

U.S. DISTRICT JUDGES

Howard B. Turrentine, of California, to be a U.S. district judge for the southern district of California.  
 Warren K. Urbom, of Nebraska, to be a U.S. district judge for the district of Nebraska.  
 Joseph F. Weis, Jr., of Pennsylvania, to be a U.S. district judge for the western district of Pennsylvania.  
 Andrew W. Bogue, of South Dakota, to be U.S. district judge for the district of South Dakota.  
 James L. Oakes, of Vermont, to be U.S. district judge for the district of Vermont.

U.S. ATTORNEYS

Robert L. Meyer, of California, to be U.S. attorney for the central district of California for the term of 4 years.  
 D. Dwayne Keyes, of California, to be U.S. attorney for the Eastern District of California for the term of 4 years.  
 Robert E. Hauberg, of Mississippi, to be U.S. attorney for the southern district of Mississippi for the term of 4 years.  
 A. Roby Hadden, of Texas, to be U.S. attorney for the eastern district of Texas for a term of 4 years.

U.S. MARSHALS

William B. Henderson, of Kentucky, to be U.S. marshal for the western district of Kentucky for the term of 4 years.  
 Joseph W. Keene, of Louisiana, to be U.S. marshal for the western district of Louisiana for the term of 4 years.  
 John A. Birknes, Jr., of Massachusetts, to be U.S. marshal for the district of Massachusetts for the term of 4 years.  
 Anthony T. Greski, of New Jersey, to be U.S. marshal for the district of New Jersey for the term of 4 years.

HOUSE OF REPRESENTATIVES—Thursday, April 23, 1970

The House met at 12 o'clock noon.

Rev. C. R. Walker, First Baptist Church, Marion, Ill., offered the following prayer:

God of our fathers, and our God, God of this Nation and all nations, we bow before Thee with grateful hearts for our many blessings. We thank Thee for this great Nation with all its resources, opportunities, and people. Give to us a spirit within to match the resources without.

As we confront the problems of this day, grant us the grace and courage to seek first the kingdom of God that we may be enriched in our Nation with a great spiritual heritage. Then make us humble in the acceptable of that heritage.

Instill the moral integrity and courage in these our leaders to stand for the hard right against any easy or expedient wrong that might seem attractive. In Jesus' name we pray. Amen.

THE JOURNAL

The Journal of the proceedings of Tuesday, April 21, 1970, was read and approved.

MESSAGES FROM THE PRESIDENT

Sundry messages in writing from the President of the United States were communicated to the House by Mr. Leonard, one of his secretaries, who also informed the House that on April 15, 1970, the President approved and signed a bill of the House of the following title:

On April 15, 1970:

H.R. 16612. An act to amend the District of Columbia Bail Agency Act to provide additional funds for the District of Columbia Bail Agency for fiscal year 1970.

THE REVEREND C. R. WALKER

(Mr. GRAY asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. GRAY. Mr. Speaker, I deeply appreciate your courtesy in recognizing me at this time. I wish to thank you, Mr. Speaker, and Dr. Latch, our beloved Chaplain of the House of Representatives, for permitting one of southern Illinois' finest ministers, the Reverend C. R. Walker, pastor of the First Baptist

Church of Marion, Ill., to give the invocation today.

Mr. Speaker, I wish to point out the fact that in our busy lives so many times we overlook the great work done by our spiritual leaders. I again want to thank you and our beloved Chaplain of the House, Dr. Latch, for giving us the opportunity of bringing in from our congressional districts these able servants of His service royale to help us in our spiritual guidance. Reverend Walker is a lifelong friend and is a leader in his own right. He does this great body honor by his presence.

APPOINTMENT OF CONFEREES ON S. 2062, ADMINISTRATION OF ACREAGE LIMITATION OF FEDERAL RECLAMATION LAW

Mr. ASPINALL. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (S. 2062) to provide for the differentiation between private and public ownership of lands in the administration of the acreage limitation provisions of Federal reclamation law, and for other purposes, with House amendments thereto, insist on the House amendments, and agree to the conference asked by the Senate.

The SPEAKER. Is there objection to the request of the gentleman from Colorado? The Chair hears none, and appoints the following conferees: Messrs. ASPINALL, JOHNSON of California, FOLEY, HOSMER, and McCLURE.

APPOINTMENT OF CONFEREES ON S. 743, TOUCHET DIVISION, WALLA WALLA PROJECT, OREGON-WASHINGTON

Mr. ASPINALL. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (S. 743) to authorize the Secretary of the Interior to construct, operate, and maintain the Touchet division, Walla Walla project, Oregon-Washington, and for other purposes, with House amendments thereto, insist on the House amendments and agree to the conference asked by the Senate.

The SPEAKER. Is there objection to the request of the gentleman from Colorado? The Chair hears none, and appoints the following conferees: Messrs. ASPINALL, JOHNSON of California, FOLEY, HOSMER, and BURTON of Utah.

PERMISSION FOR COMMITTEE ON ARMED SERVICES TO FILE REPORT ON H.R. 17123, MILITARY PROCUREMENT AUTHORIZATIONS, 1971, UNTIL MIDNIGHT FRIDAY

Mr. PRICE of Illinois. Mr. Speaker, I ask unanimous consent that the Committee on Armed Services may have until midnight Friday to file a report on the bill (H.R. 17123) to authorize appropriations during the fiscal year 1971 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and other weapons, and research, development, test, and evaluation for the Armed Forces, and to prescribe the authorized personnel strength of the Selected Reserve of each Reserve component of the Armed Forces, and for other purposes.

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

There was no objection.

APPOINTMENT OF CONFEREES ON H.R. 515, TO AMEND THE NATIONAL SCHOOL LUNCH ACT AND THE CHILD NUTRITION ACT OF 1966

Mr. PERKINS. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (H.R. 515) to amend the National School Lunch Act and the Child Nutrition Act of 1966 to clarify responsibilities related to providing free and reduced-price meals and preventing discrimination against children, to revise program matching requirements, to strengthen the nutrition training and education benefits of the programs, and otherwise to strengthen the food service programs for children in schools and service institutions, with a Senate amendment thereto, disagree to the Senate amendment, and request a conference with the Senate thereon.

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

Mr. ARENDS. Mr. Speaker, reserving the right to object, am I correct in my understanding that this has been cleared with the ranking minority member of the committee, and that he is totally in agreement with the conference?

Mr. PERKINS. The gentleman is absolutely correct.

Mr. ARENDS. Mr. Speaker, I withdraw my reservation of objection.

The SPEAKER. Is there objection to the request of the gentleman from Kentucky? The Chair hears none, and appoints the following conferees: Messrs. PERKINS, PUCINSKI, WILLIAM D. FORD, AYRES, and QUIE.

PROVIDING FOR THE ESTABLISHMENT OF AN INTERNATIONAL QUARANTINE STATION

Mr. POAGE. Mr. Speaker, I ask unanimous consent to take from the Speaker's desk the bill (S. 2306) to provide for the establishment of an international quarantine station and to permit the entry therein of animals from any country and the subsequent movement of such animals into other parts of the United States for purposes of improving livestock breeds, and for other purposes, with a Senate amendment to the House amendment thereto, and concur in the Senate amendment to the House amendment.

The Clerk read the title of the bill.

The Clerk read the Senate amendment to the House amendment, as follows:

Page 3, line 12, of the House engrossed amendment, strike out "and the Virgin Islands," and insert: "Guam, and the Virgin Islands, contrary to the conditions prescribed by the Secretary in regulations issued hereunder."

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

There was no objection.

The Senate amendment to the House amendment was concurred in.

A motion to reconsider was laid on the table.

JUNK MAIL POLLUTION

(Mr. HECHLER of West Virginia asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. HECHLER of West Virginia. Mr. Speaker, junk mail pollution is a major contributor to the ecological crisis on which this Nation is focusing attention this week.

To begin with, millions of trees must be cut down to produce all the junk which crams your mailbox, bends the backs of the letter carriers, and adds to the burdens of the taxpayers. Second, all these gimmicks, contests, prizes, and pressures used by junk mail are only designed to force the purchase of more and more items which add to the solid waste disposal problem. Then the trash has to be burned, thereby polluting the air.

We must wake up and realize that progress can no longer be measured in the sheer quantity of goods produced. The quality of American life and the protection of our environment are higher goals which must be accorded higher priority.

The junk mail lawyers and lobbyists have now been joined by the accountants who are now trying to prove that junk mail does pay its way. This mumbo-jumbo of the accountants avoids the main issue which is that junk mail pollution is a threat to the quality of American life and a threat to our environ-

ment. Junk mail is such an outrageous nuisance that a heavy nuisance tax should be placed on junk mailers for insulting the American people by deluging them with millions of pieces of unwanted junk every day.

Let us end junk pollution. You get fined if you throw litter on somebody else's front lawn; what about littering people's mailboxes?

RULES OF DESTRUCTION

(Mr. TEAGUE of California asked and was given permission to address the House for 1 minute, to revise and extend his remarks and include extraneous matter.)

Mr. TEAGUE of California. Mr. Speaker, I call to the attention of my colleagues an excellent editorial which appeared in the Santa Maria, Calif. Times. It is as follows:

[From the Santa Maria, Calif. Times, Apr. 17, 1970]

RULES OF DESTRUCTION

We received a note from a woman this week in which she enclosed an interesting bulletin which shows how long and in what manner Communism has aimed at our destruction.

The bulletin noted that in 1919 allied forces obtained some Communist rules for revolution. As you read the rules, think about the conditions in the country today and consider the rules in relation to those conditions.

We quote the Red rules.

A. Corrupt the young, get them interested in sex. Make them superficial; destroy their ruggedness.

B. Get control of all means of publicity, thereby get people's minds off their government by focusing their attention on athletics, sexy books and plays and other trivialities.

C. Divide the people into hostile groups by constantly harping on controversial matters of no importance.

D. Destroy the people's faith in their natural leaders by holding them up to contempt and ridicule.

E. Always preach true Democracy, but seize power as fast and as ruthless as possible.

F. By encouraging government extravagance, destroy its credit, produce fear of inflation with rising prices and general discontent.

G. Promote unnecessary strikes in vital industries, encourage civil disorders and foster a lenient and soft attitude on the government toward such disorders.

H. By spacious argument cause breakdown of the moral virtues, honesty, sobriety, continence, faith in the pledged word.

I. Cause the registration of all firearms on some pretext, with a view to confiscating them and leaving the population helpless.

The note, sent by Jane Tackitt of Nipomo, ended with the comment, "My prayer for the nation is that young people wake up and see how they are being used, and then strike back for America."

We concur, emphatically.

DATE PERISHABLE PACKAGED FOODS FOR BENEFIT OF CONSUMER

(Mr. MINSHALL asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. MINSHALL. Mr. Speaker, it is time to break the code on food products, to date-stamp them so that shoppers will know whether the canned and packaged goods on their grocers' shelves are outdated.

The average housewife does not have the time to become a cryptanalyst, deciphering these often hard-to-find, and usually impossible to understand, coded date stamps on perishable products.

Surveys have revealed that such coded dates, placed there for the benefit of store employees to indicate when perishable products should be removed from sale, may consist of a short series of numbers, a series of letters, or both, and that they may indicate either the packaging date or the last day of "shelf life" of the product.

The food industry should let the most important involved—the consumer—know the truth about the last usable date of any perishable product. There should not be any secret about the freshness of our food. The bill I am introducing today would require that all perishable or semiperishable foods be clearly labeled as to expiration date and would include all meat, poultry, fish, dairy products, eggs, fruit, vegetables, bread, coffee, or any other foods the Secretary of Health, Education, and Welfare may designate as perishable or semiperishable.

HAPPY EARTH DAY

(Mr. DEVINE asked and was given permission to address the House for 1 minute.)

Mr. DEVINE. Mr. Speaker, yesterday was Earth Day and the emphasis was on our environment, what we can do to preserve it, to clean it up, to keep it livable.

Many different groups were involved in programs yesterday at many schools and many different places across the Nation. People make debris, and the same people are primarily responsible for cleaning it up.

Hopefully, this was the start of a real, long range effort by people, by civic groups, by business and by government at all levels to make our world a better place in which to live.

Hopefully, this is not just the latest fad of young people, tired of marching and demonstrating in other causes, hopefully, it is not just another gimmick perpetrated by ambitious politicians or a worried people.

There is no doubt today that man has fouled large segments of his planet pretty thoroughly. We have dirtied the air, we have polluted the water, and we have cluttered the landscape.

Fortunately, it is not too late to do something about it. Certainly this Republican administration recognizes that fact and has called for action on many fronts.

I would hope this Congress would also take up the challenge seriously and approve the programs that are necessary to do the job. If we do not join with the President in taking the necessary leadership, we cannot ask the people of America to join in the task that must be done.

**MAKE IT UNPROFITABLE FOR BUSINESS OR GOVERNMENT TO POLLUTE OUR ENVIRONMENT**

(Mr. WEICKER asked and was given permission to address the House for 1 minute.)

Mr. WEICKER. Mr. Speaker, it is my hope that those groups and individuals that yesterday celebrated Earth Day will make a positive contribution for years to the cause of cleaning up our environment.

It is easy to place the blame for pollution, much easier than it is to enunciate practical cures.

We all recognize the causes of some pollution—the auto, the factory, the oil spill.

But the answer is not banning the auto, or closing down the plant or ending commercial uses of oil.

The answer lies in controlling the technology we have developed and using it, not to destroy our environment, but to preserve it.

The answer lies in coordinating controls, setting standards, and developing effective, enforceable laws that make it unprofitable for anyone or any business or any government to pollute our environment.

Mr. Speaker, while the duty to improve our environment lies with all of us, the leadership lies here, with the President and with the Congress. The President has already sent to us his proposals and his program. I would hope that we here in the Congress will live up to our responsibilities by acting quickly on them.

**NORTH CAROLINA COAST GUARD APPRECIATION DAY**

(Mr. HENDERSON asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. HENDERSON. Mr. Speaker, on April 18, the State of North Carolina officially recognized the dedicated and courageous service rendered by the U.S. Coast Guard to our State and to the Nation during its 100-year history.

The occasion was Coast Guard Appreciation Day, proclaimed by Governor Scott with appropriate ceremonies in Morehead City, in my congressional district.

So far as the Coast Guard has been able to determine, this is the first time any State has ever taken official action to show its appreciation for its service.

It was a well-planned and well-organized affair which required considerable time and effort by many people. In my judgment, it was a highly appropriate and effectively executed means of showing to the officers and men of the U.S. Coast Guard the respect and esteem in which their service is held by the government and the people of North Carolina.

Representing as it does the efforts of so many, it is always dangerous to single out one or two persons for praise and appreciation on an occasion of this nature, but credit should certainly go to Mr. Bob Campbell, of Morehead City, who first suggested the idea, and Mr. J. L. "Tony" Seamon, Jr., the general chairman. I have firsthand knowledge

of the many hours these two spent in organizing and arranging this effective and well-deserved tribute.

The U.S. Coast Guard is one of the many fine services of our Government which all of us are too prone to take for granted. I was delighted to have the people of my district originate and execute this fine expression.

**LITTER IS A NATIONWIDE PROBLEM**

(Mr. HORTON asked was given permission to address the House for 1 minute, to revise and extend his remarks and include extraneous matter.)

Mr. HORTON. Mr. Speaker, in the last year America has had a great awakening. The combined warnings of alarmed scientists, nature lovers, and sociologists have had their effect.

Now millions of Americans have joined in warning of the dangers of garbage and sewerage and exhaust and smoke and litter.

And all of this culminated yesterday in the observance of Earth Day, during which the total problems of our environment were discussed on campuses and public meetings around the country.

But, Mr. Speaker, talk is not enough. We need money, we need investigation, we need new laws, and we need dedicated action from every sector of our society to keep from being buried and destroyed by the end products of our own technology.

And when we come right down to it, the buck stops here in Washington at the White House and in the Halls of Congress.

Pollution knows no city or State boundaries. Lakes and rivers and seas that border many States are polluted. Polluted air blows from one State to another. Litter is a nationwide problem.

And we need to start with nationwide answers. The President recognized this in sending to Congress his proposals on pollution last winter.

Now, with the first observance of Earth Day, I believe we in the Congress should also recognize those facts and dedicate ourselves to taking the necessary action before many more weeks have passed.

The truth is, Mr. Speaker, that the danger is great and is at hand. We cannot dally too long.

**EARTH DAY**

(Mr. GROVER asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. GROVER. Mr. Speaker, all across the Nation Americans yesterday observed a special day aimed at pointing up the need to support an old cause, that of conservation.

But today we take a much broader view of conservation than we used to.

Once conservation meant primarily the preservation of forests, and wildlife and natural areas.

These efforts are still important today, perhaps more important than they were 50 or 25 years ago. But now conservation literally means preservation of our planet and its ability to support human life.

It means not just keeping air and wa-

ter clean, it means removing the pollutants from them and the causes of those pollutants. It means finding a way to dispose of garbage and rubbish and sewerage without polluting the land and the water. It means controlling the fumes of factories and autos.

Fortunately, the need has been recognized, not just by those who sponsored Earth Day, but by most segments of our society, individuals, most industries and businesses and by government.

The President, this year, has already sent to Congress proposals for cleaning up our waters and our air and our land. It is up to Congress to accept that challenge—quickly—and pass the laws and the appropriations necessary to do the job.

**TOTAL POSTAL REORGANIZATION IS NEEDED**

(Mr. RUTH asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. RUTH. Mr. Speaker, we can no longer afford the luxury of merely voting increased wages or higher opportunities each time the Post Office Department finds itself in economic or other difficulties.

We must attack the entire scope of the problem. What we desperately need is an immediate and far-reaching program of total postal reorganization as proposed by the administration. Through the creation of a Government-owned postal service, the framework would be established to make it possible for the Post Office to pay its own way. In this way, the postal employee can improve his position without continually adding to the burden of the taxpayer.

I urge approval of the bill which the unions and postal management have negotiated, along with the reasonable 8 percent pay increase for employees, as the only responsible method for providing the country with an efficient and economical mail system that will benefit both user and employee alike.

**COMMUNICATION FROM THE CLERK OF THE COURT**

The SPEAKER laid before the House the following communication from the Clerk of the House of Representatives:

APRIL 22, 1970.

The Honorable the SPEAKER,  
U.S. House of Representatives.

DEAR SIR: I have the honor to transmit herewith a sealed envelope from the White House, received in the Clerk's Office at 12:15 p.m. on Wednesday, April 22, 1970, said to contain a Message from the President wherein he recommends the enactment of the Disaster Assistance Act of 1970.

With kind regards, I am,  
Sincerely,

W. PAT JENNINGS,  
Clerk,  
U.S. House of Representatives.

**DISASTER ASSISTANCE ACT OF 1970—MESSAGE FROM THE PRESIDENT OF THE UNITED STATES (H. DOC. No. 91-323)**

The Speaker laid before the House the following message from the President of the United States; which was read:

*To the Congress of the United States:*

The spirit of neighborliness, the readiness to extend a helping hand in time of trouble, is one of the great traditions of this country. In the early years of our history, good neighbors were essential in coping with the hardships of pioneer life. They are equally essential in meeting the challenges of life today.

The spirit of the good neighbor was particularly evident in 1969 when natural disasters struck this country in unprecedented numbers and with unprecedented force. Twenty-nine major disasters and an untold number of smaller disasters were responsible for over 300 deaths and an estimated \$2 billion in property damage in the last calendar year. Events such as the California floods and Hurricane Camille with the Virginia flood were exceptionally destructive.

Private voluntary agencies have traditionally played a crucial role during times of disaster. State and local governments are key factors in any successful disaster relief effort. Thus the Federal role is only one part of the overall response of the nation. But it is a very important part of that response. Under the Federal Disaster Acts of 1950, 1966, and 1969 and their amendments and under provisions in many other statutes, the Federal government works to help individuals through relief and rehabilitation efforts and to assist State and local governments by restoring public facilities essential to community life. In 1969 the Federal government allocated \$150 million for assistance from the President's Disaster Relief Fund—the largest sum for any 1 year in history. Significant additional funds were spent on disaster assistance under other Federal programs. A report on our 1969 experience is being provided to the Congress.

We are confident that the general framework of our present program provides an effective mechanism for channeling Federal disaster assistance to individuals and communities. Rather than depending on a specialized disaster assistance agency, the present system makes maximum use of existing agencies, centrally coordinated by the Office of Emergency Preparedness, to perform tasks in time of emergency which are similar to those which they perform in normal circumstances. Our present arrangements also encourage constructive and cooperative efforts among individuals, local communities, the States and the Federal government.

At the same time, however, we have learned that a number of improvements are in order within the existing framework. The last Presidential special message on the subject of disaster assistance was written 18 years ago. Since that time, this program has grown in a piecemeal and often haphazard manner, involving over 50 separate Congressional enactments and executive actions. This slow development process has created a complex program, one which has a number of gaps and overlaps and needs increased coordination. It is time for new legislation and executive action to make

our Federal disaster assistance program more effective and efficient.

## LEGISLATIVE PROPOSALS

*To extend and to improve the assistance which the Federal Government can provide in time of major disasters, I am asking the Congress to enact the Disaster Assistance Act of 1970.* This legislation contains a number of specific proposals, the most important of which are the following:

## REVENUE MAINTENANCE

When a community experiences a major disaster, the physical impact is obvious. What the television camera does not capture, however, is the loss of property tax revenue which occurs when a substantial portion of a community's property tax base is destroyed and its essential services are disrupted.

## CALL OF THE HOUSE

Mr. O'KONSKI (during the reading). Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER. Does the gentleman wish to withhold his point of order until the President's message is read by the Clerk?

Mr. O'KONSKI. I believe the Members ought to hear this message, Mr. Speaker. I insist on my point of order.

The SPEAKER. The gentleman from Wisconsin makes a point of order that a quorum is not present, and evidently a quorum is not present.

Mr. ALBERT. Mr. Speaker, I move a call of the House.

A call of the House was ordered.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 87]

Adair	Gettys	Powell
Alexander	Giaimo	Rees
Ashbrook	Goldwater	Riefel
Baring	Green, Oreg.	Rhodes
Barrett	Green, Pa.	Rivers
Brooks	Griffin	Roberts
Brotzman	Griffiths	Roe
Brown, Calif.	Gubser	Rogers, Colo.
Brown, Mich.	Hagan	Rosenthal
Bush	Harvey	Roybal
Byrnes, Wis.	Hébert	Ruppe
Cabell	Hollifield	Sandman
Carey	Johnson, Calif.	Scherle
Chisholm	Kirwan	Scheuer
Clark	Kyl	Schneebell
Clay	Landrum	Slack
Cowger	Lennon	Snyder
Crane	Long, La.	Stanton
Dawson	Lukens	Steed
de la Garza	McCarthy	Steiger, Wis.
Diggs	McMillan	Stephens
Dingell	MacGregor	Sullivan
Dorn	Madden	Taft
Eckhardt	Melcher	Teague, Calif.
Edwards, Calif.	Mikva	Tunney
Edwards, La.	Mollohan	Udall
Feighan	Moorhead	Vanik
Flynt	Moss	Waldie
Ford, Gerald R.	Myers	Watkins
Ford,	Nichols	Watson
William D.	O'Neal, Ga.	White
Foreman	Ottinger	Wright
Fraser	Patman	
Fulton, Tenn.	Pepper	

The SPEAKER. On this rollcall 331 Members have answered to their names, a quorum.

By unanimous consent, further proceedings under the call were dispensed with.

## DISASTER ASSISTANCE ACT OF 1970—MESSAGE FROM THE PRESIDENT OF THE UNITED STATES (H. DOC. NO. 91-323)

The SPEAKER. The Clerk will continue the reading of the message.

The Clerk read as follows:

To ease this difficulty, I recommend that the Congress enact a property tax revenue maintenance plan. Under this plan, the Federal government would be authorized to lend money at favorable interest rates to local governments to make up their loss of property tax revenues following a major disaster.

## PERMANENT REPAIR

I am asking the Congress for expanded Federal authority to permanently repair or fully replace essential public facilities damaged by disasters. This authorization would provide a more effective and practical approach to the replacement of damaged public facilities which are vital to community life. This Administration would give preference to local employees and contractors in repair and rebuilding work.

## ECONOMIC DEVELOPMENT ASSISTANCE

I am also asking the Congress to amend the Public Works and Economic Development Act of 1965, so that the Economic Development Administration would provide staff support, technical advice and financial assistance to those communities affected by major disasters. Such assistance is vital in recovery efforts, particularly when the community is attempting to begin long-range rebuilding or redevelopment efforts.

## DISASTER LOANS

I am proposing legislation to improve the disaster loan programs of the Small Business Administration and of the Farmers Home Administration. These loans are among our principal sources of assistance to stricken individuals. The recommended changes would provide for improved refinancing, payment deferral, and forgiveness arrangements and would assure disaster loans to older citizens. My proposed amendment would allow the FHA and SBA to provide faster service and would therefore promote speedier recovery following disasters.

## UNEMPLOYMENT COMPENSATION

I am also recommending that the Congress extend for two years the expanded unemployment compensation provisions of the Disaster Relief Act of 1969. These provisions make temporary income available as promptly as possible to help individuals who are unemployed as the result of a major disaster. Such assistance to individuals was a new feature in the 1969 Act. Before last year, only those unemployed persons who could qualify for compensation under the normal unemployment insurance programs could receive income protection following a disaster. The two-year extension which I recommend would provide time to fully evaluate the new provisions and to consider appropriate legislation.

## HOUSING

Hurricane Camille provided the greatest test of the Federal government's

ability to provide temporary housing to victims of a major disaster. We believe we met that test; at the direction of the Office of Emergency Preparedness, the Department of Housing and Urban Development was able to place more than 5,000 mobile homes in the disaster area. We also believe, however, that the language of the law which authorizes such activities is confusing.

Two separate provisions in two different laws are now directed to temporary emergency housing. In order to simplify the legislative provisions that apply to this problem, I propose that the provisions for temporary housing in PL 81-875 be amended so that they incorporate many of the broad principles of PL 91-79, without sacrificing flexibility. A clarified version of this law would allow the government to provide temporary housing or other emergency shelter—including leased mobile homes or other readily fabricated dwellings.

#### DEBRIS REMOVAL

One of the serious problems encountered in Hurricane Camille related to the removal of debris from private property. Current legislation in this area is confusing and difficult to administer. I am therefore proposing corrective legislation that would simplify and speed debris removal from private property when it is in the public interest. Again, preference would be given to local employees and contractors.

#### DISASTER PREVENTION

In March and April 1969 this Administration conducted a massive flood prevention program in the upper Midwest and New England. This program—Operation Foresight—was immensely successful; it prevented widespread human suffering and an estimated \$200 million in damages, at a cost of \$20 million. The success of this disaster prevention effort suggests that we can do a great deal to avoid or limit the effects of expected disasters. Accordingly, I am proposing legislation which would extend the Federal government's authority to assist State and local governments in disaster prevention and damage reduction activities.

#### PLANNING ASSISTANCE

The Disaster Relief Act of 1969 authorized one-time matching grants to help States formulate better plans for coping with disasters. Almost half of the States have already indicated that they will join us in this effort and we expect that others will soon follow their lead. I now recommend that the Congress expand this provision of the 1969 law in order to help States review and update these plans on a continuing basis.

In addition to the major initiatives outlined above, the legislation prepared by the Administration includes a number of other changes designed to extend the scope and improve the effectiveness of Federal assistance.

#### ADMINISTRATIVE ACTIONS

Legislative changes are not the only improvements which are presently required. Our experience indicates that changes in administrative procedures can be equally important in providing a more effective assistance program.

#### COORDINATION

To improve coordination of Federal Disaster Assistance efforts, both among Federal agencies and among Federal, State, and local officials, I am establishing a National Council on Federal Disaster Assistance. The Council will be composed of senior officials from Federal agencies concerned with disaster assistance and will be chaired by the Director of the Office of Emergency Preparedness.

To further improve coordination of disaster assistance activities in the field, I have also directed that the Regional Directors of the Office of Emergency Preparedness be included as ad hoc members of the newly formed Federal Regional Councils. This improvement will be supplemented by other actions to improve coordination among all levels of Government, including the Office of Emergency Preparedness regional planning conferences with State officials with the first such conference this month on the West Coast.

In addition to improving coordination and developing more comprehensive plans, we need better procedures for continuous communication with State and local government on such matters as disaster legislation. The Council of State Governments and such organizations as the International City Management Association, the National Association of Counties, the National League of Cities, and the United States Conference of Mayors are assisting us in this effort.

Improvements in disaster assistance also require an improved program of research and evaluation, the results of which are readily available to all who can benefit from them. I have therefore directed the Office of Emergency Preparedness to act as a central clearing house for all Federal research which is related to disasters.

#### ASSISTANCE TO INDIVIDUALS

An important objective, particularly in large-scale disasters, is that of informing individuals of the assistance which is available and of the places where it can be obtained. To meet this problem, we are expanding our information efforts and keying those efforts to the needs of the individual citizens of the community, particularly those who are poor.

Whenever a disaster occurs, those who live in the area desperately want to be in touch with their friends and relatives who live elsewhere. Rescue workers also need better communication facilities within such areas. I have therefore asked the Office of Emergency Preparedness to provide better emergency communication services to stricken regions during times of disaster.

Just as we make it easier for individuals to get information, so we should make it easier for them to get assistance. It should not be necessary for individuals to travel from one place to another and then to still another location in order to obtain the help which various agencies of the Federal government are providing. Accordingly, we are developing plans to provide "one-stop" service to individuals in disaster areas. Representatives of the

principal Federal agencies and of the Red Cross, as well as caseworkers and legal advisors, will all be available at a single assistance center.

#### DISASTER ASSISTANCE TEAMS

Disaster stricken communities frequently lack trained personnel who can help them make the best possible use of the assistance which is available to them from many sources. To meet this need, I have directed the Office of Emergency Preparedness to form Federal disaster assistance teams to help local communities coordinate the overall assistance effort. These teams will be supervised by a Federal Disaster Assistance Coordinator who will act as an on-the-spot representative of the President in any particular disaster area.

#### DISASTER INSURANCE

Our experience with disasters in 1969 clearly demonstrated the need for expanded insurance coverage for property owners. The national flood insurance sections of the Housing and Urban Development Act of 1968 presently permit Federal insurance assistance in flood-prone areas and we are now implementing that program on an accelerated basis. I am also directing that a comprehensive study of property insurance coverage for disaster situations be undertaken and that specific recommendations be provided me by the end of this year. This study should take into account the views of the State insurance authorities, the insurance industry, lending institutions, and the general public.

#### CIVIL DEFENSE

The disaster assistance activities of State and local governments often are closely related to their civil defense responsibilities. The relationship between the Federal government's disaster assistance and civil defense activities should now be carefully reviewed. Accordingly, I have asked that such a study be carried out and that its recommendations be given to me by December 31, 1970. It is important that any changes in this sensitive area be made only after a careful review, one which gives special attention to the impact of any suggested change upon national security.

As we move into a new decade, one of the nation's major goals is to restore a ravaged environment. But we must also be ready to respond effectively when nature gets out of control and victimizes our citizens.

With the improvements I have recommended to the Congress and those which I am instituting by Executive action, the disaster assistance program of the Federal government will continue to provide outstanding public service in times of crisis. This program manifests the extraordinary humanitarian spirit of our nation. The changes I have proposed would enable it to reflect that spirit even more effectively.

RICHARD NIXON.

THE WHITE HOUSE, April 22, 1970.

The message was referred by the Speaker to the Committee of the Whole House on the State of the Union and ordered to be printed.

**COMMUNICATION FROM THE CLERK  
OF THE HOUSE**

The Speaker laid before the House the following communication from the Clerk of the House of Representatives:

APRIL 22, 1970.

The Honorable the SPEAKER,  
U.S. House of Representatives.

DEAR SIR: I have the honor to transmit herewith a sealed envelop from the White House, received in the Clerk's Office at 3:40 p.m. on Wednesday, April 22, 1970, said to contain a Message from the President wherein he transmits a report of Federal disaster relief activity for calendar year 1969.

With kind regards, I am,  
Sincerely,

W. PAT JENNINGS,  
Clerk, U.S. House of Representatives.

**REPORT OF FEDERAL DISASTER RELIEF  
ACTIVITY FOR 1969—MESSAGE FROM THE  
PRESIDENT OF THE UNITED STATES (H. DOC. NO. 91-325)**

The Speaker laid before the House the following message from the President of the United States, which was read:

*To the Congress of the United States:*

Natural disasters—in unprecedented numbers and scope—presented a grim challenge to this nation in 1969. The exceptional response to this challenge by the United States government is something in which all Americans can take pride. The story of that response is detailed in the report which I am today transmitting to the Congress.

This report of Federal activities in 1969 under authority of the Federal Disaster Act (Public Law 875, 81st Congress, as amended) is required by Section 8 of that law and has been provided by the Director of the Office of Emergency Preparedness. The report also describes activities carried out under authority of the Federal Disaster Act of 1969 (Public Law 79, 91st Congress). The funds which supported these activities are specifically appropriated to the President for the purpose of relieving suffering and repairing damage when disasters strike.

There were 29 major disasters during 1969—the largest number since the program began in 1950. Two of these—the California floods and Hurricane Camille—were exceptionally destructive. The number and extent of major disasters in 1969 required a massive Federal effort; a total of \$148,970,000 was allocated from the President's Disaster Fund, the largest amount since the enactment of Public Law 81-875. Despite these increased demands, the Federal response was most prompt and effective and those who participated in it deserve our commendation.

Under the leadership of the Office of Emergency Preparedness, the Administration is developing a stronger and more comprehensive disaster assistance program. An important part of this strengthened program is outlined in my disaster assistance message to the Congress. That message discusses both the legislation which will be submitted—the Disaster Assistance Act of 1970—and the improvements which are being made by executive action. I am confident that our

strengthened program will improve cooperation with State and local governments and with private and voluntary organizations. More important, these steps would enable the Federal government to continue to meet its responsibilities to individuals who are victimized by these unhappy events.

RICHARD NIXON.

THE WHITE HOUSE, April 22, 1970.

The message, together with the accompanying papers, was, without objection, referred by the Speaker pro tempore (Mr. EDMONDSON) to the Committee on Public Works and ordered to be printed.

**THE DRAFT—MESSAGE FROM THE  
PRESIDENT OF THE UNITED  
STATES (H. DOC. NO. 91-324)**

The SPEAKER pro tempore (Mr. EDMONDSON) laid before the House the following message from the President of the United States; which was read and, without objection, referred to the Committee on Armed Services and ordered to be printed:

*To the Congress of the United States:*

The draft has been with us now for many years. It was started as a temporary, emergency measure just before World War II. We have lived with the draft so long, and relied on it through such serious crises, that too many of us now accept it as a normal part of American life.

It is now time to embrace a new approach to meeting our military manpower requirements. I have two basic proposals.

—The first deals with the fundamental way this nation should raise the armed force necessary to defend the lives and the rights of its people, and to fulfill its existing commitments abroad.

—The second deals with reforming the present recruitment system—part volunteer, part drafted—which, in the immediate future, will be needed to maintain our armed strength.

**TO END THE DRAFT**

On February 21, I received the report of the Commission on an All-Volunteer Armed Force, headed by former Defense Secretary Thomas S. Gates. The Commission members concluded unanimously that the interests of the nation will be better served by an all-volunteer force than by a mixed force of volunteers and draftees, and that steps should be taken in this direction.

I have carefully reviewed the report of the Commission and have discussed the subject with many others knowledgeable in this field. The preeminent consideration in any decision I make involving the American Armed Forces must be the security of the United States. I have had to weigh carefully how our responsibilities in Vietnam and our overall foreign policy would be affected by ending the draft. I also had to consider the budgetary impact, and the possible effect on our economy.

On the other hand, we have all seen the effect of the draft on our young people, whose lives have been disrupted first

by years of uncertainty, and then by the draft itself. We all know the unfairness of the present system, no matter how just we try to make it.

After careful consideration of the factors involved, I support the basic conclusion of the Commission. I agree that we should move now toward ending the draft.

From now on, the objective of this Administration is to reduce draft calls to zero, subject to the overriding considerations of national security.

In proposing that we move toward ending the draft, I must enter three cautions: First, the draft cannot be ended all at once. It must be phased out, so that we can be certain of maintaining our defense strength at every step. Second, existing induction authority expires on July 1, 1971, and I expect that it will be necessary for the next Congress to extend this authority. And third, as we move away from reliance on the draft, we must make provisions to establish a standby draft system that can be used in case of emergency.

To move toward reducing draft calls to zero, we are proceeding with a wide array of actions and proposals:

—This Administration proposed, and the Congress has approved, a six-percent across-the-board pay increase for Federal employees, retroactive to the first of this year. This raises the pay of members of the Armed Forces by \$1.2 billion a year.

—I shall propose an additional 20 percent pay increase for enlisted men with less than two years of service, to be effective January 1, 1971. This action, if approved by the Congress, will raise the annual pay of enlisted men with less than two years of service by \$500 million a year, and is a first step in removing the present inequity in pay of men serving their first two years in the Armed Forces. The cost for Fiscal Year 1971 will be \$250 million.

—In January 1971 I shall recommend to the Congress, in the Fiscal Year 1972 budget, an additional \$2.0 billion for added pay and other benefits—especially for those serving their first two years—to help attract and retain the personnel we need for our Armed Forces.

—I have today directed the Secretary of Defense to give high priority to the expansion of programs designed to increase enlistments and retentions in the services. Further, I have directed that he give me a report every quarter on the progress of this program. Other agencies have been directed to assist in the effort.

—I am also directing the Secretary of Defense to review the policies and practices of the military services to give new emphasis to recognition of the individual needs, aspirations and capabilities of all military personnel.

No one can predict with precision whether or not, or precisely when, we can end conscription. It depends, in part, on the necessity of maintaining required military force levels to meet our commitments in Vietnam and elsewhere. It

also depends on the degree to which the combination of military pay increases and enhanced benefits will attract and hold enough volunteers to maintain the forces we need, the attitude of young people toward military service, and the availability of jobs in the labor market.

However, I am confident that, barring any unforeseen developments, this proposed program will achieve our objective.

The starting pay of an enlisted man in our Armed Forces is—taking the latest raise into account—less than \$1,500 a year. This is less than half of the minimum wage in the private sector. Of course, we should add to this the value of the food, uniforms and housing that is provided free. But it is hardly comparable to what most young men can earn as civilians. Even with special allowances, some married enlisted men have been forced to go on welfare to support their families.

The low pay illustrates another inequity of the draft. These men, in effect, pay a large hidden tax—the difference between their military pay and what they could earn as civilians. Therefore, on the grounds of equity alone, there is good reason to substantially increase pay.

While we focus on removing inequities in the pay of men serving their first few years in the military, we must not neglect the career servicemen. They are the indispensable core of our Armed Forces. The increasing technological complexity of modern defense, and the constantly changing international situation, make their assignments ever more difficult—and critical. We shall continue to make every effort to ensure that they are fairly treated and justly compensated.

There is another essential element—beyond pay and benefits, beyond the best in training and equipment—that is vital to the high morale of any armed force in a free society. It is the backing, support and confidence of the people and the society the military serves. While government can provide the economic justice our men in arms deserve—moral support and backing can come only from the American people. At few times in our history has it been more needed than today.

The consideration of national security contains no argument against these historic actions; the considerations of freedom and justice argue eloquently in their behalf.

#### TO REFORM THE DRAFT

As we move toward our goal of ending the draft in the United States, we must deal with the draft as it now exists. This nation has a right to expect that the responsibility for national defense will be shared equitably and consistently by all segments of our society. Given this basic principle, I believe that there are important reforms that we must make in our present draft system.

It is my judgment, and that of the National Security Council, that future occupational, agricultural and student deferments are no longer dictated by the national interest. I am issuing today an Executive Order to direct that no future deferments shall be granted on the basis of employment. Very few

young men at age 19 are in such critical positions that they cannot be replaced. All those who held occupational deferments before today, as well as any who may be granted such deferments from pending applications filed before today, will be deferred as they were previously.

This same Executive Order will also eliminate all future paternity deferments—except in those cases where a local draft board determines that extreme hardship would result. All those who held paternity deferments before today, as well as any who may be granted deferments from pending applications filed before today, will be deferred as long as they are living with and supporting child dependents.

I am also asking the Congress today to make some changes in the Military Selective Service Act of 1967.

The first would restore to the President discretionary authority on the deferment of students seeking baccalaureate degrees. If the Congress restores this authority, I shall promptly issue a second Executive Order that would bar all undergraduate deferments, except for young men who are undergraduate students prior to today. These young men would continue to be eligible for deferment under present regulations during their undergraduate years. This Executive Order would also end deferments for young men in junior college, and in apprentice and technical training programs, except for those who entered before today. Men participating in such programs before today would continue to be deferred until they complete them.

Should Congress pass the legislation I have requested, those young men who start college or enter apprentice or other technical training today or hereafter, and subsequently receive a notice of induction, will have their entry into service postponed until the end of the academic semester, or for apprentices and trainees, until some appropriate breaking point in their program.

Even if college deferments are phased out, college men who through ROTC or other military programs have chosen to obligate themselves to enter military service at a later date would be permitted to postpone their active duty until completion of their study program.

In each instance, I have spoken of the phasing out—not the elimination—of existing deferments. The sudden elimination of existing deferments would disrupt plans made in good faith by individuals, companies, colleges and local school systems on the basis of those deferments.

My second legislative proposal would establish a direct national call, by lottery sequence numbers each month, to improve the operation of the random selection system. We need to ensure that men throughout the country with the same lottery number have equal liability to induction.

Under the present law, for example, a man with sequence number 185 may be called up by one draft board while a man with a lower number in a different draft board is not called. This can happen because present law does not permit a national call of young men by lottery sequence numbers.

Some local draft boards may not have enough low numbers to fill their assigned quota for the month. As a result, these local boards are forced to call young men with higher numbers. At the same time, other draft boards throughout the country will have more low numbers than necessary to fill their quotas.

I am recommending to the Congress an amendment to suspend this quota requirement while the random selection system is in effect. If the Congress adopts this amendment, I will authorize the Selective Service System to establish a plan under which the draft call each month will be on a national basis, with the same lottery sequence numbers called throughout the country. This will result in a still more equitable draft system.

As long as we need the draft, it is incumbent upon us to make it as fair and equitable as we can. I urge favorable Congressional action on these legislative proposals for draft reform.

#### CONCLUSION

While I believe that these reforms in our existing draft system are essential, it should be remembered that they are improvements in a system to be used only as long as conscription continues to be necessary.

Ultimately, the preservation of a free society depends upon both the willingness of its beneficiaries to bear the burden of its defense—and the willingness of government to guarantee the freedom of the individual.

With an end to the draft, we will demonstrate to the world the responsiveness of republican government—and our continuing commitment to the maximum freedom for the individual, enshrined in our earliest traditions and founding documents. By upholding the cause of freedom without conscription we will have demonstrated in one more area the superiority of a society based upon belief in the dignity of man over a society based on the supremacy of the State.

RICHARD NIXON.

THE WHITE HOUSE, April 23, 1970.

#### DRAFT REFORM

(Mr. ARENDS asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. ARENDS. Mr. Speaker, the President's concern for reforming basic institutions has been evident on many occasions in his Presidency. He has called for reform in our foreign policy, reform of Federal-State relations, reform of the welfare system, reform of the Post Office. But one of the President's reforms which history may record as the most important reform of all is his reform of the draft.

The President's message on this subject should be carefully read and enthusiastically applauded by everyone of us. In the first place it reforms military pay scales in a way which will encourage more volunteers. Secondly, it reforms the Selective Service System, ending some deferments, and seeking the power to end others—so that the system will operate more fairly.

The President's message is brief, bold, and to the point. It sees that something

is wrong and it seeks to set it right. The President's actions and his proposals deserve our support. The changes which they would make will have a great and healthy impact on the life of this Nation.

Mr. GERALD R. FORD. Mr. Speaker, as the President has pointed out in his message on the draft, a peacetime draft is a relatively recent phenomenon. Traditionally, it has been used only when the Nation's security was seriously threatened.

In recent years, the draft has provoked debate and dissension, but nothing substantive was done until President Nixon advocated a lottery system a year ago and appointed a commission to study the feasibility and desirability of an all-volunteer force.

Now, the President has again acted. He has endorsed the basic conclusion of the Gates Commission's report that immediate steps should be taken to move toward an all-volunteer force. He has asked that military pay be increased, especially for first-term servicemen, as a first step toward eliminating the draft.

If we are willing to pay first-term servicemen approximately what they deserve and need—the draft can be eliminated. The draft is a heavy burden on our free society in peacetime. It infringes on personal freedom and inevitably causes unrest and dissatisfaction.

In the short run, we should continue to reform the present Selective Service System to ensure that it is as fair as possible both in its present application and in the event it needs to be reactivated in the future.

The ultimate goal must be an all-volunteer system. Only that system is consistent with the Nation's basic traditions of personal freedom.

Meantime, I am delighted that the administration is moving toward reducing draft calls to zero.

Mr. DUNCAN. Mr. Speaker, the President has asked Congress to make available \$250 million in the fiscal 1971 budget and \$2 billion in fiscal 1972 to make military service more attractive and thus move toward an all-volunteer armed force.

Increasing military pay, especially for first-term servicemen, will attract true volunteers and eliminate the present inequity in pay for those serving an initial tour of duty.

Because the draft has been available, pay for first-term servicemen has lagged behind pay for the career force and comparable civilians. First-term servicemen receive only about 60 percent of what they could earn as civilians and some servicemen have had to go on welfare to make ends meet. The underpayment of young servicemen is a national disgrace. The President's pay request for fiscal 1971 and 1972 will cure this serious inequity and will also be a major step toward ending conscription.

Mr. Speaker, I urge the Congress to support the President's program. We have an obligation to reexamine and, when no longer necessary for national security, a duty to eliminate institutions like the draft so that the process of Government is as consistent as possible with the Na-

tion's traditions of freedom and equal justice for all.

Mr. SMITH of California. Mr. Speaker, any President must reconcile long term goals and short-run responsibilities. But rarely does any President accomplish the reconciliation as successfully as President Nixon has in his message on the draft. In it he spells out explicitly his determination to end the draft. He calls for specific reforms which will bring about that goal. But, at the same time, the President recognizes his responsibility to make the interim period as fair as possible. He therefore calls for reforms in the draft system as well.

On the one hand, he asks that military pay be substantially increased—by 20 percent for first term enlistments. This provision should make it easier eventually to end the draft. On the other hand, the President also asks that the inequities created by our present system of deferments and local quotas be eliminated.

The President demonstrates in this message that he is looking both at the immediate realities and at less immediate goals. The American people are well served by his approach to his problem.

Mr. STEIGER of Wisconsin. Mr. Speaker, I feel constrained to express my disappointment that President Nixon has decided that the recommendations of the Gates Commission on establishing an all-volunteer armed force cannot be fully implemented at this point. The Commission report, which involved months of painstaking study and which was unanimously agreed to, concluded that our national security would not be jeopardized if a volunteer force were instituted by July 1971. I can only regret the President's decision to place continued reliance on the present Selective Service Act for an unspecified period of time.

Nonetheless, President Nixon has stated his readiness to move toward ending the draft and I commend him for the positive steps he has proposed toward that end. Certainly the key to reducing draft calls to zero is to improve pay and other benefits for officers and especially for enlisted men. I am pleased to note that Mr. Nixon does recommend that pay increases and additional benefits be granted in both 1971 and 1972. Although the cost is high—an additional \$2.25 billion—over a 2-year period—we have no right to compel young men to fight and perhaps die for this country if we do not at least pay them a living wage.

The review of programs and policies which the President has directed the Secretary of Defense to conduct should also serve to increase enlistments and retentions in the services and thus advance the day when draft calls no longer are necessary.

If the draft cannot be abolished entirely—a step which I continue to advocate—then I do support the President's plan for reform of the draft. The institution of a lottery system eliminated some inequities in the Selective Service Act but unfortunately introduced new injustices. The President's request for a phasing out of various deferments and

the establishment of a direct national draft call by lottery sequence should help to ensure that the draft operates in as equitable a manner as possible.

I think the Congress should at this juncture hold a comprehensive and public debate on the question of how this country is to raise and maintain an army in the next decade. The volunteer army and other similar proposals should be given a full and dispassionate hearing. If, after such debate, the Congress concludes that it is impossible to allow the draft to expire in July 1971, then I think we must at the very least reform the present system. Many of President Nixon's proposals for reform are worth while and should be adopted.

Most important of all, the Congress must resist attempts to prolong the draft unnecessarily. If new authority to extend the draft is voted, we should insist that such authority be extended only for the shortest time possible. It would be well for us to remember that the draft, no matter what reforms are instituted, remains an inequitable system based on a compulsion repugnant to our democratic society.

Mr. HORTON. Mr. Speaker, April 23, 1970 is a landmark day in American history. Three years ago, after years of frustrated effort to reform Selective Service—I coauthored a book called "How To End the Draft." Today, for the first time since before World War II, a President of the United States has sent to Congress a message in which he recommends legislation which will enable us to do just that—to rely on volunteers for the defense of our freedoms.

The President's proposals go beyond mere words or intentions. He has offered concrete proposals which will result in pay increases of over 25 percent for most armed services personnel by next year. Also, he has instructed the Secretary of Defense to give new emphasis to recognition of the individual needs, aspirations, and capabilities of all military personnel.

Combined with these proposals, the President's move to continue our withdrawal from Southeast Asia raises for the first time, the real probability that we can reduce draft calls to zero in the near future. Until that time, the President has indicated we cannot tolerate current inequities in the draft system between now and the day an all-volunteer army can be realized.

While the basic concept behind the President's message may seem simple, it has somehow eluded priority consideration by the leadership of this Nation until recently. The concept is that the manpower procurement program for the American military should interfere as little as possible with the individual freedoms of as few men as possible.

Conscription of any sort is diametrically opposed to this principle. As long as this Nation leans back on its ability to make military service compulsory, lives will be interrupted and freedoms will be violated. Further, a compulsory draft allows the military itself to be lazy about its treatment of individual soldiers. Manpower is not a very valuable com-

modity when the supply can be absolutely controlled by draft calls. Thus, pay is criminally low, opportunity for individual advancement and training is not given a high enough priority. In short, the draft enables the military to avoid the necessity of reforms, of efficient manpower utilization, and in some cases, of fair treatment of individual servicemen.

The steps outlined in President Nixon's message will substantially improve the fairness of the draft for as long as conscription is absolutely essential for national security. After that hopefully short period, other provisions of the President's message will lead the way to a manpower procurement concept which puts as high a priority on individual freedom as it must place on national security.

I heartily endorse these proposals.

#### GENERAL LEAVE

Mr. ARENDS. Mr. Speaker, I ask unanimous consent that all Members may be permitted to extend their remarks on the President's draft message immediately after the reading of the President's message.

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

There was no objection.

#### SECOND ANNUAL PLAN FOR U.S. PARTICIPATION IN WORLD WEATHER PROGRAM—MESSAGE FROM THE PRESIDENT OF THE UNITED STATES

The SPEAKER pro tempore (Mr. EDMONDSON) laid before the House the following message from the President of the United States; which was read and, without objection, referred to the Committee on Interstate and Foreign Commerce:

*To the Congress of the United States:*

In accordance with Senate Concurrent Resolution 67 of the 90th Congress, I am forwarding to you the second Annual Plan for United States' Participation in the World Weather Program. This report reviews the progress made during the past year and describes the activities planned by the Federal agencies for the coming fiscal year.

Progress in the World Weather Program has been significant. Of particular import is that, through the United States' effort in space, we have seen the development and testing of an instrument which is capable of measuring globally from a satellite the temperature distribution of our total atmosphere. This represents a giant stride forward. It holds promise of providing data from over the oceans and other remote areas, heretofore unavailable, which are essential for providing weather predictions to our people.

On another front, it is most encouraging to note the progress in international cooperation in this area. Nations have joined hands in moving forward with a program to assist developing countries in improving their meteorological services. And the nations of the world are coming

together this month to decide on the next major steps in the research activities of the World Weather Program.

The World Weather Program focuses on the important problem of understanding our global atmosphere. Whether we are attempting to assess the impact of pollutants on the quality of our environment, or trying to improve the accuracy and time range of weather prediction, these activities are vital to the people of the United States—to their safety and to their economic well-being.

RICHARD NIXON.

THE WHITE HOUSE, April 23, 1970.

#### AUTHORIZING APPROPRIATIONS TO THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Mr. BOLLING. Mr. Speaker, by direction of the Committee on Rules, I call up House Resolution 893 and ask for its immediate consideration.

The Clerk read the resolution as follows:

H. RES. 893

*Resolved*, That upon the adoption of this resolution it shall be in order to move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 16516) to authorize appropriations to the National Aeronautics and Space Administration for research and development, construction of facilities, and research and program management, and for other purposes. After general debate, which shall be confined to the bill and shall continue not to exceed two hours, to be equally divided and controlled by the chairman and ranking minority member of the Committee on Science and Astronautics, the bill shall be read for amendment under the five-minute rule. At the conclusion of the consideration of the bill for amendment, the Committee shall rise and report the bill to the House with such amendments as may have been adopted, and the previous question shall be considered as ordered on the bill and amendments thereto to final passage without intervening motion except one motion to recommit.

Mr. BOLLING. Mr. Speaker, I yield 30 minutes to the gentleman from Illinois (Mr. ANDERSON) and pending that I yield myself such time as I may consume.

Mr. Speaker, there is no controversy that I can discover on this rule. Of course, there will be considerable discussion under the 5-minute rule.

I reserve the balance of my time.

Mr. ANDERSON of Illinois. Mr. Speaker, I yield myself such time as I may use.

Mr. Speaker, I think the gentleman from Missouri is correct in his statement. There is no controversy on the question as to whether or not we should adopt the rule and discuss the space authorization bill.

Let me say, however, in the few minutes that I have that I wish to note the presence back with us on the floor the distinguished gentleman from Pennsylvania, the ranking Republican on this committee, Mr. FULTON. We are pleased to have him back with us. It also gives us an opportunity to say that I know of no one in this Chamber or in this House who has been more devoted over the years to this program and no one who

has a more tremendous fund of expertise and knowledge of our goals in the space program than the gentleman from Pennsylvania. I am pleased that he can be here to take his usual part in the debate today.

Mr. Speaker, the purpose of the bill is to authorize NASA appropriations for fiscal 1971.

The authorization totals \$3,630,875,000. By far the greatest part of this authorization—\$2,903,200—is earmarked for research and development efforts. Some \$33,975,000 is for facility construction at various NASA institutions around the country and \$693,700,000 is for administrative costs and research efforts.

The largest single item is \$1,101,500,000 for continued Apollo flights. Seven more flights are now programed; two in 1970, two in 1971, one in 1972, and two in 1974. Boosters, command, service, and lunar modules must be procured.

Another large item, \$670,200,000, is for the space flight operations. These include the orbital workshop program and the space shuttle and station. Some \$300,000,000 of this total was added to the bill over and above what was requested by the administration.

Other major projects funded by the bill include—

First, lunar and planetary exploration, \$144,900,000. This includes our Mariner and Viking unmanned flights to Mars;

Second, space research and applications, \$172,600,000. This includes our scientific satellite efforts, like Nimbus, Tiros and our geodetic, communications and navigational satellites;

Third, launch vehicle procurement, \$124,900,000; and

Fourth, tracking and data acquisition, \$293,800,000.

Mr. KARTH has filed additional views. He opposes delaying some ongoing projects in order to fund a new one, the space shuttle and station.

Mr. KOCH has filed additional views opposing the funding level. He believes it should be cut and the funds made available for more pressing domestic needs.

Mr. FULTON has made several recommendations. He believes the level of Apollo flights should be increased from 2 per year to 2½, to more fully utilize existing equipment, boosters, and personnel. He also believes that the Nerva nuclear rocket project should have an increase in funding.

Mr. MOSHER has filed additional views. He opposes funds added to the bill for the manned space flight program over what the administration recommended—some \$300,000,000. He believes our unmanned flights bring back more useful information.

Mr. WYDLER has filed additional views. He believes that the Department of Defense and NASA should get together on a Manned Orbiting Laboratory program as a matter of national security.

Mr. FREY has filed additional views in which 12 Members have joined. He points out that our space program has provided us with many new products and processes.

Mr. MILLER of California. Mr. Speak-

er, will the distinguished gentleman from Illinois yield?

Mr. ANDERSON of Illinois. Yes; I shall be pleased to yield to the chairman of the committee.

Mr. MILLER of California. Mr. Speaker, I want to thank the gentleman from Illinois for welcoming back the gentleman from Pennsylvania (Mr. FULTON). I join the gentleman in saying how happy we are at seeing the ranking Republican Member back on the floor.

Mr. ANDERSON of Illinois. I thank the gentleman for those remarks.

Mr. Speaker, I have no further requests for time.

Mr. BOLLING. Mr. Speaker, I move the previous question on the resolution.

The previous question was ordered.

The resolution was agreed to.

A motion to reconsider was laid on the table.

Mr. MILLER of California. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 16516) to authorize appropriations to the National Aeronautics and Space Administration for research and development, construction of facilities, and research and program management, and for other purposes.

The SPEAKER pro tempore (Mr. EDMONDSON). The question is on the motion offered by the gentleman from California.

The motion was agreed to.

#### IN THE COMMITTEE OF THE WHOLE

Accordingly the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill H.R. 16516, with Mr. ROONEY of New York in the chair.

The Clerk read the title of the bill.

By unanimous consent, the first reading of the bill was dispensed with.

The CHAIRMAN. Under the rule, the gentleman from California (Mr. MILLER) will be recognized for 1 hour, and the gentleman from Pennsylvania (Mr. FULTON) will be recognized for 1 hour.

The Chair now recognizes the gentleman from California (Mr. MILLER).

Mr. MILLER of California. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, today we bring before the House H.R. 16516, the fiscal year 1971 National Aeronautics and Space Administration authorization bill.

The bill before you would provide new obligational authority in the amount of \$3,630,875,000 for this Nation's space and aeronautics activities in the forthcoming fiscal year.

The President's space budget submitted to the Congress this year was the lowest request for space since fiscal year 1962.

The original NASA request to the Bureau of the Budget totaled \$4,500,000,000 and was designed to implement the recommendations contained in the report of the President's task group.

The President's space budget submitted to Congress was for \$3,333,000,000; or \$1,200,000,000 less than the recommendations contained in that report.

In view of this, it was the committee's considered judgment that a portion of these amounts should be restored.

The committee's action, as reflected in the bill before you, was to increase the total authorization to \$3,630,875,000—an increase of \$297,875,000.

The increase falls entirely within the area of manned space flight, with the exception of a \$1,400,000 increase in research and program management.

However, this latter increase was offset by an equal reduction in research and development.

We have just crossed the threshold of a new decade in space. I do not believe that it is necessary for me to remind the Members of the House of our past successes in space, and particularly the flights of Apollo 11 and 12.

Hundreds of millions of people in almost every country of the world watched the first landing on the moon.

The Apollo 13 mission was to have been a continuation of our program of lunar exploration.

The entire world is aware that the mission had to be aborted because of severe damages to the service module which occurred as the spacecraft approached the moon on April 13.

The cold, statistical history of Apollo 13 will show the mission as a failure.

In my opinion, Apollo 13 was one of the greatest successes we have had in space flight to date.

A success because it was a vivid example of American expertise, working as a team, bringing into play all of our technological know-how to avert a tragedy.

I had the privilege of being present at the Mission Control Center in Houston during the return and recovery of our brave Apollo 13 astronauts.

There, I witnessed one of the most remarkable demonstrations of cool, calm, and deliberate application of space technology, all concerted toward one objective: To bring astronauts Lovell, Haise, and Swigert home safely to earth.

I think that all concerned, not only the astronauts, but the fantastic ground crew as well, deserve the praise of every American for their outstanding accomplishment.

The single national space target of the last decade was the manned lunar landing.

This feat demonstrated what Americans, as a people, can accomplish when they have the will and when the national leadership and the public favor are united to achieve a desirable goal.

The program of the seventies will, however, have no single climatic goal.

It must be clearly understood by us in Congress and the American people that the space program of the seventies will be quite different from that of the sixties.

It will be a balanced and viable program composed of a reasonable schedule of space priorities.

It will be a program responsive to opportunities presented by the remarkable new technology developed in the last decade.

It will also be a program responsive to the limitations imposed by our Nation's many competing needs.

Already we have begun to reap the benefits of our space program.

The commercial Comsat satellite is now giving us television coverage of world events on a regular basis—and the corporation is making a profit.

The international Intelsat satellite is working smoothly to provide TV coverage to over 70 countries around the globe.

Worldwide weather coverage from space has moved from an experimental to an operational basis with satellites routinely sending back valuable pictures of the earth's cloud cover and weather patterns.

We now have satellites for navigation, geodetic surveys, nuclear test ban surveillance, and numerous other scientific information. Yet, we are just beginning to realize the potential of our new space technology.

We now know that space observations can answer the basic questions that must be answered if we are to make efficient use of the limited resources of our own planet.

What causes ocean currents? What untapped food resources are in the sea?

How do the oceans affect the weather and vice versa?

Can we get accurate weather predictions for longer than a few days? Can weather be controlled? Can earthquakes be predicted?

And of prime importance, what are the sources of air and water pollution?

The answers to these questions and many other problematical areas affecting the life of man can be found in a viable national space effort.

We must proceed in the development of space technology, just as this Nation proceeded in the past during the eras of rail and air transportation development.

Now permit me to explain briefly the increases in authorization the committee has recommended in the bill before you.

NASA requested \$956,500,000 for continuation of the Apollo lunar exploration program in fiscal year 1971.

The committee recommends an increase of \$145 million for a total authorization of \$1,101,500,000 for fiscal year 1971.

Of this amount, the committee has added \$45 million for the initiation of long leadtime production of payloads for lunar exploration flights after 1973, and to start production of the spacecraft and science payloads for one more Apollo lunar exploration flight in addition to those now planned.

It is necessary that we authorize funding for these long lead items now.

Insofar as Saturn V is concerned, the committee recommends the addition of \$100 million to start procurement of long leadtime hardware and to begin fabrication of an improved Saturn V system.

This includes startup costs of vendors and subcontractors that have been phased out of the Saturn V program.

Among Saturn V systems, engine funding would have the highest priority, due to the long leadtime associated with their production.

NASA requested \$515,200,000 for space flight operations in fiscal year 1971, and

the committee recommends an increase of \$155 million.

Of this amount, \$75 million has been added to augment the development and qualification effort on spacecraft and subsystems for the orbiting laboratory which is now called Skylab.

This addition would emphasize earth resources experiments.

The initiation of preliminary design for a second orbiting workshop would also be possible.

The committee also recommends the addition of \$80 million for more extensive analysis and engineering studies, payload definition and preliminary design for the space shuttle and space station programs.

The key to the success of this Nation's future space effort lies in the development of a low cost, recoverable, and reusable space transportation system.

The reusable space shuttle will drastically reduce the cost of putting people and cargo into space.

In particular, the shuttle will facilitate construction of a manned orbiting space station that will open up new areas of scientific and technological activity in the near neighborhood of earth.

The committee's action in increasing this program will serve to emphasize the necessity of proceeding with the development of this system at a faster rate than envisioned by the President's budget.

And now a few words about the unmanned space flight program.

The bill before you includes \$565,700,000 for these purposes.

NASA's scientific satellites have enriched mankind's knowledge in many scientific disciplines, notably geophysics, astronomy and solar physics.

The Nation's unmanned probes to the nearby planets of Venus and Mars have revealed a wealth of information about our two closest neighbors in space.

The study of the solar system will be continued with the launch of instrumented spacecraft to the other more distant planets during the decade of the seventies.

Satellites have also proven to have a variety of practical uses, and the space application program has already contributed to a better life for all men.

International communications are routinely handled through satellites today, and weather forecasting is assisted by satellites currently in space.

The future looks even brighter. Research is underway on a navigation and air traffic control satellite system.

In addition, experimental spacecraft are now being designed which will survey the earth's resources so as to provide information of great value to farmers, foresters, hydrologists, geologists, the maritime and fishing industries, among others.

I will not go into the many details needed to explain the extremely good work which is being performed by NASA in aeronautics and advanced research and technology.

This continuing work has been very valuable in our space program.

We did find it necessary, however, to

reorient some of the funding emphasis in several program areas that had suffered reductions in the budget process this year.

These program areas were given modest increases to perform needed research in aeronautical safety of flight items that should be continued.

We did this by reducing the tracking and data acquisition program by \$4.2 million, redistributing \$2.8 million within research and development, including technology utilization, and the balance, \$1.4 million to research and program management.

This latter item is to encourage the movement of younger scientific personnel into aeronautical research fields.

Thus, we bring before you a modest space and aeronautical program for fiscal year 1971.

We are embarked on our second decade in space, one in which U.S. spacemen will continue to visit the moon, and unmanned craft will go to every planet in the solar system.

There is hope of launching an experimental nuclear powered rocket by 1978—the type needed for long stay time manned interplanetary flights at some time before the end of this century.

Very few Government programs are based on the type of long-range planning that characterizes this Nation's space activities.

It is typical of Americans that we are prone to react in spurts.

Sputnik jolted us into the space age and we scrambled to get the first man to the moon.

But now is the time for advance planning if we are to insure that our space program does not stagnate—and that we do not waste the investments already made or we do not deprive ourselves of the important knowledge we seek.

The wide-ranging but relatively modest objectives planned by NASA are reasonable, practical, and within our resources.

It is a program the public will support.

Important and dramatic goals await the United States in space.

So we should forge ahead into the seventies and let it never be said that we failed to support this investment in tomorrow.

In summary, we are presenting to you a bill which would authorize \$3,630,875,000 for the Nation's space effort in fiscal year 1971.

The bill before you is \$297,875,000 more than the President's request.

We think it is a minimal program, but one which will permit the Nation to move forward in line with the stated objectives of the President's Space Task Group Study.

The CHAIRMAN. The Chair recognizes the gentleman from Pennsylvania (Mr. FULTON).

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I strongly favor, with minor exception, H.R. 16516, the NASA authorization for this coming fiscal year.

Space is with us to stay. It is not only with us for peacetime uses, in order to remain first in technology, but it is also

with us for our very security. Therefore, we should move ahead. That is why I strongly favor the action of the Science and Astronautics Committee and its members who have given so much study to this over the past few weeks.

Space is here to stay. It is now a vital part of the lives of the earth's people.

The United States must remain first in space and technology working in cooperation with other countries, not only to maintain our progress, but our security.

We should proceed on a measured course for both manned and unmanned exploration with particular emphasis on the safety of our U.S. astronauts. We can reduce by 90 percent the cost of earth orbits by promptly going ahead with the research and development of the space shuttle, which can land like an airplane; by the development of a permanent space workshop that can be expanded by the addition of modular units as needed; by continuing research on liquid, solid, and nuclear space storable fuels.

The progress of the United States in space has already changed the United States making the American people and the economic system world acknowledged first in research, technology, and systems management. The impact of worldwide television and satellite communication, weather prediction, hurricane warning, health benefits, and so forth, has really changed the world.

We must remember that in 1961 the U.S. House of Representatives by a unanimous record vote authorized the Apollo program of lunar research.

Differences have arisen and will always arise as to priority and approaches on the technical level. We will have heated discussion about the best equipment as to command modules, lunar modules, fuel components, valve fittings, and even screws and bolts, but this is our American system to obtain excellence.

The tremendous success of America through NASA in returning alive and unhurt the three Apollo 13 astronauts has fully demonstrated to the world that we can really operate in space.

Do not forget our big threat of destruction to the American people and our very security rests now in space. Also our greatest peacetime progress in research and development has occurred in space.

Any nation that gains absolute control or absolute superiority in any strategic area, such as space has now become, controls the world and absolutely everybody on earth. We American people certainly do not want this to happen.

For peace as well as defense purposes, the American people are doing well in lifting their sights to space and the future. President Eisenhower advocated "open skies." Our generation must say, under President Nixon, "open space." We must work for open participation of the world's people to make the benefits of space available for all mankind as our original space law has so well stated in the statute setting up NASA.

At this point, Mr. Chairman, I would like to include in the RECORD a summary chart of the committee's actions:

## FISCAL YEAR 1971 NASA AUTHORIZATION—SUMMARY OF COMMITTEE ACTIONS

Program/project	NASA request	Committee action (thousands of dollars)	H.R. 16516	Program/project	NASA request	Committee action (thousands of dollars)	H.R. 16516
<b>Research and development:</b>				<b>16. Aeronautical vehicles.....</b>			
1. Apollo.....	\$956,500	+145,000 (+45,000) Lunar payloads and Apollo 20. (+100,000) Saturn V improvements.	\$1,101,500	Subtotal ART.....	\$87,100	Approved request.....	\$87,100
2. Space flight operations.....	515,200	+155,000 (+75,000) Apollo applications. (+80,000) Space shuttle/station.	670,200	17. Tracking and data acquisition.....	264,200	+2,300	266,500
3. Advanced missions.....	2,500	-1,500	1,000	18. Technology utilization.....	298,000	-4,200	293,800
Subtotal, MSF.....	1,474,200	+298,500	1,772,700	Total, R. & D.....	2,606,100	+297,100	2,903,200
4. Physics and astronomy.....	116,000	-5,600 Explorers.....	110,400	<b>Construction of facilities:</b>			
5. Lunar and planetary exploration.....	144,900	Approved request.....	144,900	1. Ames Research Center.....	1,525	Approved request.....	1,525
6. Bioscience.....	12,900	do.....	12,900	2. Goddard Space Flight Center.....	2,050	do.....	2,050
7. Space applications.....	167,000	+5,600 ATFS F. & G.....	172,600	3. Jet Propulsion Laboratory.....	1,950	do.....	1,950
8. Launch vehicle procurement.....	124,900	Approved request.....	124,900	4. Kennedy Space Center.....	575	do.....	575
Subtotal, SSA.....	565,700	No change.....	565,700	5. Manned Spacecraft Center.....	900	do.....	900
9. Space vehicle systems.....	30,000	Approved request.....	30,000	6. Marshall Space Flight Center.....	525	do.....	525
10. Electronics systems.....	22,400	+1,500 Avionics.....	23,900	7. Nuclear Rocket Development Station.....	3,500	do.....	3,500
11. Human factor systems.....	17,900	+440 Air crew stress.....	18,300	8. Various stations.....	18,575	625 Projects at Michoud and WTF.....	17,950
12. Basic research.....	17,600	+400 Aeronautics.....	18,000	9. Facility planning and design.....	5,000	Approved request.....	5,000
13. Space power and electric propulsion systems.....	30,900	Approved request.....	30,900	Total, C. of F.....	34,600	625—	33,975
14. Nuclear rockets.....	38,000	do.....	38,000	Research and program management.....	692,300	+1,400 ART for aeronautical trainees.	693,700
15. Chemical propulsion.....	20,300	do.....	20,300	Grand total.....	3,333,000	+297,875	3,630,875

Mr. Chairman, I wish to join my distinguished colleague, the gentleman from Texas (Mr. TEAGUE) in support of funds in the amount of \$298.5 million added to the manned space flight program by the Subcommittee on Manned Space Flight and the full committee. As you know, the NASA request for the Apollo program for fiscal year 1971 is \$729.6 million less than fiscal year 1970. The budget as proposed by NASA terminates Saturn V production and reduces the launch rate to two lunar exploration flights per year. The total increase proposed for the Apollo line item is \$145 million; \$45 million will be used for long lead production payloads for the sixth and seventh Apollo flights. This will augment the scientific payloads and contribute to an increased stay time on the lunar surface. These same funds will provide for production of spacecraft components and definition of science payloads for an eighth Apollo flight.

One hundred million dollars was also added to the Apollo line item for the Saturn V to provide long leadtime components and to start fabrication of improved Saturn V systems. For several years I have strongly urged that NASA undertake efforts to improve the Saturn V system so that it will not become an obsolete vehicle. These funds will provide for this activity particularly for vendors and subcontractors who are now being phased out of the program and for engine work which requires the longest leadtime. The leadtime to build the Saturn V is approximately 4 years. If we are to have Saturn V vehicles available in the mid 1970's to lift such payloads as nuclear flight stages and space station modules this leadtime must be minimized. The \$100 million included by the committee in this bill will reduce this leadtime and make more efficient and less costly the reinitiation of the Saturn V production in the mid 1970's.

Space flight operations was increased by \$155 million over the NASA request

for fiscal year 1970 in the area of Apollo applications workshop, now called "Skylab," and for the space shuttle, and space station—\$75 million of this increase will provide for augmenting the development and qualification of spacecraft and workshop subsystems for long duration missions planned for 1973. This same money allows for initiating development for experiments for the Skylab which have been excluded because of funding limitations.

I have insisted that adequate attention be paid by NASA to the earth resources and medical areas. These funds will provide for experiment emphasis in these areas. Within this \$75 million preliminary design for a second mission will also be undertaken. A thorough examination will be made of incorporating artificial gravity in a second mission if it is approved in subsequent years.

A low-cost space shuttle is the single most important component of our total national space program in the 1970's. Because of this \$80 million was added on my insistence to the space shuttle and space station effort for 1971. The \$80 million will provide for more extensive analysis and engineering studies, long leadtime payload definition effort and advanced testing and fabrication of preliminary designs for both the shuttle and the station. If we are to reach adequate decisions on the timing and emphasis in the low-cost shuttle program and space station it is important that during fiscal year 1971 that the detailed design effort be carried out so that sufficient information is available to the committee and the Congress to make decisions on proceeding with the development of the low cost shuttle and space station.

NASA requested \$2.5 million for advanced missions studies for fiscal year 1971. After reviewing this program and at my insistence this line has been reduced by \$1.5 million. After considering all of the information it was obvious that NASA could conduct sufficient studies in the advanced missions area with an au-

thorization of \$1 million for fiscal year 1971 utilizing unobligated funds remaining in this program for fiscal year 1970. If we are to have a strong space program in the 1970's that will pay substantial returns on the large investments made in the past decade it is important that the Members of this body support the bill as recommended by the committee.

I would like to quote an excerpt from a statement issued by the House Republican policy committee, which was supported unanimously, and which shows the measured pace of the space program under President Nixon's decisions.

The first year of the Nixon Administration witnessed the culmination of the greatest scientific effort of the American people, the magnificently perfect lunar landings of Apollos 11 and 12. The United States achieved in full measure the goals set and the commitments made for the decade of the sixties.

President Nixon has now called upon the Congress to join in charting a new course in space for the seventies. He has challenged America to forge ahead and to continue our progress and leadership in lunar exploration, in satellite communications, in navigation, meteorology and medical research. The President has presented to the Congress an effective and balanced program which insures the achievement of the nation's long-range goals.

The Republican proposals for FY 1971 emphasize: (1) preservation of U.S. technological, engineering and scientific leadership, (2) maximum economy and efficiency in all space programs, (3) development of practical, usable benefits, (4) broadening the contribution of technology and research advances to the U.S. economy, (5) maintenance of balance between manned and unmanned space flight programs to achieve maximum scientific results with minimum expenditures, and (6) safe and efficient conduct of aeronautics research programs including air pollution and noise abatement studies.

For several years I have been critical of NASA's planning schedules for the production and launch of Saturn V vehicles.

Last year NASA planned to maintain

a production rate of three Saturn V vehicles for fiscal year 1970 at the Michoud Assembly Facility. Although this would not have resulted in the optimum production rate, it at least reduced the production costs per vehicle considerably from the \$250 million cost per vehicle at a production rate of two per year as was the previous plan.

During testimony received this year, however, we learned that Saturn V production will be suspended for an indefinite period after the completion of the original 15 vehicles planned. This means that the Mississippi test facility will revert to a mothball status in early 1971, and the Michoud Assembly Facility with its production capability will be placed in standby status.

It is unfortunate that budgetary restrictions have forced these two installations to a skeleton-force type of operation. We should try to keep these installations partially active and hold as much of the technical team together.

There is no question in my mind that we will need eventually more Saturn V launch vehicles for future missions, both manned and unmanned.

It was for this reason that I recommended that we add \$100 million to the Apollo request for fiscal year 1970 to start long leadtime procurement on Saturn V components and to start on the development of an improved Saturn V system. Since it is the only large booster we have, we must continue to upgrade it to prevent it from becoming obsolescent.

I am not advocating that we resume production now. This should not be done until we have specifically defined missions. With long leadtime and improved components on hand, the startup time for the production lines will be reduced and we will be in a position to start production of an improved version of the Saturn V.

But when production is started, we must be prepared to produce the vehicles at or near the optimum economic rate, and in any case no less than three per year.

Likewise, we must pay very careful attention to launch rates. According to Dr. Paine's testimony this year, the Apollo 20 lunar exploration mission has been canceled. Apollo flights 18 and 19 missions have been delayed until 1974, and the Apollo applications workshop, now called Skylab, has been slipped by 4 months.

The limited budget available has caused the launch schedule to be stretched out to a maximum of two per year, with only one flight in 1972 and none in 1973.

My analysis of launch operations costs, including those incurred at the Kennedy Space Center and the Manned Spacecraft Center, indicates that the more launches you have per year, the less the operating cost per vehicle. For example, if only one launch per year is scheduled, the cost per launch is \$260 million. If four launches per year are scheduled, the cost per launch decreases to about \$106 million per launch.

Our present rate of two per year works out to about \$143 million per launch. It is apparent that the space budget will not permit us to attain the optimum in

launch rate costs for the immediate future. However, with some minor rescheduling, the cost per launch could be considerably reduced.

My recommendation is that the launch rate should be stepped up slightly to 2½ launches per year, or five every 2 years. Then operating costs savings of about \$20 million per launch could be realized.

Likewise, the frequency of launches has much to do with safety and the risk of accidents during the launch phase. If launch crews are not exercised often enough, they tend to become rusty with attendant risk of accident. We must keep the launch crews and supporting personnel sufficiently busy to maintain top proficiency. This can be done with a launch rate of 2½ vehicles per year.

Over the years the committee has consistently emphasized the need for additional research and development in the propulsion field. It is unfortunate that these words have not been heeded and that our advanced propulsion technology in high energy liquid fuels, solid fuels, and engine components has not been pursued at a faster pace. This country's space program has always been propulsion limited. The effects are dramatically shown in the recent Apollo 13 abortive mission. A sounder policy of research in this field would have resulted in a larger payload capability, longer mission capability, improved storable fuels, and more efficient propulsion systems.

The unprecedented management by NASA of the limited resources available to our astronauts in the Apollo 13 is a tribute to the technical competence of the NASA team. But it is also an indication of the limitations caused by lack of propulsion capabilities that have forced the program to operate very close to the ragged edge of the weight limitations. This, of course, is caused by lack of propulsion capability. One simple example to show this fact—the lithium hydroxide filters which were used to purify the air in the service module and in the LEM are of two different sizes. They, therefore, presented some problems in the jury-rigged lifesaving arrangements that were made in the return flight. Why were they of different sizes? Primarily, they were of different sizes because of weight saving requirements. There are numerous other weight limiting factors. For example, there were no spare oxygen tanks for use with the fuel cells after the failure of the first tank.

It would seem to me that somewhere in our future planning we should provide more than enough propulsion capability to prevent our programs from being weight limited. With an adequate program in the chemical propulsion field, we could have more "push per pound" merely by the application of a relatively small amount of funding in the areas that are so critical to the mission's success; namely, propulsion and space electrical power generation. I have consistently pushed for further development of the large solid rocket booster which has now been completely phased out of the NASA program. This is being done in spite of the obvious simplicity and more economical "push per dollar" that is inherent in the large solid program.

Previous testimony has shown that the Russians are expected to have a new booster of more than 10 million pounds of thrust. The Russians have always had a forward thrusting development program with respect to large boosters, and their new booster is almost one-third larger than our Saturn V rocket. They have learned that it is folly to be limited on booster capability. Why cannot we wake up to this same obvious fact?

In addition, we have not pursued the development of space-storable fuel at a very impressive rate. NASA has at my prodding continued work in the fluorine-oxygen-methane program and in the fluorine-diborane program. These new technologies offer many advantages in propulsion efficiency, storability and simplification of total mission payloads. However, this program has been limping along at a reduced rate. Additionally, NASA has year by year reduced the amount of money available in the chemical propulsion research area. It is extremely difficult for me to understand the thought processes which could arrive at this type conclusion.

From this brief discussion it is obvious that there are a number of areas which are being completely overlooked and by the application of a relatively small amount of money could give our country the propulsion capability it needs to stay foremost in the space field. With the paucity of effort that is now being expended, we will be fortunate if we do not slip further behind the Russian booster effort.

The NERVA nuclear rocket program continues to progress according to the schedule dictated by reduced funding over the past 3 years. We are achieving technology that will give this country a vitally necessary capability in exploring the outer reaches of the solar system. Already the NASA-AEC team has successfully test-fired the NERVA at present maximum power of 50,000 pounds of thrust for over an hour, including 10 cycles of shutdown and restart. The ultimate development objective, which is already within reach, is 75,000 pounds of thrust with 10 hours of operation and having the capability of multiple shutdown and restart. To get some understanding of what that means, the longest we can operate a chemical fueled rocket is about 6 minutes.

The key to success in space is propulsion, thrust power to lift the payloads necessary to accomplish our objectives. It is as simple as that. It is also the one factor that forced this Nation to come from behind and overtake the Soviet Union, because for many years we could not match their rocket power. We must never be caught in that position again. The NERVA is intended for operations after 1978, when we will be approaching really ambitious missions which are already well into development. Those missions will include close investigations of the outer planets, lunar orbiting manned spacecraft, the manned orbital laboratory, and so forth—all those missions that require long duration of thrust and are much more economical if the engine is reusable.

NASA requested \$38 million for fiscal year 1971 for nuclear rockets, \$1.5 million more than was programmed for fiscal year 1970. In my view, the request is really a very minimal amount to carry forward the schedule. Personally I would have preferred a more substantial funding level, increasing the NERVA to approximately \$50 million. However, I am also deeply aware of the budgetary strictures this country is experiencing at this time. NASA has given assurances that the agency can make significant progress with NERVA under the present budget request. The committee, therefore, approved the authorization request of \$38 million by virtually a unanimous vote and I support it completely.

In any event we cannot afford to hamstring the program without paying a tremendous penalty in our program organization and in funds to make up lost ground in the not too distant future.

No American could have been prouder than I last July when our astronauts landed on the moon. I have stated, from the very beginning that man's exploration of space will not end with the lunar landing. We must continue to take advantage of the almost limitless possibilities of space exploration and the benefits to mankind it offers.

You may recall that I served on the select committee formed in 1958 to chart a course of dynamic action in our Nation's space endeavors. The wisdom of the committee that went into formulating the National Aeronautics and Space Act of 1958 is attested to by its durability. The goals and objectives started nearly 12 years ago are still valid today.

To date, our Nation's space program has provided unparalleled gains in scientific knowledge, communications, weather observations and predictions, navigation, and improvements in national security. Our Apollo lunar landing program alone has produced remarkable scientific and technological advances. Then there are the achievements that are not so easy to put your finger on. We can speak of national pride and international respect as side effects from recapturing the technical/scientific leadership from the Soviet Union. We can speak of the proof of our country's ability to set a formidable goal and to stick by our guns until that goal is reached. We can speak of the revolution in American education sparked by the space race. These gains cannot and must not be lost.

If these gains are not to be lost, what then must our national space program of the future be? What then is the course that America must chart to stay at the forefront of space exploration and development? What must we do to provide a steady flow of returns in science, applications, and technology from our national investments in space?

This bill now before us supports the conviction that the groundwork for future, more diversified and productive activities must be laid—although in more modest aspects.

The legislation before you outlines a national space program that will be continued at a steady but moderate level.

There are no crash programs but rather wide-ranging space goals for the nineteen-seventies. These goals are exploration, the gathering of scientific knowledge and the practical application of the lessons of space to life on earth.

The unmanned space programs have formidable goals but goals that must be reached if we are ever to understand our universe. A more viable and diversified planetary program is needed. The development of carefully conceived plans, not only for the exploration of Mars, but for Venus, Mercury, Jupiter, Saturn, Uranus, Neptune, and Pluto, as well as the Asteroid Belt should be strongly supported. The U.S. space program for the next decade will include unmanned flights to all the planets in the solar system, including the ground tour mission to the five outer planets.

The legislation before you today is presented by an administration unhampered by channel vision. It is based on the recommendations of the President's Space Task Group—recommendations which are bold and forward looking—recommendations which are broad and balanced. It is legislation that is supported by NASA, supported by me, and I am confident, supported by the American people.

For mankind on earth, our exploration of space has had far-reaching consequences which only now are we beginning to grasp and appreciate.

Since its establishment, NASA's program of space exploration has been visible in its constructive effects on almost every section of our society and every area of the Nation. It has spawned new communities and new jobs. It has advanced both education and the educated man.

To demonstrate this, let me turn your attention southward to Huntsville, Ala., once known only a decade ago as the Watercross capital of the world. Its population then was less than 20,000. Today Huntsville is the home of the Marshall Space Flight Center where the Saturn V, the rocket that boosted men to the moon, was designed and fabricated; and it has a population of more than 140,000. Where only one small fire station operated, there now are nine modern stations. In 1958, there were only a very few century-old churches in Huntsville; today there are more than 40 new churches and two new synagogues.

Since 1960 an average of one classroom a week has been added to Huntsville's public school system; and the growth is one of quality as well as quantity. More than 80 percent of the city's high school graduates who have competed for National Merit scholarships in the past 5 years are numbered in the top 25 percent above the national average. The educational level of Huntsville's residents is far above the national average. The level at Huntsville is at least 2 years of college.

The influx of personnel, both government and contractor, has brought to Huntsville a new mix in population and new ideas. The city boasts its own symphony and its own observatory. The Huntsville Branch of the University of Alabama has developed into one of the Nation's best graduate schools in science

and engineering. Through education and the educated community of Huntsville, resulting from the impact of space, the problem of race has been mitigated.

The story of Huntsville is not an isolated one in the Nation. Space exploration has brought new life and productivity to areas from New York to California; and, indeed, the influence also extends beyond our national borders. Our achievements in space have stimulated worldwide a new appreciation of the values of the American democratic system and the capabilities inherent in citizens working in a free society. The effect of this, its significance for the future with respect to the political direction of many of the newly emerging nations is beyond measure.

The success of our effort to reach the moon provided a new view of earth. We were able to see it as a whole; and this new view provided us with a deeper appreciation of its bounty. I am certain that this view has contributed to our recent intensified concern for our environment and the growing resolve to decrease pollution by managing the life-support systems of "spacecraft earth" as carefully as we do those of the Apollo spacecrafts. Space has given us a greater awareness of our mismanagement of earth and an increased regard for our future and our destiny.

Our voyages into space have been voyages of discovery. How does one express in dollars the incentives for achievement this provides? How does one measure in material terms the growing hope, the confidence that if we will it, a better world is no dream? Perhaps this is the most important achievement of our reach into space—this spur that has been provided to encourage us to set goals for improving man and his condition and then plan to achieve them.

NASA has shown how to manage and integrate worldwide thousands of peoples, countless skills, various industrial teams as well as groups from the universities, research centers and government in order to pursue and achieve a great goal. We must apply the lessons we have learned from our efforts in space to fulfill our aspirations on earth.

Our reach for the moon has given us an increased regard for the future. The best part of that future is in our children—and the more than a billion children born all over the world since 1958. Our view of earth and space, new and startling to us, will be and, indeed, is already familiar to them. Gravity that for most of our lives has confined us to earth no longer is a barrier.

Today's children will in their time go farther and faster than any of us have ever thought probable. Because of the space program, the young people who are part of that future, will master new sciences, learn new cosmology, and will have a new view of man and his ultimate destiny in the universe. The full consequences of this is now beyond our perception; but we can be certain that the promise of a future rich and productive beyond belief will be within their reach.

The funds this Nation has invested in NASA programs are paying off in ways

no one could perceive when we started back in 1959. The Intelsat communications systems already a reality is based principally on the work NASA has done in communications satellites. The existence of the Comsat Corp. is solely due to the technologies that have been evolved through the NASA-contractor teams. One of the great accomplishments we expect to achieve is widespread use of this media for educational purposes. NASA is participating in the creation of an educational system by satellite for the Indian Government, this system is to be tested within the next 2 years. An applications technology satellite will be placed in synchronous orbit precisely at 23,300 miles over the Indian Ocean and will beam down experimental educational programs to inexpensive television receivers located in 5,000 villages. These programs on farming, family planning, conservation, the three "R's," and many others will initially be transmitted by India's Government stations and will be seen by more than 5,000,000 people. The later operational system will reach the 400,000,000 citizens of India who live off of the earth. Such efforts to help underdeveloped nations to make their people self-sufficient in the basic needs of human existence is, from our point of view, well worth the investment.

Additionally, the Canadian Government is planning a similar satellite to cover the wide expanse of that relatively thinly populated country. In addition, there are now 75 countries of the world participating in Intelsat system. This shows that not only do the underdeveloped countries have an output from NASA spinoff, but also the developed countries as well.

NASA programs such as these should continue to receive vigorous support. Soon to come into being are the earth resources satellites, which will bring unprecedented benefits. These unmanned craft will be able to pinpoint early indications of crop disease, previously undiscovered sources of fresh water, the beginnings of locust swarms in barren country, not to mention global weather patterns.

Not only are such programs of direct benefit to ourselves and other countries, but NASA is participating in space-related activities with more than 70 other nations around the globe. These ventures are either conducted jointly or on a reimbursable basis. To me, this policy is an excellent example of enlightened self-interest, and goes far to give strength and support to the international objectives of the country.

The space program and particularly the manned space flight portion thereof, has brought the biomedical scientist and engineer to closer conjunction than any other endeavor in the history of the earth. The hostile environment of space including the weightlessness, the radiation, the great distances involved and the loss of earth's influence on man's natural periodicities has made it mandatory that the technology of measuring man's physiologic and psychologic reactions to the space environment be reported in real time or as close real time as possible.

Because of the weight, volume and

power limitations of spacecraft and because techniques traditionally used on earth are not acceptable and in many cases not feasible in space, much effort has been expended in developing new and advanced techniques of measurement and of instrumentation. These advances affect almost all man's bodily systems, but the cardiovascular system has been found to be one which is highly susceptible to the environments of space and, of course, is a key system in maintaining man in a healthy, effective state.

Many of the developments which have risen directly from the space program and have been used therein, have had other offshoots into terrestrial cardiovascular assessment and treatment functions.

Today, there are a number of these in actual use in the United States and some have been tried abroad. Examples are the spray on electrode. Normally, when one has an electrocardiogram, the technician applies a metal electrode to the chest and moves it about. In addition, he connects wires to the wrist and ankles. These electrodes are all right for short contacts, but in doing dynamic monitoring of the heart they have proven to be inadequate. Under NASA sponsorship, a spray on electrode was developed. One merely sprays this electrode over the end of a lead wire which has been greatly miniaturized and these are connected to the electrocardiogram machine. The application of the electrode doesn't require the removal of heat and this then flexible layer of material will contain the electrode, even though the patient is moving about. This is particularly useful in children.

Because of the need for good communications and receiving data from space, the equipment has been adapted for use in not only ambulances which are not attended by a physician—in moving a cardiac patient from his home on to a treatment center, so that the physician on the other end can give instructions to the ambulance attendant, but in addition, is being utilized today in a number of mobile cardiac treatment vans which are operational in various places.

Another development which is proving to be of use on earth, is enhancement of X-rays by means of a computer. X-rays, particularly of deep unaccessible portions of the body hidden behind boney areas, are often distorted and unclear. The use of a computer technique of converting the X-ray picture into digital forms and converting each point of the picture into a number proportionate to the film's optical density has resulted in the ability to reproduce them with much more clarity of detail and these are being used in studies of the heart and great vessels, as well as of the vessels in the brain.

Today, in many places, catheters used to do pressure studies and analyses of the cardiovascular system and the heart are equipped with pressure transducers which are miniaturized and have been adapted for measuring these pressures in humans. These transducers originally were designed for pressure survey probes in wind tunnels and for telemetry of pressure data from small flight models.

They have greatly increased the sensitivity and increased the data returning from these very important measurements.

Another interesting technique which is still under development, but which has been used by cardiac surgeons, both in this country and abroad, is a technique for measuring the output of the heart by means of a four-electrode impedance plethysmograph. Normally, to measure the heart output, one must put a catheter directly into the outflow tract of the heart. This is still somewhat a dangerous procedure, even though done almost routinely today, and this technique shows extremely high degree of promise of either replacing or complementing the dye dilution techniques which are used today.

Another somewhat recent development is a technique for improving the image of the contractions of heart muscle tissue in doing heart research. This particular method was developed because a closed circuit television being used to monitor muscle movement produced a degraded and distorted image because a muscle moves rapidly, and the image storage time in the camera tube was wrong.

An engineer at one of the NASA centers suggested and developed the method of synchronizing a rapidly flashing light with the closed TV system, and as a result markedly improved images were obtained utilizing these stroboscopic principles. Although no catheters or tubes have been placed into any of the astronauts today, the research going on related to the cardiovascular system has resulted in the production of a miniature semiconductor transducer capable of transmitting pressure variations which help to assess cardiovascular function. This particular pressure transducer is about 200th of an inch thick and uses less than 500 millionths of a watt of electrical power and is a particularly attractive device which advances the state of the art in monitoring blood flow changes in cardiac patients for coronary inclusion.

A new type of artificial heart controller has been developed in cooperation of one of the space research centers with other medical groups, and consists of a pneumatic control system which supplies a driving pressure for either a cardiac assist pump or for a total replacement artificial heart. The system is still rather large, but continuing work is going on to make it small enough so that it can be useful outside the great institutions. This particular control system responds to very small variations in the atrial pressure of the heart, and results in a normal regulation of the artificial heart outflow system.

Going somewhat beyond the cardiovascular system, there are at the current time in use in several places in this country an automated monitoring system which can collect several channels of physiologic data from as many as 64 hospital patients and transmit it in digital form to a central control station for processing by a computer. A variety of conventional medical sensors can be used with a patient unit and these include EKG, temperatures, blood pressure,

peripheral blood flow and certain other physiologic parameters, such as depth and rate of respiration.

Another method of measuring peripheral blood flows using ultra sound techniques and the doppler phenomenon are also under development and show great promise.

A further advancement is the discovery that some high purity, high strength carbon forms which were developed for the aerospace activities are chemically, biologically, and physically compatible with fluids and tissues within the human body. In addition to their high strength and long term compatibility, these forms of carbon can be fabricated easily into variable shapes and easily sterilized. Because of these characteristics, these materials may very well be the next order of materials used in surgical implantations for corrections of various pathological body conditions resulting from disease and/or injury. They will be used for implantation splints, bone extensions, circulatory bypass implants, replaceable heart valves and other implantable prostheses which can probably be used more safely than the materials available today.

No one knows what the future will bring, but the space program continues to drive technology to find ways of measuring cardiac and vascular functions in man by noninvasive techniques and to develop the means of communicating this data over great distances rapidly in a form that will be easily interpreted.

It is likely that in the next 20 to 30 years, a number of new diagnostic or detection methodologies will be derived. Looking toward the future, a number of likely advancements are in sight. With the capability of imprinting microcircuitry on very small discs, it is entirely possible that a man's complete medical history—to include EKG's, cardiac outputs, peripheral blood flow, venous compliance, state of certain peripheral vessels, that is rigidity, and so forth, miniaturized pictures of the heart and vessels of the brain, plus every significant component of his physical examinations can be imprinted upon a disc as small as a quarter. This disc could then be used in place of the physician taking a history each time. Merely by inserting it into a small machine, he could pick out those elements which were significant as he reviewed the case in question.

Another advancement is that by the use of early detection of disease techniques, upon which the space agency is working very hard, one may be able to detect those subtle early changes which indicate that the cardiovascular system is beginning to get into trouble. With the advancement in communications and monitoring devices, I can foresee that rather than go to the doctor's office for a lying down examination, the patient may very well be able to pick up a monitoring device and wear it for several days, either transmitting directly to a receiver or deliver a very tiny recorder to a physician's office that can then be analyzed.

The development of new material and new techniques for pumping and regulating pressures may very well result in

the ability to produce devices which can take the load off the heart if it is diseased, while the body goes through its normal function of repair.

There has been mention many times of a hospital in space where the weightless environment would take the load off of a diseased heart and, that while the patient was recovering from a heart difficulty they could be in this environment. This may come, but the stresses of returning to a gravity environment might very well limit the usefulness of this idea.

If, however, one can reduce the stresses of insertion into orbit and return to earth, this has a possibility in the future. Because space flight makes it important that we understand the various subtle and basic changes which occur at the cellular and even molecular level, the research being done and to be conducted may well lead to a much deeper understanding of the total function of the cardiovascular system and its relationship to other systems, so that more effective preventive means can be devised for patients with heart disease.

One development currently of great interest, but not yet far enough along to predict when it will come into effect, is one called "integrated medical behavioral laboratory system." This is a modularized flexible system which would have the capability of—at one sitting—measuring a good many physiologic and psychologic factors and integrating them into a picture of the individual's total well-being very rapidly. This system is being developed in its first form to fly in a spacecraft in the mid or late 1970's. This should prove a great boon to hospitals and physicians' offices—in that it would simplify and speed up the process by which the biochemical, behavioral and physiologic measurements are being carried out today. It might well be the greatest breakthrough in diagnostic instrumentation that we will have seen within the past 100 years.

In the NASA fiscal year 1971, the construction of facilities budget request of \$34,600,000 is the lowest budget for new facilities that NASA has submitted. Their low budget program has been submitted in consideration of economy in spite of testimony before the committee on the need for more facilities for research.

Repeatedly, I have emphasized the need for forward-looking research programs and am well aware of the demands for newer facilities to meet the new research needs. I am, however, in agreement with this year's request and support it without change. My colleagues should be reminded that more research facilities are a must if this country is to maintain its predominance in space and aeronautics in the future. NASA must closely review its future needs and present them to the Congress in their proper order of priority.

Mr. Chairman, I conclude by complimenting our Apollo 13 astronauts, the officials of the NASA mission control, and the whole NASA team on bringing the Apollo 13 astronauts safely back to earth. They showed the world that we really can operate in space, that we are

first in space and first in technology in this country.

Mr. Chairman, I yield 10 minutes to the gentleman from Ohio (Mr. MOSHER).

Mr. MOSHER. Mr. Chairman, before we approve H.R. 16516, the NASA authorization bill, I believe it should be substantially amended. I oppose it in its present form.

Frankly, I have hesitated to grab this tiger by the tail. I particularly hate to stand here against the position of the gentleman from Texas, OLIN TEAGUE, chairman of the Subcommittee on Manned Space, for whom I have great admiration and respect. I hate to disagree with the gentleman from California, GEORGE MILLER, chairman of our full committee, for whom I have a very special personal devotion.

Also, I regret being in disagreement with my distinguished minority colleague on the committee, JIM FULTON, of Pennsylvania. I salute JIM FULTON for his personal courage, his devotion to duty, and his devotion to NASA's missions, as indicated by the fact that he has risked coming from the hospital in order to participate in our action here today.

We all recognize that the superb success of the moon landings, the Apollo program of the 1960's, owes much to the wise and vigorous leadership of Congressmen MILLER, TEAGUE, and FULTON, as well as the persistently strong support of all members of our committee, and the Congress as a whole. We continue to persist.

Personally, I certainly do support a continuing, strong manned flight program. At the same time, I urgently submit it should be supported at a lower priority level, and slower paced.

Therefore, I regret and oppose the action of our Science and Astronautics Committee in proposing nearly \$300 million for manned flight programs over and above the administration's NASA budget requests, in this authorization bill.

I suggest that any such tremendous increase above the administration's budget request is not only unwise because of our crucial inflationary problems and the whole question of national priority needs, but also because it would to an unfortunate degree tend to distort the shape of NASA's overall effort, would distort the mix or balance of its various elements.

Therefore, I urge that we hold this NASA authorization much closer to the level requested by the administration, and that our amendments should provide wiser balance, direction, and timing for the whole space program.

This is 1970. Our original commitment for the Apollo program in the 1960's has succeeded magnificently. Now new needs and goals, other opportunities, demand our greater attention and support in this new decade.

Among those opportunities, relatively neglected thus far and crying for greater attention, are those so very evident in the greater use of unmanned, automated, instrumented space flights.

At this time of severe budget restraint, when our dollars are so scarce and must be spread so thin and wisely, I argue

strenuously that we must put relatively greater emphasis on those aspects of the space program whence the practical returns, the fruitful returns, are the greatest. I mean usefulness to human beings right here on the earth. And all the evidence clearly shows that we achieve by far the greatest return in usefulness, in potential dollars profit for every dollar invested, from the unmanned space programs.

There was abundant evidence this year before our Subcommittee on Space Science and Applications that encouraged us to increase the authorizations for unmanned flight. We could have presented strong, valid arguments here for such increases. But in view of the Nation's other crucial needs, and other NASA programs, we felt obligated to stay strictly within the NASA budget request, and that is what we did.

Similarly, in the Subcommittee on Advanced Research and Technology, they faced strong arguments for increases, but they too held the line.

But the \$300 million increase proposed for manned flight broke that policy. I repeat, it thus tends to distort the whole program. I am confident there are many, many more places where that \$300 million could be put to better use.

I believe that the \$3½ billion—I repeat, \$3.30 billion—requested by NASA is adequate for that agency's needs in fiscal year 1971. It will be argued that is the smallest NASA request in many years. But that is as it should be. Right now should be a period of transition, a time for rethinking plans and priorities; not a time for rushing headlong into major expensive new programs, but a time for relatively very low budgets. I submit that a proposal for \$3.3 billion is not very low. And, three hundred added millions is much too much.

Mr. Chairman, the Apollo 13 crisis of last week was a tremendous test of NASA's planning and skills. NASA's crews, both ground control and the astronauts themselves, came safely through that harrowing test with superb courage, skill and success. All of us are profoundly grateful for that; and we are immensely proud of the NASA performance. The accident does not diminish our faith in the space program; in fact, that faith is strengthened by the way NASA's men overcame it.

Nevertheless, Mr. Chairman, I believe the Apollo 13 accident inevitably may require some slowdown in the manned flights, and that in itself weakens the argument for added funding right now. All the more reason for holding to NASA's original budget request.

If thorough investigation of the Apollo 13 accident proves the need for added funds, then a supplemental authorization should be warranted, but not until we have the special investigating board's report.

Incidentally, I believe an excellent review board—headed by the extremely capable and conscientious Ed Cortright—has been named to do that investigation.

Mr. Chairman, I expect to support amendments which will be offered by the gentleman from Minnesota (Mr. KARTH), chairman of the Subcommittee on Space Science and Applications, on which I

have the privilege of serving as ranking minority member.

Mr. KARTH will of course explain his own amendments later, in detail. But, in general terms, I understand he expects to propose cutting, not all of the extra money added to NASA's budget request by the committee, but a substantial part of it. His amendments would cut a total of about \$240 million. Some \$190 million of that would be cut from the proposed space shuttle development.

We argue that advanced research for the shuttle should be funded for the next fiscal year, but that it is too early to spend millions upon millions for its development. Far too many basic, beginning questions seem to remain undetermined as yet about this major new program. We argue this is a transition year in which we should move slowly, carefully, a time for a lot of rethinking, especially in relation to other national and NASA needs, not the right time for a huge new program start that inevitably will cost countless billions of dollars.

I doubt most Members of the House fully recognize that, if we authorize \$190 million for beginning development of the space shuttle next year, it may well be the first step, a commitment for a \$40 to \$60 billion—yes, billions—dollar program in the next 6 to 8 years. Implied here, I submit, are annual NASA budget levels of \$6 to \$7 billion or more, year after year in the near future.

I urgently believe this is not the time to make any such new start.

Mr. Chairman, please note that I have not emphasized here the argument which several other Members undoubtedly will speak very eloquently, that our society is suffering today from several other human needs which should have a much higher priority, above the NASA programs, in our very limited national budget.

I understand and sympathize with that argument. However, in reality, I do not believe a reasonable NASA budget is in conflict with, or steals from these other budget needs. In fact, I believe the NASA program so vigorously bolsters our economy, stimulates our technology and points the successful way by which great public problems should be attacked, its beneficial "fallout" is so great and so varied, I do not see it as a rival but as an essential ally to other positive, creative programs. But, I repeat, that assumes that the NASA authorizations should be held down to the administration's requested budget limits. I believe it very healthy for NASA itself, that it be held to a very lean budget in these difficult times.

In closing these remarks, I repeat my strong feeling that the really big potential return for dollars invested in space effort is in the unmanned programs, and that is why I tend to resent any action here which seems to overcommit us away from the unmanned flight opportunities, already too much neglected.

I submit that an overwhelming portion of the scientific knowledge produced thus far by NASA has been based upon data produced by unmanned, automated spacecraft.

Similarly, most of the practical applications of space technology, such as com-

munications, meteorology, navigation and earth resources survey, have been and will continue to be achieved by using unmanned satellites. In my judgment it is these efforts which should receive relatively much greater emphasis in the decade of the 1970's, and many of the most responsible, knowledgeable assessments of our full space program by others, also emphasize the need for that change of emphasis.

In the earth resources satellites program alone, there is literally billions of dollars of return possible in benefits for agriculture, forestry, mineralogy, geology and geography, oceanography, air pollution controls, better weather controls, and so forth, the entire spectrum of activities for the conservation, enhancement of our natural resources and environment. And yet we are supporting only a very limited beginning Earth Resources Technology Satellites (ERTS) effort by NASA.

I am very glad, in these days of limited funding, that H.R. 16516 does include some authorizations for the unmanned programs—for lunar and planetary exploration, physics and astronomy research, bioscience experiments and space applications. But these are very limited, "bare bones" programs, even though they are in several respects very much needed as preliminary to later manned flights.

All the more reason why we should not approve here today the adding of nearly \$300 million over and above NASA's budget request for manned flights, the most expensive and least productive aspect of our national space effort—least productive both in terms of scientific output and in practical applications.

Mr. FRIEDEL, Mr. Chairman, will the gentleman yield to me?

Mr. MOSHER. I am happy to yield to the gentleman from Maryland.

Mr. FRIEDEL, Mr. Chairman, I wish to compliment the gentleman for his remarks.

Mr. Chairman, my record of support for the space program, I believe, is second to none in this House. I have consistently voted for this program over the last 12 years and it goes without saying that I have the highest possible personal regard for all our marvelous spacemen, from Dr. Von Braun and Colonel Glenn right through to all of the heroes of the Apollo 13 flight. These brave men in space and those able and dedicated technical geniuses on the ground that made the successful recovery possible gave all Americans here on earth a tremendous moral lift.

I favor and will continue to support the further continuation of the space program. However, I cannot in these days of grave domestic national concern over such earthly problems as environmental pollution, crime and drug prevention, and the need to rebuild our cities, support the expansion of the space program. I will, therefore, vote to support cuts in the bill before us today in those areas where I deem the program requirements as expansive. Specifically, I am for deleting the \$190,000,000 provided for the manned space shuttle/station at the expense of other unmanned programs of greater value.

In addition, I shall vote to eliminate

the \$100 million which is provided by the committee for the long lead time procurement of hardware for an improved Saturn V rocket. It seems to me, Mr. Chairman, that the current Saturn V which has done such a fine job in making our Apollo flights so successful, is sufficient for the present time. Research should of course continue on improvements for the future but I do not think now is the time to begin a large procurement effort. We have landed Americans on the moon. Our only competitors in this field are the Russians and they have admitted our primacy in technical excellence and achievement. Therefore, I feel that we are entitled at this point to relax somewhat our effort in this area and concentrate our main assets on those grave national domestic concerns, some of which were voiced so dramatically yesterday on the first Earth Day.

Mr. MILLER of California. Mr. Chairman, I yield 10 minutes to the gentleman from Minnesota (Mr. KARTH).

Mr. KARTH. Mr. Chairman, it is with sincere regret that I am unable to support the bill (H.R. 16516) as reported by the Committee on Science and Astronautics. Our distinguished chairman, Mr. MILLER of California, knows that I have been a strong supporter of the national space program over the many years it has been my privilege to serve under his able leadership. I have supported large NASA budgets, even in the face of other urgent needs of our Nation and our citizens, because I am convinced that the space effort represents the leading edge of America's technological advancement. As a nation we must remain in the forefront of the world's technology, for to fall behind, in my judgment, is to assure that we will shortly become a second-rate nation.

Yet, as Chairman MILLER has pointed out, this is a year of budget austerity. The Subcommittee on Space Science and Applications recognized this fact and observed the stricture in considering NASA's request for space science and applications funds, and in making our recommendations to the full committee. We approved the exact amount that the administration requested, which is \$565.7 million for research and development for the Office of Space Science and Applications for fiscal year 1971. That amount for this important work is a little over one-fifth—21 percent—of the NASA budget for research and development. To me, this is a reasonable approach to the budgetary problems which we face at this session of the Congress. I hope that the House will sustain our recommendations.

I want to assure the Members that our subcommittee, in arriving at this judgment, gave very careful and detailed attention to each of the five major programs in our jurisdiction, and to the money authorizations requested for each program. These are the line items identified in the bill as "Physics and astronomy, lunar and planetary exploration, bioscience, space applications, and launch vehicle procurement."

The subcommittee met for 3 days in executive session to evaluate each pro-

gram, weigh the possibilities of reductions in the stern administration budget, and appraise the benefits of possible increases in certain items. I think I can speak for all the members of our subcommittee in stating to the House that we feel strongly that the space applications program—the practical, end-result, benefits-on-earth type of space activities—needs greater emphasis and attention than it has had in the past. We believe increased expenditures for these purposes can be justified. Nevertheless, as I said earlier, we did not increase that portion of the NASA R. & D. budget within the subcommittee's jurisdiction.

We did, however, make one minor change in the form of a transfer of \$5.6 million from one program to another. Frankly, in order to find a little more money for space applications work, we searched diligently for an item that might be cut slightly so that an increase of a like amount would not change the overall total and would not thereby rock the austerity boat. We found it, I think, in the Explorer program which comes under the line item, "Physics and astronomy." The Explorer satellites constitute an on-going program which is important, but which at least to some degree, is deferrable. So this is where we took away the \$5.6 million. The Explorer item is thereby reduced to an even \$20 million for fiscal year 1971, which approximates the Explorer funding level for the current fiscal year under NASA's operating plan, and accordingly the line item of "Physics and astronomy" is reported at \$110.4 million instead of \$116 million as presented in the original budget.

The transferred amount—\$5.6 million—is added to the applications technology satellite project, to bring it up to \$36.7 million—which is still less, incidentally, than the current fiscal year budget for this project. The purpose of the transfer is to permit the timely launching of two specific satellites, called ATS-F and G, under the original schedule of 1972-74, rather than to postpone the launchings for perhaps a year. The effect on the bill before you is to make the "Space applications" item \$172.6 million instead of \$167 million as in the original budget.

Mr. Chairman, please observe that we have resisted the temptation to increase, at this time, the highly popular tremendously vital earth resources survey program which also comes under the heading "Space applications." The reason for this restraint is not that I have lost my zeal for what many Members consider one of the most important of all space projects; the reason simply is that NASA finally has made a good start on development of an earth resources technology satellite, and proposes to continue its work on this project in fiscal year 1971 under a reasonably adequate budget request of approximately \$50 million. I wish it could be more, but I recognize the realities of the current situation, and the need to curtail Government spending in the face of inflation.

In summary, Mr. Chairman, our budget recommendations for space science and applications are moderate, noninflationary, and at the same time at a level that

should keep the program moving ahead on an even keel.

Why then do I oppose this bill in its present form? My opposition might be based simply upon the fact that almost \$300 million was added by the Science and Astronautics Committee to support a more vigorous manned space flight program.

Mr. Chairman, it should be recognized that the sustained effort on the Apollo project during the last 8 years and its attendant high costs, taken together with 5 years of declining NASA budgets, has caused the space program as a whole to be thrown out of balance.

I supported the large expenditures for Apollo during this period, not only because I approved of the objectives of Apollo, but also because to have done otherwise would have disrupted the pace of the program, introduced inefficiencies, and resulted in dramatic increases in costs.

Furthermore, I am as happy with the successful conclusion of the Apollo project as anyone in this chamber.

Now that the Apollo mission has been accomplished, however, the time has come for a reassessment of the space program, and it seems appropriate that primary emphasis should be placed upon achieving a better balance between the manned and the unmanned aspects of the program.

Unfortunately, the program presented to Congress by NASA this year is not calculated to redress the imbalance in the space effort; rather, it constitutes the initial step in pursuit of an extremely ambitious space program for the decade of the seventies, with all increases in future budgets going toward manned mission. NASA's projected budgets go from \$4 billion in fiscal year 1972 to \$6.8 billion in fiscal year 1979, but the unmanned effort will remain at a constant level of effort.

While I oppose increasing the NASA budget for fiscal year 1971 in general, and especially for the manned space flight program, I submit that Congress has an unusual opportunity this year to participate in developing basic policy for the Nation's space program for the next decade by making selective cuts in the administration's request for authorization.

NASA proposes to begin large-scale expenditures in fiscal year 1971 for development of a so-called space shuttle/station program. This program is directed toward development, first, of a reusable chemically fueled two-stage shuttle which will operate between the surface of the earth and low earth orbit in an airline-type mode.

Second, the project looks to development of a space station module which is conceived to be a permanent structure in orbit designed initially to support six to 12 occupants. By joining together such space station modules, NASA proposes ultimately to erect a space base capable of accommodating 50 to 100 men. But what 100 men in earth orbit would be called upon to do that 12—or even six—cannot do, is not explained.

NASA's preliminary cost estimates for development of the space shuttle/station

total almost \$14 billion. However, NASA officials readily concede that these preliminary estimates are not to be relied upon. Testimony was received by our committee to the effect that "studies of the space station and shuttle, which are in progress during fiscal year 1970 and will continue into fiscal year 1971, will provide a much more comprehensive definition of the development of operational programs with a related improvement in the quality of our cost estimates. Experience indicates a strong probability that these more refined cost estimates will vary significantly from the preliminary values shown."

Mr. Chairman, I agree with that statement by NASA officials. In fact, I have no confidence in those cost estimates. Ten years' service on the Science and Astronautics Committee has convinced me that preliminary costs estimates are uniformly low, often only a fraction of ultimate costs.

In any case, it is my contention that NASA proposes to embark this year upon a new space program based upon new hardware almost entirely in support of manned missions with a manned Mars landing as the ultimate objective. For example, it is estimated by NASA that 68 percent of its total budget will be spent on manned space flight missions in fiscal year 1979 with \$1 billion specifically designated for the manned Mars landing in fiscal year 1979.

While I am not opposed to the eventual development of a space shuttle, the large space station, the chemical space tug, and the nuclear transfer stage, I submit that it is unwise to undertake an accelerated program of the type envisioned by NASA during the next decade. I believe that the next few years should be a period of consolidation of the gains made in the space program to date, a fuller utilization of existing hardware and technology, and with special emphasis on a more aggressive exploitation of our space capabilities for useful application. Space systems have already demonstrated their enormous potential for direct economic payoff in such fields as international communications, navigation and air traffic control, analysis and forecasting of weather, and in surveying the earth's resources.

Let me now turn to the specifics of the fiscal year 1971 NASA budget. The Committee on Science and Astronautics adopted a report offered by the Manned Space Flight Subcommittee which increased the administration's request of \$110 million for the space shuttle/station development project by \$80 million, for a total of \$190 million.

I would propose to cut these funds out of the authorization bill under consideration, and at an appropriate time I shall offer an amendment to accomplish this. The purpose of my amendment is not to kill the project, but simply to establish a realistic pace for development. I want to point out that NASA officials have testified that as much as \$80 million will be spent during fiscal year 1971 in direct support of the space shuttle/station by the Office of Advanced Research and Technology.

I fully support the research work proposed to be done by OART in this regard.

Before the space shuttle can be a reality, many difficult technological advances must be made in such areas as configuration and aerodynamics, heat protection, guidance and control, and propulsion, to name some of the more obvious ones. While NASA officials appear optimistic that these technical problems can be solved, they admit maximum innovation from the aerospace industry will be required, and that alternative approaches to these difficult problems will need to be studied.

As a matter of fact, NASA officials are divided on the fundamental question of whether the space shuttle should be a fully reusable two stage vehicle, or simply a recoverable orbital stage launched by an expendable first stage. Dr. Werner von Braun seems to favor the latter approach, while Dr. Thomas Paine and Mr. Dale Myers have testified in support of the former.

In short, Mr. Chairman, development of the space shuttle may prove to be far more difficult than NASA anticipates. Many technical questions must be resolved before the Nation embarks on such a difficult and explosive undertaking.

Most important, it is far from clear that the space shuttle is needed; NASA has not defined the program of the future in terms of numbers, and size, and cost of payloads that will require a space shuttle.

Even if the space shuttle were now in existence, and the cost of operation of the space shuttle were extremely low, the high utilization rate needed to justify its high development costs and its high procurement costs would require a considerable expansion of the scope of U.S. space activities during the late seventies and the eighties. Specifically, NASA officials have testified that the space shuttle will provide a capability for placing 50,000 pounds in orbit, and that they anticipate a minimum of 30 flights per year by NASA and an equivalent number in support of DOD programs. During the entire decade of the sixties, NASA exceeded 30 launches per year only once—36 in 1966—including Scouts and Saturn V's, which are not to be replaced by the space shuttle. Assuming the space shuttle's payload capacity would be fully utilized on each of the projected 60 yearly flights, this adds up to 3 million pounds of payload launched into orbit each year. Could the United States afford such an ambitious space program? Would the American taxpayer be willing to support such an ambitious space program?

How do 3 million pounds of payload in orbit compare with the space program of the past? In terms of cumulative payload launched, 1969 was NASA's biggest year with 442,358 pounds, over 97 percent of which was attributed to the four Apollo flights. It follows that space shuttle advocates must anticipate a greatly expanded manned space flight program—30 flights per year by NASA alone—one which the Nation might be unwilling or unable to support. Note that the NASA budget has declined each year since 1965. It would have to increase dramatically during the next few years to support the development project if the space shuttle is to fly by 1977, and then increase even more after the shuttle be-

comes operational in order to support the kind of ambitious program it is designed to serve.

The Titan III experience may be instructive. Development of Titan III was undertaken in the expectation that, once operational, there would be 50 to 100 launches per year. This high utilization rate was the justification for investing \$1 billion for development. Currently, there are three Titan III launches per year.

Mr. Chairman, we may someday need a space shuttle. I believe we must all keep an open mind regarding the nature and scope of the space program in the future. Accordingly, I support the basic research work to be done by OART on space shuttle/station technical problems. But \$80 million during fiscal year 1971 seems adequate, even generous.

We should proceed with caution, recognizing that these new developments will ultimately cost the taxpayer many billions of dollars. Before we embark upon this new phase of the manned space program, we should be sure it is technically feasible, that there is a genuine requirement and public support.

In short, the United States can have a meaningful manned space flight program using existing equipment during the next decade. The space shuttle, which is designed to replace much of this existing hardware, should be developed in an orderly fashion, the basic technological problems should be resolved prior to design and development, and the cost effectiveness of the entire system should be clearly established before the project is undertaken.

Mr. Chairman, I intend to offer a second amendment to reduce the NASA authorization bill by \$50 million, which is one-half the amount added by the Science and Astronautics Committee, and not requested by the administration for Apollo.

The line item "Apollo" was increased by \$100 million for "long leadtime hardware" for improvement of the Saturn V launch vehicle. For the Congress to authorize additional funds for "improvement" of Saturn V, a vehicle which will go out of production by the end of this calendar year, makes no sense whatever.

Frankly, Mr. Chairman, I regret the decision of NASA to discontinue production of Saturn V launch vehicles after No. 515. The decision to suspend production of Saturn V launch vehicles in order to make funds available to begin development of a space shuttle/station in fiscal year 1971 seems to me especially unwise. The Saturn V is a proven launch system which NASA concedes probably will be needed for future manned missions, and for testing of the nuclear stage in which NASA is continuing to make large investments. Suspension and restart of production of Saturn V vehicles has been estimated by Dr. Werner von Braun to cost additional hundreds of millions of dollars. In spite of this, the decision to suspend production appears to be firm.

In view of the enormous costs involved, if production is in fact discontinued, there is no assurance that it will be resumed. Yet, the Science and Astronautics Committee also authorized an addi-

tional \$100 million, under the Apollo line item, for "long leadtime hardware" for improvement of the Saturn V launch vehicle. It makes no sense whatever to authorize additional expenditures of \$100 million in fiscal year 1971 for "improvements" to a launch vehicle which may never again be produced.

However, in view of the circumstances of the Apollo 13 flight, I have decided to offer an amendment to reduce that amount by only \$50 million so that the remainder might be applied to the Apollo spacecraft system.

Mr. Chairman, the Nation is fortunate that the lives of the Apollo 13 astronauts were spared. There is no doubt, however, that because of the equipment failure, their lives were in jeopardy. Whatever needs to be done to give astronauts on future missions greater assurance of safety and success should be undertaken immediately. Accordingly, with the understanding that the remaining \$50 million of the committee increase will be applied for this purpose, my amendment will propose a reduction of only \$50 million below what the bill provides.

Mr. DOWNING. Mr. Chairman, will the gentleman yield?

Mr. KARTH. I shall be happy to yield to the gentleman from Virginia.

Mr. DOWNING. Mr. Chairman, I have always been a strong supporter of the space program, and I am now. In my opinion it has accomplished a great deal. It is going to accomplish much more in the future. This is the first time, however, that I concur in the minority views with reference to any part of this program. However, I do think the position which the distinguished gentleman from Minnesota (Mr. KARTH) has taken on this particular issue is a correct one. I intend to support him in his effort.

I feel it is necessary, of course, to explore the moon, but I question how much exploration should be done on that planet. I think I am rather more interested in our technology which has enabled us to get to the moon than I am as to what the moon is composed of or its relationship to the earth. I feel that other things have to be taken in terms of priorities. I feel that the gentleman from Minnesota has made a distinct contribution along this line.

Mr. Chairman, I deeply regret that the administration has seen fit to delay the launch of the Viking project from 1973 to 1975. Such a delay is estimated to cost us an additional \$150 million. Moreover, we shall also be delayed 2 years on the acquisition of valuable knowledge and technology which would be derived from the exploration of the planet Mars. This is the planet which scientists say offers the best available possibility of determining whether extra-terrestrial life exists there.

Deferring funding for the planned Viking launch in order to accommodate a major new start in the manned space flight program appears to me to be an unwise move. I do not believe that it is necessary or prudent from a standpoint of economy, to authorize seven more moon landings through 1974.

To me, the real achievement in landing a man on the moon was the fact that

we had the technical knowledge to get him there and bring him back. It is a matter of some interest to know that some positions of the moon are over 4 billion years old. We rather suspected, even prior to the flight, that the moon's surface was barren and hostile. But I do not think we should continue seven more manned space flights to confirm these facts.

I would rather see us now direct our efforts in a new direction with new goals in mind. If we find life on Mars, then we have a whole new ball game so far as the space program and space funding is concerned. Personally I am convinced that extraterrestrial life does exist somewhere in space. It may not be technologically reachable for years but that should be our thrust.

In the meanwhile I am concerned that we should expend more effort to make the magnificent technology which we have acquired available, for the betterment of mankind. The flow, in my judgment, from knowledge to use is too slow. The practical benefits to mankind derived from our knowledge of space, continue to be rather nebulous so far as the general public is concerned. This is not to say that we have not already received many useful benefits. The ability to miniaturize, for example, has given the medical profession tiny television transmitters which can be swallowed for visual examination of the inner stomach. Exotic lubricants have been developed which will benefit everyone. Soon we will be able to purchase a "space blanket" which will fit in your pocket but will provide warmth and comfort in the coldest weather. We have discovered how to use the energy of the human body as a source of power for hearing aids and for the direction and control of artificial limbs. The fact that we already have instantaneous world television coverage, worldwide communication capability, world weather forecasts and other benefits are so commonplace that we tend to forget that they came as a result of the space program.

There will be many more dramatic and important developments, as we continue our space effort but again the flow is too slow. We must intensify our efforts in this regard to bring these benefits to the people as quickly as possible.

I reconfirm my faith in the goals of our national space program. In my opinion, it is not only desirable but necessary that we continue to fund a viable progressive program now and in the years ahead. Not to exploit what we have been able to conquer would be a historic failure.

Mr. GROSS. Mr. Chairman, would the gentleman yield?

Mr. KARTH. I yield to the gentleman from Iowa.

Mr. GROSS. Mr. Chairman, last January I relayed to the Administrator of the National Aeronautics and Space Administration a request from the University of Northern Iowa for a specimen of moon rock to be displayed at the university. The request was rejected.

Recently I learned that there was on display at the Stardust Motel and gambling casino in Las Vegas, Nev., a speci-

men of moon rock. I wonder if the gentleman would care to comment on that kind of procedure?

Mr. KARTH. I am not sure that I can enlighten the gentleman as to the reasons for that decision, nor can I enlighten him as to the reasons for its display in Las Vegas. It may have been displayed in connection with some scientific conference. I really do not know. But I want to assure the gentleman that I have not had much to say about who gets one of the moon rocks for display purposes. I do know, however, that—and in all fairness I think it is the right decision for NASA to have made, NASA has distributed rather broadly those moon rocks to the various scientific communities all over the world, for exhibition.

Mr. GROSS. I suppose it is more important to exhibit moon rock to people on their way to the gambling tables than it is to display it to university students. I suppose that is the feeling of the Space Administration.

Mr. MILLER of California. Mr. Chairman, if the gentleman will yield, if the gentleman from Iowa will formally write to me and cite his authority I can assure the gentleman that we will look into it, and quite thoroughly, because it is the first charge of this kind that I have ever heard of, although I have had to turn down many people who had good reasons, and many institutions who wanted moon rocks, because there are not enough to go around.

I would like to have the facts to prepare a protest to NASA in this case.

Mr. GROSS. If the gentleman will yield further, why does not the gentleman from California go and get the facts? That is what I have to do.

The CHAIRMAN. The time of the gentleman from Minnesota has expired.

Mr. MILLER of California. Mr. Chairman, I yield 2 additional minutes to the gentleman from Minnesota.

Mr. KOCH. Mr. Chairman, will the gentleman yield?

Mr. KARTH. I yield to the gentleman from New York.

Mr. KOCH. Mr. Chairman, I want to commend the gentleman and say to the gentleman I am going to support the amendments which the gentleman will offer. I recognize how difficult it is for a subcommittee chairman and a member of the Committee on Science and Astronautics to stand on the floor and urge a reduction in the committee's appropriation. I am a member of that committee and as I say I can understand how difficult it is to urge the body to reduce the appropriations requested, but I think it is in the national interest, as the gentleman in the well has indicated, for us to do that, because of national priorities.

Mr. Chairman, I have been on the Committee on Science and Astronautics a little more than a year, and in the course of that experience one thing has become crystal clear, and that is that the only reasons that we have manned space flight which costs five times that of unmanned space flight is to see what the effect of space would be upon man, and to give a psychological uplift to the Nation. I think that those things would be fine if there were money enough to do

everything we needed, then we might continue with that, but so long as there are rats in the apartments in the ghettos of his country I think it is esoteric for us to ascertain through manned space flight whether or not there is microbiotic life on the planet Mars.

So, because of that I intend to support the amendments to be offered by the gentleman from Minnesota which would reduce the appropriations requested for manned space flight. Indeed, I believe the appropriation should be reduced to an even greater extent.

The administration has requested authorization for more than \$3.3 billion for the space program in fiscal year 1971. A majority of the Science and Astronautics Committee have increased this amount by almost \$300 million, with the entire increase designated for the manned space flight program.

Expenditures for space must be considered in the context of the total needs of the Nation. This raises a question of national priorities, and it seems absurd that the space program should rate so high when measured against other programs of American society which are in desperate need of attention.

So many of society's most pressing needs are not being adequately funded that the list seems endless. Both the administration and the Congress have failed to fund sufficiently the urgently needed programs in education, housing, mass transit, pollution abatement, and crime control, to name only a few. Nor do prospects for meeting the cities' urgent needs seem very bright. Yet, to continue to ignore these problems is surely a perilous course, particularly while the government proposes to spend more billions on space ventures.

There are some who defend these expenditures by saying there is no assurance that if these vast resources were not spent on space, they would be applied to the accumulated needs of our cities and our fellow citizens. I believe this is too pessimistic an attitude, and I think that we can work together in the Congress and redirect these funds to meeting our needs here on earth.

Rather than increase the NASA budget, I would recommend that it be reduced. While much of the space program is worthy of support, there are several projects in the NASA program which seem particularly unjustified.

The most obvious among these appears to be the space shuttle/station. This is the first year substantial amounts have been requested to start the development of this ambitious new vehicle. The amount earmarked in this bill for the space shuttle/station is \$190 million. If Congress approves these new manned space flight projects, the United States will be embarking upon developments that will cost many billions of dollars during the decade of the seventies—approximately \$14 billion according to NASA's own estimates—and many knowledgeable persons believe NASA's estimates are unrealistically low.

I would urge that, during the next decade, NASA emphasize the use of automated spacecraft, rather than manned programs. At a fraction of the cost, auto-

mated spacecraft have proven to be much more effective in the acquisition of scientific knowledge as well as having practical applications, such as communications, air traffic control, weather prediction, and earth resources survey.

A second project, ill justified in my judgment, is the Viking program. Two Viking spacecraft are scheduled to be launched to Mars in 1975 with the primary objective of acquiring information relative to the possible existence of extraterrestrial life on the planet Mars. Viking is not expected to provide a final definitive answer to the question, but should reveal more detailed information about the environment at the Martian surface so that scientists can speculate as to whether that environment could support life.

We already know enough about Mars to know that if life exists there at all, it must be in the simplest form. I cannot justify approving moneys to find out whether or not there is some microbe on Mars, when, in fact, I know there are rats in Harlem apartments. The cities in this country are on fire; and the people living in the slums are furious at how little is being done to meet their needs while so much is being spent on space explorations.

While the objective of Viking may be very exciting to members of the scientific community, it is not a matter of great urgency to most Americans who are preoccupied and concerned with domestic problems.

NASA currently estimates the total cost for Viking will be almost \$900 million. That cost estimate has more than doubled during the past year. If history is any guide, expenditures for Viking surely will ultimately exceed \$1 billion.

Finally, there is the NERVA project. To date the United States has spent well over \$1 billion on development of the NERVA engine. More than \$1 billion additional dollars will be needed during the next few years to complete work on the NERVA engine and the stage with which it is to be integrated.

Since the decision has been made to discontinue production of Saturn V launch vehicles after vehicle No. 515, and since the nuclear stage is designed as an upper stage for Saturn V, if and when such nuclear stages come into existence toward the end of this decade, there will be no way to flight test it. Once discontinued, there is no assurance that Saturn V production will be resumed and the NERVA engine will be grounded.

Even more to the point, the nuclear rocket has never had a mission assigned to it. It does not have a mission today. And there are no approved missions for the future which will require the nuclear rocket. It has been argued that much larger, heavier payloads can be launched using the nuclear rocket but no mission has been defined involving such large and heavy payloads. In short, the need for NERVA has not been demonstrated.

Again, unless the NERVA project is canceled, the United States will end up with an extremely expensive, unlaunchable, and useless piece of equipment.

Mr. KARTH. Mr. Chairman, I thank the gentleman from New York. Let me

just say in conclusion that the amendments I will offer will not, in my judgment, do damage to the national space effort. I am concerned about one new start program, a multibillion-dollar starting program that is a line item for the first time this year. I am interested in reducing the level of expenditure to begin the start of that program.

I will explain the reasons when we get under the 5-minute rule, but the simple reason I feel so strongly about this particular program is the agency itself, the experts, those who are going to be charged with the responsibility of overseeing it, are not at this point in agreement.

So, Mr. Chairman, I will, at the proper time, offer the amendments and explain them.

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield 10 minutes to the very competent gentleman from Indiana (Mr. ROUDEBUSH).

Mr. ROUDEBUSH. Mr. Chairman, I rise in support of H.R. 16516, the NASA authorization bill for fiscal year 1971.

As is the custom in our committee, we are again bringing a clean bill without committee amendment before this body. All of the many amendments which were considered in committee are incorporated in this bill. The purpose of this is to save the time of this body in considering the various amendments.

The NASA bill referred to the committee amounted to \$3,303,000,000. The committee action, as reflected in the bill I speak for, indicates an increase in the authorization to \$3,630,875,000 or \$297,875,000 more than was approved by the Bureau of the Budget for NASA activities in fiscal year 1971.

The preponderance of this increase falls within the realm of manned space flight, with the exception of about \$1½ billion in the field of research and program management. In view of this increase over the amount requested by NASA, I feel a further explanation is in order.

This year's request for the space program is the lowest space budget submitted to the Congress since fiscal year 1962. I am sure we are all aware of our troubled fiscal condition. NASA was thus required to present to Congress a very austere budget.

Actually, the original request from NASA to the Bureau of the Budget was for \$4,500,000,000. This was to implement the recommendations contained in the President's Space Task Group Report. The President's space budget submitted to Congress was \$1,200,000,000 less than the recommendations in that report.

Personally, I am a great believer in the authorization committees of this House. I do not suppose there is any group of men more familiar with our space program than the House Committee on Science and Astronautics. The committee's considered judgment was that a portion at least of the original recommendations by NASA to the Bureau of the Budget should be restored. And, of course, this restoration is contained in the bill we present to you today.

I do not think I need to remind you that we have had extraordinary success

in our space program. Probably the greatest achievement of our Nation during the past year was the exploits in outer space. And I am sure you all joined with me and thrilled with me as we viewed television's presentations of the Apollo 11 and Apollo 12 flights. Without question, these were a great step forward for man and proved without fear of contradiction that the technical development of our Nation far exceeds that of any competing against us.

I say this without regard to the problems experienced on the Apollo 13 flight. I am sure that every Member joined with me in my personal anxiety for the safe recovery of our astronauts during this perilous experience. Their safe recovery with pinpoint accuracy, I personally think is a tribute to their own skills as well as the skills of those men at the Manned Space Center who improvised the use of their equipment and directed their safe recovery. This, too, even in partial failure emphasizes the excellence of the engineering and technology involved.

I have read that more than 500 million persons in every developed country of this world watched the first landing on the moon and listened to the words of Neil Armstrong as he became the first man to set foot on the lunar surface. The fact that this caused a great rise in American prestige is not refutable.

The President clearly indicated this by sending the astronauts to many countries of the world as envoys of this Nation. I personally feel that the moon landing was the greatest scientific achievement ever accomplished by man.

The success of Apollo 11 was followed by Apollo 12, which was every bit as successful and perhaps more so.

Sometimes I wonder if we have a complete appreciation of the contributions of our space program. I realize full well that many consider our space effort largely a waste of effort and money. I know I hear this often in my own good State and congressional district. But during my past 10 years of service on this committee I have noted a revolution in man's education and the many "fallouts" benefiting mankind.

So far, I have spoken mostly about our manned space programs, and this is as it should be since manned space flights have accounted for the bulk of the money allocated. But I do want to say just a few words about that other category of our space program which does not receive the publicity and notice. NASA's unmanned space program, including the scientific satellites, has enriched man's knowledge immensely in the past 10 years. In physics, astronomy and the many scientific disciplines we have had a great leap forward.

These unmanned vehicles have proved to have a variety of practical uses for the betterment of life for all mankind. We are all familiar with our communication satellites, handling a great amount of our international communications today. Our weather satellites give us a much more complete and analytical look at weather.

When I began my remarks, I spoke of increases in the budget rendered by

the committee. It might be well to review just briefly those increases authorized by the committee.

The committee has recommended an increase of \$145 million for the Apollo lunar exploration program in fiscal year 1971. This figure was reached in the following manner: \$45 million was added for the initiation of long leadtime production of payloads for lunar exploration flights after 1973, and to start production of the spacecraft and payloads for one more Apollo lunar exploration flight in addition to those currently programmed. It is necessary that we authorize these funds at this time because of the leadtimes involved.

In addition, we have added \$100 million to start procurement of long leadtime hardware to begin fabrication of an improved Saturn V system. This includes the beginning cost to vendors and subcontractors who have been phased out of the Saturn V program. Engine funding would have the highest priority because, from experience, we know the development of new engine systems has a leadtime of many years.

The committee has recommended an increase of \$155 million for space flight operations in fiscal year 1971. Of this amount, \$75 million has been added to augment the spacecraft and subsystems for a low earth orbiting laboratory called Skylab. This additional funding would give emphasis to earth resources and medical experiments, and would permit work to commence in the field of design for a second orbiting workshop.

The committee further recommends an additional \$80 million for the analysis and engineering studies needed for the preliminary space shuttle and space station programs.

I do not think one needs a complete knowledge of the space program to realize that the success of this Nation's future space program lies in the development of a relatively low cost recoverable and reusable space transportation system.

Here I have spoken of our space program and the moneys needed to carry out a well-rounded program. If this money can be authorized by this House, I feel our future is bright.

Many of the undertakings of our space agency have materially and significantly worked for the betterment of man living in earth's environment. I think of the research being carried out in navigation and air traffic control satellite systems. Unmanned vehicles now being designed will survey earth's resources and provide a great deal of information for farming and forestry, the maritime and fishing industries.

We could talk of the efforts of NASA in the areas of aeronautic research, pollution, and noise abatement. However, I am sure the Members of this body are aware of this good work.

I believe H.R. 16516 is a good bill. I recommend its passage to the Members of this body and do hope it will have the approval of this committee and this House.

In the past year, every American citizen held his head high as Neil Armstrong and Buzz Aldrin first set foot on the

moon. The world reacted with astonishment and utter amazement and every nation once again looked to the United States as the undisputed leader in science, technology, and management. There was no doubt that our country had recaptured the lead in a contest that could have been lost 10 years ago if the President and Congress had not promptly reacted to the challenge.

Our achievements in space, however, represent much more than adventure and our pride that America has taken once more its rightful place of leadership. Our efforts in space have encouraged the development of new products, new processes, and new technology, much of which has been made available to American industry and our defense organization. We have trained and developed a national resource of engineers, scientists, and other specialized workers in industry, government, and the universities, with skills vital to our economy and national security.

With this vast reservoir of technological talent and space science know-how, our great Nation cannot afford to sit back and rest on the laurels of past accomplishments. We have all seen how our space endeavors have brought about an unprecedented revolution in American education processes. We have seen science and engineering expertise excel to heights which we thought were impossible a few years back. We have observed a spirit of dedication and commitment rivaled only by the Nation's efforts in World War II. It is unthinkable to me that now, with this remarkable capability, we would not forge ahead in further exploration and exploitation of our new frontier.

The vast possibilities of many peacetime benefits to man here on earth have been demonstrated by observations and photographs of the Gemini and Apollo programs. These observations from space can tell experts the location of mineral reserves, the status of crops, the sources of air and water pollution, the flood potential of snow cover in a mountain range, and much more than was ever known about the weather. At the same time, our country is working to assure that all of the potential national security benefits of space are explored. We are conducting programs to protect us against hostile activities and to assure that space is not employed as a medium for aggression against us or our allies.

Our Polaris submarines fix their position beneath the high seas with the aid of the Transit navigation satellites. Ships at sea, aircraft in flight and forces at remote military bases depend on weather information obtained by satellites. A space satellite monitoring system helps us to maintain vigil against violations of the nuclear test ban treaty and the world's communications, both military and civil, have been revolutionized by communications satellites.

America has no ambition to turn space exploration into a destructive battleground. As the Apollo 11 crewmen noted on the plaque deposited at the landing site in the Sea of Tranquility, they "came in peace for all mankind." We must keep in mind, however, that others can have

different motives. More ominous statements were being made by the leaders of the Soviet Union not too long ago when their sputniks and their cosmonauts were in the spotlight of world attention. It behooves us to work to seek to deny them the occasion to make such statements again.

Too much is at stake to allow leadership to revert again to another nation; particularly to one that does not share our ideals or our way of life.

The ultimate benefits of this country's space accomplishments will fully justify the cost.

Mr. MILLER of California. Mr. Chairman, I yield 8 minutes to the gentleman from West Virginia (Mr. HECHLER).

Mr. HECHLER of West Virginia. Mr. Chairman, the Subcommittee on Advanced Research and Technology recommended to the full committee an authorization of \$775,271,000 for that portion of the NASA request considered by the subcommittee each year. This is \$10,376,000 less than the fiscal year 1970 programmed amount.

While this is the overall total requested by NASA, we did not "rubber stamp" this budget. We reordered some priorities within the request by emphasizing certain areas of research that will have a more immediate return to the taxpayer. We recommended an increase of \$3.7 million for aeronautics research and \$500,000 for technology utilization, to be offset by a reduction of \$4.2 million in the tracking and data acquisition program.

The total amount is to be utilized in the following areas:

[In millions]	
Research and development.....	\$564.8
Construction of facilities.....	7.55
Research and program management .....	202.921
	775.271

The changes to the program were specifically to add: One, \$1.5 million to electronics systems; two, \$400,000 to human factor systems; three, \$400,000 to basic research; four, \$500,000 to technology utilization; and, five, \$1.4 million to research and program management.

The subcommittee held extensive hearings both in 1968 and 1969 on the aeronautical R. & D. The evidence provided in these hearings—along with the testimony given in this year's authorization hearings—make a strong case for increased support for aeronautics-related work by NASA. In relative terms, the aeronautics part of NASA's budget request is still only 5.6 percent of the total—despite modest increases for the aeronautical vehicles program since the mid-1960's.

The recommendations reflected in this section stem from the conclusions and recommendations contained in House Report 91-932 of March 23, 1970, entitled "Issues and Directions for Aeronautical Research and Development." I recommend this report to you as pointing to the need for additional emphasis and attention to aviation matters in the United States. The purposes of the hearings and of the report were: First, to identify the priorities and prob-

lems in Aeronautical R. & D., and second, helping to focus the attention of the Nation's leadership on the urgency of greater emphasis on aeronautical research in the solution of critical aviation problems.

The conclusions and recommendations of this report are in consonance with the longstanding policy and recommendations of the Committee on Science and Astronautics. The committee has always sought greater recognition of aviation problems and greater support for the necessary R. & D. to help solve the problems that are within the purview of NASA. In spite of the efforts of the committee, NASA this year reduced the aeronautics-related work in the electronics research area by 45 percent. The action of the committee was to add funds for the important items that we believe should be emphasized.

The small amounts added will provide for additional work in the area of flight safety including work on aircraft wake turbulence, clear air turbulence, pilot warning indicators, air crew workload, and tension stress and in reducible noise and pollutants from aircraft engines. Also, the actions of the committee reflect this emphasis by providing additional funds to train and encourage new personnel to move into aeronautical research; to continue the development of flight safety items in the vital avionics area that would not have been continued because of the closing of the Electronics Research Center by NASA.

In considering the imbalance of space and aeronautics-related effort and the backlog of critical unmet needs in aviation, the subcommittee would have preferred to make a substantial increase in aeronautics-related areas. However, in balancing this desire with the realities of the total Federal budget and the need to curb inflation, the subcommittee felt constrained to recommend a modest increase for aeronautics which was offset by the reduction in tracking and data acquisition.

I remind the House that the advanced research and technology program provides the reservoir of new technology for our aeronautics and space programs of the future. It is a program that has been declining for the past several years as the NASA budget declines. Each year I have emphasized the need for continuing this basic work with increased emphasis on long-range needs as well as meeting current pressing "payoff" problems that lend themselves to immediate solution.

One of the roadblocks that has long distressed the committee has been the inability of NASA, particularly in the advanced research and technology centers, to maintain an inflow of young scientists and this has been notable in the aeronautical research area. Testimony taken in December 1969, indicates that the inflow has dropped from 179 new hires of young college graduates in 1966 to only 23 in 1969. With the serious shortage that exists in NASA today and with a continuation of this trend, the capability of NASA to provide the needed research could greatly diminish and the impact on the aerospace industry and the country could be disastrous. It would be tragic, indeed, if the country failed to

maintain its world leadership in aviation which is being seriously challenged today. For example, while the net contribution of the aerospace industry in 1969 to our international balance of payments was \$3 billion, there is no guarantee that this favorable result will continue. Our competitors are pushing hard and have equaled or surpassed us in a number of areas.

To reverse the trend in new personnel hires and to encourage younger personnel to involve themselves in aeronautical research, the committee recommended an increase in research and program management of \$1.4 million to be used specifically for: 50 research fellowships with NASA, 100 additional summer jobs at NASA centers, and 100 graduate and undergraduate scholarships.

We believe that the use of this relatively modest sum in this manner and continued for a few years will provide the impetus that can stimulate the innovative research needed to keep NASA and the country in the forefront in this vital industry.

In the area of technology utilization which is the program whereby NASA makes available to industry and to the public new discoveries and ideas resulting from their research, the committee recommends an increase of \$500,000.

The subcommittee has always considered this area to be highly important. The budget request was \$4 million—or 20 percent lower than for fiscal year 1970. To carry on the modest, but important work in disseminating the results of the space program to the taxpayer, the program was increased by \$500,000. Emphasis will be placed on results from space research which contributes to the solution of urban problems and to the reduction of pollutants and noise in our environment. Specifically, these funds will provide:

An additional applications technology team to work specifically on the problems of transferring NASA technology for the solution of urban development and environmental quality problems.

Additional effort in disseminating the results of space-related research to the general public and through trade associations.

Our review of the tracking and data acquisition program showed that it is soundly based; however, a judgment was made that a small 1.4 percent reduction could be made to offset the \$4,200,000 increase for aeronautics and technology utilization. The principal impact of this reduction will be to defer certain equipments which must be acquired eventually to modernize the worldwide networks. Although the committee is fully aware of the excellent work that has been performed by the tracking networks and the need to update equipments, it was concluded that the problems discussed above are more pressing at this time.

I urge all of my colleagues to support this important portion of the space and aeronautics program.

#### APOLLO 13 FLIGHT

The flight of Apollo 13 was unquestionably a tribute to the astronauts' courage and ability. It was equally a tribute to the dedication and skill of the

managers, technicians, and engineers at Houston who guided the crippled spacecraft through its 4-day ordeal. But most of all, it was a tribute to the training, which from the very beginning, has been the very backbone of the Apollo program.

The years spent as test pilots developed in the astronauts a sense of coolness in response to emergency. Continued jet flights enhanced this ability.

In the Apollo program, engineers, scientists, and managers were constantly keyed to anticipating the worst situation that could possibly occur—and solving the problem beforehand.

In the aerospace industry, hundreds of people were constantly performing systems engineering checks. All systems were tested "off nominal" to design and build in alternative modes of operation.

The astronauts were also involved in this process, with simulations on the ground and in flight. In fact, John Swigert wrote the technical manual on Command Service Module emergency procedures. In each Apollo mission, hours and days and months, and even years of practice preceded the flight. Complete missions, with emergencies and alternative means of mission accomplishment, were simulated.

It had been proven in previous flights that the lunar module could provide emergency propulsion and serve as an environmental shelter. On the Apollo 9 earth-orbital mission, Jim McDivitt and his crew deliberately ran the lunar module through the lifeboat operation that was to save Apollo 13.

Simulations and computations on the ground were performed during the Apollo 13 flight to verify other emergency procedures. Scientist Astronaut Anthony England tried the emergency lithium hydroxide air purification setup on the ground before this method was relayed to the astronauts. Computers checked out the necessary operational changes in the mission before they were attempted by the Apollo 13 crew.

The first indication of how all the training in depth paid off for Apollo 13 was when John Swigert replaced Tom Mattingly as the third Apollo crew member just 2 days before launch. But perhaps the most vivid demonstration was when the three astronauts, without the least indication of panic, prepared to take shelter in Aquarius knowing that the fragile craft designed only for lunar landing operations would be responsible for their lives until they once again approached earth.

#### TECHNOLOGY UTILIZATION

Mr. Chairman, the great technological advances made since the beginning of the space program are resulting in major benefits. Many of these benefits have been made possible by our work in advanced research and technology. We have produced new materials with properties heretofore deemed impossible. We have found new processes and techniques that are more reliable and have greater precision, and we have vastly increased our computer, communications, and data-handling capabilities.

Aside from the direct inputs for spe-

cific space programs, there are many additional dividends from our efforts. These are variously called spinoffs, fall-outs, or technology transfers—many of which take place under NASA's technology utilization program. The transfers range over a wide field—medicine, materials, safety devices, electronics, tools, fire-resistant foams, and paints—and some may become the nucleus of new industries.

Clearly, the major output of NASA is technology. At the beginning of the space program, for instance, we had tape recorders that could handle 200 bits of information per inch of tape; we now can record 28,000 bits per inch. We have instruments capable of magnifying objects 20 million times. We have a diamond knife that can dissect away portions of a molecule or cut a hair to 10,000 lengthwise strips.

In order to get to the moon, NASA required advances in every technical discipline. Knowledge gained is applied over and over again in all fields of engineering, and this leads to advances in related technologies. The computer industry is a good example of the impact of space technology. NASA is the largest user of computers in the world. We must have large computer systems of great complexity, size, and speed, and we must have great flexibility in the use of computers. In order to meet planetary launch window dates, it is necessary for us to have hundreds of thousands of items on schedule. We also must be able to monitor dependably our space missions. All of this, from automated check-out functions to inventory management, is done by computer.

Stimulated in large part by space demands, our Nation met the challenge for computers so well that the U.S. computer industry now dominates the world. It does about \$8 billion worth of business a year. Its exports have increased more than 1,400 percent in the first decade of the space age. It not only pays the highest average wages of any industry, but contributes a large positive international trade balance.

Another field that has felt the effect of the NASA-sponsored technological progress is aviation. History has taught us that we cannot drag our feet in this sector. We did so after the Wright Brothers invented the airplane and, as a result, our pilots were forced to fly French and British planes in World War I. International competition in aviation is intensifying to such a degree that a strong aerospace industry is a matter of national survival. On our leadership hangs our future national security.

This present leadership is evident at airports around the world; 75 percent of commercial aircraft flying all over the world are American-built. American aircraft, whether civil or military, reflect the technical contributions of NASA research in aerodynamics and engines, materials and structures, guidance and controls.

Aerospace is now America's largest manufacturing industry. Last year it did a \$27 billion business, with a \$28 billion backlog. It is one of our great producers of national wealth, exporting

more than \$3 billion worth of aircraft and parts in 1969 alone.

Much of our progress has resulted from the effective way in which NASA has organized and managed research and technical development, getting practical results into the hands of people who can use them. Individuals, cities, universities, and corporations have greatly benefited from this technology transfer. Many people employed on NASA programs now have taken their knowledge and skills into other fields. In the Chrysler Corp. for example, automobile ignition systems were reworked in order to meet the new Clean Air Act criteria. This was done by their own personnel who had developed the automated check-out and launch sequence equipment for the Saturn launch vehicle.

Technological transfer and growth mean much to the Nation. They influence productivity, wealth, and power. They bring better and cheaper products, and they mean more and better jobs with higher pay. As an example of what I am talking about, let me give you one brief comparison. Just 38 years ago, in 1932, the U.S. population was 125 million. Today we have 205 million. Some estimates suggest that the U.S. population will reach the 400 million mark by the year 2000. Thirty-eight years ago, in 1932, the U.S. gross national product was about \$58 billion. Today it is at the \$952 billion level and in the year 2000, if we progress at nothing more than an average annual 3 percent growth, the gross national product will be 2 trillion, 500 billion dollars. My point is this—it is no accident that this tremendous national growth coincides with a major commitment and investment by the United States in science and technology—of which aerospace has been a major component.

One level of technology was generated in response to specific space program needs. But that was just the beginning. What has resulted has been a wide assortment of progress, some expected, some unexpected, and out of it all have come many wonderful things now beginning to be realized. What lies in the future, we can only surmise, but I feel confident the harvest will be rich and bountiful. Mr. Chairman, I believe that our national security, economic progress, and world leadership are values we must protect by continuing to support our investment in technology.

For all these reasons, I strongly support an increase of \$500,000 over the President's budget request of \$4 million to finance the technology utilization program.

Mr. Chairman, I hope this committee will vote the full amount of \$775,271,000 for advanced research and technology, tracking and data acquisition, and technology utilization.

Mr. Chairman, I yield back the balance of my time.

The CHAIRMAN. The gentleman from West Virginia yields back 5 minutes.

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield 5 minutes to the gentleman from California (Mr. BELL), who has been extremely interested in the work of the committee on space matters.

Mr. BELL of California. Mr. Chairman, first of all, the chairman of the full com-

mittee, the gentleman from California (Mr. MILLER), has done an outstanding job for this committee in his leadership and ability to anticipate what is going to happen.

Also I commend the gentleman from Texas (Mr. TEAGUE), for his fine leadership and anticipation and being able to ferret out some of the difficulties that occurred for the committee. Also, I pay my respects to the gentleman from Pennsylvania (Mr. FULTON). It is a pleasure to have him back. He has done an outstanding job in leading the committee on the minority side and he has a thorough understanding of the problems of space.

Mr. Chairman, I rise in support of H.R. 16516 to authorize appropriations for the National Aeronautics and Space Administration.

This bill was subjected to the closest scrutiny by your committee in full recognition of the urgent demands of budgetary priorities.

NASA is the only agency in the Federal bureaucracy whose budget continues to decline each year.

We hear a great deal about priorities in our Nation, and I fully agree with most of what is said.

Domestic social ills demand our attention and our resources.

And they are getting them.

But the cry for a trade-off between space/defense and domestic social budgets has become so commonplace these days as to be in danger of losing its meaning.

It is often overlooked, however, that in the last 10 years, while defense spending has gone up by about 73 percent, domestic social program spending has increased 222 percent, while the space program has declined by about 40 percent in the past few years.

Now let me not be misunderstood.

I have supported both in my committees and here on this floor these moves to reorder our national priorities.

But as in any other endeavor, let us beware of shortsightedness.

And let us also be aware that we are not discussing annual increases in NASA's budget, but annual decreases, and how large those decreases should be.

I might point out that this is a highly unusual procedure in this body.

Mr. Chairman, the level of spending authorized in the bill before us is the minimum level at which we can maintain the chance for optimum return of the taxpayer's dollar. Now that we have had some difficulty in our recent manned-space flight to the moon, a few Members may think it popular to try to cut our effort. That would indeed be shortsighted.

Why is it that at the very height of our space success we want to say "forget it—forget the billions we've spent—forget the tremendous technological know-how we've developed."

Unless we approve this legislation, our Nation will have no manned space flight capability after 1974.

No matter how we would view our Nation's requirements in space, we would have cut off our options; we would have lost the leadtime necessary to regain launch capability.

You have heard before, on this floor, the enormous and unwarranted costs which would be incurred from a stop-start, stop-start operation.

It is no less true today.

Mr. Chairman, in my own district, which is the home of so much of the talent that landed Americans on the moon, I have witnessed, personally, the devastating decline of a technological capability that is essential to the maintenance of our Nation's competitive position in the world—not only of today, but of the future.

We are literally destroying our ability to provide our Nation with the scientific and technological prowess essential to our survival.

This is happening not just in southern California but in many areas across the country.

We must not allow American leadership and expertise to be reduced to the vulnerable level it is otherwise headed for.

This legislation offers us the opportunity for a moderate continuation of our space program, a balanced level which permits not only salvaging of our pool of technological talent and facilities, but the maximum return on our space investment.

Without it we may all of a sudden wake up and find ourselves totally unprepared for tomorrow's challenges, and then it would be too late.

I cannot urge more strongly that my colleagues support the bill as reported by their Committee on Science and Astronautics.

The CHAIRMAN pro tempore. The time of the gentleman from California has expired.

Mr. MILLER of California. Mr. Chairman, I yield the gentleman 2 additional minutes.

Mr. TEAGUE of Texas. Mr. Chairman, will the gentleman yield?

Mr. BELL of California. I yield to the gentleman from Texas.

Mr. TEAGUE of Texas. The gentleman has been an excellent member of the Manned Space Flight Subcommittee.

I kind of have the feeling, when the chairman of another subcommittee and the ranking minority member of that subcommittee came in to offer amendments to cut what was done by this subcommittee unanimously, there must be some curiosity as to what our subcommittee did. Will the gentleman from California tell the Members of the House something about how we operate, about how we get information and how we learn about what is going on in the manned space program?

Mr. BELL of California. I shall be happy to do so.

We make a thorough study of all the aspects of expenditures in the space program and the space expenditures under the NASA authorization.

We travel about various parts of the Nation in which the programs are being developed by the different aerospace plants. A thoroughgoing study is made of the operations of those plants.

I could go on for hours to tell the Members about the amount of time and effort that is placed in the work of pro-

gramming the space effort. It is not something we go over very hurriedly. It is something highly technical. It requires a great deal of understanding and study.

As the chairman of the subcommittee has said, this is the type of operation you must understand, it is a highly technical subject that must be studied carefully. It is difficult to understand how someone can quickly say they are opposed to this particular proposal, without being a member of the subcommittee.

Mr. CORMAN. Mr. Chairman, will the gentleman yield?

Mr. BELL of California. I yield to my colleague from California.

Mr. CORMAN. Mr. Chairman, I commend the gentleman for his work on the Science and Astronautics Committee. I have great respect for his ability and join in his statement.

Mr. PODELL. Mr. Chairman, will the gentleman yield?

Mr. BELL of California. I am happy to yield to the gentleman from New York.

Mr. PODELL. Mr. Chairman, I commend the gentleman for his statement.

Mr. Chairman, it is significant that earth day came only 6 days after the most hazardous of space flights has ended. I am happy as anyone to find our three brave astronauts safely back home on earth again. They met the challenges of their dangerous flight with distinction and bravery.

They are now back down on earth for a while. In the days and months ahead, they will have to face another hazard, the dangers and the rigors of earth travel. Riding behind a bus in the middle of a traffic jam is the American version of death in the afternoon.

Our earth stands out among the planets in our solar system. Its blue cast signifies the presence of water—and, as we know, water is the mark of the existence of life. Indeed, life as we know it emerged from the sea millions of years ago. From miles away in space, we cannot see the water turning brown from pollution. We cannot see the objects floating in that water. Water, once the source of life, is now killing the life actually contained within it.

Earth Day signifies that cooperation to combat the crisis of the environment is needed; it is needed between levels of government, between industry and government, and among all citizens. Deadlines for ending pollution are too far into the future. I call upon all to act now so that in the years ahead there will be no need of an earth day.

While people are talking about the problems of the environment, there must be some determination as to what are adequate standards for a "clean" environment. Goals must be established so that we have a direction for our activity. If our methods are spelled out, we can act to keep pollution indices low.

Thus, environment, ecology, and the quality of life on this planet have become the concerns of the 1970's. If they are ignored any longer, some scientists say that there will not be a decade of the 1980's and 1990's.

There is a public mandate for speedy action. Polls have shown that more than

85 percent of the population in this Nation is concerned with environmental pollution. Three out of four are willing to make additional sacrifices to improve our surroundings.

The entire issue is a new departure for the United States. It is a mass effort to improve the quality of life. It is time to put American know-how to work in this effort. If pollution recognizes no political boundaries, we must cross administrative boundaries to fight pollution. I would like to elaborate and to give you further proposals on this matter. I propose that we use the technical know-how of the National Aeronautics and Space Agency to help solve the problems of this planet.

Several months ago, spokesmen for General Motors announced that fume-free automobiles would be available for mass public consumption by 1980. I think that 10 years is simply too long to wait for such an important technological breakthrough.

In 1953, automobile companies began to work on antipollution devices. Seventeen years, and millions of dollars later, our cities are blanketed by automobile-caused smog, carbon monoxide, and sulfur dioxide. The once crisp outlines of buildings now fade into the grayness of the air.

In the past, the automobile industry has had an almost total monopoly on the research and development facilities in this area. When the American public was quoted a date or timetable for an automotive antipollution device, having no other source of information, they could do nothing but accept the work of the industry.

I believe that there is cause for some scepticism in their pronouncements. I feel it is none to inject some competition into the development of an automobile that does not pollute the air. The American public deserves faster service.

The year 1953 marked the beginning of the automobile industry's efforts to develop an antipollution device. It also marked the beginning of the U.S. Space efforts. In the intervening 17 years, the United States, in what can justifiably be called the achievement of the last decade, landed four men on the moon.

The National Aeronautics and Space Agency has met all the challenges presented to it. The technological feats regarded as science fiction several years ago have become the accepted reality of today. At NASA the impossible seems to take only a little longer.

As a member of the Science and Astronautics Committee, I have observed NASA's achievements first hand. On Earth Day, I have called upon NASA, the Agency that has conquered the challenges of space, to help us conquer some of the problems here on earth. Literally interpreted, space begins right above our hands, and lately this area has become more and more unpleasant. I am calling upon NASA to take up the challenge posed by our polluted environment.

The American public is rightfully demanding some solution to these problems and NASA spokesmen have said they seek the application of space technology for the direct benefits of all mankind.

What could be more beneficial than using a portion of NASA's 35,000 employees, including some of the Nation's top scientists, engineers, propulsion, and electronics experts to solve the problems of our earth's atmosphere?

With the proposed cutback in NASA appropriations for fiscal year 1971, some of the NASA people may remain idle. There are too many problems as yet unsolved for idle scientists. Federal funds should be given to NASA for the express purpose of developing an antipollution device for automobiles.

One of NASA's objectives for the 1970's is "the expansion of human knowledge of the phenomena in our atmosphere and space." Sulfur dioxide, hydrocarbons, and carbon monoxide—thanks to the internal combustion engine—have become phenomena of our air space. Let NASA set the pace for the development of a clean engine, starting from Earth Day, April 22, 1970. It would be another "giant leap" for the health, and the well-being of mankind.

Mr. SCHEUER. Mr. Chairman, will the gentleman yield?

Mr. BELL of California. I yield to the gentleman from New York.

Mr. SCHEUER. Mr. Chairman, my distinguished colleague, the gentleman from California (Mr. BELL), has served with me on the Education and Labor Committee where he is acknowledged to be one of the most thoughtful, constructive, and useful members of the committee. I value his counsel highly.

I am impressed when he cites the problem of trying to develop important national programs on a "fits and starts" basis.

It is certainly quite true that, to reach the moon, America had to do the whole job. We developed a highly sophisticated, comprehensive master plan to do the job—the whole job—by a predetermined timetable. No "on again, off again" approach could work for space exploration.

Mr. Chairman, neither will such a reluctant, dispirited attack by half-measures help us conquer earth problems either. We have lost ground steadily in our war against the despoilation of our environment. We are fighting a standoff in our war against poverty. We have long since been outmaneuvered and outgeneraled by our own profligate, haphazard, heedless "growth for the sake of growth"—in our feeble effort to create livable cities.

I am exhilarated by the marvelous new scientific insights which our space program has gained for us. I deeply believe in mankind's eternal quest for knowledge for the sake of knowledge. But the cost, and utility, of this new body of knowledge must be balanced against the comparable costs and the comparative benefits of earth problems which need to be squarely faced, and earth programs which must be vigorously prosecuted.

I believe that, considering the urgent programs at home which have been stretched out, thinned out, trimmed down, cut out, and starved on the vine, we must seriously consider eliminating or drastically reducing the expensive manned-space program. Likewise, we must consider some stretching out and

temporarily cutting down of the entire multibillion dollar space program.

I hope the day will come soon when we will have diverted enough resources from a wasteful and futile war in Vietnam to finance not only a sound and comprehensive body of education, housing, health, welfare, job training and employment, and conservation and environment programs here at home, but also a long-term space exploration effort which will further probe the mysteries of the Universe.

But, until we serve earth better, so far as I am concerned, the stars will have to wait.

I must vote against this authorization.

I thank my colleague for yielding.

Mr. MILLER of California. Mr. Chairman, I yield 3 minutes to the gentleman from Florida (Mr. FUQUA).

Mr. FUQUA. Mr. Chairman, I appreciate the chairman of the committee yielding me this time. I wholeheartedly support the bill before us today.

First of all, I want to commend the chairman of the committee, the gentleman from California, for his interest and in supporting this great space program. I also wish to express my thanks to the chairman of the subcommittee, the gentleman from Texas, for the time and effort that he has put forth in behalf of manned space flight.

We have gone into this bill very thoroughly and visited many of the centers around the country. I think we come to this House with some knowledge of what we think we need to do in our space program.

Mr. Chairman, World War II challenged this Nation as it had not been challenged before. A long-time depression was supplanted by a thriving economy as the factories, and the people went back to work. For the war activated our production, and the wealth of a nation is its productive capacity.

The demand for aircraft made the aviation industry the major manufacturing employer of the Nation. And we produced over 70 percent of all aviation equipment throughout the world. But time passed, and volume production was no longer the criterion for success. The British produced the first pure jet aircraft—the Comet, and if it had been successful the United States would have lost the market. It is not valid to attribute success to the failure of others, but, because of the failure of the Comet, the United States gained the time necessary to produce the 707 which now dominates the world jet market.

While the production equipment of West Germany—financed by the Marshall plan—became the most modern and efficient in the world, the producing plant of the United States fell into obsolescence. By the beginning of the Kennedy administration, the industrial plant of the United States lagged behind the other leading industrial nations of the world. Volume had been achieved during the war—but innovation in equipment and in concept had fallen behind.

One of the early moves to improve the physical plant was the legislation which permitted a 7-percent tax write-off in the year of purchase of new capital equipment. But this was only part of

the problem. It was also necessary to upgrade the technology of mass production induced by the volume requirements of the war. What was needed was a major challenge to bring U.S. industrial technology up to its historical standards of world leadership.

The International Geophysical Year presented such an opportunity and the United States joined the leading technological nations of the world in the quest for new knowledge which was exemplified by the thrust into space. The efforts of this country were not rewarded by immediate success. The first satellite to be launched into orbit was Sputnik I which stunned a nation accustomed to first place in the technological world. However, many aware people were not surprised. The price of leadership has always been daring, risk, innovation, and the United States had not been engaging in any of these pursuits.

Belatedly we realized, as a nation, that in order to keep our industrial house in order, we must innovate, we must engage in fundamental research, we must tread new ground and lead rather than follow. When the U.S.S.R. put the first man into earth orbit we all knew that we would have to compensate for the years of neglect with a crash program for progress. The lunar mission was assigned in 1961. It was performed in 1969, within the time and cost constraints prescribed by the President.

And the lunar landing accomplished all of its aims. It gave this Nation the new capability to operate in space; it upgraded the physical plant of the United States, not only in the aerospace but also in other sections of basic industry; it challenged the university, industry, government team to work together in unprecedented combinations of talent; and it finally returned this country to first place among the nations of the world, in the essential concomitant of industrial and social progress—technology.

At the peak of production for the Apollo program, in 1966, over 400,000 people in government, industry and over 200 universities throughout the country were engaged. Twenty major manufacturing companies subcontracted to almost 20,000 smaller or allied manufacturers. Every aspect of our economy was involved in this national effort. From food to fabrics; from parachutes to plastics—U.S. industry grew and matured in response to the lunar landing program. Since there is still no way to spend money in space, the \$21 billion used for Apollo was all spent here on earth. Most of the money went to pay the salaries of the men and women who made up the government, industry, university team which accomplished this miracle of engineering. Less than 5 percent of the total amount was actually expended on materials which went into space.

As a result, the United States can now boast the most modern and most sophisticated plant, on a physical and technological basis, of any nation in the world. Our aerospace industry, still the largest manufacturing employer in the Nation, has the most modern equipment from clean rooms to wind tunnels; from laser cutting techniques to 80 billion a day

computer calculation capacity. In the international arena of space, this country can claim a well-rounded capability to operate in every space regime—automated, manned, near-earth, synchronous orbit, polar orbit and planetary.

The challenges of our space program have prepared our industrial base to stand in the forefront of the world of nations. And since industrial capability is synchronized with economic viability, we can expect that our industry will be able to maintain its supremacy in the light of expanding population and social pressures. Only with an expanding industrial capacity can we expect to maintain our scale of living, and maintain our population in rewarding activity.

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield 4 minutes to the distinguished gentleman from Washington (Mr. PELLY).

Mr. PELLY. Mr. Chairman, the first question one asks oneself in considering H.R. 16516, is how does the accident and near-tragedy of the Apollo 13 flight change the space program.

As for me, my answer, as far as the manned lunar-landing program is concerned, is that no accident at this late date should deter the United States from continuing to expand man's knowledge of the moon and solar system. As the report of the committee indicates, the moon is the only planetary body, other than the earth, which man can investigate in detail. I think we should continue to study the moon by further landings and exploration. But, certainly, the Apollo 13 accident means a delay and as such I see no need to authorize the increase of \$145 million recommended by the committee for the lunar exploration in fiscal year 1971. I think NASA's requested \$956,500,000 for its continuation is more appropriate.

Likewise, the recommended increase of \$155 million for space flight operation seems unnecessary, and, anyway, I do not think the Appropriations Committee would approve the money or, even if they did, the administration would spend the money.

On the other hand, I don't think that NASA has asked for enough money for aeronautical research. If we had done the necessary research 10 or 15 years ago, the Nation would have avoided much of the difficulties of airport congestion and other problems that exist today.

I repeat, Mr. Chairman, I am greatly disturbed by our past submersion of activities in advanced research and technology. I have been an active member of the ART Subcommittee for 8 years and have supported the need to strengthen the entire area of aeronautics so that the Nation would not be faced with the air traffic problems that are proving so unmanageable today. Are we waiting for a tragic air fatality to draw our attention to the priority of aeronautical research and development? I certainly hope not. If we are to continue to rely on our airways in the future as we have in the past and continue to accept the Government's involvement in this field, then the time has come to implement this priority.

The United States has always ranked

at the top in nearly every phase of aeronautics thanks greatly to the effort of private industry to concentrate so much effort on advanced research, but I deplore the suppressing of Government support that squeezes and cripples this advanced research in the name of either economy or the stress demands of more immediate practical application.

In the report of the Subcommittee on Advanced Research and Technology entitled "Issues and Directions for Aeronautical Research and Development" seven conclusions and recommendations were reached.

First. Our Nation should establish a national aeronautics and aviation policy—with particular emphasis on aeronautical research and development.

Second. The pattern of Government agency-industry roles and relationships requires clarification.

Third. The Department of Transportation should be a statutory member of the National Aeronautics and Space Council.

Fourth. With overall U.S. research and development effort in aeronautics and aviation declining, there is reason for concern about maintaining our long-term world leadership.

Fifth. There is a broad range of unmet needs in aviation and aeronautical research and development. Not only must we rebuild our technological base but we must use our existing technology more fruitfully.

Sixth. Positive action must be taken by Government and industry to encourage younger scientific and technical personnel to enter and remain in the aeronautics field.

Seventh. In the past airports have not been considered as a part of aeronautical R. & D.; however, they are becoming more and more related to both R. & D. and operational areas.

It is easy to understand how far we have advanced in aeronautics over the past 12 years when we are reminded that commercial jet flights had just begun in 1958. Yet, in this same period of 12 years there has been a real increase of only \$75 million for aeronautical research and development within NASA. This just does not make good sense.

Whether we are talking about civil air transport, noise abatement, air pollution, safety, congestion, or improvements in aircraft themselves, we definitely need more research effort, intelligently organized and directed.

If we accept Government control of civil aeronautics, then we had better think seriously about Government's responsibility to support the necessary research and development in aeronautics and supply the funds required.

It is incongruous for the Government to create and support increasing demands for air service without doing the same for the necessary research and development needed to fulfill these demands.

Government must be consistent and comprehensive in its activities.

Mr. Chairman, as I said at the outset, I do not think the Apollo 13 accident should be used as an excuse to halt or delay America's exploration of space.

Mr. HECHLER of West Virginia. Mr.

Chairman, will the gentleman from Washington yield?

Mr. PELLY. I yield to the gentleman from West Virginia.

Mr. HECHLER of West Virginia. Mr. Chairman, I would like to compliment and commend the gentleman from Washington for his statement and for the leadership that he has helped to provide in this vital area of aeronautics.

Mr. PELLY. I thank the gentleman.

Mr. MILLER of California. Mr. Chairman, I have no further requests for time.

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield 5 minutes to the gentleman from Florida (Mr. FREY) who very actively represents the Fifth Congressional District of Florida in which Cape Canaveral is located.

Mr. FREY. I thank the gentleman from Pennsylvania.

Mr. Chairman, first let me say this, it is an honor to serve on this committee with Chairman MILLER and the chairman of my subcommittee, the gentleman from Texas (Mr. TEAGUE), as well as the ranking Republican member on the committee, the gentleman from Pennsylvania (Mr. FULTON).

Mr. Chairman, there have been several questions raised today. In my opinion one of the questions we are asking ourselves today is, do we want to stay in the manned space flight business? It has been stated by the gentleman from Minnesota (Mr. KARTH) that the amount authorized by the committee for this purpose is too great and that we should support the amendment which he will offer under the 5-minute rule because the gentleman feels that we should slow down a little bit in this program.

However, Mr. Chairman, as of today, right now, with this budget we will be out of the manned space flight business in approximately 3 years, from 1975 through 1977.

In the budget request of NASA for the so-called space shuttle and space station program, they requested \$268 million. Our committee, through its action, lowered this amount to \$190 million. This lower amount itself has cost us valuable time. Further, if I understand Mr. KARTH's amendment correctly it will go toward knocking out the entire \$190 million and it will go to knock out manned space flight for not just 3 years but probably 4 or 5 years.

Now, during this period of time, what are we going to do with the facilities that we have, approximately \$4.5 billion worth? What are we going to do about people and teams that we have put together? How are we going to keep this team together? I might add parenthetically that the team has been lowered from 420,000 people 3 years ago to approximately 190,000 today, and it will reach approximately 144,000 at the end of fiscal 1971. There is certainly very little fat, if any, in our space program.

You are going to hear a lot about the space shuttle today. Everybody says that in the space program we should use our money better. I think we all agree with that, and that is the reason for the space shuttle. The space shuttle is the way to use a vehicle over and over again. It will have a booster and orbiter, and it will

move men and satellites into orbit, and both the orbiter and booster will return. The requirement is that you can use it at least 100 times. It will carry about a 50,000-pound payload.

Mr. MILLER of California. Mr. Chairman, will the gentleman yield?

Mr. FREY. I yield to our distinguished chairman, the gentleman from California (Mr. MILLER).

Mr. MILLER of California. Mr. Chairman, I want to congratulate the gentleman from Florida on his last statement. I would like to point out to the House that we have to start building this space shuttle, and we have to do it because we have some very expensive satellites that are now in space, such as the space communications satellites and the other satellites that we have all heard about.

Yet when one of those goes dead now it is dead. It is lost forever. Eventually we have to have a vehicle that can go to these satellites and refurbish them, perhaps change the powerplants, or to do repair work. They have to be given the same kind of treatment as any other type machine needs. So that is the theme that we are working for, and are looking for in this field now.

I am very much of the impression and opinion that within the next 10 years we are going to see vehicles of this kind that can take off perhaps with regular conventional power, go through the earth's atmosphere, and turn on a different type of power, perhaps nuclear energy—that is one of the things we hope for—and that can then pick them up and bring them back to the earth's atmosphere. Instead of having to splash down, be able to land on conventional runways just as we now land our planes.

This is the development that we wish for, and hope for, and I am satisfied one that will come about.

Again I want to thank the gentleman from Florida for introducing this aspect of the space program.

Mr. FREY. Mr. Chairman, I thank our distinguished chairman for the leadership that he has exercised in the growth of our space program, and for his continuing leadership under which our space program will continue to develop.

Mr. HUNT. Mr. Chairman, will the gentleman yield?

Mr. FREY. I yield to the gentleman from New Jersey.

Mr. HUNT. Mr. Chairman, I thank the gentleman for yielding, and I take this opportunity to congratulate the gentleman from Florida for his foresight.

Prior to the gentleman coming to Congress I served on the Committee on Science and Astronautics for 2 years. I was a hardliner on costs, mainly because I wanted to see something practical developed whereby we could recover vital hardware that time and time again we have lost. The explanation the gentleman has given today I am sure will not be lost on this august body.

Those Members who have fought hard against the costs of the program and who have screamed about the loss of vital hardware I believe would now have to support the shuttle that the gentleman is talking about.

To me it is very important to be able

to go up into space and photograph something in space and then come back and have that object retrieved and be able to use it all over again.

The statement the gentleman has given us is one of the best explanations I have heard in quite some time. His contribution to a sensible project is commendable.

The CHAIRMAN. The time of the gentleman has expired.

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield 3 additional minutes to the gentleman from Florida.

Mr. FREY. Today the cost of putting a pound in space runs between \$500 and \$1,500.

The space shuttle will hopefully allow us to put the same pound into space at \$50 a pound or less.

Many people believe that this is really the DC-3 of the future—well, no one really knows. But it is certainly possible.

If we cut out \$190 million in the manned space portion of the budget for the shuttle, we are really cutting out money that goes to research and design. This is not hardware money. This is money necessary to look into the question to see if we can build a shuttle and see if we can do it economically; to see if we can develop the engines, wings, and materials necessary.

I certainly believe in economy. I certainly believe we need the space program. I think that with the space shuttle, these two items are wedded.

Mr. ROUDEBUSH. Mr. Chairman, will the gentleman yield?

Mr. FREY. I yield to the gentleman.

Mr. ROUDEBUSH. A few moments ago the gentleman spoke about a reduction in personnel. I think it should be pointed out at this time that that reduction the gentleman from Minnesota voted would be in effect even if the full amount that the committee requested is granted and it could be even more if a further reduction is made in the program.

Mr. FREY. I thank the gentleman and I stand on that statement.

For instance, in our Cape Kennedy, if we have a gap of 5 years in the space program, it has been reduced to over 10,000 people now, and I foresee it just down to a skeleton crew, if we do not continue the manned space program. We have \$4.5 billion in facilities, as pointed out before, and not to expend this \$190 million we are going to lose more of that in plain operating costs in mothballing and in the teamwork we have built. This cost would be much greater than the \$190 million for the space shuttle.

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield such time as he may desire to the gentleman from New York (Mr. WYDLER).

Mr. WYDLER. Mr. Chairman, when the first trouble appeared on the Apollo 13 flight, what the public expected to be a routine mission to the moon became instead an exciting and dangerous adventure.

The three American astronauts found themselves aboard a spacecraft whose air was limited and polluted, and whose water and other life support systems were in danger of contamination and extinction.

In many ways, the condition of the astronauts in their spacecraft was similar to the condition that mankind finds himself facing on earth. Their environment was endangered. The astronauts did not respond to this serious problem with despair, although they had every reason to react in that way. They did not radio Houston to the effect that they wished to be returned to the earth now and demand that all their problems be immediately solved. They did not allow themselves to become objects of self-pity but instead went to work with ingenuity and determination to improve their conditions and save their environment.

This past week we have celebrated as Environmental Week, including Earth Day. Individual effort and sacrifice will be necessary to clean up our air and water, but new technology is necessary to see that we can maintain the benefits of industry without the horrors of pollution.

No program offers greater hope to produce the necessary technology for this effort than the space program. It can be, and is, our scientific leading edge in the fight against environmental pollution. Its spin-off, in the areas of medicine, communications and weather reporting is already paying dividends for a better life here on earth. Americans can be proud of our astronauts and their bravery and the competence and resourcefulness of our space team.

They succeeded and, in so doing, gave to America a lesson it could well take advantage of in this decade of ecology.

From Long Island's point of view, the most significant fact was the magnificent performance of the LEM module, which took over the job it was not designed to do and became the "lifeboat" that returned our three astronauts from the far reaches of space to an almost perfect splashdown in the Pacific. This performance by the LEM and Long Island technology once again establishes beyond question our area's competence in space work and nationwide leadership in future space programs and business.

I intend to see, as a member of the Science and Astronautics Committee in the House, that the Congress is made well aware of Grumman's and Long Island's past contribution to the space program and the necessity that such performance be rewarded by our area's inclusion in a major role of the space effort of the 1970's.

The value of moon rocks is now clearer than ever and we on Long Island, will be able to see one of these rocks displayed in Town Hall in Hempstead during the week of June 9 to 18. I was glad to arrange this, with the cooperation of NASA and the presiding supervisor of the town of Hempstead, Ralph G. Caso. Long Island will have a chance to see some of the rock that was gathered on the face of the moon by astronauts who landed there on Long Island-built spacecrafts. We on Long Island are especially proud of our performance in what was one of the finest hours of the American spirit.

Mr. FULTON of Pennsylvania. Mr. Chairman, I yield such time as he may use to the gentleman from Texas (Mr. PRICE).

Mr. PRICE of Texas. Mr. Chairman, I rise in support of H.R. 16516.

As a member of the Science and Astronautics Committee, I feel I have gained a certain insight in this bill that I would like to share with my colleagues.

H.R. 16516 authorizes appropriations of \$3.63 billion to the National Aeronautics and Space Administration for fiscal year 1971. As such, the committee's recommendation represents a total increase of \$279.9 million over the NASA budget request for the same period.

This increase, however, is a selective one. The committee added \$145 million for manned space flight in an effort to improve the scientific return from lunar exploration. An addition of \$75 million was made to reduce the leadtime necessary to take up the program slack when production of the Saturn 5 vehicle is resumed. The committee provided an extra \$80,000 to increase the return to be gained from establishing and operating an orbital laboratory, and to develop a low-cost space shuttle and space station for operation in this coming decade.

In perspective, the committee action has given the manned space program a needed selective infusion of operating capital. These dollars will help the program yield even more valuable benefits to mankind, as well as help reduce the risks inherent in manned space travel.

History has handed this generation of man the unique opportunity for our species to escape the earth's surface and to begin exploring the solar system. What we will find we do not know. We do know, however, that this Nation stands poised on the threshold of a great opportunity, one which will not go unavailed of if we turn our backs on it. Russia is still trying to surpass our space efforts, and if it does, experience indicates the Communists would not hesitate to use this achievement as a lever in their quest for world domination.

In addition, as was made fully apparent during an extended discussion on the House floor this past Tuesday, the manned space program has yielded a giant harvest for mankind. At the present time, more than 2,500 technological products have originated directly from our space program, and thousands more have profited from space research activities. To name but a few:

Miniaturization advanced for the space program has been the source of tiny appliances, improved color television, and surgical instruments.

In major hospitals throughout the Nation, tiny television transmitters which can be swallowed in a capsule are being used for visual examination of the inner workings of the human stomach.

Refrigerators which move at a touch, aid the housewife.

Sportsmen have been provided with a "space blanket" which fits in a shirt pocket to provide him with warmth and comfort.

Space research has discovered a way to use energy generated within the body to provide power for hearing aids and for the direction and control of artificial limbs.

Operational meteorological satellites

now assist in the analysis and forecast of the world's weather.

Forecasting weather up to 2 weeks in advance is considered a realistic goal using advanced meteorological sensors already under development.

Surveys of the surface of the earth from orbiting spacecraft will soon lead to more effective exploration, management, and conservation of our natural resources.

Military defense satellite systems keep a constant watch on our enemies looking for military movements and arms build-ups.

Finally, the most important thing to remember about the applied benefits from the space program is that compared to this coming decade, the present yield from space research and activities is but a trickle. The future holds a storehouse of value from space research. We need but vigorously pursue our efforts and the rewards will be ours.

Mr. Chairman, the committee has recommended authorizing approximately \$3.63 billion for NASA operations in fiscal year 1971. This amount should be considered in light of other Federal and private expenditures. This is less money than the welfare program that passed the House last week cost. It represents but 5 percent of our defense budget. On the consumption side of the ledger, the \$3.63 billion is less than the Nation spends for pet food each year. And, it is only 10 percent of what is spent annually on women's dresses. In terms of per capita cost, the space program costs less than 40 cents per person per week.

As regards the question of whether space spending should be deferred until our domestic problems are solved, let me say this. If the initiatives taken by Western man throughout history were forced to meet this test, we still would be painting our bodies blue to ward off evil spirits and diseases, and living in mud huts and hillside caves.

Historically, progress has not been the hand servant of social ills. The reason for this is clear. Progress creates new wealth, which in turn provides society with an increased ability to distribute its wealth and beneficence. In present times, man's efforts to conquer space represent the epitome of technological progress. It is a significant means by which social progress and social justice can be brought in greater measure not only to Americans, but to people throughout the world.

Mr. Chairman, these are but some of the possibilities that await for us as part of our space program, a program which can only function in accordance with the money the Congress provides it. The Science and Astronautics Committee has worked long and hard in arriving at this austerity budget for NASA; I urge my colleagues to support the committee's recommendations.

(Mr. WEICKER (at the request of Mr. FULTON of Pennsylvania) was granted permission to extend his remarks at this point in the Record.)

Mr. WEICKER. Mr. Chairman, the opponents of the space program repeatedly beat the drums in an effort to reduce the Nation's space work. They ask what has

the space program done for the man in the street?

The space program has been eminently successful in meeting national goals in addition to providing an output of value to our taxpayers. This goal of placing America first in aerospace technology and assenting the Nation's preeminence in space research, in fact rather than inuendo or propaganda, has been clearly demonstrated. As a result, we have concrete benefits that have resulted from this challenging work.

I realize that we proponents of the program have talked about the educational impetus, the interest in science and technology, and the enthusiasm generated in our Nation by the space program as well as our space accomplishments. These issues are genuinely felt by our taxpayers and these feelings are higher than most of you think. We have not heard very much about the technical excellence that must be an accomplished fact to have a successful space mission. I ask my colleagues just what value do they place on interest by both consumer and manufacturer on the demonstrated reliability of technical equipments, electrical and mechanical, that have to perform as designed to carry out these goals? These accomplishments are readily appreciated by industry. Manufacturing and testing techniques are incorporated into consumer products as rapidly as possible consistent with the economics involved. NASA has established the Office of Technology Utilization which has in turn established—dissemination centers to speed the flow of this and other innovations into the economy. This flow of material has grown year by year and this year the Committee on Science and Astronautics recommended an increase in funds to be used specifically for speeding the flow of technology relating to the solution of urban development and environmental quality problems.

Now, if you ask me when the man in the street will realize benefits from improved reliability and improved urban and environmental quality due to space spin-off, the answer is they have and are continuing to benefit from space work. If you ask when the man in the street will begin to appreciate these space-related improvements, the answer is, "when you tell him about them." You should join the team and give these reasons as influencing your support of a viable space program. From my association with the NASA program I am convinced of the value of this work and believe that the request of 1.6 percent of total Federal budget for fiscal year 1971 is well worth its expenditure for space.

It must be emphasized that space research is not, and cannot be primarily oriented toward producing immediate benefits to our citizenry. Long-term gain is generally the result of any technological improvement and this should be the expected results of the space program. I ask, do we expect the same immediate benefit from other Government expenditures or from other technological advancement? Has this been true in any other technological expenditure?

Lest my colleagues forget or believe that there is only long-range gain from

the space program, let me remind you of the multimillion-dollar space communications industry that has grown up as a direct result, the weather forecasting and storm warnings that have saved our Nation and the world untold lives and millions of dollars. Is it expected that every year NASA must discover a new and startling space business equal to these two contributions to our Nation? I should remind you also that 99.9 percent of the space appropriations are spent in this country and that the thousands of space workers and their families do not believe that such innovations of the magnitude of these two need be forthcoming each year for the program to be beneficial to them. A large portion of the aerospace industry, employing over 1 million people with an annual payroll of over \$14 billion is supported directly and by the research and the technology transfer supported by this program. To reduce the program and not support this important segment of our industry would be a folly which would seriously weaken a vital national resource.

You have heard of the potential advantages of space related research for worldwide navigation improvements for aircraft and ships, a better understanding of weather and weather phenomena, an opportunity for better cooperation between nations because of scientific interchange, mutual economic worldwide advantages in education and technology and many, many other thoughts that have broad impact. Have you, however, heard of the following:

A NASA developed accelerometer which is the key item in the development of a direct reading drilling direction indicator, a tool that is expected to have major impact on the entire well-drilling industry.

A device for precise positioning of spacecraft models in test rigs has been applied to the design of a commercially marketed digital clock.

NASA research on foam and honeycomb core sandwich construction has led to development of a new process in the production of truck body construction material.

In-space eating research brought forth the commercially available "space food sticks" whose marketing success inspired development by the producer of a whole new line of nutrition foods.

Hand-sized TV cameras, developed to photograph rocket stage separation, are being used to monitor industrial processes, and for crime detection and prevention.

A method of damping vibration of engine compressor blades has found applicability in the manufacture of clutches for heavy duty trucks to overcome problems of vibration in gear trains.

In the field of medicine which has been a prime beneficiary of space research, the following has resulted:

A NASA developed system designed to monitor pilots' heart action can be attached by spray action and used to radio electrocardiogram signals to hospitals to assist in emergency treatment of cardiac patients. This equipment is commercially available today.

A method of measuring breathing functions especially applicable to in-

ants and small children who suffer breathing difficulties, allowing immediate corrective action to prevent brain damage due to lack of oxygen.

The fluid-cooled undergarment for the space suit is used to cool the body and slow body processes for surgery and therapy.

The lunar gravity simulator has been used as a rehabilitation aid for long bedridden patients who must learn to reuse muscles in order to walk.

In addition, there are many other items such as miniature telemetry systems, new resins for use in bone repair, radio monitoring systems for hospital automation allowing a more efficient hospital design.

In other fields, the leadership that NASA has displayed in technology transfer is bearing fruit in a number of ways. Unique and valuable relationships between NASA, and federal and state agencies concerned with application of engineering and management technology to medicine, mine safety, pollution control, law enforcement, and transportation have been established. These cooperative efforts are being assisted by two new technology application teams. Each team is composed of people from a variety of scientific and engineering disciplines. Their assignment is to transfer aerospace technology to areas of concern in the public sector through an interdisciplinary approach to problem solving. The teams are located at the Illinois Institute of Technology Research Institute, Chicago, and the Stanford Research Institute, Menlo Park, Calif. These new groups, along with the two previously formed biomedical application teams, constitute a significant new resource to transfer aerospace technology.

The user agencies with which NASA has worked on the Federal level include the Law Enforcement Assistance Administration—in the Department of Justice—the Bureau of Reclamation, Bureau of Mines, and the Federal Water Pollution Control Administration—in the Department of Interior—the Bureau of Solid Waste Management and the National Air Pollution Control Administration—in the Department of Health, Education, and Welfare—the Department of Transportation; and the Department of Housing and Urban Development. Public agencies on the State and local level with which NASA has worked include the Los Angeles, Seattle, New York, and Chicago police departments; the Maryland and Illinois State crime commissions and the New York Office of Crime Control Planning; the Bay Area, Los Angeles, and Seattle air pollution control districts, plus other local air-pollution authorities; the Los Angeles and Bay Area Rapid Transit authorities; and the Chicago, Boston, and Los Angeles fire departments.

These cooperative problem-solving efforts have begun to pay off. Among recent transfers are a compact, self-powered, easily portable device for monitoring dust particles in coal mines; a sensor for the measurement of low-velocity air flow in coal mines; a scanning instrument for the detection and recovery of indented writing in criminal

laboratories; an instrument to determine the sensitivity of automobile drivers to various air pollutants; the application of NASA mass spectrometers for monitoring air pollution; and the development of a portable life-support system for use by fishermen.

We have been told over the years and it is true that U.S. leadership has been based on our ability to transfer scientific and technological output into useful instruments for the betterment of our citizens. This is a cliché. However, because of our world leadership we should not abrogate our leadership in science and technology because we demand an immediate output that has a short range objective of meeting an immediate aim, that of requiring as a prime requisite an immediate usable output of complex technology. We should pursue our technological effort with prudence and with confidence that our ability to transfer this technology has not abated.

(Mr. GOLDWATER, at the request of Mr. FULTON of Pennsylvania, was granted permission to extend his remarks at this point in the RECORD.)

Mr. GOLDWATER. Mr. Chairman, we are now realizing the tremendous benefits of America's space technology. If we were to cut off NASA's budget now, we would be losing the interest on our investment.

Early this week, many of my colleagues and I discussed the numerous spinoffs from the NASA program. It is not necessary to repeat these facts at this time, but I would like to insert my comments in the RECORD following these brief remarks.

Certainly, no one can contend that the NASA budget is large. It is only 1.5 percent of the entire Federal budget. However, severe and immediate cuts in the NASA budget would seriously damage our Nation's economy.

My home State of California's aerospace employment has suffered tremendously, due to the present reductions. These reductions are now having a serious effect on all sectors of California's economy.

The State's aerospace/defense employment dropped by nearly 60,000 in just the past 18 months. North American Rockwell has already announced that they will lay off 8,000 more people between now and November. Most of these people are in southern California.

Therefore, the administration has already cut the budget and any further reductions will simply do more damage than good.

America's men of space have re-inspired the American spirit. Our astronauts have made tremendous sacrifices for our Nation. Let us live up to the challenge that they have given us. Let us give our complete support to America's space program.

I include the following:

#### BENEFITS FROM THE SPACE PROGRAM

(Press release of BARRY GOLDWATER, Jr.)

The launching of Apollo 13 to the moon is less than a month away and again many Americans ask: "Is it really worth all that money?"

Certainly, this is a fair and legitimate question.

The American people should be reminded

that this astronomical outlay has not been wasted, but has paid off in saving the lives and improving the lot of mankind. Fascinating, indeed, are the bonuses and benefits of the taxpayers' investment in space.

Most everyone knows of the more direct benefits—communication satellites linking us to all peoples of the world—weather satellites saving lives by advance warnings of killer hurricanes—navigation satellites adding to the safety of travel by sea and by air—surveillance satellites which may soon strip secrecy from the deadly weapons of every nation—and the prospect of cruising manned spaceships to fend off enemy attacks from outer space.

Dramatic as are these direct results, we are prone to forget that the unplanned, indirect benefits, by-products of space exploration and the moon shot, may prove far greater. New devices for space travel will have a mighty impact on our daily living. They range all the way from the very ordinary to the miraculous, from a super glue which you can now buy at the hardware store to the last word in electronics which before long may virtually restore sight to the blind.

An electromagnetic hammer for fabricating rockets is being tested for construction of ships and automobiles, shaping metals without weakening them. It may soon give you a cheap and strong automobile. A canopy or "glass sandwich" preventing the spacecraft from icing will be a cradle cover affording precise temperature control for prematurely-born infants. An adult version is already saving lives of those with heretofore fatal burns. And speaking of temperature, you may soon use a super-insulated blanket of aluminized mylar, similar to metal developed for the Echo Balloon Satellite. It will keep you cool when it's hot, warm when it's cold, and dry when it rains. It can be a shelter in the forest, or a wrapper for the fish you just caught, or a radar-reflective, air-sea rescue signal; a multi-purpose item and a potential lifesaver. Space clothing will make your life more comfortable. Developed for astronauts to withstand lunar temperatures, it will lead to suits that are lightweight and wear-resistant. Instead of a bulky overcoat, you may be wearing a thermo-electrical weave with built-in temperature control. Thermal underwear is already on the market.

Spray-on electrodes will take a heart patient's electrocardiogram while he is being rushed to the hospital in an ambulance and flash it to the waiting doctor, so he will know exactly what to do the instant the patient arrives. Sudden clogging of the tracheotomy tube has strangled many patients, especially small ones. A NASA-developed sensor will sound the alarm within ten seconds of the slightest change in breathing.

A switch, controlled by the eye, gave astronauts the equivalent of an extra pair of arms. This has been adapted for the paralytic. By a flick of his eyes, he can activate a call board or even manipulate a motor-driven wheelchair. Similarly, an eight-legged lunar walker prepared for use on the uneven surface of the moon offers fuller life for the handicapped, allowing him to go places on his own where a wheelchair could never go. Even if he cannot use his hands, it can be controlled by a chin cup.

Complex electronic components devised by space research makes possible a small TV camera, which, worn on the forehead, will scan a blind person's surroundings and reading matter. Then, bypassing the sightless eyes, it would transmit an image to a tiny, teflon-insulated receiver in the visual cortex of the brain, enabling the blind to "see." The camera might eventually be miniaturized to fit into an eye socket. It may take a decade to perfect this marvel, but it is well on its way.

There are numberless other benefits, small and great—scar-proof, long-wearing, fire-

resisting paint, a whole new family of plastics which will transform the automobile of the future and a computer filter process which provides infinitely clearer X-rays, adding speed and precision to medical diagnosis.

The total number of benefits are too numerous to mention here. However, as the Apollo 13 lifts off for the moon on April 16, let us take a moment to remember the tremendous benefits that America's space program has brought us—right here on earth.

Mr. MILLER of California. Mr. Chairman, I yield 3 minute to the gentleman from Texas (Mr. TEAGUE).

Mr. TEAGUE of Texas. Mr. Chairman, I take this time to read a letter which I was afraid I would not have the chance to read later.

This letter is from probably the most knowledgeable person in our country so far as manned space flight is concerned. He is Dr. George E. Mueller who was associate administrator of manned space flights up until the time when we first landed man on the moon.

This, Mr. Chairman, is his letter:

WASHINGTON, D.C., April 15, 1970.

HON. OLIN E. TEAGUE,

Chairman, Subcommittee on Manned Space Flight, Committee on Science and Astronautics, House of Representatives Washington, D.C.

DEAR MR. TEAGUE: I am pleased to respond to your request for my thoughts about the space program at this critical moment in the formulation of our future space efforts.

Now before the Congress is the proposal to proceed immediately with studies for the development of the space shuttle. These are the funds necessary to confirm previous studies which indicate the efficiencies we expect of this new low-cost space transportation system. It is my considered opinion that this single development is the key to all of our future space activity, both manned and unmanned. By drastically lowering all costs of operation in space, we can afford to move forward rapidly into this new territory for exploration and exploitation. Our studies already show that the shuttle will reduce costs by at least tenfold at the outset, and with the maturity of the space shuttle, by as much as twice that amount.

The characteristics of the space shuttle, as it is being designed, provide for economies in every aspect of space operations. Reusability is the primary factor. At least 100 round trips into space will replace the one time use on a one way trip of all present launch equipment. The ability of the space shuttle to return men, cargo, and equipment back to earth will significantly reduce the cost of all equipment. First, because the low transportation cost and the benign launch environment will permit us to use heavier off-the-shelf laboratory and production equipment. Secondly, with the space shuttle in operation, on-orbit maintenance can be supplemented by return of instruments to earth for repair. Another special capability of the space shuttle is its use for space rescue.

As we look to the future, it is possible that the most important role of the space shuttle will be in our national defense. There can be no doubt that the space shuttle is the key to control and utilization of outer space. That control may well be decisive in preventing future wars. In that regard, timing is of the essence. The lead time for carrying out the development and putting into operation a new concept of this magnitude is very long—seven to ten years. We know that this concept has been under study by many people in many countries for at least a decade. Now that the technology for building a space shuttle is available, we need to im-

plement an orderly program—or we will again face the necessity of having to produce such equipment as a crash program at much greater expense. I believe that we, as a nation, cannot afford to delay an orderly development program, now! If we should fail to grasp the initiative, we risk being confronted with an alien space shuttle which will give its developer effective control of space.

In summary, the space shuttle will save billions of dollars in our space activity. It will provide a barrier to technological surprise. It will be an effective shield for our national security. I urge you and your Committee to support the development of the space shuttle.

Sincerely,

GEORGE E. MUELLER.

Mr. HAYS. Mr. Chairman, will the gentleman yield?

Mr. TEAGUE of Texas. I yield to the gentleman from Ohio.

Mr. HAYS. Did I correctly understand the gentleman to say that he is asking \$190 million to further study and confirm studies that have already been made?

Mr. TEAGUE of Texas. No; not to confirm studies but to continue studies that have been started or are being made.

Mr. HAYS. \$190 million, at \$25,000 apiece, would give you 7,625 experts to study it. It seems to me that would be a lot of studying.

Mr. TEAGUE of Texas. When Mr. Nixon became President, he appointed a very distinguished panel to make a study of this subject.

Mr. HAYS. He has appointed other—

Mr. TEAGUE of Texas. Let me finish my statement. That panel came back with the recommendation of \$4 billion for a space program this year. This panel came up with \$3.3 billion. So our committee is in between.

Mr. GROSS. Is the gentleman impressed now?

Mr. HAYS. I am not impressed.

Mr. MILLER of California. Mr. Chairman, I yield such time as he desires to the gentleman from Missouri (Mr. BURLISON).

Mr. BURLISON of Missouri. Mr. Chairman, the administration has requested authorization for more than \$3.3 billion for the space program in fiscal year 1971. The Science and Astronautics Committee increased this amount by nearly \$300 million, with the entire increase earmarked for the manned space flight program.

The accomplishments of the space program have been spectacular to say the least, but that fact alone cannot justify continued multibillion dollar appropriations. Expenditures for space must be considered in the context of the total needs of the Nation. The Government does not have an unlimited amount of money to spend. If one program takes a large piece of the fiscal pie, other programs must take smaller pieces. The issue is: Which programs are most important to the general welfare of the Nation.

The listing of pressing problems is staggering. Vast amounts of money are going to be necessary to clean up our polluted environment. Large infusions of money are needed to restore prosperity to our rural areas. Local communities al-

ready saddled with debts are in need of new water systems and sanitary facilities. Police forces need upgrading for the fight against crime. Federal contributions to education have been inadequate and people are waiting in line to get into hospitals that have been forced to keep patients in hallways for lack of rooms.

In view of these high priority problems I feel that we have an obligation to take a long hard look at the money that is devoted to space exploration, particularly those fantastically expensive manned space projects. With this in mind let us examine what is being proposed.

This year \$190 million is authorized for a "space shuttle." The National Aeronautics and Space Administration conservatively estimates the total cost at approximately \$14 billion. This space "bus" would launch 20 astronauts into orbit and bring them back again, at a cost of \$50 per pound. But before you begin to see visions of space vacations, you better take a look at your savings account.

By the time we add up the ton or more of life support equipment required for each person and the program development costs the price comes up to about \$1 million per person per trip and that only if 20 persons go each time. Why we would want to send up 20 at a time is a complete mystery.

The most costly program under consideration is Vice President Agnew's pet project, the mission to Mars. NASA predicts that with a crash program we could land a man on Mars by 1983. The cost would be paid in installments. A little over \$4 billion in 1971 climbing ultimately to nearly \$10 billion per year by the 1980's. Some have estimated that the total cost might reach \$100 billion. We can probably do it, but is it worth the cost? Dr. Bruce Murray of the California Institute of Technology and a member of the team analyzing the findings of the unmanned Mariner 6 and 7 thinks not. He called the manned mission to Mars in the 1980's a "stunt." Joshua Lederberg, a former member of the Space Science Board of the National Academy of Science expressed his belief that the cost of sending a man to Mars far outweighed any possible contribution he could make to the mission.

I think NASA should devote its attention to the use of automated spacecraft. At a fraction of the cost, automated spacecraft have proven to be much more effective in the acquisition of scientific knowledge as well as having practical application such as communications, air traffic control, weather prediction, and earth resources survey.

The cost contrast of manned flights as against automated flights is striking. Explorer 35, a 2-pound lunar satellite requiring only seven-tenths of a watt for power, has been circling the moon since July of 1967. It never sleeps, requires no oxygen, no food, no toothpaste, and no sanitary facilities. The whole surveyor program which soft landed five vehicles on the moon cost no more than it costs to launch a single Saturn V moon rocket.

The United States has spent \$50 billion on space programs in the last 10 years.

The Apollo moon project cost about \$2.5 billion per year for that decade. While we were spending \$2.5 billion a year to put a man on the moon, we were spending \$500 million less than that each year on elementary and secondary education. To my mind this is a tragic misapplication of national resources. We are saying in effect that it is more important to send two men to the moon than it is to educate the more than 55 million children who are in elementary and high schools throughout the country, or to keep our farm economy going. Our Government pays our farmers very little more than the \$2.5 billion in a year.

We seem to be working on the proposition that if a thing is technologically possible it should be done. We have put a man on the moon. The scientists and engineers tell us it is technically possible to put a man on Mars. Therefore, we should do it. Noted physicist and Nobel Prize winner, Max Born once commented that the manned space program was a "triumph of intellect but a failure of reason." Intellect he said distinguishes between possible and impossible. Reason distinguishes between sensible and senseless. To his mind the manned missions were senseless because their cost so far outweighed their scientific value and the money was so badly needed elsewhere.

Mr. Chairman, that is the point I am trying to make. If money were no object I would say send a man to Mars. Send him to Venus. But, we simply cannot do that. Money is an object and the money we have is desperately needed for other programs. On the other hand, I am not in favor of abolishing the space program. Some phases of it such as the unmanned projects have great potential. All I am saying is that we should not get so carried away with the spectacle of space travel that we lose sight of what is really important. In view of all these considerations, Mr. Chairman, I am constrained to vote against this legislation.

Mr. MILLER of California. Mr. Chairman, I yield such time as he desires to the gentleman from Missouri (Mr. SYMINGTON).

Mr. SYMINGTON. Mr. Chairman, I thank the distinguished chairman, and wish to acknowledge my appreciation to him and to the chairmen of the two subcommittees on which I serve, Mr. KARTH and Mr. DADDARIO, for their consistent courtesy and consideration.

It is tempting, particularly for the layman including Congressmen, to say, "away with the space program, who needs it? Whoever needed it?" Tempting, but not wise. The technology derived from our space effort to date may have more relevance to spaceship earth's survival prospects than any single development since the discovery of electricity. The weather warning satellite has already saved estimated thousands of lives from the ravages of Hurricane Camille, and maintains a steady watch now over the gulf coast and other areas. The communications satellites will be able to bring into the remotest corners of earth, knowledge, information, and education geared to the economic needs, language, and culture of every family. Perhaps one

day, using simultaneous translation, a weekly conversation between representatives of all the earth's great cultures can bring into every home a new awareness of the joint venture we are engaged in, survival, reducing fear and mistrust, and just possibly the barren machinations and weapons systems they generate. Earth resources satellite, will fly in a few years time and will, with infrared sensors, explore the subsurface of land and water areas, and tell the farmers of the world what the soil needs. It could ultimately save, according to the Department of Agriculture, a billion or more dollars a year in farming costs in the United States alone, one-quarter the current annual cost of the whole space program. It will monitor the oceans as well, and warn man against the depredations of his oil and fishing industries which disturb the life cycle of the sea, possibly even jeopardizing the orderly process of oceanic photosynthesis from which most of our oxygen is derived.

Now, what of man in space? Yesterday, Earth Day, I met hundreds of students and academicians who voiced the firm opinion that all investments in space should cease at once in favor of investments on earth. Yet, a curiously dominant thread ran through their prescription for earth: population control, and the need for Government to take a more active part in achieving it. It is clear that those who reject the importance of space technology claim with equal fervor that the effort to keep earth livable cannot possibly succeed unaccompanied by firmly enforced worldwide population management. Up with Malthus; down with NASA. And it occurs to me that today we may be implicitly deciding, in a very small way to be sure, between two alternatives. First, predictably costly first steps that could lead in a century or more to the expansion of civilization into the universe. Second, an unpredictably costly determination to contain the expansion of civilization on earth. Undoubtedly a beneficent world order will determine which seeds shall multiply and what spaces shall be allotted them with appropriate sanctions to secure compliance.

In the meantime there is another relevance to manned programs difficult to tag with a price. It comes in two perspectives. The earth as seen by man in space and the man in space as seen from earth. The earth was seen and described on this floor by the first man from the far side of the moon—Frank Borman—as a tiny ball hanging in the black stillness of space, with no sustaining help from the galaxies, entirely dependent on man's own initiative, and, as Borman said, his sense of brotherhood. Not a bad perspective, while cities burn, hungry reach up in Biafra, and bodies float down the Mekong.

The second perspective we saw last week in a space shot that failed. Or did it in all respects? How do we measure failure, and how success? If an aborted effort to land and return men from the moon was failure, we failed indeed. But the world was used to success. Would success in that limited sense have focused

the prayers, hopes, and yearnings of men too deep to describe? Or did it take failure to do it? All of us were on that ship, in the LEM, in the command module. And we wanted to come home safe. That tiny struggle in the sky meant more to the watching world than any part of its own anatomy of chaos down here. It succeeded in suggesting that great ventures should be joint ventures. And I would hope that as we look ahead to more Apollo flights, consideration be given to initiatives to incorporate a Soviet experiment if not a scientist-astronaut on one of them, or one soon thereafter. The more we link hands in realizing the joint dreams of man, the fewer hands we will have free to fight with, and the less inclination to do so. Great wars cost great sums—hardly compensated by the concomitant reductions in population. What price then may we place on small embraces between great powers? If men on earth should work together to make their planet spaceship more livable, and less likely to blow out a panel, or dissipate its oxygen, maybe that lesson must come from men in space. Heaven knows it has not come from men on earth.

As Teilhard de Chardin holds, "Things rising converge." Perhaps that is true of the hopes of man.

Mr. FREY. Mr. Chairman, on Tuesday of this week, together with other colleagues on the Science and Astronautics Committee, the space program was discussed at some length. We tried to place it in proper perspective. For instance, it was pointed out that the proposed budget request is approximately 1.7 percent of the total Federal budget. Interest on the national debt for fiscal year 1970 would be 18.8 billion or close to 5½ times the amount budgeted for space. In terms of the gross national product we spend approximately four times more for alcohol and twice as much for cigarettes as we do on our space program.

We also attempted to detail the direct and indirect benefits of the space program and what it has meant to the average American. For instance in 1969, Hurricane Camille killed 256 persons, while another 68 are missing and presumed dead. The hurricane's damage was estimated at \$1.42 billion. This deadly hurricane's path force and extent were predicted early and accurately enough by satellite to permit the evacuation of 70,000 people from the affected gulf coast State. Without this warning, ESSA estimated that 50,000 people might have lost their lives. New sensors will be tested through Nimbus satellites and application technological satellites by 1972. If all goes well, we should know the weather up to 2 weeks in advance by the end of the 1970's. In a 1966 speech, Dr. Seaborg, presently Chairman of the Atomic Energy Commission, estimated that if weather could be accurately predicted even 3 days in advance, man could save \$60 billion a year. This estimate was based on a comprehensive 17 volume study made by the IBM Corp. Even if this prediction is 90 percent in error, a saving of \$6 billion and untold human

lives a year is a significant return of our space dollar.

Other spinoff benefits of the space program were discussed in detail and included such areas as communications, the earth resources program, medicine, education, the NASA information bank, the management of large urban areas, information systems, transportation systems, power generation, collision avoidance, aircraft control, computer technology, and oceanography. I hope that those who say "the space program is not helping on earth" will take time to review the RECORD of Tuesday, April 21.

I did like to direct my attention to several points that have been raised regarding the future of the Apollo program and the overall manned space flight effort.

It has been estimated that we have spent approximately \$22 billion to date on the Apollo phase of the program. Some people would have us stop the program because of the problems of Apollo 13. These people forget that the purpose of the Apollo program was not just to get to the moon but to galvanize the scientific, technological, and human resources of this country in order for men to be able to operate in, survive in, and understand space. Space is there. If we are not able to use it, other countries certainly will. The Russians proved this. Not to do so would be like Columbus making his voyage to the New World and no one following it up. History teaches us that the nation that is first in science and technology has the best opportunity to create a better life for all its citizens. Our space exploration program offers us a chance to recoup material returns of immeasurable value and to maintain our technological superiority.

Specifically, regarding the Apollo program, we have seven Saturn V's left and six are programmed for moon landings. The other Saturn V is to be used in the AAP program in 1972. After this year's authorization and appropriations, in essence we have paid for all the hardware needed for the Apollo program. The estimated runout costs for these six remaining Apollo missions after fiscal year 1971 through fiscal year 1975 total \$2.710 billion. It would not make sense to build a fleet of airplanes and then not fly them. We, of course, must first correct the problems of Apollo 13 before continuing our flight program. We all realize now that in any program such as this, the astronauts' safety cannot be guaranteed, but we have a responsibility to do everything we can to make our spacecraft as safe as humanly possible. Those who oppose the continuance of the Apollo program on the basis of saving money are in essence asking us to throw \$22 billion away just when technological and scientific returns are beginning. Those who oppose the continuation of the Apollo program or think it should be cut back, are asking us in essence to waste \$22 billion previously spent because they do not wish to spend \$2.710 billion more to complete the program. This just does not make sense.

Another question is of course what is the future of man in space. The future

as outlined by the space task force group headed by Vice President AGNEW lists as one of the keys the development of new capabilities for operating in space. The emphasis would be on the three factors of commonality, reusability and economy. These factors are found in the so-called space shuttle which consists as presently conceived of a reusable booster and orbiter. It will be designed to perform at least 100 missions with minimum maintenance, carry at least 12 passengers to and from the earth and have a payload capacity up to 50,000 pounds. Instead of paying between \$500 and \$1,500 a pound to get an object in space, we will hopefully be paying less than \$50 a pound by use of this space shuttle. It is surprising to me that those who are complaining about economy in our space program can find fault with the space shuttle. Indeed the estimates of the space shuttle over the approximate 7 years of the development program amount to \$5.7 billion or approximately 20 percent of the Apollo program cost. The space shuttle will be the DC-3 of the future. It can be used for transporting crews to space stations, for carrying and positioning satellites in orbit, for retrieval and maintenance of satellites. The latter can be extremely cost productive in that today satellites must be engineered to perfection because of the inability to correct problems in space. Simpler and cheaper satellites can be put into space when we have the ability to go to the source and correct malfunctions. Furthermore, the space shuttle can serve as an orbital staging platform for automated planetary probes and spacecraft. Of course, one other important function which really hit home during Apollo 13 is that the space shuttle will be designed so that it can be maintained in a state of launch readiness for lengthy periods and be launched within several hours' notice. With this rescue capability, Apollo astronauts could be rescued in earth orbit without the need for re-entry.

Based on our present program, we today face a gap in our manned space flight program from 1975 to 1977. If the shuttle money is taken out of this budget this gap will be stretched even further, possibly 1 to 2 additional years. When the money in the budget at the present time, \$190 million for both the space station and space shuttle is compared against the storage and mothballing costs, the loss of human resources caused by the delay and the scientific and technological loss, there can be no question that there is true economy in leaving the money in the budget for development for the space shuttle. It should be noted that the money in the budget for both the space shuttle and space station is not for the development of hardware. The budget includes \$12 million for experiment definition, \$48.5 million for shuttle engine definition and design, \$22.5 million for shuttle air frame definition, \$6 million for station definition, and \$101 million for the shuttle station preliminary design verification. We have taken the necessary steps to insure that

we will have economy and reusability in our future manned space flight programs.

Because of some misunderstanding that has developed, I wrote a letter to NASA Director Tom Paine requesting that he set forth supporting data regarding the Apollo program and shuttle. His letter is as follows:

NATIONAL AERONAUTICS AND SPACE  
ADMINISTRATION,  
Washington, D.C., April 23, 1970.

HON. LOU FREY, JR.,  
House of Representatives,  
Washington, D.C.

DEAR MR. FREY: Dr. Paine asked me to send the attached responses to the questions you asked of him in your April 22, 1970, letter.

Sincerely yours,  
GERALD J. MOSSINGHOFF,  
Acting Assistant Administrator for Legislative Affairs.

Question A: Based upon the President's FY 1971 space program, what have been the total Apollo program costs to date, and what is the estimated runout cost?

Answer: The annual cost of the Manned Lunar Landing program through July 31, 1969, following completion of the Apollo 11 mission, was \$21.3 billion as summarized on the attached Table. Since that historic event, additional costs have been incurred through March 31, 1971, of \$1.3 billion, thereby increasing the total costs of this program through March 1970 to \$22.6 billion. This includes the cost of Apollo 12 and most of the checkout and other preparations for the launch of Apollo 13. The \$22.6 billion also funded \$1.4 billion of flight hardware which is now in inventory or in the production line and available for future missions. It also provided capital assets of about \$2.8 billion, which are of a continuing national value such as the manned space flight centers; unique production, test, and launch support equipment; the worldwide tracking communications and data acquisition network; instrumentation ships, etc.

The Apollo R&D program, through March 1970, accounted for \$17.8 billion of the total Manned Lunar Landing costs of \$22.6 billion. The remainder, \$4.8 billion, is attributable to Tracking and Data Acquisition, Construction of Facilities, and Operations of the Manned Space Flight Centers.

Apollo program costs for the remainder of FY 1970 are estimated to be between \$375 to \$400 million, thus increasing the Apollo R&D costs through FY 1970 to approximately \$956 million for Apollo R&D in FY 1971. The funding required to maintain the Apollo program through completion in the first half of FY 1975 is dependent on many factors. However, under the existing guidelines, schedule, and assuming early resolution of the Apollo 13 anomalies and no further problems, our current estimates for the program by fiscal year are as follows:

Fiscal year:	[In millions]
1972	\$880
1973	780
1974	740
1975	310

These estimates assume continued lunar exploration flights through Apollo 19 in late Calendar Year 1974 and that during this period, the Apollo program will continue to bear the costs of maintaining the development, production, test, and operational capabilities to meet the common requirements of all manned space flight programs. To the extent that new programs are undertaken and would bear their proportionate share of these relatively fixed costs, i.e., Space Station, Space Shuttle, second Skylab, the costs allocated to the Apollo program would, of course, be reduced.

Questions B and C: What is the total cost of the Space Shuttle and the Space Station programs?

Answer: Current estimates for the Space Station and Space Shuttle are based on preliminary studies used in developing the Space Task Group report and can be regarded only as approximations of the total cost. The Space Station costs, in particular, are subject to variation, depending on the experiments selected for flight. Preliminary analysis indicates that Space Station costs for development and initial flight hardware will be in the range of \$5 billion and that development and initial flight hardware of the Shuttle will require about \$6 billion. These estimates are in terms of 1969 dollars. Studies of the Space Station and Shuttle, which are in progress in FY 1970 and will continue in 1971, will provide more comprehensive definition of the development and operational programs and the resources requirements to support these efforts.

Question D: Aside from the requested \$110 million identified specifically for the Space Shuttle/Station in the FY 1971 Space Flight Operations line item, how much is included elsewhere in the FY 1971 request for the Space Shuttle/Station, and what is the tentatively planned use of these funds?

ANSWER: In addition to the \$110 million identified in Space Flight Operations in the FY 1971 budget for Space Station and Shuttle, a significant portion of the Office of Advanced Research and Technology effort is applicable to these same two programs. In each program between \$30 to \$40 million will be applied.

The major portion of the Shuttle and Space Station effort was already underway in OART before a specific program of Shuttle/Station technology was formulated. Many program elements have been accelerated or amplified in support of these two programs, but only minor funding is associated with new effort undertaken to meet specific Shuttle/Station requirements. Technology effort in the following functional areas has been identified as being associated with the Shuttle:

1. Aerothermodynamics and configurations;
  2. Structures and materials;
  3. Propulsion work;
  4. Integrated electronics; and,
  5. Biotechnology.
- The Space Station technology development effort includes the following areas:
1. Information systems;
  2. Structures, dynamics, stabilization, and control;
  3. Power generation and distribution;
  4. Space medicine and human research;
  5. Life support and protective systems; and,
  6. User technology.

Question E: Based upon your projections as to space funding levels for the future, what do you foresee as the relative percentile balances between the manned and unmanned flight programs?

Answer: Based on the total NASA budget for FY 1971, the percentage of R&D funds allocated for manned space flight activities approaches 45 percent and nearly 20 percent for unmanned activities. As you are aware, our FY 1971 budget request is based on the STG report to the President which recommended "that this Nation accept the basic goal of a balanced manned and unmanned space program conducted for the benefit of all mankind." With the normal growth in programs already approved and underway for space applications and planetary exploration and on the assumption that future budgets (including FY 1971) will be approved at levels which support the major program elements in the STG report, the R&D funding applied to unmanned activities will increase over the next several years.

MANNED LUNAR LANDING COSTS

(In millions of dollars)

	April 1961 estimate	March 1964 estimate <sup>1</sup>	March 1966 estimate <sup>2</sup>	April 1969 estimate <sup>2</sup>	Actual cost through July 31, 1969
Apollo spacecraft.....		\$5,053	\$6,642	\$7,945	\$6,939
Saturn launch vehicles.....		7,702	8,941	8,770	7,940
Engine development.....		1,190	1,053	854	854
Operations support.....		863	1,077	1,393	1,137
<b>Total MSF R. &amp; D.....</b>		<b>14,808</b>	<b>17,713</b>	<b>18,962</b>	<b>16,870</b>
Tracking and data acquisition.....		776	730	664	541
Facilities.....		1,664	1,773	1,830	1,810
MSF center operations.....		2,253	2,502	2,421	2,128
<b>Total.....</b>	<b>\$20,000-40,000</b>	<b>19,501</b>	<b>22,718</b>	<b>23,877</b>	<b>21,349</b>
Flight hardware available.....					-2,000
<b>Net total.....</b>					<b>19,349</b>

<sup>1</sup> Based on assumption of timely initiation of follow-on program.

<sup>2</sup> Based on assumption that there would not be timely initiation of a follow-on program; also reflects the effects of program stretchout

Today we stand on the threshold of the greatest era of exploration in the history of man. We explore space not because it is there—but because exploration of the unknown is inherent in man and a vital part of the American spirit. The space program is returning more to us than the money we have invested and will invest. To stop this space program which directly benefits and improves the quality of life here on earth would be to fail in our commitment to the future generations of this country.

Mr. KARTH. Mr. Chairman, NASA officials have testified that initial cost estimates for development of the space shuttle are \$6 billion. They concede that this preliminary estimate cannot be relied upon. NASA admits that design and development of the space shuttle represents a new and formidable technical challenge, and will require maximum innovation on the part of the aerospace industry. Specifically, the space shuttle will require advances in technology on several fronts:

First. Structures and materials, especially related to reentry heating.

Second. New high performance propulsion systems.

Third. Integrated electronics for guidance and control.

Fourth. Configuration and aerodynamics, which will permit vertical launch, hypersonic reentry, and controlled subsonic horizontal landing.

By contrast, the Saturn V launch vehicle was based upon technology developed over many years beginning with the German V-2 rockets of the late 1930's and extending through a long progression of missiles and launch vehicles developed by the United States on which many billions of dollars were spent. In short, the technology was well in hand when development of Saturn V was undertaken. Nevertheless, the cost of development of Saturn V was almost \$5 billion.

In view of the extremely difficult technological problems which must be solved, the \$6 billion preliminary estimate for development of the space shuttle appears unrealistically low. Some knowledgeable people believe it will cost three or four times that much.

COST OF OPERATION

Proponents of the space shuttle assume that operations utilizing a reusable launch vehicle can be carried

out more cheaply than with expendable launch vehicles. Reusable systems may or may not result in some savings—that remains to be seen—but the space shuttle will be much more sophisticated and therefore very much more expensive to build than throwaway boosters. The class of launch vehicles to be replaced by the space shuttle—Delta through Titan—cost from \$3.5 million to about \$20 million per copy. By contrast, each space shuttle will cost hundreds of millions. It should also be recognized that there will be additional operational costs as well, not incurred by expendable systems—namely, costs of recovery and refurbishment, and associated ground facilities and personnel. Finally, the proposed reuse of the shuttle 100 times seems overly optimistic.

It is even more important to recognize that total mission costs are much more sensitive to the costs of development of spacecraft and experiments, and to ground operations—tracking, data acquisition and analysis—than to the cost of procurement of launch vehicles. In fact, launch vehicle costs account for a relatively small part of the total costs of a given space mission. Launch vehicle costs typically represent from 10 to 25 percent of total mission costs, with the largest expenditure normally for the spacecraft. Thus, it appears that if major economies are to be made in the space program, they will be achieved by sharp reductions in spacecraft and experiment development costs, costs of ground operations, and not simply by reducing launch vehicle procurement costs. It should also be noted that NASA has stated that "expendable launch vehicles could be developed that would be considerably cheaper than our present systems." This may turn out to be the most effective way of reducing launch vehicle costs.

OTHER ARGUMENTS DON'T STAND UP

Even if the space shuttle were now in existence, and the cost of operation of the space shuttle were extremely low, the high utilization rate needed to justify its high development costs and its high procurement costs would require a considerable expansion of the scope of U.S. space activities. Specifically, NASA officials have testified that the space shuttle will provide a capability for placing 50,000 pounds in orbit, and that they anticipate a minimum of 30 flights per year by NASA and an equivalent number

in support of DOD programs. During the entire decade of the sixties, NASA exceeded 30 launches per year only once—36 in 1966—including Scouts and Saturn V's, which are not to be replaced by the space shuttle. Assuming the space shuttle's payload capacity would be fully utilized on each of the projected 60 yearly flights, this adds up to 3 million pounds of payload launched into orbit each year. Could the United States afford such an ambitious space program? Would the American taxpayer be willing to support such an ambitious space program?

How does 3 million pounds of payload in orbit compare with the space program of the past? In terms of cumulative payload launched, 1969 was NASA's biggest year with 442,358 pounds, over 97 percent of which was attributed to the four Apollo flights. It follows that space shuttle advocates must anticipate a greatly expanded manned space flight program—30 flights per year by NASA alone—one which the Nation might be unwilling or unable to support. Note that the NASA budget has declined each year since 1965. It would have to increase dramatically during the next few years to support the development project if the space shuttle is to fly 1977, and then increase even more after the shuttle becomes operational, in order to support the kind of ambitious program it is designed to serve.

The Titan III experience may be instructive. Development of Titan III was undertaken in the expectation that, once operational, there would be 50 to 100 launches per year. The high utilization rate was the justification for investing \$1 billion for development. Currently, there are three Titan III launches per year.

Mr. OBEY. Mr. Chairman, the move to increase NASA's spending on manned space flight is another sad example of scrambled priorities.

Every bit as important as a balanced Federal budget is a better balance in what we choose to spend our money on. We went to the moon in the 1960's. Our next mission should not be to land a man on Mars, but to see what we can do for the United States in the 1970's.

Yet this NASA authorization bill would give an extra \$298 million worth of lift-off to manned space flight and apparently launches a man-on-Mars mission.

It does this by adding \$80 million to the \$110 million requested by NASA for a space station and shuttle program—a program to build a permanent space station for up to 100 men and a reusable shuttle for transportation to and from the earth's surface.

I find this recommendation premature, to say the least, inasmuch as we have not yet determined whether man can live and work in space. A big space station has little value unless it is intended to be a stepping-stone to Mars.

The feasibility of long-termed manned operations in a space environment will not be known for 3 years, until we finish our 8-month experiment with a small orbiting station to be launched in late 1972.

It strikes me as strange indeed to authorize construction of a giant space station before we have even flown the

small one which is supposed to test the concept of space station flight.

I think we should delete this \$190 million fiscal booster for the space station and shuttle. NASA would still have ample funding for the experimental space station, which ought to come first anyway, as well as \$80 million for research and technology studies for future space flight.

Mr. Chairman, my evaluation of manned space flight has nothing to do with the failure of the Apollo 13 lunar mission. The accident which befell the Apollo 13 spacecraft was serious and disappointing, but it was not so surprising that something could go wrong on a mission of such complexity.

To me it is rather a question of priorities, and not whether a particular mission succeeds or fails. I believe the space program should be controlled, not killed.

We are naturally curious about man's ability to perform in space, but we can determine that in a fiscally responsible manner. Right now, we should seek to extend man's capability to live and work in his cities, and in rural America.

Fancy programs are fine, but how in conscience can we support added effort in space when human need cries out all around us—for hospitals, for doctors and nurses, and for cleaning up our environment.

The quality of our education, of our air and our water will determine whether we are a great nation—not being first to land a man on Mars. There simply is not enough money to do everything we would like, and it is a mistake in values to put the glamor of space ahead of the realities of our corrupted environment and our crippled health care system.

NASA requested \$3.3 billion—a not inconsequential sum. Given our many terrestrial problems, this is no time to be generous with our space program. Even without the increases recommended by the committee, the NASA budget is still too high given our other pressing needs. We cannot afford to do all the things we would like to do tomorrow. Let us face that fact and exercise some restraint on programs such as this, which are marginal, at least in terms of their contribution to the welfare of the individual American citizen.

Mr. ROTH. Mr. Chairman, today I rise in opposition to H.R. 16516, the National Aeronautics and Space Administration Authorization Act for 1971. On July 20, 1969, the United States did indeed land men on the moon and bring them back safely to earth. The challenge laid before us by President Kennedy in the 1960's has been fulfilled. Now it is time to place greater emphasis on other challenges.

The challenge of our polluted environment is a great one, one that will require just as much, if not more, skill and knowledge in the future as had our space program in the past.

This country has many brilliant and talented scientists. I would like to see more time, more money, and more of the talented scientists used to conquer the pollution of our air, our water, and our cities.

Let me illustrate what I mean. It would

seem to me that there must be a better way to clean up oil spillage than by spreading straw on a polluted shoreline, or by simply putting a layer of clean sand on top of an oil-soaked beach. And it would seem to me that there must be methods—literally waiting to be discovered—to recycle and make useful a vast amount of what now passes for waste. I believe that if we draw on the minds and the computers that can land a rocket on the moon or can return a crippled spaceship from hundreds of thousands of miles in space, we can certainly find the answers to the many problems that confront us here at home in what appears to be a long, costly, and difficult battle to reclaim what we have squandered for so long.

The decade of the 1960's was the age of space and landing men on the moon. The decade of the 1970's should be devoted to cleaning up our home, the spaceship earth.

Let me make it clear that I do not believe we should abandon our space effort; far from it. I believe that we should continue our space program, but, for the time being, on a more modest scale. Our all-out effort to land men on the moon before 1970 has paid off. We have done it. Now is the time to reevaluate our goals in space and proceed at a more reasonable speed.

In addition to solving the problems of pollution, it seems to me that there are other areas here on earth where the money could be more wisely spent. For example, expanded research in cancer and heart disease, two of our most serious killers, could possibly yield untold benefits for not only our Nation, but all mankind.

I think it is time for us to devote ourselves to solving the problems we face here on earth. I think it is time we began to clean up our polluted environment and support research directed at finding cures for the diseases that cripple and kill mankind, such as cancer and heart disease.

For these reasons Mr. Chairman, I intend to vote against the bill presented before this body today, H.R. 16516.

Mr. DADDARIO. Mr. Chairman, scientific information has increased enormously since Sputnik I went into orbit only 13 years ago. A study made by Stanford Research Institute indicated that astronomy had been most enriched. However, many other sciences have also been impacted. One of the most important discoveries was that of the Van Allen radiation belts, result of the first U.S. satellite.

Since that time we have learned the true shape of the earth for the first time, the true distance between the earth and the moon, the approximate age of the moon—at least at two sites—some information about the moon's magnetic field and some information about its mineral content.

One of the most exciting discoveries, not yet explained, is the behavior of some plants when lunar dust or soil is added to their growth medium. Amazing increase in size and color were noted, but the reasons for these reactions are still a mystery. On another experiment, certain

viruses, difficult to destroy on earth, were killed by lunar dust. Virologists are diligently searching for the answers.

The laser-reflector array which was left on the moon is already returning valuable information, never before available. We have been able to determine relative earth-moon distance to an accuracy of 1 foot. Distance measurements can supply precise information on lunar orbital motion and periodic oscillations of the moon. It is hoped that they will also lead to understanding the fluctuations in the rate of the earth's rotation. The drift of the continents can be measured with this equipment as can the variations in the wobbling of the earth's rotational axis. Some geodesists believe that there is some association between the wobbling of the earth's axis and major earthquakes. Therefore, an understanding of this phenomenon may aid in the prediction of such disasters.

Among the most important results of the space program are the innumerable developments and discoveries which have biomedical application. The need to remotely examine the astronauts while they were in space has given rise to a whole new class of aids and instruments, combining our ability to miniaturize with our expanded computer capabilities. The heart monitor is only one of the notable developments. A group of doctors, the biomedical applications team, has found over 200 answers to medical problems within space medicine. They have assisted in the transfer of information from space to general medicine.

The need to maintain continuous study of the men who have been in space and of those who are preparing to fly has occasioned the constant medical supervision of our astronauts. Thus a body of information about well men is being compiled, more extensive than any study previously done. When the SkyLab goes into orbit in 1972, even more intensive work will be done on the three teams who will man these flights, the first for 28 days and the second and third for 56 days each. Because of enhanced facilities, very much more biomedical work can be done in SkyLab.

In the research centers of NASA, where fundamental research is being conducted, two recent discoveries which may give valuable clues in the conquest of cancer have been made. They both concern the behavior of cells and their composition and are under study because of our need to know as much as possible about the behavior of human cells in space.

Meteorology has probably been more advantageously affected than any of the other sciences which affect our daily lives. The weather satellites which daily survey the cloud-cover of the earth and regularly report to earth receiving stations, have brought extra facility in weather reporting and weather analysis to all nations who have chosen to query them.

It has been possible, using information from the weather satellites, to predict some major hurricanes in time for preventive action to be taken by the people in their paths. With more sophisticated satellites scheduled for service, meteorol-

ogists hope to be able to predict weather at least 2 weeks in advance.

Earth sciences have already profited greatly from work done in space. With the earliest photographs from Gemini, through those taken on Apollo, and the extensive multispectral camera experiment performed on Apollo 9, knowledge of the earth has grown significantly. It is possible to ascertain the composition of soil, the kind of growth, the condition of growth and the extent of forest cover, all from photographs from near-earth orbit. Geologists believe that ore concentrations can be discovered; hydrologists expect to be able to predict floods from analysis of snow-cover; examination of the temperature of water in the oceans of the world is another project of oceanographers which promise to produce fundamental knowledge about our environment.

Practically every major scientific regime has been stimulated and challenged to new research and discovery by the demands of the space program. And one must realize that this newest area of man's interest has only begun to return results. With two new territories for exploration, the sterile vacuum of space and the surface of the moon, we can expect a scientific "golden age" within the next decade.

Mr. TEAGUE of Texas. Mr. Chairman, I support H.R. 16516 to authorize funds for the National Aeronautics and Space Administration for fiscal year 1971. There are those today who say we spent too much money in our national space program. I would like to remind those who express this view that this money is spent in the most advanced science and technology known to man. It pays the wages to those who push back the frontiers of the unknown. It betters the skill of over 150,000 Americans. It provided not only hardware but know-how to tackle the difficult problems that our Nation faces in the years ahead. It contributes many of the management innovations necessary so that we may deal not only with the complex problems of operating an adequate space effort but may also help many of the difficult problems that we face in environmental improvement, crime prevention technology, and resources development within our Nation.

When the detractors to our national space program say that funds devoted to the space program can better be devoted to our social needs I ask all of my colleagues to consider that this is exactly what our expenditure for our national space program does. It aids the solution of many of our pressing problems in our Nation today. We need improved communications at a lower cost. Our national space program is contributing everyday to this area.

We need improved ability to assess the availability of natural resources. Our space program contributes to this every day. We need better management talent and better management procedures for complex governmental programs. Our space program contributes to that every day. If we are to continue to progress as a nation, we must remain in the forefront of technical development. Since the beginning of the industrial revolution our Nation has depended on its competitive

advantage through technology to maintain its world position in the marketplace. Both in aeronautics and space flight development NASA is contributing to this advance of technology. Consequently, this represents one of the most important reasons for continuing to support an aggressive national space program.

The Committee on Science and Astronautics and the Subcommittee on Manned Space Flight have worked long hours and studied thoroughly the bill you have before you today. We received testimony from key industrial contractors and NASA field centers in hearings before the committee. All of this is a matter of record in the report of hearings accompanying this bill.

The changes made in the budget proposal submitted by NASA for fiscal year 1971 are largely associated with manned space flight. In summary these changes provide for a forward-looking and adequate space effort in the 1970's.

The committee added \$145 million to the Apollo line item requested by NASA. It should be noted that the NASA request was over \$725 million less than that for fiscal year 1970. It is a budget which terminates Saturn V production and reduces the Saturn V launch rate to two lunar exploration flights per year until the remaining Saturn V's are expended. The addition of \$145 million by the committee provides sufficient funds so that the last two lunar missions with the sixth and seventh Saturn V vehicles will have increased scientific payloads and longer stay time on the lunar surface to gain the maximum return from these flights. These same funds would also provide for early work on a spacecraft for an eighth lunar exploration and a preliminary investigation of scientific payloads for that same flight. In addition to this the committee added \$100 million for long leadtime hardware for improved Saturn V vehicles. These same funds would also be used to allow critical vendors and contractors that have been phased out of the Saturn V program to accomplish sufficient work to maintain their skills and provide limited equipment so that Saturn V production may be reinitiated without delays at a later date. Particular emphasis will be placed on work for engine components since these are the longest leadtime items associated with the production of the Saturn V vehicle. The Saturn V is the only vehicle available to the United States that lifts payloads in excess of 60,000 pounds into earth orbit.

The leadtime required to build these large complex vehicles is in the order of 4 years and the funds which have been included by the committee will materially reduce this leadtime. If we are to assure that this Nation has a large payload capability in earth orbit and deep space in the mid-1970's it is essential that these funds be included as recommended by the committee.

In the area of space flight operations the committee has increased the NASA budget request for fiscal year 1971 by \$155 million. It was the view of the committee that the addition of \$75 million for the Apollo applications program workshop, now called Skylab, would pro-

vide funds to augment the development and qualification of the spacecraft and workshop for long duration missions in 1973. These same funds would also provide for the development of additional experiments that will improve the return on the investment made in the Skylab. These experiments were excluded from the program because of funding limitations.

The \$80 million was added to space flight operations to provide for more extensive analysis and engineering studies for a space station to follow Skylab in the late 1970's and to provide advanced testing and verification of early designs in the low-cost recoverable space shuttle design effort now being undertaken by NASA. These funds will provide additional information so that when the Congress is asked to make a commitment to the development of a low-cost recoverable space shuttle system the information will be in hand to make that important decision. The low-cost recoverable shuttle represents, in my view, the most significant aspect of the national space program in the late 1970's. Developing a reusable space transportation system operating much like commercial aircraft will provide broad new opportunities to utilize space and conduct scientific explorations at a significantly reduced cost. With such a system available, recovery, repair, and maintenance of automated spacecraft, low-cost visits to manned space stations and the commercial application of space not only for expanded communications but also in the area of earth resources will be enhanced.

The opportunities for international cooperation with a low-cost shuttle system available will be significantly improved simply by virtue of the fact that the cost of operating in space will be brought to a level that many of the developed nations of the world will find attractive.

With these facts in mind I urge your favorable consideration of H.R. 16516.

#### INCREASES IN THE BILL

Mr. Chairman, so that there will be no doubt as to the importance or nature of the increases in the bill I wish to identify them for the benefit of the Members.

The proposed \$45 million for Apollo/Lunar payloads will provide funds to permit effort in fiscal year 1971 on spacecraft and payloads for the Apollo 18, 19, and 20 missions. This effort will include systems improvements and augmented scientific payload components to enhance the data return from these missions based on experience from earlier Apollo flights. The proposed additional funds for Apollo/Lunar payloads will provide resources for the following:

The sum of \$5 million: Funds will be used to resume work on the Command and Service Module—CSM 115A—for Apollo 20. This spacecraft was placed in storage at the North American Rockwell plant following initial systems installation in line with the decision not to provide funding in the fiscal year 1971 budget for a Apollo 20 mission or follow-on Saturn V production.

The sum of \$7 million: The Lunar Module—LM 14—which would be used on

Apollo 20 is in storage at the Grumman plant. In accordance with the earlier decision to delete Apollo 20, all fabrication was stopped during structural assembly. Additional funds will be utilized to reinstate production of this spacecraft.

The sum of \$11 million: These fiscal year 1971 funds will be applied to the development of equipment for orbital science experiments proposed for Apollos 18, 19, and 20. This equipment includes: 24-inch panoramic cameras; 3-inch mapping cameras; FAR UV spectrometers; IR SCAN radiometers; and subsatellites with: S-band transponder particle measurement, magnetometer, and a laser altimeter.

The sum of \$16 million: Development and initial fabrication of surface science experiments will also be covered by the additional funds for Apollos 18, 19, and 20. Funds for this effort and the orbital science effort were deferred in the original budget request. Equipment for several of the experiments that would be funded in this category include: Passive seismology; lunar surface magnetometer lunar hand-held magnetometer; mass spectrometer; gravimeter; and field geology investigation equipment.

The sum of \$6 million: Funding will provide for equipment to enhance astronaut activities on the lunar surface including lunar roving vehicles, additional portable life support systems—PLSS—lunar drills, lunar surface cameras, and other miscellaneous Apollo/Lunar equipment required for the Apollos 18, 19, and 20 missions.

The proposed \$100 million in funds to sustain Saturn V production will minimize the production gap, reverse the almost complete phaseout of vendors and subcontractors, and continue to provide the country with its only operational launch vehicle capable of placing large payloads in earth orbit or sending spacecraft on lunar missions in the mid-1970's. The additional funds will be utilized as follows:

The sum of \$20 million: These funds will be used to requalify and reassemble the vendor and subcontractor structure of the Saturn V team which have been completely phased out of the program. With all of the Saturn V stages nearly completed, large groups of the prime contractor's work force will have to be reassembled and retrained to assure a high quality and reliable vehicle.

The sum of \$35 million: Engine funding will have the highest priority due to the long leadtime associated with engine production and installation. As the last Saturn V engine of the present buy was delivered in January 1970, the engine production base must be reestablished. The funds would also be utilized to qualify the J-2S engine and cover the final design and engineering changes required to incorporate the J-2S into the follow-on stages.

The sum of \$30 million: These funds support the purchase of standard material and parts, and for the procurement of critical long leadtime hardware items such as: actuators, relays, transducers, pumps, and propellant systems, heat shield panels, retro-rockets, instrument

unit components, castings, valves, bearings, and sensors.

The sum of \$15 million: Initial production efforts, including fabrication of basic stage and engine parts, by the prime contractor or contractors, will be provided by these additional funds. Early initiation of production in fiscal year 1971 would result in the first delivery in this buy of Saturn V vehicles in 1974.

The proposed addition of \$75 million to the Skylab program will be applied to increasing the assurance of Saturn Workshop I's success, initiating experiments previously excluded from the program due to funding limitations, and the preliminary design of a second Workshop mission in which incorporation of an artificial gravity environment will be of prime consideration. This effort will not only enhance the first Skylab mission, but will provide additional design studies for an upgraded Skylab Workshop II mission. Specific application of the proposed funds follows:

The sum of \$20 million: These funds will principally be used to increase and augment the development, verification analysis, and qualification testing of major systems—workshop, spacecraft, and airlock—to increase success on the first mission and to provide confidence in planning missions of longer duration for future flights.

The sum of \$25 million: Funds will be utilized to upgrade the presently assigned experiments program with increased emphasis on identifying and developing those experiments which prove to be of significant value in the areas of earth resources and medicine. Other experiments previously deferred due to funding limitations will be incorporated into the program and will enhance the scientific knowledge and direct benefit to be achieved in the Skylab program. Effort will also be initiated to develop an on-board biomedical monitoring system and an on-board data processing system for all major experiments.

The sum of \$18 million: Funding will be devoted to the development and qualification of improved life support and other critical systems. Through increasing both the reliability and capacity of the major systems and subsystems, not only will the assurance of mission success be increased, but the operational capacity of the Skylab will be expanded to a point approaching continuous operation.

The sum of \$12 million: These funds will be applied to the procurement of additional hardware and experiment systems as spares to more fully support the Skylab program. In addition, the backup ATM hardware will be upgraded to provide a qualified flight unit. The present backup ATM is a refurbished qualification unit and some work is necessary to assure flight worthiness.

#### SPACE STATION—\$30 MILLION

The space station module is conceived as being the basic element of future manned activities. The long-duration subsystems developed for the station would have application for, not only earth orbit missions, but planetary missions, possible future lunar missions,

and adaptation for use on major systems for both planetary and lunar surface bases. In this connection, the additional funds will be applied to increasing our understanding of the systems and requirements of this significant undertaking and will be applied as follows:

The sum of \$6 million: These funds will be used to complete studies in areas in which firm conclusions have not as yet been reached such as experiment information management, both on board the station and on the ground, and crew structure and management. Some functional mockups will be fabricated to be used for simulation and design testing. In addition, development of critical subsystems will be initiated, such as: fabrication of a completely functional full-scale prototype of a 25-kilowatt solar array-battery power processing system; initial hardware breadboard and programming for a high data rate computer system for on-board screening, editing, processing, analysis technique computer system; and improved radiators; coating and analysis techniques to optimize space station thermal design.

The sum of \$12 million: Funds will be applied to augmenting the planned experiment payloads definition effort and the preliminary design work on the experiment module. An early and better understanding of the operational and environmental requirements of the experiments will provide the necessary data which can be incorporated into the design of the basic space station. Funding will also be used to identify the station and experiment module interfaces with the space shuttle and space tug.

The sum of \$12 million: These funds provide for more extensive and inclusive trade-off analyses, verification of the selected preliminary design and advanced prototype and proof-of-concept testing to increase the assurance that the design and development of the station is proceeding on a strong technological basis.

The primary objective of the space shuttle is to transport effectively a varying mix of personnel and cargo to low earth orbits and return. This system is considered the key to the success and growth of future space flight developments for the exploration and exploitation of near and far space. To this end, the additional \$50 million will be utilized to provide a much more penetrating design and performance analysis of potential shuttle engines and airframe configurations thus greatly increasing assurance that the best possible engine and configuration will be selected. This greater understanding would decrease the possibility of significant design difficulties which produce higher costs being discovered later on in the program. In addition, as with the space station, funds will be applied to design verification, prototype and proof-of-concept testing to increase the assurance that the design and development of the shuttle will proceed on a strong technological basis. The proposed funds will supplement our budget request as follows:

The sum of \$15 million: These funds will augment the present engine definition and design effort to assure the selec-

tion of the best possible shuttle engine and to define engine test facility requirements.

The sum of \$15 million: Increased effort in defining the most desirable airframe configuration will be funded including definition of all required ground support equipment.

The sum of \$20 million: This funding supplements the important preliminary design verification and proof-of-concept testing effort.

#### FUTURE PROGRAMS

The future space programs planned by NASA are guided by the goals of exploration, scientific knowledge, and practical applications to man here on earth. To illustrate the significance of these future plans to maintaining our Nation's preeminence in space, I would like to briefly touch on each one.

We will continue to explore the moon. Present plans call for seven more flights to different locations on the moon—the flatlands, the rugged highlands, the giant craters, and the mysterious channelways called the rilles. When this phase of lunar exploration is completed in 1974, our scientists hope to have information on which to evaluate the moon's natural resources, better understand the history of the earth and our solar system and apply this knowledge to problems of the earth such as predicting earthquakes. They also believe that we may find that the moon is a convenient offshore base for further exploration of the planets.

In late 1972, the Skylab program will get underway. This program is designed to capitalize on the techniques and hardware developed in the Apollo program. The heart of the Skylab concept is the orbital workshop which is actually the third stage of a Saturn V launch vehicle fitted out with a laboratory and living quarters. Attached to the workshop is the Apollo telescope mount, a solar astronomy module for detailed studies of the sun whose energy provides the driving force that controls our environment.

The Skylab program will provide data on the ability of men to live and work in space for extended periods and the experiments conducted will provide advanced knowledge on improving conditions here on earth. Terrain photography will improve mapping techniques of the earth. Mineral, agriculture, and ocean resource surveys will be made. And experiments with measurements and remedies to reduce pollution in the earth's air and water will be conducted.

After the workshop is placed into near-earth orbit, a Saturn IB launch vehicle will carry three crewmen aboard an Apollo spacecraft to rendezvous and dock with the workshop. These astronaut-scientists will then enter the workshop and begin an open-ended 4 weeks of scientific experiments. At the completion of this period, the crew will reenter the Apollo command module and return to earth. Two more visits to the workshop are planned, each with a duration of about 2 months.

With the conclusion of the Skylab program, information for evaluating the need for a second, more advanced workshop will be available. Also, the Skylab program will serve as a progenitor of the large space station in earth orbit.

The development of the space station, in conjunction with the space shuttle, will form the basis of the next major advance in manned earth orbital flight.

In the next fiscal year, NASA will continue space station design studies. The space station will serve as a servicing and maintenance platform for both manned and unmanned spacecraft in earth orbit or in transit to and from the moon or deep space. Additionally, the station will support beneficial space applications programs, scientific investigations, and technological/engineering experiments.

The space station will provide living accommodations for a crew of 12, some responsible for maintenance and operation of the station and others for the conduct of experiments. Further into the future, the space station could be developed into a large space base in earth orbit by clustering other space stations and specialized modules. The base would initially accommodate 50 persons. Growth to a 100-man capacity would be possible.

In an attempt to slash the cost of space operation, NASA has intelligently been looking at less costly and less complicated ways of transporting payloads into space. This summer, space shuttle design studies will be initiated as a followon to earlier feasibility studies.

With the shuttle for transport, we will be able to launch automated satellites and probes, to maintain, refuel, repair, and refurbish them or to reposition or retrieve them for return to earth. Another major purpose of the shuttle will be to rotate crews and provide logistic support to the space station.

The shuttle will be a two-stage reusable space vehicle consisting of a booster stage and an orbiter stage. The shuttle will be launched vertically by its booster stage, much as today's rockets are launched. High above the earth the booster stage will separate from the orbiter stage and will be piloted back to earth for a horizontal, aircraft type landing on a conventional runway. The orbiter stage then will power itself into orbital flight. Later, the orbital stage of the shuttle and its crew can also return to earth and land at an airport. The shuttle will be designed for at least 100 round trip flights with minimum maintenance.

Development of the NERVA nuclear engine will continue. This engine, for use between earth and moon orbits and for propulsion on interplanetary missions could be operational by 1978.

In the decade of the 1970's, NASA will launch unmanned probes to all planets of our solar system in attempts to explore and learn more about our universe. A Mars orbiter will be launched in 1971, a Jupiter probe in 1972, and in 1973 a Venus-Mercury flyby. In the mid-1970's, an unmanned vehicle will be sent to land on Mars and to investigate its surface.

In the last half of this decade the positions of the outer planets will offer a unique opportunity to launch missions which can visit several of them on a single flight. These "grand tour" missions will study the planets of Jupiter, Saturn, Uranus, Neptune, and Pluto.

Present plans call for launching earth resources satellites in 1972 and 1973. These satellites will be capable of sur-

veying crops, locating mineral deposits, and measuring water resources. They will enable us to assess our environment and to use our limited, earthbound resources more effectively.

In 1973, an applications technology satellite will be launched with a number of technical and engineering experiments aboard. One of these experiments will be the first large-scale test of instructional television to demonstrate the potential value of effective mass communications in developing countries. The United States and India will cooperate in using this satellite to bring instructional TV programs to some 5,000 Indian villages. The international character of this satellite demonstrates the remarkable potential that space offers in fostering global cooperation.

These space projects of the 1970's that I have outlined are not political ventures nor programs for the sheer fun and exhilaration of exploring the unknown, rather, they are realistic and responsible projects for gaining the greatest returns on the groundwork that was laid by NASA in the 1960's.

#### MAN IN SPACE

The magnificent flights of Apollo have caught the imagination of men everywhere. In the eyes of the world, these demonstrations of our excellence in science, engineering, and management have restored the United States to preeminence as the leading technological nation.

It is a truism that man relates only to man. This was emphasized by the contrasting reactions of men everywhere to the daring planetary expeditions of the U.S.S.R. and to the manned flights of Apollo. No single act of the United States has ever elicited such enthusiasm around this planet. A recent Gallup poll conducted in 12 countries asked, "Which nation will lead in science in 1980?" Fifty-four percent said "the United States." A similar poll in 1959 gave the United States only 23 percent against 42 percent for the U.S.S.R. Mechanical wizardry intrigues us, but the daring of the men who walked upon the moon, and the dedication and brilliance of those who sent them there is truly awe inspiring.

Critics of manned space activities essentially have only one objection—that they are today more expensive than unmanned operations. Yet tomorrow we will be able to move men, equipment, and supplies into earth orbit at a fraction of today's costs with the low-cost space transportation system. The first element of this system, the space shuttle, is now in phase B development.

With the activation of this system, we will be able to make optimum use of men in space. For man has three sets of capabilities that make him extremely hard to replace with any machine: First, he has a very wide-band set of sensors for acquiring information, second, he has in his head a built-in memory and computer for unprogrammed calculations that cannot yet be matched by our largest and fastest machines; and finally, third, he has a remarkably versatile capability for action and physical operations with his body, hands, and tools. These three capabilities, as well as his unique talent

for innovation and emergency reaction, make men such a valuable element in space science and applications that we need to take advantage of him at the site of operations whenever this is feasible.

There are many tasks in space that we will want men to perform as soon as the round-trip reusable shuttle is available. We will want him to hasten the development of earth-oriented sensors for use on automated satellites. At present extrapolation from man-tended airplane sensors is being made to sensors to be flown on automated satellites for a year or more. Under these circumstances, considerable time must elapse before improvements can be made in a next generation of sensor on a later launch.

In the future, manned spacecraft with large payload capacity and several trained crewmen could carry out prescribed tests on a battery of developmental earth-oriented sensors under actual space conditions. With a versatile set of equipment modifications and options planned for the test program, perhaps in the breadboard stage, the space crew could carry out a series of developmental and operational steps on the sensors in one mission which would have required several years and many launches of automated equipment. Such a program would not only lessen the cost of equipment development, but would bring earth sensing activity into practical use at a much earlier date.

Today, if some failure occurs on an automated satellite, it must be completely replaced in orbit. With the space shuttle in operation it will cost us much less to send men up to rendezvous with a complex automated satellite in an accessible orbit and make repairs there or return it to earth, than to send up a new satellite.

In addition to maintenance and repair, men will be needed for the deployment and calibration of many of the large space systems of the future, such as assembly and checkout of large antenna for communications satellites, or initiating operation of large astronomical satellites.

With respect to selected sensing operations, we will want to join the advantages of manned operation to the superb vantage point for viewing the earth offered by space installations. Trained men will be able to conduct special observations related to atmospheric circulation, heat balance, air pollution, and meteorologic and oceanographic dynamics. Thus we will be able to obtain information not available from the preprogrammed observations of automated instruments. By taking full advantage of both manned and automated conclusions from earth sensing from space, we will have the analyses as well as unexpected knowledge in order to make the most rapid utilization of new information about our planet.

In the laboratories in space which will follow the initial workshop, scheduled for launch in 1972, the effects of the space environment on men, animals, and plants will be studied. With increased knowledge of living systems we will be able to improve certain conditions on earth. The work of scientist-astronauts in conducting tests, making observations on man,

plants, and animals in situ, using microscopes and other scientific equipment and returning specimens to earth, will make enormous progress in the life sciences possible within minimum time periods.

Manned astronomical observations will begin in the Skylab workshop with the activation of the Apollo telescope mount. For the first time men will be able to explore the sun using sophisticated instruments from beyond the veil of the earth's atmosphere. In later space stations, we can expect to see a high energy cosmic ray and a high energy physics laboratory. Studying the cosmic rays for their own properties will tell us something about the nature and origin of the universe; such observations cannot be made from earth or even from high altitude balloons. Letting the rare but extremely high energy particles from the cosmic rays interact with chosen forms of matter, such as hydrogen, astronaut-physicists may test theories on the nature and properties of nuclei. Such a high energy physics laboratory, at a modest incremental cost to a space station, could accomplish studies impossible with the largest nuclear accelerators which may have been built on earth by that time—and perhaps even at a lower cost.

Another set of space laboratory studies which will demand the innovative and inventive powers of man will be research into the behavior of materials in the vacuum, sterility, and weightlessness of space. The production of a vacuum within our "ocean of air" resulted in the vacuum tube and the age of electronics. The possibility of escaping from our "ocean of gravity" may well open a whole new phase in our technical history.

The development of new materials has been basic to our industrial progress. Within the past 50 years advances made have resulted in new industries, new products, the development of backward areas, and to a large extent, our burgeoning economy which we enjoy today.

Therefore, experimental work designed to explore and to use a completely new set of physical circumstances can be expected to yield totally new results from relatively simple research. In the area of purification of materials, levitation casting has been effective on magnetic materials. In space nonmagnetic materials may be purified by a simple process. Molten metal, outside of a gravity field, should be subject to surface tension only and should take the shape of a perfect sphere. Therefore, small droplets of molten steel should form perfect ball bearings. In our mechanized society, perfect ball bearings, reducing friction to a minimum, would be revolutionary.

Large perfect crystals, essentials of the electronics industry, may very well be grown in space. The two conditions most often responsible for imperfections are convection currents and contamination from molds or supports. A facility in space where growing crystals can be floated free of all supports for hours or even days, should produce large perfect crystals. Large perfect mirrors and lenses might also be produced for use in space-based astronomical apparatus. The distribution of gas bubbles can be controlled in space, making theoretically possible the production of steel with the weight

of balsa wood. Very high strength materials with unique thermal characteristics may result from uniformly mixing ceramic crystals in a metal, not possible in earth's gravity.

When we realize that the production of even one new fundamental material might justify the cost of the entire space program, experimental work in this new environment seems to be a particularly good idea.

Wherever men go, they pay their way, from the depths of the oceans to the surface of the moon, and on into the solar system. Wherever intelligence is required, men must go. Even our largest and most sophisticated computers are only adding machines—designed by men, built by men, programmed by men, and interpreted by men. So far we have not been able to construct a substitute for him—on earth, in the sea—or in space.

#### KEY VIEW ON THE SPACE PROGRAM

Mr. Chairman, because of the importance of the bill before us today I have asked six key leaders of NASA to provide their views on the future of the space program. Their letters are as follows, Mr. Chairman:

NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION,  
Washington, D.C., April 21, 1970.

HON. OLIN E. TEAGUE,  
Chairman, Subcommittee on Manned Space  
Flight, Committee on Science and Astro-  
nautics, House of Representatives, Wash-  
ington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request that I describe the future of space flight as it appears to me. As you know, the new work I have recently undertaken on behalf of NASA's planning for the future is still in the preliminary stages. However, the President's Space Task Group (STG) has already outlined the basic aspects of our future in space. The STG's report points toward a broad-based program of exploration and applications, emphasizing value and dividends for the people of the nation. Additional planning and review, in which I have participated since the report of the STG, continues to confirm the validity and balance of the overall programs outlined by the STG.

In the next several years, the Skylab Program will be able to fulfill its objectives with a foundation for long-range returns from space. These returns will be in the form of increasing capability to use a platform in earth orbit as an experimental laboratory for scientific experiments and for applications work which will help us learn more about the resources and environment of our planet. Astronomers in the Skylab Workshop will use its solar telescope to learn more of the relationship of the earth to its power source, the sun.

Automated missions to learn more of the solar system are being refined so that as we learn more of our planet with the Skylab and advanced satellites we also will learn more about its relationships to the sun and neighboring planets. The flights we have planned for the seventies will send machines out to the planets on their fact-finding tours. I fully expect that man from planet earth will ultimately observe his sister planets first hand, building upon the knowledge we hope to gain in the next decade.

The lunar landing in 1969 climaxed a decade of development that saw this country move forward in launch vehicles, spacecraft, testing and operational facilities, and trained manpower as it developed a great space capability. In addition, the space program brought renewed strength in national leadership, in security, in education, and in science and

technology, and in the will of America to succeed. The temporary setback suffered in Apollo 13 should serve only to intensify that will as this country moves ahead with lunar exploration.

In the final analysis, the key to our future accomplishments in space will be our willingness to undertake the developments that will advance this nation to new plateaus of operational flexibility and will give us the technological advances needed to assure economical operations in space. No one would question the justification for a jet aircraft that can be flown over and over again instead of just once. With the space shuttle and the space station we will have the space age equivalent of the jet liner.

Many times in the past I have pointed out my views regarding our current achievements. Magnificent as they are, they must, in the long run be considered but a mere beginning in our conquest of space and our mastery of knowledge that will greatly enhance the lives of this and future generations of this planet. The international leadership of this country is linked with our space leadership as clearly demonstrated by the events of this past week and the all but unprecedented interest in Apollo 13 by men of good will from all nations. If this nation views what it has gained in space and considers what space activities can win for us in the future based upon normal technological growth, then that future will, I am convinced, exceed our most optimistic expectations of today.

You have shared my confidence in years past and you have supported the national space effort vigorously, for which we at NASA are most grateful. I am confident that in the future we will continue to justify your support of this nation's efforts to maintain leadership in space.

Sincerely yours,

WERNHER VON BRAUN,  
Deputy Associate Administrator.

NATIONAL AERONAUTICS AND SPACE  
ADMINISTRATION,  
Washington, D.C., April 22, 1970.

HON. OLIN E. TEAGUE,  
Chairman, Subcommittee on Manned Space  
Flight, Committee on Science and Astro-  
navitics, House of Representatives, Wash-  
ington, D.C.

DEAR MR. TEAGUE: I am pleased to respond to your request for my views on the future of this nation's manned space program.

First, I think it important to stress that the future as I see it will not be clouded by the difficulties encountered during the flight of Apollo 13. Much was learned from that flight, not the least being the flexibility of the lunar module and the magnificent abilities of flight crews and ground controllers. We also verified the effectiveness of the contingency planning for mission emergencies and anomalies. This long-term planning, in my judgment, saved Apollo 13.

I am confident that we will find the cause of the accident and that the result will be a better spacecraft. Dr. Paine has appointed a Review Board to investigate the incident and the Board can be expected to move ahead without delay. Since only one spacecraft subsystem is involved and volumes of data already are available for analysis, the Board and its supporting teams can go directly to the problem.

The objectives of the post-manned lunar landing period are, of necessity, somewhat different from the clearly defined national goal of the last decade. The objectives of the Apollo Program were those of a single major program which demanded the achievement of rapid technological progress in the new field of manned space flight. Today, as we move into the 1970's, we have in addition to the continued lunar science program of Apollo, multiple programs with emphasis on economy and additional uses of space

technology for the benefit of man. The realization of these objectives to achieve greater returns from space for the man in the street while increasing the economy of space operations certainly is a challenge to match that of the previous decade.

The Skylab Program, with its experimental space station, is a major step toward the use of space for the benefit of mankind. It will use modified Apollo hardware to provide the first opportunities for a laboratory environment to learn more of the earth's resources and the sun's energy.

The reusable space shuttle will offer many economies and benefits. It will be available for use by more than one agency or one program. Its development will stimulate both space and aeronautical technology. It will reduce the cost of payloads by allowing retrieval or repair of satellites in orbit and the transportation of cargo and passengers to and from orbit. It will have a quick response time and significant space rescue capability. Its design will provide for 100 or more flights without overhaul.

In earth orbit, a space station supplied by the reusable shuttle will provide additional economic gains and practical benefits. The space station will reduce operating costs by its long life and its flexibility, combining many operations such as research, applications, and support of space flight operations. It will be designed so people on board will be able to carry out their technical tasks without special flight training. The space station modules may be used in various earth orbits, and ultimately, in lunar orbit or on a planetary mission.

The operation of the space shuttle and the space station will permit a considerable expansion in the scope of space activities and a steady increase in the number of visitors into space. The expanded, more economical flight activities made possible by these advanced systems will conceivably open space to a broad range of public and private interests.

The future programs I have mentioned cannot be considered with an awareness of the management challenges involved. We must bring available technology to bear in an optimum manner as we develop new technology needed in the programs of the 1970's. We must use all resources wisely, including the intimate participation of our colleagues in the NASA Offices of Space Science and Applications, Advanced Research and Technology, and the cooperative support of the United States Air Force. We must manage prudently and effectively if the objectives of this decade are to be reached.

The Lunar Landing Program in moments of success and difficulty was made possible by a strong spirit and dedication that characterized the government, industry, and university teams. Today there is a need to maintain this same spirit and dedication as we focus on our new objectives in the Manned Space Flight Program of the future.

Sincerely,

DALE D. MYERS,  
Associate Administrator for Manned  
Space Flight.

NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION,  
MANNED SPACECRAFT CENTER,  
Houston, Tex., April 21, 1970.

HON. OLIN E. TEAGUE,  
House of Representatives,  
Washington, D.C.

DEAR MR. TEAGUE: I welcome the opportunity to respond to your query concerning the future course of the nation's space activities. This is a particularly significant time since we have just faced adversity during Apollo 13 and lead times are such that we need to move forward toward future hardware developments if we are to maintain rea-

sonable continuity to our manned space flight program.

It can be expected that the Apollo 13 incident will necessitate a reexamination of our plans. It may also provide the opportunity for some to suggest that we slow down, defer, or make major changes in our present and future plans. I am personally confident that the hardware failure encountered during Apollo 13 will be understood and that we will be able to make timely corrections. The failure encountered was most critical and the mission objectives had to be abandoned. However, it was encouraging that we did have the systems capability both in flight and on the ground combined with the teamwork between flight and ground personnel to safely return the crew after a major subsystem failure. I feel that we have put our best possible efforts into Apollo and that the basic system is sound. We cannot, however, expect to push back the space frontier without some difficulty. When the full report from Apollo 13 is in, I am confident that we will again be able to fly to the Moon successfully.

In evaluating the possible directions in the post-Apollo time period, I firmly believe that the reusable space shuttle and the large space station are vital elements which must be developed in our national program. We are presently completing the program definition phase on the space station and plan to complete a similar phase of study of the space shuttle over the next year. Our studies to date have given us confidence that both systems are technically feasible and our definition work planned over the next year should enable us to proceed with a decision on the hardware development phases of these systems. It now appears that the reusable earth-to-orbit shuttle is the keystone to our post-Apollo activities.

Developing these classes of hardware is, to my thinking, the next logical step in the evolution of our space-faring capability and would put us in a favorable position to maintain a viable forward thrust to our space activities. These systems will allow us to fulfill many of the national objectives outlined in the Space Task Group report and capitalize during the 70's on the foundation that has been developed during our first decade in space.

In conclusion, I would like to include a brief comment on funding rate and priorities. Certainly, the space program must be considered in context with our total list of national priorities and some time phasing of new hardware development will be required in order to meet reasonable budget constraints. The transportation system concept, having the earth-to-orbit shuttle as the key element, as outlined in the Task Group report does provide the building block approach that will allow proper funding distribution. I feel that we are at a critical milestone in space flight vehicle development and we must be willing to proceed with the identification of new vehicle systems if we are to maintain a viable space flight program.

Sincerely,

ROBERT R. GILRUTH,  
Director.

NATIONAL AERONAUTICS AND SPACE  
ADMINISTRATION, GEORGE C. MAR-  
SHALL SPACE FLIGHT CENTER,  
Huntsville, Ala., April 14, 1970.

HON. OLIN E. TEAGUE,  
House of Representatives,  
Washington, D.C.

DEAR MR. TEAGUE: As you know, Dr. von Braun and his associates at Marshall Space Flight Center have for some years been planning extensively for a post-Apollo Program. This planning included both novel launch vehicle transportation systems as well as manned and unmanned payloads. Particular attention was given to launch vehicle development and operational costs for delivering payloads into earth orbit since present

day methods seemed in the long run prohibitively expensive.

It became increasingly clear as we deepened the post-Apollo planning that we could no longer employ the high cost expendable launch vehicle transportation systems used for previous programs. Technical feasibility and economic studies conducted in industry and within the government (NASA and DOD) indicated that a low-cost, highly reusable transportation system was the most optimum means for transporting payloads and cargo from the earth to an earth orbit. We concluded that the answer to the high cost transportation problem was to develop a system which operates much like the cargo and passenger airlines, namely a Space Shuttle System.

Some of the main capabilities of such a system would be as follows:

1. Delivering payloads, propellants, equipment, etc. up to an earth orbit.
2. Supplying a space station and later on a space base with scientific equipment, life support, materials for maintenance, etc.
3. Shuttling scientists, astronauts and support personnel from earth to orbiting stations and back.
4. Providing possibilities for final checkout of payloads in orbit and minor maintenance and repair.
5. Taking expensive payloads down from orbit to laboratories on earth for repair, maintenance, modifications, etc. (reuseability of payloads).
6. Serving as a base for checkout and launching payloads and space craft into higher earth orbits and deep space (manned and unmanned planetary missions).

In summary, such a space shuttle system combines the advantages of manned operations with those of automatic satellites and spacecraft. It is my opinion that if space-flight is to continue to expand and to progress, the development of a transportation system with above capabilities and of low cost is mandatory.

The next logical step in bringing this planning to fruition should be an exhaustive study leading to a preliminary design of the Space Shuttle—this is what we call Phase B. We plan to award up to three Phase B contracts for both the Shuttle Vehicle System and the Shuttle Main Engine so that the more promising configurations may be examined in considerable depth. In these studies, we will harden the concepts, do additional economic analyses and cost trade-offs, test selected components and sub-systems, do wind tunnel testing of models, and provide a preliminary design for the more promising configurations. The results of these Phase B studies will provide us with much greater insight and confidence in our technical approach as well as in the development and operating cost and thus the economics of such a Space Shuttle System.

Upon completion of the Phase B studies, it is planned that we in NASA with the support of DOD make a comprehensive evaluation of the various configurations investigated for the purpose of selecting the most economical and technically feasible system. Such an evaluation will provide NASA with required information upon which to base their recommendations for proceeding into the development and operational phases of the program.

I consider the approval to proceed with the Phase B studies to be a most important and vital step in the definition of the Space Shuttle System. The failure to approve funds for this activity may well deprive the nation of important returns on the investment already made in space research.

Sincerely yours,

EBERHARD REES,  
Director.

ADDITIONAL REMARKS OF DR. KURT H. DEBUS IN RESPONSE TO QUESTIONS AT HEARINGS OF THE MANNED SPACE FLIGHT SUBCOMMITTEE HELD AT KENNEDY SPACE CENTER, APRIL 10, 1970

Mr. Chairman, for sake of clarity and completeness, I will include in this statement your questions followed by my responses. In view of your offer to revise and extend my remarks of April 10, I have included some thoughts not expressed at that time.

First question. Would you comment on the following statement? "NASA should defer large-scale expenditures on the Space Shuttle/Station until after necessary basic research can be accomplished on the many technical problems that may be resolved before hardware development can be undertaken effectively."

Response. Having observed technology development over many years and relating this experience to the Space Shuttle, I am convinced that hardware development can and should be undertaken as soon as adequate funding can be made available. Technology development is essential and should proceed on a broad front. Normally, its scope is determined principally by the interest of the original investigators and the monies available for certain investigations. However, in my considered opinion, it takes a specific and carefully formulated goal to focus technology development on those individual problems that must be resolved to support that specific goal. Additional studies leading to improved heat protection techniques is a typical example of an area requiring technology development in support of the Space Shuttle. There is no doubt that a great deal of basic research related to heat protection is now and will proceed on a very broad front. Such general research is essential; however, in order to develop heat protection that will be practical for a given configuration of a reusable shuttle, specific designs must be developed. As an illustration of how hardware and technology developments can proceed in parallel, I would like to note that the ultimate scheme of thermal protection is not a requirement for the first developmental flights. Currently available ablative thermal protection techniques could be used while the development of improved methods proceeded independently. An almost identical method of attack was used by this country during the course of its ICBM development program in the mid 50's.

The first step in the development of a shuttle must be the identification of the system criteria and related specifications. This step is being taken, specific designs are being examined, and, we are concurrently identifying areas where technology advances must be made. This orderly process with periodic reviews to insure the proper phasing of parallel hardware and technology development is, in my opinion, the most intelligent way to proceed at this time.

Second Question. Will you also comment on the following statement? "In addition, it would seem advisable that cost effectiveness studies be conducted comparing operation of the space shuttle with the continued use of existing expendable launch vehicles before sizable amounts of money are applied to the shuttle development project."

Response. Over the past twelve years, more than twenty studies have been made by NASA and DOD on the relative cost effectiveness of reusable versus expendable space transportation systems. These studies indicate a varying degree of cost effectiveness for a totally reusable system that is dependent on the use rate. A low use rate results in lost cost effectiveness, a high use rate results in good cost effectiveness and significant long term economies. Additional studies at this time will neither prove nor disprove conclusively the wisdom of proceeding now with the development of this

innovation. For the answer, we must examine and evaluate the past. We must ask ourselves the question, "Must the total use of an innovation be identified before proceeding with the development of that innovation?" In all recorded history innovations have been made without identifying all the uses and applications. You can almost start with the wheel . . . the telephone, the car, the airplane. All these resulted from our curiosity of the unknown, our instinctive need to understand our world, and the desire to contribute to a better way of life. Once in existence, the innovation is then used by society in ways that were never predicted or even predictable. When the airplane development was commenced, it was not done because there were large numbers of people waiting to be transported across the ocean in six hours. That utilization developed as the airplane developed and became a useful tool. The same is true for the telephone. The telephone was not created because people wanted to have a telephone. But, once it was there, it quickly became a necessity for our civilization and society. I firmly believe that once we have opened this new frontier to space and made its use economical, then many broad areas of application will appear that cannot now be forecast and, therefore, cannot be currently assessed.

In summary, Mr. Chairman, I am convinced that we should proceed now with the development of a fully reusable space shuttle. I acknowledge the possibility that the course and schedule of such a program may require modification, depending on the results of technology developments and the scope of identifiable uses. However, these possibilities should not prevent immediate initiation of this vitally important development.

WASHINGTON, D.C.,

April 15, 1970.

HON. OLIN E. TEAGUE,

Chairman, Subcommittee on Manned Space Flight, Committee on Science and Astronautics, House of Representatives, Washington, D.C.

DEAR MR. TEAGUE: I am pleased to respond to your request for my thoughts about the space program at this critical moment in the formulation of our future space efforts.

Now before the Congress is the proposal to proceed immediately with studies for the development of the space shuttle. These are the funds necessary to confirm previous studies which indicate the efficiencies we expect of this new low-cost space transportation system. It is my considered opinion that this single development is the key to all of our future space activity, both manned and unmanned. By drastically lowering all costs of operation in space, we can afford to move forward rapidly into this new territory for exploration and exploitation. Our studies already show that the shuttle will reduce costs by at least tenfold at the outset, and with the maturity of the space shuttle, by as much as twice that amount.

The characteristics of the space shuttle, as it is being designed, provide for economies in every aspect of space operations. Reusability is the primary factor. At least 100 round trips into space will replace the one-time use on a one-way trip of all present launch equipment. The ability of the space shuttle to return men, cargo, and equipment back to earth will significantly reduce the cost of all equipment. First, because the low transportation cost and the benign launch environment will permit us to use heavier off-the-shelf laboratory and production equipment. Secondly, with the space shuttle in operation, on-orbit maintenance can be supplemented by return of instruments to earth for repair. Another special capability of the space shuttle is its use for space rescue.

As we look to the future, it is possible that the most important role of the space shuttle will be in our national defense. There can be no doubt that the space shuttle is the key to control and utilization of outer space. That control may well be decisive in preventing future wars. In that regard, timing is of the essence. The lead time for carrying out the development and putting into operation a new concept of this magnitude is very long—seven to ten years. We know that this concept has been under study by many people in many countries for at least a decade. Now that the technology for building a space shuttle is available, we need to implement an orderly program—or we will again face the necessity of having to produce such equipment as a crash program at much greater expense. I believe that we, as a nation, cannot afford to delay an orderly development program, now! If we should fail to grasp the initiative, we risk being confronted with an alien space shuttle which will give its developer effective control of space.

In summary, the space shuttle will save billions of dollars in our space activity. It will provide a barrier to technological surprise. It will be an effective shield for our national security. I urge you and your Committee to support the development of the space shuttle.

Sincerely,

GEORGE E. MUELLER.

#### BENEFITS FROM SPACE PROGRAM

Mr. Chairman, I have entitled my remarks, "Dividends of Discovery" because I feel quite strongly that some of the troubles the space program has encountered—both in Congress and among the general public—can be attributable to a lack of knowledge of the enormous benefits the average civilian American is reaping—and will reap in the future—from the scientific advances which have made our adventures in space possible.

We have heard criticism of the space program—people, well-intentioned but ill-informed, declaring that we would be a lot better off spending our treasure on earthbound projects instead of squandering it among the stars.

To hear them talk one would think that the United States was spending all that money on the moon, instead of here on earth. But the money is being spent on earth—here in the United States—and it is creating hundreds of thousands of new jobs which would not have existed otherwise—and with its incessant demands for new manpower, it is creating vacancies—job openings—in tens of thousands of industrial operations outside the space industry.

Let me cite you a few figures: During fiscal 1969, NASA was doing business with 14,369 prime contractors, located in 1,882 different communities, scattered among all 50 of our States. During fiscal year 1969 these contractors and subcontractors shared \$3.07 billion of U.S. dollars. The effect on our economy has been incalculable. In these troubled times the space program has been an indispensable factor in the preservation of our prosperity.

Let me cite you another set of figures. We are all aware that most of our universities—even the most highly endowed ones—are in financial trouble. During the years 1959 through 1967, NASA spent \$2.07 billion on grants and research programs, carried out in 223 universities in all 50 of our States, as well as the District of Columbia. The programs involved

have not only added immeasurably to the scientific vigor and scope of the universities affected, but it has, in many cases, been able to alleviate some of their most pressing financial problems, also.

Very well, you might say, that is enough of generalities, let us get down to some specifics. What has the space program been doing for me lately? And personally?

How about the simple matter of survival? Our complex and wasteful life in the 20th century has been having the effect of changing and disturbing the natural balances of elements in the air we breathe. As we continue to pollute the atmosphere and to trouble it with unnatural disturbances, we are changing the amount of oxygen available to us. We could seriously deplete our oxygen supply—and our survival would be seriously threatened.

One spin-off of the space program is that it has given us the capability of anticipating such a change before it could happen, and it has given us the opportunity of remedying the situation—or adapting to it—before it is too late. I consider this a basic plus.

Our progress in space has also vastly increased our ability to locate major food supplies—both under the sea and on the land—which could be a vital survival factor in an overpopulated world. In the space program they have also developed scores of perfectly nutritious, perfectly sustaining synthetic foods which could eventually mean the difference between famine and survival in certain areas of the world. The food may not be as yet "finger lickin' good," but it is edible, and in times of starvation, all foods taste good.

This may sound like a remote benefit at the moment, but there are informed people who maintain that large areas of the earth's surface will be experiencing famine conditions within 10 years, unless we control our population explosion and improve the efficiency of our growing and harvesting of crops.

The space program has vastly increased our capability in weather forecasting. Already, the Tiros satellite program, in just 10 years, has been very successful in tracking—and giving advance warning of—typhoons and hurricanes, with an enormous resultant saving in lives, property, and crops.

When the equipment is available to implement the know-how of the meteorologists, we shall be able to predict accurately the weather over a 5-day span, at least, and probably up to 2 weeks.

Former President Lyndon B. Johnson once said that the ability to forecast the weather just 5 days in advance would result in an annual saving of \$2½ billion in agriculture: of \$45 million in the lumber industry; of \$100 million in the transportation industry; \$75 million in retail marketing, and untold millions in the recreation industry.

We have learned from our program in space that many phenomena on earth can be properly understood only from a great distance. This stretches all the way from the mapping of terrain to the discovery of natural resources.

A Gemini crew, for example, photographed 80 percent of the land area of

Peru in just 3 minutes. Much of the area photographed had never been properly or accurately mapped before. We are even certain, for the first time, of the actual shape of the earth on which we live, because of the success of our efforts in space.

Through space, we have been able to make enormous strides in such areas as detection of crops and forest disease; classification of vegetation; the measurement of water transpiration and the discovery of new sources, and the detection of insect migrations. We have been able to utilize infrared photography from space to locate fresh water escaping along our coastlines, a step which will help us to preserve what resources we have left to us.

We have taken almost for granted the progress in communications which have come to us through space. The enormous expertise which permitted television cameras, quite small in size, to transmit to the television sets of America pictures from the moon, has been reflected in many other ways, also.

We have grown almost blasé about satellite transmissions of television pictures—but this is a direct dividend directly attributable to space.

Perhaps the most immediate and identifiable dividends of space discovery can be found in the development of new products and materials. Space-proof materials, for instance, are being used in the development of practically indestructible refrigerators which will be almost impervious to outside temperatures. These materials, in a few years, will have an enormous effect on the development of air conditioning and heating systems in America's homes.

Stoves and other appliances will be better because of materials developed in the space program. Pots and pans right now are being coated with variations of the same material developed to protect spacecraft from the extreme heat of launching and reentry.

In the automobile industry, advances are already being made, and others are in the offing—particularly in the area of sealants and caulking materials.

There have been tremendous advances in the manufacture of new types of glass which will soon become commonplace in the average American kitchen.

Ever since Wally Schirra started taking over the Nation's railroads there has been a marked increase of interest in the development of space techniques within that industry. Railroad tank cars are now being produced from lightweight plastics developed for NASA for use in rockets. The cars weigh only half as much as the steel cars, and are at least as sturdy and durable.

I could go on indefinitely on the subject.

But, before completing my remarks, I want to touch upon some of the most obvious and significant developments in medical equipment and techniques which have been directly derived from the space program. For example:

Pressurized space suits have been adapted for use by victims of strokes, enabling them to become ambulatory, and thereby hastening their recovery.

The ultrafast dental drill with minute

ball bearings, which most modern dentists use today—and which has so significantly reduced the pain of dental work—is a direct result of the space program.

Supersensitive infrared detectors, developed in the space program, are already proving useful in the early discovery of cancer, and will prove even more useful in the future.

Hospitals are now beginning to use a new type of infrared switch which will allow an immobilized patient to turn lights on and off, to regulate his bed, or even to manipulate his wheelchair merely by a movement of his eyes.

Of course, these developments are still in their infancy—and I have merely scratched the surface in these remarks. One of the developments in the near future, I might say, is a human radar mechanism for the blind which will be powered by the wearer's own body.

And now—as an unexpected byproduct, there is at least a faint hope that moon dust could possibly be effective in combating cancer. If that ever proves even partially true, the entire cost of the exploration of space would be entirely justified.

But I have been talking almost entirely about the tangible, materialistic dividends of the space program. There are other dividends—spiritual, intellectual, psychological—which are even more valuable than those I have mentioned.

Historians have marveled at the enormous impact which the voyages of Columbus, Magellan, Vasco da Gama, and others had on the vision and the mentality of Renaissance Europe. Entire, brave new worlds were discovered—and as the geographic horizons lifted and extended themselves, the mental and spiritual horizons lifted and extended themselves also.

I feel very strongly that our program in space has done this for America.

In the immediate postwar years American industry had shown an alarming tendency to become complacent, self-satisfied—content with its own magnificent past performances and impervious to the attractions of future adventures.

The space program created a renaissance of its own in American industry. It has also stimulated the imagination of the average citizen in a way that nothing else in this century has done.

Among thoughtful people it has demolished the last vestiges of parochialism. It has made almost all of us citizens of the world, and, indeed, of the universe.

I have mentioned a few—a very few instances of what the space program has produced and will produce to make the daily life of the average man more comfortable, more satisfying.

But over and above all this, the program has stimulated industry's thinking. It has fired industry's imagination. As a result of the space program, dazzling new techniques have been introduced in almost every known field of human endeavor. Many of these techniques are only remotely connected with our efforts in space, but they have been directly or indirectly inspired by our achievements in this mighty program.

In many subtle, intangible ways the mental outlook of every American has been changed because of what we have done in space. Ever since the first man placed his foot on the moon, every American has viewed the world around him in a different way than he ever did before.

Within the next few decades the human race must face incredible challenges. It must meet those challenges successfully if it is to survive—let alone prosper.

Not only must we learn to live together in peace, we must learn to cleanse and preserve our environment; we must learn to feed and house countless billions of human beings; we must learn to conserve our human resources, through improved educational techniques on the one hand, and improved medical techniques on the other.

It is more than apparent now that a slavish adherence to the techniques and customs of the past will not do the job. We must pioneer in human engineering just as we have pioneered in science and astronautics.

Because of what we have done in the space program I feel confident that we in America shall be able to meet the staggering challenges of the future.

If it had not been for the space program, I feel that our chances of meeting those challenges would have been almost nonexistent.

In my opinion, our space program is just as important as that. Because of what it has produced for us—in materials, in techniques and in intellectual and spiritual stimulation—it literally holds the key to our survival in a world that is growing perilously small and perilously unproductive in the face of exploding populations.

Thank you very much.

Mr. AYRES. Mr. Chairman, did you perchance have an opportunity to view the moon last night? I did and what a beautiful sight. If you saw what I saw, if you could have seen the moon as I saw the moon, there would be no argument, no debate, in fact, not even mild discussion as to whether or not we should authorize the money asked for in the bill before this committee.

Mr. Chairman, ask yourself the question, or perhaps I should say questions, who made the moon? Who made the earth? Who discovered America? Why is there a United States? Why did Armstrong and Aldrin walk on the moon? Why did Lovell, Swigert, and Haise return to the good earth in 7 days without having walked on the moon? Mr. Chairman, why have I asked these six questions? Any one of the six can be answered if you have the answer to the first question "Who made the moon?". In my book—God did. Oh, I know in this modern age we talk about priorities and I know we all realize that it is perfectly safe to walk in space, but not on the streets of our Nation's Capital.

We are all aware that money is needed to break the pockets of poverty, but if we are realistic, poverty cannot disappear until people learn to earn. I ask you, Mr. Chairman, who is to decide what is to be first, second, third, fourth, fifth, or even

sixth or seventh priorities. I presume we would each have our own priority.

In 1492—the answer to the third question I previously asked is known to all—Christopher Columbus had to convince a lady with money to sponsor his voyage. Without that voyage who knows whether there would be a United States of America. I wonder what the Queen thought when an Italian merchant with vision, courage and conviction, said the world is not flat, the world is round, and if you give me the money to sail across this body of water I shall return and prove to you that the world is not flat. I can imagine the Queen looking into the heavens and asking Mr. Columbus, "If the world is not flat how can that moon in the heavens lighten all of Spain?". Yes, Christopher Columbus proved his point and that was less than 500 years ago.

We are living in an age that behooves all of us to do our best to make certain the future is not ignored. In October of 1957, I was in Rome, Italy, when the Russians launched Sputnik. For a few hours I was an embarrassed American, all I heard was "Oh, your country is big, your country is powerful, your country is rich, but the Russians did it—not you." I called a small press conference and invited my foreign friends. I predicted that my country, the United States of America, would in the near future not only have a Sputnik in the heavens but a man would circle the earth space. I was thrilled on May 5, 1961, when Comdr. Alan Sheppard—a gentleman I had become acquainted with in the 1950's when he was working on Capitol Hill as a Navy liaison officer—tested the heat shield. A brave man—he could have died. Then in 1962, when a native of my State, not where I was born, but where I reside and have had the privilege of representing the 14th District of Ohio for nearly 20 years, made my prediction of 1957 come true. Yes, another great Ohioan, Neil Armstrong, was the first man to set foot on the moon. His words as his foot touched the moon were echoed around the world "One small step for man, one giant leap for mankind" and with those words America's faltering prestige rose to the greatest heights ever known to our country, and the free world breathed a sigh of relief. "America can do it," were the quiet thoughts in all of their hearts. Now just last Friday, April 17, three brave men who had hoped to repeat and go a little farther than did Apollo 12. No obstacle is so great that dedicated, God-fearing, brave men, coupled with Yankee know-how, cannot overcome.

Yes, Mr. Chairman, less than 200 years after 1492, brave men decided America would be the land of the free and the home of the brave.

Apollo 14 must go forward and in my heart I cannot help but feel that the man above the moon will look down on those astronauts on the moon and say "Well done thou good and faithful men, return to earth and tell the story as Columbus did to the Queen who sponsored him."

Mr. Chairman, I suggest in spite of all the political pressures, in spite of all the elections that Members are faced

with, that we be brave and vote for the bill pending before this committee. This is not the time to cut—this is not the time to gut. This is a time to have faith—this is a time to display courage—which is always the master of fear.

Mr. OTTINGER. Mr. Chairman, today we are deliberating a bill which closely follows the dramatic recovery of the Apollo 13 astronauts and their disabled spacecraft. Much is being and will be said publicly about the direction our effort in space should take now that we have demonstrated our capabilities, and properly so.

We have achieved our breakthrough. We have proven what we can do. Our leadership in space is a tribute to our know-how, our industry, our technological genius, and our unbeatable ability to accomplish monumental tasks when we set our minds to them and pull together with a common national will. And we will not halt our exploration of the heavens, nor will we surrender the scientific achievements that have resulted from the public investment in NASA.

But it appears self-evident to me that the time is long overdue to take pause and place our entire space effort into perspective.

Now that we have our lunar rocks from the surface of the moon, we must look around us and take a searching look at the prospect here on the surface of our earth, the planet which looks so welcome to those voyagers returning from outer space. We find our cities steadily decaying, our urban centers becoming blighted no-man's terrain. We find polluted rivers, smogged skies, the earth fouled, and even greater encroachment on the green space so necessary to our physiological and spiritual survival. We find our roadways festooned with trash, our streets littered with drug addicts dying and dead of overdoses. We have a massive outburst of violence, a spiralling crime rate, and finally we must come to realize that what we are witnessing is no less than the rending of the social fabric which gives meaning and purpose to our individual lives and without which the journeys into space lose their grander definition.

Mr. Chairman, if we want our astronauts to be assured that there will be a livable planet for them to return to after some future prolonged mission in space, we had better wake up now and take the desperately needed measures becoming increasingly crucial for our very survival. The Nation beyond the city limits of the District of Columbia is trying to tell us something, and those of us who are listening take these warning signals to be a mass plea for a redirection of the energies of our people.

Mr. Chairman, we can well afford at this time to curtail the manned exploration of space in favor of the more productive—from a scientific viewpoint—unmanned probes, which are infinitely less expensive and do not involve the risk to human life the Nation so breathlessly witnessed last week.

The NASA authorization before us today came up from the White House with

a \$3.3 billion price tag, Mr. Chairman, and I can only view with dismay the \$300 million increase added to the request by the Science and Astronautics Committee. Instead of pruning excess fat off this authorization, the committee has reported out a \$3.6 billion heavyweight.

Mr. Speaker, I submit that this is motion in the wrong direction. With 30 million poor people in our populace, with widespread hunger and inadequate medical care, rising unemployment, and proliferating urban blight, we are obligated to reduce our space effort to dimensions more consistent with other aspects of our national life demanding attention. First to be deferred should be the space shuttle/station for which the administration requested an outlay of \$110 million and which the committee increased by \$80 million for 1971. This is a project that is going to run into astronomical expenses in the coming decade, with estimates ranging as high as \$40 billion. It is simply not the appropriate time to undertake such expensive hardware development when we have not yet applied ingenuity to such problems as the mass production of inexpensive housing.

I find it unbelievable, Mr. Chairman, that the budget request for earth orbital manned space flight for 1971 is \$490 million and for lunar exploration \$947 million, at the same time that the estimated net budget outlay of Federal funds for all housing programs in the same fiscal year is only \$732 million. The perfection of manned space vehicles must not, cannot, be given higher priority than the provision of adequate shelter for all Americans. With an agreed-upon goal of 26 million new housing units over the next 10 years, the administration found room in its budget for Federal assistance for completion of only 989,000 units of new or rehabilitated housing for occupancy in 1971, and of these, only 418,000 are to be subsidized for low- and moderate-income families.

Mr. Chairman, it is past due time to explore the possibilities of life on earth. The crime-breeding ghetto must be eradicated, the shacks of the rural poor must be immediately replaced. What national pride can we take in viewing the lunar terrain when the view at eye-level is cause for disgrace? Not only is there no commitment here to reach for the minimum number of new or improved housing units needed in this decade, but we are sliding backward as our population growth continues apace. True, the NASA authorization is a decrease from fiscal 1970's outlays, and I welcome the trend, but we must go further. Boldness is called for on terra firma to match that in outer space, and it is up to us to exhibit that quality here and now.

Compare further—\$3.6 billion to explore the heavens and \$104 million to clean up the air we breathe. By any measure the same picture emerges in clear focus. It is simply incredible that those of us who are well-fed and well-housed cannot see where we as a nation are headed. Are we to concur in the indifferent attitude of those who declare that when you have seen one ghetto, you have seen them all, or are we to put our re-

sources to work for survival here on spaceship earth?

This authorization must be cut, Mr. Chairman. We can trim manned space flight off the budget this year, and continue the training of our astronauts in our elaborate ground facilities while continuing the exploration of space with unmanned vehicles. I am convinced that the American people will stand firmly behind us if we take the reins now and announce a crash program to rebuild our society. We do not have the luxury of time to procrastinate at this critical juncture, and the quality of life for generations to come is in the balance. Not next year—now.

Mr. COHELAN. Mr. Chairman, while I shall vote for the NASA authorization bill this afternoon, I want to make my position very clear on the matter of funding for our space program. I feel the amounts contained in this authorization bill are beyond the needs of an effective and rationally funded operation. For that reason I also supported the Karth amendment which would have cut what I consider to be unnecessary funding from this bill.

I am reserving final judgment on this measure pending presentation of the conference report. If I feel at that time that the bill has been scaled down to acceptable proportions I will gladly support the conference report. If however, the final version still contains excessive funds I will be forced to oppose acceptance of this report. I will also reserve these same options when Congress considers the NASA appropriations bill.

I want it understood that I support continued development of our space program. But, this program must be kept in perspective. We must look to our total package of national priorities in order to make constructive spending decisions.

Mr. HORTON. Mr. Chairman, I strongly support the space program and the National Aeronautics and Space Administration authorization bill which we passed.

Through the NASA program, Americans have faced the challenge of forging ahead in lunar exploration, in satellite communications, in navigation, medical research and practical benefits to mankind. We have renewed our faith in man's capability to conquer the elements.

In March of this year, I visited Cape Kennedy with the United States-Canadian Interparliamentary group. I was surprised that Cape Kennedy was almost a ghost town, with many of its facilities shut down.

I am well aware that we have other priorities, but I see the NASA program as a continuing and important part of our national commitment. I feel it is important to realize we need a strong foundation in our space program. The technical knowledge we gain from our space efforts is applicable to our domestic problems and our industrial growth.

The triumph of the human spirit and competence in the recent safe return of Apollo 13 has no equal as an example of the energy and determination of the American nation. We began as pioneers,

and must continue to pioneer new frontiers for mankind.

Some Americans feel that the space program climaxed with the first moon landing of Apollo 11. But to abandon this effort at its beginning stage would waste billions of dollars we have invested in this exciting new generation of technology. Not all of the goals of this program are as spectacular as the moon landing—but they are just as essential if this is to be a worthwhile effort.

The space program emphasizes several objectives: to preserve the leadership of U.S. technology, engineering, and science; to provide maximum economy and efficiency in all space programs; to broaden the contribution of technical research to the U.S. economy, and to develop practical, usable benefits.

Mr. Chairman, I continue to take pride in the advances of our space program, and the new spirit it infuses in our American life.

Mr. FULTON of Pennsylvania. Mr. Chairman, I have no further requests for time.

Mr. MILLER of California. Mr. Chairman, I have no further requests for time. I ask that the bill be read.

Mr. GROSS. Mr. Chairman, I make the point of order that a quorum is not present.

The CHAIRMAN. The Chair will count. Evidently a quorum is not present. The Clerk will call the roll.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 88]

Adair	Fraser	Patman
Alexander	Fulton, Tenn.	Pepper
Anderson,	Gettys	Powell
Tenn.	Gialmo	Rees
Ashbrook	Gibbons	Reid, N.Y.
Ashley	Gilbert	Reifel
Ayres	Green, Oreg.	Rhodes
Baring	Green, Pa.	Rivers
Barrett	Griffin	Roberts
Brooks	Griffiths	Roe
Brotzman	Gubser	Rogers, Colo.
Brown, Calif.	Hagan	Rosenthal
Brown, Mich.	Harvey	Royal
Brown, Ohio	Hébert	Scherle
Bush	Hollfield	Scheuer
Byrnes, Wis.	Jacobs	Schneebeli
Cabell	Johnson, Calif.	Sebelius
Carey	Kastenmeier	Slack
Celler	Kirwan	Smith, Calif.
Clark	Kuykendall	Smith, N.Y.
Clay	Kyl	Snyder
Conyers	Landrum	Stanton
Corbett	Leggett	Stephens
Cowger	Lennon	Stokes
Crane	Long, La.	Stratton
Dawson	Lowenstein	Stuckey
Dellenback	Lukens	Sullivan
Dickinson	McCarthy	Taft
Diggs	Madden	Teague, Calif.
Dingell	Meskill	Tunney
Dorn	Mikva	Udall
Eckhardt	Mink	Vanik
Edwards, Calif.	Mollohan	Waldie
Edwards, La.	Moorhead	Watkins
Esch	Moss	Watson
Feighan	Murphy, N.Y.	White
Flynt	Nedzi	Wilson,
Ford,	Nichols	Charles H.
William D.	O'Neal, Ga.	wright
Foreman	Ottinger	Young

Accordingly the Committee rose; and the Speaker having resumed the Chair, Mr. ROONEY of New York, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill H.R. 16516, and finding itself without a quorum, he had directed the roll to be called, when 313

Members responded to their names, a quorum, and he submitted herewith the names of the absentees to be spread upon the Journal.

The Committee resumed its sitting.

The CHAIRMAN. The Clerk will read.

The Clerk read as follows:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby authorized to be appropriated to the National Aeronautics and Space Administration:*

(a) For "Research and development," for the following programs:

- (1) Apollo, \$1,101,500,000;
- (2) Space flight operations, \$670,200,000;
- (3) Advanced missions, \$1,000,000;
- (4) Physics and astronomy, \$110,400,000;
- (5) Lunar and planetary exploration, \$144,900,000;
- (6) Bioscience, \$12,900,000;
- (7) Space applications, \$172,600,000;
- (8) Launch vehicle procurement, \$124,900,000;
- (9) Space vehicle systems, \$30,000,000;
- (10) Electronics systems, \$23,900,000;
- (11) Human factor systems, \$18,300,000;
- (12) Basic research, \$18,000,000;
- (13) Space power and electric propulsion systems, \$30,900,000;
- (14) Nuclear rockets, \$38,000,000;
- (15) Chemical propulsion, \$20,300,000;
- (16) Aeronautical vehicles, \$87,100,000;
- (17) Tracking and data acquisition; \$293,800,000;
- (18) Technology utilization, \$4,500,000.

(b) For "Construction of facilities," including land acquisitions, as follows:

- (1) Ames Research Center, Moffett Field, California, \$1,525,000;
- (2) Goddard Space Flight Center, Greenbelt, Maryland, \$2,050,000;
- (3) Jet Propulsion Laboratory, Pasadena, California, \$1,950,000;
- (4) John F. Kennedy Space Center, NASA, Kennedy Space Center, Florida, \$575,000;
- (5) Manned Spacecraft Center, Houston, Texas, \$900,000;
- (6) Marshall Space Flight Center, Huntsville, Alabama, \$525,000;
- (7) Nuclear Rocket Development Station, Nevada, \$3,500,000;
- (8) Various locations, \$17,950,000;
- (9) Facility planning and design not otherwise provided for, \$5,000,000.

(c) For "Research and program management," \$693,700,000.

(d) Appropriations for "Research and development" may be used (1) for any items of a capital nature (other than acquisition of land) which may be required for the performance of research and development contracts, and (2) for grants to nonprofit institutions of higher education, or to nonprofit organizations whose primary purpose is the conduct of scientific research, for purchase or construction of additional research facilities; and title to such facilities shall be vested in the United States unless the Administrator determines that the national program of aeronautical and space activities will best be served by vesting title in any such grantee institution or organization. Each such grant shall be made under such conditions as the Administrator shall determine to be required to insure that the United States will receive therefrom benefit adequate to justify the making of that grant. None of the funds appropriated for "Research and development" pursuant to this Act may be used for construction of any major facility, the estimated cost of which, including collateral equipment, exceeds \$250,000, unless the Administrator or his designee has notified the Speaker of the House of Representatives and the President of the Senate and the Committee on Science and Astronautics of the House of Representatives and the Committee on Aeronautical

and Space Sciences of the Senate of the nature, location, and estimated cost of such facility.

(e) When so specified in an appropriation Act, (1) any amount appropriated for "Research and development" or for "Construction of facilities" may remain available without fiscal year limitation, and (2) maintenance and operation of facilities, and support services contracts may be entered into under the "Research and program management" appropriation for periods not in excess of twelve months beginning at any time during the fiscal year.

(f) Appropriations made pursuant to subsection 1(c) may be used, but not to exceed \$35,000, for scientific consultations or extraordinary expenses upon the approval or authority of the Administrator and his determination shall be final and conclusive upon the accounting officers of the Government.

(g) No part of the funds appropriated pursuant to subsection 1(c) for maintenance, repairs, alterations, and minor construction shall be used for the construction of any new facility the estimated cost of which, including collateral equipment, exceeds \$100,000.

(h) No part of the funds appropriated pursuant to subsection (a) of this section may be used for grants to any nonprofit institution of higher learning unless the Administrator or his designee determines at the time of the grant that recruiting personnel of any of the Armed Forces of the United States are not being barred from the premises or property of such institution except that this subsection shall not apply if the Administrator or his designee determines that the grant is a continuation or renewal of a previous grant to such institution which is likely to make a significant contribution to the aeronautical and space activities of the United States. The Secretary of Defense shall furnish to the Administrator or his designee within sixty days after the date of enactment of this Act and each January 30 and June 30 thereafter the names of any nonprofit institutions of higher learning which the Secretary of Defense determines on the date of each such report are barring such recruiting personnel from premises or property of any such institution.

Mr. GROSS (during the reading). Mr. Chairman, I ask unanimous consent that the first section be considered as read, printed in the RECORD, and open to amendment at any point.

The CHAIRMAN. Is there objection to the request of the gentleman from Iowa?

There was no objection.

AMENDMENT OFFERED BY MR. KARTH

Mr. KARTH. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. KARTH:

Page 1, line 7, strike "\$1,101,500,000" and insert in lieu thereof "\$1,051,500,000" and on page 2, line 1, strike "\$670,200,000" and insert in lieu thereof "\$480,200,000".

(By unanimous consent, Mr. KARTH was allowed to proceed for an additional 5 minutes.)

The CHAIRMAN. The gentleman from Minnesota is recognized for 10 minutes.

Mr. KARTH. Mr. Chairman, first of all, let me say that I have the greatest high regard for the gentleman from Texas, Mr. TEAGUE, chairman of the Manned Space Flight Subcommittee, and also for the committee, because I know beyond any question of doubt whatso-

ever, that the subcommittee is an extremely hard working committee, and that never has been in question.

The thing that is in question is the amount of money and the speed by which we proceed into a new multibillion-dollar manned space flight effort. In that regard I suppose my position is probably closer to the position of the total scientific community, certainly in terms of total dollar amounts it is closer to the administration's position, and in total dollar amounts I guess I could honestly say it is even closer to the agency's position.

Mr. Chairman, very simply, the amendment specifically reduces the line item in space flight operations referred to as the space shuttle station by \$190 million, and reduces the level of the effort of \$100 million that was added by the committee to \$50 million.

I suppose I should begin by telling you a little about what the space shuttle station program really is. It is a manned space flight concept involving a reusable launch vehicle that will go from earth to a suborbit, and a second stage that rides piggyback on this first stage will go from there to orbit, and both of them, theoretically, will return to earth like an aerodynamically designed aircraft would land.

The space station—and I want you to understand the shuttle station is one program—the space station is a station that would accommodate from 50 to 100 men in earth orbit and is part of the multibillion-dollar new start that I address myself to at this point.

First of all, I want to make perfectly clear that my amendment does not eliminate all funds, and therefore does not cancel out the space shuttle and space station program. It merely reduces it, and if my amendment carries, there is still another \$60 to \$80 million in this program in the Office of Advanced Research and Technology portion of the budget for this purpose.

Then there is another \$40 million for the nuclear propulsion module which I am not touching, but which is a program that is associated with and I might even say an integral part of, the space shuttle station program, and that brings the amount of money for this particular level of effort to between \$100 million and \$120 million. So all my amendment does, Mr. Chairman, is say: Let us not rush into this new multimillion-dollar program, let us not have design definition and let us not answer the question about what kind of space shuttle station we will have before we begin to design anything.

Mr. Chairman, \$80 million is for study and research, and incidentally during this fiscal year we will have spent \$24 million on study and research—and it is almost more study and more research than all the laboratories in this country can effectively and intelligently spend in 1 year on one program.

I asked a very able and distinguished Air Force general, whom I consider to be a friend of mine, if he could intelligently spend on research and study \$80 million in 1 year on a new project, and he said he probably could if he had to, but he really did not know how. I asked him

whether or not he could spend \$270 million in 1 year on a new project for study and research, and he said it was impossible. That is how much money is in this bill for the space shuttle station program.

Why do I say we should slow it down? For two reasons. First, we do not know what kind of system we are going to use. We do not know at this point in time whether or not we are going to involve ourselves with, or use the concept, of a completely reusable shuttle or whether we are going to have the first stage as a throwaway booster for the shuttle. Second, this in my judgment at least—and there is a great deal of evidence to support the theory—is the beginning of a manned Mars landing program. That national policy determination, Mr. Chairman, has not been made. This decision as to whether or not we embark upon a \$50 billion to a \$100 billion manned space flight landing program to Mars, is something I think we ought to debate loud and clear.

I understand that the American taxpayer probably would not agree with the start of this kind of program without knowing fully what kind of commitment is being made in his behalf and what kind of tax dollars for the future we are calling upon him to pay.

The space shuttle station in my judgment is a start, I think an essential start to the manned Mars landing program. I think it is the first step, because without the space shuttle and without the 100 man space station to assemble the various spacecraft and other paraphernalia to get them to Mars and to the huge space station, no Mars program is possible, and I defy anyone to dispute that.

Without this goal of man to Mars in the 1980's there is really no need to rush the program. All I am saying is we should slow it down. If we think there is among the experts no evidence of disagreement, or no evidence to substantiate that there is disagreement, let me refer to an article recently reported in the *Aviation Week & Space Technology* issue dated April 13, 1970. There is a headline entitled "NASA Divided Over Space Shuttle." It is a two-page article. I commend it to the Members, and I think they ought to read it.

The fact of the matter is, perhaps the best known and qualified rocketeer of them all is in disagreement with the space task group on which direction we ought to travel or what course we ought to pursue, in the design and development of the space shuttle station.

Mr. CASEY. Mr. Chairman, will the gentleman yield?

Mr. KARTH. I yield to the gentleman from Texas.

Mr. CASEY. Mr. Chairman, I am trying to follow the argument of the gentleman. I have read his remarks in the back of the report. Does the gentleman's amendment reduce the level below the budget request?

Mr. KARTH. My amendment for the Apollo program would remove \$50 million of the \$100 million that was added in committee, so as a result of that it would still be \$50 million above the budget request, or the administration request.

Mr. CASEY. How about the other?

Mr. KARTH. The space shuttle station program is one for which \$80 million was added by the committee. There is \$110 million in the line item, and from \$60 million to \$80 million in another portion of the budget for its study and its research. I would take \$190 million of that \$270 million out.

Mr. CASEY. Is this below the budget request?

Mr. KARTH. In this particular instance, for this particular program, it would be below the budget request, yes; in fact, some \$30 million.

Mr. CASEY. I have always recognized the gentleman in the well as a really staunch supporter of the space program. I hope he is not playing into the hands of someone in the Republican administration, who might say that the Democrats are cutting the space program.

Mr. KARTH. I assure the gentleman from Texas that is not the case. There is still some \$60 million to \$80 million in the budget. I say \$60 million to \$80 million, because that is what NASA said. When I asked the question as to whether or not there were other funds in the space shuttle station program, other than those which appeared on line 2 of the budget, the answer was, "Yes, from \$60 million to \$80 million." I do not know whether it is \$60 million or \$80 million. I would guess \$80 million.

The CHAIRMAN. The time of the gentleman from Minnesota has expired.

Mr. MOSHER. Mr. Chairman, I move to strike the requisite number of words.

Mr. Chairman, I should like to yield most of my time to the gentleman in the well (Mr. KARTH), but first I want to say that I wholeheartedly support the gentleman's amendments, for the reasons I stated earlier in general debate.

To recapitulate, I merely wish to point out to the Members that the bill as it stands before us would authorize some \$300 million for the manned space program over and above the request of the Nixon administration.

I believe the budget request as given us by the administration was a sound request. It is a fairly lean budget. I believe this is a time for a lean budget. This is a moment of transition, having completed the program of the 1960's and looking into the 1970's. I believe this is a good time to go slow, to take pause, and to reconsider.

Especially I believe it is not the right time to make a new start in a tremendous shuttle program without answering first some of the questions the gentleman from Minnesota (Mr. KARTH) is raising. Therefore, I do support his amendments, which would reduce by \$240 million the \$300 million added by the committee, above the budget request. It would not reduce the figure as much as I would like, but at least he is going about it in a very sensible way.

Mr. KARTH. Mr. Chairman, will the gentleman yield?

Mr. MOSHER. I yield to the gentleman from Minnesota.

Mr. KARTH. Mr. Chairman, let me say that there is not anywhere near unanimity of opinion within the space agency itself as to whether or not we

ought to proceed with the space station shuttle program at this level of effort this year. There is a great deal of difference of opinion. There is even a great deal of difference of opinion within industry itself. Certainly most of the scientific community support the position that we ought not embark upon such an extravagant effort at this time in a new program area.

Mr. SCHWENGEL. Mr. Chairman, will the gentleman yield?

Mr. MOSHER. I yield briefly to the gentleman from Iowa.

Mr. SCHWENGEL. I have followed very intently the proposition of the gentleman from Minnesota and his argument.

The CHAIRMAN. The gentleman from Ohio (Mr. MOSHER) has the time.

Mr. MOSHER. Mr. Chairman, I yielded briefly although I want to give as much time as possible to the gentleman from Minnesota.

Mr. SCHWENGEL. I just want to take a moment to point out that the scientists are indeed in disagreement. Van Allen has recently published an article which appeared in a daily paper indicating that probably we ought to have second thoughts on this and withhold on the manned space program until we find out more about the information we already have.

So I support the gentleman's position.

Mr. MOSHER. I thank the gentleman for his support of the amendments.

Mr. DAVIS of Georgia. Mr. Chairman, will the gentleman yield to me with the consent of the gentleman from Minnesota?

Mr. MOSHER. Does the gentleman from Minnesota consent to that?

Mr. KARTH. Yes, I do.

Mr. MOSHER. I yield to the gentleman from Georgia.

Mr. DAVIS of Georgia. Mr. Chairman, I merely want to associate myself with the remarks of the gentleman from Minnesota (Mr. KARTH), and also the gentleman from Ohio (Mr. MOSHER), and I urge that this amendment be adopted.

Mr. MOSHER. Mr. Chairman, I yield further to the gentleman from Minnesota.

Mr. KARTH. Mr. Chairman, we never have enough time on these very important matters, but let me try to conclude by saying that this reusable shuttle and space station is probably the most sophisticated combination of aerodynamics and ballistics ever undertaken in the history of our space program. I have already explained how it is proposed to operate, but let me tell you that we are involving ourselves in a program that in turn demands terribly high specific impulses never before achieved in a hydrogen-oxygen engine which is essential to this program. We are involved in reentry, cryogenics, and combinations never before attempted, and they are a must for this program. We are involved in new structures and materials and propulsion agents, aerodynamics and electronic controls, because they are all a part of this program. The only thing I am saying is, indeed, it is chal-

lenging—and some day we may want to do it as a nation and as a national priority item—but let us now take it slow and easy and not waste millions of tax dollars traveling in one direction and find out later on that we have traveled down the wrong technological road, forced to retrace our steps and for all practical purposes discard the designs we made and start a new course with the taxpayer picking up the bill.

Mr. FUQUA. Mr. Chairman, I rise in opposition to the amendment.

(Mr. FUQUA asked and was given permission to revise and extend his remarks.)

Mr. FUQUA. Mr. Chairman, it is with great reluctance that I rise in opposition to the amendment offered by my good friend from Minnesota (Mr. KARTH).

I have served on the Manned Space Flight Subcommittee for 8 years now. During that time under the able chairmanship of the gentleman from Texas, this subcommittee traveled all over the United States in reviewing and trying to familiarize ourselves with and bring ourselves up to date on this program and particularly the space shuttle program. Only this past year we traveled to the west coast and visited with all the manufacturing companies in the aerospace industry. We received their views as to what level we should proceed. We visited all of the NASA centers relating to manned space flight. This subcommittee was very wise, I believe, when it unanimously—and again I say the subcommittee unanimously—approved the addition of these funds for the space shuttle and space station.

NASA requested \$268 million from the Bureau of the Budget. That figure was reduced to \$110 million. We added \$50 million for the space shuttle and \$30 million for the space station work. We still have a great deal of work to do. If we proceed with the moneys that have been provided today, it would still be the year 1977 or 1978 at the earliest before they would become operational and effective. There is nothing in this and no decision has been made to make a manned trip to Mars. NASA would have to come back to this Congress for the approval of those funds. Again I say there is no money in here for a manned trip to Mars. I have second thoughts about that with the technology we have now.

Mr. KARTH. Mr. Chairman, will the gentleman yield?

Mr. FUQUA. Let me conclude my remarks and then I shall be happy to yield to the gentleman from Minnesota.

Mr. Chairman, we must proceed with the design of the vehicle and the facilities and find out what we need in this program. This is not a development program.

I might point out that there was testimony in the committee provided by Dr. George Low that over \$30 million to \$40 million in this program for which we are asking is already underway and only \$8 million of this would be added—would be for direct research in the space shuttle program.

Mr. Chairman, there is much work

that could be done at the present time. This is not a development program. There is not 1 cent in here for hardware and other items for flight operational vehicles. It has been mentioned already that we have a space team together and that we cannot disseminate that team. We need to keep it together. For the best expertise we have been able to develop this would provide for an orderly and efficient program of development.

We cannot start out suddenly and then say next year because maybe some other country might develop a space shuttle program, we cannot get into it in a very fast manner. This is not a crash program. I think as we go down the line we will find that this program has a great deal of benefits to the national security of this country. It has a great deal of benefits for future commercial development. It has been referred to as being probably the DC-3 of the future. I think this is true. I think in many years to come it will have a tremendous commercial benefit as well as peaceful benefits in space.

Mr. KARTH. Mr. Chairman, will the gentleman yield?

Mr. FUQUA. I am happy to yield to the gentleman from Minnesota.

Mr. KARTH. I just wanted to challenge the gentleman insofar as his suggestion that this is not a crash program.

I am honestly and sincerely convinced that one cannot spend \$270 million in 1 year to study and to research one single program. There is a lot of design definition in this package for the governing of the shuttle space station. It just cannot be any other way. And, insofar as my point is concerned about this being the start of the manned Mars program, I would only refer the gentleman to an answer in response to a question which I raised during the course of our hearings this year about NASA's plans for the 1970's—it happens to be in the hearings—and the answer was that as soon as this program has been developed NASA plans to spend \$100 million in fiscal year 1977 for a manned Mars exploration program, \$300 million in fiscal year 1978 for a manned Mars exploration program and \$1 billion in fiscal year 1979 for that program. That is why I say it is the beginning of the manned Mars landing program.

The CHAIRMAN. The time of the gentleman from Florida has expired.

(By unanimous consent, Mr. FUQUA was allowed to proceed for 3 additional minutes.)

Mr. TEAGUE of Texas. Mr. Chairman, will the gentleman yield?

Mr. FUQUA. I am happy to yield to the distinguished chairman of the subcommittee.

Mr. TEAGUE of Texas. Regardless of what the gentleman from Minnesota says, the truth of the matter is that a panel made up of the Vice President, Mr. AGNEW; Mr. Seamans, Secretary of the Air Force; and Dr. Paine recommended more money than we have in this bill.

Mr. FUQUA. I might also point out—and then I shall be happy to yield to my colleague from Florida (Mr. FREY)—the gentleman is talking about the future

plans that NASA may have in the years 1977 and 1978. We are considering here the fiscal year 1971 budget and not the fiscal year 1977 budget.

Mr. KARTH. Mr. Chairman, if the gentleman will yield further, the gentleman did not really understand my argument. My argument is that we cannot properly begin a manned Mars program until after the shuttle station, 100-man station, has been developed, and their program shows precisely that is what they plan to do.

Mr. FUQUA. No decision has been made by Congress or this committee to proceed with a manned Mars landing program and I do not believe we can until we have more and further development. This was pointed out, as the gentleman from Texas pointed out, is what the space task force group recommends.

Mr. KARTH. I appreciate what the gentleman says. He is absolutely correct. This Congress has not made that national policy determination. I resent the agency coming in the back door and making it possible by suggesting this kind of a plan but at the time saying this is not the beginning of the manned Mars program, because in my judgment the evidence proves that it is.

Mr. FUQUA. I must respectfully disagree with my good friend, the gentleman from Minnesota, because I think that before any decision of that magnitude is made this Congress must make that decision.

Mr. FREY. Mr. Chairman, would the gentleman yield?

Mr. FUQUA. I yield to the gentleman from Florida.

Mr. FREY. Mr. Chairman, I thank the gentleman for yielding. I would ask the gentleman from Florida (Mr. FUQUA) if it is not true that part of the money that we are talking about for the purpose of advanced missions research, according to the testimony, much of this was under way and ahead of time anyway, and according to the testimony only \$8 million in one section of this is going directly to the shuttle as a result of the program?

Mr. FUQUA. Only \$8 million.

Mr. FREY. And much of the other money was being spent in other things that not only applied to the space shuttle, but to the space program, so when we talk about \$80 million, it is not the correct way to describe it.

Mr. ROUDEBUSH. Mr. Chairman, will the gentleman yield?

Mr. FUQUA. I yield to the gentleman from Indiana.

Mr. ROUDEBUSH. Mr. Chairman, I thank the gentleman for yielding, and I ask the gentleman to yield at this time because I am puzzled by the statement that the shuttle is in some way mixed up with the Mars landing, when nothing is further from the truth.

The shuttle we are proposing in this bill has absolutely nothing to do with the exploration of space further than the Apollo program has already taken us, and I am sure the gentleman from Minnesota (Mr. KARTH) knows that. The purpose of the space shuttle is simply this: to go out and work on satellites such as communication satellites, to refurbish them, and to take men to and

from a space station in a near earth orbit.

Mr. FUQUA. The gentleman is correct. The CHAIRMAN. The time of the gentleman has expired.

AMENDMENT OFFERED BY MR. GROSS AS A SUBSTITUTE FOR THE AMENDMENT OFFERED BY MR. KARTH

Mr. GROSS. Mr. Chairman, I offer an amendment as a substitute for the amendment offered by the gentleman from Minnesota (Mr. KARTH).

The Clerk read as follows:

Amendment offered by Mr. Gross as a substitute for the amendment offered by Mr. KARTH:

On page 1, line 7, strike \$1,101,500,000 and insert \$550,750,000, and on page 3, line 15, strike the period, insert a comma and add the following:

"Provided, however, That including the reduction in the item contained in line 7, page 1, selective reductions shall be made in one or more of the items contained on pages 2 and 3 to the end that reductions in authorizations for appropriations for the National Aeronautics and Space Administration shall total not less than \$1,500,000,000."

Mr. GROSS. Mr. Chairman, I support the intent of the gentleman from Minnesota (Mr. KARTH), but the gentleman does not begin to go far enough in cutting down on the lavishing of money upon this program.

My amendment would cut the Apollo program exactly in half, a 50-percent cut of \$550,750,000. It also provides that including the 50-percent cut in Apollo, selective cuts must be made in the rest of this \$3.6 billion authorization bill so that the reductions total \$1.5 billion.

There has been much talk about austerity here today. Well, anyone would have to have moon rocks in his head to believe there is any austerity in this program. As a matter of fact, with the amendment offered by the gentleman from Minnesota (Mr. KARTH), it is still above President Nixon's budget. And that is austerity?

Where are we in this country? This morning it was announced that the cost of living increased another five-tenths of 1 percent in March, or about the same 6-percent annual rate of last year. And inflation is increasing going right along with it. Continue this kind of a program, and try to fund all of the other programs that we are approving in Congress, and the increase in the cost of living will not be five-tenths of 1 percent a month, or an average rate of 6 percent a year. Inflation and costs of living will be going up 8 or 10 percent a year.

Let us have the good sense and courage to do what needs to be done here and cut \$1,500,000,000 from this program.

The gentleman from Florida earlier said this space outfit has 144,000 employees. These are among the highest paid of all employees in the Federal Government. With the pay increase bills that have been passed, where is it proposed to get the money to pay the increases for agencies of this kind as well as all other Federal employees, and the military?

Mr. ROUDEBUSH. Mr. Chairman, will the gentleman yield?

Mr. GROSS. I yield to the gentleman.

Mr. ROUDEBUSH. The gentleman

talks about our committee lavishing money on this and he made a remark about the tremendous level of expenditures.

I wonder if the gentleman is aware of the fact that every dime of this authorization bill was authorized and the Committee on Appropriations in their generosity gave us every cent that we are asking for here—and that it will still be less money than we spent last year. The gentleman is aware of that; is he not? This is a decrease—not an increase.

Mr. GROSS. Well, so what? It was far too much last year.

Mr. ROUDEBUSH. Well, so what? I just thought the gentleman's memory should be refreshed, because he talks about the money that the Government is spending here.

Mr. GROSS. Does not the gentleman think it might be a good idea to let some other country do a little spending and experimenting in space and on moon-dogging? They have lots of money; we do not have it. Has the gentleman not heard that there is no money in the Treasury and we are going to have to pass another debt ceiling increase this year? Has he not heard about that?

Mr. ROUDEBUSH. The gentleman has heard about it and he has repeatedly voted along a line that would save money for this Nation, the gentleman knows that.

Mr. GROSS. No; I do not know that at all.

Mr. ROUDEBUSH. I am telling the gentleman in the well that it will.

Mr. GROSS. It will not save money.

Mr. ROUDEBUSH. What the gentleman from Iowa says is not true.

Mr. GROSS. Why do you not want to save money on this moon-landing business?

Mr. ROUDEBUSH. The gentleman should know that this is the smallest authorization bill that this committee has brought out since 1962.

Mr. GROSS. But there is still \$3,600,000,000 in this bill and for what? The gentleman is aware that we now have the rocks and moon dust down here. How much more of this do we need? Let some other country that has a lot of money do this.

Mr. ROUDEBUSH. The gentleman's own State of Iowa has a piece of that rock, may I say to the gentleman.

Mr. GROSS. Go out and sell this \$3,600,000,000 deal to your people in Indiana. I have no intention of trying to sell it to the taxpayers of Iowa.

Mr. ROUDEBUSH. It is very difficult to sell, I will have to admit.

The CHAIRMAN. The question is on the substitute amendment offered by the gentleman from Iowa (Mr. GROSS), for the amendment offered by the gentleman from Minnesota (Mr. KARTH).

The question was taken; and on a division (demanded by Mr. GROSS) there were—ayes 16, noes 67.

So the substitute amendment was rejected.

Mr. TEAGUE of Texas. Mr. Chairman, I rise in opposition to the amendment.

I am sure that everyone would agree with me that it would be wonderful to be

a Member of Congress if you could always know truth and if you could always know what is right and what is wrong.

About 65 years ago the Members of Congress were debating whether or not to spend some money on aviation research. Some people were told that they had rocks in their heads. Some Members got up and said the airplane would never contribute to the economy of our country.

Today it has to be most difficult for Members who do not work on the committee to know what is happening. I wish it were possible for the Members to know how much work our committee did on the bill. First, I would like to point out that when Mr. Nixon became President, he appointed a task force to advise him what to do on the subject of space. That task force was made up of Vice President SPIRO T. AGNEW, Robert C. Seamans, Secretary of the Air Force; Thomas O. Paine, Administrator of the National Aeronautics and Space Administration; and Dr. Lee A. DuBridge, science adviser to the President. In addition, U. Alexis Johnson, Under Secretary of State for Political Affairs; Glenn T. Seaborg, Chairman of the Atomic Energy Commission; and Robert P. Mayo, Director of the Bureau of the Budget, were advisers.

They came back to the President and recommended a \$4 billion budget for this year. Then the Bureau of the Budget cut that amount to \$3.3 billion, and that was the amount of money that was recommended to Congress.

I would like you to know that our subcommittee has talked to practically everybody there is to talk to about our manned space program. We have talked to the people at North American, the engineers and scientists at McDonnell-Douglas, Boeing, Lockheed, and every major company involved in this program. Our subcommittee has talked to those engineers and scientists and listened to them.

When our subcommittee met, we considered the fact that this very distinguished panel had recommended \$4 billion. We considered the fact that the Budget people had cut it to \$3.3 billion. We agreed in our subcommittee that we were going to add some money, and we almost split the difference between what the task force recommended and what the Bureau of the Budget recommended. Then we went back to NASA and asked them where they would put that money to use.

Mr. Chairman, there are a lot of people who do not think the space program amounts to anything. I happen to believe it amounts to a lot. I happen to believe that in the future of this country, in defense alone it means so very much. In the arena of national defense, if we are going to control the ocean, the surface and underseas, control the ground and control the air, the next area will be space, and for certain we do not want to be second.

Mr. Chairman, I hope the amendment will be voted down.

Mr. FULTON of Pennsylvania. Mr. Chairman, will the gentleman yield?

Mr. TEAGUE of Texas. I yield to the gentleman from Pennsylvania.

Mr. FULTON of Pennsylvania. I join with the gentleman in his remarks. I have been working with him over a number of years on the Manned Space Flight Subcommittee. It is a question of whether we will lead in space or become second and begin to drop out. This is a real challenge both for peacetime and for military purposes.

Mr. HECHLER of West Virginia. Mr. Chairman, I move to strike out the last word.

The CHAIRMAN. The gentleman from West Virginia is recognized.

Mr. HECHLER of West Virginia. Mr. Chairman, I feel that the amendment has great merit. Aside from the motion to recommit, this is the only opportunity that we will have on the floor this afternoon to bring the program back more closely to the President's initial budget recommendation.

At this point I would like to yield to the sponsor of the amendment, the gentleman from Minnesota (Mr. KARTH).

Mr. KARTH. Mr. Chairman, I thank the gentleman from West Virginia for yielding to me. First of all, I would like to say to the gentleman from Indiana that I have done my homework on this subject.

I would suggest, if he is really interested in finding out whether or not there is \$8 million left in this bill for research and study of the space shuttle/station, if my amendment should prevail, rather than the \$60 to \$80 million that I suggested is in here, I would only suggest he read page 324 of our own hearings.

In answer to a question, Mr. Chairman, that I asked during the hearings this year—and that question was how much money is in other parts of the budget—this is the answer on page 324:

In addition, the Office of Advanced Research and Technology will be conducting significant work, approximately 30 to 40 million dollars each, in support of both of these programs.

I repeat, that is for each of the shuttle and space station area.

Also, Mr. Chairman, let me say I have heard a great deal today about the defense of this country and how important this project might be—and I am all for maintaining a strong defense—but I also happen to have read the Organic Act that created the Space Agency, and the things we should be interested in are those things involving the civilian space program, and those things that might have a military effect ought to be done by the Department of Defense, if I may point out that jurisdiction.

The fact of the matter is, as far as the manned orbiting laboratory, MOL, is concerned, which was an Air Force-Department of Defense man in space project, I understand it has been canceled. As far as establishing priorities for that agency are concerned, they found a man in orbit apparently was not important enough to find its way into the priority structure.

There has been a great deal of argument too, Mr. Chairman, about how much more cheaply we could put pounds of payload in orbit if we had the shuttle. I dispute that.

No. 1, the launch vehicle associated with every single satellite program we have had is one of the smallest parts of the total cost of that program. So if we really want to start putting pounds in orbit at a cheaper rate, we ought to do it with the satellite and not work on the launch vehicle, since the launch vehicle is only 10 to 25 percent of the total cost on all programs—except for a very few, where the cost was 35 percent, and that was probably in the manned space flight program.

It has been suggested we could lower the cost of satellites by lowering the redundancy now involved because man cannot go into space and make repairs. I do not believe that can be done, because if we reduce the redundancy, we increase the failure rate. And if we do that, we will have shuttles running around repairing satellites and doing nothing else.

What an expensive way to repair satellites. The fact is, if you have had trouble with a television set lately, even though the truck is parked outside with all kinds of equipment, more than likely they will have to take the television set to the shop to make repairs before they can do a really good job. I question whether an astronaut in the hostility of outer space can repair or replace black boxes in a satellite, and I question whether it is even feasible for us to suggest traveling this route.

The reason I mention this, Mr. Chairman, is because I am convinced, after looking at all aspects of this program and all the arguments that have been volunteered, I believe the only reason for development of the space shuttle 100-man space station is indeed to eventually send a man to Mars. Really it has very little practical use other than that.

Mr. HECHLER of West Virginia. Mr. Chairman, I hope the remarks of the gentleman will be heard.

Mr. MILLER of California. Mr. Chairman, I move to strike the necessary number of words.

Mr. Chairman, I think there has been a great deal of fog created in this room today, and we ought to penetrate a little bit of it. I bow to the gentlemen on my committee who have done an excellent job and I do not want to criticize them, but I think I know a little bit about this business too.

I have never heard the desire to place the shuttle air space station or manned orbiting laboratory as part of the parcel going to Mars. I would be quite critical of going to Mars until we have developed techniques to do it, if it is ever done.

I do not know that it will be done.

When I say this I offend some of the great scientists. One of them was just mentioned by my friend on my left to me, by name, but I will not bring his name into this. I know I offend him, because he would like to go to Mars.

We do need, in my estimation and considered judgment, the ability to go into space and to come back from space. We are going to have to repair some of these satellites—perhaps generations we do not know very much about right now—in space. What we have to do is go forward with the development of the

facilities to go into space and to stay in space.

We have heard about the criticisms which came when we wanted to develop the airplane. One can go a little further back. A little more than 140 some years ago a man stood in the Senate of the United States, a great Senator, when they were discussing the feasibility of building a railroad across the United States, and he said, "What do we need these States for? They are desert States covered with cactus. Nothing but rattlesnakes live in them. They have high mountains covered to their base with snow. What do we want to spend our money here for? We do not need them, and I will not spend 1 cent to bring the West 1 mile closer to Boston than it now is."

I am very glad that he did not prevail. I want to say, we have to begin. We cannot dismiss the teams and the people who have done such a good job in this thing without putting them together again at a future date when it is going to cost much more.

I have no criticism of the gentleman who puts in the amendment, but I sincerely believe it should be defeated.

Mr. MONAGAN. Mr. Chairman, I support the amendment of the gentleman from Minnesota (Mr. KARTH). While one who is not a member of this committee hesitates to take a position on these matters, with the proposal of one as experienced as the gentleman from Minnesota, one can feel greater confidence in such action.

Many people have reservations about the timing of this authorization bill, especially after the Apollo 13 flight. There is much opinion that this whole program should be reviewed before any final action is taken on it. Questions have been raised about the size of the amounts expended in this program and their possible use elsewhere. Other questions have been raised about the validity of some of the programs authorized in this bill. Of particular doubt is the space shuttle program which this amendment seeks to reduce.

I believe that it is time we set about cutting this bill. Even if the Karth amendment were passed, the total authorization would still be above that requested by the administration. For these reasons, I support this amendment and I hope that it will pass.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Minnesota (Mr. KARTH).

The question was taken; and the Chairman announced that the yeas appeared to have it.

Mr. KARTH. Mr. Chairman, I demand tellers.

Tellers were ordered, and the Chairman appointed as tellers Mr. KARTH and Mr. MILLER of California.

The committee divided, and the tellers reported that there were—ayes 53, noes 53.

So the amendment was rejected.

AMENDMENT OFFERED BY MR. RYAN

Mr. RYAN. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. RYAN:  
On page 2, line 15, strike out \$38,000,000.

Mr. RYAN. Mr. Chairman, once again I rise to discuss the NERVA nuclear rocket engine program which this year carries an authorization in this bill of \$38 million, which my amendment would strike out.

In the past I have pointed out that, although there was no specific mission assignment for this engine, it was in reality part and parcel of NASA's plan for a manned Mars mission sometime in the 1980's.

Over \$1 billion has thus far been spent on this project, and its completion through the building of a flight engine will cost at least another \$1 billion.

In past years justification for proceeding was that the expenditure was for research and development on the technology to build a nuclear rocket engine. That justification no longer exists, for it is clear from the hearings that the technology phase has ended. Milton Klein, the manager of the Space Nuclear Propulsion Office of NASA testified, and I quote, "The past year marked the completion of the NERVA technology program."—Hearings, page 1436.

So, Mr. Chairman, whatever justification some saw for developing the capability to build a nuclear rocket engine now has been met. The \$38 million which this bill would authorize today is to institute a second phase of this program, the development of an operational rocket engine for flight. I think we should very carefully examine the implications of that. The proposal is to move from the technology phase into the flight phase, yet no specific mission has been assigned publicly by NASA.

Mr. Chairman, if a new phase for NERVA is to be funded, then we should assess its purpose and the ends it will serve. The fact of the matter is, however, that the potential end, for which the NERVA engine will be employed, is not difficult to discern, although NASA refuses to articulate it, and present it so it can be considered by the Congress. The end is the manned Mars mission which was discussed during the debate on the previous amendment offered by the distinguished chairman of the subcommittee (Mr. KARTH.) I pointed 2 years ago to the House, and let me quote—I said then, because I think it is relevant to what we are talking about now, the following:

Since the NERVA program is actually intended as another step toward a \$200 billion manned Mars mission, a goal which has not been approved by Congress, and which even at a "thinkable" cost remains open to serious technical and value questions, it is essential the Congress withhold funds for hardware development in this program pending open and public evaluation of the intended national goal.

Let me also point to the testimony of Mr. Klein at page 1439 of the Hearings on H.R. 16516, where he said:

"Manned Mars missions are mentioned in the Space Task Group report for an unspecified time in the future to include their influence on the design of earlier systems elements. In this respect, the reusable nu-

clear vehicle designed for interorbit transportation will be capable of evolving into an inter-planetary propulsion module."

In other words, what I am saying is that we ought to set our goals and clearly define them. If the purpose of developing further the nuclear engine is to land men on Mars, let us face that question frankly and let us determine what the best means is of achieving that goal, if in fact we want to achieve it.

This involves the question of national priorities on the one hand and priorities within the space program on the other hand. The lack of opportunity for Congress to examine the merits of a manned Mars mission is perhaps the most troublesome aspect of the NERVA program, for programs like this, once the investment has been made, make it easy for the NASA bureaucrats to argue that the next step is inevitable, whether the Congress sets the priorities in that direction or not. Then, it is a simple and easy matter to argue that we must go ahead.

When I served on the Committee on Science and Astronautics, in the committee report on the fiscal year 1969 authorization for the National Aeronautics and Space Administration, I stated:

Once NERVA hardware is developed, at the very least Congress would be asked to support numerous lunar or other vastly expensive missions for the purpose of justifying its \$2 billion development cost.

I think we should today stop and examine whether or not we want to continue with manned missions in the far reaches of outerspace or whether we should concentrate more on unmanned probes which produce more scientifically at a lesser cost.

Light, unmanned vehicles which are relatively inexpensive and which operate by chemical propulsion currently travel into distant space. Some of the best scientific data received have come from these missions. Manned vehicles, on the other hand, must be bigger and heavier, requiring more powerful and expensive rockets.

As I stated in support of the amendment which I offered to the 1970 NASA authorization bill, H.R. 11271, on June 10, 1969, which would have reduced the authorization for NERVA by \$13.5 million:

Unmanned planetary exploration missions are already underway with conventional hardware and propulsion systems. There is no reason to assume that it will be of interest repeatedly to send extremely heavy manned payloads into orbit or to the lunar surface until further data confirms that man contributes significantly more to space missions than simply additional cost factors and severe weight and safety problems.

Finally, I would note that despite continue and repeated requests, NASA has not developed a detailed, technical comparison between the costs of nuclear and chemical propulsion upper rocket stages, so that an accurate determination of which system is superior can be made.

An unnecessary and long leadtime piece of hardware such as NERVA should not be pursued till the Congress has determined our future goals. Considering the pressing necessity for money to fund urgently needed domestic pro-

grams, any commitment to expensive space programs demands direct congressional analysis. Until such time as this commitment is made through considered and cogent debate and study, we should not allow the National Aeronautics and Space Administration indirectly to commit the Nation to a program that may ultimately cost \$200 billion—the manned Mars mission.

Mr. GERALD R. FORD. Mr. Chairman, I move to strike the requisite number of words.

Mr. Chairman, later in my time I shall yield to the distinguished majority leader in order for him to give us the program for next week, but at the moment I yield to the gentleman from Pennsylvania (Mr. FULTON) to announce the contents of the motion to recommit.

Mr. FULTON of Pennsylvania. With reference to the motion to recommit, there will be the amount of \$30 million to be stricken. If the members of the committee will look at page 1 of H.R. 16516, at the bottom of the page for the Apollo program, we propose to cut it by \$14.5 million. Then at the top of page 2, the first line, under "Space flight operations," we propose to cut that by \$15.5 million, totaling \$30 million.

This has been agreed to by many on our committee and we believe it will represent a tightening of the program and that such action can be taken without hurting the program.

Mr. MILLER of California. Mr. Chairman, will the gentleman yield to me?

Mr. GERALD R. FORD. I yield to the chairman of the committee.

Mr. MILLER of California. I think it is a very good amendment and we shall accept the motion to recommit when it is offered.

Mr. GERALD R. FORD. I thank the distinguished chairman of the committee.

Let me make an observation or comment on the space authorization bill at this point. Several weeks ago I had the opportunity to consult with the gentleman from Minnesota (Mr. KARTH) and the gentleman from Ohio (Mr. MOSHER). I listened to the presentation they made and in that environment, if that is the right word, I must admit that many of their arguments were persuasive.

I subsequently had the opportunity of talking with others on our side of the committee, and at that point it seemed like the better course of action for those of us in the minority to at least do what was recommended by the President in his budget for the space program. But all of us know that approximately a week ago three of our fellow Americans were faced with a great crisis. All of us, regardless of our individual feelings concerning this program, were pleased and relieved that the three astronauts and their spaceship returned safely. In the interim between last Friday and today there has been a great deal of soul-searching within the agency. There has been a great deal of public concern pro and con as to what the Nation's space

program should be in the future and what course of direction it should take in the years ahead. I understand a committee with NASA has been established for the purpose of analyzing the overall program and the mechanical problems in the Apollo 13 flight. In light of the appointment of that particular committee, and the uncertainty as to what they will recommend, it seems to me the wiser course of action on this authorization bill is to take the motion to recommit offered by the gentleman from Pennsylvania. It will do no harm to the program and yet will not hamstring the agency as to any new decisions for the future. I think it will show that the Congress, or the House, is interested in a responsible tightening of the authorization as recommended by the committee. We ought to support the motion to recommit, as the distinguished chairman indicated, and as recommended by the gentleman from Pennsylvania (Mr. FULTON). I do not believe this is any commitment, certainly not a commitment by me, to support a broader program, a long-range program that goes well beyond what we are doing at the present time in a space program. However, the atmosphere and the environment, politically as well as otherwise, is such that I believe the wiser course of action for the House today is to do what the gentleman from Pennsylvania (Mr. FULTON) suggests. I urge an aye vote on the motion to recommit.

Mr. GROSS. Mr. Chairman, will the gentleman yield?

Mr. GERALD R. FORD. I yield to the gentleman from Iowa.

Mr. GROSS. The gentleman from Michigan has just spoken for a broader program, and helped to tie the vote and defeat an amendment thus keeping this authorization at nearly \$300 million above the budget. Yes, the gentleman is certainly for a broader program.

Mr. GERALD R. FORD. I voted for the authorization that gives flexibility within the appropriation process, and I made no commitment as to dollars in the appropriation process.

Mr. BELL of California. Mr. Chairman, I move to strike out the last word and rise in opposition to the amendment.

Mr. Chairman, I rise in opposition to this amendment. I also rise in strong support for the continuation of our nuclear rocket development, the NERVA booster.

Any delay in the continuation of the development of NERVA would not present to our Nation an adequate future program.

While we recognize today's needs, we must not abandon tomorrow's.

Failure of foresight has cost us dearly in the past.

It can cost us more in the future.

There are important reasons why we should proceed with NERVA, and equally important reasons why we should proceed with NERVA now.

We are at the crossroads of space travel capabilities.

We have now the opportunity to begin thinking in terms of transportation in

space; rather than continuing the limiting artillery approach of present systems.

Performance advantages of nuclear rockets range from 65 to 200 percent increases in lunar or deep space payloads thereby saving millions of pounds in earth orbit to perform manned landings or any other missions to the planets. It is approximately 50 percent complete.

The versatility of the nuclear rocket engine will provide enhanced flexibility and technological leadership at less cost than is possible in any other available combination of propulsion developments for these missions.

NERVA can be used as a Saturn 5 upper stage for lunar base support and for sending large unmanned payloads into deep space.

It can be used for maneuvering heavy payloads in earth orbit, and in synchronous orbit—22,000 miles. With refueling, it provides many hours of repeated mission capability.

It can be the building block of large vehicles carrying men to Mars and Venus.

By extending the capability of Saturn V and by greatly reducing the weight required in earth orbit, the nuclear rocket will not only pay for its development in a very few flights, but also opens up many new mission possibilities.

Its adaptability to growth in payloads and operational requirements will assure that only one engine design technology be developed to provide the propulsion modules for decades of space exploration; it will be our workhorse.

The NERVA engine has a potential of approximately 75,000 pounds of thrust with full power operation for periods up to 10 hours, with multiple restart capability.

Compare this with chemical boosters which operate for a maximum of 5 to 7 minutes.

Those who would delay NERVA cite obstacles of cost.

I would ask them not to overlook important cost considerations.

For example, delaying NERVA for 1 year would cost us at least \$300 million and 3 years in time just to catch up to where we are now.

Unquestionable savings will result from NERVA's unique capabilities.

To deliver a 47,000 pound payload to the moon, two Saturn chemical systems would be required at a cost of more than \$300 million each.

The same payload could be delivered by one NERVA system at a cost of approximately \$210 million.

Using the same example a second time around:

The next 47,000-pound payload to the moon by chemical systems would require an additional \$300 million.

But the NERVA system could be re-used.

This will be possible because of NERVA's transportation characteristics.

After landing on the moon, NERVA can return to earth orbit and be re-used, as opposed to the artillerylike

Saturn chemical system which is thrown away after use, like a soft drink can.

Mr. Chairman, we cannot afford to turn our backs on this prospect.

We cannot forever make existing systems increasingly larger to fit our advancing objectives.

The door to space is open.

We will do our Nation and its future generations a devastating disservice if we close that door.

Mr. Chairman, I strongly urge approval of the NERVA continuation program.

I urge defeat of the amendment.

Mr. GROSS. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, when I was a boy on the farm we had a dog, one in particular who was a pretty good scrapper. He could take on anything that came around. The neighbors would come over and sometimes bring their dogs. In order to keep our dog from killing a neighbor's dog, we had an old piece of dried cowhide and we used to throw that to him. He would take that cowhide and crawl under the porch or go out to the barn and chew on it—and everything was peaceful. That was the way we hoodwinked him.

Mr. Chairman, we have been had here this afternoon. The committee increased this bill about \$300 million above President Nixon's budget, and then staged a fraudulent exercise in economy. Now we are about to go through another one in the motion to recommit that has just been announced. They have thrown that old dry hide out to us. We have spent the afternoon talking about that \$300 million of sweetening when we ought to have been spending our time cutting a billion dollars or more out of this discredited program.

Yes, we have been had. Now we are about to get a motion to recommit that will do what? Cut a paltry \$30 million from this \$3.6 billion? This is sponsored and promoted by the minority floor leader of the House, the gentleman from Michigan (Mr. GERALD R. FORD) who was one of those going through the teller line a few minutes ago and it was his vote that tied and lost the amendment that would have at least cut \$240 million out of this inflated monstrosity.

I say again—we have been had as usual here this afternoon, and I do not like it. I voted for this program until 2 or 3 years ago, but not until the financial crisis is met in this country will I vote \$3.6 billion a year for a continuation of this moondog.

Mr. BOGGS. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I shall not take the 5 minutes. But I want to commend the committee on what I consider an outstanding job. I think this program is one that has contributed immeasurably to the total knowledge of mankind. I think we are only beginning to understand what the potentials are.

I trust that the committee's action will be sustained.

Mr. Chairman, I support the recommendations of the Committee on Science and Astronautics contained in

H.R. 16516, and I urge my colleagues to do so also.

We have before us a bill which authorizes \$3.6 billion for research and development, construction of facilities, and research and program management for the National Aeronautics and Space Administration.

NASA was required to present to the Congress a minimal budget to fund its programs during fiscal year 1971. It submitted a \$4.5 billion request—the bare minimum needed to implement the recommendations contained in the report of the President's Task Force on Space. The administration pared this request still further and sent to Congress the lowest space budget request in almost a decade, \$3.3 billion.

After lengthy consideration, the Committee on Science and Astronautics restored a portion of the funds to the bill now before us. It was the committee's judgment that the total authorization should be increased to \$3.6 billion—an increase of some \$297 million falling principally in the area of manned space flight.

It has already been said here today—and I am certain that it will be said again—that the central issue in this debate is the question of national priorities—how much we have to spend and where our resources should be applied. We are a rich Nation, but we have many problems demanding solutions and needs crying to be met. No one denies that.

Mr. Speaker, I believe this country can afford to solve its problems and meet its needs without crippling its space program. I further submit that this country's space program is a national priority, and one we can ill afford not to fulfill.

Last year the American people spent twice as much on liquor as this bill proposes we spend on space exploration. Last year the American people spent twice as much on candy as the committee proposes we increase the administration's request. I have nothing against liquor or candy—I cite the figures only to give us some perspective about the scope of our economy. We are the richest Nation in history, and our space budget today represents 1.6 percent of our total national budget—not our gross national product, but our total national budget. Has our space program become such an intolerable burden as to warrant reducing it further? I think not.

Mr. Speaker, rich nations are not rich simply because they are fortunate enough to have plentiful natural resources, for there are many poor nations with abundant natural resources. Rich nations are not rich nations simply because they possess large populations, for there are many populous nations that are very poor. Mr. Speaker, the single most important factor in the wealth of nations is technology, and to a considerable extent it is the future of American technology that we are debating today.

We are a wealthy nation because the value of education and the need to develop technology are permanently ingrained in the character of our people.

I recall vividly the hue and cry which

arose in this Chamber in 1957 when the Soviet Union orbited the first manmade satellite, marking the beginning of a period of national self-doubt and reexamination.

In May 1961, President Kennedy announced the intention of this country "to send men to the moon and return them safely to earth in this decade."

What followed was the creation and application of the greatest technological plant in history. The results are known, not only to you, but to almost every person on the face of the globe.

At this moment, there are more than 2,500 technological products, in fields ranging from communications to medicine, which are direct spinoffs on our space program.

Yet, I believe we are just now reaching the point in our space program where major economic, scientific, social, and technological returns and benefits are being realized. I further believe that even greater tangible and intangible benefits lie just around the corner.

It may be that the space program is offering mankind a new perspective of itself which will do more to bring about world peace than all else we have ever attempted.

The space program of the 1960's which brought a man to the lunar surface taught us that there is very little we cannot do if we set our minds to it. The space program of the 1970's, however, will be different. It will not culminate in the achievement of a single, dramatic goal. It will consist of the hard work of exploration, of understanding and learning about new worlds and applying that knowledge to our problems here on earth.

The exploration of space will continue during the 1970's whether we choose to lead it or not. I believe we should continue our leadership.

For these reasons, and many, many more, I support H.R. 16516, and I urge my colleagues to do so also.

Mr. KOCH. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I do want to say first, I concur in the remarks of the gentleman from Iowa (Mr. GROSS). I do not think I have ever agreed with him before. But I agree with him today.

Mr. RYAN. Mr. Chairman, will the gentleman yield?

Mr. KOCH. I yield to the gentleman.

Mr. RYAN. Mr. Chairman, we may have lost sight of the fact that there is on the floor an amendment which will strike \$38 million from this bill. So I urge support for that.

But I would also out of curiosity at least like to ask the chairman of the committee and the minority leader as well as the ranking minority member of the committee, why it is since they have all agreed to accept a cut of \$30 million—why we simply cannot do that by an amendment to the bill on the floor. Why not reduce line 7, page 1, by \$14.5 million and reduce line 1, page 2, by \$15.5 million. It would be so simple and the chairman said he would accept it. Now I ask the chairman if one were to offer that as an amendment, would he accept it now?

Mr. MILLER of California. I said I would accept the motion to recommit. When we go back into the House and the motion to recommit is moved, I will support it.

Mr. RYAN. Would the gentleman support an amendment now on the floor to do exactly the same thing?

Mr. MILLER of California. No, I think I have made my statement, and I told this to the minority side.

I would be running out on an agreement in order to satisfy the gentleman's ego, to get his motion over.

Mr. COLLIER. How can the gentleman refuse to accept the motion to recommit? I do not quite understand from what I heard the gentleman say—I do not understand.

Mr. MILLER of California. No, there is no motion now. I said I would support the motion to recommit.

Mr. COLLIER. But I understood the gentleman to say he refused to accept this cut.

The CHAIRMAN. The question is on the amendment offered by the gentleman from New York (Mr. RYAN).

The amendment was rejected.

The CHAIRMAN. The Clerk will read.

The Clerk read as follows:

Sec. 2. Authorization is hereby granted whereby any of the amounts prescribed in paragraphs (1), (2), (3), (4), (5), (6), (7), and (8) of subsection 1(b) may, in the discretion of the Administrator of the National Aeronautics and Space Administration, be varied upward 5 per centum to meet unusual cost variations, but the total cost of all work authorized under such paragraphs shall not exceed the total of the amounts specified in such paragraphs.

Sec. 3. Not to exceed one-half of 1 per centum of the funds appropriated pursuant to subsection 1(a) hereof may be transferred to the "Construction of facilities" appropriation, and, when so transferred, together with \$10,000,000 of the funds appropriated pursuant to subsection 1(b) hereof (other than funds appropriated pursuant to paragraph (9) of such subsection) shall be available for expenditure to construct, expand, or modify laboratories and other installations at any location (including locations specified in subsection 1(b)), if (1) the Administrator determines such action to be necessary because of changes in the national program of aeronautical and space activities or new scientific or engineering development, and (2) he determines that deferral of such action until the enactment of the next authorization Act would be inconsistent with the interest of the Nation in aeronautical and space activities. The funds so made available may be expended to acquire, construct, convert, rehabilitate, or install permanent or temporary public works, including land acquisition, site preparation, appurtenances, utilities, and equipment. No portion of such sums may be obligated for expenditure or expended to construct, expand, or modify laboratories and other installations unless (A) a period of thirty days has passed after the Administrator or his designee has transmitted to the Speaker of the House of Representatives and to the President of the Senate and to the Committee on Science and Astronautics of the House of Representatives and to the Committee on Aeronautical and Space Sciences of the Senate a written report containing a full and complete statement concerning (1) the nature of such construction, expansion, or modification, (2) the cost thereof, including the cost of any real estate

action pertaining thereto, and (3) the reason why such construction, expansion, or modification is necessary in the national interest, or (B) each such committee before the expiration of such period has transmitted to the Administrator written notice to the effect that such committee has no objection to the proposed action.

Sec. 4. Notwithstanding any other provision of this Act—

(1) no amount appropriated pursuant to this Act may be used for any program deleted by the Congress from requests as originally made to either the House Committee on Science and Astronautics or the Senate Committee on Aeronautical and Space Sciences

(2) no amount appropriated pursuant to this Act may be used for any program in excess of the amount actually authorized for that particular program by sections 1(a) and 1(c), and

(3) no amount appropriated pursuant to this Act may be used for any program which has not been presented to or requested of either such committee,

unless (A) a period of thirty days has passed after the receipt by the Speaker of the House of Representatives and the President of the Senate and each such committee of notice given by the Administrator or his designee containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of such proposed action, or (B) each such committee before the expiration of such period has transmitted to the Administrator written notice to the effect that such committee has no objection to the proposed action.

Sec. 5. It is the sense of the Congress that it is in the national interest that consideration be given to geographical distribution of Federal research funds whenever feasible, and that the National Aeronautics and Space Administration should explore ways and means of distributing its research and development funds whenever feasible.

Sec. 6. (a) If an institution of higher education determines, after affording notice and opportunity for hearing to an individual attending, or employed by, such institution, that such individual has been convicted by any court of record of any crime which was committed after the date of enactment of this Act and which involved the use of (or assistance to others in the use of) force, disruption, or the seizure of property under control of any institution of higher education to prevent officials or students in such institution from engaging in their duties or pursuing their studies, and that such crime was of a serious nature and contributed to a substantial disruption of the administration of the institution with respect to which such crime was committed, then the institution which such individual attends, or is employed by, shall deny for a period of two years any further payment to, or for the direct benefit of, such individual under any of the programs authorized by the National Aeronautics and Space Act of 1958, the funds for which are authorized pursuant to this Act. If an institution denies an individual assistance under the authority of the preceding sentence of this subsection, then any institution which such individual subsequently attends shall deny for the remainder of the two-year period any further payment to, or for the direct benefit of, such individual under any of the programs authorized by the National Aeronautics and Space Act of 1958, the funds for which are authorized pursuant to this Act.

(b) If an institution of higher education determines, after affording notice and opportunity for hearing to an individual attending, or employed by, such institution, that such individual has willfully refused

to obey a lawful regulation or order of such institution after the date of enactment of this Act, and that such refusal was of a serious nature and contributed to a substantial disruption of the administration of such institution, then such institution shall deny, for a period of two years, any further payment to, or for the direct benefit of, such individual under any of the programs authorized by the National Aeronautics and Space Act of 1958, the funds for which are authorized pursuant to this Act.

(c) (1) Nothing in this Act shall be construed to prohibit any institution of higher education from refusing to award, continue, or extend any financial assistance under any such Act to any individual because of any misconduct which in its judgment bears adversely on his fitness for such assistance.

(2) Nothing in this section shall be construed as limiting or prejudicing the rights and prerogatives of any institution of higher education to institute and carry out an independent disciplinary proceeding pursuant to existing authority, practice, and law.

(3) Nothing in this section shall be construed to limit the freedom of any student to verbal expression of individual views or opinions.

Sec. 7. This Act may be cited as the "National Aeronautics and Space Administration Authorization Act, 1971."

Mr. MILLER of California (during the reading). Mr. Chairman, I ask unanimous consent that the bill be considered as read, printed in the RECORD, and open to amendment at any point.

The CHAIRMAN. Is there objection to the request of the gentleman from California?

There was no objection.

The CHAIRMAN. Are there any further amendments? If not, under the rule, the Committee rises.

Accordingly, the Committee rose; and the Speaker having resumed the chair, Mr. ROONEY of New York, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee having had under consideration the bill (H.R. 16516) to authorize appropriations to the National Aeronautics and Space Administration for research and development, construction of facilities, and research and program management, and for other purposes, pursuant to House Resolution 893, he reported the bill back to the House.

The SPEAKER. Under the rule, the previous question is ordered.

The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

MOTION TO RECOMMIT OFFERED BY MR. FULTON OF PENNSYLVANIA

Mr. FULTON of Pennsylvania. Mr. Speaker, I offer a motion to recommit.

The SPEAKER. Is the gentleman opposed to the bill?

Mr. FULTON of Pennsylvania. In its present form I am, Mr. Speaker.

The SPEAKER. The Clerk will report the motion to recommit.

The Clerk read as follows:

Mr. FULTON of Pennsylvania moves to recommit the bill H.R. 16516 to the Committee on Science and Astronautics, with instructions to report the same back to the House forthwith with the following amendment:

On page 1, line 7, strike the amount "\$1,101,500,000" and insert in lieu thereof the amount "\$1,087,000,000".

On page 2, line 1, strike the amount "\$670,200,000" and insert in lieu thereof the amount "\$654,700,000".

Mr. FULTON of Pennsylvania. Mr. Speaker, I move the previous question on the motion to recommit.

The previous question was ordered.

The SPEAKER. The question is on the motion to recommit.

The motion to recommit was agreed to.

Mr. MILLER of California. Mr. Speaker, pursuant to the instructions of the House in the motion to recommit, I report the bill back with an amendment.

The Clerk read as follows:

Amendment:

On page 1, line 7, strike the amount "\$1,101,500,000" and insert in lieu thereof the amount "\$1,087,000,000".

On page 2, line 1, strike the amount "\$670,200,000" and insert in lieu thereof the amount "\$654,700,000".

The SPEAKER. The question is on the amendment.

The amendment was agreed to.

The SPEAKER. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

The SPEAKER. The question is on the passage of the bill.

The question was taken; and the Speaker announced that the ayes appeared to have it.

Mr. ROUDEBUSH. Mr. Speaker, I object to the vote on the ground that a quorum is not present and make the point of order that a quorum is not present.

The SPEAKER. Evidently a quorum is not present.

The Doorkeeper will close the doors, the Sergeant at Arms will notify absent Members, and the Clerk will call the roll.

The question was taken; and there were—yeas 229, nays 105, not voting 96, as follows:

[Roll No. 89]  
YEAS—229

Abbutt  
Adams  
Addabbo  
Albert  
Anderson, Calif.  
Anderson, Tenn.  
Andrews, Ala.  
Andrews, N. Dak.  
Annunzio  
Arends  
Aspinall  
Ayles  
Baring  
Beall, Md.  
Belcher  
Bell, Calif.  
Bennett  
Berry  
Bevill  
Biaggi  
Blester  
Blackburn  
Blanton  
Blatnik  
Boggs  
Boland  
Bolling  
Bow  
Bray  
Brinkley

Brookfield  
Broyhill, Va.  
Buchanan  
Burke, Fla.  
Burke, Mass.  
Burleson, Tex.  
Burton, Calif.  
Burton, Utah  
Byrne, Pa.  
Camp  
Carter  
Casey  
Cederberg  
Chappell  
Clancy  
Clark  
Clausen,  
Don H.  
Clawson, Del.  
Cohelan  
Collier  
Collins  
Colmer  
Conte  
Corbett  
Corman  
Coughlin  
Culver  
Cunningham  
Daddario  
Daniel, Va.  
Daniels, N.J.

Davis, Ga.  
de la Garza  
Denney  
Dennis  
Dent  
Derwinski  
Devine  
Donohue  
Dowdy  
Downing  
Dulski  
Duncan  
Edmondson  
Edwards, Ala.  
Edwards, Calif.  
Erlenborn  
Esch  
Evins, Tenn.  
Fallon  
Fascell  
Findley  
Fisher  
Flood  
Flowers  
Ford, Gerald R.  
Fountain  
Frelinghuysen  
Frey  
Fulton, Pa.  
Fulton, Tenn.  
Fuqua  
Galifianakis  
Garmatz

Gaydos  
Goldwater  
Gonzalez  
Gray  
Grover  
Gubser  
Haley  
Hall  
Hamilton  
Hanley  
Hanna  
Hansen, Idaho  
Hansen, Wash.  
Harsha  
Hastings  
Hebert  
Hechler, W. Va.  
Heckler, Mass.  
Heistoski  
Henderson  
Hogan  
Hosmer  
Howard  
Hunt  
Jarman  
Johnson, Pa.  
Jones, Ala.  
Kee  
King  
Kleppe  
Kuykendall  
Lloyd  
Lujan  
McClory  
McClure  
McCulloch  
McDade  
McEwen  
McFall  
McKneally  
McMillan  
MacGregor  
Mahon  
Mailliard  
Marsh

Martin  
Mathias  
Matsunaga  
May  
Meeds  
Michel  
Miller, Calif.  
Mink  
Minshall  
Mize  
Montgomery  
Morgan  
Morse  
Morton  
Murphy, Ill.  
Murphy, N.Y.  
Natcher  
Olsen  
O'Neill, Mass.  
Passman  
Patten  
Pelly  
Perkins  
Pettis  
Philbin  
Pickle  
Pirnie  
Poage  
Podell  
Pollock  
Preyer, N.C.  
Price, Ill.  
Price, Tex.  
Pryor, Ark.  
Pucinski  
Purcell  
Quie  
Rarick  
Reid, Ill.  
Robison  
Rodino  
Rogers, Fla.  
Rooney, N.Y.  
Rooney, Pa.  
Rostenkowski

NAYS—105

Abernethy  
Ashley  
Betts  
Bingham  
Brademas  
Brasco  
Broyhill, N.C.  
Burlison, Mo.  
Button  
Chisholm  
Cleveland  
Conable  
Conyers  
Davis, Wis.  
Delaney  
Dickinson  
Dwyer  
Elberg  
Eshleman  
Evans, Colo.  
Farbstein  
Fish  
Foley  
Fraser  
Gallagher  
Gibbons  
Gilbert  
Goodling  
Gross  
Gude  
Halpern  
Hammer-  
schmidt  
Harrington  
Hicks  
Hull

Hungate  
Hutchinson  
Ichord  
Jacobs  
Jonas  
Jones, N.C.  
Karth  
Kastenmeier  
Keith  
Koch  
Kyros  
Landgrebe  
Langen  
Latta  
Long, Md.  
Lowenstein  
McCloskey  
McDonald,  
Mich.  
Macdonald,  
Mass.  
Mayne  
Meicher  
Mikva  
Miller, Ohio  
Mills  
Minish  
Mizell  
Monagan  
Mosher  
Myers  
Nedzi  
Nelsen  
Nix  
Obey  
O'Hara

NOT VOTING—96

Adair  
Alexander  
Anderson, Ill.  
Ashbrook  
Barrett  
Brooks  
Brotzman  
Brown, Calif.  
Brown, Mich.  
Brown, Ohio  
Bush  
Byrnes, Wis.  
Cabell  
Caffery  
Carey  
Celler  
Chamberlain  
Clay  
Cowger  
Cramer  
Crane

Dawson  
Dellenback  
Diggs  
Dingell  
Dorn  
Eckhardt  
Edwards, La.  
Feighan  
Flynt  
Ford,  
William D.  
Foreman  
Friedel  
Gettys  
Gialmo  
Green, Oreg.  
Green, Pa.  
Griffin  
Griffiths  
Hagan  
Harvey

Roudebush  
St. Onge  
Sandman  
Satterfield  
Scott  
Shibley  
Shriver  
Sikes  
Smith, Calif.  
Smith, Iowa  
Springer  
Stafford  
Staggers  
Steed  
Stratton  
Stuckey  
Symington  
Talcott  
Taylor  
Teague, Calif.  
Teague, Tex.  
Thompson, Ga.  
Thompson, N.J.  
Van Deerlin  
Vander Jagt  
Vigorito  
Waggonner  
Wampler  
Weicker  
Whalley  
Whitehurst  
Whitten  
Widnall  
Wiggins  
Wilson, Bob  
Winn  
Wold  
Wolf  
Wylder  
Wylie  
Yatron  
Young  
Zablocki  
Zion

O'Konski  
Pike  
Poff  
Powell  
Quillen  
Rallsback  
Randall  
Reid, N.Y.  
Reuss  
Riegler  
Rosenthal  
Roth  
Ruppe  
Ruth  
Ryan  
St Germain  
Saylor  
Schadeberg  
Scheuer  
Schwengel  
Skubitz  
Smith, N.Y.  
Steiger, Ariz.  
Steiger, Wis.  
Stokes  
Stubblefield  
Taft  
Thomson, Wis.  
Tiernan  
Ullman  
Watts  
Whalen  
Wyatt  
Wyman  
Yates  
Zwach

Moorhead  
Moss  
Nichols  
O'Neal, Ga.  
Ottinger  
Patman  
Pepper  
Rees  
Reifel  
Rhodes  
Rivers  
Roberts

Roe  
Rogers, Colo.  
Roybal  
Scherle  
Schneebell  
Sebelius  
Sisk  
Slack  
Snyder  
Stanton  
Stephens  
Sullivan

Tunney  
Udall  
Vanik  
Waldie  
Watkins  
Watson  
White  
Williams  
Wilson,  
Charles H.  
Wright

So the bill was passed.

The Clerk announced the following pairs:

On this vote:

Mr. Hays for, with Mr. Slack against.  
Mr. Long of Louisiana for, with Mr. Carey against.  
Mr. Johnson of California for, with Mr. Roe against.  
Mr. Caffery for, with Mr. Ottinger against.  
Mr. Friedel for, with Mr. Clay against.  
Mr. Celler for, with Mr. Barrett against.  
Mr. White for, with Mr. McCarthy against.  
Mr. Bush for, with Mr. Kyl against.  
Mr. Rhodes of Arizona for, with Mr. Watkins against.  
Mr. Crane for, with Mr. Dellenback against.  
Mr. Chamberlain for, with Mr. Scherle against.  
Mr. Williams for, with Mr. Schneebell against.  
Mr. Horton for, with Mr. Brown of Michigan against.

Until further notice:

Mr. Pepper with Mr. Adair.  
Mr. Patman with Mr. Harvey.  
Mr. Dorn with Mr. Watson.  
Mr. Moorhead with Mr. Cowger.  
Mr. Nichols with Mr. Byrnes of Wisconsin.  
Mr. Madden with Mr. Meskill.  
Mr. Cabell with Mr. Lukens.  
Mr. Brooks with Mr. Snyder.  
Mr. Hollifield with Mr. Stanton.  
Mr. Lennon with Mr. Brotzman.  
Mr. Brown of California with Mr. Ashbrook.  
Mr. Moss with Mr. Reifel.  
Mr. Dingell with Mr. Anderson of Illinois.  
Mr. Feighan with Mr. Sebelius.  
Mr. Gialmo with Mr. Foreman.  
Mr. Gettys with Mr. Roybal.  
Mr. Hathaway with Mr. Stephens.  
Mr. Hawkins with Mr. Rogers of Colorado.  
Mr. Flynt with Mr. William D. Ford.  
Mr. Edwards of Louisiana with Mr. Mollohan.  
Mr. Leggett with Mr. Tunney.  
Mrs. Sullivan with Mr. Wright.  
Mr. Charles H. Wilson with Mr. Udall.  
Mr. Mann with Mrs. Griffiths.  
Mr. Green of Pennsylvania with Mr. Rees.  
Mr. Rivers with Mr. Sisk.  
Mr. Hagan with Mrs. Green of Oregon.  
Mr. Griffin with Mr. Eckhardt.  
Mr. Waldie with Mr. Dawson.  
Mr. Vanik with Mr. Diggs.  
Mr. Kluczynski with Mr. Kirwan.  
Mr. Jones of Tennessee with Mr. Kazen.  
Mr. Alexander with Mr. Landrum.  
Mr. Roberts with Mr. O'Neal of Georgia.

Mr. WYMAN and Mr. CLEVELAND changed their votes from "yea" to "nay." The result of the vote was announced as above recorded.

The doors were opened.

A motion to reconsider was laid on the table.

GENERAL LEAVE TO EXTEND

Mr. MILLER of California. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to extend their remarks on the bill just passed and to include extra-neous matter.

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

There was no objection.

#### MESSAGE FROM THE SENATE

A message from the Senate by Mr. Arrington, one of its clerks, announced that the Senate had passed without amendment a joint resolution of the House of the following title:

H.J. Res. 251. Joint resolution to authorize the President to proclaim the last Friday of April 1970 as "National Arbor Day."

The message also announced that the Senate agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 10105) entitled "An act to amend the National Traffic and Motor Vehicle Safety Act of 1966 to authorize appropriations for fiscal years 1970, 1971, and 1972, and for other purposes."

The message also announced that the Senate insists on its amendment numbered 2, to the foregoing bill.

This message also announced that the Senate agrees to the amendments of the House to a bill of the Senate (S. 3253) entitled: "An act to provide that the Federal Office Building and U.S. Courthouse in Chicago, Ill., shall be named the 'Everett McKinley Dirksen Building East' and that the Federal office building to be constructed in Chicago, Ill., shall be named the 'Everett McKinley Dirksen Building West' in memory of the late Everett McKinley Dirksen, a Member of Congress of the United States from the State of Illinois from 1933 to 1969," with an amendment in which the concurrence of the House is requested.

#### LEGISLATIVE PROGRAM FOR THE WEEK OF APRIL 27

Mr. GERALD R. FORD. Mr. Chairman, I have committed myself to yield to the distinguished majority leader for the purpose of receiving from the gentleman the program for next week.

Mr. ALBERT. Mr. Chairman, I thank the gentleman for yielding.

Mr. Chairman, the program for next week is as follows:

Monday is District Day, but there are no District bills.

On Monday we will have H.R. 14714, to encourage travel in the United States, under an open rule with 1 hour of debate;

H.R. 14385, to provide authority for subsidized transportation for Public Health Service employees to Rockville, Md., under an open rule with 1 hour of debate; and

H.R. 4599, payments in lieu of taxes for former Reconstruction Finance Properties, under an open rule with 1 hour of debate.

On Tuesday we will have H.R. 16200, Arms Control and Disarmament Act Amendments, 1970, with an open rule and 1 hour of debate; and

H.R. 15693, to exclude from the mails certain nonmailable matter, under an open rule with 2 hours of debate.

For Wednesday and the balance of the week, H.R. 17123, the military procurement authorization, 1971, subject to a rule being granted.

And of course, Mr. Chairman, this announcement is made subject to the usual reservation that conference reports may be brought up at any time, and any further program may be announced later.

Mr. Chairman, I thank the gentleman for yielding.

#### ADJOURNMENT OVER TO MONDAY, APRIL 27, 1970

Mr. ALBERT. Mr. Speaker, I ask unanimous consent that when the House adjourns today that 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 BUSINESS IN ORDER UNDER THE CALENDAR WEDNESDAY RULE ON WEDNESDAY NEXT

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

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

There was no objection.

#### EVERETT MCKINLEY DIRKSEN BUILDING—EMERGENCY EDUCATIONAL PAYMENTS

Mr. GRAY. Mr. Speaker, I ask unanimous consent to take from the Speaker's desk the bill (S. 3253) to provide that the Federal office building and U.S. courthouse in Chicago, Ill., shall be named the "Everett McKinley Dirksen Building East" and that the Federal office building to be constructed in Chicago, Ill., shall be named the "Everett McKinley Dirksen Building West" in memory of the late Everett McKinley Dirksen, a Member of Congress of the United States from the State of Illinois from 1933 to 1969, together with the Senate amendment to the House amendments, and concur in the Senate amendment.

The Clerk read the title of the bill.

The Clerk read the Senate amendment to the House amendments as follows:

Sec. 2. Upon a determination that a local educational agency lacks the fiscal capacity to provide an adequate free public education for children of persons who live and work on Federal property, and if such children constitute not less than 25 per centum of the total enrollment, the Secretary of Health, Education, and Welfare shall make emergency payments from sums already available, but not to exceed \$2,500,000, for the current school year to such local educational agency as may be necessary to provide a free public education for such children: *Provided*, That such payments shall not exceed the average per-pupil cost to such agency for all children eligible to receive a free public education from such agency, less Federal and State

payments to such agency for free public education.

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

There was no objection.

The Senate amendment to the House amendments was concurred in.

A motion to reconsider was laid on the table.

#### DESIGNATING FRIDAY, MAY 1, 1970, AS DAY FOR APPEAL FOR INTERNATIONAL JUSTICE FOR ALL AMERICAN PRISONERS OF WAR AND SERVICEMEN MISSING IN ACTION IN SOUTHEAST ASIA

Mr. SIKES. Mr. Speaker, I offer a concurrent resolution (H. Con. Res. 582) and ask unanimous consent for its immediate consideration.

The Clerk read the concurrent resolution as follows:

#### H. CON. RES. 582

Whereas the health, safety, and well-being of every individual American serviceman is of great value and importance to this Nation; and

Whereas over 1,500 American servicemen are imprisoned by Communist forces in Southeast Asia; and

Whereas these captors have refused to identify all of these prisoners of war or servicemen missing in action or provide information as to their health and condition; and

Whereas these captors have denied these prisoners of war the right to regularly communicate by mail with their families; and

Whereas these captors have refused to permit the inspection of the facilities at which these prisoners of war are confined; and

Whereas these captors have refused to exchange or permit medical treatment of sick or wounded prisoners of war; and

Whereas the continued callous exploitation of these helpless men brings anguish and sadness, not only to the families and friends of these prisoners of war, but to compassionate people everywhere; and

Whereas the first of May of each year is recognized as a day of dedication to law and justice: Now, therefore, be it

*Resolved*, That it is the sense of Congress

(1) That Friday, May 1, 1970, be commemorated as a day for an appeal for international justice for all the American prisoners of war and servicemen missing in action in Southeast Asia;

(2) That men of compassion and good will throughout the world be urged to search all peaceful avenues available to insure that these men be treated humanely and fairly in accord with the standards established by the Geneva Convention;

(3) That every possible effort be made to secure their early release from captivity; and

(4) That copies of this resolution be delivered by the appropriate representatives of the United States Government to the appropriate representatives of every nation of the world.

The concurrent resolution was agreed to.

A motion to reconsider was laid on the table.

#### HUMANE TREATMENT FOR CAPTURED AMERICAN SERVICEMEN

(Mr. SIKES asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. SIKES. Mr. Speaker, the reading

of the resolution has in itself told the story of the great objective which many of us throughout America are seeking; that of humane treatment for those unfortunate American servicemen who are imprisoned by Communist forces in Southeast Asia. Those who are concerned for our servicemen and their families have sought in so many ways to awaken the conscience of the Communists and to induce them to follow at least the basic rules of civilized warfare in their treatment of our servicemen. Yet all of these efforts have been unavailing.

Now we propose on Friday, May 1, 1970, which is the day dedicated to law and justice, that there be a great outpouring of interest and sympathy for our servicemen and their families at Constitution Hall in Washington, seeking again to impress upon the nations of the world America's determination to do everything within the bounds of peaceful endeavor to secure humane and fair treatment and the early release from captivity of American prisoners of war. We must arouse the conscience of the world to greater support for our missing servicemen and their families. Thus we engage in this additional effort to obtain justice, with the prayer that in some way these endeavors will penetrate to the minds and hearts of their captors.

This resolution is in support of the program which is being formulated for May 1 in Constitution Hall under the leadership of the distinguished Senator from Kansas, ROBERT DOLE. Serving with him as cosponsors are six Senators and six Representatives in the House. They are: Senators PETER H. DOMINICK, BARRY GOLDWATER, MIKE MANSFIELD, GEORGE MURPHY, EDMUND S. MUSKIE, and JOHN STENNIS; Representatives W. C. DANIEL, MARTIN B. MCKNEALLY, CATHERINE MAY, RICHARD L. ROUDEBUSH, ROBERT L. F. SIKES, and OLIN E. TEAGUE.

In addition, there are many others who are cosponsors of this resolution in the House. Their names will appear separately.

Now let me express my appreciation, and that of all sponsors of this resolution and that of all friends of America's missing servicemen and their families, for the outstanding cooperation given by the distinguished Speaker, and the leadership of the House on both sides of the aisle. It was with their help and cooperation that immediate consideration could be obtained for this worthy objective. I have never seen a finer evidence of helpfulness on both sides of the aisle for an important cause than has been shown by Speaker McCORMACK and both the Democratic and the Republican leadership. America can take heart from examples like this.

Mr. Speaker, we are most grateful.

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

Mr. SIKES. I yield to the gentleman from Iowa.

Mr. GROSS. Mr. Speaker, let the record show that this resolution was adopted unanimously by those present in the House.

Mr. SIKES. Mr. Speaker, I thank the gentleman from Iowa.

#### GENERAL LEAVE

Mr. SIKES. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to extend their remarks on the concurrent resolution just passed.

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

There was no objection.

#### AUTHORITY FOR CLERK TO RECEIVE MESSAGES FROM SENATE AND SPEAKER TO SIGN ENROLLED BILLS AND JOINT RESOLUTIONS

Mr. DANIEL of Virginia. Mr. Speaker, I ask unanimous consent that notwithstanding the adjournment of the House until Monday next the Clerk be authorized to receive messages from the Senate and that the Speaker be authorized to sign any enrolled bills and joint resolutions duly passed by the two Houses and found truly enrolled.

The SPEAKER pro tempore (Mr. MATSUNAGA). Is there objection to the request of the gentleman from Virginia?

There was no objection.

#### MORE NEWS ON THE ECONOMY: ALL BAD

(Mr. FULTON of Tennessee asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. FULTON of Tennessee. Mr. Speaker, it has just been announced that the cost-of-living index soared another one-half of 1 percent last month. This brings the rate of increase in the inflationary spiral over the last 12 months to 6.1 percent.

At the announcement of this latest erosion in the purchasing power of our income dollars the White House stated the administration found the news "rather encouraging."

Press Secretary Ronald L. Ziegler said the White House economic advisers were quick to point out that on a seasonally adjusted basis the cost of living actually increased only four-tenths of 1 percent.

This may be encouraging and good news to the White House but it should be utterly discouraging and bad news to the millions of Americans who now find that the result of this unchecked inflation is that the average private payroll worker remaining in the same job is worse off in purchasing power than he was almost 5 years ago.

I doubt also that this latest report from the Bureau of Labor Statistics is good news or encouraging to the 4.4 percent of our work force who are now unemployed, the highest unemployment level in over 4 years.

And I doubt if it is good news or encouraging to the prospective homeowner or the homebuilding industry. Increase in the cost of mortgage money accounted nationwide for 28 percent of the overall price increase during the month of March.

It certainly was not encouraging to one of the President's economic advisers, Mr. Herbert Stein, who termed the

increase in the Consumer Price Index a "disappointing number."

In terms of dollars the latest report from the BLS means that it costs \$13.32 today to purchase what could have been bought in 1950 for \$10. And this is an average of goods and services. Many important items such as homes have become almost prohibitive.

The war in Vietnam and our overall involvement in Southeast Asia is credited as the primary cause of our inflation. Extricating ourselves from that involvement has proven no easy task.

However, when you have inflation you have to deal with it as best you can and it has become apparent that our efforts to date have not been an even qualified success.

While inflation continues the threat of recession grows larger. Take home pay is being eroded. More and more corporations and businesses are reporting losses or reduced earnings. Prices continue to rise and wages continue to chase them.

To date the administration has continued to use one primary instrument to combat inflation, high interest rates. Even though there has been a recent drop in the prime rate of one-half percent, interest rates continue at a depressing level. For almost 2 years now high interest rates have been employed as the major instrument to combat inflation. By now it should be apparent that this approach has not, is not, and probably will not provide the total effectiveness needed.

Mr. Speaker, there are other tools available to the administration. To mention just one package, the selective economic controls which were approved by the Congress last December. The administration is not powerless to adopt new measures. Measures are available.

There has been criticism from certain persons within the administration of our news media for allegedly dwelling only on the negative aspects of the news, for not reporting the news which is rosy or good. Well, no matter how gullible some Madison Avenue advisers may believe the public to be, I doubt very seriously the public would long remain silent if they had an earful of this from the evening news: "Good evening, this is Chet Huntley, NBC, New York. There is good news tonight. The cost of living has increased to an annual rate of 6.1 percent and a White House spokesman has termed this latest erosion of the purchasing power of the dollar 'rather encouraging.'"

#### BASIC CHARACTERISTIC OF OUR COUNTRY

(Mr. MCKNEALLY asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. MCKNEALLY. Mr. Speaker, I rise to bring to the attention of the Members of the Congress an editorial which recently appeared in the Times Herald Record of Middletown, N.Y.

Because the paper is well managed and well edited, it has achieved a wide circulation which is constantly increasing. The editor of the paper, Mr. A. N. Romm,

recently set out a credo on its editorial page. It is not only worth reading but it is worth committing to memory. It sums up and defines for all of us what has been the basic characteristic of our country. We have always sought to solve our problems and achieve our progress in deliberative and in peaceful ways. Mr. Romm's credo is so sententious and well written that it is worthy of being reprinted, framed and hung on the wall of every congressional office. I might add, Mr. Speaker, that Mr. Romm received first prize for distinguished editorial writing by the New York State Publishers Association for his credo. I am delighted at this opportunity to bring it to the attention of the Congress.

[From the Times Herald Record,  
Mar. 25, 1970]

#### CREDO: OF NOBLE ENDS AND IGNOBLE MEANS

EDITOR'S NOTE.—As reported elsewhere in today's Times Herald-Record, the following editorial, first published May 20, 1969, was awarded first prize for distinguished editorial writing by the New York State Publishers Association.)

Count me as a soul brother of any poor or black man outraged because his child's gullet is stuffed with promises, not food.

List me as a kindred spirit marching beside any man, be he student or adult, who cannot fathom why we began and why we yet continue to wage a war in Vietnam whose military, strategic, and moral value is dubious.

Label me an unredeemed and unrepentant liberal who shares Martin Luther King's dream of brotherhood and indulges in further visions of an educated America, a healthy America, an unpolluted America, a peaceful America, a righteous America.

But omit my name from the roll call of those who believe the better America can arise only from the rubble of a destroyed or wounded land.

#### DE-RADICALIZATION

If the method must be violent, if blood must flow, if rights must temporarily be laid aside, consider me de-radicalized.

I march under a different banner from all these. For method and means, fealty to due and democratic processes, must be the test of a free and just society, not its sometime handmaiden.

Offer me no substitute yardstick by which to gauge an association of free men than how that association achieves change when change is required. And it is.

Were all other nations of the world perfect in every respect, the models to which idealists in this lesser country could aspire, Valhalla on earth, and were America in a far more aggravated state of disunity and disarray, still there would exist no cause for revolution. Still could America reach her apex in orderly, evolutionary fashion, albeit at quickened tempo, for her problems are grave.

But the truth is that America, despite her imperfections, stands tall, perhaps tallest, among the great powers of recorded history in her devotion to the principles and practices of freedom, equality, and social justice.

#### DEMOCRATIC PROCESS

All the more reason for her citizens to "mend her every flaw" through due process, not by the sword or its latter-day equivalent, the fire bomb.

What the the ingredients of the democratic process?

We vote for those who would represent us.

Whether our men win or not, we petition the office-holders to enact the laws we favor or repeal those we don't.

We attempt to convince others of our views.

We demonstrate individually or in a body as the occasion warrants, mindful at all times of the rights of those who may disagree.

If our efforts fail through the legislative process, we do not flinch from traveling the court route. We may defy an evil law and accept the consequences, the swifter to challenge that law or test its constitutionality.

Along the way, we speak up whenever we see injustice, for to remain silent or inactive is to have committed the injustice ourselves.

These constitute the arsenal of our republic.

Those—however young, however sincere, however aggrieved—who use coercive methods, those who speak of improving the system but practice junta hooliganism, must be restrained, ever through due process, or the disease of fascism will spread and the democracy surely will collapse.

But even as we reject their unworthy methods, as we must, let us remain steadfast in pursuit—intensified pursuit—of the goals that are worthy.

#### CAUSE UNSULLIED

Use of extremist and ignoble tactics sullies the perpetrator, not the end he seeks. The cause, if it be of noble quality, like the quest for peace or equality, can never be tarnished.

Such causes require the unflinching devotion of men dedicated to the Constitution and to that nation whose arteries it supplies with life blood.

This I believe.

#### THE HUMAN SIDE OF THE WAR

(Mr. KLEPPE asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. KLEPPE. Mr. Speaker, if anyone asks me why I support the President's position on troop withdrawal from Vietnam, I do not give one argument. I give 115,500 arguments. That is the number of American soldiers who have been withdrawn from Vietnam since the President began his troop withdrawal program. By spring of next year, there will be a total of 265,500 such arguments.

All other arguments—political, philosophical, historical—seem paltry compared with even the single argument of an American removed from danger. The President reminded us that when the crew of Apollo 13 was in danger the whole world offered help for their return. Our President has helped 115,500 men return from danger—he is concerned with human beings and not with rhetoric.

Two hundred and sixty-five thousand five hundred arguments such as these are proof of good policy, good planning, and great leadership.

The President himself now deserves the generous compliments of the American people, for he has followed a difficult policy in Vietnam—one which has been filled with risks as he has acknowledged. Yet, despite the lack of any cooperation from the other side, he has made that policy work. The proof of his success can be measured in objective terms—115,500 U.S. troops withdrawn in the first year and a plan to pull out another 150,000 troops over the next year.

I hope that the leaders in Hanoi were listening Monday night when President

Nixon made his speech on Vietnam. And I hope they get a text of that speech and study it very carefully.

For, while the President announced his plans to withdraw another 150,000 U.S. troops in the next year, and while he spoke of our aim and desire for peace, he spoke from a remarkable position of strength.

Hanoi should not underestimate the inference.

Our training and equipping of the South Vietnamese military is going better than expected. They are more and more able to take over the fighting of the war.

Pacification is working. This means that the enemy is losing the countryside.

The President is taking risks for peace, but he warned the enemy that "they will be taking grave risks should they attempt to use the occasion to jeopardize the security of our remaining forces in Vietnam, in Cambodia or in Laos."

And the President said: "We shall not be defeated in Vietnam."

President Nixon is for peace and he is taking risks for peace. The point should not be lost on Hanoi: He has no intention of ever accepting a dishonorable peace.

Listen, Hanoi.

#### HUGE FARM SUBSIDY PAYMENTS

(Mr. CONTE asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. CONTE. Mr. Speaker, I want to call to the attention of my colleagues today some information I have just obtained which, in my view, provides a striking illustration of the reason why the Department of Agriculture has consistently opposed all meaningful efforts to eliminate the scandal of huge farm subsidy payments.

According to the Department's own tabulation, put together at my request, 46 members of the Department's Agriculture Stabilization and Conservation Service State committees hold interests in farms which received subsidy payments in excess of \$5,000 in 1960. Whatever else these gentlemen are stabilizing and conserving, it certainly has not been Federal funds. Thirteen of them, in fact, collected over \$20,000 in payments. The men in this category represent well over one-fourth of the total membership of 175.

These ASCS State committeemen are the ones Secretary Hardin relies on to manage the subsidy program in the field.

Given the makeup of these State committees and the obvious self-interest of so many members, it is not surprising that Secretary Hardin, and Secretary Freeman before him, have opposed my efforts to put an end to these large payments.

It takes little imagination to figure out what sort of advice on payment limitations the Secretaries have received from such men as William E. Young of California who collected \$124,412 in subsi-

dies last year, or from Wilbur H. Wuertz of Arizona who raked in \$82,479.

And the man in charge of the whole payments program here in Washington, Kenneth E. Frick, is also a beneficiary of this bonanza. In 1969 his Kenmar Farm in Arvin, Calif., collected \$77,981.

This year, of course, the Secretary has finally proposed a limitation. But the levels he proposes—\$110,000 per crop, or \$330,000 for all three crops—would do little to disrupt the good life that these gentlemen have been living at the taxpayers' expense. More importantly, it would produce virtually no savings. In effect, the Secretary is suggesting the appearance of reform without the substance.

Mr. Speaker, as the author of amendments to place a \$20,000 ceiling on total subsidy payments which have twice now passed this body, I am confident that the Secretary's ridiculously high ceiling will be rejected.

Since I intend to offer an amendment again this year—this time at a level of \$10,000 per crop—I urge all of my colleagues to consider this new information, which I insert at the close of my remarks.

It provides, as I have said, new evidence that the initiative for reform of our farm subsidy program can only come from the Congress. We will not get it from the Department of Agriculture.

The list referred to follows:

U.S. DEPARTMENT OF AGRICULTURE—AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE		
<i>State Committeemen and Payments of \$5,000 or more Received under 1969 ASGS Programs. (Excluding Wool, Sugar, and Price Support Loans)</i>		
ALABAMA		
A. G. Mitchell	-----	\$9,554
Lawrence G. Davis	-----	10,694
ARIZONA		
Arden J. Palmer	-----	14,497
Joe A. Sheely	-----	52,262
Wilbur H. Wuertz	-----	82,479
ARKANSAS		
Aylmer L. Lowe	-----	13,938
Lowe & Lowe, Inc. (30% of \$4,646)	-----	1,394
Claude C. Kennedy	-----	8,965
CALIFORNIA		
Kenneth E. Frick—Kenmar Farm	-----	77,981
Everett G. Rank, Jr.	-----	21,687
William E. Young	-----	124,412
John B. Sill—Sill Prop., Inc. (20% of \$101,559)	-----	20,312
COLORADO		
Robert B. Grauberger	-----	8,875
GEORGIA		
Ross P. Bowen	-----	18,577
David L. Hardegree	-----	9,104
IDAHO		
J. Adrian Nelson (Nelson Ranch)	---	8,958
ILLINOIS		
Kenneth T. Benjamin	-----	15,230
Milton M. Hartman, Jr.	-----	6,526
INDIANA		
J. D. Thompson (\$8,977) (a 60% share on sister's farm, \$3,409)	-----	12,386
KANSAS		
E. R. Patton	-----	8,214
Lavern Becker	-----	6,105
L. Frank Boyd, Jr.	-----	5,729
LOUISIANA		
Erle M. Barham	-----	41,902
Barham Bros. (2.9% of \$105,702)	-----	\$3,065

West, Inc., Leflore County, Miss. (2.9% of \$138,022)	-----	4,003
Earl A. Roque—Roque Bros. (50% of \$11,929)	-----	5,964
MICHIGAN		
Nicholas Smith—Le Grand and Nick Smith (50% of \$6,613)	-----	3,306
MINNESOTA		
Alvin Payne (\$5,789 portion of Alvin Payne Agt. in Chippewa County—\$17,307)	-----	5,789
Elton Redalen	-----	8,315
MISSISSIPPI		
W. L. Prichard	-----	20,842
Prichard Bros. (50% of \$23,377)	-----	11,688
J. C. Sides, Jr.	-----	9,866
MISSOURI		
Barry Richardson	-----	27,891
Grape Ridge Farms (50% of \$18,349)	-----	9,174
Richardson Gin, Inc. (50% of \$3,869)	-----	1,943
NEBRASKA		
Lowell H. Hummel—Prairie Plains Seeds	-----	13,331
NEW MEXICO		
H. E. Gary	-----	20,123
John R. Hadley, Jr.	-----	24,874
NORTH DAKOTA		
William L. Grandy	-----	12,941
Howard W. Hardy	-----	14,870
Gordon Myer	-----	6,348
OKLAHOMA		
Beatty Patterson	-----	17,766
Bart W. Brorsen	-----	8,407
Raymond Watson	-----	9,218
SOUTH CAROLINA		
Leroy S. Epps, Jr.	-----	47,125
Joseph P. Hodges	-----	31,094
SOUTH DAKOTA		
Edwin I. Rudd	-----	5,343
Ohmer D. Cook	-----	9,241
TEXAS		
E. G. Schuhart II	-----	22,673
UTAH		
Wayne I. Sandall—Wayne & Dallas Sandall (joint payment \$22,765)	---	11,382
VIRGINIA		
Delman R. Carr	-----	5,725
WASHINGTON		
Herb Hemingway	-----	16,680
WYOMING		
Jack Van Mark	-----	8,343
1 Administrator of the Agriculture Stabilization and Conservation Service, USDA.		

EDUCATIONAL TV AND MR. WOESTENDIEK

(Mr. KUYKENDALL asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. KUYKENDALL. Mr. Speaker, the Congress of the United States has expressed its concern and its support for our Nation's educational television stations in graphic terms: by voting millions of dollars for grants in order that they might continue their important functions.

I served on the House Interstate and Foreign Commerce Committee that tailored this important piece of legislation, so I feel an official as well as personal interest in the manner of the firing of a newsman, William Woestendiek, from one of these stations for a reason I con-

sider spurious, at best—because his wife took a job the station management disapproved of.

Mr. Speaker, I do not know Mr. Woestendiek, nor have I ever had the pleasure of meeting Mrs. Kay Woestendiek, the lady whose employment has placed her husband in this situation. I might say, parenthetically, that I would look forward to meeting them with pleasure, if for no other reason than Mr. Woestendiek's reaction when he was asked to tell his wife to quit her job. He is reported to have said he would not even consider discussing it with her, and I commend him for this attitude.

For many years, Mr. Speaker, Mr. and Mrs. Mike McGee worked in my hometown for rival newspapers—he for the Commercial Appeal and she for the Memphis Press Scimitar. Throughout their careers there was never any hint that their journalistic ethics were marred by this arrangement. The same two newspapers, for years, boasted two excellent city editors, Mr. Null Adams on the Press-Scimitar and his brother, Mr. Malcolm Adams, on the Commercial Appeal. There was no compromise of journalistic integrity here.

The firing of Mr. Woestendiek transcends political party lines, Mr. Speaker. If we would believe the administrative chiefs of WETA, Mr. Woestendiek's job would have been jeopardized if his wife had gone to work for anyone in the Government, Republican or Democrat. I find their so-called sensitivity a little hard to swallow.

Is Mrs. Woestendiek, then, a chattel of WETA? Do these sensitive executives demand the right to determine suitable employment for the families of anyone on their staff? I think I know a little about newsmen, and I can warn them here and now that they would be courting full-scale mutiny if they persist in such demands.

Mr. Speaker, it is not my nature to use the Halls of Congress as a sounding board to tell private business how to run itself. But this organization is not private business; it is a nonprofit, educational television station, supported by money from tax-exempt foundations and from the U.S. Treasury, and using the airwaves that this Congress long ago decided were public property.

Other members of my committee are asking these same questions. They want to know if this policy is really a policy, or a convenient subterfuge to express disapproval toward the actions of members of the President's official family.

The entire matter, Mr. Speaker, should be looked into by the Federal Communications Commission, and I urge the FCC to be about this task immediately, because I have reason to believe that my colleague from Massachusetts, Chairman TORBERT MACDONALD, may very well want a report from the FCC before his Subcommittee on Communications.

If, indeed, Mr. Woestendiek was fired for the reasons stated, then WETA's officialdom was guilty of the most haphazard kind of overreacting. I was caught by the editorial in the Washington Post Monday, which reminded us all of James

Thurber's famous moral that "you might as well fall on your face as lean over too far backward."

#### COUNTRY NEEDS A JOINT CONGRESSIONAL COMMITTEE ON PEACE

(Mr. BENNETT asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. BENNETT. Mr. Speaker, one of our great generals, Douglas MacArthur, proposed 15 years ago in a speech at Los Angeles that the United States proclaim its readiness to abolish war in concert with other powers of the world.

George Catlett Marshall, an American military hero and former Secretary of State, said:

If man does find the solution for world peace it will be the most revolutionary reversal of his record we have ever known.

These two men of war—and of peace—presented our generation a bold challenge to find a way for men to live in peace.

Our Nation and the world need fresh and sound ideas to help find new ways toward peace on earth. The difficulty of the task should not deter us. War today is a bizarre intrusion from the past, truly anachronistic.

I am introducing legislation which would assist in our country's pursuit of mankind's biggest challenge—to achieve and maintain peace. It would establish a Joint Committee on Peace.

Congress has scores of committees on many matters. Among the important ones are the "Atomic Energy" and "Economic" Committees. Also there are such joint committees as the Joint Committee on Disposition of Executive Papers and the one for the Library. Surely, we could use one on the quest for peace. Millions of hours are spent by Congressmen on an almost infinite variety of investigations and studies. It is time now for Congress to spend a greater degree of time and energy in the quest for peace.

We are living today in an atmosphere that is primed and conducive to world peace. The recent remarks by the United Nations Soviet Delegate Yakov A. Malik that a new Geneva conference could bring about "a fresh solution and a relaxation of tension on the Indo-China peninsula" is indicative of perhaps a renewed effort to halt the war in Southeast Asia.

Of importance also, are the second round of strategic arms limitation talks, SALT, now going on between Russia and America in Vienna. The development of the atom bomb and nuclear weapons have required us to at least talk to our enemies.

A third point to mention is the President's announcement this week that 150,000 men will be withdrawn from Vietnam fighting. While he made this declaration of withdrawal—despite any progress at the Paris peace talks—he also had this to say:

But I again remind the leaders of North Vietnam that while we are taking these risks for peace, they will be taking grave risks

should they attempt to use the occasion to jeopardize the security of our remaining forces in Vietnam by increased military action in Vietnam, in Cambodia or in Laos.

I repeat what I said November third and December fifteenth. If I conclude that increased enemy action jeopardizes our remaining force in Vietnam, I shall not hesitate to take strong and effective measures to deal with that situation.

These are complicated and perilous times. While we have a signal from the Russians that they are willing to cooperate in bringing the Vietnam war to a conclusion and we are discussing with them ways to halt the arms race and the President is trying to grind down the conflict in Southeast Asia, there are still belligerent situations through the world we must cope with and find peaceful answers to. Somehow, we must seek also a lasting peace with China.

A Joint Committee on Peace would be a vehicle to study and consider these grave problems and when proper, to keep them before the public, and thus provide possible answers to peace.

For over a decade I have sponsored and worked for a U.S. Agency for World Peace within the Department of State—H.R. 949 now pending in the House Committee on Foreign Affairs. As a matter of fact, I was the first Member of Congress to introduce a bill to establish a Peace Agency, January 6, 1960, which led to the statutory establishment of the U.S. Arms Control and Disarmament Agency in 1961.

While the idea for a further extension of this law, concentrating on peace and research to achieve peace, has been favorably received by the executive agencies involved no support for H.R. 949 has been forthcoming. I quote from a letter from the Secretary of State in the report on H.R. 949:

The objective of H.R. 949—the achievement of a peaceful world—deserves the full support of the Department of State and the several other agencies of the U.S. Government which are actively and continuously working to foster peace throughout the world and to change or to prevent conditions which might lead to war.

Rather than establish a new agency, however, the State Department is convinced that the objective of the bill can be carried out more effectively through continued collaboration between the agencies already heavily committed to research leading toward a more peaceful world. These include not only such foreign affairs agencies as the State Department, Defense Department, Arms Control and Disarmament Agency, United States Information Agency, Agency for International Development, and the Peace Corps, but also the Department of Agriculture, Department of Health, Education, and Welfare, Atomic Energy Commission, and the National Aeronautics and Space Administration.

The diversity of research approaches among these agencies is of real value in the U.S. Government's search for ways of strengthening world peace. Concentration of all such research in one agency might be less effective in achieving the objective of this bill. Current efforts are proceeding on a broad and comprehensive basis. To concentrate all efforts in one agency could be self-defeating, in that it might limit the breadth of interpretation and even diminish the soundness of the research process and conclusions.

There is executive enthusiasm for the basic purposes of H.R. 949, but none for

a new agency in the State Department or for a new department of peace.

The challenges for world peace are, however, of such magnitude we in the Congress should spotlight these challenges. We can do this with a Joint Committee on Peace.

The committee would not establish policy, but would do research on problems related to achieving peace, including an examination of the economic, political, and sociological causes of war and the development of techniques for the elimination or reduction of these causes.

Research on peace would be conducted by the committee and its staff—and I do not envision a large staff, but one composed of experts—similar to that of "war gaming" done by military specialists.

Five Senate and five House Members would make up the committee and they would be required to report to the Congress on activities in the field of peace-finding and peacekeeping. This would not be a legislative committee, but would be a study and oversight committee. Government agencies, concerned with peace, including the Departments of Defense and State, would be required to report to the committee in the field of the committee's inquiries. The committee could also receive suggestions from the general public, thus assuring consideration of every valuable suggestion made in the public area.

As a senior Member of the House Armed Services Committee, I know that the survival of our Nation is our most important goal. But I believe we sometimes overlook the prime target—peace.

The establishment of a Joint Committee on Peace might mean the difference between world progress and world oblivion.

Theodore Roosevelt said almost seven decades ago: "Speak softly and carry a big stick; you will go far." He challenged our Nation to have a strong national defense to support our efforts for world peace and freedom for all people.

I believe in a strong national defense. I also believe we need a Joint Committee on Peace, and I hope Members of the House of Representatives and the Senate will join me in this effort.

A copy of the bill follows:

H.J. RES. 1184

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, that there is hereby established a Joint Committee on Peace to be composed of five Members of the Senate to be appointed by the President of the Senate, and five Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. In each instance not more than three Members shall be members of the same political party.*

Sec. 2. The Joint Committee shall make continuing studies of ways to achieve world peace. The several departments and agencies of the federal government concerned with keeping and maintaining peace including the Departments of Defense and State shall keep the Joint Committee fully and currently informed. Any Government agency shall furnish any information requested by the Joint Committee with respect to the activities or responsibilities of that agency in the field of peace. The members of the Joint Committee who are Members of the Senate shall no less than annually report to the Senate, and the members of the Joint Committee who are

Members of the House of Representatives shall no less than annually report to the House.

Sec. 3. Vacancies in the membership of the Joint Committee shall not affect the power of the remaining members to execute the functions of the Joint Committee, and shall be filled in the same manner as in the case of the original selection. The Joint Committee shall select a Chairman and a Vice Chairman from among its members at the beginning of each Congress. The Vice Chairman shall act in the place and stead of the Chairman in the absence of the Chairman. The Chairmanship shall alternate between the Senate and the House of Representatives with each Congress, and the Chairman shall be selected by the Members from that House entitled to the Chairmanship. The Vice Chairman shall be chosen from the House other than that of the Chairman by the Members from that House.

Sec. 4. In carrying out its duties under this Act, the Joint Committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings or investigations, to sit and act at such places and times, to require, by subpoena or otherwise, the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The Joint Committee may make such rules respecting its organization and procedures as it deems necessary: Provided, however, That no measure or recommendation shall be reported from the Joint Committee unless a majority of the committee assent. Subpenas may be issued over the signature of the Chairman of the Joint Committee or by any members designated by him or by the Joint Committee, and may be served by such person or persons as may be designated by such Chairman or member. The Chairman of the Joint Committee or any member thereof may administer oaths to witnesses. The expenses of the Joint Committee shall be paid one-half from the contingent fund of the House of Representatives and one-half from the contingent fund of the Senate, upon vouchers signed by the Chairman or Cochairman of the Committee.

Sec. 5. To enable the committee to exercise its powers, functions, and duties under this joint resolution, there are authorized to be appropriated for each fiscal year such sums as may be necessary to be disbursed by the Clerk of the House of Representatives on vouchers signed by the chairman or vice chairman of the committee.

Sec. 6. The Joint Committee may classify information originating within the committee in accordance with standards used generally by the executive branch for classifying restricted data or defense information.

Sec. 7. The Joint Committee shall keep a complete record of all committee actions, including a record of the votes on any question on which a record vote is demanded. All committee records, data, charts, and files shall be the property of the Joint Committee and shall be kept in the offices of the Joint Committee or other places as the Joint Committee may direct under such security safeguards as the Joint Committee shall determine in the interest of security.

#### MASTON O'NEAL HAS SERVED NATION WITH DISTINCTION

(Mr. FUQUA asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. FUQUA. Mr. Speaker, during the nearly 7½ years I have been privileged to serve in the Congress, I have known many fine men. But I can say in all truth that of all those men, there is none finer

nor more gentlemanly than our colleague from Georgia, MASTON O'NEAL.

Monday he announced that he would not seek election to a fourth term. I know that all Members of the House were deeply sorry to learn that a heart condition has developed which led him to this personal decision. I feel that Congress and the Nation will be poorer when he leaves active service in these Halls.

MASTON O'NEAL is that rare individual who is beloved by all who come in contact with him. Quiet and courtly, he gets things done without fanfare and few men have the real friends and respect that he has within the House.

For 24 years he served as a district attorney and will complete 6 years of service in the Congress at the end of this year. We share adjoining offices in the Cannon Building as well as having adjoining congressional districts in our respective States of Georgia and Florida. From that association has come a warm personal friendship as well as a genuine feeling of respect for a fine gentleman on the part of myself and my staff.

Particularly would I say a word about Mrs. O'Neal, a lady of grace and charm who has been his guide and inspiration and has been very helpful to him in his political career.

The O'Neals are the loving parents of two fine children, Mrs. Susan Charlotte Bowden and Air Force Capt. Maston Emmett O'Neal III. Without question, their greatest pride is in their grandchildren.

Captain O'Neal is an outstanding officer and pilot in the U.S. Air Force, having served in the Vietnam conflict. He carries on a military tradition established by his father who served in the Navy during World War II.

Following his election to the 89th Congress, MASTON O'NEAL so proved himself to those he has represented that they have returned him to Congress twice without opposition.

I know that I speak for all of the Members of the Congress when I say that we will be losing one of our most beloved Members when MASTON O'NEAL ends his career of public service. But I can say also that this Nation, the State of Georgia and the people of his district are richer for his having served.

#### EARTH DAY

(Mr. ANNUNZIO asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. ANNUNZIO. Mr. Speaker, as a young man I was a teacher of history and civics at Harper High School in Chicago. I have often thought back on those days and reflected, as have all teachers, how much I learned from my students. They contributed much to my thinking and to my own personal development.

Today's students, Mr. Speaker, are a bit more controversial than those I taught back in the 1940's. Their activism and excesses at times have prompted harsh words in reaction in this very chamber. Many criticisms were leveled at them; yet, yesterday, April 22, we witnessed one of the most responsible and mature endeavors ever undertaken by the youth of this country.

At over 2,000 colleges and universities and 10,000 high schools throughout the country, activities were sponsored on April 22 in observance of Earth Day. This effort is unique in our history, and indeed, in the history of the world, because never before in the millions of years that man has existed on this planet has a society done what we in America have done. Never before has man so organized his endeavors to produce such wealth for the vast majority of a country's citizens. Yet, we have paid a dear price in the process, for we are fast running out of clean land, clean air, clean water.

Look at Lake Erie with its slimy shores and wasted waters, supporting ever fewer forms of higher life. Stand on a hill surmounting one of our major cities and watch the mustard-colored haze drifting into every corner—and every lung. Visit the inner cities and see the bleakness of the streets, the despair in the faces.

These are the events that were commemorated yesterday, Earth Day, and during this week, Earth Week. The young people of our land are calling to our attention what it was that we gave up to obtain that extra kitchen appliance, that air conditioner, that last hundred horsepower in our automobiles. They are pointing out the degradation the land and the people have suffered. That it was done by and large unwittingly does not make more tolerable the dirt and waste prevalent today.

Our manufacturers and industrialists are not to be blamed alone, for they merely supplied what the people asked for. There is guilt enough for all. If our garbage dumps and landfills are overburdened it is because every one of us preferred throw-away containers to returnable bottles, and bought the flashy overpackaged product instead of the simpler, utilitarian carton.

Without some incentive to do otherwise we will probably do the same tomorrow and let the earth and our descendants bear the load. The businessman's profit is measured in dollars, the housewife's in time saved and in "convenience." And whether or not we know it, all of us help pay the price. We pay for the fancy package when we buy the product, we clean up after the litterbug with increased taxes, and we amortize the cost of the belching smokestack with years off our lives.

All of us carry a great responsibility, Mr. Speaker. It is within our power to reduce these ravages on our environment and to bring to manageable terms the wastes, solid and fluid, of our daily lives. I, and others in this Chamber, have in the past supported the Water Quality Act, the Clean Air Act, the Water Pollution Control Act, the Environmental Policy Act, and other landmark legislation designed to control pollution, and yet, pollution of our environment continues. Much remains to be done, and it is truly an awesome task we face.

The demonstrations that took place on Earth Day expressed the hope that survival and improvement are still possible. I salute and congratulate all those who yesterday brought this hope to the attention of the Nation, and join my colleagues in the Congress in redoubling our efforts to solve the environmental crisis.

Mr. Speaker, at this point in the RECORD I would like to include an article by Colman McCarthy entitled "Hard Facts About Dirty Facts" which appeared in the Washington Post on April 22. The article, which is a cogent analysis of the environmental problems that confront us, follows:

HARD FACTS ABOUT DIRTY FACTS  
(By Colman McCarthy)

After tons of adjectives and the legwork of a thousand advance men, today sees the arrival of Earth Day—so named because a few earth people are beginning to worry. The basic dread is simple: the dirt and waste is everywhere, we are running low on—if not out of—clean land, air and water, and nobody gets a transfer when the planet stalls in mid-air. Naturalists, lecturers and the inevitable me-too politicians speaking at hundreds of colleges and high schools will tell the young what most of them know and have heard a hundred times already.

The purpose of Earth Day is to prod each group to work out a strategy for earth-improvement—or what is now called, strenuously, ecotactics. Many will organize to change local pro-pollution laws, or perhaps unite behind an earth-minded politician, or boycott the one-way cans and bottles, or—hardest of all—begin taking personal responsibility for conserving things like water, fossil fuels and life itself.

Trying to end the evil of pollution may meet many of the frustrations found earlier in the civil rights and antiwar movements: first, like racism and war, pollution has been going on unquestioned so long that suddenly putting on the brakes is more an act of alarm than actual stopping—the way a speeding car needs over 400 feet of braking before forward motion is killed. Second, ending pollution means that somebody will get hurt: profits must be cut, comforts reduced, sacrifices endured. As in all human struggles, the powerful and monied will fight the hardest to be hurt the least.

Few politicians, and certainly not a Republican President with re-election already on his mind, are talking up these hard facts about the dirty facts. Instead, anti-pollution is often presented as a warm puppy issue, assuring happiness to anyone opposing a befouled environment. If we pass enough laws, says the delusion, spend some money and have a good heart, well, it will soon be America the Beautiful again.

Just how fast the pollution wheels have been speeding along, and how many decades if not centuries will be needed before they may stop, is shown by the almost countless laws on the books forbidding pollution: the Water Quality Act, the Clean Air Act, the Water Pollution Control Act, the Environmental Policy Act, to name a few. Yet, the air, land and water continue to blacken. The "laws" have been ignored by large corporations and small companies, many of them cheered on, if not whipped on, by the stockholders. But the industries were only committing the kind of ecological murder the federal and state agencies let them get away with. It is almost as if the Interior Department, Agriculture, the FTC, the FDA and the many state and local conservation bureaus were listening to Ford Motor Company president Arjay Miller, who warned in 1967 of the "threat of over-regulation by government" regarding pollution. That remark was made when pollution was still a quiet issue.

A second reason why destruction of the earth will not stop instantly is that the needs of the public will not instantly slacken. The opposite seems true. American homes are now so filled to the roof with appliances, machines, devices and gizmos that the demand for electricity to run them all is insatiable.

The electric companies, far from being profit-mongers, argue that nuclear power plants must be built to supply the public. But each plant needs millions of gallons of water to cool the machinery. The used water is then flushed into a lake or river at an increased temperature that kills the fish and unbalances the ecology.

What does the public want? More contraptions in its homes or clean lakes and rivers outdoors?

The choice is everywhere. Phosphates in detergents—such as Axion, Bold, Cheer, Fab, Oxydol, Tide, Trend—have been ruining our lakes and rivers, according to the House Committee on Government Operations and anyone able to see or smell. But the heavy duty soaps clean clothes fresher and brighter, and everyone, except some of our younger people, wants that. Moreover, according to the Soap and Detergent Association, eliminating phosphates "would be equivalent to setting back health, cleanliness and sanitation standards many years."

Despite the industry's talk about impending disease and pestilence, a choice is present: weaker soaps or cleaner lakes and rivers. But is there a choice? The industry swears that no replacement for phosphates is now possible; since the Interior Department is hesitant to force the manufacturers to change (Interior has funded only one study, for only \$99,000, on the idea of removing phosphates from the detergents), the public has the choice made for it: rivers and lakes that are dirty today and dirtier tomorrow.

The question—who gets hurt the most in cleaning up?—easily wins the Rhetorical Question of the Century contest. The consumer, who else? Fortune magazine recently asked business leaders for ideas on solving the ecology mess. Over half—57 per cent—said the government should offer industry tax relief for combat duty in fighting pollution. "This would mean," writes Michael Harrington in the current *Commonweal*, "that the biggest polluters, with the greatest problems, would get the largest subsidies. It would, in effect, reward those who have befouled the atmosphere. And it would, like all other tax expenditures for the private sector, take money away from social uses."

In case tax money is not about to be forked over, a few industries are telling the public outright that the latter must pay. Prices will be raised \$100, for example, on new GM cars for anti-smoke devices. At this point, the temptation is to condemn the captains of industry and their corporals at the local outlet. But this is simple-minded. Naturally, industry is going to make the public pay. American business has worked hard and long to supply the public with the services, goods and technology it seemed to want. The individual consumer never asked for products that didn't pollute; instead, as in the case of cars, he said, "Make them flashy, fast and powerful." Detroit did. Now, the public suddenly wants its cars clean as well. "That's fine with us," says Detroit, but be prepared to pay for this latest whim the way you wanted and paid for the old whims.

At the base of the environmental crisis, two general theories of man are whirling. The first, from philosopher Alfred North Whitehead and popularized by Teilhard, holds that the creation of the world is still ongoing. The current mire in population should not discourage—it is only a venial lapse caused by the giddiness of progress. We'll snap to soon, and be swept up in what Teilhard calls "an irresistible tide of liberated energies."

The second theory is from Freud who claimed that man has an "innate inclination toward evil, toward aggression, destruction, and . . . toward cruelty."

The question raised by an earth suddenly turned cesspool, after millions of years of grace and purity, is forcing a definition of man: is he a co-creator or a violent destroyer? The hope of Earth Day is that we

are the former, that survival, even self-improvement, is still possible. But even here the evidence is mixed. The very signs, posters, buttons and pictures used to dramatize April 22 will become tomorrow just more piles of junk and garbage to be hauled off to the burning ground—as much a pollutant to the air and earth as any Detroit smokewagon guaranteed to be damned more than once today.

IMPORTANT ANTIPOLLUTION  
PACKAGE

(Mr. COHELAN asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. COHELAN. Mr. Speaker, one of the major causes of air pollution is the automobile. Because of my great concern for this problem, which is rapidly increasing in almost uncontrollable proportions, I am joining with several other of my concerned colleagues in sponsoring an important air pollution package.

This is an antipollution package of quality and substance—a concrete and realistic appraisal of the problem with viable and workable solutions. I commend my colleagues for their foresight in comprehending the problem of automotive air pollution, for the timeliness of their presentation, for their awareness of the hazards of this situation, and for their thoroughness in attacking and attempting to resolve this problem. I am happy to associate myself with this effort.

The time has come when we must begin to realistically face the problem of air pollution. The simple fact is that our environment is in grave danger. The air we breathe is impure—and this is unhealthy, a threat to life. If allowed to go unchecked, this situation is going to cause enormous and hazardous consequences for the future. There is evidence today of the seriousness of this situation. In my own State of California, the problem of air pollution resulting from automobile emissions is critical. In the city of Los Angeles, there have been instances where schoolchildren have been prohibited from outdoor recess because smog levels were so high. The policy now in Los Angeles school districts is that during high frequency smog levels, children are permitted outside only 1 hour every 3 days. Incidences of lung cancer and emphysema have increased and are reportedly attributed to air pollution, and people have died with lung conditions aggravated by impure air.

This is somewhat absurd and incredible, but these are the facts. The situation in California is paralleled in New York, where extensive congressional hearings were held which resulted in this action we are taking today. All metropolitan centers in this country are fast falling victim to the dangers of automotive air pollution. This package we are considering today recognizes these facts and provides for a program to deal with all aspects of the problem.

The package attacks the problem by establishing strict Federal auto emission standards based on the cleanest feasible propulsion system; it calls for the elimination of the internal combustion engine in automobiles by 1975 and for the

installation of emission control devices on all used cars by 1972; the time limits are a positive insurance of action and action now. The package also provides for federally conducted assembly line and follow-up inspections to assure that standards are being met and kept.

The enforcement aspects of this program are sound and viable—Federal inspections will guarantee adherence to standards; and owners and purchasers of high horsepower cars, which cause greater pollution levels, will be assessed a higher auto excise tax.

The package goes further than regulating type of engine and emission control devices by banning leaded gasoline and calling for the regulation of rubber and asbestos emission. Current Federal law and research efforts consider only three of the six major automotive pollutants—carbon monoxide, hydrocarbons, oxides of nitrogen; lead, rubber and asbestos are equally as dangerous and causative of pollution in the air. A report prepared for the National Air Pollution Control Administration at HEW noted that asbestos—emitted from clutch and brake lining—is an "air pollutant which carries with it the potential for a national epidemic of lung cancer." The auto industry's research into this area is practically negligible.

Mr. Speaker, I urge my colleagues on both sides of the aisle to give careful and thoughtful consideration to this matter. It is a problem with complex and frightening consequences for the entire human race. We all have what we might consider more important issues to contend with, but I ask with all sincerity what could be more important than an existing condition which threatens the existence of life itself?

#### STRATEGY MYTH BELIED

(Mr. DELLENBACK asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. DELLENBACK. Mr. Speaker, sometimes, amid the loud cries from President Nixon's critics in the press and elsewhere, it is difficult to hear the facts about the progress this administration has made and is continuing to make in the perplexing problems facing our Nation.

Fortunately, there are voices of reason which sometimes rise above the clamor, to put the issues in their true perspective. One such voice was recently heard in an editorial from the Portland Oregonian, discussing the President's recent speech on desegregation and the followup to that speech seen in Secretary Finch's press conference and Federal court decisions regarding integration.

Perhaps the most significant thing about this editorial, however, Mr. Speaker, is the citing of specific statistics which indicate clearly that the Nixon administration has made great strides in bringing about integration of southern schools. These facts demonstrate the promise offered by Secretary Finch's statement that by next year, 80

percent of the South's Negro children will be in desegregated schools. I ask to insert this editorial in the RECORD at this point:

[From the Portland Oregonian, Apr. 8, 1970]  
STRATEGY MYTH BELIED

HEW Secretary Robert H. Finch's press conference statements Tuesday should dispel any lingering doubt that the Nixon Administration is dragging its feet on racial desegregation in the schools. Secretary Finch echoed President Nixon's commitment to the elimination—through both court suits and administrative action—of law-imposed segregation. His appearance coincided with a federal court order's prevalence over the opposition of Gov. Claude Kirk to a plan for federally-imposed integration in a Florida county's schools.

Mr. Finch put it on the line. He set a goal for next fall of doubling the number of black students in desegregated schools in the South. In the first year of the Nixon Administration, that number has doubled from 600,000 to 1.2 million. The Finch projection would put the total at 2.4 million in the next year, or about 80 per cent of the South's Negro children.

That is the sort of progress unmatched by any previous administration. It reflects the success of major desegregation accomplishments already this year over the racist rhetorical opposition of southern governors and other public officials. Here is a part of this year's score:

In Louisiana, an estimated 225,000 more black pupils put in desegregated schools since the beginning of the year, doubling the number placed in integrated classrooms in Louisiana in the entire 15-year period after the initial Supreme Court school integration decision.

In Atlanta, Ga., school faculty desegregated, involving transfers of 40 per cent of Atlanta teachers, despite opposition of Gov. Lester Maddox and little community support.

In Jackson, Miss., successful integration of some 20,000 children despite the vigorous opposition of Gov. John Bell Williams.

Congress, too, has caught the spirit of accelerated desegregation, having rejected crippling amendments to legislation introduced by southern congressmen and supported by some congressmen of other regions.

Similar extensive progress in the elimination of de facto segregation established by housing patterns will be complicated. But it will surely follow, with each community taking its own tack, as in the case of the decentralization of Portland's school system.

However, events of the last few months have clearly belied the contentions of some critics of the Nixon Administration that it was following a "southern strategy" in soft-peddling desegregation. The pedals have never before been operated with such effect.

#### GILBERT ENDORSES EARTH DAY

(Mr. GILBERT asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. GILBERT. Mr. Speaker, yesterday was, of course, Earth Day. Conceived by our youth, sponsored for the most part by young people, Earth Day has suddenly come to symbolize all that is wrong with our world.

We need not look far beyond this chamber to see the ills that so concern youth today. Only blocks away we have ghetto areas; less than a mile away the polluted and rank Potomac River flows.

At rush hour Constitution Avenue going by the Capitol will be bumper to

bumper with automobiles emitting noxious fumes. No one does not have to go far to find out what bothers our young people today.

The wonder is then, Mr. Speaker, why the Congress in its wisdom has not also become so concerned. We do pass laws but we extract the muscle from them at the same time. We sign resolutions but resign ourselves to pollution. Cannot the Congress learn a few wisdoms from these youngsters who preach neither hate nor love but simple survival?

We must not be afraid to lead occasionally. If we are so subtly attuned to political nuances as our critics claim, does it not seem significant that Earth Day itself, unknown just a year ago, has become so imbedded in the mind of the public at large today? I think that should tell us something of what the people of this Nation are demanding.

They want their air fit to breathe, their water pure enough to drink. They want an end to murky waters and fish unfit to eat. They want the noise levels tolerable, the byways uncluttered, the ghettos eradicated.

I salute the young men and women who have made this day possible. And I pray that all of us in Congress do not end this year without some affirmative response to this call from our Nation.

We possess no convenient excuse for not responding. In fact, we as a body owe the Nation a deep apology for allowing matters to degenerate to where they stand today.

I would ask today that those committee chairmen who have environmental projects before them immediately convene hearings to determine how to improve those areas under their jurisdiction. We cannot longer accept a project because it will cause only minimal destruction. We must, from this day forward, concern ourselves with how to improve what we have allowed to be damaged.

We all recognize that the pressures that come from groups which are more concerned with profit than with purity. Appealing to man's better nature has never been successful by itself. It is time, however, to realize that profit cannot come if the Nation's very existence is in jeopardy. If we make it profitable to care about environment and expensive to abuse it, the Congress will have gone a long way toward redeeming itself in the eyes of the American people.

#### MCCULLOCH MOVES TO SAVE THE "QUEEN"

(Mr. McCULLOCH asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. McCULLOCH. Mr. Speaker, today I introduced legislation supported by Senator SAXBE and cosponsored by Congressmen ROBERT A. TAFT, JR., of Cincinnati, WILLIAM H. HARSHA, of Portsmouth, and CLARENCE E. MILLER, of Lancaster, that would preserve the last page of America's 160-year-old riverboat history. My reference, Mr. Speaker, is to the only overnight passenger steamer in America—the *Delta Queen*. She is the

last paddle wheel steamboat authorized by the Interstate Commerce Commission to carry overnight passengers, certificated and regularly inspected by the U.S. Coast Guard.

This vessel has a steel hull and a superstructure largely of mahogany, ironwood, and walnut. Because of this wood construction, the *Delta Queen* cannot meet modern steel ship building requirements and was therefore to be retired from service in 1968. However, by act of Congress—Public Law 90-435—the *Delta Queen* was permitted to operate until November 2, 1970. Unless this Congress acts, another of our great American traditions will have passed from the scene.

The law that would retire the *Delta Queen* was enacted in 1966 to rid the seas of unsafe ships and to insure the financial responsibility of the carriers calling at U.S. ports. Inadvertently, it seems, that this legislation was made broad enough to encompass passenger vessels carrying overnight passengers operating on our inland rivers. For the purpose of safety standards, the *Queen* was placed in the same category as deep-draft vessels traveling on the high seas. Unless this Congress intervenes 160 years of paddle wheel history will end November 2, 1970.

Originally designed and built in 1926, the *Delta Queen* is the most luxurious paddle wheel passenger boat ever built and also the safest. Every compartment and public room is equipped with automatic sprinklers and other safety devices such as fire extinguishers, fire hydrants, fire alarms, and emergency tools that are strategically located throughout the vessel. Unlike ocean vessels, most of the *Queen's* staterooms open directly onto the outside deck. There are no enclosed corridors where passengers or crew could be trapped.

I believe that the Congress has the duty, indeed the responsibility to look into this type of small business which has become all but extinct. It hardly need be said that the riverboat business is not what it was 50 years ago when hundreds of vessels, similar to the *Delta Queen*, plied the same trade routes. However, many Americans have discovered that riding on a riverboat can be a most satisfactory experience. Mark Twain said it this way:

One cannot see too many summer sunrises on the Mississippi. They are enchanting. First there is the eloquence of silence; for a deep hush broods everywhere. Next there is the haunting sense of loneliness, isolation, remoteness from the worry and hustle of the world. . . . And all this stretch of river is a mirror, and you have the shadowy reflections of the leafage and the curving shores and the receding capes pictured in it. Well, that is all beautiful; soft and rich and beautiful; and . . . you grant that you have seen something that is worth remembering.

The legislation that has doomed the *Queen* was passed in 1966. Since that time, the owners of the vessel sought successfully two extensions of time in order to permit them to design and construct a duplicate of the *Delta Queen*. To their dismay and to the dismay of many, the owners and operators of the *Queen* learned that with the rise in the cost of

construction, material, and labor under competitive bidding, a new vessel to replace the original *Queen* would cost in excess of \$10,000,000 instead of the estimated \$4,000,000 to \$6,000,000. This new dollar figure is believed by all to be prohibitive for such a small business as Greene Line Steamers, Inc.

I believe, Mr. Speaker, enactment of my bill would have an important positive effect on the long-range economies of our river system. Mr. Speaker, I predict that passage of this legislation will encourage and make possible the expansion of scenic river travel in the United States.

Presently, by act of Congress, the *Delta Queen* is categorized with ocean-going vessels. I think she and others like her should be distinguished from that class and should be exempted. The *Queen*, for example, only travels the rivers: the beautiful Ohio, the scenic and historic Mississippi and Tennessee. For 9 months of the year she travels our western river system—from St. Paul in the North to New Orleans in the South, from Pittsburgh in the East and to the Gate of the West—St. Louis, touching ports in 16 States.

The *Delta Queen* is never more than a few yards from any shore and should an emergency arise, all the captain need do would be to hit the rudder and she could be run aground probably before the lifeboats hit the water.

I might add, Mr. Speaker, that the *Delta Queen* presently meets certain Coast Guard safety standards and I think it should be noted that the waters in which she travels is no deeper, at its deepest point, than her middle deck. For these reasons I believe this type of watercraft is very much distinguishable from those ocean going vessels which the 1966 legislation sought to regulate for greater safety of life on the high seas.

I am sure that many of my constituents along with people from around the State of Ohio, as well as citizens from other river States across the Nation, do not want to see the cessation of this great tradition by legislation that is primarily intended to rid the high seas of unsafe ocean-going ships.

WILLIAM T. EVJUE, 1882-1970, EDITOR AND PUBLISHER OF THE CAPITAL TIMES DAILY NEWSPAPER, MADISON, WIS.

(Mr. KASTENMEIER asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. KASTENMEIER. Mr. Speaker, it is my sad duty to announce to the Members of the House the death of William T. Evjue, editor and publisher of the Capital Times daily newspaper in Madison, Wis. I am certain that all of my colleagues who knew him or knew of him will join me in this tribute to a crusading newspaperman and humanitarian.

In the development of a community, a State, and a great Nation, a voice of conscience is needed to protect the less powerful from abuse and misuse. A voice

of sensitivity, a voice of courage, and a voice of commitment to the ideal that no man's rights as a citizen of this country can be blotted out by those who temporarily grasp the levers of political and economic power.

Wisconsin and the entire Nation have been the benefactors of such a voice for the last 53 years. Although death has now silenced that voice, William T. Evjue has established a record of humanitarianism and journalistic excellence that will serve as a benchmark for all who follow.

When he published the first edition of the Capital Times on December 12, 1917, he protested the suppression of dissent from a war to make the world safe for democracy. The words of that early protest and the publisher who had the courage to print them are even more relevant today. For today, we are again waging a battle for the right to dissent and for the cause of a peaceful world.

During Mr. Evjue's 53 years as editor and publisher of the Capital Times, he possessed an unchanging commitment to the principle of human dignity. The controversies which he engendered gave him the will to meet other controversies, and to emerge from each conflict with renewed strength. Unlike some newspaper editors, he did not tie his publication to the pursuit of blandness—he did not allow his voice to grow old and dull.

What made Mr. Evjue's newspaper unique was his refusal to withdraw quietly from the rough and tumble arena of public events—to print only that news which pleased his news sources, his advertisers and his readers. While every reader may not have always agreed with what Mr. Evjue printed, no amount of pressure compromised his views of the public good.

It was this unswerving loyalty to a principle that led him to support Republicans, Democrats, Progressives and Socialists. It is the test he used when he launched his campaign against secrecy in government, special privilege, corruption, gambling and bigotry. He supported Al Smith, the Democrat and Catholic, for the same reason he supported Robert LaFollette, the Republican and Protestant. He fought the Ku Klux Klan for the same reason he fought McCarthyism. He fought the Communists for the same reason he fought Fascists—because they opposed free men.

From his earliest campaigns against those who profited from war to his most recent opposition to the bottomless pit of the Vietnam conflict, Mr. Evjue supported the pursuit of peace. However, he was not a pacifist. He supported the war against fascism in World War II. He supported the war against aggression in Korea. But he opposed the war in Vietnam, because he believed it serves the cause of our antagonists and is sustained by policies inspired by the "industrial-military" complex of this country.

After his early years as a crusader in the Nation's and Wisconsin's capitals, he had ample laurels to rest upon if he so chose. Yet, to the last days, Mr. Evjue

maintained his belief in equality and his determination to ferret out corruption. He was well aware that the voice of special interest is often louder and heard more distinctly than that of the average citizen. Mr. Evjue's voice was heard whenever the public's rights were abrogated. It is easy to look back over the past half century and pause to recall the battles he has fought, and the frustration of those who thought they could silence him.

A little more than a year after he founded the Capital Times, Mr. Evjue wrote:

We have tried to stand for interests of the common man. We have tried to tell the truth about things. We have fought privilege. We have fought exploitation at the hands of interests that prey on the public.

The most remarkable thing about his statement is that for 53 years he lived that philosophy and kept his pledge to his readers. The unique role which he played in American journalism will be recorded by history. The lessons which his life has taught will be emulated by other newspapermen who follow.

Although death has removed Mr. Evjue from the American journalism scene, his ideals still live.

#### NATIONAL OBSERVANCE EACH YEAR OF THIRD WEDNESDAY OF APRIL AS EARTH DAY

(Mr. FASCELL asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. FASCELL. Mr. Speaker, in the name of progress, we have wrought tragic wrongs on this planet we inhabit. Man's race toward self-destruction in his quest for the necessities of life must halt.

On Earth Day we were all talking about "the same old garbage." It is everywhere we look. Our advanced technology has moved forward helter-skelter with little thought of its total effect on the environment.

The full extent of the damage we are doing to our environment and our course of seeming self-destruction have been forcefully brought to our attention. The impact of this realization has brought about a recognition of the factors which we have come to accept as "every day" but which are extremely detrimental to all aspects of our ecology. Our continued advances in technology can no longer be accepted without a forethought to the consequences to do so may very well be our undoing.

The overwhelming response of the entire Nation to Earth Day, 1970, indicates to me the keen awareness of the American people for the need to improve the quality of our environment. More importantly, it indicates a national commitment to do something about it. But Earth Day will have been meaningless, if, having been celebrated on April 22, it is then promptly forgotten. We must make Earth Day an everyday occurrence.

One of the most interesting observations I have read in the recent proliferation of material about the decay of our environment was made by Jerry Yudelson of the Cal Tech Environmental Ac-

tion Council and quoted in an article by Connie Flateboe in the March issue of the Sierra Club Bulletin. Mr. Yudelson observed:

Ecology is as much an attitude toward life as a science. Changing personal attitudes about the environment is as important in the long run as passing laws or developing new technologies for environmental control.

Stated in another way, the individual is the key to resolving the environmental crisis. If he is not willing to pay the price—and it is a price not measured in dollars alone—then the fight for a clean environment is foredoomed to failure.

In my judgment, an annual observance of Earth Day would serve to renew each individual American's commitment to the antipollution effort and allow us to review what progress has taken place and determine what efforts remain to be taken during the following year.

I am today, therefore, introducing a resolution to authorize the President to designate the third Wednesday of April of each year as Earth Day. The text of my resolution follows:

H.J. Res. 1185

A joint resolution designating the third Wednesday of April of each year as Earth Day

Whereas, the overwhelming response of the entire nation to Earth Day, 1970, indicates the keen awareness of the American people for the need to improve the quality of the environment, and

Whereas, this need has national and international import; and

Whereas, this need is a continuing one and should be constantly reviewed to determine what progress has taken place and what efforts remain to be taken during the following year; and

Whereas, such an annual day of observance would serve to renew each individual American's commitment to the anti-pollution effort: Now, therefore, be it

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That the third Wednesday of April of each year is designated as "Earth Day," a day to renew each individual American's commitment to the anti-pollution effort. The President is authorized and requested to issue annually a proclamation calling upon the people of the United States to observe such day with appropriate activities.

An annual reappraisal of our course, our efforts, and our progress would be extremely beneficial, and I urge favorable consideration of my proposal at an early date.

Mr. Speaker, I am proud that the counties in my district in south Florida planned a very active part in yesterday's observance. The following news articles from the South Dade News Leader and the Key West Citizen outline the programs organized in Dade and Monroe Counties:

[From the South Dade (Fla.) News Leader, April 15, 1970]

#### DADE COUNTY SCHOOLS, COLLEGES TO OBSERVE E-DAY

Dade students will observe the nationwide Environmental Teach-In April 22 by planting seeds, visiting sewer treatment plants and holding neighborhood clean-up drives.

E-Day, a nationwide movement, is designed to make us all aware of the threat to

our ecology, and to encourage individual responsibility in keeping our environment habitable.

Most Dade schools have ongoing programs in ecology. These will be supplemented by classroom discussions and reports, poster displays, field trips and school-wide assemblies.

Activities will vary with each school, according to Mrs. Harriet Ehrhard, science consultant.

Sixth grade pupils at Broadmoor Elementary will talk to first and second grade classes about pollution: its dangers and prevention, and about keeping our surroundings clean.

A group of youthful student reporters at Kinloch Park Junior High will discuss the question, "Why is the American Rush for Progress Permitted to Destroy the Nation?" and offer both individual and group solutions to the problem. They'll also write letters to-the-editors of local newspapers discussing how they feel about pollution and what they as individuals can do about it.

A fifth grade group at Miami Shore's Elementary has written and produced a skit which has been shown to the community groups and will be televised on Channel 2 at 1 p.m., April 25.

Miami Beach Senior High will move the E-Day observance up to April 20 and is planning to hold a rock band performance of songs relating to pollution during lunch period. The school paper already has devoted one issue to environmental problems and will do so again on the 20th.

Mrs. Ehrhard said the study of ecology and the environment has been part of biology and science courses in Dade for many years.

"We are stressing it more now," she said, "but we always have made our students aware that they must take care of and be cautious about what they do with the things that surround them. We always have taught the importance of clean air and clean water and that we must preserve our natural resources."

Miami-Dade Junior College students and faculty will join hundreds of colleges across the country in observance of Earth Day.

For the National Environmental Teach-In, a series of programs, films and special guest speakers has been planned on both North and South Campuses.

The event, sponsored at M-DJC South by the Division of Natural Sciences, will feature three guest speakers. Ralph Renick will present WTVJ's award-winning documentary, "A Dirty Shame," at 9 a.m. Dr. Milton Kollinsky of the U.S. Geological Survey will discuss environmental problems in South Florida at 11 a.m., and Paul Leach of the Dade County Pollution Control Board will speak on governmental protection of the environment at 3:25 p.m. All lectures are scheduled for Room 2108 of the Trammell Learning Resource's Center and are open to the public.

The public is also invited to attend any of the classroom lectures that will be devoted to environmental problems during the week. On April 20 and 24, Dr. Wallace Orgell will lecture on "Resources, Wastes and Survival" at 2:25 p.m. On April 24, T. A. Toney will speak on "Use and Abuse of Subsurface Water" at 3:25 p.m. On April 21 and 23, Dr. John Zaharis will speak on "Population Pollution" at 7 a.m., Dr. Roy Jervis on Pollution in the Gene Pool" at 9:50 a.m., and Dr. Robert Brown on "Rape, Ruin, Retchedness" at 11:15 a.m.

Observances at M-DJC North are being sponsored by the Community College Studies Department. Speakers on April 22 include nationally known author Phillip Wylie, Dade Thornton of the Florida Audubon Society and Robert Evans of the Dade Pollution Control Board. Wylie and Thornton will lead a discussion with students and the public at 9:15 a.m. in the McArthur Science and Technology Building patio. Bill Anderson, former Disney photographer and naturalist, will con-

duct slide and film lectures at 11 a.m. and 2 p.m. in Room 2151 of the Science and Technology Building.

Other activities at North Campus include participation of a student group named "Environment!" which has compiled a bibliography of articles and books dealing with environmental problems and possible solutions. The group has also gathered a list of films available to students and to the general public.

The students have also formed a speakers bureau and are urging every academic department at the campus to devote April 22 classes to environment and the way that environmental problems relate to the subject matter of the course.

Another group of students enrolled in a South Campus Continuing Education course, "Man and His Environment," has devoted the final three weeks of classes to contacting civic groups urging them to use their April meetings to discuss environmental problems.

[From the Key West (Fla.) Citizen, Apr. 19, 1970]

#### LOCAL SCHOOLS TO TAKE PART IN ENVIRONMENTAL TEACH-IN

Monroe County schools—both teachers and pupils—will become totally involved in a nationwide Environmental Teach-In on Wednesday, April 22.

Superintendent of Schools, Armando J. Henriquez, in announcing the participation said it was in accordance with the request of State Commissioner for Education Floyd T. Christian that all schools throughout the state join in the nationwide effort.

Superintendent Henriquez requested and received from the principals of the Monroe County schools the plan of each for participation in the "E-Day" observance. These plans include a varied number of activities from the reading of newspaper articles on Environment to, in one case, a "Litterbug Convention."

School children will view film strips on the environmental crisis, take part in clean up campaigns and make field trips to waterfront areas to observe at first hand the harm being done in the area of water pollution by the dumping of waste materials into the waters of our oceans and bays. Other children will draw posters depicting before and after scenes of pollution.

Science classes will conduct tests on conservation, take them home and discuss them with their parents. Senior high biology and chemistry students will conduct extensive studies of ecology and related terms.

Panel discussions on the growing pollution problem in the United States will occupy some junior high school students with areas of concern being garbage disposal, the yacht basin, sewage disposal, canal and stream pollution and oil slicks in surrounding waters.

Also to be featured in the Environmental Teach-In will be talks before assemblies by members of the Florida State Conservation Department.

"I am pleased," said Henriquez, "with the response of the schools to the participation in 'E-Day'. The detailed reports of planned participation indicate a real interest on the part of our students and our teachers in the environmental crisis which faces our nation.

"It is a matter which should concern every citizen—especially future citizens, now in school, who will have to face up to the perils of pollution if some nationwide corrective action is not taken by responsible leaders in business and in government."

While we have allowed technology—in the name of progress—to pollute our natural resources, we have been most fortunate to have many farsighted individuals whose actions have preserved many areas in south Florida. In the 12th

District of Florida alone we have three parks under the National Park System—the Everglades National Park, the Biscayne National Monument, and Fort Jefferson National Park—three national wildlife refuges—the Key Deer Refuge, the Great White Heron Refuge, and the Key West National Wildlife Refuge—and Florida's John Pennekamp Coral Reef State Park in the Florida Keys. The Pennekamp Park is the first underseas park within the continental United States.

But what was emphasized yesterday was that this is not enough. If our air and our water are polluted our efforts to protect the endangered species or to preserve the beauty of the Florida Everglades or the Biscayne Bay will quickly be nullified.

The solution to our environmental crisis will come from many sources. Our efforts in the Congress to formulate programs to purify our air and water must continue and expand. Efforts in industry must be doubled. But the most important factor, in my judgment, is individual commitment. Ecology is as much an attitude as a science.

#### H.R. 17140—RESTORE CONFIDENCE TO OUR MONEY THROUGH CONSTITUTIONAL GOVERNMENT

(Mr. RARICK asked and was given permission to address the House for 1 minute, to revise and extend his remarks and to include extraneous matter.)

Mr. RARICK. Mr. Speaker, the American people are bombarded with fearful reports on war, poverty, pollution, inflation, strikes, and violence, yet the foremost concern to every citizen is his money and its buying power.

Because of this I have introduced H.R. 17140, a bill to vest in the Government of the United States the absolute, complete, and unconditional control over our money through Government ownership and control of the 12 Federal Reserve banks.

I have taken this action because of an ever-increasing lack of public confidence in the private monopoly which presently is in charge of our money. Confidence and stability in our fiscal affairs could be restored by the Federal Reserve Board and private bankers but they refuse to discipline themselves voluntarily to meet the crisis they have precipitated.

Since the Federal Reserve bankers lack the responsibility to perform their duty, then Congress must concede that the Federal Reserve Act of 1913 has, by experience, proven itself a failure.

When the Federal Reserve Act was signed into law in 1913 the U.S. public debt was \$1 billion. As of January 1970 our national debt was \$382 billion. The combined national debt—Federal, State, county, municipal, corporate, and private—is fast approaching \$2 trillion. The non-Federal debt is estimated at \$1,347 billion. Farm debt at the end of 1969 has reached nearly \$60 billion—up from \$25 billion or almost doubled in the last 10 years.

We but owe it to ourselves, is the response of the liberals to the figures. We owe it to someone but not to ourselves because we do not own our own money.

Consider that according to the Treasury report of January 1970 the total coinage in circulation was \$5,965,000,000 and the total currency in circulation was \$47,026,000,000. Yet of this evidence of wealth totaling \$52,991,000,000 if \$46,431,000,000 is Federal Reserve notes which belong to the Federal Reserve then only \$595,000,000 in currency belongs to our people or the Government. And this \$46 billion of the Federal Reserve is lent into circulation by commercial banks for which credit on credit our people as borrowers pay interest.

Considering that the estimated interest on the national debt this year will exceed \$18 billion it must be apparent that this kind of credit lending has been a profitable institution, but not for our people or our country.

Inflation and recession are destroying both the poor and the entrepreneur. Interest rates, already exceeding usury, give no sign of lowering and under the expected economic law of supply and demand can be expected to soar higher. Unemployment increases stealthily. Most workers and producers are falsely led to believe the answer lies only in wage increases or price increases. The consumer seeks relief through price controls.

And behind the scenes our academic economists fumble to "think tank" sophisticated solutions to a problem they are unable to understand because its beneath their comprehension. And any of the many proposals of the controlled intellectuals in the service of the cabal can but be temporal and could only worsen the problem by entending the time of any solution.

The Federal Reserve exclusive franchise was a mistake. Congress in 1913 erred tragically when it imprudently delegated full control over our money to the Federal Reserve moneychangers—a private banking cartel. The act may carry de facto legality but no informed individual can deny its unconstitutionality and unjust powers over the money of our people.

Yet fear pervades our land and those who know the truth and could act or relegated to silence because someone's political future may be threatened or a friend embarrassed. My only comment is that unless we corral this monster in our midst the very Republic which includes not only the wealth but the intellect, will be demolished. We walk by faith and not by sight. Should confidence fail or falter the mightiest will fall first.

My bill H.R. 17140 provides the only viable and effective solution to the breakdown in confidence of our money and financial system. It is very simple. That we return the banks of the Federal Reserve System and full control over our money to the Congress. I claim no pride in authorship because this is as was intended by the Founding Fathers when they provided in the U.S. Constitution—the law of the land:

The Congress shall have the power—  
5. To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures (Article 1, Section 8, clause 5).

Who should the people trust more than their Congress—if they disapprove

we can be eliminated at the polls. Unelected bureaucrats and monopolistic bankers, never.

We of this House are the sole representatives of the American people. Our system is not a democracy because we are the only elected officials in the federal system. The Founding Fathers intended that the power to issue and control money was only to be entrusted to the hands of those elected officials who are constantly accountable to the voters.

This H.R. 17140 will do.

I insert the text of H.R. 17140 at this point:

H.R. 17140

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) the Secretary of the Treasury of the United States is hereby authorized and directed forthwith to purchase the capital stock of the twelve Federal Reserve banks and branches, and agencies thereof, and to pay to the owners thereof the par value of such stock at the date of purchase.*

*(b) All member banks of the Federal Reserve System are hereby required and directed to deliver forthwith to the Treasurer of the United States, by the execution and delivery of such documents as may be prescribed by the Secretary of the Treasury, all the stock of said Federal Reserve banks owned or controlled by them, together with all claims of any kind or nature in and to the capital assets of the said Federal Reserve banks, it being the intention of this Act to vest in the Government of the United States the absolute, complete, and unconditional ownership of the said Federal Reserve banks.*

*(c) There is hereby authorized to be appropriated, out of any funds not otherwise appropriated, such sums as may be necessary to carry out the purposes of this Act.*

#### AWARD OF CONTRACT BY NASA TO GENERAL ELECTRIC CORPORATION FOR PHASE D OF APPLICATIONS TECHNOLOGY SATELLITE PROGRAM

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Maryland (Mr. BEALL), is recognized for 20 minutes.

Mr. BEALL of Maryland. Mr. Speaker, I take the floor today to bring to the attention of the Members of the House the award of a contract recently by the National Aeronautics and Space Administration to the General Electric Corp. for phase D of the applications technology satellite—F and G—program. On the basis of information I have received I feel that it is in the best interest of the Government of the United States to further examine events leading up to the announcement of this contract before any official award is made by the National Aeronautics and Space Administration to General Electric Corp.

I would like to relate to you a brief history of this project and some of the incidents that have come to my attention which would indicate that perhaps one contractor was clearly favored over another.

After extensive preliminary procedures early in 1969 NASA selected the Fairchild-Hiller Corp. and the General Electric Corp. as competitors in phase D of the applications technology satellite program in May of 1969. Both of these

competitors received procurement packages and resubmitted the proposals to NASA for examination in September 1969. Conversations were held and new proposals were submitted at the end of December. Following further examination by NASA, a resubmission of the cost estimate was requested and the contractors were given an estimated award date of April 1970.

It appears that during the period of September to the final announcement in April, certain things happened that worked to the benefit of the General Electric Corp. and to the detriment of the other bidder, the Fairchild Hiller Corp.

In competitive bidding of this type, where cost-plus plays an important part, one of the prime considerations differentiating between the competitors should be the technical excellence of the design. During the evaluation process in this particular competition, however, there is evidence that technical innovations developed by Fairchild eventually became a part of the competitor's proposal. These changes, therefore, had the effect of diminishing the technical superiority Fairchild-Hiller had displayed.

Further, I have learned that NASA distributed Fairchild's proposal to its technical evaluators prior to the time that General Electric even submitted its proposal. This, therefore, provided General Electric the opportunity to learn Fairchild's price even before they submitted their bid. Apparently, the National Aeronautics and Space Administration allowed General Electric to submit its final revised proposal 1 week beyond the previously determined date for submission.

There is further evidence that General Electric was permitted to submit technical changes in its final revised proposal which is contrary to NASA's own instruction.

There is also evidence that the final price reduction made by the General Electric Corp. resulted from a change in accounting procedures rather than any real savings occasioned by substantive provisions.

An analysis of the procedures used in this particular competition can only lead one to the conclusion that the decision to make the award was based on something other than objective examination. It would appear that the competitors size, the number of previous space programs, and other factors might have been used. It is further evident that the competitive nature of the program was diluted because of events that transpired between the period September of 1969 and April of 1970. Through this period the submission and resubmission of proposals has given one contractor the opportunity to take advantage of technical innovations introduced by the other; in this case, the Fairchild-Hiller Corp.; in its original proposal. That result, therefore, is to eventually eliminate the technical advantage Fairchild had in September.

While the result would appear to be reprehensible in this case, this practice carried to its extreme would be catastrophic to the competitive bidding process. Eventually, the larger compa-

nies would be able to take advantage of any technological superiority in a smaller organization and the eventual result would be that the smaller companies would be forced out of the market. This then, would place the Government at the mercy of a monopolistic industry.

Upon learning about this contract and the items that I just mentioned, I requested that the Administrator of the National Aeronautics and Space Administration, Dr. Thomas P. Paine, provide a review of this whole bidding process and I, of course, asked the General Accounting Office to do likewise. Dr. Paine acknowledged this request and has indicated his willingness to submit to such an examination. In the meantime, however, NASA has notified the Fairchild-Hiller Corp. that it is eliminating certain funding the contractors have been receiving.

Both Fairchild Hiller and General Electric have been receiving a certain amount per month in order to cover their costs since the submission of the original proposals. The decision to eliminate Fairchild's funds has the effect of rendering inconsequential the results of any investigation that might be made into the propriety of the bidding procedure and the validity of the announced intention to make the award. The capacity to produce a contract of this nature obviously depends to a great degree on the ability of the technical team that is assembled by the contractors. The elimination of funds in Fairchild's case would make it virtually impossible to retain the scientific personnel that comprise this team and, therefore, would be imposing an additional injustice on this bidder. In a telegram last Friday, I requested Dr. Paine to continue the funding of both contractors until the General Accounting Office has had the opportunity to determine the validity of his decision.

In view of the scope of the contract and the nature of the information that has been developed, it seems that the only logical course to follow, in the best interests of all concerned, particularly the Government of the United States, is to reexamine the decision to award this contract in an atmosphere that will be free of any potential conflicts.

Because Dr. Thomas Paine was employed by the General Electric Corp. in a high executive capacity for a period of years prior to becoming the Administrator of the National Aeronautics and Space Administration, the charge might be made that he favored one of these two competitors at the expense of the other.

In order to protect Dr. Paine and the highly respected Space Agency from such allegations and in order to ascertain that this contract was awarded strictly on the basis of merit, I would again request that any official award be delayed until such time as a complete examination has been made by the General Accounting Office.

In the meantime, in order to maintain the integrity of the bidding process, it is essential that funding be continued for both contractors.

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

Mr. BEALL of Maryland. I yield to my colleague from Maryland.

Mr. GUDE. Mr. Speaker, it bothers me—and I have reviewed the formal allegations made in the protest of which the gentleman from Maryland speaks—that one company in this competition apparently started way ahead, but was, by the end of the competition, equalized. What is the point of competition if NASA procurement procedures first encourage equalization and second do not give credit to the competitor who makes the major innovation?

Particularly, what is the chance of the small- or moderate-size competitor in a competition such as this—where this transfusion and equalization process has occurred—as opposed to the industrial grant. NASA may always justify selection of the giant, and say, "Well, they are bigger, and have had more experience, so now—now, not then, but now that they are technically equal we will give it to the bigger, more experienced company." I think there is a serious philosophical question to be explored here, with ramifications that reach beyond the Fairchild-GE competition for the ATS F. & G. It is the question of how NASA procurements are to be conducted—and how protection for technical innovation can be credited to the smaller company struggling against a giant in such a way as to give the smaller company's technical innovation any meaning in the outcome.

I also hope the General Accounting Office, which is an arm of this Congress, will very seriously probe the implications of the late submission of General Electric's revised cost proposal, which I understand included a prohibited technical revision as well, and the effect the late GE submission had on Fairchild-Hiller's posture in the ultimate analysis. It seems that what is good for the goose is good for the gander. If Fairchild-Hiller was denied an extension in which to submit its bid, and GE was likewise denied, why was GE's late submission then accepted? If Fairchild-Hiller's final technical proposal had been disseminated, including reference to hours of production, it seems clear to me that it is entirely possible that General Electric could have known Fairchild-Hiller's price before General Electric even submitted theirs.

Mr. BEALL of Maryland. I thank the gentleman for his contribution, and I agree this is a matter that needs very serious study because the integrity of the entire bidding system is at stake.

#### LEGISLATION TO ELIMINATE AUTO AIR POLLUTION

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from New York (Mr. FARBSTEIN) is recognized for 20 minutes.

Mr. FARBSTEIN. Mr. Speaker, I have today introduced on behalf of myself and 27 other Members of the House H.R. 17199, H.R. 17201, and H.R. 17203, a comprehensive 11-part package of automotive air pollution legislation.

One provision is an updated version of H.R. 13225, legislation I introduced in

July 1969, to ban the internal combustion engine. This provision would outlaw the sale of engines which did not meet the pollution levels of the "cleanest feasible propulsion system." Last summer I also introduced H.R. 13281 and H.R. 13320, the first bills ever introduced in Congress to regulate or ban lead in gasoline.

If enacted, this legislation would eliminate auto air pollution by the mid-1970's and achieve, almost immediately, a radical reduction in air pollution.

The legislation includes provisions—  
Phasing out large horsepower, high-pollution engines;

Establishing an air pollution trust fund to finance research and development on pollution-free engines and government purchases;

Revising the tax structure to encourage low-pollution engines;

Establishing, on a national basis, the California standards for auto pollution for the 1971, 1972, and 1974 model years;

Establishing pollution standards for used cars and commercial fleets;

Banning lead in gasoline by 1972; and

Revising Government test procedures to include inspection of auto pollution control devices on the assembly line and after they have been in operation.

The recent public statements of the auto industry, claiming major technological advances to alleviate the harmful environmental impact of the automobile appear to me to be sheer hypocrisy. It seems to be more than a coincidence that in the face of mounting public concern the industry is suddenly claiming all kinds of air pollution breakthroughs. Past experience would suggest that there is usually little to such claims. One major auto producer, for example, advertised an air pollution device as being almost immediately available as far back as 1939. The device has yet to make it beyond the design state. Worse, however, if the claims are true, it suggests that the industry has been holding back on development of low pollution engines.

The auto is responsible for up to 92 percent of air pollution in urban areas. This legislation is the result of ad hoc hearings we held in December in New York at which Ralph Nader, the vice presidents of the two major automobile manufacturers, and experts on health and low pollution technology testified on auto air pollution. The report issued as a result of these hearings appears in the February 17, 1970, RECORD on page 3639. The full transcript of the December hearings appears in the February 5, 1970, RECORD on page 2601.

There is a great deal of engineering evidence to suggest that the internal combustion engine cannot be cleaned up sufficiently to bring air pollution down to acceptable levels.

The only way this is going to be achieved is to turn to cleaner alternative propulsion systems like steam or gas turbines. Steam produces one-eightieth the level of carbon monoxide, one-fifty-fifth the level of hydrocarbons and one-fourteenth the level of oxides of nitrogen of an unregulated internal combustion engine.

Except for Detroit, which has a vested interest in maintaining the internal combustion engine, almost every expert believes clean alternatives are feasible right now which are cheaper to manufacture and operate and easier for the driver.

Dr. Robert U. Ayres, a noted expert on automotive engineering technology, told our ad hoc hearings in December that when compared to the IC engine under actual testing conditions, steam engines were found to be:

First, mechanically simpler (no clutch, transmission, starter, distributor, carburetor, fuel induction system, muffler, and so forth);

Second, longer lived and more reliable;

Third, more powerful for the size and weight;

Fourth, cheaper to operate;

Fifth, virtually pollution free;

Sixth, quiet;

Seventh, safe and quick to start up; and

Eighth, as efficient under normal driving conditions.

If the American auto industry can build the world's largest auto plant in the Soviet Union, it can produce a pollution free engine in the United States. The industry has the technological capability; all it needs is the economic incentive.

Mr. Speaker, this legislative package will bring about that incentive.

A list of the House sponsors of the legislation, a summary of its provisions, and the text of the three bills follow:

LIST OF THE SPONSORS OF THE LEGISLATION  
Leonard Farbstein, Democrat, of New York.  
Joseph Addabbo, Democrat, of New York.  
William A. Barrett, Democrat, of Pennsylvania.  
Mario Biaggi, Democrat, of New York.  
Frank J. Brasco, Democrat, of New York.  
George E. Brown, Jr., Democrat, of California.  
Jeffrey Cohelan, Democrat, of California.  
Dominick V. Daniels, Democrat, of New Jersey.  
Don Edwards, Democrat of California.  
Jacob Gilbert, Democrat of New York.  
Seymour Halpern, Republican of New York.  
Lee Hamilton, Democrat of Indiana.  
Michael Harrington, Democrat of Massachusetts.  
Edward I. Koch, Democrat of New York.  
Allard K. Lowenstein, Democrat of New York.  
Abner J. Mikva, Democrat of Illinois.  
Joseph G. Minish, Democrat of New Jersey.  
Arnold Olsen, Democrat of Montana.  
Richard Ottinger, Democrat of New Jersey.  
Edward J. Patten, Democrat of New Jersey.  
Bertrum L. Podell, Democrat of New York.  
Adam C. Powell, Democrat of New York.  
Peter Rodino, Jr., Democrat of New Jersey.  
Benjamin S. Rosenthal, Democrat of New York.  
William F. Ryan, Democrat of New York.  
William St. Onge, Democrat of Connecticut.  
John V. Tunney, Democrat of California.  
Lionel Van Deerlin, Democrat of California.

SUMMARY OF PROVISIONS OF LEGISLATION  
1. Sets auto emission standards on the basis of the cleanest feasible propulsion system.

There is agreement among many recent studies conducted for government that at least two inherently cleaner alternative propulsion systems, steam and gas turbine, are technologically and economically feasible and possibly cheaper to produce and operate.

Current auto emission standards are based on what the inherently pollution IC engine can achieve. Standards should be set on the basis of the cleanest feasible propulsion system and responsibility to carry out the standards left to the auto industry.

2. Large engines which cannot meet the standards would be phased out in 1975.

It must be recognized that conversion to a new propulsion system cannot be completed in one year, but must be done on a gradual basis, beginning with a limited number of lines. Large horsepower IC engines which cannot meet the standards should be phased out first based on the following time-table:

Based on sales of 1969 American cars, the phasing out would have the following effect:

(a) 375 horsepower in 1975—Less than 5 percent of new car sales.

(b) 275 horsepower in 1976—35 percent of new car sales.

(c) 175 horsepower in 1977—All but 10 percent of new car sales.

(d) All internal combustion engines in 1978.

Phasing out large horsepower engines first has the advantage of eliminating the highest pollutant first. Large engines burn more fuel and thus produce higher levels of pollution. It also has the following additional advantages:

(a) It is easier to develop a new propulsion system in a large engine.

(b) Fewer people buy automobiles with large engines for personal use, therefore, any recalls that might be necessary to perfect a system would affect fewer people. The industry follows a practice now of putting experimental systems, which may need recalling to perfect them, on "odd-ball lines" that attract fewer customers and inconveniences fewer customers. This would follow that practice.

3. A large scale Federal prototype development program for pollution-free vehicles would be undertaken.

Currently, the Federal Government is developing one prototype rankine (steam) propulsion system. A more extensive program is needed. Such a program would not need to test all forms of propulsion, since steam and gas turbines are generally conceded to be the most feasible and the most developed. Nor would such a program have to undertake initial development. While the spokesmen for the major auto companies were telling a Senate committee that steam autos were not feasible, members of the committee were driving a modern steam car in the Senate basement. Similarly, at least one small company is now producing inexpensive gas turbine engines. What remains to be developed is the mass production capability and not the engine itself. Such a program would also provide a source of technological and cost information independent of the auto industry.

4. Part of the Federal automobile excise tax would be utilized to provide the necessary financing for the air pollution program.

A Federal commitment to eliminating automotive air pollution will require a guaranteed source of funding for the next 4 to 5 years. The mechanism of the automotive excise tax offers a logical source of such funding.

The tax should be recalculated on the basis of the amount of engine horsepower and the amount of pollution produced. This would be in line with the philosophy that the polluter should pay for cleaning up his pollution. It would also reflect a recognition that in addition to producing more pollution, large engines—and this generally means large cars—occupy more parking and road space in our crowded central cities, a privilege for which they should pay.

The revenue collected in excess of the current 7 percent tax level should then be set aside to finance the prototype develop-

ment and Federal purchase of pollution free automobiles.

5. The Federal Government would be authorized to purchase pollution free vehicles even if they were more costly.

To create a significant market for low pollution vehicles now and thus stimulate earlier production, the Federal Government should purchase entirely pollution free vehicles even if they are more costly than currently available high polluting vehicles.

6. The states would be encouraged to purchase pollution free vehicles by authorizing the use of the highway trust fund to compensate for any added cost.

The states and local governments, like the Federal Government, are major purchasers of new cars, trucks and buses. To stimulate them to purchase pollution-free vehicles, highway trust fund money should be authorized to be used for added cost involved in purchasing them.

B. A radical reduction in automotive air pollution can be achieved almost immediately. What is needed is (7) an increase in interim auto emission standards to those already established for California; (8) the establishment by 1972 to auto emission standards for used cars; (9) the establishment by 1972 of rigorous emission standards for fleet owned vehicles; (10) ban leaded gasoline and regulate the composition of fuel; and (11) regulate rubber and asbestos emissions.

7. Interim auto emission standards would be increased to those already established for California and strengthened enforcement procedures would be established.

According to Federal law, California is the only state that can set its own auto emission standards. It can set standards so long as they are more rigorous than Federal standards and are approved by the Federal Government as "technologically feasible." Standards for 1971, 1972 and 1974 have been approved, which began to regulate oxides of nitrogen in 1971.

We applaud the Administration's announced auto emission standards for 1975, but believe standards more stringent than those for 1970 models are necessary in the interim. We also are pleased that oxides of nitrogen will be regulated, but do not believe we should wait to 1973 to do so. As an interim step, the California standards, which have been approved by the Federal Government as "technologically feasible," should be required of all new cars. There is no reason standards demonstrated to be feasible should be applied just in California.

However, such standards are meaningless if large numbers of devices are found to be defective. The Federal Government should be empowered to conduct assembly line inspections of air pollution devices in place of its present testing of prototype devices, which may or may not be the same as those mass produced. It should also be given the power to inspect devices after 6,000 miles of operation and require recalling of lines found to have defective devices with the auto company picking up the cost of correction.

8. Auto emission standards would be established for used cars by 1972.

To achieve clean air now, air pollution standards should be established for all used cars to go into effect after January 1, 1972. Such standards should apply to all cars sold or licensed after that date.

Even if a pollution free auto could be marketed today, it must be remembered that over 90 percent of the cars on the road are more than one year old, and these cars account for far more than 90 percent of the pollution that comes from the auto. Approximately 10 million new cars are sold annually, and these have an average life of ten years. It would be almost a decade

before today's high polluting used cars would be retired.

One of the major auto manufacturers recently announced development of an air pollution device for used cars. An independent firm has also developed and tested such a device. We believe they are now technologically feasible and should be required.

According to evidence presented in connection with the recent Federal suit against the auto industry, United States v. Automotive Manufacturers Association, et al., the auto industry has been conspiring since 1953 to prevent the development or manufacture of anti-pollution devices. If they had not acted in this way, pollution devices might well have been on cars 15 years ago. As the polluter, we do not believe the auto manufacturer should make a profit in selling pollution control devices to owners of autos without devices that they manufactured. It would seem to us that the industry has the obligation to sell and install these devices at cost.

9. Rigorous emission standards would be established by 1972 for fleet owned vehicles.

Fleet owned trucks, buses and taxis make up only 10 percent of vehicular traffic in urban areas, yet account for over 30 percent of the air pollution that comes from vehicles. Fuels, like compressed natural gas, which can operate in current internal combustion engines, can dramatically reduce these pollution levels, and are readily accessible to a fleet operation. The Florida telephone company, for example, has been operating its trucks on one form of natural gas for the past ten years. Rigorous emissions standards for fleet operations should, therefore, be established by 1972. Such standards should be similar to those tentatively established by the State of California for 1975.

10. Leaded gasoline would be banned by mid-1972 and governmental authority established to regulate the composition of fuel.

Leaded gasoline should be banned and the Federal Government empowered to regulate the composition of fuel. Current engines need no modification to use unleaded gasoline. One oil company has been marketing a premium brand non-leaded gasoline for many years.

There is currently a "gentlemen's agreement" in the oil industry limiting to 4 grams per gallon the lead content of gasoline. This should be phased out in accordance with the following time table:

(a) 3 grams per gallon after January 1, 1971.

(b) 2 grams per gallon after June 30, 1971.

(c) 1 gram per gallon after January 1, 1972.

(d) 0 gram per gallon after June 30, 1972.

Gasoline is the largest unregulated source of lead in the atmosphere—98 percent—and can be directly correlated with the level of lead in the air. Forty-five percent by volume of lead in gasoline ends up in the air. We do not believe this uncontrolled experiment can be permitted to go on any longer. Leaded gas must be totally banned by mid-1972.

Elimination of lead from gasoline would not only remove the major source of unregulated lead in the atmosphere, but would reduce emission from hydrocarbons and carbon monoxides as well which are increased as a result of the presence of lead. Except for the oil and lead industries, there was unanimous support in recent California legislative hearings on the banning of lead. The auto industry, we believe, is supporting a ban because it sees the result of pollution reduction as one way of taking the pressure off the move to ban the IC engine, and to buy time until approximately 1980.

Many of the additives and other components of fuel also contribute hazardous emission to the atmosphere. The Federal Government should have the power to regu-

late the composition of fuel to reduce this hazard.

11. Federal auto emission standards would be established for rubber and asbestos.

Federal auto emission standards should be established for rubber and asbestos as well as for carbon monoxide, hydrocarbons and

oxides of nitrogen. Testimony at our hearing revealed the health hazards of these previously little noticed pollutants. Rubber emission comes primarily from auto tires and can be reduced. Asbestos in the air comes primarily from automotive brake systems and can also be reduced.

of not more than \$1,000 if he is so engaged in such business."

Sec. 3. The National Emission Standards Act is amended by renumbering section 212 as section 217 and by inserting immediately after section 211 the following:

"RESEARCH AND DEVELOPMENT

"Sec. 212. The Secretary shall conduct and accelerate research and development of propulsion systems for use in motor vehicles, other than those using internal combustion engines, which systems are technologically and economically feasible including, but not limited to, mass production methods and techniques. Such research and development shall include cost analysis of mass production of such feasible propulsion systems, and such cost analysis shall be independent of those produced by manufacturers. Any knowledge and information resulting from research or development, including cost analysis, carried on under this section shall be public information.

"FEDERAL LOW-EMISSION VEHICLE PROCUREMENT

"Sec. 213. (a) For the purpose of this section—

"(1) 'Board' means the Low-Emission Vehicle Certification Board;

"(2) 'Federal Government' includes the legislative, executive, and judicial branches of the Government of the United States, and the government of the District of Columbia;

"(3) 'motor vehicle' means any vehicle, self-propelled or drawn by mechanical or electrical power, designed for use on the highways principally for the transportation of passengers except any vehicle designed or used for military field training, combat, or tactical purposes;

"(4) 'low-emission vehicle' means any motor vehicle which meets the regulations prescribed under section 202(c) of this title.

"(b) There is established a Low-Emission Vehicle Certification Board to be composed of the Secretary of Transportation or his designee, the Secretary of Health, Education, and Welfare or his designee, the Director of the National Highway Safety Bureau in the Department of Transportation, the Administrator of the General Services Administration, and one member appointed by the President. The Secretary of Transportation or his designee shall be the Chairman of the Board.

"(c) Any member of the Board not employed by the United States may receive compensation at the rate of \$125 for each day such member is engaged upon work of the Board. Each member of the Board shall be reimbursed for travel expenses, including per diem in lieu of subsistence as authorized by law (5 U.S.C. 5703) for persons in the Government service employed intermittently.

"(d) (1) The Chairman, with the concurrence of the members of the Board, may employ and fix the compensation of such additional personnel as may be necessary to carry out the functions of the Board, but no individual so appointed shall receive compensation in excess of the rate authorized for GS-18 by section 5332 of title 5, United States Code.

"(2) The Chairman may fix the time and place of such meetings as may be required.

"(3) The Board is granted all other powers necessary for meeting its responsibilities under this Act.

"(e) The Secretary of Health, Education, and Welfare shall determine which models or classes of motor vehicles qualify as low-emission vehicles in accordance with the provisions of this Act.

"(f) The Board shall certify any class or model of motor vehicles—

"(1) for which a certification application has been filed in accordance with subsection (h) of this section;

TABLE 1.—POLLUTION CHARACTERISTICS OF VARIOUS PROPULSION SYSTEMS

	[In grams per mile]			
	Internal combustion engine (unregulated)	Internal combustion engine on natural gas	Gas turbine <sup>1</sup>	Steam engines <sup>2</sup>
Hydrocarbons.....	11	1.5	0.32	0.2
Carbon monoxide.....	80	6.0	3.5	1.0
Oxides of nitrogen.....	4	1.5	1.9	.4

<sup>1</sup> Based on the Chrysler Corp. experimental gas turbine car.

<sup>2</sup> Based on Williams steamcar tested by Mobil Oil Corp. in December 1966.

<sup>3</sup> Mostly nonreactive hydrocarbons.

TABLE 2.—COMPARISON OF EMISSION RECOMMENDATIONS

	[In grams per mile]					
	Current 1970 model	California		Nixon		This legislation, 1975-78
		1971	1972	1974	1973	1975
Hydrocarbons.....	2.2	2.2	1.5	1.5	2.2	0.5
Carbon monoxide.....	23.0	23.0	23.0	23.0	23.0	11.0
Oxides of nitrogen.....		14.0	3.0	1.3	3.0	.75

<sup>1</sup> The regulation of hydrocarbons and carbon monoxide has increased the emission of oxides of nitrogen beyond the level of the unregulated internal combustion engine. The chemical conditions relied upon in antipollution devices to date have increased the emission of oxides of nitrogen.

H.R. 17199

*A bill to amend the National Emission Standards Act to provide for the elimination of automotive air pollution*

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 "National Emission Standards Act Amendments of 1970."

Sec. 2. Section 202 of the National Emission Standards Act is amended by striking out in subsection (b) thereof "prescribed under this section," and inserting in lieu thereof "prescribed under subsection (a) of this section" and by adding at the end thereof the following:

"(c) (1) In addition to standards prescribed under subsection (a) of this section, the Secretary shall by regulation, giving appropriate consideration to technological feasibility and economic costs, prescribe as soon as practicable, but not later than June 30, 1971, standards applicable to the emission of any kind of substance, from any class or classes of new motor vehicles propelled by any system other than one using an internal combustion engine, and new motor vehicle engines other than internal combustion engines, which in his judgment cause or contribute to, or are likely to cause or to contribute to, air pollution which endangers the health or welfare of any persons, and such standard shall apply to such vehicles or engines whether they are designed as complete systems or incorporate other devices to prevent or control such pollution.

"(2) The regulations initially prescribed under this subsection shall be applicable (A) on and after January 1, 1975, to all new motor vehicles propelled by engines having 375 horsepower or more and to all new motor vehicle engines having 375 horsepower or more (B) on and after January 1, 1976, to all such new vehicles and engines having 275 horsepower or more (C) on and after January 1, 1977, to all such new vehicles and engines having 175 horsepower or more, and (D) on and after January 1, 1978, to all new motor vehicles and new motor vehicle engines. Amendments to any regulations prescribed under this subsection shall become

effective on the effective date specified in the order promulgating such regulations which date shall be determined by the Secretary after consideration of the period reasonably necessary for industry compliance.

"(d) (1) In addition to standards prescribed under subsections (a) and (c), the Secretary shall by regulation, giving appropriate consideration to technological feasibility and economic costs, prescribe, as soon as practicable, standards applicable to the emission of any kind of substance, from any class or classes of motor vehicle or motor vehicle engines sold, or offered for sale in commerce, other than a new motor vehicle or new motor vehicle engine sold or offered for sale to an ultimate consumer, which in his judgment cause or contribute to, or are likely to cause or contribute to, air pollution which endangers the health or welfare of any persons, and such standards shall apply to such vehicles or engines whether they are designed as complete systems or incorporate other devices to prevent or control such pollution. Standards prescribed under this subsection may be amended by the Secretary by regulation in the same manner as in the case of prescribing the initial standards. Standards initially prescribed under this subsection shall establish maximum levels of emission for at least the following: reactive hydrocarbons, carbon monoxide, and oxides of nitrogen. Standards first prescribed under this subsection shall become effective as of January 1, 1972, and subsequent standards or amendments to then existing standards shall become effective on the date specified in the order promulgating such regulations, which date shall be determined by the Secretary after consideration of the period reasonably necessary for compliance.

"(2) Whoever sells or offers for sale in commerce or introduces or delivers for introduction into commerce any motor vehicle or motor vehicle engine which is not in conformity with standards issued under paragraph (1) of this subsection shall be subject to a fine of not more than \$500 if he is not engaged in the business of selling motor vehicles or motor vehicle engines and

"(2) which is a low-emission vehicle as determined by the Secretary of Health, Education, and Welfare; and

"(3) which it determines is suitable for use as a substitute for a class or model of vehicles presently in use by agencies of the United States.

The Board shall specify with particularity the class or model of vehicles for which the class or model of vehicles described in the application is a suitable substitute. In making the determination under this subsection the Board shall consider the following criteria:

- "(1) the safety of the vehicle;
- "(2) its performance characteristics;
- "(3) its reliability potential;
- "(4) its serviceability; and
- "(5) its fuel availability.

"(g) Certification under this section shall be effective for a period of two years from the date of issuance.

"(h) (1) Any party seeking to have a class or model of vehicles certified under this Act shall file a certification application in accordance with rules established by the Board and published in the Federal Register.

"(2) The Board shall publish a notice of each application received in the Federal Register.

"(3) The Board shall determine whether or not the vehicle for which application has been properly made is a low-emission vehicle in accordance with procedures established by it and published in the Federal Register.

"(4) The Board shall conduct whatever investigation necessary, including actual inspection of the vehicle at a place designated by the Board in the certification application rules established under this section.

"(5) The Board shall receive and evaluate written comments and documents from interested parties in support of, or in opposition to, certification of the class or model of vehicle under consideration.

"(6) Within ninety days after the receipt of a properly filed certification application, the Board shall reach a decision by majority vote as to whether such class or model of vehicle is a suitable substitute for any class or classes of vehicles presently being purchased by the Federal Government for use by its agencies.

"(7) The Board shall publish in the Federal Register, within ninety days after the receipt of a properly filed certification application, a report of its decision on such application which sets forth with particularity the reasons for granting or denying certification, together with dissenting views.

"(1) As soon as possible, but no later than January 1, 1973, only certified low-emission vehicles shall be acquired by purchase by the Federal Government for use by the Federal Government.

"(j) For the purposes of this section any statutory price limitations shall be waived, and the procuring agency shall be required to purchase available certified low-emission vehicles which are eligible for purchase before purchasing any other vehicles for which the low-emission vehicle is a certified substitute.

"(k) This section shall take effect upon its enactment and the Board shall promulgate the procedures required to implement this section within ninety days thereafter.

#### "STATUTORY STANDARDS

"SEC. 214. (a) Notwithstanding any other provision of this title, the maximum level of emission from any new motor vehicle or new motor vehicle engine, expressed in grams per mile, with respect to reactive hydrocarbons, carbon monoxide, and oxides of nitrogen shall be as follows: Reactive hydrocarbons—2.2 for 1971, 1.5 for 1972, 1973, and 1974; carbon monoxide—23.0 for 1971 through 1974; oxides of nitrogen—4.0 for 1971, 3.0 for 1972 and 1973, and 1.3 for 1974. For the years after 1974, such levels shall be

determined by the Secretary in accordance with this title but such levels shall not exceed those established herein for 1974.

"(b) Nothing in this section shall be construed to prohibit the Secretary from establishing for any year with respect to reactive hydrocarbons, carbon monoxide, and oxides of nitrogen emission standards establishing lower levels of emission than those provided in this section.

"(c) The Secretary shall conduct such inspections and investigations as may be necessary to enforce standards established under this title, including, but not limited to, (1) the inspection (continuously or periodically) of new motor vehicles and new motor vehicle engines and items of equipment necessary to conform such vehicles and engines to such standards, at the time and place of manufacture (including the assembly of parts of such vehicles, engines, or items of equipment), and (2) the inspection of new motor vehicles and new motor vehicle engines after such engines have been operated at least 6,000 miles but not more than 50,000 miles. Any inspection of a new motor vehicle or new motor vehicle engine, after its sale to the ultimate purchaser, shall be made only if the owner of such vehicle or engine volunteers to permit such inspection to be made. If, as a result of any such inspection or investigation, the Secretary determines that any new motor vehicle or new motor vehicle engine is no longer in conformity with regulations prescribed under this title because of any defect in such vehicle or engine, the manufacturer of such vehicle or engine shall furnish notification of such defect to the owner of such vehicle or engine within a reasonable time after such manufacturer has been notified of such defect by the Secretary. Such notification to the owner shall contain a clear description of the defect, a statement of measures to be taken to repair such defect, and a commitment of the manufacturer to cause such defect to be remedied without charge.

#### "FLEET OPERATIONS

"SEC. 215. After January 1, 1972, if a person is engaged in any business, commercial, industrial, or other activity which results in any year in such persons' operating, directly or indirectly, ten or more motor vehicles, each such motor vehicle without regard to age or condition, must produce a level of exhaust emissions of not more than .5 grams per mile of reactive hydrocarbon, 11 grams per mile of carbon monoxide, and .75 grams per mile of oxides of nitrogen. Violations of this section shall be subject to injunction and the penalties provided in section 204 and 205 of this Act in the same manner and to the same extent as is provided therein for violations of paragraphs (1), (2), and (3) of section 203 (a) of this Act.

#### "RUBBER AND ASBESTOS STANDARDS

"SEC. 216. No later than January 1, 1972, the Secretary shall, acting under and in accordance with the authority given him by this title, prescribe maximum levels of emission of rubber and asbestos from motor vehicles and motor vehicle engines."

SEC. 4. (a) Subsection (a) of section 210 of the National Emission Standards Act is amended to read as follows:

"(a) The Secretary may by regulation designate any fuel (which, for purposes of this section, means only fuel intended for use in the transportation of any person or thing) or fuel additive, and after such date or dates as may be prescribed by him, no manufacturer or processor of any such fuel or fuel additive may sell or deliver it unless the manufacturer of such fuel or fuel additive has provided the Secretary with the information required under subsection (c) of this section and unless such fuel or fuel additive has been registered with the Secretary in accordance with subsection (c) of this section."

(b) Section 210 of such Act is amended by redesignating subsections (b), (c), (d), and (e) as subsections (c), (d), (e), and (f), respectively, and by adding after subsection (a) the following new subsection:

"(b) The Secretary may, on the basis of information obtained under subsection (c) of this section or any other information available to him, establish standards respecting the composition or the chemical or physical properties of any fuel or fuel additive to assure that such fuel or fuel additive will not cause or contribute to emissions which would endanger the public health or welfare, or impair the performance of any emission control device or system which is in general use or likely to be in general use (on any motor vehicle or motor vehicle engine subject to this title) for the purpose of preventing or controlling motor vehicle emissions from such vehicle or engine. For the purpose of carrying out such standards the Secretary may prescribe regulations—

"(A) prohibiting the manufacture for sale, the sale, the offering for sale, or the delivery of any fuel or fuel additive; or

"(B) limiting the composition or chemical or physical properties, or imposing any conditions applicable to the use of, such fuel or fuel additive (including the maximum quantity of any fuel component or fuel additive that may be used or the manner of such use)."

(c) The subsection of section 210 herein redesignated as subsection (c) is amended by striking out "For purposes of this section, the Secretary shall" and inserting in lieu thereof "For the purpose of establishing standards under subsection (b), the Secretary may require the manufacturer of any fuel or fuel additive to furnish such information as is reasonable and necessary to determine the emissions resulting from the use of the fuel or fuel additive or the effect of such use on the performance of any emission control device or system which is in general use or likely to be in general use (on any motor vehicle or motor vehicle engine subject to this Act) for the purpose of preventing or controlling motor vehicle emissions from such vehicle or engine. If the information so submitted establishes that toxic emissions or emissions of unknown or uncertain toxicity result from the use of the fuel or fuel additive, the Secretary may require the submission within a reasonable time of such scientific data as the Secretary may reasonably prescribe to enable him to determine the extent to which such emissions will adversely affect the public health or welfare. To the extent reasonably consistent with the purpose of this section, such requirements for submission of information with respect to any fuel additive shall not be imposed on the manufacturer of any such additive intended solely for use in a fuel only by the manufacturer thereof. Among other types of information, the Secretary shall": by inserting in clause (2) "the description of any analytical technique that can be used to detect and measure such additive in fuel," after "above,"; by striking out in such clause "to the extent such information is available or becomes available,"; by striking out "clauses (1) and (2)" in the second sentence and inserting in lieu thereof "the provisions of this subsection"; and by striking out "such fuel additive" in such sentence and inserting in lieu thereof "such fuel or fuel additive."

(d) The subsection of section 210 herein redesignated as subsection (d) is amended by inserting between the first and second sentences the following new sentences: "The Secretary may disseminate any information obtained from reports or otherwise, which is not covered by section 1905 of title 18 of the United States Code and which will contribute to scientific or public understanding of the relationship between the chemical or physical properties of fuels or fuel additives

and their contribution to the problem of air pollution." The first sentence of such subsection is amended by striking out "subsection (b)" and inserting in lieu thereof "subsection (c)."

(e) The subsection of section 210 herein redesignated as subsection (e) is amended (1) by adding "or subsection (b)" after "subsection (a)"; and (2) by striking out "\$1,000" and inserting in lieu thereof "\$10,000".

(f) The amendment made by subsection (e) (2) of this section shall be effective with respect to any fuel or fuel additive to which a regulation issued under subsection (a) of section 210 of such Act or a standard established under subsection (b) of such section, as amended by this Act, applies.

(g) Notwithstanding any of the amendments made by this section, after January 1, 1971, no person shall process, blend or produce in any way any gasoline containing any component of lead in excess of 3 grams per gallon, nor may any such gasoline be imported into the United States. After June 30, 1971, no person shall process, blend or produce in any way any gasoline containing any component of lead in excess of 2 grams, nor may any such gasoline be imported into the United States. After June 30, 1972, no person shall process, blend or produce in any way any gasoline containing any component of lead in excess of 0 grams per gallon, nor may any such gasoline be imported into the United States. Whoever violates this subsection shall forfeit and pay to the United States a civil penalty of \$1,000 for each gallon of gasoline processed, blended, produced, or imported in violation of this subsection. Such penalty may be recovered in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business. The Secretary may, upon application, remit or mitigate any such forfeiture.

#### H.R. 17201

A bill to impose an excise tax on automobiles based on their horsepower and emission of pollutants, for the purpose of financing programs for research in, and Federal procurement of, low emission vehicles

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) (1) section 4061 (a) of the Internal Revenue Code of 1954 (relating to motor vehicle excise tax) is amended—

(1) by striking out "the specified percent of the price for which so sold" in the matter preceding paragraph (1) and inserting in lieu thereof the following: "a percent of the price for which so sold equal to the specified percent determined under paragraph (1) or (2), plus (in the case of an article taxable under paragraph (2)) the percent determined under paragraph (3)", and

(2) by adding at the end thereof the following new paragraph:

"(3) (A) (i) An article taxable under paragraph (2) which when sold is a motor vehicle is taxable under this paragraph at a percent determined by adding the percent determined under subparagraph (B) to the percent determined under subparagraph (C).

"(ii) An article taxable under paragraph (2) which when sold is not a motor vehicle is taxable under this paragraph at 4.5 percent.

"(B) Each motor vehicle referred to in subparagraph (A) (i) is taxable at a percent, based on the brake horsepower of the engine of such vehicle, determined under the following table:

"If the brake horsepower is—	Then the percent is—
Not over 175.....	.0
Over 175, but not over 275.....	0.5
Over 275, but not over 375.....	.1
Over 375.....	1.5

"(C) Each motor vehicle referred to in subparagraph (A) (i) is taxable at a percent, based on the grams of carbon monoxide it emits per mile, determined under the following table:

"If the grams of carbon monoxide emitted per mile is—

Not over 11.....	Then the present is—
Over 11.. ¼ of 1 percent for each gram in excess of 11	0

"(D) For purposes of subparagraph (C), carbon monoxide emissions of a motor vehicle shall be determined (in accordance with regulations prescribed by the Secretary or his delegate) on the basis of the standard tests conducted by the Secretary of Health, Education, and Welfare on vehicles of the same kind for purposes of determining whether such vehicles meet the omission standards prescribed under section 202 of the National Emission Standards Act.

(2) The amendments made by paragraph (1) of this subsection shall apply with respect to articles sold on or after the day after the date of enactment of this Act.

(b) Amounts received in the Treasury by reason of the tax imposed by section 4061 (a) (3) of the Internal Revenue Code of 1954 shall be paid into a separate account in the Treasury and shall be available for appropriation only to carry out section 212 of the National Emission Standards Act (as amended by section 2 of this Act) and to pay the amount by which the price of certified low-emission vehicles purchased by the United States in accordance with section 213 (1) of such Act (as so amended) exceeds the price of similar automobiles which are not certified low-emission vehicles.

SEC. 2. The National Emission Standards Act is amended by renumbering section 212 as section 214 and by inserting immediately after section 211 the following:

#### "RESEARCH AND DEVELOPMENT

"Sec. 212. The Secretary shall conduct and accelerate research and development of propulsion systems for use in motor vehicles, other than those using internal combustion engines, which systems are technologically and economically feasible including, but not limited to, mass production methods and techniques. Such research and development shall include cost analysis of mass production of such feasible propulsion systems, and such cost analysis shall be independent of those produced by manufacturers. Any knowledge and information resulting from research or development, including cost analysis, carried on under this section shall be public information.

#### "FEDERAL LOW-EMISSION VEHICLE PROCUREMENT

"Sec. 213. (a) For the purpose of this section—

"(1) 'Board' means the Low-Emission Vehicle Certification Board;

"(2) 'Federal Government' includes the legislative, executive, and judicial branches of the Government of the United States, and the government of the District of Columbia;

"(3) 'motor vehicle' means any vehicle, self-propelled or drawn by mechanical or electrical power, designed for use on the highways principally for the transportation of passengers except any vehicle designed or used for military field training, combat, or tactical purposes;

"(4) 'low-emission vehicle' means any motor vehicle which meets the regulations prescribed under section 202 (c) of this title.

"(b) There is established a Low-Emission Vehicle Certification Board to be composed of the Secretary of Transportation or his designee, the Secretary of Health, Education, and Welfare or his designee, the Director of the National Highway Safety Bureau in the

Department of Transportation, the Administrator of the General Services Administration, and one member appointed by the President. The Secretary of Transportation or his designee shall be the Chairman of the Board.

"(c) Any member of the Board not employed by the United States may receive compensation at the rate of \$125 for each day such member is engaged upon work of the Board. Each member of the Board shall be reimbursed for travel expenses, including per diem in lieu of subsistence as authorized by law (5 U.S.C. 5703) for persons in the Government service employed intermittently.

"(d) (1) The Chairman, with the concurrence of the members of the Board, may employ and fix the compensation of such additional personnel as may be necessary to carry out the functions of the Board, but no individual so appointed shall receive compensation in excess of the rate authorized for GS-18 by section 5332 of title 5, United States Code.

"(2) The Chairman may fix the time and place of such meetings as may be required.

"(3) The Board is granted all other powers necessary for meeting its responsibilities under this Act.

"(e) The Secretary of Health, Education, and Welfare shall determine which models or classes of motor vehicles qualify as low-emission vehicles in accordance with the provisions of this Act.

"(f) The Board shall certify any class or model of motor vehicles—

"(1) for which a certification application has been filed in accordance with subsection (h) of this section;

"(2) which is a low-emission vehicle as determined by the Secretary of Health, Education, and Welfare; and

"(3) which it determines is suitable for use as a substitute for a class or model of vehicles presently in use by agencies of the United States.

The Board shall specify with particularity the class or model of vehicles for which the class or model of vehicles described in the application is a suitable substitute. In making the determination under this subsection the Board shall consider the following criteria:

- "(1) the safety of the vehicle;
- "(2) its performance characteristics;
- "(3) its reliability potential;
- "(4) its serviceability; and
- "(5) its fuel availability.

"(g) Certification under this section shall be effective for a period of two years from the date of issuance.

"(h) (1) Any party seeking to have a class or model of vehicles certified under this Act shall file a certification application in accordance with rules established by the Board and published in the Federal Register.

"(2) The Board shall publish a notice of each application received in the Federal Register.

"(3) The Board shall determine whether or not the vehicle for which application has been properly made is a low-emission vehicle in accordance with procedures established by it and published in the Federal Register.

"(4) The Board shall conduct whatever investigation necessary, including actual inspection of the vehicle at a place designated by the Board in the certification application rules established under this section.

"(5) The Board shall receive and evaluate written comments and documents from interested parties in support of, or in opposition to, certification of the class or model of vehicle under consideration.

"(6) Within ninety days after the receipt of a properly filed certification application, the Board shall reach a decision by majority vote as to whether such class or model of vehicle is a suitable substitute for any class

or classes of vehicles presently being purchased by the Federal Government for use by its agencies.

"(7) The Board shall publish in the Federal Register, within ninety days after the receipt of a properly filed certification application, a report of its decision on such application which sets forth with particularity the reasons for granting or denying certification, together with dissenting views.

"(i) As soon as possible, but no later than January 1, 1973, only certified low-emission vehicles shall be acquired by purchase by the Federal Government for use by the Federal Government.

"(j) For the purposes of this section any statutory price limitations shall be waived, and the procuring agency shall be required to purchase available certified low-emission vehicles which are eligible for purchase before purchasing any other vehicles for which the low-emission vehicle is a certified substitute.

"(k) This section shall take effect upon its enactment and the Board shall promulgate the procedures required to implement this section within ninety days thereafter."

#### H.R. 17203

A bill to permit the Governor of a State to elect to use funds from the State's Federal-aid highway system apportionment for purposes of paying additional costs incurred by such State in purchasing low-emission vehicles

*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 "State Low-Emission Vehicle Procurement Act".*

#### DEFINITIONS

SEC. 2. For purposes of this Act—

(1) the term "Federal-aid highway system apportionment" means an apportionment for a fiscal year to a State under one of the five paragraphs of section 104(b) of title 23, United States Code;

(2) the term "Governor" means the chief executive officer of a State;

(3) the term "State" means a State, the District of Columbia, or Puerto Rico.

#### GRANTS

SEC. 3. The Governor of a State may elect to use all or part of one or more of any Federal-aid highway system apportionment for such State for a fiscal year for the purpose of reimbursing such State and its political subdivisions for the additional cost to such State and its political subdivisions (determined under regulations of the Secretary of Transportation) of purchasing low-emission vehicles (meeting standards prescribed by the Secretary) for their own use. The election authorized herein shall be made in such manner as the Secretary of Transportation shall by regulation prescribe, within sixty days after the Secretary of Transportation certifies to the Governor, pursuant to title 23, United States Code, the sums apportioned to that State for a fiscal year.

#### AMENDMENT TO TITLE 23, UNITED STATES CODE

SEC. 4. (a) Section 104(e) of title 23, United States Code, is amended by inserting after "State highway department" the following: "and the Governor or chief executive officer of each State."

(b) Section 104(b)(5) of such title is amended by adding at the end thereof the following: "Rules, regulations, and standards adopted by the Secretary for estimating the cost of completion of the Interstate System and taking into account all previous apportionments shall prescribe a consistent and equitable procedure for taking into account amounts of apportionments which the Governor of a State has elected to use to carry out section 3 of the State Low-Emission Vehicle Procurement Act."

(c) Section 104 of such title is amended

by adding at the end thereof the following new subsection:

"(f) No amount which the Governor has elected to use to carry out section 3 of the State Low-Emission Vehicle Procurement Act in a fiscal year shall be available for expenditure for Federal-aid highways under this title."

(d) Section 118(a) of such title is amended by striking out "On and after" and inserting in lieu thereof "Sixty days after."

#### AMENDMENTS TO HIGHWAY REVENUE ACT

SEC. 5. (a) Section 209(f)(1) of the Highway Revenue Act of 1956 is amended by inserting "(A)" before "making expenditures" and by striking out the period at the end thereof and inserting in lieu thereof the following: "and (B) for the purposes of section 3 of the State Low-Emission Vehicle Procurement Act."

(b) Section 209(g) of such Act is amended by adding at the end thereof the following: "An election by the Governor of a State under section 3 of the State Low-Emission Vehicle Procurement Act to use funds to carry out such section 3 shall not be taken into account in making any adjustment under this section."

#### EFFECTIVE DATE

SEC. 6. This Act shall take effect upon the first certification of Federal-aid highway system apportionments under section 104(e) of title 23, United States Code, following the date of enactment of this Act.

#### GIVE 'EM HELL HARRY

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Missouri (Mr. HALL) is recognized for 15 minutes.

Mr. HALL. Mr. Speaker, on Thursday evening, May 7, at 8:15 p.m., the Junior Chamber of Commerce of Kansas City, Mo., will sponsor the presentation of a two-act documentary drama entitled "Give 'em Hell Harry."

The play, written by Carl E. Bolte, Jr., will honor our former Chief Executive, the Honorable Harry S. Truman of Missouri. It will dramatize the event-filled years that the former President spent in the White House at 1600 Pennsylvania Avenue.

The date of May 7 was selected for the performance as it is the eve of Mr. Truman's 86th birthday.

Mr. Speaker, I was pleased to accept the request that I serve as one of the honorary chairmen of the event, along with many distinguished Missourians. I pledge to all who plan to attend a most rewarding and nostalgic evening.

Although I have admittedly often been poles apart politically and philosophically from our 33d President, we have always maintained a good friendship and mutual respect that has stood the test of time as well as partisan politics. I can well remember the occasions when the man from Independence visited our part of the State of Missouri, and would designate this Member of Congress to be the "White House physician" for his stay. This of course, due to our service in the executive branch during the Truman administration, and bringing my friend and fellow physician back from World War II in the European theater to become the White House physician.

The script of "Give 'em Hell Harry" has been made available to me and its reading has evoked many memories of

the sometimes tumultuous days of the "Fair Deal."

It chronicles the death of President Roosevelt which thrust the former captain, farmer, haberdasher, U.S. Senator, Vice President, into the Nation's highest office during some of the most trying days in the history of the United States.

It recreates the day when Mr. Truman, angry about an unfavorable review of his daughter Margaret's vocal recital, dictated the now famous letter to the Post reviewer offering to "punch him in the nose," should they per chance happen to meet.

The play returns dramatically to the conflicts that led to the decision to drop the first atom bombs on Hiroshima and Nagasaki, Japan. The debate before that decision with Generals Marshall and Arnold, Admiral Leahy, Dr. Conant, Secretary of State Byrnes, and others is all enacted with the final determination made by the oft quoted phrase, "The buck stops here."

We are taken back to May 1946, when Mr. Truman, attempting to solve a crippling railroad strike, took the precarious political step, of drafting the railroad workers into the armed services in order to keep them on the job.

Other scenes in the play depict the creation of the Hoover Commission on the Reorganization of the Congress; the beginning of the Marshall plan; the ill-famed attack on the President and the House of Representatives of enraged Puerto Ricans; the Berlin blockade; the 1948 "whistle-stop" campaign; the "police action" in Korea; and the eventual recalling of General MacArthur; and on into the scandals of the deep freezes and mink coats.

All the history of the Truman years in the White House is portrayed by an excellent cast, tasteful settings, and a dramatic script.

The Junior Chamber of Commerce of Kansas City, Mo., has assumed the responsibility of the ticket sales for this one-night-only performance. It will be held in the Kansas City Music Hall which seats more than 2,500. The Jaycees have pledged the funds from the sale of tickets to be used by the Kansas City Philharmonic Orchestra.

I am sure that many Members of the Congress who know and love this great American would like to attend this production. It is my pleasure to extend an invitation to them to do so. My office will be happy to supply any further information that might be desired.

Those who recall the man who is famous for the phrase, "If you can't stand the heat, stay out of the kitchen," and "the buck stops here," will be delighted with "Give 'em Hell Harry."

#### THE FEDERAL-AID HIGHWAY SYSTEM

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from California (Mr. DON H. CLAUSEN) is recognized for 20 minutes.

Mr. DON H. CLAUSEN. Mr. Speaker, I have taken this special order to advise the Members of the House that I am, today, introducing the first of a series of

bills pertaining to our Federal-aid, highway system and program.

As a member of the Roads Subcommittee from California, I feel the time has come for a new look at our entire highway program. We need to completely evaluate the history of road development in the United States and decide whether or not we have been heading in the right direction, what mistakes have been made and, most importantly, where do we go from here?

This, of course, is the purpose of the hearings now being held by our Public Works Committee.

In previous legislation we took the initiative and called for a "functional classification and needs study" to be conducted by the Federal Highway Administration, in concert with the American Association of State Highway Officials, and the recommendations presented to our committee in 1970—this year.

While I will be participating directly in the framing of the Federal-Aid Highway Act of 1970, during the course of the hearings, I want to relate to my colleagues, at the outset, just a few thoughts and ideas that I believe are pertinent and, hopefully, timely.

The Interstate Highway and Defense System and the Federal-aid highway program developed in 1956 have been lauded and generally considered to be the most important public works project ever undertaken by any country in the world. It has contributed more to economic growth in the United States than any other single Government program. It permitted the movement of people, goods, and services to accelerate tremendously. It helped large and small businesses alike to "get a piece of the action." Our gross national product has more than doubled since the enactment of this act in 1956. Our standard of living increased immensely.

As we move into the decade of the 1970's, I believe we stand, literally, "at the crossroads" in our decisionmaking process. What we do this year, with regard to highway legislation, and in the next 10 years, in my judgment, will determine the direction and success story of America for the next 100 years.

We will, by our decisions, determine whether our already over-crowded, over-congested, unmanageable, heavily polluted, and decaying metropolitan areas are going to add more people and more problems or whether we check, and hopefully, reverse the present population migration trend and move toward a more balanced population pattern and a better environment for future living.

The revenue allocations formulas we adopt for highways and all modes of transportation will "pretty well determine" the final outcome.

For many years, I have strongly advocated the establishing of three transportation trust funds:

First. Improve and revise the existing highway trust fund in concert with the States.

Second. Enact an airport-airways system trust fund.

Third. Establish an urban area transportation system trust fund.

I believe this basic concept is now underway due to the very able leader-

ship of our Secretary of Transportation, John Volpe. Further, I developed in-depth testimony and presented it to the Interstate and Foreign Commerce Committee during the consideration of the airport-airways legislation.

Today, I will touch briefly on what I think needs a great deal of consideration and emphasis—that of revenue allocation revisions of our established formulas and apportionment factors for all Federal-aid highways, but in particular, the primary and secondary roads systems.

The legislation I am introducing today would change the percentage of matching funds for primary and secondary roads from 50-50 to 75-25.

The areas that really need the highways and improved roads are the sparsely populated areas, which in fact, are the least able to finance the then badly needed highways. The major road deficiencies in highway construction are in rural America. Conversely, the greatest opportunity for improving the quality of life can be found in "Countryside, USA."

The most important ingredient for revitalizing and diversifying rural America is a coordinated, integrated, and balanced transportation system.

The most important contributor toward that objective, in my judgment, will be an accelerated construction timetable of the Federal aid to primary—FAP—and Federal aid to secondary—FAS—road system, coordinated with our Interstate Highway System completion and the contemplated airport-airway system now pending before the Congress.

It is for this reason that I introduce the "75-25" highway matching formula legislation today, in the hope that it will focus increased attention on this very important segment of our total transportation system.

If I were to offer some constructive criticism of our existing highway allocation formulas, I would suggest that there has been too much emphasis on allocating funds to where the population is and not enough attention given to allocating funds on a basis of where the population can be.

We need to devise a new method of financing the urban area transportation system to improve the traffic flow and develop more efficient and effective "people-moving" systems, consistent with improved urban living objectives.

However, there is one commonly accepted fact of life that cannot be underestimated. And, that is desire on the part of the individual to maintain his independence and flexibility, particularly as it relates to transportation.

The overwhelming majority of Americans will insist on personal transportation from their home, select the direction they want to travel—with the option to change their mind—and on their own time schedule.

With this in mind, the automobile is a long way from becoming extinct and will serve as the prime vehicle for most Americans during our lifetime.

The public is demanding pollution-free engines and properly so. This will come into being and ultimately add to the demand for more automobiles.

So, now is the time to lay the legisla-

tive groundwork for "redirecting the traffic"—instead of pouring more traffic into the cities, let us develop a system that will help some people get out of the cities. The relief of population pressures can make more cities livable and manageable and open up new opportunities for people now "mired down in megalopolis."

Time and again, I have heard people say, I would like to "go back from whence I came"—"if only I could make a living there." Mr. Speaker, I submit, a change in the revenue allocation formula of our highway system and a re-direction of other tax revenues could go a long way toward accomplishing this and, at the same time, provide major improvements in the quality of future living conditions for all Americans.

In 1968, the Congress accepted an amendment I introduced in our Roads Subcommittee to increase the funds available for primary and secondary roads by \$225 million. I hope you will take a good look at this proposal to change the matching fund formula to 75-25, looking constantly to the tremendous advantages that can accrue to the benefit of all people—living in both urban and rural America.

The environmental, inflationary, crime, and other major socioeconomic problems of America are primarily concentrated in metropolitan areas.

I hope some of you can see the opportunities available to provide relief from these mounting and nagging problems.

America desperately needs a more balanced population pattern—this can be accomplished through creation of a more balanced transportation system—this can be realized through a more balanced method of financing our transportation systems.

I want to start balancing our highway system—that is what "75-25" is all about.

The timing on this formula change will have to be considered and decided upon by those most familiar with current highway financing and our committees of the Congress, working with the States—keeping constantly in mind the fact, that the fuel tax was "invented" at the State level and we do not want to preempt their ability to raise adequate funds to meet their own transportation requirements as well as their own share of the matching funds.

The year, 1970, could be the year of decision. It could also determine the direction America and her people will take for the balance of our lifetime. I hope it will lead to building a better—"open-space" America.

#### EARTH DAY

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Michigan (Mr. McDONALD) is recognized for 15 minutes.

Mr. McDONALD of Michigan. Mr. Speaker, for more than 200 years this country has met, explored, and conquered frontiers. It has been a way of life for us. We had the audacity, the fortitude, and the courage to enter often

hostile territory, and in so doing we have established a world reputation of hardiness and ingenuity.

It was not too long ago that St. Louis was the last vestige of westward civilization. The Mississippi River was the frontier, but the land beyond beckoned. Our pioneers accepted—and met—the challenge.

Yesterday, Mr. Speaker, was Earth Day. All over this Nation people met on college campuses, in town halls, in public parks, and at garbage dumps in an effort to focus attention on our environmental problems. Those problems represent in a sense a human frontier—a barrier to human development, which we must penetrate to have a better way of life.

There is much to be done in the exploration of this human frontier. Individuals can address themselves to a host of projects, all of which will contribute to the massive cleanup necessary to bring about clean air and clean water.

There are projects designed to clean up our beaches. There are projects to clean up our roadways. There are projects to clean up, fix up, and straighten up all the physical disorder in our country.

Many Congressmen and Senators returned to their home States to sweep debris from the side of the road and contribute to the volumes of environmental rhetoric.

The legislation correcting many of our environmental problems is pending here in Congress. It is here that the ultimate decision will be made when—and how—to clean our environment. I would hope that my colleagues' efforts include a commitment to return to Congress and take positive action on the bills and resolutions pending on this issue. To return without such a commitment is to negate the efforts of thousands of Americans on Earth Day.

It is not my intention to demean the work being done by the thousands of citizens taking part in active campaigns. That work is valuable toward solving the problem at hand.

But the residue of garbage, litter, bad air, and dirty water which lowers the quality of life in this country is the end result of our environment problem. I see my responsibility as a Member of Congress as developing an action program to attack the root of the problem. There are solutions to our environmental crisis. And they are now before this body in bill form. This is where I must be if I am to carry out the responsibilities of my office.

Earth Day was a day to assess the mass reaction and response to a challenge. Hundreds of thousands of Americans took part in a day of dedication to preserve and improve our quality of life. That sort of activity is supportive to the action now needed by Congress. There is something for everyone to do. That something—for a Congressman—can only be done in this Chamber.

The topic of environment has brought together the young and the old. It serves as a glue which brings together and holds the many factions that exist in our Nation. I would hope that Earth Day, Mr. Speaker, is remembered as a benchmark for positive action toward creating

a clean and healthy environment for today and tomorrow. The day we began to do something about the world we are in. The day we penetrated the human frontier.

#### CITIZEN SUITS NEEDED AGAINST AIR POLLUTERS

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from New York (Mr. HALPERN) is recognized for 10 minutes.

Mr. HALPERN. Mr. Speaker, although pollution is considered a public nuisance, there is little a private citizen can do to stop emissions. To remedy this fundamental wrong, I am today introducing a bold, new approach to pollution: giving citizens the right of legal action against anyone polluting the air.

This bill does not mean that anyone can get relief from an alleged polluter merely by filing a suit. Each decision would be based on consideration of whether or not a defendant is polluting, whether or not he can stop, and whether or not the plaintiff is damaged. But the decision will be based on these relevant issues and no longer on legal technicalities.

The requirement that a polluter abate his pollution unless the cost is prohibitive has already been adopted by the Pennsylvania Supreme Court and by the U.S. district court in Oregon. It makes sense that a polluter should not be allowed to poison the air merely because cleaning up would subject him to a non-prohibitive expense.

The citizen bill against polluters would also allow class actions, treble damages for willful violations of regulations, minimum damages, and recovery of costs for successful plaintiffs.

Today pollution is generally considered a public nuisance, which only public authorities have the right to abate.

This situation of citizen powerlessness should be ended. The average citizen is injured by pollution and should have a right to stop it. Also, the possibility of private action would insure much more widespread control of pollution than is possible when the power to act is limited to a few agencies, often understaffed.

The major element of the bill suggests that a polluter must abate its pollution whenever it can do so and still stay in business. By definition this provision will not force a company to operate at a loss. It will end the excess profits earned by free use of the public's air.

Both justice and reason demand that when a business can abate its pollution, it should be required to do so.

In some cases a polluter will not be able to stay in business unless it is allowed to continue to pollute. In these cases a decision must be made as to whether or not the social benefits of the polluter's enterprise outweigh the damage done by the pollution. Unfortunately, in the past the courts have tended to balance the benefit to the public against the damage to the individual plaintiff. This bill adopts the more sensible approach of balancing public benefit against public, not merely private, harm. It establishes the citizen's right to clean air.

#### NO PRIVACY FOR 1040

The SPEAKER. Under a previous order of the House, the gentleman from Iowa (Mr. SCHERLE), is recognized for 5 minutes.

Mr. SCHERLE. Mr. Speaker, last Thursday the senior Senator from Delaware, the Honorable JOHN WILLIAMS performed a service for the entire country by exposing a shabby political trick for what it was.

Several days before that, three former Democratic officials, acting on orders of the Democratic National Chairman Lawrence O'Brien, charged that Presidential Aide Clark Mollenhoff was illegally examining income tax returns.

They waxed indignation about this invasion of privacy and shortly thereafter some of their Democrat cohorts in the Congress joined them in pointing with alarm at this practice.

But lo and behold, Mr. Speaker, last Thursday the Senator from Delaware disclosed that one of those making the complaints, Mr. Mortimer Caplin, had, while Director of the Internal Revenue Service, given carte blanche to a White House aide, Mr. Carmine Bellino, to examine income tax returns without written permission.

This, of course, was during the administration of President Kennedy. In contrast to the open access given Mr. Bellino, files have been made available to Mr. Mollenhoff only on written request.

Mr. Speaker, the charges made by Mr. Caplin, Mr. O'Brien, and others were a dishonest bit of political trickery, worthy of none of them. We can all hope they will not stoop so low again.

#### ENVIRONMENTAL CLEANUP—PART I

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Pennsylvania (Mr. SAYLOR) is recognized for 20 minutes.

Mr. SAYLOR. Mr. Speaker, now that Earth Day has come and gone, now that the orgy of environmental demonstrations has been flashed across the television screens, now that the burnings, burials, and picketing are finished for the moment, it is time we settled down to the serious business of cleaning up the Nation's natural and human environment. Additionally, now that it is generally agreed that the population has been properly and substantially warned about the threat of pollution—for the nth time during the past nth number of years—we should recognize that the cause of conservation and pollution abatement has been "catching on" throughout the country.

As one who has been concerned with the conservation of natural resources for more years than I like to count, you will forgive me for cocking a jaundiced eye at the plethora of activities which accompanied Earth Day. My concern is, and has been, sustained activity on behalf of improving the environment. If that is the result of the youthful massification regarding the environment, then a great deal has been accomplished. Only time will tell.

Meanwhile, back in the real world,

dollars and cents, not demonstrations and confrontations, determine the real thrust of our commitment to environmental cleanup, it is possible to find some signposts of hope about the problems of pollution we face.

In the series I am beginning today, I hope to show that our much-maligned free-enterprise system is beginning to respond to the challenges of environmental pollution. Following today's report, I will submit for our colleagues' consideration the status of industrial pollution abatement programs which are showing promise in the never-ending struggle to produce without polluting.

Perhaps it need not be said, but I will say it anyway, the Federal Government cannot by itself force the cleanup of the environment in spite of the speeches and posturing by some well-known Federal officials. If the environment is to be improved it will be on a cooperative basis; that is, individuals, groups, businesses, politicians, government at all levels, will have to work in harness to effect significant environmental improvements.

Before I bring to your attention various industry programs and individual statements on pollution abatement, it is proper to have the scene set. Edwin L. Dale, Jr., the distinguished economics columnist for the New York Times, has done just that in an article entitled "The Economics of Pollution," which appeared in last Sunday's New York Times Magazine. Without further ado, I will set the realists' scene for effective pollution abatement by referring you and our colleagues to the Dale article:

[From the New York Times Magazine  
Apr. 19, 1970]

#### THE ECONOMICS OF POLLUTION

(By Edwin L. Dale, Jr.)

Now that environment has become a national concern, it might be well to clean up some of the economic rubbish associated with the subject. There are, alas, a few "iron laws" that cannot be escaped in the effort to reduce the pollution of our air and water, in disposing of solid waste and the like. The laws do not necessarily prevent a clean environment, but there is no hope of obtaining one unless they are understood.

We have all become vaguely aware that there will be a cost—perhaps higher monthly electric bills, perhaps higher taxes, perhaps a few cents or a few dollars more on anything made from steel—if there is a successful and massive effort to have a better environment. But that is only a beginning. There are other problems.

This article will describe the three iron laws that matter. There is no point in hiding that all three are very depressing. The only purpose in adding more depressing information to a world already surfeited with it is a small one: to avoid useless effort based on false premises. A classic example has already arisen in wistful Congressional inquiries into whether we might think of a future with somewhat less electric power, or at least less growth in electric power.

In shorthand, the three laws are:

- (1) The law of economic growth.
- (2) The law of compound interest.
- (3) The law of the mix between public and private spending.

#### THE LAW OF ECONOMIC GROWTH

Whether we like it or not, and assuming no unusual increase in mass murders or epidemics, the American labor force for the next 20 years is already born and intends

to work. It is hard for any of us—myself included—to imagine a deliberate policy to keep a large portion of it unemployed. But that simple fact has enormous consequences.

For more than a century the average output of each worker for each hour worked has risen between 2 and 3 per cent a year, thanks mainly to new machines, but also to better managerial methods and a more skilled labor force. This increase in what is called productivity is by far the most important cause of our gradually rising standard of living—which pollution aside, nearly all of us have wanted. In simplest terms, each worker can be paid more because he produces more and he consumes more because he earns more. Inflation only increases the numbers and does not change the facts. Machines increase the productivity of an auto worker more than a barber, but both rightly share, through the general rise in real income, in the expansion of productivity in the economy as a whole.

It is difficult to conceive of our society or any other wanting to halt the rise in productivity, or efficiency, which has made real incomes higher for all of us. But even if "we" wanted to, in our kind of society and economy "we" couldn't. The profit motive will almost always propel individual daily decisions in the direction of higher productivity. A business will always buy a new machine if it will cut costs and increase efficiency—and thank goodness! That is what has made our standard of living—and we do enjoy it—rise.

It is not a matter of enjoying it, however. By any fair test, we are not really affluent; half of our households earn less than \$8,500 a year. Apart from redistributing income, which has very real limits, the only way the society can continue to improve the well-being of those who are not affluent—really the majority—is through a continued increase in productivity. Anyone who wants us to go back to the ax, the wooden plow, the horse carriage and the water wheel is not only living a wholly impossible dream, he is asking for a return to a society in which nearly everybody was poor. We are not talking here about philosophical ideas of happiness, but of what people have proved they want in the way of material things. This society is not about to give up productivity growth. But every increase in productivity adds to output. Now consider the next step:

We can count on the output of the average worker to continue to rise in the years ahead, as it has in the past. Nearly all current forecasts put this rise in productivity much closer to 3 per cent than to 2, and 3 per cent has been about our average in the years since World War II. So without any change in the labor force at all, our national output will go on rising by some 3 per cent a year.

What does output mean?

It means electric power produced—and smoke produced.

It means cans and bottles produced.

It means steel produced—and, unless something is done about it, water and air polluted.

It means paper produced—with the same result as for steel.

And so on and on.

But that is not the end, for there will not be a static labor force. As noted, the force for the next 20 years is already born and it is going to grow year by year (with a caveat, to be described below).

Obviously, we want to offer these people employment opportunity. So, in addition to a 3 per cent productivity growth, there will be an added growth of at least 1 per cent a year in the number of workers. The result is that we are almost "condemned" to a rise in our total output of 4 per cent a year. The only escape, it seems, would be a national decision either to have high unemployment or to try to be less efficient. Both are absurd on their face.

The law of economic growth says, then,

that we already know that the national output in 1980 will be, and almost must be, some 50 percent higher than it is now. President Nixon has said so publicly, and he is right. That is the result of an annual rate of real growth of about 4 percent, compounded. It is terrifying. If an economy of \$900-billion in 1969 produces the pollution and clutter we are all familiar with, what will an economy half again as large produce?

Is there no escape from this law? The answer, essentially, is no. But there is one possible way to mitigate the awesome results. We might reduce the labor input (but, we hope, not the productivity input), without creating mass unemployment.

Each working person has a workday, workweek, workyear and worklife. Any one of them could be reduced by law or otherwise. We could reduce the legal workweek from the present 40 hours. We could add more holidays or lengthen vacations to reduce the workyear. We are already shortening the worklife, without planning it that way: increased participation in higher education has meant later entry into the labor force for many, and retirement plans, including Social Security, have brought about earlier retirement than in the past for others.

If, by chance or by law, the annual man-hours of employment are reduced in the years ahead, our output will grow a little less rapidly. This is the only way to cut our economic growth, short of deliberate unemployment or deliberate inefficiency.

There is a cost. It is most easily seen in a union-bargained settlement providing for longer vacations without any cut in annual wages, or a legal reduction in the workweek from 40 to 35 hours, with compulsory overtime payments after that. In each case, more workers must be hired to produce the same output, and if the employer—because of market demand—goes on producing at the same level, wage costs for each unit of output are higher than they otherwise would have been. Prices will therefore be higher. This is widely recognized. Maybe we would be willing to pay them.

But we cannot guarantee less output. Only if employers produce less—because of the extra cost—would that happen. And in that larger sense, the cost of a reduction of our annual labor input is simply less production per capita because the labor force is idle more of the time.

But less production was the objective of the exercise—the antipollution exercise. If we start with the proposition that the growth of production is the underlying cause of pollution, which has merit as a starting point, the only way we can get less growth in production, if we want it, is to have more of our labor force idle more of the time. In that case, we will have more leisure without mass unemployment, as we usually think of the term. Our national output, and our standard of living, will rise less rapidly.

That last idea we may learn to take, if we can cope with the leisure. But under any foreseeable circumstances, our output will still go on rising. With the most optimistic assumptions about a gradual reduction of the workday, workweek, workyear and worklife, we shall undoubtedly have a much higher output in 1980 than we have in 1970. To a man concerned about the environment, it might seem a blessing if our economic growth in the next 10 years could be 2 per cent a year instead of 4 per cent; he cannot hope for zero growth.

The law of economic growth, then, tells us a simple truth: "we" cannot choose to reduce production simply because we have found it to be the cause of a fouled environment. And if we want to reduce the rate of growth of production, the place to look is in our man-hours of work.

#### THE LAW OF COMPOUND INTEREST

It is a fair question to ask: Why weren't we bothered about pollution 12 or 15 years

ago? In October, 1957, to pick a date, the Soviet Union sent the first earth satellite into orbit. The American economy had just begun a recession that was to send unemployment to 7 per cent of the labor force. The late George Magoffin Humphrey, who had just resigned as Secretary of the Treasury, was warning of what he saw as vast Government spending, at that time \$77-billion, and saying it would bring "a depression that would curl your hair." There were plenty of things to think about.

But nobody was worried about pollution. Conservation groups were properly bothered about parts of the wilderness (the Hell's Canyon Dam in Idaho, for example), but that was an entirely different thing. That was an issue of esthetics, not health. Nobody seemed to mention air pollution or waste that might overwhelm the space in which to put it. In a peculiarly sad irony, the late Adlai E. Stevenson had fought and lost an election against Dwight D. Eisenhower in 1956 partially on a "pollution" issue—radiation in the atmosphere from the explosion of atomic weapons.

The question, to repeat: Why didn't we worry about pollution then? The answer is that, relatively speaking, there was no pollution. Yes, there were electric power plants then, too. Yes, there were paper mills polluting streams. Yes, there were tin cans and paper and bottles. Some snowflakes, though we didn't know it, were already a bit black, and Pittsburgh got national attention because it tried to do some cleaning up.

But here we come to the law of compound interest. In 1957—only 13 years ago—our gross national product was \$453-billion. In 1969, in constant dollars, it was \$728-billion. That is an increase of nearly \$300-billion in tin cans, electric power, automobiles, paper, chemicals and all the rest. It is an increase of 60 per cent.

So what? That was not the result of an unnaturally rapid growth rate, though a bit more rapid than in some periods of our past. The so what is this: in the preceding 13 years the growth had been only \$100-billion. We were the same nation, with the same energy, in those preceding 13 years. We invested and we had a rise both in productivity and in our labor force. But in the first 13 years of this example our output rose \$100-billion, and in the second 13 it rose \$300-billion.

In the next 13 it will rise more than \$500-billion.

That is the law of compound interest. These are not numbers; they are tin cans and smoke and auto exhaust. There is no visible escape from it. Applying the same percentage growth to a larger base every year, we have reached the point where our growth in one year is half the total output of Canada, fully adjusting for inflation. Another dizzying and rather horrifying way of putting it is that the real output of goods and services in the United States has grown as much since 1950 as it grew in the entire period from the landing of the Pilgrims in 1620 up to 1950.

Most investors know the law of compound interest. There is a magic rule, for example, known as the Rule of 72. It says, with mathematical certainty, that money invested at a 7.2 per cent rate of interest, compounded each year, doubles in 10 years. Our G.N.P. happily, does not compound at 7.2 per cent. But it compounds at between 4 and 5 per cent, and it has been compounding. The result is that the same, routine, full-employment, desirable, nationally wanted, almost unavoidable percentage increase in our national output in 1970 means precisely twice as many extra tin cans, twice as much additional electric power, and so on, as the same rate of growth in 1950. And that is only 20 years ago! We are not doing anything different, or anything awful. We are the same people. Granting approximately the same amount of human carelessness and selfish-

ness, we are the victims solely of the law of compound interest.

#### THE LAW OF THE MIX BETWEEN PUBLIC AND PRIVATE SPENDING

Robert S. McNamara, the eternally energetic and constructive former Secretary of Defense and now president of the World Bank, gave a speech in February about the plight of the poor countries. In the speech he understandably criticized the United States for reducing its foreign aid effort. But in supporting his point he adopted, almost inadvertently, a piece of partly fallacious conventional wisdom:

"Which is ultimately more in the nation's interest: to funnel national resources into an endlessly spiraling consumer economy—in effect, a pursuit of consumer gadgetry with all its senseless by-products of waste and pollution—or to dedicate a more reasonable share of those same resources to improving the fundamental quality of life both at home and abroad?"

Fair enough. It means tax increases, of course, though Mr. McNamara did not say so. That is what the "mix" between public and private spending is all about. But for our purposes the point is different. Let us look more closely at the phrase: "... a pursuit of consumer gadgetry with all its senseless by-products of waste and pollution..."

As it stands, it is true. Private consumption does create side effects like waste and pollution. But now, assume a Brave New World in which we are all happy to pay higher taxes and reduce our private consumption so that the Government may have more money with which to solve our problems—ranging from poor education to poverty, from crime to inadequate health services. We shall not examine here the issue of whether more Government money solves problems. It is obviously more effective in some areas than in others. But anyway, in our assumption, we are all willing to give the Government more money to solve problems, including pollution.

Now let us see what happens.

The Government spends the money to reduce pollution. Sewage plants are built. They need steel. They need electric power. They need paperwork. They need workers. The workers get paid, and they consume.

The Government spends the money on education. New schools are built, which need steel, lumber and electric power. Teachers are hired. They get paid, and they consume. They throw away tin cans.

The Government spends the money on a better welfare system that treats all poor people alike, whether they work or not. Incomes among the poor rise by some amount between \$4-billion and \$20-billion, and these people consume. Electric power production rises and appliance and steel production rises, and so on and on.

The point is obvious by now. A shifting in our national income or production between "public goods" and "private goods" hardly changes the environment problem at all because it does not reduce total spending, or output, in the economy.

Let a careful economist raise a valid objection, a slightly technical point must be conceded here. Government spending is done in three categories:

Purchase of goods (tanks, typewriters, sanitation trucks and school buildings).

Transfer payments to people outside government (Social Security, veterans' benefits, welfare).

Purchase of services, meaning the services of the people it employs (teachers, policemen, park rangers, tax collectors).

To the extent that a shift to more public spending, through higher taxes and a resulting reduction of private consumption, involves the first two of these categories, the point stands as made: there will be just as much production of steel, tin cans, electric

power and toasters as before. To the extent that the higher public spending goes to the third category, employment of more teachers, policemen and the like, there will be slightly less production of goods, even though these people spend their paychecks like everyone else. Essentially what happens in this case is that the society has chosen, through higher taxes, to have more services and fewer goods. If we assume that goods production brings pollution, a society with fewer auto- or steelworkers and more cops will crank out less pollution.

But this remains a relatively minor matter. Hardly anyone who proposes a solution to our problems thinks in terms of vast armies of Government workers. Reforming welfare through the President's new family-assistance plan is the perfect example; this will be a simple expansion of transfer payments. And, for that matter, building more sewage plants will be a purchase of goods. The overriding fact is that we can spend 30 per cent of our G.N.P. for public purposes, as we do now, or 50 per cent, and the G.N.P. will still be there. The law of compound interest will apply, forcing the G.N.P. upward. To the extent that the environment problem is caused by ever-expanding output, the third law says that it will not be essentially changed by altering the mix between private and public spending.

#### CONCLUSION

Three nice, depressing laws. They give us a starting point for any rational discussion of the environment problem. Our output is going to go on growing and growing under any conceivable set of choices we make.

But the starting point does not mean despair. It simply means that trying to solve the problem by reducing output, or the growth of output, is waste of time and energy. It won't and can't work.

How is the problem solved then? The purpose here is not, and has not been, to solve any problems. It has been to try to head off useless solutions. But a few things can be said:

There is, first, technology itself. The very energy and inventiveness that gave us this rising output—and got us to the moon—can do things about pollution. A fascinating case is the sulphur dioxide put into the air by coal-burning electric power plants. A very strong argument can be made that under any foreseeable circumstances we will have to burn more and more coal to produce the needed growth of electric power. And the ground does not yield much low-sulphur coal. Thus, somebody is going to have to have the incentive to develop a way to get the sulphur out before it leaves the smokestack; and if this costs the utilities money, the regulatory commissions are going to have to allow that cost to be passed along in electric bills.

Next, there is the related idea—being increasingly explored by economists, regulators and some legislators—of making antipollution part of the price-profit-incentive system. In simplest terms, this would involve charging a fee for every unit of pollutant discharged, with meters used to determine the amount. There would be an economic incentive to stop or reduce pollution, possibly backed up with the threat to close down the plant if the meter readings go above a specified level. The company—say a paper company—would be faced with both a carrot and a stick.

There is also that simple use of the police power, as with poisonous drugs or, lately, D.D.T. It is the "thou shalt not" power: automobiles can emit no more than such-and-such an amount of this or that chemical through the exhaust pipe. Once again, if the engineers cannot find a way out, the car simply cannot legally be sold. There will be, and should be, all sorts of debate "at the margin"—whether the higher cost

of the different or improved engine is worth the extra reduction of pollution. The argument exists now over D.D.T.; there are clearly costs, as well as benefits, in stopping its use. But the "thou shalt not" power exists.

Finally, there are many possibilities for using a part of our public spending for environmental purposes. Sewage plants are the obvious case. President Nixon has proposed a big expansion of the current level of spending for these plants, though not as much as many interested in clean water—including Senator Edmund Muskie—would like to see.

In this case, and only in this case, a greater effort at curing pollution must be at the expense of some other Government program unless we pay higher taxes. It is proper to point out here the subtle dimensions of the issue. There are all sorts of possible gimmicks, like tax rebates for antipollution devices for industry and federally guaranteed state and local bonds. One way or another, spending more for pollution abatement will mean spending that much less for something else, and the something else could mean housing or medical services. Every local sewage plant bond sold means that much less investment money available for mortgages, for example.

A final reflection is perhaps in order, thought it is almost banal. Our rising G.N.P. gives us the "resources" to do the antipollution job. These resources include rising Government receipts. Our technology, which has given us the rising G.N.P., might find the way out of one pollution problem after another—and they are all different.

But, in the end, we cannot be sure that the job will be done. Growth of total output and output per capita will continue. The long-term relief is perfectly obvious: fewer "capita." That sort of "solution" might help, in our country, by about 1990. If we survive until then, the law of compound interest will be much less horrifying if the population is 220 million instead of 250 million.

#### EDUCATIONAL TECHNOLOGY

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from New York (Mr. McKNEALLY), is recognized for 5 minutes.

Mr. McKNEALLY. Mr. Speaker, I am very pleased to bring to the attention of this House an article appearing in the Sunday, April 19 edition of Potomac magazine of the Washington Post. This article, entitled, "We Haven't Learned How To Use Our Teaching Machines To Teach" was written by Leo S. Tonkin, a good friend and constituent of mine from the 27th Congressional District of New York.

I heartily commend Mr. Tonkin's thought provoking article to every American citizen. At a time when taxpayers everywhere are hard pressed to meet the spiraling costs of our educational system, Mr. Tonkin's comments deserve our attention. I am particularly gratified to see mention made of President Nixon's sensible call for greater research into the basic dynamics of the learning process of students. Certainly, we should have known much more of this basic process before investing billions of dollars into the complicated and expensive field of teaching machines and their components.

Incidentally, in bringing this article to the attention of the House, I am happy to note that Mr. Tonkin is chairman of the board of trustees at an excellent college in my district, St. Thomas Aquinas

College, in Sparkill, N.Y. When Leo Tonkin was elected board chairman there some 3 years ago, he was the youngest college chairman in the country, and it was testimony to the progressive and effective leadership that is guiding St. Thomas Aquinas College into the years ahead.

Aside from Mr. Tonkin's role as president of Tonkin Associates, a Washington, D.C., based college and school system development consulting firm, he has authored other numerous articles, and has spent some years as a congressional assistant to Senator CHARLES MATHIAS, Congressman CARL ELLIOTT, and Congresswoman EDITH GREEN. His background and professional activities thus recommend the Potomac magazine article to all our attention and I am happy to insert it in the RECORD at this time:

#### WE HAVEN'T LEARNED HOW TO USE TEACHING MACHINES TO TEACH

(By Leo S. Tonkin)

The word "technology" is not new to the vocabulary of education. For years we have been hearing about teaching machines, slide and film projectors, dial access, programmed instruction. In fact, in the last 10 years, the federal government has provided grants totaling \$5 billion or more to help schools buy the latest machines on the market. Familiar corporate names, like Eastman Kodak, IBM, Xerox, Bell and Howell, have been manufacturing such devices for years. Their armies of salesmen have been doing a noteworthy job, too.

So, after all this prodigious spending, what has it got us?

The answer—shockingly—is very little. We simply have not learned yet how to use the machines made for teaching.

The many pages of a report just issued by the federal Advisory Commission on Instruction Technology say loudly that education technology in American schools today is not making it. My own meetings with high school and college personnel around the country would convince anyone—as it has convinced me—that educational technology has been little used and, where used, has often failed.

Closed-circuit television systems remain idle in the schools, microfilm readers are alien to most students, programmed study consoles are dusty from nonuse. Some claim that the machines are invaluable. But in my work, as a school systems and college consultant, mostly all I hear are complaints.

The fact is, we need some kind of mechanized help in America's teaching business.

In seven years, the United States will be spending about \$76 billion to educate some 63 million students, in both public and private schools. The cost will have risen 40 per cent in 10 years, the student population 6 million. Facing this, we must find new ways to teach more students, and teach them better, and for less money. It sounds simple—but it isn't, and every taxpayer knows it; continuing tax increases afflict every community, large and small.

With billions of dollars already spent on this expensive hardware, and very little pay-off to show for it, where does the blame lie?

Much of it lies with the corporations. They rushed headlong into the teaching machine business, chalking up tremendous sales. But, in the process, they sat back and cared little about perfecting creative materials, slides and films to make the hardware usable.

A good deal of blame also lies with the federal government. In approving an astounding amount of taxpayers' money for equipment and machines, the government encouraged schools by the thousands to apply for grants (through programs like the

National Defense Education Act and the Elementary and Secondary Education Act, and a score of other federal programs). The inevitable result: schools with closets stacked high with teaching machines, machines that sounded wonderful in sales brochures, looked imposing to the local P-TAs (and taxpayers) but just plain failed in helping the citizens' children to learn.

If we are going to make teaching machines work, and justify the commitment we've already made in terms of time and money, we must start immediately to understand what's gone wrong, and get to the business of correcting the problems.

It is clear that technology can bring about far more productive use of teachers' and students' time. And it is blatantly clear too, that education (as well as taxpayers) desperately needs this kind of help. So, just what is wrong? Three areas, in particular, have not kept pace with the development of the teaching machines:

#### 1. Hardware minus software.

In 1969, public schools in the United States owned 251,000 16-millimeter projectors, and 426,000 slide and filmstrip projectors. When you add to this thousands of other teaching devices, you begin to see how well industry has been marketing its products.

But all these teaching machines take materials, and the materials are of first importance if a student is to use a machine, learn from it, and return to it on his own initiative—and he must return to it on his own, or a teacher has only so many hours in which to give personal instruction.

These materials (software is the label) have not met the need.

By the truckload, the companies have been turning out "canned boredom"—materials that have excited no one, materials that have left the machines literally useless. Oh yes, the marketing brochures rave about the relevant subject matters, and most film series and the like have imposing advisory "panels of professors" who help in strangely abstruse ways to compile and edit the material. The result: a near uniform lack of anything that will interest students. So, like castor oil, if you don't have to take it, it sits on the shelf.

A big problem is that even the simple fundamentals of learning have been neglected in the software that has been put out so far. The psychology of learning depends upon the response of students and their teachers. Yet these are the people who have been relegated to a back seat in preparing the materials for the machines. Surprisingly little has been done to tune the students and teachers into the production of software, and that is a decisive flaw in the growth of educational technology.

If a film is to stimulate a student, watch his response to a product, test his reaction, ask for his suggestions. Similarly, with the teacher, find out his or her feelings and suggestions. Then mold and rework the films accordingly.

#### 2. Teacher training.

Aside from assisting in the development of interesting materials, teachers must learn how to use the machines. Advancements in classroom technology present teachers an awesome roomful of complicated machinery; they must undergo specially designed training programs before they know how best to use the machines, not only in one class, but as part of the whole school environment. For the most part, such teacher training has so far been neglected.

#### 3. School coordination.

Sensible use of these machines in classrooms is lost when schools fail to provide an awareness and appreciation of just what a machine can do, and get this message across to everybody. Schools, or school systems, cannot merely dump a machine into a classroom. Some teachers, some bureaucrats, resent them. And that is probably quite nat-

ural—they represent a threat—until both bureaucrats and teachers learn what these machines are capable of—that human teachers will not be replaced by automation, that a prime importance of the machines lies in freeing teachers for more and more individualized attention to individual students. Educational technology is an expensive business, and its potential for better learning is too important to be lost in bureaucratic malaise.

When media systems are tried and found effective, an entire school—in fact the entire school district and perhaps the state at large—should help implement the proven systems, and see that this costly equipment is given the widest possible use.

What is the future for teaching machines? In the words of the Advisory Commission on Instructional Technology, “. . . technology could bring about far more productive use of the teachers' and students' time.” The large corporations that make the machines know this well. After having profited immensely in the mid-1960s from selling so much equipment to schools, their business suddenly took a downward turn. Many, like General Learning Corporation, have retrenched their operations. They know now that preparing sensible and effective software must occupy the principal priority area for further advancements.

Teaching machines do have a special capacity to tailor instruction to individual students. Computer-assisted instruction offers considerable potential, in view of its encouraging students to proceed at their own pace, then receiving instant feedback on right and wrong answers. Computer-assisted instruction (now labeled CAI) is just now breaking above the water and (as with all of computer technology) the potential of these machines is without limit for storing information and returning it to a student at his own individual capacity.

Prof. Gabriel Ofesh of Catholic University here has been a leader in this infant field, and his work is beginning to bear fruit. In New York City, a computer learning system with 200 terminals has recently gone into operation, and 16,000 students are already involved in its use.

We must remember the lesson of the 1960s, however. Students must be involved in reworking the initial programming, teachers must be trained in how to use the machines, and schools must coordinate the technology across various courses and school systems. Only then will we transform the entire learning environment, by using teachers, students and facilities in new and different ways.

In his recent education message to Congress, President Nixon requested early establishment of a National Institute of Education within the Department of Health, Education and Welfare, to research and understand thoroughly the dynamics of the learning process of a student. This knowledge is desperately needed, and should have come years ago, before we spent billions upon billions of dollars on untried teaching machines, and encouraging everyone to expect great and immediate strides in education via the new technology.

Knowing what we now do about teaching machines, I would propose the following steps:

(1) Develop “media centers” in the schools. In these centers, make the computers, the dial access, the talking books, the microfilm readers and the other fine learning systems available to all students—and on a constant readiness basis.

(2) Establish a widely based teacher training program in the new technologies.

(3) Research and understand thoroughly the psychology of learning, particularly as it pertains to educational technology.

(4) Enlist the support of students in preparing and critiquing software. A good lesson could be gained from the Washington

Workshops Foundation. This Foundation annually sponsors a series of highly effective seminars in American government for hundreds of high school students from across the country. In conjunction with this, the students themselves will be assisting in preparing a sensible and practical series of films and filmstrips that look at the study of government through the eyes of youth.

(5) Choose material topics and content most carefully if we are to encourage a student to reach for a machine, push buttons and experience a stimulation that will be meaningful and sensitive to the disadvantaged youngster as well as to the brightest students.

(6) Provide an interrelationship of machine to student to teacher to school in such a way that a new kind of learning environment comes into being. Antiquated and expensive class hours, sleepy lectures, physical conformity and wasted materials must give way to students' using better what is and will become available. Technology can serve as the catalyst for all of this.

(7) Follow up use of the machines with on-the-scene visits, work-study arrangements, and time-off semesters of study for individual students. Here again, the Washington Workshops could serve as an important example. Their program combines seminar attendance, preparation of film and other software, research papers, and follow-up assignments, requiring a month or more of study away from high school.

(8) Round out the most effective educational technology program by making source materials available at school via such systems as low-cost microfilm readers. In a government class, for instance, excerpts from the *Congressional Record*, Committee reports and hearings, official statements and the like should be available. Then when a teacher mentions something important, they can all go to the original source material. Educational television can be a great help here. Recent grants to Washington's non-commercial television station WETA, Channel 26) to provide live coverage of official Washington events (like Capitol Hill hearings) to similar non-profit channels across the country is a case in point.

The future for educational technology is by no means gloomy because of past mistakes. It could be, of course, if educators, corporation designers and others involved refused to learn from those mistakes. But the indicators now seem to say that, from the White House on down, there will be a new and coordinated approach to educational technology, and that America's inestimable ability to use machines productively in other facets of society will be harnessed to help solve the problems of the schools.

#### PROBLEMS FACING THE NATION

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Pennsylvania (Mr. BYRNE) is recognized for 35 minutes.

Mr. BYRNE of Pennsylvania. Mr. Speaker, there have been many problems and crises confronting this august body during the 18 years I have had the honor to represent the Third District of Pennsylvania, but throughout that service I cannot point to a period where we have had a greater challenge facing us than today.

The problems facing the Nation are of such proportions that it is not physically possible for the Congress to solve each and every one before the conclusion of this session. But their monumental nature demands that we do everything within our capacity and ability to accom-

plish as much as possible in the time that remains for us in this session.

There are many “priorities” and “priority priorities” to consider and I feel that the people of this country are looking to us for action—action now because, unfortunately, the executive branch seems to be neglecting these needs and wants which are its primary responsibility.

Briefly, I would like to outline the fields in which I consider immediate movement not only necessary but vital.

#### THE VIETNAM WAR—AND ASSOCIATED CONFLICTS

My feelings on these conflicts are a matter of record. I am not in favor of a land war in Southeast Asia for a number of reasons. Frankly and pragmatically, it is a historical fact that a land war in Southeast Asia cannot be won. This current war of attrition does not solve the problems which led to the war; what it does is eat up lives and resources.

I have supported the efforts of the President to deescalate this conflict, but I must state frankly I am not satisfied by what has been accomplished.

I am not satisfied with the pace of troop withdrawals. I am not satisfied that we are supporting a stable, democratic, representative government which could fill the void when and if American forces leave that area.

I am not satisfied with American efforts at the so-called Paris peace talks, which have denigrated from an honest effort toward a true and lasting peace to a cruel charade which no one—most of all the American Government—takes seriously.

I would urge that this body and the other body of the Congress use every means, make every effort to convince the President that these talks be upgraded; that he send the Secretary of State as his personal representative to these talks; so that the world and our adversaries in this conflict know absolutely that the United States wants a true, lasting and equitable peace in Southeast Asia.

But let me make absolutely clear where I stand. As long as we do have troops engaged in combat in that area of the world, I am determined that they shall have the best and sufficient equipment and material to defend and protect themselves. We will never desert or deprive these brave young men who are executing their duties as American citizens.

#### THE MIDDLE EAST

Time and time again, this body, with my absolute support, has passed resolution upon resolution urging the President to pursue a more sensible course in the Middle East, but apparently these pleas have fallen on deaf ears—or nearly deaf ears.

It is a wise nation which knows its true friends; and I think it is abundantly clear the only dependable, democratic and true friend in the Middle East is the State of Israel.

How do we recognize this friendship? By denying to this small country the means to protect itself. And at the same time we engage in a monumental arms race with the Soviet Union and France as to who will supply more sophisticated weaponry to the Arabs—who inciden-

tally curse and damn us as their blood enemies.

Make no mistake. If it were not for Israel holding the line against Soviet expansion in the Middle East, I shudder to think what our military position would be in that part of the world.

#### PRICES—INFLATION

Anyone who does not admit that our Nation is in the midst of inflation is just not facing facts. If anyone harbors any doubts, let him ask the housewife, who finds food prices up each and every time she does her shopping.

Ask the municipalities and school boards who, if they are able to sell their bond issues, find that the allocations no longer cover the building and services for which they were intended.

Ask anyone who has been unfortunate enough as to require medical treatment or hospital care. For many, health insurance has become a down payment for medical care only. And health insurance costs are spiraling, reaching the point where it is beyond many of the people who need it the most.

I think this points very clearly to the need of either Federal control over health prices, or the institution of a national health plan to insure that this, the richest Nation in the world, can assure at least minimum health standards for its people.

#### UNEMPLOYMENT

An unemployment rate approaching 5 percent may be "acceptable" to certain members of the administration, but it is obvious that these individuals are not those suffering from joblessness and its handmaidens of hunger and deprivation.

I do not consider any rate of unemployment acceptable; I do not believe unemployment makes a healthy economy; I believe that nothing can substitute for the dignity and fulfillment of honest employment.

#### INTEREST RATES AND HOUSING

Recently I read a newspaper article by a knowledgeable real estate financier who advised those waiting for a reduction in interest before purchasing a house to stop waiting. Interest rates, he declared, are not coming down.

Unfortunately, I must agree with him. Despite a small amount of movement concerning the prime rate, interest costs do not seem to be declining. I think a good look must be taken at all the to-do about the prime rate decline. How many people can borrow money at the prime rate? Very few.

I do not think this reduction is filtering down to the small borrower—especially in the realm of mortgages.

For this reason, the homebuilding industry has ground almost to a standstill—despite housing legislation passed by this body.

Any homebuilding that continues appears to be involved with very expensive houses—houses that the average person cannot afford—even if he could get a mortgage loan.

The place where we vitally need new and rehabilitated housing is within the city—the inner city, if you will. The suburbs and semisuburbs likewise need housing, I agree, but unless we launch a mas-

sive homebuilding campaign within the city, our cities are going to die.

Again, despite the legislation of the Congress, it would not take long to count the number of housing units being worked on within the cities. The cities—my city included—need massive assistance and cooperation from its legislators.

"Build—Build—Build"—should be our watchword in the Congress. Give people decent housing which they can afford.

The cities are depending upon us; the people are depending upon us.

Unemployment in the building industries is rife—probably at the crisis stage.

These are facts we cannot ignore. They cry out for action.

#### TAXES

In view of the foregoing, I feel the need for tax reform is imminent—to preserve what little the people have left—if anything—after the ravages of inflation and unemployment.

I am not one of the supporters of the "filter-down" doctrine—that the large corporations should be given tax relief and the relief will filter through to the "little man." This just is not so.

And I hope no one ever sells us a bill of goods again that a tax surcharge is necessary to halt inflation. We had the surcharge and inflation was not even slowed. What we did get was a lot of squeezed little people, who had to deny themselves not luxuries but necessities of life.

Income tax being the biggest tax bite experienced by the citizenry, here is the place we should logically begin with tax reform. The proper place we should start is with a realistic exemption for dependents. Certainly not \$600 a year, or even \$1,200 a year are realistic figures for support of children or aged parents.

Another area crying for relief is among the middle class—that great, forgotten majority of Americans, who are carrying the brunt of the tax burden. We know the very rich evade taxes through gimmickry despite the reforms passed by the Congress. More tightening up is necessary for the rich and relief is needed for the middle class.

#### CRIME

I need not tell anyone residing or working in an urban area that crime stalks our streets; there is an uneasiness in the day succeeded by utter fear at nightfall. And make no mistake, this fear for life and limb transcends racial and ethnic lines. All of our citizenry is frightened on the streets and even within their own homes.

To combat this intolerable situation, I see two basic approaches. First, I do not believe we need more laws; there are enough statutes upon the books now. What we need is efficient, fearless enforcement of existing laws.

Second, we must attack the causes of crime. I am not talking about the habitual criminal; the only thing that can be done with the confirmed felon is to remove him from the public for as long a period as possible.

But where we can make real progress is among the occasional, nonprofessional criminal, who turns to violence and theft through frustration with existing society. A good job is the best deterrent to crime

that I can think of. Money spent in training our citizens for a productive, dignified life is the best investment I can visualize.

Clean up the slums. Give people decent housing. Give them dignity and purpose.

Destroy the incentives of crime and the breeding ground of crime, and we have come a long way toward the solution of this immense problem.

#### SOCIAL SECURITY

Can we hold our heads up when we recognize that in the richest land of the world the aged who have worked hard and honorably through the autumn of their years cannot live in dignity and freedom from fear during their "golden years."

In today's world, it is impossible to subsist on social security payments without outside income or subsidation by relatives. Social security is not welfare. It is payment earned by our elderly during their productive years. They have a right to expect more than they are getting.

As soon as possible, we must work for a substantial increase in social security payments—an increase to make living for the elderly more realistic in this present day.

Other adjustments are needed in social security. With the astronomical increases in health insurance costs, I think the Medicare program must assume the deficit presently being filled by health insurance plans.

Also in the realm of Medicare, I think it only proper that the disabled people under 65 on social security be granted coverage under Medicare. They are one group which needs it the most.

#### FARM SUBSIDIES

In view of the cost of government and the price of food products, I believe it is incumbent upon Congress to reassess and adjust the multibillion-dollar farm subsidy program whereby farmers are getting unbelievable sums from the Government both for raising and not raising agricultural products.

It just does not make sense. Here we have many thousands in the United States and many millions throughout the world hungry and starving, and we expend our precious tax money to halt the production of food.

It must be remembered that it is not the little farmer who is the chief beneficiary of subsidies; it is the giant farmer, who gets hundreds of thousands of dollars—to do nothing.

A sensible lid on the amount of subsidies going to any single farmer—or perhaps food corporation would be a more suitable name—is required now, with an eye toward eliminating this entire practice in the foreseeable future.

#### DRUGS

Mention the word "youth" today and most people will respond "drugs." I do not mean to imply that all young people are on drugs; the truth is that actually only a small percentage are involved. But this does not lessen the seriousness of the situation.

Millions of our children are victims of this disease of our times and this cannot be ignored. Let us face it: anyone who would poison his or her body for momen-

tary escape from the realities of the world must be sick. They must be treated as such.

We need a massive treatment program to provide the means of escape from drugs for this "hooked" generation; and we must provide the mental care as well to remove the causes which began this syndrome.

This does not imply leniency for the "pusher" or "supplier." These are the criminals and must be treated as such. This is a cancer which must be removed from our society whether the culprit be a member of the crime associations or an independent peddler.

#### EDUCATION

It is impossible today to open a newspaper and not read of the plight of our schools. Some operate on a hand-to-mouth existence and others are in the danger of not even operating.

Throughout the Nation, children are crowded into aged and aging firetrap buildings with too few teachers to satisfy their educational needs.

Our colleges are bursting at their seams as tuition costs climb far beyond the abilities of the average citizen. Intelligent, capable students are denied what should be a right to higher education.

Youth lounge on the streets without employment instead of having institutions to prepare them for suitable vocational careers.

Nonpublic schools are even in greater trouble than the public schools; so overburdened with spiraling cost that they threaten to close their doors and disgorge their pupils upon an already overtaxed public school system.

There is no single answer to this vast group of problems. But our responsibility to the future generations demands we take immediate action—despite the disregard of some members of the executive.

#### MASS TRANSIT

To me, the jokes about the various expressways and freeways of our country are not funny. I do not think they are funny to the millions of motorists who must use them in the daily exercise of their work.

Yes; we need new roads, and better roads and safer roads; but roads alone are not the final solution to our transportation problems.

What we need—and need now, before all traffic stops—are intelligent approaches to mass transportation facilities to give the traveler a sensible, convenient alternate to driving.

We all know the attitude of the major railroads; they would just as soon go out of the passenger business and restrict their activities to the more profitable field of moving freight.

This cannot be permitted, even if existing facilities must be taken over by Government or Government authorities to improve and expand mass transit systems.

Intracity and intercity bus and streetcar service must be brought up into the 20th century.

Trains and buses must be cleaned up so riders have no hesitation about using them. Criminals who haunt public transportation facilities must be removed so that riders can use them without fear.

Are these all the problems facing our society? Certainly not; they are just a few. But a start must be made, and made now. I think these spheres are the proper places to begin our efforts to give all citizens a better country and a better life.

#### LAVA BEDS SHOULD BE ADDED TO WILDERNESS SYSTEM

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from California (Mr. JOHNSON) is recognized for 15 minutes.

Mr. JOHNSON of California. Mr. Speaker, today I introduced a bill to designate certain lands in the Lava Beds National Monument of California as a wilderness. Involved is a total of approximately 9,000 acres, all of which are within the boundaries of the federally owned park facilities located in Modoc and Siskiyou Counties in the extreme northern portions of California.

Lava Beds National Monument is an area of comparatively recent lava flows, with lava tubes, or caves, and related volcanic features. It was the principal scene of the Modoc Indian War of 1872-73, the last important war of its kind fought in California.

The smooth cinder cones are the most conspicuous features on the landscape. These miniature volcanoes rise from 100 to nearly 500 feet over the lava beds. The largest cone is Schonchin Butte, named after a famous war chief of the Modocs. Altogether, there are about 17 cinder cones in the monument, most of them in the southern part.

Of equal interest are the spatter, or dribble, cones on the lava flows. Some of these form large tubelike structures resembling chimneys, and others have deep holes extending down into the earth. One such hole at Fleener Chimneys, northwest of headquarters, is 3 feet in diameter and more than 100 feet in depth.

The Modoc War of 1872-73 was one of the last clashes between Indians and settlers in the Pacific West. Considering the small number of Indians involved and the hundreds of troops amassed against them, it was probably the most costly Indian campaign ever waged by the U.S. Army. The main battlefields of the Modoc War, located in the monument, are practically the same today as they were in 1873. The rock forts marking the scenes of conflict have been preserved and protected.

Two types of Indian art occur in the monument: paintings—pictographs—of red, yellow, and green mineral pigments in caves and on natural bridges; and carvings—petroglyphs—which are found mostly on the rocky bluffs in the Tule Lake peninsula where the rocks were soft enough to be pecked by stone tools. In the petroglyph section, a detached segment northeast of the main part of the monument, carvings are scattered for over a quarter of a mile along the cliffs.

The plant life of the area is unexpectedly colorful. In spring and early summer, the region at times is a veritable garden, and flowers bloom profusely wherever there is sufficient soil for plant growth. About 250 species of plants grow in the area, and their reds, yellows, and

whites contrast vividly with the black lava flows and the green in scattered junipers, ponderosa pine, flowering antelope bitterbrush, mountain-mahogany and wild currant.

There are about 40 species of mammals in the monument. The checklist of birds of the lava beds area comprises about 200 species.

It is my hope, Mr. Speaker, that the rugged beauty of this area can continue to be preserved in its natural state for the enjoyment of this and future generations, and therefore, I urge its inclusion in the National Wilderness System.

Thank you.

#### RESTORING THE CONTROL OF OUR MONEY TO THE PEOPLE

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Louisiana (Mr. RARICK) is recognized for 15 minutes.

Mr. RARICK. Mr. Speaker, on the 21st of this month I introduced H.R. 17140, a bill to vest ownership and control of the 12 Federal Reserve banks in our Government.

This is a positive and progressive action I feel necessary to overcome the retrogressive mistakes of the past. Money, next to freedom, is a basic human right. Protection of the peoples' money is a priority duty of government.

I am not a banker, nor am I involved in any international banking schemes or profitmaking enterprises. I only recognize that there is unrest in America—it is affecting the happiness and welfare of all of our people and it can be traced readily back to money.

From time to time I hope to grant free expression to many of our concerned citizens on the money crisis—chances to express themselves to Congress that they might otherwise never be granted. In so doing I may not necessarily agree with them in whole or in part, but I feel that somehow we must breach the bonds that bind us and live up to our responsibility by giving the American people some voice over their money.

Such information must by necessity commence with the speech of Congressman Louis T. McFadden who served this body for 22 years and was chairman of the Banking and Currency Committee. I insert his speech of January 24, 1934, and other related papers and comments:

[From the CONGRESSIONAL RECORD, JAN. 24, 1934]

SPEECH OF CONGRESSMAN LOUIS T. MCFADDEN, CHAIRMAN, BANKING AND CURRENCY COMMITTEE, 22 YEARS

Mr. MCFADDEN. Mr. Chairman, a citizen of the United States has asked me to explain for his benefit and for the benefit of other United States citizens the real meaning of the Roosevelt gold bill, the bill which the House passed last Saturday by 360 votes to 40, with 32 Members not voting.

Mr. Chairman, a law against the Constitution is void. The gold bill creates a nullity. Old John Marshall said that the words of the Constitution are not to be twisted out of their plain, everyday meaning. The Constitution says Congress shall have power to coin money and to regulate the value thereof. This, Mr. Chairman, means that Congress has power to make coins of metal and to stamp the true value upon each one of them. It does not mean that Congress shall refuse

to furnish the people of the United States with an adequate coinage, and it does not mean that a theoretical amount of uncoined metal shall be called a coin. A coin is an object which may be seen and felt and even heard if one tests the ring of it.

Mr. Chairman, the gold bill attempts to cut out, delete, and destroy that part of our great written Constitution pertaining to the power of Congress to coin money and to regulate, that is, to stamp on the metal coin the value thereof. The bill is unconstitutional on its face because it seeks to nullify the Constitution. Moreover, it is a bill which is contrary to the common law and to the law of custom upon which the common law rests. It attempts to legalize robbery. It attempts by force to deprive the people of the United States of their right to the currency of the Constitution. It gives the international bankers power to send the gold belonging to the people of the United States to a place of deposit reserved to themselves in Europe. Mr. Chairman, the gold bill cannot become a valid law by any constitutional means.

Now Mr. Chairman, let us look at the bill to see if the legal hirelings of the Bank of England and their agents, the Federal Reserve Board and the Federal Reserve banks have been able to disguise its purpose. Let us see if they were able to clothe the grisly skeleton of their greed with echoes of glib religiosity, moral precepts, economic jargon, and shop worn tags of speech, according to the fashion set by the present administration. The first thing that meets my eye is the title. We read:

"A bill to protect the currency system of the United States to provide for a better use of the monetary gold stock of the United States and for other purposes."

It is indeed a bill to protect the present currency system of the United States, but it is a bill to protect it from the just wrath of United States citizens. It is a bill to save for the Federal Reserve Board and the Federal Reserve banks, and a great effort has been made to have it appear that the Federal Reserve banks their gigantic monopoly of a special paper currency which they steal from the Treasury and upon which they charge the people of the United States a heavy toll of interest. It is indeed a bill to provide for a better use of the monetary gold stock of the United States, if better use means the issuance of two sets of obligations against one peace of security. It is indeed a bill for "other purposes", and these are purposes which the proponents dare not mention.

Among the purposes of the gold bill not mentioned in the title is that of pretending to take into the Treasury the gold now held by the Federal Reserve Board and the Federal Reserve banks, and a great effort has been made to have it appear that the Federal Reserve banks are unwilling to surrender the gold they now hold to the United States Treasury. This effort is dishonest for two reasons. First, the Federal Reserve Board and the Federal Reserve banks have already made a profit of some billions of dollars out of the President's gold seizures, and those billions were stolen from the people of the United States; and second, the transfer is fictitious. The President sought to convince Members of Congress that the Federal Reserve banks were resisting his efforts to have the Treasury take possession of the gold, but one of the members of the Federal Reserve Board spoiled that argument by declaring that the Federal Reserve Board had asked the President to have the Treasury take the gold.

You see, Mr. Chairman, under this bill the United States Treasury has to pay for the gold. Although the gold belongs to the people and was taken away from their bank deposits and their cash registers and their pocketbooks in the first place and put into

the Federal Reserve banks, and although the Federal Reserve banks tricked and fooled the people into giving it to them for Federal Reserve currency, which they now refuse to redeem, and although that gold does not belong to the Federal Reserve Board and the Federal Reserve banks, the United States Treasury has to pay the Federal Reserve Board and the Federal Reserve banks for it. Well, how does this bill propose to pay the Federal Reserve outfit? How does this bill provide that the Government shall take over the stolen goods? It provides that the United States Government shall give the Federal Reserve Board and the Federal Reserve banks new gold certificates to the full value of the loot. The gold certificates will give the Federal Reserve Board and the Federal Reserve banks legal title to the gold, and the United States Treasury will be nothing more than its physical custodian. The Secretary of the Treasury will give the Federal Reserve banks gold for their new gold certificates whenever they ask for it. It is a fraudulent transfer.

When the individual citizens of the United States were required to surrender their gold, they were required to surrender their gold certificates as well as their gold coin and bullion. The Federal Reserve Board and the Federal Reserve banks are private corporations, but they did not obey the gold orders. They did not surrender any gold coin, gold certificates, or gold bullion. On the contrary, the gold which was commandeered from the people was given to them as a free gift; and now, after they have taken into their possession all the gold belonging to the people, they are ready to make a pretended transfer of that gold to the Government. Evidently there is law for the common man and no law for the Federal Reserve Board and the Federal Reserve banks. The common man must toe the mark, but the Federal Reserve Board and the Federal Reserve banks are the agents of the Bank of England, and the law, it seems, does not apply to them. Many of the officials of the Federal Reserve outfit have had charges of impeachment brought against them, but those charges have not been investigated.

The Federal Reserve outfit now has in its possession gold coin, gold certificates, and gold bullion. But this bill does not require them to surrender their present holdings of gold certificates. After this bill becomes law, if such a catastrophe should occur, the Federal Reserve Board and the Federal Reserve banks will still hold their present gold certificates. They may exchange those gold certificates for gold between the time this bill becomes law and the day the President makes his proposed devaluation proclamation. Is not this gift of over \$1,000,000,000 in gold a great treasure to bestow upon the Federal Reserve Board and the Federal Reserve banks—the corrupt and sinister organization which has bankrupted the country? Does this not make favorites of the financial crooks who control it?

Mr. Chairman, all the gold in the possession of the Federal Reserve Board and the Federal Reserve banks belongs to the people of the United States. During the last 20 years, under the vicious Federal Reserve Act, they have taken it from the people in exchange for Federal Reserve currency, and it has not cost them one penny. Now they come forward to make a pretended transfer of the people's gold coin and bullion to the United States Treasury. Not one penny of the gold they pretend to transfer to the United States Treasury is owned by them; every dollar of it belongs to the individual citizens of the United States. The United States Treasury is to buy it on credit and to pay for it with new gold certificates. How does this transfer title to the United States Treasury? Can the Congress lend itself to such a transaction? Last May I stated that, in my opinion, the people's gold, unjustly impounded in the Federal Reserve banks, should be placed in the peo-

ple's Treasury, but I did not state that it should be placed there as the property of the Federal Reserve Board and the Federal Reserve banks, to be withdrawn by them with gold certificates and to be made exportable from the United States Treasury to the Bank for International Settlements in Europe. What this bill proposes to do in connection with the President's message suggesting that this United States gold may be sent to Europe to be kept in the Bank for International Settlements with the loot of the central banks of other countries is one of the greatest fiscal frauds in history. It is one of the biggest swindles of all time.

Again, Mr. Chairman, as you very well know, the Federal Reserve Board and the Federal Reserve banks had paper currency outstanding to the extent of about \$5,000,000,000 when the present administration came into power. That currency was redeemable in gold. It constituted the people's title to all the gold held by the Federal Reserve outfit. It constituted a first and paramount lien on all the assets of the Federal Reserve Board and the Federal Reserve banks. Instead of taking over the gold and the assets of the Federal Reserve Board and the Federal Reserve banks, including the great hoard of United States wealth which they have hidden in foreign countries, and honestly administering those assets for the benefit of the people who had been defrauded by the Federal Reserve Board and the Federal Reserve banks, the President of the United States unlawfully relieved the Federal Reserve Board and the Federal Reserve banks from their legal liability to redeem their Federal Reserve currency in gold, or in lawful money convertible into gold, and from the surrender of all their assets. Every dollar that was unlawfully taken from the people of the United States by Roosevelt's gold order was given to the Federal Reserve Board and the Federal Reserve banks in preparation for this great steal, this wholesale robbery of the masses for the benefit of the privileged few. And now that American citizens have lost their gold, an entirely fictitious transfer has been arranged to deceive the people. Mr. Chairman, the President may underrate the mental capacity of the American people as much as he likes, but I venture to say there is no man in the United States so dumb that he cannot understand how this bill tricks and deceives him.

The Federal Reserve Board and the Federal Reserve banks have profited to the extent of \$5,000,000,000 or more by being released from their obligation to redeem their outstanding \$5,000,000,000 of paper Federal Reserve currency in gold. They have profited by having had over a billion dollars in gold certificates saved to them. They have profited during the last 20 years by the criminality of the Federal Reserve Board, which never charged them one penny in interest on the great mass of Federal Reserve currency they have taken from the Government. They have profited from their own wrongdoing by the unlawful creation of fictitious claims against the United States Government and the giving of those claims to foreigners, and they have profited by their control of all the public revenues. And now they come forward with a scheme to sell the gold they have taken from the American people to the Treasury for new gold certificates which will give them a legal title to that gold and permit them to do as they please with it. An era of corruption is culminating in one of the greatest crimes that have ever been perpetrated against the people. Mark my words, Mr. Chairman, there will be trouble here if this bill becomes law.

Why, Mr. Chairman, this fiscal fraud, this crime is so stupendous that the instigators and manipulators of it did not dare to have all the transactions performed by one man. Each man did his part and then got out of Washington pretending that he disagreed

with the President's money policy or pretending that he was ill. William H. Woodin, who sat beside Albert H. Wiggin on the board of the Federal Reserve Bank of New York and who acquiesced in and helped to perpetrate the financial misdeeds which bankrupted the country, is now hiding in a western sanitarium. Dr. Sprague, the tool of the international bankers and an employee of the Bank of England, was, in my opinion, put into the Treasury to resign at a certain time and to create uncertainty in the minds of the people by the manner of his going and his subsequent articles pleading for sound money. Mr. Chairman, all the bickering and the resignations and the artful propaganda that have been thrown around the monetary policy of Franklin D. Roosevelt cannot disguise the fact that he was selected by the international bankers to carry on the work they started with the great depression; that is, the pauperization of the masses and the seizure of American property for their own use and benefit, and that he has lent himself to their schemes by unconstitutionally demanding and assuming the dictatorial powers which will enable him to carry them out.

Another purpose of this bill not mentioned in the title is the transference of a very large quantity of United States gold to the Bank for International Settlements. One of the chief objects of the gold policy of the present administration is the sending of gold taken by force from its lawful American owners to the Bank for International Settlements in Europe, where it will be kept with the property of the central banks of the world. According to the Hague convention, under which the Bank for International Settlements was formed, gold deposited in the vaults of the Bank for International Settlements is safe from seizure. Our gold, when it goes there, will certainly be safe from seizure by the United States. The Bank for International Settlements is dominated by the Bank of England. It is not on American soil. It is in Europe. American gold, therefore, will be kept in Europe. It will be placed where none of the wage slaves of the United States will ever be able to acquire any of it. It will be the capital and means of oppression of that international superstate, that financial superstate, which has been after Uncle Sam's gold money ever since the wealth of this country attracted the attention of greedy European bankers and brought them flocking over here to set up the suction pumps of the Federal Reserve Board and the Federal Reserve banks.

The Bank for International Settlements is an international bankers' bank. It is a central bank of central banks. The international bankers, who brought about the depression, have been drawing gold to themselves from the common people of every land. It is their intention to use that gold for their own purposes. They propose two kinds of money. Gold—the real money—is what they intend to have for themselves, and paper money, which has no intrinsic value in itself, and which is made out of nothing and is worth nothing unless it can be redeemed by the holder in gold—that is for the common people, or, as they call us, the peasants.

George Washington said:

"I never have heard, and I hope I never shall hear, any serious mention of a paper emission in this state; yet such a thing may be in agitation. Ignorance and design are productive of much mischief. The former is the tool of the latter, and is often set at work suddenly and unexpectedly."

While he was here in Congress, Daniel Webster, in 1832, made the following statement:

"Of all the contrivances for cheating the laboring classes of mankind, none have been more effectual than that which deludes them with paper money. This is the most effectual of inventions to fertilize the rich man's field

by the sweat of the poor man's brow. Ordinary tyranny, oppression, excessive taxation—these bear lightly on the happiness of the mass of the community compared with fraudulent currencies and the robberies committed by depreciated paper. Our own history has recorded for our instruction enough, and more than enough, of the demoralizing tendency, the injustice and the intolerable oppression, on the virtuous and well disposed, of a degraded paper currency, authorized by law, or in any way countenanced by government."

Franklin D. Roosevelt, the high priest of repudiation, the apostle of irredeemable paper money, and the man who intends to send United States gold out of the United States to a place where no American citizen can claim it—this Franklin D. Roosevelt characterizes all those who do not agree with his monetary policy as mules. If that is true, what an awful mule President Woodrow Wilson must have been. Concerning Andrew Jackson, Wilson said:

"He had no idea of allowing the country to undertake the fatal experiment of an irredeemable paper currency."

This is the fatal experiment Franklin D. Roosevelt has undertaken. This is a part of his policy of "bold experimentation." Not long ago he told the people at Savannah that George Washington, like himself, was an experimenter. Mr. Chairman, there are no points of resemblance between George Washington and Franklin D. Roosevelt, experimental or otherwise. George Washington did not take orders from money changers. He did not rob the people of their gold. George Washington abhorred dishonor in all its forms. He would have died before he would have violated his oath of office or tampered with the Constitution of the United States in the manner of Franklin D. Roosevelt.

In 1837 the New York Herald described the crime of suspending payments in specie, that is, in gold or silver, on demand, as follows:

"The general suspension of specie payments is a terrible fraud upon the community that will end in destruction to all concerned. This fraud is heightened into crime of the deepest dye, from the fact that it is done to send gold and silver to England by the actual plunder, at the point of the bayonet, of the great mass of the people here \* \* \*. Such an act is a phenomenon in the annals of crime, without a parallel in the history of tyranny, violence, or bad government, from the remotest ages of the world down to the present day."

Now, Mr. Chairman, let us hear the true purpose of the \$2,000,000,000 fund which this bill proposes to set up. I quote from the prophecies of Henry Morgenthau, Mr. Baruch's Secretary of the United States Treasury, as shown by the following article which appeared in the Washington Times of January 16, 1934:

#### "TREASURY SEES U.S. NEED OF BLUE CHIPS

"When you play poker, you want just as many blue chips as the other fellow.

"That, in a man's language, was the gist of Secretary Morgenthau's summing up of the Roosevelt proposal for a \$2,000,000,000 stabilization fund to protect the currency of the United States.

"In other words, the American Government is engaged in probably the greatest gamble of all time. The stake is the credit of the United States.

#### "TO EQUAL BRITISH

"When asked why a figure of 2,000 millions for the stabilization fund had been asked, Morgenthau said:

"We figured we might need an amount substantially equal to the British stabilization fund.

"If we are going to play, we must have as many chips as the other fellow.

"We want every piece of machinery the

other countries have. We want to be in a position to buy gold and to sell gold."

"The 2,000-million stabilization fund will be derived from the Government's profit on the debasing of the value of the dollar to from 50 to 60 percent of the normal valuation.

#### "FUND FROM PROFITS

"If the debasement is 50 percent, the profit to the Government will be \$4,000,000,000 in round numbers. A 60-cent dollar will mean about 2,666 millions in profits.

"Out of these profits will come the stabilization fund to be administered by the Secretary of the Treasury, the remainder being available for any Government expenditure. Morgenthau said:

"It is possible that the mere existence of the fund will be sufficient to carry out the law which requires that the Secretary of the Treasury maintain all lawful money of the government on parity with gold."

"The Secretary of the Treasury is charged with the responsibility of administration of the fund to carry out that purpose. If any particular type of currency issued—United States notes, for instance—should become depreciated in value, the Treasury would go into the market and buy a sufficient quantity of that currency to maintain its parity. Operations in the foreign markets to protect possible depreciation of the dollar would be similar."

Let this quotation from Morgenthau go down into history. Long from now some curious investigator of the present age of witchcraft and magic in the White House may unearth it and reconstruct the financial history of the new deal from it, as science from a single part reconstructs the entire animal.

Mr. Chairman, it is not the gambler's voice in Mr. Morgenthau's confession which most deserves political attention. We are becoming accustomed here to gambling terms as they are employed by the executive branch of the Government, and we can well understand that the Executive and his favorites must of necessity speak the lingo of their kind. This is a gambler's administration, and all the "big shot" gamblers are here to revel in it. Mr. Roosevelt does not deny his gambling propensities. He is a "new dealer." He is "on his way", but he "doesn't know where he is going." He is for a policy of "bold experimentation", just as Samuel Insull was for a policy of bold experimentation. He has not been Ben Smith's patron all these years for nothing. But, Mr. Chairman, there is something apart from the vice of gambling to be observed in Mr. Morgenthau's utterance, and that is its entire untruthfulness. He would have us believe that the United States is on one side of the fence and Great Britain on the other. That, of course, is not the case. The United States has been placed in a position of financial servitude to Great Britain, and Mr. Morgenthau's loud-sounding propaganda is designed to conceal that fact from the people. Great pains have been taken to conceal it. It would be very damaging to this administration if certain people in the United States should find out about the great sums of United States money which have been sent to England during the past summer. Those funds were appropriated by Congress for the people of the United States.

Mr. Chairman why should tax money paid by American citizens be sent to London? When England makes her periodical gesture of insult toward the United States by paying a small installment on the war debt she owes us, she pays us in debased coins, in token coins, to be exact. But when Mr. Roosevelt sends American money to England, he sends it in gold or its equivalent. When Mr. Morgenthau obtains his "kitty" for this, I have been told, is what he called the proposed stabilization fund at the White House a week ago last Sunday evening. American funds will be fed to Europe more expedi-

tiously and with less secrecy than such operations now require. If Congress puts the people's property into a "kitty", someone, if he cannot be the knight of the bedchamber, can at least pose before royalty as the knight of the "kitty."

Mr. Chairman, understanding that Henry Morgenthau is related by marriage to Herbert Lehman, Jewish Governor of the State of New York, and is related by marriage or otherwise to the Seligmans, of the international Jewish firm of J. & W. Seligman, who were publicly shown before a Senate committee of investigation to have offered a bribe to a foreign government; and to the Lewisohns, a firm of Jewish international bankers; and to the Warburgs, whose operations through Kuhn, Loeb & Co., the International Acceptance Bank, and the Bank of Manhattan Co. and other foreign and domestic institutions under their control, have drained billions of dollars out of the United States Treasury and the bank deposits belonging to United States citizens, and to the Strauses, proprietors of R. H. Macy & Co., of New York, which is an outlet for foreign goods dumped upon this country at the expense of the United States Government, which is compelled to issue paper money on the said foreign goods of the Strauses; and that Mr. Morgenthau is likewise related or otherwise connected with various other members of the Jewish banking community of New York and London, Amsterdam, and other foreign financial centers, and that he has as his assistant, presiding over public funds, Earle Bailie, a member of the firm of J. & W. Seligman, bribe givers as aforesaid. It seems to me that Henry Morgenthau's presence in the United States Treasury and the request that Congress now give him a \$2,000,000,000 "kitty" of the people's money for gambling purposes is a striking confirmation of the statement made by me on the floor of the House on May 29, 1933, which statement was as follows:

"Mr. Chairman, the Constitution of the United States has served us well. I am in favor of defending it against all comers. In the Constitution of the United States it is written that the United States shall guarantee a republican form of Government to every State in the Union. This guaranty has been broken by Franklin D. Roosevelt in his unlawful assumption of dictatorial powers. It is also written that no State shall make anything but gold or silver coin a tender in payment of debts. This repudiation bill and its predecessors nullify this provision of the Constitution. It is also written in an amendment to the Constitution, "The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties in suppressing insurrection or rebellion, shall not be questioned." Mr. Chairman, this repudiation bill questions the validity of the public debt and repudiates it. It repudiates the Liberty bonds; it repudiates the veterans' adjusted-service certificates; it cancels the war debts due to the United States from foreign governments. "Now, Mr. Chairman, we have come to the place where we must decide whether we shall serve God or Mammon. Shall we nullify the Constitution at the behest of the money changers who have unlawfully taken all our gold and lawful money into their own possession or shall we take a stand here in defense of the faith of our fathers? Mr. Chairman, my mind is made up. I will stand by the Constitution. If I should fall to do so, I should expect to be met at the train when I go home to my district by a delegation of honest Pennsylvania citizens with 50 or 100 feet of rope. I should expect to be escorted to the nearest tree to be taught what it means to vote for a nullification of the Constitution in the House of Representatives.

"Mr. Chairman, the provisions of this repudiation bill were foretold by a writer in

the Dearborn Independent some years ago. There is, therefore, nothing novel or original about them. The writer of the article in the Dearborn Independent made the following quotation prophesying some of the measures which have been introduced here by the President of the United States:

"(2) Confiscation of money in order to regulate its circulation.

"(3) We must introduce a unit of exchange based on the value of labor units, regardless of whether paper or wood is used as the medium. We will issue money to meet the normal demands of every subject, adding a total sum for every birth and decreasing the total amount for every death.

"(4) Commercial paper will be bought by the Government, which \* \* \* will grant loans on a business basis. A measure of this character will prevent the stagnation of money, parasitism, and laziness, qualities which were useful to us as long as the Gentiles maintained their independence, but which are not desirable to us when our kingdom comes.

"(5) We will replace stock exchanges by great Government credit institutions, whose functions will be to tax trade paper according to Government regulations. These institutions will be in such a position that they may market or buy as many as half a billion industrial shares a day. Thus all industrial undertakings will become dependent on us. You may well imagine what power that will give us.

"Remember that when next you hear the Jewish plan that "Gentiles" shall do business with their own bits of paper, while Jews keep the gold reserve safely in their own hands. If the crash comes, "Gentiles" have the paper and the Jews have the gold. Says protocol XXII: "We hold in our hands the greatest modern power—gold; in 2 days we could free it from our treasuries in any desired quantities."

"The Jews are economists, esoteric and exoteric: They have one system to tangle up the "Gentile", another which they hope to install when "Gentile" stupidity has bankrupted the world. The Jews are economists. Note the number of them who teach economics in the State universities. Says protocol VIII:

"We will surround our Government with a whole world of economists. It is for this reason that the science of economics is the chief subject of instruction taught by the Jews."

"Mr. Chairman, have not most of these predictions come to pass? Is it not true that, in the United States today, the "Gentiles" have the slips of paper while the Jews have the gold and lawful money? And is not this repudiation bill, a bill specifically designed and written by the Jewish international money changers themselves, in order to perpetuate their power? What else do you make of it, Mr. Chairman? Does it not cancel the war debts? Does it not defraud the holders of Liberty bonds and every other obligation calling for the payment of money? Does it not defraud the veterans of the World War and take the value out of their adjusted-compensation certificates?"

Mr. Chairman, do you not see in this "kitty" bill the identical features outlined in the Protocols of Zion? Do you not see the Protocols of Zion manifested in the appointment of Henry Morgenthau as Secretary of the Treasury? It is not by accident, is it, that a representative and a relative of the money Jews of Wall Street and foreign parts has been so elevated?

Why, Mr. Chairman, this "kitty" bill takes the hitherto obscure young Henry Morgenthau and makes of him a central bank of the United States. It makes of him a central bank, an institution which Jefferson declared is one of deadly hostility to the free institutions of the United States. It exalts him above all other men. Under the powers to be granted him, his conduct is not subject to

review or control by any other officer of the United States Government, not even the President.

What this "kitty" bill really does is to slide into the hands of Henry Morgenthau the emergency powers which Congress granted to the President. Those powers will not lapse. Instead, they are being slyly and dishonestly transferred to the bankers and after the bankers, in the person of Henry Morgenthau, have exercised them long enough to get the gold of the United States into their exclusive possession and to transfer it to their den of thieves, the Bank for International Settlements, Congress may take back its constitutional power over the currency, but it will have nothing left to exercise it on. The monetary gold of the people of the United States will, like the sons of the people, be buried in a foreign field.

Mr. Chairman, if you, as one of the party in power, are thinking of remaking the world so that the old America we knew and loved is to be no more; if you are one of those who is countenancing the placing of this country under the British Crown and the pooling of all American resources with those of England and Soviet Russia; if you are one of those to whom a title of nobility appears to be more desirable than plain citizenship in the Republic founded by George Washington, I trust that you will some day descend from the Speaker's chair and let us know the reasons for your preference. If, on the other hand, you are not what these words depict, I trust that you will come down to the floor and tell us how constitutional government is to be maintained in this country if the plutocratic managers of the Democratic Party continue their efforts to destroy it. You, if anyone, should be able to give the people of the United States an answer to this question.

Under this administration the result of the American Revolution has been reversed. The United States has become an economic vassal of Great Britain. The once proud Republic of the United States with its great charter of human freedom, the Declaration of Independence, and its written Constitution, which had kept it free and independent for over 140 years, and its flag, first made by the hands of Betsy Ross in Philadelphia, and its national anthem, born within earshot of the British guns that shelled Fort McHenry—all these, like the American dollar, were brought down from their high estate.

Oh, say, can you see by the dawn's early light

What so proudly we haled at the twilight's last gleaming?

Mr. Chairman, you know very well that you cannot see that flag there as it used to be. Others started very cautiously to pull it down. But it was Franklin D. Roosevelt, in his unlawful and unconstitutional assumption of dictatorial powers, who finally lowered it and tore it from its standard.

Mr. KELLER. Will the gentleman yield?

Mr. McFADDEN. Yes, I yield to the gentleman from Illinois.

Mr. KELLER. I should like to ask this question, if the gentleman holds that our only legal money under the Constitution is metal money?

Mr. McFADDEN. I do; yes.

PALO ALTO, CALIFORNIA MAN STOPS PAYING INCOME TAX—ASKS FOR 3-YEAR REFUND, INVITES STATE AND FEDERAL JURY TRIAL

At a State Convention of United Republicans of California (UROC) held in Santa Cruz, California, February 6-8, the editor of the California Mining Journal was privileged to hear, at a special meeting Dr. Robert L. Meiers, of Palo Alto, California. Dr. Meiers stopped paying income tax in June of 1969, and on October 22, 1969 invited the U.S. Government and its proper agency, and the State of California and its proper agency to

bring a civil action against him in a jury trial before a Federal Court—if they think he owes an income tax under the present U.S. and California Income Tax Statutes.

Although Dr. Meiers' correspondence with State and Federal officials is too lengthy for one issue of CMJ, it is a matter of such importance to every American taxpayer that we plan to publish all of his letters in chronological order. Part I follows.

PALO ALTO, CALIF.,  
June 11, 1969.

U.S. Treasury,  
Internal Revenue Service,  
San Francisco, Calif.

GENTLEMEN: I have revised my income tax estimate because I recently learned that I am not earning "dollars" but Federal Reserve notes. A "dollar" is defined as "1/35 ounce of gold," but the banks will not exchange my Federal Reserve notes or checks for gold or gold coins, only copper and nickel coins; therefore, the notes cannot legally be considered to be "dollars." The income tax law says anyone earning 600 "dollars" or more must file. But, in the light of the above, I am not earning any "dollars," only Federal Reserve notes and copper or nickel coins.

THE GENERAL COUNSEL  
OF THE TREASURY,  
Washington, D.C., July 24, 1969.

HON. CHARLES S. GUBSER,  
House of Representatives,  
Washington, D.C.

DEAR MR. GUBSER:

This is in reply to your letter to Commissioner of Internal Revenue Thrower, dated June 25, 1969, transmitting an inquiry from Robert L. Meiers, M.D., Palo Alto, California, who questions the constitutionality of Federal Reserve notes since they are not redeemable in gold or silver. Dr. Meiers' concern is apparently based on Article I, Section 10, Clause 1 of the Constitution, which provides that "No State Shall . . . make any Thing but gold and silver Coin a Tender in Payment of Debts."

The quoted provision of the Constitution does not require that gold and silver coins be made the only lawful medium of exchange for the payment of debts. Nor is it the purpose of this clause to require the States to pass legislation making gold and silver coins the only legal tender, rather it is a restriction preventing them from making anything else legal tender. In other words, this prohibition is aimed at preventing the States from enacting legislation which would force creditors to accept property at inflated value or state bank notes in payment of the debts owed to them. While limiting the States in this respect, Article I, Section 10, Clause 1 has no effect on the power of Congress to provide for a national currency not redeemable in gold or silver and to make that currency legal tender. As the Supreme Court has stated, by virtue of the specific monetary powers granted by the Constitution "Congress is authorized to establish a national currency, either in coin or in paper, and to make that currency lawful money for all purposes, as regards the national government or private individuals." Legal Tender Case (Julliard v. Greenman), 110 U.S. 421, 448 (1884). The Congress has made Federal Reserve notes a national currency and legal tender for all debts, public and private. These notes are lawful money, their issuance having been authorized under laws enacted by the Congress in the exercise of its monetary power under the Constitution.

I hope you will find the foregoing helpful in preparing a reply to your constituent.

Sincerely yours,

PAUL W. EGGERS.

The constitution defines money only in terms of gold and silver coins. The paper notes issued by the Government have not been redeemable in gold coins since 1934

and not redeemable in silver coins since the Coinage Act of 1965. Obviously these Acts are unconstitutional since no Constitutional amendment was made first. In view of this, I have not been earning any gold "dollars" since 1934, nor any silver "dollars" since 1965. Since I have been earning only Federal Reserve notes since 1965 and not "dollars," I demand a refund of all income tax paid in the years 1966, '67, '68 and '69, plus six per cent interest. As long as the present situation exists in which it is impossible to earn "dollars," it will not be necessary to file income tax reports.

If you have any facts relevant to this matter, I would appreciate hearing from you as I am prepared to take this to the Supreme Court for a Constitutional ruling, if necessary.

ROBERT L. MEIERS, M.D.

Ref: 1. U.S. Constitution  
2. Myer's Finance Review, Nos. 67, 68 & 68-X

cc: David Kennedy, Secretary of the Treasury  
Chas. Gubser, Congressman  
George Murphy, Senator  
Allan Cranston, Senator

CONGRESS OF THE UNITED STATES,  
HOUSE OF REPRESENTATIVES,  
Washington, D.C., June 25, 1969.

DR. ROBERT L. MEIERS,  
Palo Alto, Calif.

DEAR DOCTOR MEIERS: Thank you for sending me a copy of your letter of June 11 which was addressed to the Internal Revenue Service in San Francisco.

I have advised the Commissioner of IRS of my interest in your behalf.

Yours sincerely,

CHARLES S. GUBSER,  
Member of Congress.

CSG: dc

CONGRESS OF THE UNITED STATES,  
HOUSE OF REPRESENTATIVES,  
Washington, D.C., July 31, 1969.

DR. ROBERT L. MEIERS,  
Palo Alto, Calif.

DEAR MR. MEIERS: Possibly you have received a response from the Internal Revenue Service in San Francisco concerning your letter of June 11. In any event, I thought you would like to have the enclosure which has been sent as a result of my expression of interest in your behalf.

Yours sincerely,

CHARLES S. GUBSER,  
Member of Congress.

U.S. TREASURY DEPARTMENT,  
Washington, D.C., August 1, 1969.

DR. R. L. MEIERS,  
Palo Alto, Calif.

DEAR DR. MEIERS: This is in reply to your letter in which you contend that you are not subject to Federal income tax for the reason that the Federal Reserve notes you receive do not constitute lawful money of the United States and are, therefore, not income.

Mr. Jerome Daly, the defendant in the Justice of the Peace case you cite, has challenged the constitutionality of the monetary system of the United States in several court cases. However, the United States Court of Appeals for the Eighth Circuit, in affirming judgments of the United States District Court for the District of Minnesota, has flatly refused Daly's contentions on at least three different occasions. See Koll v. Wayzata State Bank, 397 F. 2d 124 (July 5, 1968); Daly v. United States, 393 F. 2d 873 (April 11, 1968); and Horne v. Federal Reserve Bank of Minneapolis, 344 F. 2d 725 (April 29, 1965).

It was settled long ago by the Supreme Court of the United States that the Congress has the power to provide for a national

currency not redeemable in gold or silver and to make that currency legal tender. See Legal Tender Case (Julliard v. Greenman), 110 U.S. 421 (1884). The Congress has made Federal Reserve notes a national currency and legal tender for all debts, public and private. These notes are "lawful money," their issuance having been authorized under laws enacted by the Congress in the exercise of its monetary powers under the Constitution.

The opinion of the Justice of the Peace of Credit River Township, Scott County, Minnesota, does not alter the law as enunciated by the Supreme Court of the United States and the United States Court of Appeals for the Eighth Circuit.

Sincerely,

K. MARTIN WORTHY,  
Chief Counsel.

By: JAMES F. DRING,  
Director, Legislation and Regulations.

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DEPARTMENT OF THE TREASURY,  
INTERNAL REVENUE SERVICE CENTER,  
WESTERN REGION,  
August 8, 1969.

ROBERT L. & BETTY T. MEIERS,  
Palo Alto, Calif.

XXXX

FORM: 1040

Period: 1966, 1967, 1968, 1969

Your inquiry concerning the tax account identified above is receiving special attention. As soon as we have the necessary information we will contact you by letter or telephone to let you know the action we are taking.

If you need to contact us, please attach a copy of this letter to your correspondence.

Sincerely yours,

DELBERT L. HIRSCHI,  
Chief, Technical Section.

PALO ALTO, CALIF., MAN STOPS PAYING  
INCOME TAX—ASK FOR 3-YEAR REFUND, IN-  
VITES STATE AND FEDERAL JURY TRIAL

PART II

(Dr. Robert L. Meiers, of Palo Alto, California stopped paying income tax last June, 1969, and informed the Internal Revenue Service of his reasons for the action. On October 2, 1969 Dr. Meiers invited the U.S. Government and its proper agency, and the State of California and its proper agency to bring a civil action against him in a jury trial before a Federal Court—if they think he owes an income tax under the present United States and California Income Tax Statutes.

Last month's installment ended with a letter to Dr. Meiers from Delbert L. Hirschi, Chief, Technical Section, Department of the Treasury, Internal Revenue Service Center, Western Region.)

PALO ALTO, CALIF.  
August 14, 1969.

CHARLES S. GUBSER,  
Member of Congress,  
House of Representatives,  
Washington, D.C. 20515

DEAR MR. GUBSER: Thank you very much for giving my recent letter to you the attention you did. I am returning a copy of the letter from the Treasury you forwarded to me as well as another copy of my letter to the I.R.S. Please read Mr. Eggers' letter carefully, because I could not have written a better letter in my behalf, although I am certain this was not Mr. Eggers' intention.

He is correct in identifying my concern based on Article I, Section 10, Clause 1 of the Constitution which provides that "No State shall . . . make anything but gold and silver coin a tender in payment of debts." Can you imagine a more clear and precise statement than this? Apparently not for Mr. Eggers because he says "The quoted provision does not require that gold and silver coin be made

the only lawful medium of exchange for payment of debts." Well, it certainly doesn't provide for anything else. He continues, "Nor is it the purpose of this clause to require the States to pass legislation making gold and silver coins the only legal tender." (Obviously a state or the Nation does not have to pass a law reiterating a provision of the Constitution.) "rather it is a restriction preventing them from making anything else legal tender." (This is exactly my point.) "While limiting the States in this respect, Article 1, Section 10, Clause 1 has no effect on the power of Congress to provide for a National currency not redeemable in gold or silver and to make that currency legal tender." If this is true, and I doubt that it is, where could that currency circulate? Certainly not in any of the States. They are prohibited by the Constitution from allowing anything but gold and silver coins as legal tender within their borders.

Mr. Eggers cites the Supreme Court Legal Tender Case (*Juilliard v. Greenman*), 110 U.S. 421, 448 (1884). Unfortunately, he failed to tell you that that case referred to only U.S. Treasury Notes, not Federal Reserve Notes. It should be quite clear that these are not the same thing. There has been no ruling on the Federal Reserve notes and this is the issue. In fact, there are several issues involved here, such as:

1. Where does the Constitution give Congress the right to delegate its power to issue currency to a private organization, namely, the Federal Reserve Banks?
2. Where does the Constitution give Congress the right to give such an organization monopoly over currency with the full sanction and coercive power of the Government?
3. Where does the Constitution give Congress the right to permit a private organization to create something out of nothing (It costs less than one cent to print a Federal Reserve Note, regardless of the denomination) then force the citizens to make up the difference in taxes? Therefore, there is no lawful consideration for these notes to circulate as money.
4. Where does the Constitution give Congress the power to create something out of nothing, then loan that something at interest to other banks and the U.S. Treasury?
5. Where does the Constitution give Congress the power to create, then to permit a private organization to be free from control, public auditing, and taxes?

It is also interesting that Mr. Eggers did not deal with the issue in my letter, that Federal Reserve Notes are not dollars. At one time there was a statement on them saying that they were redeemable in lawful money. This is an open admission that they were not lawful money, only a promise to pay in lawful money. As the Federal Reserve Banks became bankrupt, this statement obviously became embarrassing and recently has been omitted. Since a note, whether issued by an individual, a bank or a government, is an acknowledgement of a debt with a promise to pay, the Federal Reserve Notes can no longer qualify even as notes. They are obviously not dollars because Congress has defined a dollar as 25.8 grains of gold, .900 fine, or 412.5 grains of silver. If they are not notes and they are not dollars, what are they? The only conclusion I can make is that they are only pieces of paper with some printing on them, signifying nothing. In addition to this all being unconstitutional, it is so fraudulent and immoral, that no thinking person could knowingly and willingly support such a crime.

One of the main purposes of establishing our Government under our Constitution was to protect and defend its citizens from fraud. Now, when the Government becomes a party to fraud against the citizens, where do those citizens turn to for protection and defense? Obviously, the citizens must reclaim the powers and responsibilities they originally

delegated to the Government through the Constitution.

Since Federal Reserve Notes are not money, debts cannot be paid—only shifted from one to another. It's like the card game "Old Maid"—the last one who gets stuck with it, loses. In every known instance in history, when a government has committed the fraud of irredeemable currency (flat money) it has had a destructive effective on the moral and economic character of that nation. Under such circumstances, paying the tax is aiding and abetting the destruction of our Nation. States and self. Therefore, paying the tax is treason.

Incidentally, there are many other Constitutional reasons for refusing to pay income taxes, such as:

1. As long as any income to an individual or private organization is exempt from taxation, it represents discrimination and confiscation of private property \* \* \* which requires just compensation and due process of law.

2. All taxes must be for a public purpose. Any time taxes are used for fostering any private individual business or enterprise, the Government is using its coercive power as a highwayman forcibly taking property from A and giving it to B. At this point it ceases to be a tax and becomes robbery.

The principle involved in the above issues of discrimination in collection and/or disbursement of income taxes is one that affects the foundation and continued existence of every free government, namely, equality of all men before the law. If an income tax is laid at the same rate on all incomes and used only for public purposes, there would be no question as to its uniformity and compliance with the Constitution. It is obvious that the income tax as it is presently administered, does not meet these requirements.

3. When the Government is using the taxes for unconstitutional purposes in addition to those previously stated, the responsible citizen finds that the only patriotic action is to refuse to support these actions: of the many—only two will be mentioned. A. Engaged in an unconstitutional "war" in that it has not been legally declared and even if it were, it would not be to "repel invasion," Article 1, Section 8. B. Aiding and abetting the enemy by fostering trade with the enemy (Communist countries) which for an individual, civilian or military, would be treason.

All of these problems raise very basic questions, such as, is our Government guided by and limited by the Constitution, or is it guided by the whim of whoever is in power or has the original relationship of employer to employee changed completely between the citizens and their Government employees? Has the Government become master and the citizens slaves? Has the Government gained a special privilege to commit crimes without punishment? Have the citizens lost their ability or power to effectively limit the power and control of the Government through legal means? Is revolution the only means left to obtain a constructive change?

These are not pleasant ideas to contemplate, but each concerned citizen must face them and follow the dictates of his own conscience in terms of what is in his own best interest and the interest of his Country. In this matter, there should be no conflict of interest.

Thank you again for giving my thoughts your attention.

ROBERT L. MEIERS, M.D.

#### SOLVING MONETARY DILEMMA

More and more often we hear or read about inflation, recession and even inflation within recession or recession within inflation. Take your choice. It does show what "fine-tuning" has done to the economy.

There is increasing evidence that so-called

economists and money managers are becoming increasingly frantic; and properly so, because they got themselves and us into this mess.

Interest rates have not yet been lowered. In fact, they may not even have reached their full heights. Unemployment has increased and may increase some more. Just what is wrong?

Our monetary and economic system have been complicated by men with academic degrees, who no doubt are looking for complicated solutions.

Here is a simple solution by a man without an academic degree in economics for the common man likewise without such a degree.

In our present system before production can begin someone has to borrow at interest usually from commercial banks all or most of the money required. Now, in order for full production and employment to be maintained the products must be used up—otherwise surpluses build up. But, in order for the consumers to buy up all the products all the money involved in production must reach the consumers. That can't happen now because a part of the originally borrowed money has to be paid as interest. Most of that money can't be used to buy production. Right there is the *bottleneck* in our present system.

Since the producers can't recover from the consumers the full cost of production, if they want to maintain full production, they will have to borrow more money.

On the other hand, the consumers—if they are expected to buy up and utilize all the production—will have to borrow additional money simply because they didn't get all the money involved in production. Hence, someone has to keep borrowing ever more money at interest to keep the system going. It is a VICIOUS system. If people refuse or can't afford to borrow any more, then the Government does the borrowing for us. It should not and need not be so.

#### THE REMEDY

Congress must admit that it made a tragic mistake when it delegated to the Federal Reserve and the commercial banks the power to issue money (mostly credit) at interest. The present system is legal because it is based on a law—the Fed. Res. Act, 1913—but it is unconstitutional and gravely unjust. Congress must assert its constitutional right and assume full responsibility for the issue of all coin, currency and credit without interest at the source. The source must be only the Congress as the Constitution provides. The Founding Fathers wanted the power to issue and control money in the hands only of elected officers accountable to the voters.

This does not mean that banks could not loan money which they really have and charge for it an interest rate controlled by Congress. But the banks could no longer issue money by creating credit. There must be a separation: Congress must issue money but not compete with bankers by loaning it, whereas bankers should loan and safeguard money but not issue any of it.

REV. DISMAS TREDER, O.F.M.

Pulaski, Wis.

#### CONFIDENCE, BASIC (?) COMPONENT OF MONEY SYSTEM?

William McChesney Martin, who after 14 years was replaced Feb. 1, 1970 by Arthur F. Burns as Chairman of the Federal Reserve Board, at a Hearing before a Senate Finance Committee on Aug. 14, 1947 stated: "I personally like the definition that money is a medium of exchange and a standard of value, and that ITS BASIC COMPONENT IS CONFIDENCE." (1, p. 1304)

By the way, both Martin and Burns are members of the Council on Foreign Relations. (2, p. E1139 and E1140)

Confidence in the present monetary system does seem to be one of its very impor-

tant ingredients; but just like the gold behind our dollars, there is very little left. Again, please let me quote THE authority: "Confidence in the stability of the dollar and fixed-income securities . . . has been gradually ERODED to the point that we have this great pressure for new plant equipment expenditures." (Wm. M. Martin himself in U.S. News and World Report, Sept. 22, 1969, p. 104).

If confidence is so essential—and I agree that it is, although I am also convinced that there ought to be something much more basic—why doesn't Congress make the monetary system worthy of our confidence? Furthermore, if the Fed. Res. Board—and bankers in general—are at all concerned about confidence, they would be the first to do their utmost to restore confidence.

The method is extremely simple, but if the bankers won't adopt it voluntarily, a law will have to be enacted to COMPEL them.

It may seem too far to go back to 1934 in order to recall some sound thinking on this topic; but if the best advice had been followed then, neither the people, the bankers, Fed. Res. Board, Congress, nor Pres. Nixon would be in the mess all of us are in right now.

What was the advice?

"If we can devise a plan that will make banking safe and build no more debts than we have money, we will have solved the problem . . . The Gov't. can make up its deficits with new money and this will be placed in (not lent out at interest but paid into) circulation, and of course will soon find its way to the banks as a (real) deposit of money and can be lent once, not 7 to 13 times as now . . . The nation will then be on a Cash basis for doing business, and not on a Debt basis . . ."

"All banks must be required to keep a reserve of 100% against ALL deposits. No loan shall be counted as a deposit (as is now done with demand deposits), but when a loan is made it must appear on the books of the bank as a charge against the (actual money) deposits in the bank . . . When a loan is made the account will stand charged with the amount of the loan and when the loans equal the amount of the deposits, no more loans can be made. The only exception to this would be that it (a bank) could loan its capital and surplus.

"The real danger (in the present System) is the large amount of loans in this country without any money . . . The danger from inflation is the fact that the banks can and will use (the small amount of actual) money as reserves, and under the System as now operated, they can create such large mountains of debts that there is 10 times the danger from the present System than the System of 100% bank reserves for deposits. The banks can (and must be restricted to) lend their money ONCE, their customers' money ONCE . . . So under this plan when the banker calls your loan you (will) know that there is a dollar somewhere for each dollar you owe, and under the present System you owe \$100 but there are but \$10 in existence with which to pay your debts."

Note: Keep in mind that at present you can transact enormous business with the credit lent you at interest by the banks with only a fractional reserve, but you can't pay your debts with it.

Now back to the extremely important quotation:

"All savings accounts would be in (actual) money, so there would be no runs on the banks. It is because depositors are afraid (lost confidence) that they withdraw their money; and when the System is so set up that the fear of loss is removed, bank runs will be a thing of the past." (3, p. 45-47)

The big bankers well knew what they were after and knew well how to achieve it when they induced Congress to pass the Fed. Res. Act in 1913. The first words of that Act are:

"An Act to provide for the establishment of Federal Reserve banks, to furnish an ELASTIC currency . . . and for other purposes." (4, p. 1)

I hope your guess is as good as mine about the OTHER purposes.

The currency is elastic alright. Have you noticed the alternate expansion and contraction of credit? About that George Knupffer writes:

"They have to allow periods of expansion, so as to fatten the victim before the slaughter". (7, p. 60)

Have you noticed the alternate inflation and deflation, booms and bursts? Some try to make us believe those are inevitable, natural, economic, business cycles.

Did you ever try to figure out why ever more people are becoming poorer, while ever fewer people are becoming super rich? If you think seriously enough about it, you might eventually conclude that those who manage our elastic currency might have something to do with it.

In early 1965 I was seeking an official reply to the question whether money printed by the Gov't and spent into circulation would have a greater inflationary impact than the same amount of money borrowed at interest by the Gov't. In part the reply on "Office of the Secretary of the Treasury" stationery, dated Feb. 26, 1965, and signed by Joseph M. Bowman, reads:

"The reason the Government does not finance itself by issuing currency rather than borrowing when necessary is that such a course of action would have a tremendous inflationary impact on economy."

"The direct use of printing press money would have far reaching psychological repercussions. It could easily undermine the confidence of our people."

This was not the end of my quest. I couldn't bring myself to believe the reply from the U.S. Treasury Dep't. Further search for truth brought on "Fed. Res. Bank of Richmond" stationery the following reply dated Mar. 26, 1965:

"You have asked if a million dollars printed by the Government and spent into circulation would cause any more inflation, than a million dollars borrowed from a Fed. Res. bank and spent into circulation. The answer is NO (emphasis added); the two actions would have essentially the same effect."

If you can't decide which of the two replies is the correct one, you definitely need more study.

I will not reveal the name of the one who signed the reply from Richmond unless someone with sufficient authority demands it.

When the Fed. Res. Act was passed in 1913 the U.S. public debt was \$1 billion. Now it is \$382 billion (5, p. 22). No doubt, an elastic currency could have been involved in that too. The total Federal, State, County, municipal, corporate and private debt is fast approaching the \$2 trillion mark. "The 1969 . . . non-Federal debt . . . estimate based on midyear statistics . . . is \$1,347 billion. (Congr. Record, Jan. 30, 1970, p. E565). Consider just the farm debts: "At the end of 1969, farm debt was nearly \$60 billion—up from \$25 billion in 1960". . . (6, p. 12) It more than doubled in 10 years.

That to which we ordinarily limit our idea of money is:

1. Total coin-----	\$5,965,000,000
2. total currency-----	47,026,000,000
Total -----	\$52,991,000,000

(5, of p. 21.)

Of the total currency \$46,431,000,000 is Fed. Res. notes, which belong to the Fed. Res. and which have been lent into circulation by the commercial banks, and on which the borrowers have to pay interest. That leaves only \$595,000,000 of currency which

belong completely to the Gov't. and the people.

Now that the amount of insured deposits has been raised from \$15,000 to \$20,000, the readers are entitled to a guideline for their confidence in this kind of insurance.

On p. 24 of the U.S. Treasury Bulletin, Jan., 1970, there is listed under Special Public Debt Issues the item: Federal Deposit Insurance Corporation. This particular debt issue for F.D.I.C. amounts to \$138,000,000.

From p. 151 of the same issue of Treas. Bulletin we learn that \$284,000,000 was the net income into the F.D.I.C. fund between June 30, 1968 and June 30, 1969. The balance on hand as of June 30, 1968 was \$3,613,063,000. Hence, the F.D.I.C. fund on June 30, 1969 amounted to \$3,897,199,000. (5, p. 151). That is the amount of money available for all deposits up to \$20,000. All deposits includes savings, time and demand deposits. If the reader is really concerned, he will exert the effort to discover for himself the approximate amount of deposits covered by the \$3,897,199,000.

Many bills have been introduced in Congress to straighten out radically our jumbled monetary mess, but those bills chronically have a way of dying in committee.

Many House as well as Senate Hearings have been held, and still we're in a mess. One wonders why.

As soon as Congress enforces an honest, dependable 100% reserve money system, neither the small bankers, Fed. Res. Board nor the Government will have to be concerned about the people's confidence. It will become automatic.

Now that you have read this brief dissertation on Confidence, may the writer ask the reader to measure the degree of Your confidence in our present money system at this moment? Or would it be better to wait until you find out the total of insured deposits?

I will be extremely happy if I can place my confidence in your determination to ready, study, think and DO something about it.

REV. DISMAS TREDER, O.F.M.,  
Pulaski, Wis.

FEBRUARY 9, 1970.

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[From The American Mercury, July 1956]

The Constitution of the United States provides that Congress alone has the right to coin money and issue currency. However, in 1913 the Federal Reserve System was established. Today, the Federal Reserve Banks unconstitutionally issue our currency. Ironically, these private banks, largely owned by international bankers, only pay the United States Government \$1.25 per \$1,000 for the currency they issue—which is, incidentally, guaranteed by the people of the United States. This \$1.25 is to cover the cost of paper, ink, and the use of the government printing plant. In 1913 these privately owned Federal Reserve Banks had a capital of 147 million dollars. Today, without producing any commodity or natural resource, they have assets of over 45 thousand million dollars!

(\*See Encyclopedia Britannica for reference to events which led to the creation of this privately owned system of banks.)

#### U.S. CURRENCY PLATES TO RED RUSSIA

In Congress on July 8, 1946, the Hon. Jessie Sumner stated that Russia had been given a set of plates by the U.S. Government which enabled the former to *manufacture for herself all the American dollars she wanted to spend*. Congressman Daniel A. Reed said in Congress on Sept. 14, 1945 that "... it was a deliberate fraud, the result of a conspiracy not yet revealed." High and reputable authorities placed the loss to U.S. taxpayers in the billions of dollars.

John W. Hanes, a former Under-Secretary of the Treasury, was reported in the Baltimore News Post of September 13, 1945, as exposing the fact that U.S. officials had turned over these plates to Red Russia. Gen. Lucius Clay, former U.S. Military Commander of Germany, is recorded as saying: "It wouldn't be difficult to make 1,000 mark notes out of the plates we furnished to the Soviets."

An investigation was attempted in Congress on June 7, 1947. It was smothered by enemies of these United States. Senator Styles Bridges, and others, were greatly concerned with this illegal act.

(See Pages 6, 7, of U.S. Senate Report 837, dated Dec. 15, 1953)

Mercury printed that Henry Morgenthau, Jr., Harry Dexter White, and Harold Glasser gave the Russian government our money plates, complete with 3 planeloads of special ink and 4 planeloads of special paper for printing our money in East Germany. Refugees then brought many millions of this money to the U.S. to set themselves up in business.

We are told it is estimated the known movement of such money into the U.S. amounts to about \$19 billion of which more than \$3 billion comes from Canada, and \$1.-800,000,000 through Swiss banks.

(See book, "Major Jordan's Diary.")

(See Publisher Eugene Pulliam's statement, Para 4, Back Cover, June 1957.)

#### PROPOSITION N°. 57 SUBMITTED BY H. L. SAVAGE, VICE PRESIDENT, LONG BEACH LOCAL NO. 128, OIL WORKERS INTERNATIONAL UNION, CIO

Whereas it is an established and self-evident fact that in order for a Nation of people to enjoy economic security and freedom, it is imperative that Government shall have the sole power to create and regulate the value of the Nation's money; and

Whereas the founding fathers of this great American Republic recognized this fact and specifically provided for the Government of the United States of America to have the sole power to create money and regulate its value by making it mandatory on Congress as provided in article I, section 8 of the Constitution of the United States of America, "To coin money, to regulate the value thereof, and of foreign coin, and fix the standard of weights and measures," and

Whereas among other great Americans we find that the scientific-minded Benjamin Franklin, the democratic Thomas Jefferson, the noble George Washington, the martyred Abraham Lincoln were all advocates of the powers vested in Congress, by article I, section 8, of the Constitution of the United States of America; and

Whereas it is a widely known fact that Congress has violated its own oath and trust to support the Constitution by delegating to private bankers its powers to create money and regulate its value thereof; and

Whereas the private bankers, and in particular the heads of the Federal Reserve banks (private banking institutions), have abused their powers to create money and by regulating its value to destroy money as well, have caused widespread unemployment, economic chaos, loss of homes, farms, business savings, and paved the way for world warfare; and

Whereas it is a positive matter of record that the overlords at the top of the money

world deliberately planned and viciously carried out the program to cause the depression, widespread unemployment, loss of homes, farms, and savings after World War No. 1; and

Whereas the same people have the same power to do the same thing after World War No. 2 unless Congress restores to itself the powers vested in article I, section 8, of the Constitution of the United States of America; and

Whereas the overlords at the top of the private banking institutions can continue to exploit the American people and the resources of this Nation so long as they have the power to create our Nation's money and regulate its value thereof; and

Whereas it is a widely known fact that our Government is compelled to borrow its own money from private institutions and pay interest tribute to private banking institutions for the use of its own money; and

Whereas the national interest-bearing debt is growing larger and larger because Congress has delegated its power to create and regulate money to private banks; and

Whereas the United States Government does not own 1 cent of stock in the Federal Reserve banks; and

Whereas even when the war is ended with full and complete victory for the United States of America and her allies there can never be a secure and lasting peace so long as a few ruthless, cold-blooded, brutal private bankers have the power to bring on a condition which will cause continued economic chaos and eventually bring about either a revolution or another world war; and

Whereas our representative form of government is in the very gravest danger of being destroyed and a dictator form of government in one of its various forms being instituted, because the intent of the blueprint for representative American democracy is being grossly violated by those sworn to uphold and defend it; and

Whereas many sincere but uninformed Americans are being seduced into embracing foreign ideologies and philosophies of economics and government due in large part to the violation of article I, section 8 of the Constitution of the United States of America; and

Whereas it is becoming increasingly necessary that American trade-unions crusade for the American ideal of living; and

Whereas American labor unions can never gain their goal or objectives by simply bargaining collectively in the matter of hours, wages, and general working conditions until Congress restores to itself the power to regulate the value of the buying power of the wages bargained for, any attempt to bring about economic security for wage earners being futile while the New York Stock Exchange and the overlords at the top of the money world set the value of the buying power of the dollars earned; and

Whereas an amazing revolution has taken place in the science of production, no change, in any way commensurate, has taken place in the financial mechanism; and

Whereas it has become increasingly necessary for the United States of America to institute a scientific, non-interest-bearing, constitutional monetary system; and

Whereas, this scientific monetary system should have its supply of money so regulated as to prevent any material decline of the domestic average wholesale commodity price; and

Whereas the Government-created money interest free at source of origin used scientifically would prevent inflation, deflation, repudiation; and

Whereas an equitable and scientific Government controlled monetary system should be based on a balance being constantly attained in order that distribution, exchange, and consumption shall keep pace with production; and

Whereas the volume of money should be increased year by year to match growth of production; and

Whereas it is an established fact that an honest, scientific, constitutional monetary system must have these essential principles:

1. It must be created and controlled by Congress.

2. It must be free from interference by politicians and private bankers.

3. It must be interest free at the source of origin and be based on the total wealth of the Nation and not on the bonds or basic metals owned by private bankers; and

Whereas one of the main contributing factors to our present unsound monetary system is the practice of the so-called fractional reserve requirements; and

Whereas in order to secure a sound monetary system it will be necessary to institute a 100-percent-reserve requirement on demand deposits held by banks, or, in other words, a dollar for dollar or 100 percent reserve being mandatory; and

Whereas it is common knowledge that many and probably a majority of the Members of Congress are ready to restore to Congress the powers vested in article I, section 8, of the Constitution of the United States of America when they are convinced that they have the support of their constituents: Now, therefore, be it

*Resolved*, That we, the delegates of the Oil Workers International Union, in convention assembled at the city of Fort Worth, Tex., respectfully request Franklin Delano Roosevelt, President of the United States of America, to immediately call upon Congress to restore to Congress the powers vested in article I, section 8, of the Constitution of the United States of America; and be it further

*Resolved*, That we go on record urging the Senate and House of Representatives of the United States of America in Congress assembled to immediately enact such legislation as will be necessary to restore to Congress the sole power to issue money and to regulate its value, as provided in article I, section 8, of the Constitution of the United States of America; and be it further

*Resolved*, That we go on record urging the Senate and House of Representatives of the United States of America in Congress assembled to immediately enact legislation to provide for non-interest-bearing, constitutional United States Government money.

#### CONSTITUTIONAL RIGHTS

(Mr. PODELL asked and was given permission to extend his remarks at this point in the Record and to include extraneous matter.)

Mr. PODELL. Mr. Speaker, we are in the habit of taking our constitutional rights for granted. In centuries past, we argued that such rights were "natural" and could not be taken away. More recently, we have termed our rights "inalienable" and have looked upon them as the cornerstone of democratic government. I believe, however, that we have entered a period in which these rights are being abridged. I argue further that recent actions of the Nixon administration read like a catalog of their infringement.

Such action necessarily fosters a deep distrust of the Government on the part of its citizens. They slowly begin to question the motives of the Government, and finally balk at having to provide such information at all. After all, if the Government has the authority to gather such confidential information, does it not have the moral obligation to insure the citizen

that the information will be used only for the stated purpose?

Last month, we were told that the National Park Service would require a protest group to disclose in advance of a demonstration in front of the White House the signs that would be used, whether the individuals had participated in any previous demonstrations, and whether they had advocated anything other than peaceful demonstrations. It seemed to make little difference to the Service, which has jurisdiction over the sidewalk in front of the White House, that the right to peaceful assembly is part of the first amendment to the Bill of Rights.

Then we were informed that the Postmaster General had authorized the opening of mail received from abroad. In the past, the practice has been to send it back unopened or to get permission before opening it. Now the mail is being opened without even asking such permission.

We learned that some people were seriously considering a proposal calling for the testing of 6-year-olds in order to determine whether they possessed "anti-social" tendencies. Evidently some people have more faith than I do in the ability to predict the direction of lifelong behavior at the still formative age of 6. The danger and possible consequences of even a slight range of error are formidable.

Finally, of late, the supposedly confidential individual tax forms filed with the government have been examined by individuals outside the Internal Revenue Service without the knowledge of the citizen filing the return. If such practice continues, it appears as if we are creating a data bank readily available for use at some, yet to be specified purpose.

These precedents are dangerous. They leave the individual potentially helpless against a Government that has tremendous stores of data that might be used for purposes as yet unknown. We know that too often the resources of individual to protect himself against such infringement are inequally distributed. The citizen may be helpless against governmental action. I believe that the individual must be protected by the government's willingness to check its own power. I call upon the government as now constituted will exercise such discretion.

CPL. CLARENCE H. ST. CLAIR, JR.

(Mr. SIKES asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. SIKES. Mr. Speaker, it is with both a great sense of loss and humble pride that I relate to my colleagues in the Congress the circumstances of the posthumous awarding of the Navy Cross for extraordinary heroism in the Republic of Vietnam to Cpl. Clarence H. St. Clair, Jr., of Pensacola, Fla. The Navy Cross, as you know, is our Navy's highest award for gallantry in combat action.

Corporal St. Clair distinguished himself valorously as a squadron leader with Company K, Third Battalion, 7th Ma-

rines, 1st Marine Division in connection with combat operations against the enemy on August 28, 1969. At this point I would like to quote verbatim from the citation by the Secretary of the Navy:

Company K was conducting a search and destroy operation in Quang Nam Province. The lead platoon was pinned down by small arms, automatic weapons, and anti-aircraft fire from enemy soldiers concealed in well-camouflaged emplacements. Directed to assist the pinned-down element, Corporal St. Clair deployed his men to the point of heaviest contact and instantly came under intense fire. Observing two principal sources of hostile fire, he directed two of his fire teams to provide covering fire while he maneuvered his third team toward the enemy emplacements. While crawling toward their objective, the men were seriously wounded by enemy grenades.

Quick to act, Corporal St. Clair began crawling through the enemy crossfire toward the first objective and had advanced only five meters when he was severely injured by the detonation of another grenade. Recovering quickly, he pressed his advance until he was close enough to the enemy bunker to hurl a grenade through its aperture, destroying the position and its occupant. Although suffering intense pain, he valiantly continued in the direction of the second objective and, while thus engaged, was mortally wounded. By his courage, aggressive fighting spirit and unwavering devotion to duty in the face of grave personal danger, Corporal St. Clair contributed significantly to the accomplishment of his unit's mission and upheld the highest traditions of the Marine Corps and of the United States Naval Service.

These brave, selfless, exemplary deeds of Cpl. Clarence H. St. Clair, Jr., represent the finest traditions of our military services. Although our hearts go out to his parents, Mr. and Mrs. Clarence H. St. Clair, Sr., of 2525 Wycliff Drive, Pensacola, Fla. They have suffered greatly and given so much to America, and our hearts go out to them. May their sacrifice and his not have been in vain. I am proud and honored to have represented in the U.S. Congress this courageous and devoted young man, and I know I can say that great branch of the service, the U.S. Marine Corps, is equally proud to have claimed Cpl. St. Clair as a U.S. Marine.

#### PERSONAL ANNOUNCEMENT

(Mr. DULSKI asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. DULSKI. Mr. Speaker, I missed two rollcall votes in the House on Monday, April 20. Had I been present and voting, I would have voted "aye" on both rollcalls No. 85 and No. 86.

#### EARTH DAY

(Mr. BOLAND asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. BOLAND. Mr. Speaker, millions of people observed Earth Day yesterday at rallies throughout the United States—rallies called to dramatize what is turning into a popular national commitment toward cleaning up our environment. This heightened public awareness of environmental pollution is a heartening

sign. For more than a century we have been fouling our rivers, littering the landscape, and tainting the very air we breathe. Yet, until recently, few people outside the scientific community showed anything but the most tepid interest in this problem. Fewer still were prepared to take action against it.

The situation has changed—and changed dramatically. The "teach-in," a spirited academic forum once limited to protests against the Vietnam war, yesterday became a new weapon in the war against pollution. Hundreds of thousands of students at campuses ranging from Harvard's in Cambridge, Mass., to UCLA's at Los Angeles, Calif., gathered to exchange ideas on what has become the most modish "cause célèbre" in the academic world. High school and elementary school students, once chided by their elders of a lack of interest in public affairs, were among Earth Day's most enthusiastic participants. Average citizens—working people, professional people, the old, the young—took part in meetings and rallies throughout the country. A striking success by virtually anyone's yardstick, Earth Day demonstrated that concern about our environment reaches far beyond the campus laboratory or the congressional hearing room.

Such public arousal makes my job easier—significantly easier. For years I and other Members of Congress have been struggling to enact major new legislation to clean up the environment. And, as a ranking member of the Appropriations Committee, I have exerted every effort to see that what antipollution programs we do have are amply funded.

Earth Day convincingly demonstrated that the American people are squarely behind such efforts.

The cleanup job will not be easy; nor will it be achieved overnight.

But it must be done.

It is one of history's cruellest ironies that the wastes of civilization threaten to destroy civilization.

Mr. Speaker, I include in the Record at this point the editorial series the Boston Herald-Traveler is running on ecology:

#### ECOLOGY AND EARTH DAY

"Ecology," says California Democratic leader Jesse Unruh, "has become the political substitute for the word 'mother.'"

If this is the only thing which has happened to the word, then the chance of earth surviving the next millennium may be diminished by the amount of compromise inherent to the political process.

Fortunately, however, ecology has also become the scientific substitute for the word "life." And what we will be seeing throughout the country this week is a fight for the preservation of life.

We hope the teach-ins, rallies and displays marking Earth Day on April 22 will be a positive manifestation of concern over the dying pines on the San Bernardino mountains, the fish disappearing from Lake Michigan and the blackened lungs in our bodies.

Organizers of these activities must make certain that their efforts to save the environment do not result in damage to the environment by deliberate slowdowns of traffic or destruction of property. What's needed is a sane, aggressive effort to get the message across to communities within and beyond the campuses. To this end, the petitions in favor of an environmental bill of

rights and requests to "reclaim" a street or two for special observances can be supported.

The Boston Area Ecology Action is seeking its goals through legitimate channels and is trying to insure that splinter groups will not frustrate the effort by resorting to illegal tactics.

The sponsors and Cambridge city officials acted wisely when they decided to cancel last Friday's Harvard Square Reclamation activities. A gathering of that sort so soon after the violent disturbances would have been risky at best.

The sponsors, however, can take solace in the support they have attracted from official quarters. Until Wednesday, the city was willing to go along with the request to permit only buses and bicycles to enter Harvard Square between 12 and 3 p.m. Officials did not object to a proposed music festival which the sponsors wanted to hold "in order to focus attention on what Harvard Square could become in terms of pedestrian and public transportation."

Sponsors of "reclamation day" ceremonies on Wednesday have been permitted to use certain streets in Boston, New York and other cities. And there appears to be considerable public support behind a petition effort in favor of adding an environmental bill of rights to the U.S. Constitution, proclaiming that "the right of the people to clean air, pure water, freedom from excessive and unnecessary noise and the natural, scenic, historic and esthetic qualities of their environment shall not be abridged."

A lack of adequate response to the proposals for a better environment could lead to a feeling of helplessness similar to frustrations concerning the war in Vietnam. People should not have to resort to extra-legal means to gain attention, and our institutions should make use of all the positive energy which is being expended, especially by youth, in behalf of a clean environment.

The problem, however, will not and cannot be solved by youth alone. And in view of the danger that radical elements may try to exploit the issue for their own purposes, it is all the more imperative that the larger population become actively concerned with the problem. Editorials in the next three days will discuss the roles which consumers, industry and government can play in combating what has come to be regarded as public enemy No. 1.

#### ECOLOGY AND THE CONSUMER

One problem in the current crusade for a clean environment is the tendency of many crusaders to blame everything on profit-hungry industry and lackadaisical government.

"We have learned that we cannot depend on the benevolence or even on the enlightened self-interest of industry," writes James Fogel of the Harvard Ecology Coalition. "Yet these are people who have it in their power to do something about our ecology. Indeed, only they have that power."

On a practical level, he continues, "You don't save the landscape by cleaning up your backyard; you don't stop the air from causing lung cancer by using car pools and you don't prevent destruction of all life in the ocean by not flushing your toilet."

To the extent that these individual acts are not by themselves going to solve the problem, Mr. Fogel is right. Yet, remembering World War II's victory gardens, one must not ignore their symbolic significance.

To blame everything on our big institutions and the men who run them is just as deceiving as to rely totally on cleaning our backyards. A decent environment can be attained by combining high personal resolve with legislation, interstate compacts and commitment by industry.

The common denominator in all this is man, who has always been a messy animal. The word "ecology" is traced to the Greek

word *oikos*, meaning a house. Literally translated, ecology means the study of houses—and that includes backyards.

"If real changes are to occur," says Russell Train, the Interior Department's top conservationist, "We are talking about changing attitudes Americans have had bred into them since the Jamestown Colony and Plymouth Rock—the frontier ethic, the pioneer drive, the striving for more and better." He's talking about a serious obstacle to a better environment—our worship of growth. We no longer enjoy the luxury of moving on to another territory once we deplete the immediate environment. The frontiers have vanished but their ethics remain.

Newsweek magazine recently observed, "The villains are the consumers who demand (or at least let themselves be cajoled into desiring) now, more, faster, bigger, cheaper, playthings, without counting the cost of a dirtier, smellier world."

Viewed from such a perspective, the main problem is not only what James Fogel calls "the self interest of industry." It would be foolish to rely on technology primarily to solve this human dilemma. Technology may, for example, sanitize the exhaust fumes or develop "clean" detergents, but such advances would also result in more and more cars and washing machines. A decent environment means more than clean air and water. It means converting concrete jungles into green malls and truncated houses into tolerable homes.

To be effective and enduring, the battle has to start at the broadest level—people not only agitating for institutional response but also exercising self-restraint.

Dressed in the garb of affluence and productivity, environmental deterioration has slowly and subtly crept upon us as few other threats have. Unlike the defenses of yesterday's wars, this battle has no frontline or rear guard. The battle is wherever people are. The captains of industry and the foot-soldiers of consumption are in this as one, and the price will have to be borne by all.

"The price," says Rep. Morris Udall of Arizona, "may be cars with 60-horsepower engines, instead of 360, and fewer gadgets and high taxes. But there will be more fishing streams. We might have fewer supersonic transports, but nicer beaches and forests." It's a high price, all right. To pay it, people must be convinced that the enemy is not only "them" but "us." Organizers of the teach-ins will succeed if they convince people of this painful truth. Restricting their role to a doctrinal recitation of the evils of industry will not suffice.

#### ECOLOGY AND INDUSTRY

A respected business magazine, *Fortune*, recently concluded that "American business, since it organizes and channels a high proportion of the total action of this society, has been and still is deeply implicated in depredations against the environment."

The consumer, as we pointed out in yesterday's editorial, must somehow be persuaded that his present binge of expansion and accumulation is leading to a ruinous situation. The same persuasion should be applied to industry. And just as it will be difficult for people to engage in self-restraint, it will be difficult for industry to practice self-restraint.

Changes are not going to be easy in a nation where, for example, the oil depletion allowance is viewed as a bulwark of free enterprise rather than a catalyst for depletion of nature's limited resources. Changes are not going to come easily when, in the world as a whole, most nations are underdeveloped, many of them already overpopulated and all of them striving for industrialization.

Because America represents the epitome of industrialization, it is incumbent on its business leaders to set a good example for others to emulate. The awesome efficiency

and ingenuity of industry will amount to naught if it is paired with the catastrophic extinction of the brown pelican and the New England lobster, or if it is matched by the defacement of thousands of green acres by strip mining.

There must be a compromise between the blessings of affluence and the sanctity of nature.

The debate between some industrial spokesmen and proponents of this week's nationwide teach-in resembles the chicken 'n' egg controversy—which comes first, consumer abstinence or industrial self-restraint? If industry is viewed as the "egg" laid by consumers, then the notion that the cleanup of the environment has to start at the people level carries weight.

This does not, however, diminish the responsibility of industrial initiative toward a cleaner environment or the role it is currently playing in the deterioration of our planet. Industry, after all, uses more than 13 trillion gallons of water each year compared to the five trillion used by people for drinking, bathing and waste disposal. Industry has been the principal poisoning agent of America's 10 filthiest rivers, two of which—the Merrimack and the Androscoggin—are in New England. The federal government estimates that food, textile, paper, chemical, coal, oil, rubber, metal machinery and transportation industries spill a total of 25 trillion gallons of waste into the water annually. Factories and electric-power generating plants fire some 50 million tons of fly ash and 26 million tons of sulphur oxides into skies.

The grey sky under which we all live is, by necessity, beginning to affect industrial thinking. Edward Cole, president of General Motors, recently echoed the heads of Ford and Chrysler Corps. in committing his company "to eliminate the automobile as a factor in the nation's air pollution problem," even if it means using "power sources other than the internal combustion engine." He announced that starting with 1971 models, all new cars will be equipped with an exhaust device reducing hydrocarbon emission by 80 per cent.

It is true, as some critics point out, that we cannot depend totally on industry's altruism or sense of social responsibility. But we do not have to. If industry's principle incentive is monetary and expansionist, then the goal will be thwarted by continued inattention to the environment.

The World Health Organization recently reported, for example, that on-the-job noise pollution costs U.S. employers more than \$4 billion annually in accidents, absenteeism, inefficiency and compensation.

If altruism is not the principal motivation, then the balance sheet should be. The managers of industry must realize that the law of diminishing returns applies to the use and abuse of the environment as well as the supply and demand of the commercial market.

#### ECOLOGY AND THE GOVERNMENT

"No central environmental machinery, no Big Brother in Washington, can remake the environment. It's impossible," says Russell Train, undersecretary of the Interior Department.

"We can lick the problem, if only we are allowed to plan the way NASA planned the moon program. We need goals and money," says Kenneth Biglane, senior pollution expert in the same department.

Contradictory as these statements may seem, they may both be correct. Mr. Train is right because our institutional setup is such that government alone cannot cope with the problem, unless it resorts to drastic usurpation of individual and corporate liberties. Mr. Biglane's assessment is sound because, as NASA proved, there is no impossi-

ble dream when government is willing to work in partnership with the private sector.

This partnership entails cooperation, inducement and, if need be, coercion. Governments at all levels are currently participating in this three-pronged attack, giving industries which buy anti-pollution equipment a tax break, awarding grants for municipal clean-ups and prosecuting violators of statutes.

As in Medicare and mass transit, government is the last sector to respond—and, most of the time, it does so when the other sectors fail. Estimates show that it may take \$20 billion a year to start reversing the course of pollution. Obviously, the private sector, though it may have caused a good deal of the problem, cannot solve it alone—not unless we are willing to accept some important modifications of the tradition of free enterprise and free choice, which seems unlikely.

Government's entry on a large scale into this problem area has been predictably marked by a lot of confusion, contradiction and waste. No less than 13 Congressional committees now have a piece of the environmental action. In addition, there are 90 separate federal governmental programs, plus 26 quasi-governmental bodies and 14 inter-agency committees already at work on special aspects of the environment.

The red tape and waste created is dramatically exemplified by the National Park Service's successful opposition to the proposed Florida Everglades jetport while the Corps of Engineers was building canals that lowered the area's water levels and altered the balance of animal life. The recent Chevron Oil Co.'s spill off the Louisiana coast showed the government's enforcement procedures have been lax.

Yet, despite the cumbersome bureaucracy, the federal government cannot let up on its effort. And in time, Washington must reorganize the jerry-built federal ecology structure.

In doing so, it should not prevent local governments from adopting regulations tougher than their federal counterparts. The ecology activity is proceeding at a faster tempo in states and cities than in Congress. About one-quarter of the bills now before the California Assembly deal with pollution control. The Rhode Island legislature, which considered only two anti-pollution bills in 1969, saw 21 proposals introduced by the end of February 1970. Maine recently adopted a sweeping anti-pollution program which would, according to Gov. Kenneth M. Curtis, alleviate almost half of the municipal pollution problems in the state.

The Massachusetts Public Health Council is expected to approve shortly a series of sweeping anti-pollution regulations which would include a ban on all burning and an embargo on trucks in the Boston area between 6 and 10 a.m. during the fall months. Last week, the council adopted a regulation restricting the types of fuel burned in Massachusetts, as of Oct. 1st.

Some of these measures are no doubt unrealistic. Yet there is some truth to the slogan, "Be realistic—do the impossible."

#### INTRODUCING THE CLEAN AIR ENFORCEMENT AMENDMENTS OF 1970—APRIL 22, 1970

(Mr. MURPHY of New York asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. MURPHY of New York. Mr. Speaker, in the rightfully fretful mind of the modern-day American, pollution is the Fifth Horseman of the Apocalypse.

It rides alongside war, famine, pestilence and death, and conjures up pictures of filth, stench, fumes, muck, smoke, soot, grime, and slime.

Certainly the problems of pollution are awesome. Everyone is exposed to it in one form or another.

It is a dream, devoutly wished, that this Earth Day, with thousands of observances across the land, will mark a turning point in man's vital relationship with the earth. For far too long we have attempted to assume mastery of the earth and its inhabitants instead of living in harmony with it and with them.

We have lately become aware that in our pride and myopia, we are inexorably rendering the world unfit for life. In the now immortal words of Pogo: "We have met the enemy and he is us."

Bringing quality back into our lives will be expensive and time-consuming, and it will call for our best ingenuity and cooperativeness, but it will be worth it. For nothing short of a total commitment will do.

The depth of environmental dilemma is best stated through facts. Let me very briefly give you just a few:

Despite the work of the Public Health Service, a recent study indicates that perhaps 30 percent of the Nation's public drinking water and water systems fall below Federal standards.

In the United States, all manufacturing dumps an estimated 16,400 billion gallons of waste water into our rivers, lakes, and coastal waters each year. This waste contains 27,500 million pounds of oxygen-demanding matter and some 22,500 million pounds of solid matter.

Recent disclosure of the dumping of sewage sludge off New York Harbor is disheartening testimony to our incredible insolence toward nature in the name of expediency. An estimated 48 million tons of dredgings, sludge, and other wastes are dumped into the coastal waters of the United States each year. As the President noted recently:

In the New York area alone, the amount of annual dumping would cover all of Manhattan Island to a depth of one foot in 2 years.

Industry, powerplants, space heaters, and incinerators annually pour almost 200 million tons of pollutants into the air we try to breathe.

We have countless incidents which warn us of the dangers of air pollution: The killer fog in London in 1965 which lasted 5 days and is said to have caused an excess of 4,000 deaths above the normal; the 1948 inversion in Donora, Pa., which made 7,000 persons ill and killed 20, and the recent blanket of eye-burning and lung-searing filth right here on Staten Island that drifted over from Kearney, N.J.

The stealthy killing by air pollution is perhaps even more alarming than the episodes listed above when you consider the dramatic rise in lung cancer and emphysema over the last few years.

And air pollution is expensive as well as dangerous. Agricultural losses are put at over \$500 million a year. A family of four living in New York City has about \$600 a year extra added to its cost of living in washing, cleaning, repairing, and repainting bills. A major report puts the cost of air pollution to New Yorkers at well over \$500 million a year.

These are just a few of the facts that

give rise to the use of the term crisis in describing the condition of our polluted world. I could go on to the more subtle dangers of solid wastes, pesticides, radioactive, and noise pollution, but I suspect that for every dismaying fact I might cite, you could reply with 10 more.

Thus, let it suffice to say that the health and well being of our Nation and its inhabitants, both human and otherwise, are faced with the clear and present danger from pollution. If we are to continue to live here, let alone play a leadership role in the world community, we must commit ourselves unequivocally to the task.

Briefly, just let me state my commitment.

While more than seven departments and agencies are directly concerned with the growing menace to life and lung, they are impotent to probe, prosecute, or punish willful air polluters. The Clean Air Act, one of the chief vehicles in the fight for clean air, is failing to provide the necessary tools for Federal officials to assist their counterparts in the State and local communities in cracking down on polluters or in enforcing antipollution statutes. The reason: The well-intentioned Clean Air Act is simply without enforceable provisions and the administration's commitment to enforcement has been a Mickey Mouse one.

Did you know, for example, that officials of the Federal Air Pollution Control Administration are powerless to enter or inspect any property or plant where an air contaminate source is located or suspected of being located?

To insure that the Federal effort in the fight for clean air becomes more than that of a mere bystander, I have this April 22 introduced the Clean Air Act Enforcement Amendments of 1970.

This vitally needed measure—H.R. 16946—will not only extend the duration of the act, but will provide for inspection and enforcement procedures, establish national emission control standards, authorize classification of air contaminant sources, set stringent \$10,000-a-day penalties for violators, authorize refueling of fuels and fuel additives, and provide for improved control over motor vehicle emissions.

And in response to the sickening studies that New York Harbor's Lower Bay has been turned into a "dead sea." I have recently introduced legislation prohibiting the dumping of sewage sludge, dredging spoils, and industrial wastes into waters designated by the Interior Department as sanctuaries for marine animal and plant life. More than 20 House Members, of both parties, have cosponsored both measures, which, I might add, were introduced long before the administration turned its Madison Avenue powerhouse loose on the problems of pollution.

My sanctuaries bill authorizes the Interior Secretary to designate and protect fish spawning and mating areas and directs the Coast Guard to enforce "no-dumping regulations." Civil fines up to \$10,000 are authorized.

As some of you are aware, I have introduced or sponsored a score of other anti-pollution measures, but these are the two most immediate and important devices.

I believe that on this Earth Day, as you consider the impact we in the House of Representatives have on the environment, both directly and indirectly, you will see the necessity of these measures and will support them in working toward a cleaner world.

#### LABOR RELATIONS CODE FOR PUBLIC EMPLOYEES

(Mr. BURTON of Utah asked and was given permission to extend his remarks at this point in the Record and to include extraneous matter.)

Mr. BURTON of Utah. Mr. Speaker, there is rising concern among officials on all levels of government with regard to the accelerated and insistent demands of public employees for more effective participation in decisions affecting their salary schedules and working conditions. Much has been said—at city hall, the State capitals, and here in Congress—about the proper relationships and responsibilities of those who accept employment in the area of public service.

The recent postal strike brought this important and sensitive matter most forcefully to the attention of the entire Nation. On other levels of government, policemen and firemen report sick in organized platoons, teachers walk out or submit resignations en masse, garbage piles up on city sidewalks creating health hazards, and strikes paralyze public transportation.

One major factor in this increasingly distressing situation is the fact that, while labor negotiations procedures are fairly well defined in the private sector, no such procedure exists in the public employment sector. In this area, there is no consistent public labor relations policy, the ranks of union members have been rising rapidly, the sense of grievance is strong among many employees and everywhere there are growing evidences of militancy. Public employees, once considered to be the most docile and dedicated of people, have engaged in slowdowns, stoppages, and strikes in areas long considered vital to public health and welfare, and hence immune to labor disputes.

The need is clear for guidelines in this entire area of public employment. But it is much less clear to government leaders on all levels what it is that should be done to meet the legitimate requests of the workers and still keep in mind another area of growing unrest—that of the taxpayer who must finance government, no matter on what level it may exist.

On Monday of last week, the Twentieth Century Fund, a private, nonpartisan research agency, released to the public the report of a comprehensive study of the entire question of labor relations codes in public employment. I believe this study deserves the thoughtful and careful consideration of us all.

I am not at this time endorsing the recommendations of this study, since the wide variety of interests involved—economic, social, and political—make it difficult to find a single formula of solution that would be acceptable to all. However, I do believe this report does provide useful guidelines to both sides, employee and

employer, in resolving what have become more and more frequent labor-management clashes in the public sector.

It does no good for us in Congress to say that this problem, while a serious one, should better be left to local government officials. Nor is it wise for those in city, county, and State government to look to the Federal Government for answers. This is a problem for all of us and we must all share responsibility for seeking and implementing solutions.

The Twentieth Century Fund report, entitled "Pickets at City Hall," suggests the creation of a new agency, independent of executive control and answerable only to judicial review, to administer a code of labor relations for public employment at State and local levels. The task force which made this study included a number of well-qualified men from a cross section of our society.

These men were:

Archibald Cox, Harvard law professor and former Solicitor General of the United States.

Charles C. Killingsworth, chairman of the Department of Economics, Michigan State University.

Joseph A. Loftus, special assistant to the Secretary of Labor.

John W. Macy, Jr., president, Corporation for Public Broadcasting.

Walter E. Oberer, Cornell University, professor of law and labor relations.

William Simkin, former Director, Federal Mediation and Conciliation Service.

George W. Taylor, professor, Wharton School, University of Pennsylvania.

H. Edwin Young, chancellor, University of Wisconsin.

The late Saul Wallen, noted arbitrator and mediator and president of the New York Urban Coalition, was also a member of the task force until his death in August 1969.

In my own State of Utah, the legislature has already been presented bills dealing with teacher negotiations acts and legislation to permit collective bargaining by State employees.

A lot of people are concerned with this matter. Individual Congressmen and the committees of the Congress could, in my estimation, profitably study this report and other information on the subject. The entire area of public employment labor relations might well be the subject of regional conferences involving State, city, and county officials, representatives of public employee groups and interested citizens.

The fact that a private foundation found this a suitable subject for study indicates that it might also be included on the agenda of business organizations and even some labor organizations who hold meetings in efforts to achieve constructive solutions to problems we all face.

Mr. M. J. Roussant, director of the Twentieth Century Fund, has said: "It is our hope that the work of the task force will be of value to unions of public employees, the public employers, to mediators and to the public."

I feel its work may have already been of help to the Congress and to individual States in presenting ways in which one can implement constructive solutions.

#### FEEES FOR USE OF OUTDOOR RECREATION FACILITIES

(Mr. BURTON of Utah asked and was given permission to extend his remarks at this point in the Record and to include extraneous matter.)

Mr. BURTON of Utah. Mr. Speaker, recently a survey was conducted by Lee Skabelund, a graduate student in the Department of Forest Science at Utah State University, on the attitudes of 590 residents of urban Weber County, Utah—age 15 and older—toward fees charged for the use of public outdoor recreation facilities. The results of the survey are as follows:

#### ATTITUDES OF URBAN RESIDENTS OF WEBER COUNTY, UTAH TOWARD FEES CHARGED FOR THE USE OF FEDERAL OUTDOOR RECREATION FACILITIES

(Data totals and percents by Lee Skabelund)

600 COMPLETE SCHEDULES DESIRED—ACTUAL IS 98.33 PERCENT OF DESIRED

	Number	Percent
Complete schedules.....	590	81.94
Schedules missing.....	5	.70
Refusals.....	61	8.47
Persons not available.....	64	8.89
Total number in sample.....	720	100.00
Question 4. Are you opposed to paying fees on Federal lands for the use of public outdoor recreation facilities?		
Yes.....	169	28.64
No.....	400	67.80
No opinion.....	21	3.56
Total.....	90	100.00
Question 5. (If opposed) Why?		
Should be free.....	36	21.30
Taxes should pay for it.....	44	26.04
Fees are too high.....	25	14.79
It is double taxation.....	11	6.51
The way the money is used.....	9	5.32
Never charged before.....	4	2.36
The Government is getting too much in taxes already.....	6	3.56
Shouldn't charge for picnic, beach, or unimproved facility.....	6	3.56
No answer.....	13	7.69
Miscellaneous.....	15	8.87
Total.....	169	100.00
Question 6. Who do you feel should pay the costs of public recreation areas?		
Only those who use them through their fees.....	240	40.68
All taxpayers through their taxes.....	147	24.92
A combination of the above.....	166	28.14
No opinion.....	33	5.59
Other.....	4	.68
Total.....	590	100.00
Question 7. (If a combination) What share of this combination do you think fees should contribute?		
Most.....	53	31.93
About half.....	72	43.37
A little.....	30	18.07
No opinion.....	11	6.63
Total.....	166	100.00
Question 8. Would you prefer paying fees by—		
The day.....	200	33.90
The summer recreation season.....	87	14.75
The entire year.....	219	37.12
Wants choice of the above.....	34	5.76
No preference.....	50	8.47
Total.....	590	100.00
Question 9. Which would you prefer?		
An annual permit allowing you to use any Federal recreation area in the United States.....	348	59.08
A lower priced annual permit allowing you to use any Federal area within Weber County.....	157	26.66
Wants choice of above.....	33	5.60
No preference.....	51	8.66
Total.....	589	100.00

	Number	Percent
<b>Question 10. Which of the following fee payment methods do you prefer?</b>		
Paying at the recreation area	246	41.84
Paying a slightly reduced rate at a convenient location near your home such as a service station, grocery store, etc.	240	40.82
Wants choice of above	33	5.61
No preference	69	11.73
<b>Total</b>	<b>588</b>	<b>100.00</b>
<b>Question 11. Would you be willing to pay extra to have a recreation site reserved?</b>		
Yes	239	40.79
No	308	52.56
No opinion	39	6.65
<b>Total</b>	<b>586</b>	<b>100.00</b>
<b>Question 12. When fees are charged, should the price increase with quality of facility provided?</b>		
Yes	309	52.37
No	231	39.15
No opinion	50	8.48
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Question 13. Should the price increase with the length of time the facility is occupied?</b>		
Yes	224	37.96
No	322	54.58
No opinion	44	7.46
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Question 14. Should the price increase for periods of heavy use?</b>		
Yes	452	76.61
No	104	17.63
No opinion	34	5.76
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Question 15. Should the price be reduced during periods of light use?</b>		
Yes	188	31.87
No	366	62.03
No opinion	36	6.10
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Question 16. If fees are charged for each individual should the price be reduced for—</b>		
<b>The aged:</b>		
Yes	416	70.51
No	152	25.76
No opinion	22	3.73
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Children:</b>		
Yes	424	71.86
No	143	24.24
No opinion	23	3.90
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Organizations:</b>		
Yes	330	55.93
No	231	39.15
No opinion	29	4.92
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>The handicapped:</b>		
Yes	493	83.56
No	80	13.56
No opinion	17	2.88
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Persons with low income:</b>		
Yes	291	49.32
No	274	46.44
No opinion	25	4.24
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Question 17. Do you think fees should be charged for—</b>		
<b>Picnic facilities:</b>		
Yes	165	27.97
No	411	69.66
No opinion	14	2.37
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Camping facilities:</b>		
Yes	384	65.08
No	185	31.36
No opinion	21	3.56
<b>Total</b>	<b>590</b>	<b>100.00</b>

	Number	Percent
<b>Boat launching facilities:</b>		
Yes	369	62.54
No	173	29.32
No opinion	48	8.14
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Beach facilities:</b>		
Yes	213	36.10
No	358	60.68
No opinion	19	3.22
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Question 18. Fee moneys are used to provide additional recreation areas within the United States. Are you in favor or opposed to this policy?</b>		
Favor	473	80.17
Opposed	75	12.71
No opinion	30	5.09
Other	12	2.03
<b>Total</b>	<b>590</b>	<b>100.00</b>
<b>Question 19. Maintenance on Federal recreation areas is provided for by tax funds. Fee moneys collected on these areas are not used for maintaining them. Are you in favor or opposed to this policy?</b>		
Favor	301	51.10
Opposed	233	39.56
No opinion	47	7.98
Other	8	1.36
<b>Total</b>	<b>589</b>	<b>100.00</b>

Chi square analysis of the data shows at the .05 level of significance there are several associations. Students tended to favor while retired persons as a group opposed fees more often than expected. Those who had children less than four years of age at home tended to oppose fees. Those persons age fifteen to nineteen and fifty to sixty-four favored fees more often than expected. Lastly those persons who had moved from state to state in the last ten years and those who had lived in Weber County less than ten years tended to favor fees. Thus contingency table frequencies yielded significant chi square test for age, occupation, and transiency.

**ABBREVIATION FOR MISTRESS**

(Mr. BINGHAM asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. BINGHAM. Mr. Speaker, there are an increasing number of American women who do not wish to be identified as Miss or Mrs. I sympathize with the way they feel and I suggest that they should start using the abbreviation "Ms." pronounced "Mis."

This may seem to some like a frivolous suggestion, but it is not. I know from many conversation with women, including my wife and my daughter-in-law, that they resent being asked by strangers whether they are Miss or Mrs. They point out that men are called Mr. whether or not they are married. "What business is it," they say to me, "of a sales clerk whether I am married or not?" I believed that a profound question involving the status of women is involved here.

The form "Ms." is a useful one for another purpose, and I commend it to my colleagues in the Congress for their consideration. Many of you receive letters, as I do, signed with feminine names but with no indication of the writer's marital status. Until recently, we had a problem in my office deciding how to address these women in reply. On the en-

velope it was possible simply to use both names, but what to do with the salutation on the letter itself? For a while, we tried using both names—for example, "Dear Jane Brown"—but this somehow seemed too intimate for a person I had never seen. Then the possibility of using the form "Ms." was brought to my attention—for example, "Dear Ms. Brown"—and this seemed convenient. I noticed that the women on my staff thought this was a good idea. Next, I came to the conclusion that this abbreviation and salutation could be widely used.

Of course, it is really up to the women of America whether the idea catches on or not. Far be it from me to presume to tell them how they should be addressed.

Whatever form of address the ladies choose, however, the U.S. Government should not contribute to the widespread practice of unnecessarily asking the impertinent question about marital status. Far too many forms to be filled out, including U.S. Government forms, require women to specify Mrs. or Miss when the question is totally irrelevant. I am today writing to the U.S. Budget Director who has responsibility for approving all forms put out by Federal agencies, urging him to see that this question is eliminated where it is not significant.

The retailers of America should also wake up to the fact that many women do not like to be asked the question "Miss or Mrs." I am writing to 10 large New York City department stores suggesting that they instruct their clerks not to ask this question unnecessarily. I will be most interested in their replies.

Moving to a single form of address for women is not a new idea. The salutation "Mistress" was formerly used to address both married and unmarried ladies. Oddly enough, as any dictionary will show, both Mrs. and Miss are abbreviations of the word Mistress.

**H.R. 16916**

Mr. ESCH. Mr. Speaker, I rise at this point in order to clarify the events which occurred during the debate on H.R. 16916, the appropriations for the Office of Education.

I believe the events which transpired were most unfortunate and do not reflect affirmatively on the credibility of this House; so my intention in taking this special order is to clarify the CONGRESSIONAL RECORD of April 14, 1970, as found on page 11648. The RECORD indicates the Chair sustained the point of order made by the gentleman from Pennsylvania (Mr. FLOOD) against Mr. WILLIAM D. FORD on the grounds that the Clerk had already passed that point in the bill. Following this, my own amendment was ruled out of order on similar grounds.

It is this point that needs correction. The Clerk, indeed, had only begun to read the page 3 sections dealing with vocational, adult, and higher education when I was on my feet seeking recognition from the Chair, and the section on community education was in truth not read prior to my seeking recognition. To

further substantiate this point: after the dialog on the point of order that followed my attempted amendment and Mr. SCHEUER's comments, Mr. PRYOR of Arkansas offered an amendment to that very section on community education. He was not ruled out of order by the Chair. Certainly if the Clerk had, indeed, read the community education section at the place indicated in the RECORD, then Mr. PRYOR's amendment also would have been out of order and the Chair would have so ruled.

While I believe it is important to correct the RECORD as a matter of historical note, I believe there is an even more fundamental issue involved here; that is the failure of the Subcommittee on Appropriations and the Chair to allow the House to work its will in a democratic manner on this important legislation.

The objections by the gentleman from Pennsylvania to my being allowed to present an amendment to be discussed and to stand or fall on its merits are most unfortunate. In his own words, he did so "to protect his bill." It is my judgment that the democratic process and the credibility of the House are in greater need of protection than any bill.

At a time when increasing numbers of citizens are questioning this body and its ability to put its own house in order, an experience such as this does little to erase their doubts.

#### D FOR DECENCY WEEK MAY 17-23

(Mr. HANNA asked and was given permission to extend his remarks at this point in the RECORD, and to include extraneous material.)

Mr. HANNA. Mr. Speaker, I am sure anyone who has the least sensitivity to what is happening around him must be concerned over the rising acceptability of grossly obscene and pornographic material.

The President's Commission on Pornography is currently involved in an intensive effort designed to learn the extent and causes for the increasing profusion and use of obscene materials. This certainly is an important and timely effort.

In introducing this Decency Week resolution today it is my intent to focus public concern and generate interest in this issue. With so much competing for one's attention and with increasing permissiveness evident in all the media, obscenity as a question of public concern and debate has been unfortunately relegated to the "back burner." This is a potentially dangerous mistake. What seems to me to be the most serious aspect of this entire matter is the increasing public apathy over a question that clearly challenges basic values and standards.

Let me cite what is perhaps an exaggerated example, but nevertheless reflects how absurd some people are willing to be in their exploitation of pornographic material. A recent ad in the Los Angeles Times movie section described a film in the following adjectives—sin, corruption, wantonness, raw sex, sadism—and the final absurdity at the bottom of the ad suggested the picture was "One of the best films to come along in the last 10 years."

With this kind of offensive exploitation so evident, I believe it is time some effort was made to restore a measure of sanity—and yes—although some unfortunates may consider the standard irrelevant—decency. A week in which we are asked to look about us and say "enough—our senses are inundated with obscene trash—lets stop it" is not only a good idea, but a necessary one.

At this point in the RECORD, I would like to include the text of the resolution I am introducing today. This resolution has been endorsed by the Los Angeles County Board of Supervisors.

The resolution follows:

H.J. RES. 1187

A joint resolution to authorize the President to issue a proclamation designating the week of May 17, 1970, through May 23, 1970, as "D for Decency Week"

Whereas the amount of obscene and pornographic material being sold and otherwise distributed throughout the United States continues to increase at alarming rate; and Whereas such material has no redeeming social value to the Nation or the American people; and

Whereas too much of such material is finding its way into the hands of the youth of the country: Now, therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to focus national attention on the need to reduce and control the vast quantities of obscene and pornographic material being distributed throughout the United States the President is authorized and requested to issue a proclamation designating the week of May 17, 1970, through May 23, 1970, as "D for Decency Week", and calling upon the people of the United States and interested groups and organizations to observe such week with appropriate ceremonies and activities.

#### NATIONAL DIGESTIVE DISEASES AND NUTRITION ACT OF 1970

(Mr. HANNA asked and was given permission to extend his remarks at this point in the RECORD, and to include extraneous material.)

Mr. HANNA. Mr. Speaker, more people in the United States suffer each year from digestive tract diseases than from almost any other type of malady. Despite this, there is no agency of the Federal Government specifically charged with the important responsibility of providing the massive research and training necessary to adequately deal with digestive disorders.

In order to improve and expand our present efforts in this area, I am introducing legislation which would establish a National Institute of Digestive Diseases and Nutrition. The creation of such an Institute would accomplish two things. First, it creates a mechanism whose overwhelming concern will be directed at digestive diseases. Second, the establishment of the Institute would clearly announce this Nation's commitment to bend every effort to deal with these disorders.

There, of course, is ample precedent to create such a special Institute. The success of the Heart Institute provides us with ample evidence of what can be accomplished when a commitment is made

to provide the necessary funds and organization.

While cardiovascular diseases still account for more fatalities than other types of diseases, digestive maladies actually have a greater impact on a larger segment of the population. Digestive diseases account for more hospitalizations than any other body system disease. The latest statistics available show more than 5 million Americans hospitalized each year from digestive diseases at an annual cost to our economy of more than \$8 billion.

Yet our ability to treat these diseases is pitifully small. For each 100,000 Americans there is presently one physician specially trained to deal with gastroenterological disorders. And remember, these diseases hospitalize more Americans than any other body system malady.

In the last AGA survey, it was found that 24 States had less than 10 physicians specially trained in digestive diseases. Four States had none.

Only 16 percent of the Nation's medical schools have five or more full-time teachers of digestive disorders. This compares with 60 percent of the schools having more than five teachers in the field of cardiovascular disease.

The state of knowledge about these digestive diseases, while impressive in some instances, is generally uneven. For example, the American Gastroenterological Association estimates that peptic ulcers afflict more than 10 million Americans—mostly males between the ages of 20 and 60. Yet, this figure represents, the AGA believes, only about half of those afflicted. For a number of reasons, but primarily because of lack of trained manpower and facilities, more than 10 million Americans probably are walking around with untreated—even undiagnosed—peptic ulcers. In other major digestive diseases such as hepatitis, cirrhosis of the liver, gallstones, infectious diarrhea, and cancer of the colon and rectum, there is a serious need for extensive research and trained personnel.

I believe a National Institute specifically dealing with these disorders can make an immediate and important impact in dealing with the distress of millions of Americans. I am hopeful this legislation will receive the prompt attention it deserves.

At this point in the RECORD, I wish to include two tables of supportive statistical material:

TABLE 1.—COMPARISON OF DISEASES OF BODY SYSTEMS AS PRIMARY CAUSES OF HOSPITALIZATION IN THE UNITED STATES, 1964

Condition category	Patients hospitalized	Days of hospitalization
All conditions.....	19.7	181.0
Digestive.....	3.4	29.4
Respiratory.....	2.9	16.2
Circulatory.....	2.0	24.4
Genitourinary.....	2.0	15.7
Musculoskeletal.....	1.0	11.0
Impairments.....	2.2	24.4
All other.....	6.0	59.9

<sup>1</sup> Modified from Lawrence.

<sup>2</sup> Numbers are in millions.

<sup>3</sup> Data from a national sample of hospitals show that the first listed cause of hospitalization constitutes 24 of the total digestive diseases entered in the records. Thus about 1,700,000 secondary or contributory conditions should be added, making a total of approximately 5,100,000 per year.

TABLE 2.—TOTAL ECONOMIC COST<sup>1</sup> OF ILLNESS, BY DIAGNOSIS, IN THE UNITED STATES IN 1963<sup>2</sup>

[In dollars]

Category	Total	Direct ex- penditures	Earnings loss from	
			Morbidity	Mortality
Diseases of circulatory system.....	20,948.4	2,267.3	2,919.7	15,761.4
Injuries.....	11,810.6	1,702.8	1,810.7	8,297.1
Neoplasms.....	10,589.9	1,279.0	850.7	8,460.2
Diseases of digestive system, excluding neoplasms.....	7,837.3	4,158.7	1,220.1	2,458.5
Diseases of respiratory system.....	7,412.8	1,581.1	3,166.3	2,665.4
Mental, psychoneurotic and personality disorders.....	7,276.6	2,401.7	4,624.0	250.9
Diseases of nervous system and sense organs.....	6,795.4	1,416.4	1,525.5	3,853.5
Allergic, endocrine, metabolic, nutritional diseases.....	2,623.1	902.9	539.5	1,180.7
Diseases of genitourinary system.....	2,559.9	1,210.2	497.8	851.9
Infective and parasitic diseases.....	2,135.3	501.9	858.0	775.4
Diseases of blood and blood-forming organs.....	372.6	155.9	41.3	175.4
Miscellaneous.....	13,138.3	4,952.1	2,988.7	5,197.5
<b>Total.....</b>	<b>93,500.3</b>	<b>22,530.0</b>	<b>21,042.2</b>	<b>49,928.1</b>

<sup>1</sup> Given in millions of dollars.  
<sup>2</sup> Adapted from Rice.  
<sup>3</sup> Note: above figure of \$7,800,000,000 for digestive disease includes \$2,400,000,000 for expense of dental care, but excludes expenditures for, and indirect costs of, gastrointestinal cancer, estimated at \$2,700,000,000. Hence corrected estimate of cost of digestive disease, as defined in this report, is \$8,100,000,000 yearly.

At this point I wish to include the purpose of the measure and the sections which establish and relate the functions of the National Institute of Digestive Diseases and Nutrition:

That this Act may be cited as the "National Digestive Diseases and Nutrition Act."

PURPOSE

SEC. 2. The purpose of this Act is to improve the health of the people of the United States through the conduct of researches, investigations, experiments, and demonstrations relating to the cause, prevention and methods of diagnosis and treatment of diseases of the digestive tract, including the liver and pancreas, and diseases of nutrition; assist and foster such researches and other activities by public and private agencies, and promote the coordination of all such researches and activities and the useful application of their results; provide training in matters relating to digestive diseases and nutrition including refresher courses for physicians; and develop and assist States and other agencies in the use of the most effective methods in the promotion and maintenance of health and of prevention, diagnosis, and treatment of digestive diseases and nutrition.

RESEARCH AND TRAINING

SEC. 3. Title IV of the Public Health Service Act is amended by adding at the end thereof the following:

"PART F—NATIONAL INSTITUTE OF DIGESTIVE DISEASES AND NUTRITION

"ESTABLISHMENT OF INSTITUTE

"SEC. 451. There is hereby established in the Public Health Service the National Institute of Digestive Diseases and Nutrition (hereafter in this part referred to as the 'Institute').

"DIGESTIVE AND NUTRITIONAL DISEASE RESEARCH AND TRAINING

"SEC. 452. In carrying out the purposes of section 301 with respect to digestive diseases and nutrition, the Secretary, through the Institute and in cooperation with the National Advisory Digestive Diseases and Nutrition Council (hereafter in this part referred to as the 'Council') shall—

"(a) conduct, assist, and foster researches, investigations, experiments, and demonstrations relating to the cause, prevention, and methods of diagnosis and treatment of digestive diseases and nutrition;

"(b) promote the coordination of research and control programs conducted by the Institute, and similar programs conducted by other agencies, organizations and individuals;

"(c) make available research facilities of

the Service to appropriate public authorities, and to health officials and scientists engaged in special studies related to the purposes of this part;

"(d) make grants-in-aid to universities, hospitals, laboratories, and other public and private agencies and institutions, and to individuals for such research projects relating to digestive diseases and nutrition as are recommended by the Council, including grants to such agencies and institutions for the construction, acquisition, leasing, equipment, and maintenance of such hospital, clinic, laboratory, and related facilities, and for the care of such patents therein, as are necessary for such research;

"(e) establish an information center on research, prevention, diagnosis, and treatment of digestive diseases and nutrition, and collect and make available, through publications and other appropriate means, information as to, and the particular application of, research and other activities carried on pursuant to this part;

"(f) secure from time to time, and for such periods as he deems advisable, the assistance and advice of persons from the United States or abroad who are experts in the field of digestive diseases and nutrition; and

"(g) in accordance with regulations and from funds appropriated or donated for the purpose (1) establish and maintain research fellowships in the Institute and elsewhere with such stipends and allowances (including travel and subsistence expenses) as he may deem necessary to train research workers and procure the assistance of the most brilliant and promising research fellows from the United States and abroad, and, in addition, provide for such fellowships through grants, upon recommendation of the Council to public and other nonprofit institutions; and (2) provide training and instruction and establish and maintain traineeships, in the Institute and elsewhere in matters relating to the diagnosis, prevention, and treatment of digestive diseases with such stipends and allowances (including travel and subsistence expenses) for trainees as he may deem necessary, the number of persons receiving such training and instruction, and the number of persons holding such traineeships, to be fixed by the Council, and, in addition, provide for such training, instruction, and traineeships through grants, upon recommendation of the Council, to public and other nonprofit institutions.

NIXON ADMINISTRATION OPPOSES ENVIRONMENTAL EDUCATION LEGISLATION

(Mr. BRADEMAS asked and was given permission to extend his remarks at this

point in the RECORD, and to include extraneous material.)

Mr. BRADEMAS. Mr. Speaker, yesterday was Earth Day, and in communities and on college campuses across the land, Americans met to express their concern about the quality of our environment.

I think it significant however that on Tuesday of this week—on the eve of Earth Day and after reams of administration rhetoric about the need for environmental education, the top education official of the Federal Government appeared before a congressional subcommittee to declare the opposition of the Nixon administration to a bipartisan effort to help our schools and communities provide education on the environmental crisis.

I refer, Mr. Speaker, to the testimony on April 21, 1970, before the House Select Education Subcommittee, of which I am chairman, of the Honorable James E. Allen, Jr., Assistant Secretary of Health, Education and Welfare and United States Commissioner of Education.

Mr. Allen testified that H.R. 14753, the Environmental Quality Education Act, which is cosponsored by my distinguished colleagues, the gentlemen from New York (Mr. SCHEUER and Mr. REID) and the gentleman from Idaho (Mr. HANSEN) was unnecessary.

Mr. Speaker, in recent speeches, President Nixon has said it is "now or never" on measures to protect the environment; Health, Education and Welfare Secretary Robert A. Finch has warned, "we mean business" on environmental education; and Commissioner Allen has called for "legislation for Federal initiatives in environmental education."

But this week the Nixon administration declared its opposition to congressional initiatives to bring environmental education to the Nation's schoolchildren and the general public.

Yesterday, administration officials were on college campuses across the country supporting Earth Day.

Mr. Speaker, the contrast between administration words and deeds on an environmental education program must be obvious.

Following my comments, I shall ask unanimous consent to insert in the RECORD the texts of two splendid addresses urging Federal support of environmental education, delivered by the Secretary of Health, Education and Welfare, the Honorable Robert A. Finch, February 7, 1970, and by Assistant Secretary Allen delivered on January 23, 1970.

Mr. Speaker, the words in these speeches are fine, but unfortunately the actions of the administration in opposing the Environmental Quality Education Act speak louder than the speeches.

Mr. Speaker, the Nixon administration's opposition to environmental educational legislation is one more instance of its "big talk—no action" attitude on meeting the environmental crisis.

Mr. Speaker, I am also constrained to note that during the testimony on April 21, Mr. Allen and his staff admitted that the Task Force on Environment/Ecological Education in the U.S. Education Office had a staff of only three, backed by

some students, two consultants, and no specific budget.

I think it also appropriate that I here note that the August 1969 report of the Citizens' Advisory Committee on Environmental Quality, headed by Laurence S. Rockefeller, sharply criticized as inadequate the environmental programs of the Office of Education.

Evidently, the Administration does not read the reports of its own advisers.

Moreover, Mr. Speaker, I think it highly significant that Russell Train, Chairman of the Council on Environmental Quality, declined to testify on the bill.

In addition, representatives of the Department of Interior earlier this year asked to testify on the proposal but late Tuesday canceled, without explanation, the scheduled appearance of Leslie Glasgow, Assistant Interior Secretary for Fish, Wildlife, Parks and Marine Resources.

Another indication of the forked tongue with which the administration has been speaking in the field of environmental education is a letter dated January 21, 1970, which I received from S. Fred Singer, a top Interior Department official and former dean of environmental sciences at the University of Miami, strongly endorsing the Environmental Quality Education bill and urging its passage. Following is the text of Mr. Singer's letter:

U.S. DEPARTMENT OF THE INTERIOR,  
Washington, D.C., January 21, 1970.

Hon. JOHN BRADEMAs,  
House of Representatives, Washington, D.C.

Dear Mr. BRADEMAs: I have noted with great interest that you have recently introduced a bill supporting environmental education. As a former Dean of Environmental Sciences at the University of Miami, I happen to believe that this is a most important bill, and I hope it will be enacted soon. I would appreciate receiving a copy of your bill and am enclosing, for your information, a recent paper of mine on the subject, presented at the December meeting of the American Association for the Advancement of Science. I would be happy to supply any additional information or papers you may desire.

Sincerely yours,

S. FRED SINGER,  
Deputy Assistant Secretary.

Mr. Speaker, it is abundantly clear that the White House and the Budget Bureau have once again silenced responsible administration officials who want to support congressional initiatives to help educate Americans about the clear and present danger to the Nation's environment.

Mr. Speaker, at this point in the RECORD, I insert the text of the two addresses of Secretary Finch and Assistant Secretary Allen to which I have earlier referred:

ADDRESS BY THE HONORABLE ROBERT H. FINCH,  
SECRETARY OF HEALTH, EDUCATION, AND WELFARE, BEFORE THE NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

As my own first item of business, let me convey to you, at his personal request, President Nixon's greetings. Even though the press of business has prevented his personal attendance, he asked me to express his concern and close attention to your endeavors.

Your convention theme, "What's Right with American Education," provides a healthy concern with the positive. I don't

think by that focus that you are ignoring the problems and tensions which secondary schools are experiencing. Since you are at the eye of the storm, you obviously know that there are no rugs big enough to have some of your problems swept under.

#### SPIRIT OF THE POSITIVE

It is in that same spirit of the positive that our own efforts are proceeding.

There is one final item on my agenda which I deem intimately related to all I have said this morning. By discussing it as an educational vehicle for the channeling of student energies, I do not mean it as a cynical technique of crisis management. I refer, of course, to the compelling problems of restoring the Nation's environment. This is not, and it cannot become, a political fad or a passing bit of heavy rhetoric. We mean business. Environmental considerations—a sense of responsibility for this planet and for each other—must become a permanent component of every decision—governmental, legal, industrial, and personal—from here on out.

#### ENVIRONMENTAL EDUCATION

The burning question about the degradation and abuse of the environment is no longer the catalogue of ecological horror stories, but rather: "What are we going to do about them?" And in this battle, there is no weapon more critical than education.

The teacher we intend to send into our public schools in 1980 is today a sixth grader somewhere in America. He or she must be taught—beginning right now—along with every American boy and girl, about environmental quality, about ecology and about all of the complex and interacting elements that go to make them up.

We and they must learn together—and in the spare time we have left, we must begin to write the textbooks for this new educational enterprise. We must think about America as it will be in 1980—a Nation with some 250 million citizens with different kinds of schools and different kinds of teaching and learning programs, and we must do this right now. That future teacher will enter college in 1976 and new textbooks will have to be written and published, courses mapped out and instructors trained in these new disciplines.

When we turn these brand-new teachers loose in 1980, they must know much more than any of us do right now about the problems involved in human survival—or else the war may well be lost, although the battles may go on for a few decades longer.

Departments devoted to the environmental sciences are being started at many of our Nation's universities. Many seminars have been held. This is an excellent beginning—but we must also begin now to develop similarly oriented programs in our grade schools, in our high schools and in our junior colleges.

#### ADULT EDUCATION

These same basic courses must be developed and put into action at every stage of adult education. Logically, this should include not only adult education sponsored by formal school systems, but also the educational enterprises conducted by business and industry, by unions and by other organized groups. The future of society lies in its ability to respond to crisis. And we are in a situation with regard to our environmental preservation that calls for a clear and vigorous response by every sector of American life.

#### THE ENVIRONMENT IS RIGHT HERE

We need in our schools to counteract the idea of environment as being something "out there" that can be visited and then left behind at the end of a field trip. Our goal must be to see that every school has access to an environmental study area where youngsters of all ages can grow up with the

concept of environment as being everything that makes up their world, and with an understanding of the interdependency of all its numberless elements. Whatever Marshall McLuhan meant by telling us and the media that we live in a "global village," the analogous message for environmental education is clear: "The world is the classroom."

#### EEE

Through the development of what Dr. Allen has called EEE—environmental/ecological education—at every level of learning, I see some very exciting things:

—Pre-schoolers will more and more be using the out-of-doors as a classroom—for it is urgent that our children early begin to understand their environment.

High school students will use civics courses to engage in work study programs with city and state officials and environmental quality professionals. They will focus on all sorts of urban problems to which solutions must be found—waste disposal, water supply, pollution and population.

Undergraduates will participate in multi-disciplinary classes under the guidance of master teaching teams to allow them to work out the great intellectual synthesis of the 1970's—the still unexplored area that lies among the humanities, the natural and social sciences, and the broad-based environmental studies that must be undertaken.

#### FUSION OF EFFORT

Education in this issue is not just something for kids. The entire level of mass citizen understanding and participation must be raised if we are to reverse the environmental skid. In this effort, we must rely on educational television, on community colleges, on business, on labor—in fact, on a total fusion of individual and group effort.

Action on this issue calls for both skills and passion: for disciplined scientific techniques and the emotional commitment to utilize them. If our communications do not fall us in this crisis, ALL AMERICANS WILL, TO SOME DEGREE, BECOME ECO-ACTIVISTS.

#### DECADE OF CHALLENGE

Let me close my remarks on the note struck by your conference theme. If there were to be one crucial thing that is right among the many things that are right—about the American educational system, it would be its historic capacity to respond creatively to challenge. This is the decade of challenge; and in your constructive introspection, the response has already begun. To that I can only echo the words I quoted last spring at a White House meeting of the best of your own students—the Presidential Scholars. The words were uttered by my predecessor, John Gardner, and they apply to education, to political leaders, and to each one of us.

"A nation is never finished. You can't build it and leave it standing as the Pharaohs did the pyramids. It has to be recreated in each generation by believing, caring men and women. It is now our turn. If we don't believe or don't care, nothing can save this nation. If we believe and care, nothing can stop us."

#### EDUCATION FOR SURVIVAL

(Address by James E. Allen, Jr., before 1970 annual meeting of the American Council of Learned Societies)

In the course of the past few weeks we have been treated to every conceivable kind of review of the 60's and prediction for the 70's that hindsight and foresight together could reduce to words.

One of the most troubling things we have learned from this inventory is that our world—which once we believed would endure for almost anyone's casual definition of "forever"—is in acute danger of becoming the subject of a premature obituary notice.

As President Nixon said in his State of the Union address yesterday, "The great question of the 70's is shall we surrender to our surroundings or shall we make our peace with nature and begin to make reparations for the damage we have done to our air, to our land, to our water."

#### SCOPE OF "EDUCATION"

If the tragic state of the environment seems a rather inappropriate subject for an address by the United States Commissioner of Education, let me assure you that it is not. Indeed, everything we have been alerted to about the perilous condition of our planet comes under the heading of "education."

Granted, it is an unusual form of education. Instead of learning it as a matter of course from our earliest classrooms on through the educational process, we are having it sledgehammered into our heads rudely and with little warning. It is education nonetheless, and in the light of history, it may prove to have been the most valuable we have ever been exposed to.

#### EDUCATION FOR SURVIVAL

Though this may seem at first to be education for catastrophe, it can also provide the catalyst for creating education for survival. For the human species, all of whom share a steadily worsening environment, there can be no more important consideration.

At the outset, let me say this: there is nothing whatever that is remotely political or even partisan in what I am saying to you tonight. The environmental deterioration in which we find ourselves knows neither Republican nor Democrat, white or black, rich or poor, young or old. To experience it, to suffer from it, to be concerned with it, to be committed to do something about it—all that is required is that you be alive. All else is quite literally irrelevant.

#### TECHNOLOGY OUT OF CONTROL

The plain fact is that the technology of living that we have created has gotten—*we hope, only temporarily*—out of control. Our mere existence is creating dangerous changes in the delicate balances by which we have thus far survived on earth. Our technology has so far been used primarily in ways which aggravate these changes. Only now are we learning how to measure the changes we know about—and to be wary of the subtle long-range changes of which we are not yet even aware.

I need not belabor you with statistics. You have read them, and heard them, and flinched at them and perhaps wearied of them.

Who, after all, can really visualize 142 million tons of pollutants discharged into the air of this country every year?

What does it really mean to say that \$20 billion is the estimated cost of the havoc wrought annually by these pollutants?

Eight million junked automobiles, 26 billion discarded bottles and 48 billion cans, 150 million tons of solid wastes, 2,100 communities dumping billions of gallons of raw sewage into our waterways—these are statistics that boggle the mind, and they are repeated like clockwork every year, inching higher and higher toward the point that reads "human extermination." It takes something really different—like a river so filthy it actually catches fire—to engage our jaded attention.

We created this technology by exploiting our talent for invention, our dedication to learning, and willingness to work and work hard. Now we face the ultimate challenge of using these same national characteristics to regain control of our technology—lest uncontrolled it exterminates us.

The time we have to achieve this reversal may be no longer than the few years remaining in this century. In any event, there is no time to lose. *The key to human survival is education.*

#### WHY EDUCATION?

Why do I say that education is the key to survival? Why not new laws? Why not new rules and regulations and codes and all the rest of the complex apparatus of government which regulates nearly all human endeavor? Why is education more important than all of these admittedly important measures?

The answer is that in a free society it is always the citizen who must bear the ultimate responsibility for the choices that are made and the actions that are taken. In all our history we have found no better way than through the process of education for equipping citizens—you and me and our children—with the knowledge and the understanding needed to make these choices and to take these actions.

What we desperately need is not ingenious tinkering with the surface of our culture but a new vision of the possibilities of human life in our age. To whom should be turn for such a vision, and who can persuade our citizens to pay the price for carrying it to fruition?

Not so long ago, many people were confident that science could solve such problems, but such confidence is no longer as pervasive as it used to be. The scientists themselves are frequently known to express pessimism. All of the threats to human existence ironically derive, to a greater or lesser degree, from the extraordinary flowering of science-based technology in the twentieth century. That this flowering has brought many benefits to man, few will deny. That it also extends his power beyond his demonstrated wisdom to use it to his collective advantage is also hard to deny. There is growing conviction in this country that science is now too portent-laden to be left to scientists alone. In this regard, I am reminded of the prophetic words of Lord Snow in his book, *Two Cultures*, some years back.

It is at this point—at the last millisecond before midnight—that the humanism and social scientist are being invited to help salvage our society. It is ironic because, like Churchill under the clock in Parliament thundering unheeded warnings of disaster prior to World War II, the social scholars have long predicted the state of affairs to which we have come. Yet like Churchill, they must now assume a major responsibility for averting the impending doom.

#### PRIMACY OF CULTURE

There is only one way to do so, and that is to reassert the primacy of a man-centered culture which subordinates technology to the human condition. That is what the new national environment policy is really all about—a Renaissance of Man in the decade of the 70's.

This Renaissance takes as its paramount issue the quality of life. And who is better equipped to speak on the quality of human existence than the man of humane letters and social concerns? Who else has devoted his life to the most productive and liberating ways of approaching the human condition? I charge each of you with the burden of leadership, of speaking to the creation of exemplary men.

In this regard, I cite Classics Professor William Arrowsmith of the University of Texas whose views on education should constitute a statement of goals for us all:

"It is men we need now, not programs. It is possible for a student to go from kindergarten to graduate school without ever encountering a *man*—a man who might for the first time give him the only profound motivation for learning, the hope of becoming a better man. Since the humanities aim at humanization, their meaning and end are always, I believe, an exemplary man. Hence the humanities stand or fall according to the human size of the man who professes them."

It is clear, then, that scientists are not alone responsible for the woes of our civilization. Humanists and social scientists by their

indifference must share with other citizens some responsibility for the current state of our world too. But the times are now suddenly ripe for a fruitful intercourse between the humanities and the sciences. The surge in inter-disciplinary team research and study represented by the concern for ecology constitutes a major opportunity for an impact upon public policy by the humanities and social sciences.

A major thrust will be made through the agency of education. I hope that you will not neglect the challenge presented to you to participate in the reorientation of American education toward man-centered environmental study. The newly awakened social conscience in our country demands a response by educational authorities. We ask that you join us in shaping an educational policy consonant with that Renaissance.

#### RESPONSIBILITIES OF GOVERNMENT

The responsibility of the government is to lead.

That is why the President, on January 1, 1970, marked the start of a new decade by signing the bill establishing a Council of Environmental Advisors. It is why he said, "The 1970's absolutely must be the years when America pays its debt to the past by reclaiming the purity of its air, its waters and our living environment. It is literally now or never." It is why he has dedicated this Administration to the saving of our fragile, threatened environment—on which our survival depends.

It is also the responsibility of government to set an example—to encourage the growth of public understanding of its activities, of public concern, of public participation. "Until he has been part of a cause larger than himself, no man is truly whole," the President said in his inaugural address.

Above all, it is the responsibility of all government—not just national or state, but every local unit that operates a public school system—to educate . . . to replace confusion with knowledge . . . to replace concern with commitment and action.

It is at this point that the humanists and the social scientists should be "doing their thing." The problems we have are not just scientific. They are social and they bear directly upon human interaction with the total environment. What we need desperately from the cognoscenti such as you here tonight is help in posing the right questions. If the growing surge of citizen concern is to give rise to new human survival techniques and attitudes, a leadership role for the humanities is essential.

Learning about environment and ecology and all that affect it is admittedly complicated. Even today, when we know how dangerously threatened our environment is, we have only a small corps of qualified professionals to call upon. But if government at any level should take the attitude that this is all too complicated for the average citizen to understand—that he is needed merely to pick up the bill—then we shall be inviting public apathy, and even the most ambitious programs will eventually fail.

We simply cannot afford failure.

#### TWO GENERATIONS

We must therefore begin immediately to use our full educational capability to learn as much as we can, as fast as we can, about how to save our environment. At the same time, we must begin to teach not just one but two generations of Americans, simultaneously, all that they must know in order to revivify the earth on which we live.

Why do I say two generations? Simply because you and I and every other adult American must learn all this, just as must every American whose age puts him in the student population. We must learn it so we can understand it—and we must learn it in order to be able to teach it on a vastly

greater scale than anything we have so far envisioned.

The teacher we intend to send into our public schools in 1980 is today a sixth grader somewhere in America. He or she must be taught—beginning right now—along with every American boy and girl, about environmental quality, about ecology and about all of the complex and interacting elements that go to make them up.

We and they must learn together—and in the spare time we have left, we must begin to write the textbooks for this new educational enterprise. We must think about America as it will be in 1980—a nation with some 235 million citizens with different kinds of schools and different kinds of teaching and learning programs, and we must do this right now. That future teacher will enter college in 1976 and textbooks will have to have been written and published, courses mapped out and instructors trained in these new disciplines.

When we turn these brand-new teachers loose in 1980, they had better know much more than any of us do right now about the problems involved in human survival—or else the war may well be lost, although the battles may go on for a few decades longer.

What are the specific tasks to be assigned to this new environmental/ecological education? They can be summed up briefly: *awareness, concern, motivation and training:*

*Awareness of how we and our technology affect and are affected by our environment;*

*Concern for man's new and unique responsibility to re-establish and to create beneficially balanced relationships among all forms of life within the closed earth system;*

*Motivation and training to enable us to acquire and spread the knowledge and skills that will help us solve interrelated environmental problems and prevent their future occurrence.*

The end product of this kind of education—and it must take place at every level of the educational enterprise—will be to create, within the decade that has just begun, a citizenry with a clear understanding that man is an inseparable part of the system and that, as such, his continued existence is totally dependent on its continued functioning.

#### ALL EDUCATIONAL LEVELS

Departments devoted to the environmental sciences are being started at many of our nation's universities. This is an excellent beginning—but we must also begin now to develop similarly oriented programs in our grade schools, in our high schools and in our junior colleges. It is essential for students reaching the university level—and just as urgent for those whose education will not take them that far—that they already know the basic facts about environment just as you and I learned addition and subtraction.

These same basic courses must be developed and put into action at every stage of adult education. Logically, this should include not only adult education sponsored by formal school systems, but also the educational enterprises conducted by business and industry, by unions and by other organized groups. The future of society lies in its ability to react and respond to situations and events—and we are in a situation with regard to our environmental preservation that calls for a clear and vigorous response by every sector of American life. Eventually, as we gain ground, we should become able to act rather than merely react.

It is a matter of urgent necessity that we develop in both young and old an understanding of the society in which they live—an increasingly urbanized society with all the problems that this creates. We need to develop ecological studies designed to make everyone aware of the fragile and interacting relationships of land, air and water—and to

give new understandings of the eco-concepts—that must govern the development of society, encompassing the demands of increasing urbanization.

We need in our schools to counteract the idea of environment as being something "out there" that can be visited and then left behind at the end of the field trip. Our goal must be to see that every school has access to an environmental study area where youngsters of all ages can grow up with the concept of environment as being everything that makes up their world, and with an understanding of the interdependency of all its numberless elements.

#### EEE

Through the development of EEE—environmental/ecological education—at every level of learning, I see some very exciting things:

Pre-schoolers will be using the out-of-doors as a classroom—for it is a matter of urgent necessity that our children early begin to understand their environment.

High school students will use civics courses to engage in work-study programs with city planners and environmental quality professionals. They will focus on all sorts of urban problems to which solutions must be found—waste disposal, water supply, pollution and population.

Undergraduates will participate in multi-disciplinary classes under the guidance of master teaching teams to allow them to work out the great intellectual synthesis of the 1970's—the newly emerging coalescence of the humanities, the natural and social sciences, and the broad-based environmental studies that are being undertaken.

Graduate students will work in special study programs directed to creating new and different approaches to solving ecological problems.

Teachers will be given opportunities to acquire the knowledge and the methods of teaching EEE.

Out-of-school adults will learn to understand how and why the ecology and the environment interact; and while the professionals and the para-professionals work toward finding the immediate solutions we must have, all of us will acquire the kind of knowledge we can no longer do without. The entire level of mass citizen understanding and participation must be raised if we are to reverse the environmental skid. In this effort, we must rely on educational television, on community colleges, on business, on labor—in fact, on a total fusion of individual and group effort.

#### ECO-ACTIVISTS

If our communications do not fail us in this crisis, all Americans will, to some degree, become eco-activists.

Let me illustrate what this can mean.

In California, voters in San Bernardino County recently turned down a proposed coal burning plant despite the increased tax revenues it would have contributed. Residents in a Seattle suburb chose to preserve a wooded park area instead of clearing it for a golf course.

A recent example of the effectiveness of the working meld provided by mass communications, citizen response, and various levels of government working in partnership was the halting of the Everglades Jetport. An irreversible ecological tragedy was averted and we lighted a beacon of hope and inspiration for a nation of environmental underachievers.

The decisions to be made by each of us in the future will be on both small and very large environmental issues, but, whatever their degree, they will be more and more numerous in the years ahead. It is vital that we and our children be equipped with the wisdom and understanding that reject haphazard or emotional choices in favor of informed, reasoned decisions.

Undertaking this vast new educational enterprise will have far reaching and highly beneficial implications for American education. It will be a catalyst whose impact will register in every classroom and, I hope, in every home and office and plant in America.

Scholarship will benefit by the development of the essential inter and cross disciplinary studies that will be needed. The active involvement of our educational system in problems that pervade the lives of all will help to make the educational process more relevant and responsive.

This new emphasis in American education will help to make every individual more aware of how dependent each of us is upon the other. We shall—we must—learn that in the highly complex structure which is human society, survival depends on self-control (which includes control of technology—that mammoth extension of "self.")

The simple goal of all this educational effort is the realization that the acts of one react on all. If we can learn this lesson, we shall live in a better society. If we do not learn it, we may well have no society at all.

#### OFFICE OF EDUCATION

What is the Office of Education going to do to help American education implement the environmental challenge outlined by the President and alluded to here today? A number of things:

Promote EEE as a major activity of the Office in the 1970's.

Set up a special environmental studies staff to coordinate existing programs, redirect existing resources, and plan new programs and activities. This can be done by drawing creatively on all the relevant resources in O.E., without creating another bureaucratic unit.

Support appropriate legislation for Federal initiatives in environmental education.

Call a major conference in June on the challenge of EEE to the American educational community.

Support wholeheartedly the Environmental Teach-In scheduled nationally for April 22. I urge all American educators, at elementary, secondary and higher levels throughout the nation, to concern themselves with this effort and to give this environmental event the impact it deserves.

Propose that teachers follow up the National Teach-In by organizing and planning regional *Ecological Environmental Teach-Ins for Teachers* in the Summer of 1970. The Office of Education and the Department of Interior would assist these efforts in cooperation with State and local groups and organizations.

Cooperate with the Department of Interior to put to the highest educational use the cultural and natural environmental resources of the National Park Service. The Department of Interior's National Environmental Education Landmark program represents a major step in the direction that education for survival must take.

And finally, begin to plan for our participation in the 1972 UN International Environmental Year. Since we are the leading industrial nation, we must take leadership in countering industrial violence to the environment. The spread of our industrial technology has brought with it the spread of its rot. As John Gardner recently said: "The problems of nuclear warfare, of population, or the environment are impending planetary disasters. We are in trouble as a species."

#### CHALLENGE AND RESPONSE

Before us stands a great challenge. Arnold Toynbee has told us that the essence of the story of mankind and the survival of civilizations is to be found in the cycle of challenge and response. Those that respond survive; those that do not decline and die.

I believe America contains the seeds of response. Some are disturbed by the enormity

of the challenge—but the very fact that we are willing and anxious to focus on our environmental problems is the best assurance that we do indeed still possess the energy to tackle them and the ability to forge the tools to conquer them.

In just six years, this nation will enter upon its third century of independence. How our children and their children will live in that century—or even if they will—is almost totally dependent on the commitment we must now make and the dedication with which we carry it out.

If we are committed and steadfast, then we can in good time step aside and make room for the future, with the reassurance that we have kept the faith . . . that in the brief but eloquent words of Ecclesiastes:

"One generation passeth away and another generation cometh, but the Earth abideth forever."

#### TELEVISION COVERAGE OF CONGRESS: AN ADDRESS

(Mr. BRADEMAS asked and was given permission to extend his remarks at this point in the RECORD, and to include extraneous material.)

Mr. BRADEMAS. Mr. Speaker, in light of current discussion of television coverage of Congress, I am sure Members of Congress will read with interest the remarks of Dr. Frank Stanton, president of the Columbia Broadcasting System, at the annual Public Service Award dinner of the Advertising Council in New York City on December 15, 1969. Dr. Stanton, who received the Advertising Council's Annual Public Service Award that evening, makes a strong plea for the case that television broadcasting of the processes of government can add significantly to the quality of public understanding of important issues.

The remarks follow:

##### INDEPENDENCE OF BROADCAST PRESS

I am deeply honored by this tribute tonight. I would like to linger over those generous words of Tex Cook, but I hesitate to indulge in any "instant analysis." However, I will try—on advice from high quarters—to respond "in a very dignified and courageous way."

I would like to think that this award is inspired less by anything that I have done, than by the contribution that broadcasting has made to a more concerned and a more informed society. And, since we meet tonight under the auspices of The Advertising Council, let me note that whatever success we have achieved in this is owed in considerable measure to advertising. For—as the free press, printed and electronic, has provided advertising with an attentive forum—advertising has furnished many of the economics sinews that have made that effort possible and has, in fact, made the free press in our time a viable reality. And in this connection let me add a footnote appropriate to this occasion: During broadcasting's short eventful life, advertisers have come to respect the independence of the broadcast press far more than have the leaders of our government.

It is of more than passing significance that we are gathered here on what by coincidence is Bill of Rights Day—the 178th anniversary of the adoption of the first ten amendments to the Constitution of the United States. If, in the familiar words of the British prime minister, William Gladstone, the American Constitution itself was "the most wonderful work ever struck off at a given time by the brain and purpose of man," the Bill of Rights was, as Jefferson insisted, "what the people are entitled to against every government on

earth, general or particular, and what no just government should refuse or rest on inference." And the first article of the first amendment of the ten constituting the Bill of Rights provided that—

"Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."

None of the principles, so simply and explicitly set forth in this very first Constitutional enactment of our Republic, long escaped attack, not in theory, but in practice. For vital as they have been and vital as they still are, they are far easier to pay lip service to than they are to live by. And, like liberty itself, they have been preserved, from the time that they were adopted, only at the price of eternal vigilance.

Yet, compared to the swiftness and the complexity of life today, the conditions under which the Bill of Rights was enacted in 1791 were paradoxically far most hospitable to its preservation than they are today. A slender strip of land stretched along the Atlantic seaboard, largely consisting of agricultural communities totaling scarcely eight million souls, the early nation had little communications beyond word of mouth, the land press and the stagecoach, and no power except that of muscles, falling water and the winds. Whole areas of life—health, education, transportation, economics, science, housing, utilities, urban living, commerce and environmental control—fundamental as they have since become, were never touched upon by the Federal government; and a man could live his entire life without being affected as an individual by any action of that government. Indeed, only on the local level did he have much to say in the affairs of government: The choice of the national leadership was delegated to electors free to choose anyone they saw fit, and the choice of United States senators was delegated to the state legislators free to make whatever bargains they thought politically prudent.

But thanks to the foresight of the political architects of two centuries ago, the citizens of the early Republic did have the guarantee of, among other minimum essentials of free political action, a free press—which is to say the right to know, the right to ask questions, the right to criticize, and the right to dissent. The importance of these rights was underscored only last week when the Vatican weekly, *L'Osservatore*, editorially praised the United States for facing honestly the My Lai episode in Vietnam, stating that the case demonstrated "the vitality of a democracy which does not close the mouth of those who publicly accuse and does not prevent—as unhappily happens often elsewhere—anyone from telling the whole truth, even a horrible and disgusting one. . . ."

##### DISTURBING DOUBTS

Yet during the past month, we have had disturbing doubts cast from high places here at home on the rights to which the Vatican paper attached such great value. Whatever the merits of the specific issues involved, we witnessed contrived government attacks on both the degree and the extent of freedom of the press. Subsequently, assurances that the purpose of these attacks was merely to stimulate discussion of media performance, and thence self-improvement, ring hollow when their sources and pattern, not to mention their language, are considered and when the right to report the facts, or to express an opinion, is challenged only when they go against the grain of Administration policy. But the danger lies not solely—or even primarily—in the angry official castigations, or in the overt warnings of government intervention, or in the subtle threats of reprisal. It does not lie even in the implication that, at a time when this nation is more powerful than

it has ever been in its history, it turns its back on the memorable words of Justice Holmes: . . . if there is any principle of the Constitution that more imperatively calls for attachment than any other, it is the principle of free thought—not free thought for those who agree with us but freedom for the thought that we hate."

The real danger is not theoretical but coldly practical: It is the pointed reminder that Big Brother—the government—is keeping its eye on you and if you don't do what it says is best, you'll be in trouble.

This is a direct inversion of the proposition inherent in the First Amendment: that the government is the servant of the people and not their master. And it would render impotent the instrument that the authors of the Bill of Rights saw as the major safeguard against that bleak inversion becoming a reality—the right of the people to keep their eye on the government. Nor did the Bill of Rights draftsmen see this right to know as merely an indulgence. For a free society, they saw it as an organic need. We cannot keep that vital right alive by abridging it whenever the going gets rough or by not making the most of it when things are going well. As the problems and opportunities facing us get more complex, as society necessarily becomes more institutional and less personal, as we grow bigger both in numbers and in the social and economic dimensions of our activities, the only way we can keep the right to know alive is by expanding it—making sure that our citizens know more about our government and its action, not less.

It is one of the great godsendings in our history that we have the means to bring this about just when we need it most—and to bring it about not in the distant future but tomorrow morning. No technical innovation, no vast investments are required—only the will to do it.

##### ELECTRONIC COMMUNICATIONS

My proposal is simply to use electronic communications to give the American people greater access to significant proceedings of the Congress and of the Supreme Court—that is, to allow television and radio to cover all proceedings of the House, the Senate and the Supreme Court to which the public and the press are admitted. We have been doing this for years with regard to the United Nations. We have been doing it with regard to party conventions. We have been doing it with regard to inaugurations and ceremonial joint sessions of the House and Senate. There is no reason why we cannot do it with regard to critical sessions of the highest legislative and judicial bodies in the land—bodies whose actions and determinations influence our lives, our pocketbooks, our present and our future.

An enlightened people—a people impelled by their heritage, their interests and their compulsions to govern themselves—need to know not only the decisions arrived at on their behalf but how they are arrived at and on what grounds. The course of the longest and the most expensive war in our history was determined in great measure by the Gulf of Tonkin Resolution of August 1964. The outcome of the discussions of that resolution in the United States Congress was to bear dramatically and materially on the life of every American, directly or indirectly. The same issues, though with varying standards of reference and from varying points of departure, were discussed in the United Nations General Assembly. Television and radio made it possible for the American people to witness the United Nations debate live and later in delayed broadcasts or on regular and special news broadcasts. But they were prohibited by archaic strictures, from witnessing the discussion in their own Congress.

Such deprivations with regard to Congressional proceedings are the rule, with the sole

exception of the Senate, where the individual committees permit the broadcasting of public hearings. In spite of the fact that broadcasts of Senate committee hearings have resulted in deep public interest, similar broadcasts are flatly prohibited in the case of committees of the House, and from the floors of both houses. We are encouraged that a remedy may be within reach, however, by the provisions in a bill (H.R. 11475) now before a subcommittee of the House Rules Committee. If passed by the House, this bill would permit radio and television coverage not only of committee hearings but of the House proceedings themselves. But the camera and microphone remain off limits in the case of the Supreme Court, despite the fact that its proceedings, like those of Congress, are open to anyone who happens to be in Washington and who can go to its chambers. For all practical purposes, the present test of a citizen's ability to see his government in action on matters of the utmost urgency to him is whether or not he has the time and money to go to Washington, often stand in line for a seat and then hope that there is room for him. Actually, through cameras and microphones, there is room for every American in those limited seats now available only to the privileged or accidental few.

Ever since the birth of the idea of self-government, the direct involvement of all citizens in their government has been the highest objective of democratic life. The Greeks sought it and for one of the most splendid, if brief, hours in human history realized it. And it was not for nothing that the New England town meeting used the largest meetinghouse available so as to accommodate the most people and would even spill out on the lawn if necessary; nor that the Constitution itself required, when the only communications medium was printing, the Congress to "keep a Journal of its Proceedings, and from time to time publish the same. . . ."

There was a time when there was no alternative to limiting access to high legislative and judicial proceedings to the handful of subscribers to the *Congressional Record* and visitors who could get to Washington. Today, it is indefensible. I think that I have heard most of the excuses that have been offered—and not one of them seems to me to hold water.

#### TELEVISION—FACT OF LIFE

Television is a fact of life in our times, but it does not create new rules of human behavior—it only reflects the old ones. To limit its role in communications on the grounds that it would in any important way alter the standards under which our elected or appointed officials conduct themselves is a wholly untenable proposition. Even if it did, the medium is available to them outside the legislative chambers; and in any case, the burden of responsibility must rest—not with the instruments that transmit legislative or judicial events—but with the participants who make those events. To do anything else would be not to report what is happening but to distort it—to decide in advance that some people and some occurrences cannot stand public scrutiny. I do not believe that this course accords either with the theory of an open society or the practice of good government. Moreover, the broadcasting of sessions of the Congress—and the same would hold with the Supreme Court—would obviously be selective, just as they have been in the case of the United Nations. Routine sessions of the Congress would not be broadcast, but the broadcasting of critical sessions, leading to major commitments on the part of the American people, would enlighten them on the causes and the rationale behind such commitments. And we must remember that Congressional powers are sweeping. Appropriations of money by the Congress are the

ultimate determinants of national priorities. Foreign policy is strengthened or frustrated in the Senate, through its power to advise and consent. The effect on the judiciary, through confirmation alone, is direct and immediate. The Congress's powers of overseeing other government agencies are virtually without limits. Because of its ability to delegate rule making, to allocate funds, to approve appointments and to conduct investigations, it can reach into every governmental agency and office. But despite the great range of its powers, most major decisions that the Congress makes in these many fields are epitomized in a few significant actions rather than in the day-to-day sessions.

In the Supreme Court, too, there are obviously a great number of arguments and decisions that are directed to very specialized problems that would have no clear or pervasive importance to the great majority of the people. But those decisions that do concern all of us are apt to concern us very deeply—civil rights, for example, and applications of the criminal code—and we ought to have access to the great arguments of protagonists and opponents which inspire such decisions. "We are under a Constitution," said Charles Evans Hughes, "but the Constitution is what the judges say it is. . . ." Certainly, the judicial process would be strengthened if instead of dismissing opinions as judicial caprice, the people sensed, through witnessing its more crucial proceedings, the inescapable burden of finality that is placed upon the Supreme Court and the gravity with which it arrives at its judgments. Since the Court deals with specific cases and not in abstractions, the people could see for themselves that the process by which its opinions are arrived at are not casual, nor reached in a vacuum of lofty legalisms, but as resolutions of actual conflicts between human beings and human institutions that have their roots in the practical affairs of a few and their effects in the practical affairs of the many.

I have felt more at home tonight in this gathering than I could in any other, putting forth the proposition that all government is the concern of the many and not just of a few, because all of you are professionally attuned to the many. No one has done more than advertising as a calling to extend the material benefits of a better, a richer and a more equitable life to the many. We have now at our command the capacity to bring the many more directly into the processes of government than has ever before been possible, because we can make them on-the-spot witnesses of consequential government actions. And to witness is to begin to increase understanding. And understanding leads to more effective and greater participation.

#### UNDERSTANDING FREEDOM

In an age of constant crisis and of burgeoning government activity, that understanding is not a luxury but a necessity. In his classic, *Congressional Government*, Woodrow Wilson introduced his essay on the House of Representatives with these words of warning: "No more vital truth was ever uttered than that freedom and free institutions cannot long be maintained by any people who do not understand the nature of their own government."

Today, we have the technical instruments to make possible the deepening and the broadening of that understanding. Let us use those instruments.

#### INVESTIGATION OF POSSIBLE IMPEACHMENT OF JUSTICE DOUGLAS

(Mr. GERALD R. FORD asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. GERALD R. FORD. Mr. Speaker, there has been much discussion in the House of late about possible impeachment of Justice Douglas. In that connection, my basic contention is that whether or not individual Members of the House believe at this point in proceeding with impeachment of Justice Douglas, information presented on the House floor to date certainly indicates the need for an investigation of the matter.

An extremely well-written column by Roscoe and Geoffrey Drummond, published on April 22, cites the evidence which has been put forward as of this time and concludes—properly, I believe—that "a fair and full-scale House investigation" of Justice Douglas is very much in order.

The writers assert that the case for impeachment has not yet been proved but they also declare that the House should move ahead with an investigation of Justice Douglas on the basis of the evidence I have assembled. I do not see how any House member can validly argue with that conclusion.

The Drummond column follows:

#### SHOULD JUSTICE DOUGLAS BE IMPEACHED?

(By Roscoe and Geoffrey Drummond)

WASHINGTON.—There is enough prima facie evidence not only to justify but to require a fair and full-scale House investigation of whether impeachment proceedings should be undertaken against Supreme Court Justice William O. Douglas.

Republican leader Gerald Ford of Michigan has presented a disturbing and objectively persuasive case that further inquiry is needed.

We say in all candor that, when we first read that a resolution for an impeachment investigation was to be introduced, our instinct was on the side of dismissing it as coming primarily from pique and politics, as without much substance and as primarily related to the very liberal opinions Douglas has rendered as a member of the Supreme Court.

The case for impeachment is still not proved. But the case for thorough investigation by a House committee with subpoena power is proved to be valid by the evidence which Rep. Ford has assembled.

Our tendency was to doubt that the evidence would be so indicative. We suspect that many may have felt similarly, and we believe that no member of the House should vote either for or against the proposed impeachment investigation until he has examined the full text of the 21-page presentation Ford made to the House. Only a minority of the membership was present to hear it.

The instant reaction of many liberal Democrats is to try to discount, discredit and dismiss the case for a committee inquiry on the ground that it is directed against Justice Douglas because he is an outspoken civil libertarian and a judicial activist.

Rep. Emanuel Celler (D-N.Y.), chairman of the House Judiciary Committee, sees it as an attempt to punish Douglas "for his liberal views."

This is not true. Whatever may be the political motivation, the case of the 105 Republicans and Democrats who co-sponsored the resolution for a committee investigation as to whether impeachment should proceed does not rest on Justice Douglas' judicial opinion and only peripherally on the way he has used his position on the Supreme Court to berate the government.

Liberals will be doing themselves and the country great harm if they keep on reacting automatically against getting at the facts,

not on Mr. Douglas' opinions, but on his conduct; not on his views but on his behavior. We don't know that his conduct and his behavior will justify impeachment, but the evidence is sufficient to conclude that his conduct and behavior justify investigation in a forum where he can be called to testify under oath.

Was it proper and ethical for Justice Douglas to fail to disqualify himself in two appeals of Ralph Ginzburg, an editor and publisher, when Douglas was connected with the defendant as a paid writer?

Was it proper and ethical for Justice Douglas to serve for nearly a decade—while he was on the court—an organization (the Parvin Foundation) which had ties to gamblers and the underworld?

Could Justice Douglas believe that this gamblers' foundation was really out to improve the culture of Latin America instead of seeking a cover to enable those who financed it to get around where gambling concessions were up for grabs?

Was it proper and ethical for Justice Douglas, while on the court, to give legal advice to the Parvin Foundation on its troubles with the Internal Revenue Service?

Is it a proper suit or a grave abuse of his position on the Supreme Court for Justice Douglas to write articles (which are exploited because he is a justice), appealing primarily to the violence-prone and coming as near as possible to condoning violence while describing the American government as today's equivalent of the oppressive King George III?

Is this the way a justice of the Supreme Court should behave?

We believe that these and other disturbing questions demand investigation.

LEAVE OF ABSENCE

By unanimous consent, leave of absence was granted to:

Mr. BROTZMAN (at the request of Mr. GERALD R. FORD), for today and the balance of the week, on account of official business, Board of Visitors, U.S. Air Force Academy.

Mr. RHODES (at the request of Mr. GERALD R. FORD), for today and the balance of the week, on account of official business, Board of Visitors, U.S. Air Force Academy.

Mr. REIFEL (at the request of Mr. GERALD R. FORD), for today and the balance of the week, on account of official business.

Mr. PEPPER (at the request of Mr. FUQUA), for Thursday, April 23, 1970, on account of official business.

Mr. JOHNSON of California (at the request of Mr. ALBERT), for Thursday and Friday, on account of official business.

Mr. HAGAN (at the request of Mr. ALBERT), for today, on account of official business.

Mr. GRIFFIN of Mississippi (at the request of Mr. COLMER), for today, on account of illness in family.

Mr. GETTYS (at the request of Mr. McMILLAN), for today, on account of official business.

Mr. PATMAN (at the request of Mr. ALBERT), for today, on account of official business.

SPECIAL ORDERS GRANTED

By unanimous consent, permission to address the House, following the legis-

lative program and any special orders heretofore entered, was granted to:

Mr. HALL, for 15 minutes, today.

(The following Members (at the request of Mr. HUNT) to address the House and to revise and to extend their remarks and include extraneous matter:)

Mr. DON H. CLAUSEN, for 30 minutes, today.

Mr. McDONALD of Michigan, for 15 minutes, today.

Mr. HALPERN, for 10 minutes, today.

Mr. SAYLOR, for 20 minutes, today.

Mr. SCHERLE, for 5 minutes, today.

Mr. McKNEALLY, for 5 minutes, today.

(The following Members (at the request of Mr. DANIEL of Virginia), to revise and extend their remarks and to include extraneous matter:)

Mr. GONZALEZ, for 15 minutes, today.

Mr. BYRNE, of Pennsylvania, for 35 minutes, today.

Mr. JOHNSON, of California, for 15 minutes, today.

Mr. RARICK, for 15 minutes, today.

Mr. ROONEY of Pennsylvania, for 10 minutes, today.

Mr. MIKVA, for 60 minutes, April 29.

EXTENSION OF REMARKS

By unanimous consent, permission to revise and extend remarks was granted to:

Mr. PERKINS and to include extraneous material.

Mr. BENNETT in two instances, and to include extraneous material.

Mr. HALL and to include extraneous matter in two instances.

Mr. COHELAN in two instances.

Mr. MONAGAN to revise and extend his remarks prior to the vote on the Karth amendment.

Mr. GERALD R. FORD, to extend his remarks with reference to the President's Message concerning the volunteer army immediately following the message of the President.

(The following Members (at the request of Mr. HUNT) and to include extraneous matter:)

Mr. CONTE.

Mr. CORDOVA.

Mr. BROTZMAN.

Mr. ROTH in five instances.

Mr. HALPERN in two instances.

Mr. LUKENS.

Mr. WEICKER in two instances.

Mr. STEIGER of Wisconsin in two instances.

Mr. KEITH.

Mr. DEVINE.

Mr. SHRIVER.

Mr. DUNCAN in three instances.

Mr. ARENDS.

Mr. HORTON in two instances.

Mr. MATHIAS.

Mr. DON H. CLAUSEN in three instances.

Mr. SKUBITZ in two instances.

Mr. WYMAN in three instances.

Mr. WYATT.

Mr. COUGHLIN.

Mr. BOW in two instances.

Mr. MICHEL.

Mr. FULTON of Pennsylvania in five instances.

Mr. WIDNALL.

Mr. MINSHALL in two instances.

Mr. DELLENBACK in four instances.

Mr. DERWINSKI in two instances.

Mr. HOGAN.

Mr. WIGGINS.

Mr. BERRY.

Mr. PRICE of Texas.

Mr. SCHERLE.

Mr. CARTER.

Mr. BROYHILL of Virginia in three instances.

Mr. BOB WILSON in three instances.

Mr. McEWEN.

Mr. SCOTT.

Mr. GOODLING.

Mr. ANDERSON of Illinois.

Mr. POLLOCK.

Mr. GOLDWATER.

(The following Members (at the request of Mr. DANIEL of Virginia) and to include extraneous matter:)

Mrs. CHISHOLM.

Mr. BOGGS.

Mr. BOLLING.

Mr. O'NEILL of Massachusetts.

Mr. FRASER in three instances.

Mr. OTTINGER in two instances.

Mr. MONTGOMERY in two instances.

Mr. EDWARDS of California in two instances.

Mr. PUCINSKI in six instances.

Mr. TEAGUE of Texas in eight instances.

Mr. ROYBAL in six instances.

Mr. JACOBS.

Mr. BOLAND.

Mr. DAWSON.

Mr. CELLER.

Mr. PODELL.

Mr. YATRON.

Mr. MONAGAN in two instances.

Mr. ASHLEY.

Mr. RARICK in three instances.

Mr. GONZALEZ in two instances.

Mr. BURKE of Massachusetts.

Mr. MOORHEAD in four instances.

Mr. GARMATZ in two instances.

Mr. MATSUNAGA.

Mr. LEGGETT.

Mr. BIAGGI in 10 instances.

Mr. ANDERSON of California.

Mr. ABBITT.

Mr. GALIFIANAKIS in two instances.

Mr. GILBERT in two instances.

Mr. DANIEL of Virginia in two instances.

Mr. PATTEN in two instances.

Mr. WOLFF in two instances.

Mr. CULVER.

Mr. MINISH.

Mr. FALLON.

Mr. PHILBIN in four instances.

Mr. EVINS of Tennessee in three instances.

Mr. DINGELL in two instances.

Mr. O'HARA in two instances.

Mr. TIERNAN.

Mr. KASTENMEIER in two instances.

Mr. HARRINGTON in two instances.

Mr. PREYER of North Carolina in two instances.

Mr. KOCH.

SENATE ENROLLED BILLS SIGNED

The Speaker announced his signature to enrolled bills of the Senate of the following titles:

S. 533. An act for the relief of Barbara Rogerson Marmor;

S. 1177. An act to authorize the documentation of the vessel *West Wind* as a vessel of the United States with coastwise privileges;

S. 1775. An act for the relief of Cora S. Villaruel;

S. 1963. An act for the relief of Wu Hip; and  
S. 1968. An act to authorize the Secretary of the Interior to permit the removal of the Francis Ashbury statue, and for other purposes.

#### ADJOURNMENT

Mr. DANIEL of Virginia. Mr. Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 5 o'clock and 14 minutes p.m.), under its previous order, the House adjourned until Monday, April 27, 1970, at 12 o'clock noon.

#### EXECUTIVE COMMUNICATIONS, ETC.

Under clause 2 of rule XXIV, executive communications were taken from the Speaker's table and referred as follows:

1963. A communication from the President of the United States, transmitting proposed supplemental appropriations and other provisions for the fiscal year 1970 in indefinite amounts in budget authority for authorized civilian and military pay increases (H. Doc. No. 322); to the Committee on Appropriations and ordered to be printed.

1964. A letter from the Secretary of Defense, transmitting the complete report on funds obligated in the chemical warfare and biological research programs for the first half of fiscal year 1970, pursuant to section 409, Public Law 91-121; to the Committee on Armed Services.

1965. A letter from the Secretary of Defense, transmitting a draft of proposed legislation to amend title 37, United States Code, to further the reduction of draft calls in the Armed Forces of the United States by increasing the pay rates of certain enlisted members of the uniformed services; to the Committee on Armed Services.

1966. A letter from the Secretary of the Army, transmitting a draft of proposed legislation to amend titles 10 and 32, United States Code, to revise the promotion system for certain officers of the Reserve components of the Army; to the Committee on Armed Services.

1967. A letter from the Director of Selective Service, transmitting a draft of proposed legislation to amend the Military Selective Service Act of 1967, and for other purposes; to the Committee on Armed Services.

1968. A letter from the Department of the Army, Director of Civil Defense, transmitting the quarterly report of Federal contributions program—Equipment and facilities, for the period ending March 31, 1970, pursuant to subsection 201(h) of the Federal Civil Defense Act of 1950, as amended; to the Committee on Armed Services.

1969. A letter from the Deputy Assistant Secretary of Defense (Installations and Housing), transmitting notification of the location, nature, and estimated cost of certain facilities projects proposed to be undertaken for the Air National Guard and Air Force Reserve subsequent to June 30, 1970, pursuant to 10 U.S.C. 2233a(1); to the Committee on Armed Services.

1970. A letter from the Assistant Administrator for Program and Policy, Agency for International Development, Department of State, transmitting copies of Presidential Determination 70-3 in sealed envelopes; to the Committee on Foreign Affairs.

1971. A letter from the Comptroller General of the United States, transmitting a report on further improvement needed in the management of magnetic tapes by Goddard Space Flight Center, National Aeronautics and Space Administration; to the Committee on Government Operations.

1972. A letter from the Assistant Secretary of Interior, transmitting a draft of proposed legislation to authorize the Secretary of the Interior to enter into contracts for the protection of public lands from fires, in advance of appropriations therefor, and to twice renew such contracts; to the Committee on Interior and Insular Affairs.

1973. A letter from the Chairman, Federal Council for Science and Technology, transmitting the report entitled "National Atmospheric Sciences Program"; to the Committee on Interstate and Foreign Commerce.

1974. A letter from the Executive Director, Federal Communications Commission, transmitting the report on backlog of pending applications and hearing cases in the Commission as of March 31, 1970, pursuant to section 5(e) of the Communications Act, as amended; to the Committee on Interstate and Foreign Commerce.

1975. A letter from the President of the Panama Canal Company, transmitting a draft of proposed legislation to provide for reimbursement of the Treasury by the Panama Canal Company for the annuity paid to the Republic of Panama; to the Committee on Merchant Marine and Fisheries.

1976. A letter from the Administrator, General Services Administration, transmitting a prospectus containing proposed amendments to certain authorized public building projects, pursuant to section 7(a) of the Public Buildings Act of 1959; to the Committee on Public Works.

1977. A letter from the Administrator of the Veterans' Administration transmitting a draft of proposed legislation to amend section 1811 of title 38, United States Code, to authorize the Veterans' Administration to make direct loans to any veteran who is determined to be eligible for assistance in acquiring specially adapted housing under chapter 21 of title 38, United States Code; to the Committee on Veterans' Affairs.

#### REPORTS OF COMMITTEES ON PUBLIC BILLS AND RESOLUTIONS

Under clause 2 of rule III, reports of committees were delivered to the Clerk for printing and reference to the proper calendar, as follows:

Mr. HALEY: Committee on Interior and Insular Affairs. H. R. 3328. A bill to authorize the Secretary of the Interior to approve an agreement entered into by the Soboba Band of Mission Indians releasing a claim against the Metropolitan Water District of Southern California and Eastern Municipal Water District, California, and to provide for construction of a water distribution system and a water supply for the Soboba Indian Reservation; with amendments (Rep. No. 91-1017). Referred to the Committee of the Whole House on the State of Union.

Mr. KASTENMEIER: Committee on the Judiciary. H. R. 6951. A bill to enact the interstate agreement on detainers into law; (without amendment (Rep. No. 91-1018)). Referred to the Committee of the Whole House on the State of Union.

Mr. KASTENMEIER: Committee on the Judiciary. H. R. 10019. A bill to provide for the establishment of a Commission on Marihuana; with amendments (Rep. No. 91-1019). Referred to the Committee of the Whole House on the State of Union.

Mr. HALEY: Committee on Interior and Insular Affairs. H. R. 14253. A bill to authorize the transfer of the Brown unit of the Fort Belknap Indian Irrigation project on the Fort Belknap Indian Reservation, Mont., to the landowners within the unit; without amendments (Rep. No. 91-1020). Referred to the Committee of the Whole House on the State of Union.

Mr. ROGERS of Colorado: Committee on the Judiciary. House Joint Resolution 546. Joint Resolution authorizing the Secretary

of the Interior to provide for the commemoration of the 100th anniversary of the establishment of Yellowstone National Park, and for other purposes; with amendments (Rep. No. 91-1021). Referred to the Committee of the Whole House on the State of the Union.

#### PUBLIC BILLS AND RESOLUTIONS

Under clause 4 of rule XXII, public bills and resolutions were introduced and severally referred as follows:

By Mr. ADDABBO:

H.R. 17147. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. BIAGGI:

H.R. 17148. A bill to exclude from gross income the first \$750 of interest received on deposits in thrift institutions; to the Committee on Ways and Means.

H.R. 17149. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. BURLISON of Missouri:

H.R. 17150. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. BURTON of Utah:

H.R. 17151. A bill to establish the Arches National Park in the State of Utah, and for other purposes; to the Committee on Interior and Insular Affairs.

H.R. 17152. A bill to establish the Capitol Reef National Park and the Capitol Reef National Recreation Area in the State of Utah, and for other purposes; to the Committee on Interior and Insular Affairs.

H.R. 17153. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. CELLER:

H.R. 17154. A bill to amend title 18 of the United States Code to provide for better control of interstate traffic in explosives; to the Committee on the Judiciary.

By Mr. DON H. CLAUSEN:

H.R. 17155. A bill to amend section 120 of title 23, United States Code, to increase to 75 per cent the Federal share of projects on the Federal-aid primary and secondary systems; to the Committee on Public Works.

By Mr. DADDARIO:

H.R. 17156. A bill to preserve and promote the resources of the Connecticut River Valley, and for other purposes; to the Committee on Interior and Insular Affairs.

By Mr. DULSKI:

H.R. 17157. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mrs. DWYER (for herself, Mr. CEDERBERG, Mr. ERLNBORN, Mr. FEIGHAN, Mr. TUNNEY, Mr. HALPERN, Mr. HARRINGTON, Mr. WOLFF, Mr. McCLOSKEY, Mr. SCHEUER, Mrs. MINK, Mrs. MAY, Mr. HANSEN of Idaho, Mr. MOSS, Mr. HELSTOSKI, Mr. WIDNALL, Mr. HASTINGS, Mr. BRADEMAS, Mr. CARTER, Mr. MESKILL, Mr. HORTON, Mr. MCKNEALLY, Mr. FRIEDEL, and Mrs. CHISHOLM):

H.R. 17158. A bill to safeguard the consumer by prohibiting the unsolicited distribution of credit cards and limiting the liability of consumers for the unauthorized use of credit cards, and for other purposes; to the Committee on Banking and Currency.

By Mr. FEIGHAN:

H.R. 17159. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. FISHER:

H.R. 17160. A bill to amend the Internal Revenue Code of 1954 to clarify the status of motor vehicles under section 4041; to the Committee on Ways and Means.

By Mr. HALPERN:

H.R. 17161. A bill to amend the National Environmental Policy Act of 1969 to provide for individual citizens suits and class actions in the U.S. district courts against persons responsible for creating certain environmental hazards; to the Committee on Merchant Marine and Fisheries.

By Mr. HANLEY:

H.R. 17162. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. HELSTOSKI:

H.R. 17163. A bill to amend section 1114 of title 18 of the United States Code to make the killing, assaulting, or intimidating of any officer or employee of the Federal Communications Commission performing investigative, inspection, or law enforcement functions a Federal criminal offense; to the Committee on the Judiciary.

H.R. 17164. A bill to amend title 38 of the United States Code to require pay differentials for nurses in Veterans' Administration hospitals who perform evening, night, weekend, holiday, or overtime duty and to authorize payment for standby or on-call time, and for other purposes; to the Committee on Veterans' Affairs.

By Mr. MELCHER:

H.R. 17165. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. MELCHER (for himself and Mr. Olsen):

H.R. 17166. A bill relating to the income tax treatment of Commodity Credit loans to farmers; to the Committee on Ways and Means.

By Mr. MINSHALL:

H.R. 17167. A bill to amend the Fair Packaging and Labeling Act to require a packaged perishable food to bear a label specifying the date after which it is not to be sold for consumption; to the Committee on Interstate and Foreign Commerce.

By Mr. PRYOR of Arkansas:

H.R. 17168. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. PUCINSKI:

H.R. 17169. A bill to amend the Fair Packaging and Labeling Act to require a packaged perishable food to bear a label specifying the date after which it is not to be sold for consumption as food; to the Committee on Interstate and Foreign Commerce.

H.R. 17170. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

H.R. 17171. A bill to extend to all unmarried individuals the full tax benefits of income splitting now enjoyed by married individuals filing joint returns; to the Committee on Ways and Means.

By Mr. RARICK:

H.R. 17172. A bill to amend chapter 83, title 5, United States Code, to eliminate the reduction in the annuities of employees or Members who elected reduced annuities in order to provide a survivor annuity if predeceased by the person named as survivor and permit a retired employee or Member to designate a new spouse as survivor if predeceased by the person named as survivor at the time of retirement; to the Committee on Post Office and Civil Service.

H.R. 17173. A bill to provide increased annuities under the Civil Service Retirement Act; to the Committee on Post Office and Civil Service.

By Mr. ROE:

H.R. 17174. A bill to provide for the development of a uniform system of quality grades for consumer food products; to the Committee on Agriculture.

H.R. 17175. A bill to provide for the development of a uniform system of quality grades for consumer food products; to the Committee on Agriculture.

H.R. 17176. A bill to require that certain short-shelf-life durable products be prominently labeled as to the date beyond which performance life becomes diminished; to the Committee on Interstate and Foreign Commerce.

H.R. 17177. A bill to require that certain drugs and pharmaceuticals be prominently labeled as to the date beyond which potency or efficacy becomes diminished; to the Committee on Interstate and Foreign Commerce.

H.R. 17178. A bill to require that certain processed or packaged consumer products be labeled with certain information, and for other purposes; to the Committee on Interstate and Foreign Commerce.

H.R. 17179. A bill to require that durable consumer products be labeled as to durability and performance life; to the Committee on Interstate and Foreign Commerce.

H.R. 17180. A bill to amend title 38 of the United States Code to increase the rates and income limitations relating to payment of pension and parents' dependency and indemnity compensation, and for other purposes; to the Committee on Veterans' Affairs.

By Mr. TEAGUE of Texas (for himself and Mr. AYRES) (by request):

H.R. 17181. A bill to remove time limitations on the duration of eligibility of veterans for guaranteed and direct loans; to the Committee on Veterans' Affairs.

By Mr. VANDER JAGT (for himself,

Mr. BARRETT, Mr. BEALL of Maryland, Mr. BRADEMAS, Mr. BROWN of Michigan, Mr. CEDERBERG, Mrs. CHISHOLM, Mr. DERWINSKI, Mr. DICKINSON, Mr. ESCH, Mr. FALLON, Mr. HALPERN, Mr. HARRINGTON, Mr. LEGGETT, and Mr. McDADE):

H.R. 17182. A bill to encourage States to establish abandoned-automobile removal programs and to provide for tax incentives for automobile scrap processing; to the Committee on Ways and Means.

By Mr. VANDER JAGT (for himself,

Mr. MESKILL, Mr. MILLER of Ohio, Mr. MILLER of California, Mr. MOSS, Mr. NEDEI, Mr. PEPPER, Mr. POWELL, Mr. THOMSON of Wisconsin, Mr. VAN DEERLIN, Mr. WIDNALL, Mr. WINN, Mr. WOLFF, and Mr. YATES):

H.R. 17183. A bill to encourage States to establish abandoned-automobile removal programs and to provide for tax incentives for automobile scrap processing; to the Committee on Ways and Means.

By Mr. WEICKER:

H.R. 17184. A bill to extend to all unmarried individuals the full tax benefits of income splitting now enjoyed by married individuals filing joint returns; to the Committee on Ways and Means.

By Mr. WHALLEY:

H.R. 17185. A Bill to protect a person's right of privacy by providing for the designation of obscene or offensive mail matter by the sender and for the return of such matter at the expense of the sender; to the Committee on Post Office and Civil Service.

By Mr. ABBITT:

H.R. 17186. A bill to amend the peanut marketing quota provisions to make permanent certain provisions thereunder, and for other purposes; to the Committee on Agriculture.

H.R. 17187. A bill to provide for orderly trade in textile articles and articles of leather footwear and for other purposes; to the Committee on Ways and Means.

By Mr. ASPINALL (by request):

H.R. 17188. A bill to authorize the Secretary of the Interior to enter into contracts for the protection of public lands from fires, in advance of appropriations therefor, and twice renew such contracts; to the Committee on Interior and Insular Affairs.

By Mr. BROCK (for himself and Mr. BURTON of Utah):

H.R. 17189. A bill to amend the Coal Mine Health and Safety Act of 1969; to the Committee on Education and Labor.

By Mr. BROWN of California:

H.R. 17190. A bill to establish means for developing comprehensive national, regional, and State land use planning policies and to provide financial assistance to States for the purpose of supporting and implementing such policies, and for other purposes; to the Committee on Interior and Insular Affairs.

By Mr. BUCHANAN:

H.R. 17191. A bill to amend the Federal Food, Drug, and Cosmetic Act to include a definition of food supplements, and for other purposes; to the Committee on Interstate and Foreign Commerce.

By Mr. BUTTON:

H.R. 17192. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. CARTER:

H.R. 17193. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. DON H. CLAUSEN (for himself,

Mr. PHILBIN, Mr. GOLDWATER, Mr. JOHNSON of California, Mr. BEVILL, Mr. PEPPER, and Mr. LEGGETT):

H.R. 17194. A bill designating the Luther Burbank Shasta Daisy as the national flower of the United States, to the Committee on House Administration.

By Mr. DADDARIO:

H.R. 17195. A bill to provide for orderly trade in textile articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. DANIELS of New Jersey:

H.R. 17196. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. DOWNING (for himself, Mr.

WHITEHURST, Mr. SATTERFIELD, Mr. ABBITT, Mr. DANIEL of Virginia, Mr. POFF, Mr. MARSH, Mr. SCOTT, Mr. WAMPLER, and Mr. BROYHILL of Virginia):

H.R. 17197. A bill to remove the present \$1 million limitation which prevents the Secretary of the Navy from settling and paying the claim of the Chesapeake Bay Bridge and Tunnel District arising out of the collision of the U.S.S. Yancey with bridge-tunnel span; to the Committee on the Judiciary.

By Mr. ERLENBORN (for himself and Mr. DON H. CLAUSEN):

H.R. 17198. A bill to amend title IV of the Higher Education Act of 1965 to establish a Student Loan Marketing Association; to the Committee on Education and Labor.

By Mr. FARBSTAIN (for himself, Mr.

ADDABBO, Mr. BARRETT, Mr. BIAGGI, Mr. BRASCO, Mr. BROWN of California, Mr. COHELAN, Mr. DANIELS of New Jersey, Mr. EDWARDS of California, Mr. GILBERT, Mr. HALPERN, Mr. HAMILTON, Mr. HARRINGTON, Mr. KOCH, Mr. LOWENSTEIN, Mr. MIKVA, Mr. MINISH, Mr. OLSEN, Mr. OTTINGER, Mr. PATTEN, Mr. PODELL, Mr. POWELL, Mr. RODINO, Mr. ROSENTHAL, and Mr. RYAN):

H.R. 17199. A bill to amend the National Emission Standards Act to provide for the elimination of automotive air pollution; to

the Committee on Interstate and Foreign Commerce.

By Mr. FARBSTEIN (for himself, Mr. ST. ONGE, Mr. TUNNEY, and Mr. VAN DEERLIN):

H.R. 17200. A bill to amend the National Emission Standards Act to provide for the elimination of automotive air pollution; to the Committee on Interstate and Foreign Commerce.

By Mr. FARBSTEIN (for himself, Mr. ADDABBO, Mr. BARRETT, Mr. BIAGGI, Mr. BRASCO, Mr. BROWN of California, Mr. COHELAN, Mr. DANIELS of New Jersey, Mr. EDWARDS of California, Mr. GILBERT, Mr. HALPERN, Mr. HAMILTON, Mr. HARRINGTON, Mr. KOCH, Mr. LOWENSTEIN, Mr. MIKVA, Mr. MINISH, Mr. OLSEN, Mr. OTTINGER, Mr. PATTEN, Mr. PODELL, Mr. POWELL, Mr. RODINO, Mr. ROSENTHAL and Mr. RYAN):

H.R. 17201. A bill to impose an excise tax on automobiles based on their horsepower and emission of pollutants, for the purpose of financing programs for research in, and Federal procurement of, low-emission vehicles; to the Committee on Ways and Means.

By Mr. FARBSTEIN (for himself, Mr. ST. ONGE, Mr. TUNNEY, and Mr. VAN DEERLIN):

H.R. 17202. A bill to impose an excise tax on automobiles based on their horsepower and emission of pollutants, for the purpose of financing programs for research in, and Federal procurement of, low-emission vehicles; to the Committee on Ways and Means.

By Mr. FARBSTEIN (for himself, Mr. ADDABBO, Mr. BARRETT, Mr. BIAGGI, Mr. BRASCO, Mr. BROWN of California, Mr. COHELAN, Mr. DANIELS of New Jersey, Mr. EDWARDS of California, Mr. GILBERT, Mr. HALPERN, Mr. HAMILTON, Mr. HARRINGTON, Mr. KOCH, Mr. LOWENSTEIN, Mr. MIKVA, Mr. MINISH, Mr. OLSEN, Mr. OTTINGER, Mr. PATTEN, Mr. PODELL, Mr. POWELL, Mr. RODINO, Mr. ROSENTHAL, and Mr. RYAN):

H.R. 17203. A bill to permit the Governor of a State to elect to use funds from the State's Federal-aid highway system apportionment for purposes of paying additional costs incurred by such State in purchasing low-emission vehicles; to the Committee on Ways and Means.

By Mr. FARBSTEIN (for himself, Mr. ST. ONGE, Mr. TUNNEY, and Mr. VAN DEERLIN):

H.R. 17204. A bill to permit the Governor of a State to elect to use funds from the State's Federal-aid highway system apportionment for purposes of paying additional costs incurred by such State in purchasing low-emission vehicles; to the Committee on Ways and Means.

By Mr. FARBSTEIN:

H.R. 17205. A bill to establish a National Bank for Cooperative Housing to aid in financing the purchase and construction of low- and middle-income cooperative housing; to the Committee on Banking and Currency.

By Mr. FARBSTEIN (for himself, Mr. MOSS, Mr. EILBERG, and Mr. McDADE):

H.R. 17206. A bill to amend the Fair Packaging and Labeling Act to require a packaged perishable food to bear a label specifying the date after which it is not to be sold for consumption as food; to the Committee on Interstate and Foreign Commerce.

By Mr. FARBSTEIN:

H.R. 17207. A bill to amend the public assistance provisions of the Social Security Act to provide that aid or assistance thereunder shall not be reduced as a result of increases

in old-age, survivors, and disability insurance benefits; to the Committee on Ways and Means.

H.R. 17208. A bill to amend title 38 of the United States Code to prevent the loss of veterans' benefit amounts as a result of statutory increases in social security benefits, and for other purposes; to the Committee on Veterans' Affairs.

H.R. 17209. A bill to assist in combating crime by reducing the incidence of recidivism, providing improved Federal, State, and local correctional facilities and services, strengthening administration of Federal corrections, strengthening control over probationers, parolees, and persons found not guilty by reason of insanity, and for other purposes; to the Committee on the Judiciary.

By Mr. HANNA:

H.R. 17210. A bill to amend the Public Health Service Act to support research and training in diseases of the digestive tract, including the liver and pancreas, and diseases of nutrition, and aid the States in the development of community programs for the control of these diseases, and for other purposes; to the Committee on Interstate and Foreign Commerce.

H.R. 17211. A bill to amend the law establishing the Marine Resources and Engineering Development Act of 1966 and the National Sea Grant College and Program Act of 1966 to provide for a program of comprehensive research in marine medicine and pharmacology; to the Committee on Merchant Marine and Fisheries.

By Mr. JACOBS:

H.R. 17212. A bill to reduce the salaries of Senators and Representatives to \$30,000, to provide for cost-of-living adjustments thereafter in those salaries, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. JOHNSON of California:

H.R. 17213. A bill to designate certain lands in the Lava Beds National Monument in California as wilderness; to the Committee on Interior and Insular Affairs.

By Mr. LONG of Maryland:

H.R. 17214. A bill to amend the Land and Water Conservation Fund Act of 1965, as amended, and for other purposes; to the Committee on Interior and Insular Affairs.

By Mr. McCULLOCH (for himself, Mr. TAFT, Mr. HARSHA, and Mr. MILLER of Ohio):

H.R. 17215. A bill to amend the Act requiring evidence of certain financial responsibility and establishing minimum standards for certain passenger vessels in order to exempt certain vessels operating on inland rivers; to the Committee on Merchant Marine and Fisheries.

By Mr. MATSUNAGA:

H.R. 17216. A bill to authorize the Secretaries of Interior and the Smithsonian Institution to expend certain sums, in cooperation with the territory of Guam, the territory of American Samoa, the Trust Territory of the Pacific Islands, other U.S. territories in the Pacific Ocean, and the State of Hawaii, for the conservation of their protective and productive coral reefs; to the Committee on Merchant Marine and Fisheries.

By Mr. MESKILL:

H.R. 17217. A bill to extend to all unmarried individuals the full tax benefits of income splitting now enjoyed by married individuals filing joint returns; to the Committee on Ways and Means.

H.R. 17218. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. MICHEL:

H.R. 17219. A bill to amend the Internal Revenue Code of 1954 to provide for an investment tax credit for small businesses, and

for other purposes; to the Committee on Ways and Means.

By Mr. MOSS:

H.R. 17220. A bill to amend title 5, United States Code, to provide salary step advancement for employees moving from prevailing rate pay systems to the classification and general schedule pay system, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. MURPHY of New York (for himself, Mr. ADAMS, Mr. ADDABBO, Mr. BIAGGI, Mr. BRADEMAS, Mr. CUNNINGHAM, Mr. DELANEY, Mr. FALLON, Mr. FEIGAN, Mr. GIBBONS, Mr. HALPERN, Mr. HARRINGTON, Mr. KOCH, Mr. McFALL, Mr. MATSUNAGA, Mr. MOORHEAD, Mr. NIX, Mr. OLSEN, Mr. PEPPER, Mr. PODELL, Mr. REES, Mr. SCHEUER, Mr. BRASCO, Mr. STOKES, and Mr. THOMPSON of New Jersey):

H.R. 17221. A bill to amend the Clean Air Act so as to extend its duration, provide for inspection and enforcement procedures, establish national emission control standards, authorize classification of air-contaminant sources, designate penalties for violations of this act, authorize regulation of fuels and fuel additives, provide for improved controls over motor vehicle emissions, and for other purposes; to the Committee on Interstate and Foreign Commerce.

By Mr. O'HARA:

H.R. 17222. A bill to require Federal contractors, and persons contracting for federally supported activities, to observe practices which will preserve and enhance the environment; to the Committee on the Judiciary.

By Mr. PATTEN:

H.R. 17223. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. RODINO (for himself, Mr. THOMPSON of New Jersey, Mr. WIDNALL, Mr. DANIELS of New Jersey, Mrs. DWYER, Mr. FRELINGHUYSEN, Mr. GALLAGHER, Mr. HELSTOSKI, Mr. HOWARD, Mr. MINISH, Mr. ROE, and Mr. SANDMAN) (by request):

H.R. 17224. A bill to amend title 18 of the United States Code to permit the mailing of lottery tickets and related matter, the broadcasting or televising of lottery information, and the transportation and advertising of lottery tickets in interstate commerce, but only where the lottery is conducted by a State agency; to the Committee on the Judiciary.

By Mr. RUPPE:

H.R. 17225. A bill to provide for the disposition of funds appropriated to pay a judgment in favor of the Grand River Band of Ottawa Indians in Indian Claims Commission docket No. 40-K, and for other purposes; to the Committee on Interior and Insular Affairs.

By Mr. WYDLER:

H.R. 17226. A bill to safeguard the consumer by prohibiting the unsolicited distribution of credit cards and limiting the liability of consumers for the unauthorized use of credit cards, and for other purposes; to the Committee on Banking and Currency.

By Mr. ZION:

H.R. 17227. A bill to provide for orderly trade in textile articles and articles of leather footwear, and for other purposes; to the Committee on Ways and Means.

By Mr. BENNETT:

H.J. Res. 1184. Joint resolution to authorize the establishment of a Joint Committee on Peace; to the Committee on Rules.

By Mr. FASCELL:

H.J. Res. 1185. Joint resolution designating the third Wednesday of April of each year as "Earth Day"; to the Committee on the Judiciary.

By Mr. GIAIMO:

H.J. Res. 1186. Joint resolution authorizing the President to proclaim July 12, 1970 as "National Prayer Salute to Our Fighting Men in Vietnam Day"; to the Committee on the Judiciary.

By Mr. HANNA:

H.J. Res. 1187. Joint resolution to authorize the President to issue a proclamation designating the week of May 17, 1970, through May 23, 1970, as "D for Decency Week"; to the Committee on the Judiciary.

By Mr. HANSEN of Idaho:

H.J. Res. 1188. Joint resolution proposing an amendment to the Constitution of the United States relative to equal rights for men and women; to the Committee on the Judiciary.

By Mr. HORTON:

H.J. Res. 1189. Joint resolution to establish a Joint Committee on Environment and Technology; to the Committee on Rules.

By Mr. PIRNIE:

H.J. Res. 1190. Joint resolution proposing an amendment to the Constitution of the United States relative to equal rights for men and women; to the Committee on the Judiciary.

By Mr. DANIEL of Virginia (for himself, Mr. WAGGONER, Mr. ABBITT, Mr. SATTERFIELD, and Mr. DOWNING):

H. Con. Res. 583. Concurrent resolution to designate May 1, 1970 as a day for an appeal for international justice for all American prisoners of war and servicemen missing in action in Southeast Asia; to the Committee on the Judiciary.

By Mr. POAGE:

H. Con. Res. 584. Concurrent resolution relative to printing as a House document a history of the Committee on Agriculture; to the Committee on House Administration.

By Mr. TEAGUE of Texas:

H. Con. Res. 585. Concurrent resolution authorizing certain printing for the Committee on Veterans' Affairs; to the Committee on House Administration.

By Mr. TIERNAN:

H. Con. Res. 586. Concurrent resolution expressing the sense of the Congress regarding further steps of the President concerning

Cambodia; to the Committee on Foreign Affairs.

By Mr. BROTZMAN (for himself, Mr. MADDEN, Mr. ROE, Mr. NEDZI, Mr. YATES, Mr. HARRINGTON, Mrs. HANSEN of Washington, Mr. GILBERT, Mr. MINISH, Mr. WHITE, Mr. LOWENSTEIN, Mr. CHAPPELL, Mr. POWELL, Mr. KARTH, Mr. FLOWERS, Mr. MOSS, Mr. CAFFERY, Mr. FEIGHAN, Mr. STRATTON, and Mr. DULSKI):

H. Res. 946. Resolution expressing the sense of the House of Representatives to create a standing committee to be known as the Committee on the Environment; to the Committee on Rules.

By Mr. DULSKI:

H. Res. 947. Resolution expressing the sense of the House that the President implement the majority report of the Cabinet Task Force on Oil Import Control; to the Committee on Ways and Means.

By Mr. FRASER:

H. Res. 948. Resolution providing for the consideration of the bill (H.R. 17123) to authorize appropriations during the fiscal year 1971 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and other weapons, and research, development, test, and evaluation for the Armed Forces, and to prescribe the authorized personnel strength of the Selected Reserve of each Reserve component of the Armed Forces, and for other purposes; to the Committee on Rules.

By Mr. ROTH (for himself, Mr. ADAIR, Mr. FULTON of Pennsylvania, Mr. HAYS, Mr. TUNNEY, Mr. ANDERSON of Illinois, Mr. SCHEUER, Mr. VANDER JAGT, Mr. TIERNAN, Mr. ROBISON, Mr. HUNGATE, Mr. RAILSBACK, Mr. WRIGHT, Mr. CARTER, Mr. EDWARDS of California, Mr. CLEVELAND, Mr. KOCH, Mr. McCLOY, Mr. COUGHLIN, Mr. FRIEDEL, Mr. ERLENBORN, Mr. PIRNIE, Mr. CONABLE, Mr. MIKVA, and Mr. McDADE):

H. Res. 949. Resolution expressing the support of the House of Representatives with respect to the strategic arms limitation talks, and for other purposes; to the Committee on Foreign Affairs.

PRIVATE BILLS AND RESOLUTIONS

Under clause 1 of rule XXII, private bills and resolutions were introduced and severally referred as follows:

By Mr. CORMAN:

H.R. 17228. A bill for the relief of Meyer Weinger and Fay Weinger; to the Committee on the Judiciary.

By Mr. MOSS:

H.R. 17229. A bill for the relief of Louis M. Lamothe; to the Committee on the Judiciary.

By Mr. PUCINSKI:

H.R. 17230. A bill for the relief of Antonio Stallone, Francesca Stallone, Paulo Stallone, and Antonina Stallone; to the Committee on the Judiciary.

By Mr. STUCKEY:

H.R. 17231. A bill for the relief of Dr. Earl S. Bernard; to the Committee on the Judiciary.

By Mr. JOHNSON of Pennsylvania:

H. Res. 950. A bill commending Joel Ziegler; to the Committee on the Judiciary.

PETITIONS, ETC.

Under clause 1 of rule XXII, petitions and papers were laid on the Clerk's desk and referred as follows:

457. By the SPEAKER. Petition of Andres Banabana, Br. Tubtobon, Sibulan, Negros Oriental, Philippines, and others, relative to payments to Filipino workers; to the Committee on Foreign Affairs.

458. Also, petition of the Inter-Tribal Council of the Five Civilized Tribes, Poteau, Oklahoma; relative to retaining laws providing services for the Indian people by the Federal Government; to the Committee on Interior and Insular Affairs.

459. Also, petition of the mayor and the president of the council of the City of Linden, N.J.; relative to supporting antipollution programs; to the Committee on Interstate and Foreign Commerce.

460. Also, petition of Andrew W. Schroeffel, Los Angeles, Calif., relative to redress of grievances; to the Committee on the Judiciary.

EXTENSIONS OF REMARKS

POSTHUMOUS AWARD OF MEDAL OF HONOR TO PFC. RALPH H. JOHNSON, CHARLESTON, S.C.

HON. STROM THURMOND

OF SOUTH CAROLINA

IN THE SENATE OF THE UNITED STATES

Thursday, April 23, 1970

Mr. THURMOND. Mr. President, Pfc. Ralph H. Johnson, U.S. Marine Corps, Charleston, S.C., was awarded the Congressional Medal of Honor posthumously for the supreme sacrifice to save the life of a Marine comrade and to prevent the success of an enemy attack on his unit.

On behalf of the President of the United States and in the name of the Congress, the Honorable SPIRO T. AGNEW, the Vice President, presented our Nation's highest award for bravery to Mrs. Rebecca Johnson, Ralph's mother, at a White House ceremony on Monday, April 20, 1970.

Mr. President, Pfc. Ralph Johnson's heroic action above and beyond the call of duty deserves the salute of a grateful nation. This gallant Negro gave his life for his country. Ralph unhesitatingly hurled his body on an enemy grenade

to protect the lives of his comrades. He was instantly killed, but his selfless devotion deep in hostile territory prevented the enemy from penetrating the sector of his patrol.

Mr. President, the citation for Private First Class Johnson states, in part:

Realizing the inherent danger to his two comrades, he shouted a warning and unhesitatingly hurled himself upon the explosive device. When the grenade exploded, Private Johnson absorbed the tremendous impact of the blast and was killed instantly. His prompt and heroic act saved the life of one Marine at the cost of his own and undoubtedly prevented the enemy from penetrating his sector of the patrol's perimeter.

Ralph was a native of Charleston. His mother and five brothers and four sisters reside in the Charleston area. One sister lives in Washington, D.C. Ralph reflected the courage, the bravery, and the American spirit of many Negroes from South Carolina and other States who are serving in our Armed Forces. I am confident I expressed the feelings of all patriotic South Carolinians when I extended my deepest gratitude and sincere sympathy to Mrs. Johnson.

Mr. President, I ask unanimous con-

sent that the citation and Private First Class Johnson's biography be printed in the Extensions of Remarks.

There being no objection, the citation and biography were ordered to be printed in the RECORD, as follows:

MEDAL OF HONOR

The President of the United States in the name of the Congress takes pride in presenting the Medal of Honor posthumously to Pfc. Ralph H. Johnson, U.S. Marine Corps, for service as set forth in the following citation:

"For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty while serving as a Reconnaissance Scout with Company A, First Reconnaissance Battalion, First Marine Division in action against the North Vietnamese Army and Viet Cong Forces in the Republic of Vietnam. In the early morning hours of 5 March 1968, during Operation ROCK, Private First Class Johnson was a member of a fifteen-man reconnaissance patrol manning an observation post on Hill 146 overlooking the Quan Duc Duc Valley deep in enemy controlled territory. They were attacked by a platoon-size hostile force employing automatic weapons, satchel charges and hand grenades. Suddenly, a hand grenade landed in the three-man fighting hole occupied by Private Johnson and two fellow marines. Realizing the inherent danger to his two comrades, he shouted