuals aged 60 or over who are retired for disability under the Railroad Retirement Act of 1937; to the Committee on Ways and Means.

By Mr. HULL:

H.R. 14583. A bill to amend the act of May 28, 1924, to revise existing law relating to the examination, licensure, registration, and regulation of optometrists and the practice of optometry in the District of Columbia, and for other purposes; to the Committee on the District of Columbia.

By Mr. HUOT:

H.R. 14584. A bill to amend Public Law 815, 81st Congress, to provide temporary assistance where public school buildings are destroyed by natural causes; to the Committee on Education and Labor.

By Mr. JENNINGS:

H.R. 14585. A bill to provide, in the case of a carryback of an unused investment credit, the same rules for quick refunds of income tax as now exist in the case of a net operating loss carryback; to the Committee on Ways and Means.

By Mr. LOVE:

H.R. 14586. A bill to amend title 18, United States Code, to make the destruction of any public aircraft a crime, and for other purposes; to the Committee on the Judiciary.

By Mr. MEEDS:

H.R. 14587. A bill to extend and amend the Library Services and Construction Act; to the Committee on Education and Labor.

By Mr. POOL:

H.R. 14588. A bill to amend the Internal Revenue Code of 1954, so as to allow an additional income tax exemption for individuals who have certain debilitating progressive diseases; to the Committee on Ways and Means.

By Mr. RIVERS of South Carolina:

H.R. 14589. A bill to prevent excessive forced attrition among women officers of the naval service; to the Committee on Armed Services.

H.R. 14590.—A bill to amend the Central Intelligence Agency Act of 1949, as amended, and for other purposes; to the Committee on Armed Services.

By Mr. TENZER:

H.R. 14591. A bill to establish a U.S. Committee on Human Rights to prepare for participation by the United States in the observance of the year 1968 as International Human Rights Year, and for other purposes; to the Committee on Foreign Affairs.

By Mr. TRIMBLE:

H.R. 14592. A bill to authorize the Secretary of the Army to construct Crooked Creek Dam on Crooked Creek, Ark.; to the Committee on Public Works.

By Mr. GURNEY:

H.J. Res. 1081. Joint resolution designating Tax Freedom Day as a national holiday; to the Committee on the Judiciary.

By Mr. KLUCZYNSKI:

H.J. Res. 1082. Joint resolution to authorize the President of the United States to proclaim August 28, 1966, as Polish Millennium Day; to the Committee on the Judiciary.

By Mr. LOVE:

H.J. Res. 1083. Joint resolution to provide for the designation of the second week of May of each year as "National School Safety Patrol Week"; to the Committee on the Judiciary.

By Mr. SECREST:

H.J. Res. 1084. Joint resolution relating to travel and investment in France; to the Committee on Foreign Affairs.

By Mr. WIDNALL:

H.J. Res. 1085. Joint resolution to provide for the establishment of an Office of Deputy Superintendent of the Arts within the Recreation Board for the District of Columbia to develop and conduct a program of the arts for the District of Columbia; to the Committee on the District of Columbia.

By Mr. GERALD R. FORD:

H. Con. Res. 629. Concurrent resolution request for the submission of a new budget for the fiscal year 1967; to the Committee on Government Operations.

By Mr. LOVE:

H. Con. Res. 630. Concurrent resolution to authorize the printing of additional copies of House Document No. 190 of the 89th Congress; to the Committee on House Administration.

By Mr. O'NEILL of Massachusetts:

H. Res. 823. Resolution authorizing a Representative in Congress who is a member of a certain committee to designate one of his employees to be cleared for access to classified information available to the Representative in his capacity as a member of such committee; to the Committee on Rules.

By Mr. POWELL:

H. Res. 824. Resolution to amend section 8(b)(4) of the National Labor Relations Act, as amended, with respect to strike at the sites of construction projects; to the Committee on Rules.

## PRIVATE BILLS AND RESOLUTIONS

Under clause 1 of rule XXII, private bills and resolutions were introduced and severally referred as follows:

By Mr. GILBERT:

H.R. 14593. A bill for the relief of Maria Carmen Plaza De Alonzo; to the Committee on the Judiciary.

By Mr. POWELL:

H.R. 14594. A bill for the relief of Vincenzo Sparaco; to the Committee on the Judiciary.

H.R. 14595. A bill for the relief of Alberto Tortoroli; to the Committee on the Judiciary.

## PETITIONS, ETC.

Under clause 1 of rule XXII,

376. The SPEAKER presented a petition of Ralph Boryszewski, Rochester, N.Y., relative to impeachment of Hon. Stephen S. Chandler, U.S. district judge for the western district of Oklahoma, which was referred to the Committee on the Judiciary.

## EXTENSIONS OF REMARKS

### Armenian Memorial Day

#### EXTENSION OF REMARKS OF

#### HON. FRANK ANNUNZIO

OF ILLINOIS

IN THE HOUSE OF REPRESENTATIVES

Thursday, April 21, 1966

Mr. ANNUNZIO. Mr. Speaker, on Sunday, April 24, Armenians all over the globe will observe the 51st anniversary of the ruthless Turkish massacres of the Armenian people.

In 1915, the Turks set out to exterminate the whole Armenian Christian population within the Ottoman borders. Systematically, and with cold callousness, the Turks first killed the writers, teachers, clergymen, and leaders of the Armenian people. Then the able-bodied men were brutally murdered and the young women enslaved. The remaining women, children, and old people were forced to march barefooted under the blazing sun, without food or water, toward their ultimate destruction in the remote deserts of Der-el-Zor.

Along the way these helpless people were subjected to inhuman tortures and mutilation, to rape and massacre, and those who survived these initial brutalities, died one by one from exhaustion, disease, and starvation. The roads where these caravans passed were piled high with the corpses of these innocent victims of the Turks.

When the carnage was over 1,500,000 martyrs had been slain and another million had been ruthlessly torn up from their ancient homeland and deported to the desolate deserts to die. Not only had the Turks attempted to annihilate the Armenian nation, but at the same time they tried to obliterate every trace of the 3,000-year-old Armenian civilization. Universities, libraries, churches, and monasteries were burned, and with them, irreplaceable antiques, paintings, books, and relics were destroyed.

Not an Armenian alive today has been left untouched by these massacres. Grandparents, mothers and fathers, children, and even newborn infants were ruthlessly murdered. Whole families were wiped out with a single blow, and a new word, genocide, had to be coined to describe the Turks' efforts to destroy an entire race.

The massacres in 1915 were a more extensive repetition of the Armenian massacres in 1895 and 1896, which horrified a civilized world and caused Gladstone, Britain's prime minister, to rise up and make the last public speech of his career in defense of the Armenian people and against Abdul Hamid, the perpetrator of these crimes.

The Armenians are perhaps the oldest of the civilized races in western Asia and were the first nation in the world to accept Christianity as their state religion. From time immemorial, the Armenian has worked peacefully and industriously in the high mountains which are his home between the Black Sea and the Caspian Sea. Here, church and people have maintained with amazing vitality their traditions and culture against wave after wave of alien conquest. For centuries, the Armenian has been known not only for his industriousness, but for his intelligence, his ingenuity, his courage, and for his talent for handicraft, for commerce, and for intellectual pursuits.

When Talaat Bay gave the signal for the unwarranted massacre of the Armenians in 1915, he declared:

After this, there will be no Armenian question for 50 years.

Fifty years have elapsed, and the 51st anniversary of the massacres is at hand. The Armenian question does exist, and shall continue to exist as a glaring reality until justice is done, and reparations are made to the survivors of 1,500,000 innocent martyrs.

The Germans have made reparations to the Jews, and until the Turks make similar reparations to the Armenians, the Armenian question will remain a blot

on the conscience of mankind which failed to support an innocent people in their great need.

The scars of these massacres are carried in the hearts and minds of every surviving Armenian. On this sad anniversary, Americans of Armenian descent in the United States are looking to their elected Representatives in the Congress and the Senate to secure some measure of justice for the crime committed against them—a crime with which no other in recorded history can compare.

As citizens of the United States, they are asking that the Congress support immediate Senate ratification of the Genocide Convention, which is before the Senate Foreign Relations Committee. They are asking recognition of President Woodrow Wilson's decision on the territorial boundaries of the Armenian Republic as provided in the 1920 Treaty of Sevres which Turkey signed recognizing Armenian independence. And further, they are asking for positive steps to right the wrongs of the past.

Mr. Speaker, as Members of this Congress, let each of us examine our conscience and let us do our utmost to alleviate the memory of this unjustified crime against the Armenian people.

### "The World Was There"

#### EXTENSION OF REMARKS OF

#### HON. WILLIAM S. MOORHEAD

OF PENNSYLVANIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, April 21, 1966

Mr. MOORHEAD. Mr. Speaker, I should like to call the attention of the Congress to a superb documentary motion picture, made by the National Aeronautics and Space Administration, entitled "The World Was There."