

1900. A letter from the Acting Assistant Secretary of State for Congressional Relations, transmitting a report showing the fiscal year 1974 country and international organization allocations for the international narcotics program, pursuant to section 653 of the Foreign Assistance Act of 1961, as amended [22 U.S.C. 2413(a)]; to the Committee on Foreign Affairs.

1901. A letter from the Acting Secretary of the Interior, transmitting a report on the activities of the Geological Survey outside the national domain during the 6 months ended December 31, 1973, pursuant to 43 U.S.C. 31(c); to the Committee on Interior and Insular Affairs.

1902. A letter from the Secretary of Health, Education, and Welfare, transmitting a draft of proposed legislation to amend the Public Health Service Act, the Developmental Disabilities Services and Facilities Construction Act, and the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, to revise and extend programs of health services, and for other purposes; to the Committee on Interstate and Foreign Commerce.

1903. A letter from the Commissioner, Immigration and Naturalization Service, Department of Justice, transmitting reports concerning visa petitions approved according to certain beneficiaries' third and sixth preference classification, pursuant to section 204(d) of the Immigration and Na-

tionality Act, as amended [8 U.S.C. 1154(d)]; to the Committee on the Judiciary.

1904. A letter from the Chairman, Marine Mammal Commission; transmitting the Commission's first annual report, covering calendar year 1973, pursuant to Public Law 92-522; to the Committee on Merchant Marine and Fisheries.

1905. A letter from the Secretary of Transportation, transmitting a draft of proposed legislation to amend the Federal-Aid Highway Act of 1973 as it relates to the conduct of charter bus operations by grantees of Federal financial assistance, and for other purposes; to the Committee on Public Works.

RECEIVED FROM THE COMPTROLLER GENERAL

1906. A letter from the Comptroller General of the United States, transmitting a report recommending changes in law to improve the acquisition of public building sites and to eliminate excess property exchanges by the General Services Administration; to the Committee on Government Operations.

PUBLIC BILLS AND RESOLUTIONS

Under clause 4 of rule XXII, public bills and resolutions were introduced and severally referred as follows:

By Mr. DEVINE:

H. Res. 869. Resolution disapproving the recommendations of the President with re-

spect to the rates of pay of Federal officials transmitted to the Congress in the budget for the fiscal year ending June 30, 1975; to the Committee on Post Office and Civil Service.

By Mr. TAYLOR of North Carolina:

H. Res. 870. Resolution disapproving the recommendations of the President with respect to the rates of pay of Federal officials transmitted to the Congress in the budget for the fiscal year ending June 30, 1975; to the Committee on Post Office and Civil Service.

MEMORIALS

Under clause 4 of rule XXII,

349. The SPEAKER presented a memorial of the Senate of the Commonwealth of Massachusetts, relative to Federal funding of the Massachusetts unemployment compensation system; to the Committee on Appropriations.

PETITIONS, ETC.

Under clause 1 of rule XXII,

393. The SPEAKER presented a petition of Earl Gayhart, North Canton, Ohio, relative to redress of grievances; to the Committee on the Judiciary.

SENATE—Monday, February 18, 1974

The Senate met at 12 o'clock noon and was called to order by Hon. FLOYD K. HASKELL, a Senator from the State of Colorado.

PRAYER

The Chaplain, the Reverend Edward L. R. Elson, D.D., offered the following prayer:

We shall pray today in the words of President George Washington's prayer for his country.

Let us pray.

"Almighty God: We make our earnest prayer that Thou wilt keep the United States in Thy holy protection; that Thou wilt incline the hearts of the citizens to cultivate a spirit of subordination and obedience to government; and entertain a brotherly affection and love for one another and for their fellow citizens of the United States at large. And finally that Thou wilt most graciously be pleased to dispose us all to do justice, to love mercy, and to demean ourselves with that charity, humility, and pacific temper of mind which were the characteristics of the Divine Author of our blessed religion, and without a humble imitation of whose example in these things we can never hope to be a happy Nation. Grant our supplication, we beseech Thee, through Jesus Christ our Lord." Amen.

APPOINTMENT OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will please read a communication to the Senate from the President pro tempore (Mr. EASTLAND).

The assistant legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
Washington, D.C., February 18, 1974.

To the Senate:

Being temporarily absent from the Senate on official duties, I appoint Hon. FLOYD K. HASKELL, a Senator from the State of Colorado, to perform the duties of the Chair during my absence.

JAMES O. EASTLAND,
President pro tempore.

Mr. HASKELL thereupon took the chair as Acting President pro tempore.

MESSAGES FROM THE PRESIDENT—APPROVAL OF JOINT RESOLUTION

Messages in writing from the President of the United States were communicated to the Senate by Mr. Heiting, one of his secretaries, and he announced that on February 8, 1974, the President had approved and signed the joint resolution (S.J. Res. 185) to provide for advancing the effective date of the final order of the Interstate Commerce Commission in Docket No. MC 43 (Sub-No. 2).

EXECUTIVE MESSAGES REFERRED

As in executive session,
The ACTING PRESIDENT pro tempore (Mr. HASKELL) laid before the Senate messages from the President of the United States submitting sundry nominations, which were referred to the appropriate committees.

(The nominations received today are printed at the end of Senate proceedings.)

MESSAGE FROM THE HOUSE—ENROLLED BILL SIGNED

A message from the House of Representatives by Mr. Berry, one of its reading clerks, announced that the Speaker had affixed his signature to the enrolled bill (S. 37) to amend the Budget and Accounting Act, 1921, to require the advice and consent of the Senate for future appointments to the offices of Director and Deputy Director of the Office for Management and Budget, and for other purposes.

The enrolled bill was subsequently signed by the Acting President pro tempore (Mr. METCALF).

THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Friday, February 8, 1974, be dispensed with.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

WAIVER OF THE CALL OF THE CALENDAR

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the call of the Legislative Calendar, under rule VIII, be dispensed with.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

COMMITTEE MEETINGS DURING SENATE SESSION

Mr. MANSFIELD. Mr. President, I ask unanimous consent that all committees may be authorized to meet during the session of the Senate today.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

VACATING OF ACTION TAKEN ON FEBRUARY 8, 1974, ON S. 1017

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the action taken on Friday, February 8, 1974, on S. 1017, the Indian Self-Determination and Education Reform Act of 1973, be vacated and the bill be restored to its position on the Senate Calendar, with the understanding that the bill will be called up within 3 days.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

ORDER OF BUSINESS

The ACTING PRESIDENT pro tempore. Does the minority leader desire to be heard?

SENATOR AIKEN, DEAN OF THE SENATE, TO RETIRE

Mr. HUGH SCOTT. Mr. President, while we were in recess, one of our most distinguished, fair-minded, and perceptive colleagues, the senior Senator from Vermont (Mr. AIKEN)—a long-time personal friend and confidante of mine, to whom I have turned so often for advice—announced to the dismay of all of us that he would not seek reelection. This, indeed, is a deep loss to the U.S. Senate, to the people of the United States and to those of us who know him so well. But, as the Senator has said, he has much to do back home and this we understand.

We look forward to further volumes on his favorite source of joy and happiness, wild flowers in particular, and gardening and agriculture in general.

Mr. President, the people of Vermont and those throughout the land who have benefited from the wise judgments of Mr. AIKEN have shared this outstanding public servant for many years. I ask unanimous consent that newspaper articles from the Washington Post and the Washington Star-News noting the retirement of our colleague, after 34 years, be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the Washington Post]

SENATOR AIKEN IS RETIRING—DEAN OF SENATE RETURNING TO VERMONT FARM

(By William Greider)

George David Aiken, a gentle-spoken farmer who was kept from his orchard and wildflowers by 34 years in the United States Senate, announced yesterday that he is going home to Vermont for good.

Sen. Aiken is the dean of the Senate, the oldest member at 81, the senator with the longest service, the ranking Republican. He was first elected in 1940 when Franklin D. Roosevelt won his third term as President. "When I came to Washington," the senator said yesterday, "I left much unfinished work at home and I now want to get back to it."

He has already ordered some new varieties of nectarines for his orchard at Putney. He is counting the days—10 months, 14 days—until he leaves office. He will miss old friends, he said, but not Washington.

"I've never felt at home in Washington," he confessed. "No, no, Washington's not home. Home's up on the mountain in Vermont where I always lived."

Throughout his career, Aiken has been counted on the liberal side of his party, a strong advocate of agriculture, an early critic of the U.S. military adventure in Indochina. More than any issue or idea, however, Aiken has been known for his civility—an abiding sense of fairness and decency which over the years added a special influence to his opinions on the great issues.

Sen. Mike Mansfield, the Democratic floor leader, an old personal friend who breakfasts every morning with the Republican from Vermont, described the loss to the Senate:

"The nation will lose a great senator and will be the poorer because of the retirement of this rock of integrity, this independent New Englander, this son of Vermont, who has contributed so much to his state, the nation and a better world understanding."

The senator is a small man with a craggy face and wispy white hair which seem just right for the role he played in the Senate—a wise elder who eschewed partisan fights. Though he was an early and articulate critic of the war in Vietnam, Aiken often bridled when he thought the antiwar movement was turning the issue to political advantage.

"I've never gone in for partisanship," he said. "Probably never made more than 15 partisan speeches in my life. Get into a community and find out what their problems are. That's the best politics."

Aiken's impish style has enabled him to state pungently what others were merely thinking. Last November, when the Watergate crisis was in one of its periodic bubblings, Aiken warned the President's critics: "Either impeach or get off his back." Today that is a widely used expression.

Probably Aiken's best known remark is the one he never made. During the height of the Vietnam debate, he announced on Oct. 19, 1966, what became known in the popular shorthand as the Aiken peace plan: "The United States should declare victory and get out."

But that's not exactly what he said. His proposal was, indeed, that the U.S. should announce "victory" in its limited military objective of deterring North Vietnamese aggression—but that American forces should then be redeployed to defend strategic population centers. If the north did not respond with further attacks, Aiken said, then U.S. troops could begin their gradual withdrawal.

Aiken, who said Watergate and other controversies had nothing to do with his retirement decision, takes a long view of Washington and its continuing wrangles between Congress and the President.

"It was before I came here under Roosevelt that Congress began turning its authority over to the executive branch," he mused. "They did that for 25 years. Then three or four years ago, they began trying to take some of it back. That's an issue that will always be with us."

Before becoming a politician Aiken was a widely-regarded horticulturist, growing raspberries and other fruit in his Vermont nursery and propagating wild flowers for domestic cultivation. Trailing arbutus and fringed gentian—now old favorites for American gardeners—were first propagated for commercial distribution by him. His 1933 book, "Pioneering in Wild Flowers," is now back in print.

"It sold more last year than it did the first year it was out," the senator said proudly.

Aiken's expertise was derived from boyhood roaming of his Vermont hills. He never went to college. In 1936, after two terms in the state legislature, he left his nursery to become a fulltime public servant—governor of Vermont.

Even then, he had an aversion to partisan

politics. Gov. Aiken shocked his fellow Republicans with an open letter to the GOP National Committee, insisting that Republicans should stop calling FDR names and start making positive proposals.

Aiken is the sixth senator to announce his retirement this year. The others are Norris Cotton (R-N.H.), Wallace F. Bennett (R-Utah), Harold Hughes (D-Iowa), Sam J. Ervin Jr. (D-N.C.) and Alan Bible (D-Nev.).

In Vermont, Aiken's announcement produced immediate speculation about successors. Mentioned as likely Republican contenders are Rep. Richard W. Mallary, the state's congressman, and insurance executive Jack Fey of Montpelier.

Possible Democratic candidates include Gov. Thomas P. Salmon, whose term also ends this year, and former Gov. Phillip Hoff, who is now Democratic state chairman.

[From the Washington Star-News]

AIKEN, 81, GOING HOME TO VERMONT

(By Shirley Elder)

George D. Aiken, the wise old Republican in the Senate, plans to return to his first love, the orchards of his Vermont farm, after 33 years in Washington's political vineyards.

At 81, he is the oldest man in the Senate and the member with the longest service. In announcing his retirement, when his latest Senate term is up, Aiken said yesterday he will turn to work left undone on his farm when he came to Washington 33 years ago.

An old friend, Senate Democratic Leader Mike Mansfield, said the nation will be the poorer for the loss of this "rock of integrity, this independent New Englander, this son of Vermont who has contributed so much to his state, the nation and a better world understanding."

For years, Aiken and Mansfield have had breakfast together early each morning long before most Senate offices are open. They share common concerns, a deep bond of friendship and one outstanding trait: Neither wastes a word.

Rumpled and white-haired, Aiken is known for a dry wit and succinct wisdom. His words of advice, if not always heeded, are clearly understandable.

For instance, four years before the United States finally ended its involvement with the Vietnam war, Aiken offered a simple solution: Declare a military victory and stop fighting.

On the long, often bitter debate over Watergate and whether President Nixon should remain in office, Aiken advised one and all: "Impeach him, or get off his back."

Aiken is an old-fashioned man. No slick newsletters bombard his constituents with word of his good works. He seldom sends out a press release. He has no Vermont office, preferring trips north as often as possible to discuss problems directly with the home folks.

Still, Aiken was born to politics. There has been one member of every Aiken generation in public life since Deacon Edward Aiken settled in Vermont before the Revolutionary War. Aiken's father was in the state legislature and Aiken himself was first elected to the Vermont House in 1931.

In the next few years, he moved up swiftly in state politics, to speaker of the House, lieutenant governor and, finally, governor in 1937. His staff and old friends still address him as "governor."

During those same years, Aiken operated a nursery, pioneered in the commercial cultivation of wildflowers, and wrote books about them. He also has been a fruit farmer and was seen more than once selling his own apples from a stand at the edge of his orchards.

He was elected to the U.S. Senate in 1940 to fill a vacancy caused by the death of Sen. Ernest W. Gibson.

Re-elections have come easy. Aiken has

attracted little opposition, winning support from Democrats as well as Republicans. In 1968, with no one to challenge him, Aiken reported that he spent \$17.09 on his reelection campaign.

In the Senate, he has been a leader of the moderate Republicans, holding to an independent course in both Republican and Democratic administrations. His legislative work has centered on agriculture and foreign affairs.

He was one of the first senators to oppose the tactics of Sen. Joseph R. McCarthy in 1950. He has supported civil rights and opposed war. He fought successfully for the St. Lawrence Seaway and unsuccessfully for the Dickey-Lincoln federal power project.

He can claim large credit for the food stamp program—a logical way, he said, to assure that the nation's bountiful harvests leave no one hungry.

Aiken, the sixth senator to retire this year, will serve in the Senate until Jan. 3, 1975. He said he announced his resignation early "in fairness to the people of Vermont," to give others a chance to run for his seat.

At the top of the list of probable contenders is Vermont's lone congressman, Republican Richard W. Mallary, a 44-year-old dairy farmer who also served in the Vermont legislature as speaker of the House.

Democratic Gov. Thomas P. Salmon also is said to be interested in making the race. Earlier he said he would not run if Aiken did. Another possible GOP candidate is Charles Ross, a former member of the Federal Power Commission.

Mr. MANSFIELD. Mr. President, will the distinguished Senator from Pennsylvania yield?

Mr. HUGH SCOTT. I am delighted to yield.

Mr. MANSFIELD. Mr. President, there is no Member of this body for whom I have greater affection or greater respect than the distinguished senior Senator from Vermont. It was a sad day when Senator AIKEN announced that he would not be a candidate for reelection. I say this on a somewhat personal basis, but I also say it because of the work which he has done in this Chamber down through the years during which I have been a Member of the Senate.

Senator AIKEN is a man of outstanding integrity and unquestioned patriotism, a man of independence, a man who represents, to me, what I was led to believe, in my younger days, is the characteristic of all New Englanders. He is, in a sense, a reminder of the glorious past, because of the things which he stands for and the fierce independence which he has displayed. He is just as young as any of us in this Chamber, or in the country, as far as ideas are concerned, because he keeps up with them, and is ahead of us most of the time.

So it was with deep regret—very deep regret—that I received the news that Senator AIKEN had decided to retire. I wish he had not. I know there is still time for him to reconsider. But knowing GEORGE AIKEN as I do, I know that "this is it." But it will be for us a loss, for the Nation a loss, and for the world a loss—and for those of us in this Chamber, the Senate's loss.

Mr. HUGH SCOTT. Mr. President, I thank the distinguished majority leader.

Few people have made more pungent statements than has the distinguished Senator from Vermont. We remember

him for many reasons, such as his statement that "we should declare a victory in Vietnam and get out"; and to "get on with the job or get off his back." Senator AIKEN has said so many things in so few words, words which it would take volumes for us to enunciate.

He is a man whom we all love, whom we all honor. I am so sorry that he has made this decision. I am sure that he will find happiness and irenic satisfaction in the pursuit of all those matters which are of interest to him. We extend to him and to his beloved wife, Lola, the very best wishes of all of us in the Senate.

Mr. MATHIAS. Mr. President, will the distinguished Senator from Pennsylvania yield?

Mr. HUGH SCOTT. I yield.

Mr. MATHIAS. I merely wish to say to the Senate, as I have already said to Senator AIKEN personally, that I hope in the years ahead, when he is relieved of his official responsibilities to the Senate, he will sleep more soundly, but that the rest of us in the Senate will sleep less soundly.

Mr. HUGH SCOTT. I thank the Senator from Maryland.

I now yield to the distinguished Senator from Nebraska.

Mr. CURTIS. Mr. President, I should like to join with other Senators in expressing our gratitude for the long and excellent service of our friend, Senator AIKEN, and to wish him the very, very best in all the days ahead.

Mr. AIKEN. Mr. President, may I say a word?

Mr. HUGH SCOTT. Mr. President, it is a great pleasure to yield to the distinguished Senator from Vermont, the dean of the Senate.

Mr. AIKEN. Mr. President, it was many years ago that I said that two of the most important hours in the Senate were the eulogy hour and the alibi hour. At that time I never expected to be the object of the eulogy hour myself.

I had no idea that my leaders would talk as they have been doing—but now that they have spoken, I want to thank Senators SCOTT, MANSFIELD, CURTIS, and MATHIAS for their remarks.

I will say that I took some satisfaction in making the announcement on last Thursday that I would not be a candidate for reelection because, to the best of my knowledge, it is the only news that has gone out of Washington for a long time that has not been leaked in advance. [Laughter.]

I do intend to carry on my work here until the 3d of next January. It will leave me just 1 week short of 34 years service in the Senate. You know, one can create a lot of difficulties for a lot of people in the 10 months I have remaining but my suggestion to others has been, "Be sure you make trouble for the right people." [Laughter.]

ORDER OF BUSINESS

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that following the reading of Washington's Farewell Address, the junior Senator from West Virginia (Mr. ROBERT C. BYRD) be recog-

nized and then the distinguished Senator from Michigan (Mr. GRIFFIN) be recognized, which will be in reverse order to that which was ordered last week.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that my time be allotted to the distinguished senior Senator from West Virginia (Mr. RANDOLPH), that 5 minutes of the time allotted to Mr. GRIFFIN be allotted to Mr. RANDOLPH, and that the remaining 10 minutes under the order for the recognition of Mr. GRIFFIN be allotted to the distinguished senior Senator from North Carolina (Mr. HELMS).

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

NO-FAULT INSURANCE BILL TO BE PLACED ON THE CALENDAR TODAY

Mr. MANSFIELD. Mr. President, it is my understanding that, by order of the Senate, the no-fault insurance bill will go to the Calendar today.

It is also my understanding that negotiations are now underway that may give the Committee on the Judiciary a little more time to consider the matter. I note this for the record, pending the outcome of these discussions.

READING OF WASHINGTON'S FAREWELL ADDRESS

The ACTING PRESIDENT pro tempore. The Chair, on behalf of the Vice President, pursuant to the order of the Senate of January 24, 1901, as modified February 1, 1974, appoints the Senator from Iowa (Mr. HUGHES) in lieu of the Senator from Alabama (Mr. ALLEN), to read Washington's Farewell Address.

Under the order of the Senate of January 24, 1901, as amended, the Senator from Iowa (Mr. HUGHES), having been appointed by the Vice President, will now read Washington's Farewell Address.

Mr. HUGHES, at the Secretary's desk, read the Farewell Address, as follows:

To the people of the United States.

FRIENDS AND FELLOW CITIZENS: The period for a new election of a citizen to administer the executive government of the United States being not far distant, and the time actually arrived when your thoughts must be employed in designating the person who is to be clothed with that important trust, it appears to me proper, especially as it may conduce to a more distinct expression of the public voice, that I should now apprise you of the resolution I have formed, to decline being considered among the number of those, out of whom a choice is to be made.

I beg you, at the same time, to do me the justice to be assured, that this resolution has not been taken, without a strict regard to all the considerations appertaining to the relation which binds a dutiful citizen to his country; and that, in withdrawing the tender of service which silence in my situation might imply, I am influenced by no diminution of zeal for your future interest; no defi-

ciency of grateful respect for your past kindness; but am supported by a full conviction that the step is compatible with both.

The acceptance of, and continuance hitherto in the office to which your suffrages have twice called me, have been a uniform sacrifice of inclination to the opinion of duty, and to a deference for what appeared to be your desire. I constantly hoped that it would have been much earlier in my power, consistently with motives which I was not at liberty to disregard, to return to that retirement from which I had been reluctantly drawn. The strength of my inclination to do this, previous to the last election, had even led to the preparation of an address to declare it to you; but mature reflection on the then perplexed and critical posture of our affairs with foreign nations, and the unanimous advice of persons entitled to my confidence, impelled me to abandon the idea.

I rejoice that the state of your concerns, external as well as internal, no longer renders the pursuit of inclination incompatible with the sentiment of duty or propriety; and am persuaded, whatever partiality may be retained for my services, that in the present circumstances of our country, you will not disapprove my determination to retire.

The impressions with which I first undertook the arduous trust, were explained on the proper occasion. In the discharge of this trust, I will only say that I have, with good intentions, contributed towards the organization and administration of the government, the best exertions of which a very fallible judgment was capable. Not unconscious in the outset, of the inferiority of my qualifications, experience, in my own eyes, perhaps still more in the eyes of others, has strengthened the motives to diffidence of myself; and, every day, the increasing weight of years admonishes me more and more, that the shade of retirement is as necessary to me as it will be welcome. Satisfied that if any circumstances have given peculiar value to my services they were temporary, I have the consolation to believe that, while choice and prudence invite me to quit the political scene, patriotism does not forbid it.

In looking forward to the moment which is to terminate the career of my political life, my feelings do not permit me to suspend the deep acknowledgment of that debt of gratitude which I owe to my beloved country, for the many honors it has conferred upon me; still more for the steadfast confidence with which it has supported me; and for the opportunities I have thence enjoyed of manifesting my inviolable attachment, by services faithful and persevering, though in usefulness unequal to my zeal. If benefits have resulted to our country from these services, let it always be remembered to your praise, and as an instructive example in our annals, that under circumstances in which the passions, agitated in every direction, were liable to mislead amidst appearances sometimes dubious, vicissitudes of fortune often discouraging—in situations in which not unfrequently, want of suc-

cess has countenanced the spirit of criticism—the constancy of your support was the essential prop of the efforts, and a guarantee of the plans, by which they were effected. Profoundly penetrated with this idea, I shall carry it with me to my grave, as a strong incitement to unceasing vows that heaven may continue to you the choicest tokens of its beneficence—that your union and brotherly affection may be perpetual—that the free constitution, which is the work of your hands, may be sacredly maintained—that its administration in every department may be stamped with wisdom and virtue—that, in fine, the happiness of the people of these states, under the auspices of liberty, may be made complete by so careful a preservation, and so prudent a use of this blessing, as will acquire to them the glory of recommending it to the applause, the affection and adoption of every nation which is yet a stranger to it.

Here, perhaps, I ought to stop. But a solicitude for your welfare, which cannot end but with my life, and the apprehension of danger, natural to that solicitude, urge me, on an occasion like the present, to offer to your solemn contemplation, and to recommend to your frequent review, some sentiments which are the result of much reflection, of no inconsiderable observation, and which appear to me all important to the permanency of your felicity as a people. These will be offered to you with the more freedom, as you can only see in them the disinterested warnings of a parting friend, who can possibly have no personal motive to bias his counsel. Nor can I forget, as an encouragement to it, your indulgent reception of my sentiments on a former and not dissimilar occasion.

Interwoven as is the love of liberty with every ligament of your hearts, no recommendation of mine is necessary to fortify or confirm the attachment.

The unity of government which constitutes you one people, is also now dear to you. It is justly so; for it is a main pillar in the edifice of your real independence; the support of your tranquillity at home; your peace abroad; of your safety; of your prosperity; of that very liberty which you so highly prize. But, as it is easy to foresee that, from different causes and from different quarters much pains will be taken, many artifices employed, to weaken in your minds the conviction of this truth; as this is the point in your political fortress against which the batteries of internal and external enemies will be most constantly and actively (though often covertly and insidiously) directed; it is of infinite moment, that you should properly estimate the immense value of your national union to your collective and individual happiness; that you should cherish a cordial, habitual, and immovable attachment to it; accustoming yourselves to think and speak of it as of the palladium of your political safety and prosperity; watching for its preservation with jealous anxiety; discountenancing whatever may suggest even a suspicion that it can, in any event, be abandoned; and indignantly frowning upon the first dawning of every attempt to alienate any portion

of our country from the rest, or to enfeeble the sacred ties which now link together the various parts.

For this you have every inducement of sympathy and interest. Citizens by birth, or choice, of a common country, that country has a right to concentrate your affections. The name of American, which belongs to you in your national capacity, must always exalt the just pride of patriotism, more than any appellation derived from local discriminations. With slight shades of difference, you have the same religion, manners, habits, and political principles. You have, in a common cause, fought and triumphed together; the independence and liberty you possess, are the work of joint councils, and joint efforts, of common dangers, sufferings and successes.

But these considerations, however powerfully they address themselves to your sensibility, are greatly outweighed by those which apply more immediately to your interest.—Here, every portion of our country finds the most commanding motives for carefully guarding and preserving the union of the whole.

The *north*, in an unrestrained intercourse with the *south*, protected by the equal laws of a common government, finds in the productions of the latter, great additional resources of maritime and commercial enterprise, and precious materials of manufacturing industry.—The *south* in the same intercourse, benefiting by the same agency of the *north*, sees its agriculture grow and its commerce expand. Turning partly into its own channels the seamen of the *north*, it finds its particular navigation invigorated; and while it contributes, in different ways, to nourish and increase the general mass of the national navigation, it looks forward to the protection of a maritime strength, to which itself is unequally adapted. The *east*, in a like intercourse with the *west*, already finds, and in the progressive improvement of interior communications by land and water, will more and more find a valuable vent for the commodities which it brings from abroad, or manufactures at home. The *west* derives from the *east* supplies requisite to its growth and comfort—and what is perhaps of still greater consequence, it must of necessity owe the secure enjoyment of indispensable outlets for its own productions, to the weight, influence, and the future maritime strength of the Atlantic side of the Union, directed by an indissoluble community of interest as *one nation*. Any other tenure by which the *west* can hold this essential advantage, whether derived from its own separate strength; or from an apostate and unnatural connection with any foreign power, must be intrinsically precarious.

While then every part of our country thus feels an immediate and particular interest in union, all the parts combined cannot fail to find in the united mass of means and efforts, greater strength, greater resource, proportionably greater security from external danger, a less frequent interruption of their peace by foreign nations; and, what is of inestimable value, they must derive from union, an exemption from those

broils and wars between themselves, which so frequently afflict neighboring countries not tied together by the same government; which their own rivalry alone would be sufficient to produce, but which opposite foreign alliances, attachments, and intrigues, would stimulate and embitter.—Hence likewise, they will avoid the necessity of those overgrown military establishments, which under any form of government are inauspicious to liberty, and which are to be regarded as particularly hostile to republican liberty. In this sense it is, that your union ought to be considered as the main prop of your liberty, and that the love of the one ought to endear to you the preservation of the other.

These considerations speak a persuasive language to every reflecting and virtuous mind and exhibit the continuance of the union as a primary object of patriotic desire. Is there a doubt whether a common government can embrace so large a sphere? Let experience solve it. To listen to mere speculation in such a case were criminal. We are authorized to hope that a proper organization of the whole, with the auxiliary agency of governments for the respective subdivisions, will afford a happy issue to the experiment. It is well worth a fair and full experiment. With such powerful and obvious motives to union, affecting all parts of our country, while experience shall not have demonstrated its impracticability, there will always be reason to distrust the patriotism of those who, in any quarter, may endeavor to weaken its hands.

In contemplating the causes which may disturb our Union, it occurs as matter of serious concern, that any ground should have been furnished for characterizing parties by *geographical* discriminations,—*northern* and *southern*—*Atlantic* and *western*; whence designing men may endeavor to excite a belief that there is a real difference of local interests and views. One of the expedients of party to acquire influence within particular districts, is to misrepresent the opinions and aims of other districts. You cannot shield yourselves too much against the jealousies and heart burnings which spring from these misrepresentations; they tend to render alien to each other those who ought to be bound together by fraternal affection. The inhabitants of our western country have lately had a useful lesson on this head: they have seen, in the negotiation by the executive, and in the unanimous ratification by the senate of the treaty with Spain, and in the universal satisfaction at the event throughout the United States, a decisive proof how unfounded were the suspicions propagated among them of a policy in the general government and in the Atlantic states, unfriendly to their interests in regard to the Mississippi. They have been witnesses to the formation of two treaties, that with Great Britain and that with Spain, which secure to them everything they could desire, in respect to our foreign relations, towards confirming their prosperity. Will it not be their wisdom to rely for the preservation of these advantages on the union by which they

were procured? will they not henceforth be deaf to those advisers, if such they are, who would sever them from their brethren and connect them with aliens?

To the efficacy and permanency of your Union, a government for the whole is indispensable. No alliances, however strict, between the parts can be an adequate substitute: they must inevitably experience the infractions and interruptions which all alliances, in all times, have experienced. Sensible of this momentous truth, you have improved upon your first essay, by the adoption of a constitution of government, better calculated than your former, for an intimate union, and for the efficacious management of your common concerns. This government, the offspring of our own choice, uninfluenced and unawed, adopted upon full investigation and mature deliberation, completely free in its principles, in the distribution of its powers, uniting security with energy, and containing within itself a provision for its own amendment, has a just claim to your confidence and your support. Respect for its authority, compliance with its laws, acquiescence in its measures, are duties enjoined by the fundamental maxims of true liberty. The basis of our political systems is the right of the people to make and to alter their constitutions of government.—But the constitution which at any time exists, until changed by an explicit and authentic act of the whole people, is sacredly obligatory upon all. The very idea of the power and the right of the people to establish government, presupposes the duty of every individual to obey the established government.

All obstructions to the execution of the laws, all combinations and associations under whatever plausible character, with the real design to direct, control, counteract, or awe the regular deliberations and action of the constituted authorities, are destructive of this fundamental principle, and of fatal tendency.—They serve to organize faction, to give it an artificial and extraordinary force, to put in the place of the delegated will of the nation the will of party, often a small but artful and enterprising minority of the community; and, according to the alternate triumphs of different parties, to make the public administration the mirror of the ill concerted and incongruous projects of faction, rather than the organ of consistent and wholesome plans digested by common councils, and modified by mutual interests.

However combinations or associations of the above description may now and then answer popular ends, they are likely, in the course of time and things, to become potent engines, by which cunning, ambitious, and unprincipled men, will be enabled to subvert the power of the people, and to usurp for themselves the reins of government; destroying afterwards the very engines which have lifted them to unjust dominion.

Towards the preservation of your government and the permanency of your present happy state it is requisite, not only, that you steadily discountenance irregular opposition to its acknowledged authority, but also that you resist with

care the spirit of innovation upon its principles, however specious the pretext. One method of assault may be to effect, in the forms of the constitution, alterations which will impair the energy of the system; and thus to undermine what cannot be directly overthrown. In all the changes to which you may be invited, remember that time and habit are at least as necessary to fix the true character of governments, as of other human institutions:—that experience is the surest standard by which to test the real tendency of the existing constitution of a country:—that facility in changes, upon the credit of mere hypothesis and opinion, exposes to perpetual change from the endless variety of hypothesis and opinion: and remember, especially, that for the efficient management of your common interests in a country so extensive as ours, a government of as much vigor as is consistent with the perfect security of liberty is indispensable. Liberty itself will find in such a government with powers properly distributed and adjusted, its surest guardian. It is, indeed, little else than a name, where the government is too feeble to withstand the enterprises of faction, to confine each member of the society within the limits prescribed by the laws, and to maintain all in the secure and tranquil enjoyment of the rights of person and property.

I have already intimated to you the danger of parties in the state, with particular references to the founding them on geographical discrimination. Let me now take a more comprehensive view, and warn you in the most solemn manner against the baneful effects of the spirit of party generally.

This spirit, unfortunately, is inseparable from our nature, having its root in the strongest passions of the human mind.—It exists under different shapes in all governments, more or less stifled, controlled, or repressed; but in those of the popular form it is seen in its greatest rankness, and is truly their worst enemy.

The alternate domination of one faction over another, sharpened by the spirit of revenge natural to party dissension, which in different ages and countries has perpetrated the most horrid enormities, is itself a frightful despotism. But this leads at length to a more formal and permanent despotism. The disorders and miseries which result, gradually incline the minds of men to seek security and repose in the absolute power of an individual; and, sooner or later, the chief of some prevailing faction, more able or more fortunate than his competitors, turns this disposition to the purpose of his own elevation on the ruins of public liberty.

Without looking forward to an extremity of this kind, (which nevertheless ought not to be entirely out of sight) the common and continual mischiefs of the spirit of party are sufficient to make it the interest and duty of a wise people to discourage and restrain it.

It serves always to distract the public councils, and enfeeble the public administration. It agitates the community with ill founded jealousies and false alarms; kindles the animosity of one part against another; foment occasional riot

and insurrection. It opens the door to foreign influence and corruption, which finds a facilitated access to the government itself through the channels of party passions. Thus the policy and the will of one country are subjected to the policy and will of another.

There is an opinion that parties in free countries are useful checks upon the administration of the government, and serve to keep alive the spirit of liberty. This within certain limits is probably true; and in governments of a monarchical cast, patriotism may look with indulgence, if not with favor, upon the spirit of party. But in those of the popular character, in governments purely elective, it is a spirit not to be encouraged. From their natural tendency, it is certain there will always be enough of that spirit for every salutary purpose. And there being constant danger of excess, the effort ought to be, by force of public opinion, to mitigate and assuage it. A fire not to be quenched, it demands a uniform vigilance to prevent it bursting into a flame, lest instead of warming, it should consume.

It is important likewise, that the habits of thinking in a free country should inspire caution in those intrusted with its administration, to confine themselves within their respective constitutional spheres, avoiding in the exercise of the powers of one department, to encroach upon another. The spirit of encroachment tends to consolidate the powers of all the departments in one and thus to create, whatever the form of government, a real despotism. A just estimate of that love of power and proneness to abuse it which predominate in the human heart, is sufficient to satisfy us of the truth of this position. The necessity of reciprocal checks in the exercise of political power, by dividing and distributing it into different depositories, and constituting each the guardian of the public weal against invasions of the others, has been evinced by experiments ancient and modern: some of them in our country and under our own eyes.—To preserve them must be as necessary as to institute them. If, in the opinion of the people, the distribution or modification of the constitutional powers be in any particular wrong, let it be corrected by an amendment in the way which the constitution designates.—But let there be no change by usurpation; for though this, in one instance, may be the instrument of good, it is the customary weapon by which free governments are destroyed. The precedent must always greatly overbalance in permanent evil any partial or transient benefit which the use can at any time yield.

Of all the dispositions and habits which lead to political prosperity, religion and morality are indispensable supports. In vain would that man claim the tribute of patriotism, who should labor to subvert these great pillars of human happiness, these firmest props of the duties of men and citizens. The mere politician, equally with the pious man, ought to respect and to cherish them. A volume could not trace all their connections with private and public felicity. Let it simply be asked, where is the security for prop-

erty, for reputation, for life, if the sense of religious obligation desert the oaths which are the instruments of investigation in courts of justice? and let us with caution indulge the supposition that morality can be maintained without religion. Whatever may be conceded to the influence of refined education on minds of peculiar structure, reason and experience both forbid us to expect, that national morality can prevail in exclusion of religious principle.

It is substantially true, that virtue or morality is a necessary spring of popular government. The rule, indeed, extends with more or less force to every species of free government. Who that is a sincere friend to it can look with indifference upon attempts to shake the foundation of the fabric?

Promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it should be enlightened.

As a very important source of strength and security, cherish public credit. One method of preserving it is to use it as sparingly as possible, avoiding occasions of expense by cultivating peace, but remembering, also, that timely disbursements, to prepare for danger, frequently prevent much greater disbursements to repel it; avoiding likewise the accumulation of debt, not only by shunning occasions of expense, but by vigorous exertions, in time of peace, to discharge the debts which unavoidable wars may have occasioned, not ungenerously throwing upon posterity the burden which we ourselves ought to bear. The execution of these maxims belongs to your representatives, but it is necessary that public opinions should co-operate. To facilitate to them the performance of their duty, it is essential that you should practically bear in mind, that towards the payment of debts there must be revenue; that to have revenue there must be taxes; that no taxes can be devised which are not more or less inconvenient and unpleasant; that the intrinsic embarrassment inseparable from the selection of the proper object (which is always a choice of difficulties,) ought to be a decisive motive for a candid construction of the conduct of the government in making it, and for a spirit of acquiescence in the measures for obtaining revenue, which the public exigencies may at any time dictate.

Observe good faith and justice toward all nations; cultivate peace and harmony with all. Religion and morality enjoin this conduct, and can it be that good policy does not equally enjoin it? It will be worthy of a free, enlightened, and, at no distant period, a great nation, to give to mankind the magnanimous and too novel example of a people always guided by an exalted justice and benevolence. Who can doubt but, in the course of time and things, the fruits of such a plan would richly repay any temporary advantages which might be lost by a steady adherence to it; can it be that Providence has not connected the permanent felicity of a nation with its virtue? The experiment, at least, is recommended by

every sentiment which ennobles human nature. Alas! is it rendered impossible by its vices?

In the execution of such a plan, nothing is more essential than that permanent, inveterate antipathies against particular nations and passionate attachments for others, should be excluded; and that, in place of them, just and amicable feelings towards all should be cultivated. The nation which indulges towards another an habitual hatred, or an habitual fondness is in some degree a slave. It is a slave to its animosity or to its affection, either of which is sufficient to lead it astray from its duty and its interest. Antipathy in one nation against another disposes each more readily to offer insult and injury, to lay hold of slight causes of umbrage, and to be haughty and intractable when accidental or trifling occasions of dispute occur. Hence, frequent collisions, obstinate, envenomed, and bloody contests. The nation, prompted by ill will and resentment, sometimes impels to war the government, contrary to the best calculations of policy. The government sometimes participates in the national propensity, and adopts through passion what reason would reject; at other times, it makes the animosity of the nation subservient to projects of hostility, instigated by pride, ambition, and other sinister and pernicious motives. The peace often, sometimes perhaps the liberty of nations, has been the victim.

So likewise, a passionate attachment of one nation for another produces a variety of evils. Sympathy for the favorite nation, facilitating the illusion of an imaginary common interest; in cases where no real common interest exists, and infusing into one the enmities of the other, betrays the former into a participation in the quarrels and wars of the latter, without adequate inducements or justifications. It leads also to concessions, to the favorite nation, of privileges denied to others, which is apt doubly to injure the nation making the concessions, by unnecessary parting with what ought to have been retained, and by exciting jealousy, ill will, and a disposition to retaliate in the parties from whom equal privileges are withheld; and it gives to ambitious, corrupted or deluded citizens who devote themselves to the favorite nation, facility to betray or sacrifice the interests of their own country, without odium, sometimes even with popularity; gilding with the appearances of a virtuous sense of obligation, a commendable deference for public opinion, or a laudable zeal for public good, the base or foolish compliances of ambition, corruption, or infatuation.

As avenues to foreign influence in innumerable ways, such attachments are particularly alarming to the truly enlightened and independent patriot. How many opportunities do they afford to tamper with domestic factions, to practice the arts of seduction, to mislead public opinion, to influence or awe the public councils!—Such an attachment of a small or weak, towards a great and powerful nation, dooms the former to be the satellite of the latter.

Against the insidious wiles of foreign influence, (I conjure you to believe me fellow citizens) the jealousy of a free people ought to be constantly awake; since history and experience prove, that foreign influence is one of the most baneful foes of republican government. But that jealousy, to be useful, must be impartial, else it becomes the instrument of the very influence to be avoided, instead of a defense against it. Excessive partiality for one foreign nation and excessive dislike for another, cause those whom they actuate to see danger only on one side, and serve to veil and even second the arts of influence on the other. Real patriots, who may resist the intrigues of the favorite, are liable to become suspected and odious; while its tools and dupes usurp the applause and confidence of the people, to surrender their interests.

The great rule of conduct for us, in regard to foreign nations, is, in extending our commercial relations, to have with them as little political connection as possible. So far as we have already formed engagements, let them be fulfilled with perfect good faith:—Here let us stop.

Europe has a set of primary interests, which to us have none, or a very remote relation. Hence, she must be engaged in frequent controversies, the causes of which are essentially foreign to our concerns. Hence, therefore, it must be unwise in us to implicate ourselves, by artificial ties, in the ordinary vicissitudes of her politics, or the ordinary combinations and collisions of her friendships or enmities.

Our detached and distant situation invites and enables us to pursue a different course. If we remain one people, under an efficient government, the period is not far off when we may defy material injury from external annoyance; when we may take such an attitude as will cause the neutrality we may at any time resolve upon, to be scrupulously respected; when belligerent nations, under the impossibility of making acquisitions upon us, will not lightly hazard the giving us provocation, when we may choose peace or war, as our interest, guided by justice, shall counsel.

Why forego the advantages of so peculiar a situation? Why quit our own to stand upon foreign ground? Why, by interweaving our destiny with that of any part of Europe, entangle our peace and prosperity in the toils of European ambition, rivalry, interest, humor, or caprice?

It is our true policy to steer clear of permanent alliance with any portion of the foreign world; so far, I mean, as we are now at liberty to do it; for let me not be understood as capable of patronizing infidelity to existing engagements. I hold the maxim no less applicable to public than private affairs, that honesty is always the best policy. I repeat it, therefore, let those engagements be observed in their genuine sense. But in my opinion, it is unnecessary, and would be unwise to extend them.

Taking care always to keep ourselves by suitable establishments, on a respectable defensive posture, we may

safely trust to temporary alliances for extraordinary emergencies.

Harmony, and a liberal intercourse with all nations, are recommended by policy, humanity, and interest. But even our commercial policy should hold an equal and impartial hand; neither seeking nor granting exclusive favors or preferences; consulting the natural course of things; diffusing and diversifying by gentle means the streams of commerce, but forcing nothing; establishing with powers so disposed, in order to give trade a stable course, to define the rights of our merchants, and to enable the government to support them, conventional rules of intercourse, the best that present circumstances and mutual opinion will permit, but temporary, and liable to be from time to time abandoned or varied as experience and circumstances shall dictate; constantly keeping in view, that it is folly in one nation to look for disinterested favors from another; that it must pay with a portion of its independence for whatever it may accept under that character; that by such acceptance, it may place itself in the condition of having given equivalents for nominal favors, and yet of being reproached with ingratitude for not giving more. There can be no greater error than to expect, or calculate upon real favors from nation to nation. It is an illusion which experience must cure, which a just pride ought to discard.

In offering to you, my countrymen, these counsels of an old and affectionate friend, I dare not hope they will make the strong and lasting impression I could wish; that they will control the usual current of the passions, or prevent our nation from running the course which has hitherto marked the destiny of nations, but if I may even flatter myself that they may be productive of some partial benefit, some occasional good; that they may now and then recur to moderate the fury of party spirit, to warn against the mischiefs of foreign intrigue, to guard against the impostures of pretended patriotism; this hope will be a full recompense for the solicitude for your welfare by which they have been dictated.

How far, in the discharge of my official duties, I have been guided by the principles which have been delineated, the public records and other evidences of my conduct must witness to you and to the world. To myself, the assurance of my own conscience is, that I have, at least, believed myself to be guided by them.

In relation to the still subsisting war in Europe, my proclamation of the 22d of April, 1793, is the index to my plan. Sanctioned by your approving voice, and by that of your representatives in both houses of congress, the spirit of that measure has continually governed me, uninfluenced by any attempts to deter or divert me from it.

After deliberate examination, with the aid of the best lights I could obtain, I was well satisfied that our country, under all the circumstances of the case, had a right to take, and was bound, in duty and interest, to take a neutral position. Having taken it, I determined, as far as should depend upon me, to main-

tain it with moderation, perseverance and firmness.

The considerations which respect the right to hold this conduct, it is not necessary on this occasion to detail. I will only observe that, according to my understanding of the matter, that right, so far from being denied by any of the belligerent powers, has been virtually admitted by all.

The duty of holding a neutral conduct may be inferred, without any thing more, from the obligation which justice and humanity impose on every nation, in cases in which it is free to act, to maintain inviolate the relations of peace and amity towards other nations.

The inducements of interest for observing that conduct will best be referred to your own reflections and experience. With me, a predominant motive has been to endeavor to gain time to our country to settle and mature its yet recent institutions, and to progress, without interruption, to that degree of strength, and consistency which is necessary to give it, humanly speaking, the command of its own fortunes.

Though in reviewing the incidents of my administration, I am unconscious of intentional error, I am nevertheless too sensible of my defects not to think it probable that I may have committed many errors. Whatever they may be, I fervently beseech the Almighty to avert or mitigate the evils to which they may tend. I shall also carry with me the hope that my country will never cease to view them with indulgence; and that, after forty-five years of my life dedicated to its service, with an upright zeal, the faults of incompetent abilities will be consigned to oblivion, as myself must soon be to the mansions of rest.

Relying on its kindness in this as in other things, and actuated by that fervent love towards it, which is so natural to a man who views in it the native soil of himself and his progenitors for several generations; I anticipate with pleasing expectation that retreat in which I promise myself to realize, without alloy, the sweet enjoyment of partaking, in the midst of my fellow citizens, the benign influence of good laws under a free government—the ever favorite object of my heart, and the happy reward, as I trust, of our mutual cares, labors and dangers.

GEO. WASHINGTON.

UNITED STATES,
17th September, 1796.

Mr. GOLDWATER. Mr. President, I commend our distinguished colleague from Iowa for the superb manner in which he read Washington's Farewell Address.

I was once privileged to perform the same duty. I know that it is most difficult to read. Some of the sentences that George Washington wrote are paragraphs in themselves.

I have been in this body for many years, and I can truthfully say that I have never heard it done better than it was done by Senator HUGHES today.

Mr. METCALF. Mr. President, I, too, want to commend the Senator from Iowa. I had the privilege to read the Washington's birthday address twice, once as a Member of the House of Rep-

representatives and once as a Member of the Senate. I realize how difficult it is. Many of the sentences contain as many as four, five, and six clauses; sometimes you run out of breath before you can complete a sentence. Yet, in that beautiful voice of the Senator from Iowa and with his composure and presence, he has read it in a way that is most impressive, and again reminded us of our need for remembering the beautiful words and the wonderful inspiration that Washington's Farewell Address can provide for all of us in the Senate.

Mr. MANSFIELD. Mr. President, I join with my colleagues in commending the distinguished Senator from Iowa for the effective way in which he presented to the Senate Washington's Farewell Address to the people of the United States. Even though this address was written in 1796, much that is contained in it would, could, or should be applicable to the situations which confront this Nation today. From a narrow range of interests, today we have achieved, hopefully, a time of maturity; but I remind my fellow Senators that it would be good for us to take home a copy of the Farewell Address, study it, and consider what the first President of this Republic, the Father of his Country, had to say so many years ago, and how applicable so much of what he said then is today.

The ACTING PRESIDENT pro tempore (Mr. HASKELL). Under the previous order, the Senator from West Virginia (Mr. RANDOLPH) is recognized for not to exceed 20 minutes.

GEORGE WASHINGTON OVERCAME SEVERE OBSTACLES IN THE STRUGGLE FOR FREEDOM

Mr. RANDOLPH. Mr. President, I, too, wish to commend our esteemed colleague, the Senator from Iowa (Mr. HUGHES) for the moving manner in which he read the Farewell Address of George Washington. The first President of our Republic reflected on his years of service and admonished the people who were to read his words of wisdom.

I remind the Members and our guests that there was a feeling that the preparation, in part, of that farewell address had been the joint work of Hamilton and Madison. In reality the final preparation of the message was done in long-hand by George Washington. It carried the imprint of the President himself. So, although he had assistance in its preparation, the words of the address were truly the words of George Washington.

Mr. President, I, too, had the opportunity, in 1962, to read this address in the Senate and I have asked for this time to review some of the hardships which General Washington and some who stood with him, endured 20 years before this farewell address of September 17, 1796, was published. It is to this period of 1776, particularly the December of that year, that I want to talk rather quietly, yet very earnestly of the problems, almost insurmountable, which were faced by George Washington.

In my research on our first President, I have been assisted by Virginia Krog, a friend and neighbor. She served several

years with the State Department and has long been an avid student of American history, particularly the life and times of George Washington.

As we navigate our ship of state through troubled waters today we certainly need to understand the hardships experienced by George Washington then, and the thoughts he expressed in those days, when he was not the President of the United States but the leader of a little band of men who were torn asunder, often by disease, even disaffection. It is of that period that I speak.

Let us remember also that in those days of 1776, we were not a united people in our desire or determination to become a new nation. Only one-third of our population believed that we should bring into being a new republic—one-third believed that we should remain under British rule. Perhaps more significantly than the two-thirds of which I speak, was that one-third of the people who had no opinion whatsoever. It did not matter too much to them which side was to prevail.

In a sense, these are the conditions we face today and have faced during other periods of our country's history.

I listened today, as Senator HUGHES read the Farewell Address, to those words of Washington when he said,

Citizens by birth, or choice, of a common country, that country has the right to concentrate your affections.

Let us review now the dire distress of George Washington as general of our Continental Army in December of 1776. He made desperate pleas again and again to the Continental Congress in Philadelphia. He pleaded for men. He pleaded for supplies. He pleaded for a thousand men to join him, to restore a semblance of strength to an army that needed rebuilding. Only 100 raw recruits responded.

How precise was Washington?

He pleaded for "261 pairs of pants." People may smile today when that statement is made, but he had documented exactly the number of men who could not stand muster because they had no trousers. Of 8, 10, 12 men living in a small tent or a hut, often only 1 was able to answer the rollcall.

Sometimes today, when we find billions and billions of dollars in cost overruns in our delivery of military equipment, we should recall the preciseness—I use that word again—with which Washington knew the needs in 1776.

Yes, Mr. President, the dark picture becomes very clear. Dr. Thatcher, assigned to the Virginia Regiment at Valley Forge, wrote that often just one man among dozens and dozens of soldiers could stand muster. So 261 pairs of pants became a very real need to George Washington as he pled for that supply.

General Mercer, on the eve of Trenton, talked about the staff hospital. It was not truly a hospital, it was a so-called hospital. He wrote—

We have no medicine. We have no food. We have not a bandage fit to be used.

"We have," he concluded, "three blankets." Three blankets, my colleagues, that was all.

Washington, when he was 10 miles above the Falls of the Delaware River was thinking to himself, I am sure at night as well as during the day, "What am I to do? Will there be a deliverance? What course shall I follow on the morrow?"

So, often he wrote his thoughts in his own diary and addressed them to friends and relatives because it was an outpouring, really, of his soul as he talked with others through his pen.

It was on December 17, 1776, that he wrote to Lund Washington—20 years before his Farewell Address which has been read today. That letter was to be like many letters—he said:

Your imagination can scarce extend to a situation more distressing than mine.

Today I suggest we look back and remember the trials of Washington in 1776 when we are asked to dim the light, when we are requested to lessen the speed, when we are asked to lower the thermostat. Let us remember in this period—the affluent period of this country and its people—of the hardships in the beginning years of this country's history.

Colonel Reed was perhaps the most devoted and dedicated of these officers who served under George Washington. He admired his superior officer. On December 22, 1776, he wrote to George Washington these words:

Our cause is desperate and hopeless. If we do not take the opportunity to strike—some stroke. Delay with us is the equal of total defeat.

Then came Trenton and the raid which was an unusual military success. Henry Knox wrote to his wife on December 28, 1776, and he wrote correctly:

Providence seemed to have smiled upon this enterprise.

I believe that in those days, God did stretch out his hand to help a people.

Mr. President, the Delaware River, with its floating ice was freezing over, the British and Hessians felt they could move across it. So certain were they that one or two or three of their generals went off to the comforts of New York City to be warm and to forget their benumbing cold. Then, as the attempt came to move across the river, history records that there was a very quick thawing.

Yes, sometimes there is a providence which works its way on this country's history.

So there were in that period doubts which came to George Washington, just as men and women today, not only in public life but everywhere in our country, have doubts and fears and forebodings. They, too, feel the obstacles, as in Washington's times, are too great to be overcome.

I hope that those who read the RECORD of today's proceedings will weigh carefully the words of Washington from his diary on the eve of Yorktown. He said:

Chimney corner patriots abound. Venality, corruption, prostitution of office for selfish ends, abuse of trust, perversion of funds from national to private use, and speculations upon the necessities of the times pervade all interests.

We should read and reread those words, not just the Farewell Address of 20 years later, but of the beginnings when General Washington was confronted with the problems that were visited on the Republic he helped bring into being.

Yes, there is today a crisis. There was also a crisis in the time of Abraham Lincoln, when he said:

The occasion is piled high with difficulty and we must rise with the occasion. As our case is new, so we must think anew and act anew; we must disenthral ourselves and then we shall save our country.

I quote, in closing, the published comments of Tom Paine, of December 19, 1776, in an editorial entitled "Crisis." He wrote:

These are the times that try men's souls.

But he was to say much more than that. He continued:

The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country, but he that stands by it now deserves the love and thanks of man and woman.

Then these words, which I hope we shall never forget:

What we obtain too cheaply, we esteem too lightly.

I have talked of George Washington as a man, not as a President retiring from public office, but as the indomitable general in those almost impossible days when a nation was born.

The PRESIDING OFFICER. The time of the Senator from West Virginia has expired.

Under the previous order, the Chair recognizes the Senator from North Carolina (Mr. HELMS).

Mr. HELMS. Mr. President, first, I desire to commend the distinguished Senator from West Virginia (Mr. RANDOLPH) for his eloquent address concerning the career of our first President.

I was also pleased, furthermore, to hear the reading of George Washington's Farewell Address by the distinguished Senator from Iowa (Mr. HUGHES). I commend both Senators, they being the good Americans that they are.

HONORARY CITIZENSHIP FOR SOLZHENITSYN

Mr. HELMS. Mr. President, on February 12, the noted Russian author and intellectual leader Aleksandr I. Solzhenitsyn was forcibly removed from his apartment by seven Soviet police agents and taken away for interrogation. At first his family was not even told where he had been taken, or what charges were brought against him. But the whole world knew that Solzhenitsyn had invited the confrontation, indeed, had welcomed it, despite the dangers involved to his family and to his compatriots fighting in the same cause.

That cause is the cause of freedom—the freedom to think, the freedom to write, and the freedom to publish. It is also the cause for the right to dissent from totalitarian ideology, and the right for those trapped under oppression to move about freely. These are all rights

which are fundamental aspects of a free society.

Despite the lack of these rights in Soviet society—indeed, despite the aggressive campaign against them—Solzhenitsyn had no desire to leave his native land. Instead, he wanted to use his special gifts to improve conditions for his fellow citizens. He spoke as an Old Testament prophet, castigating the ills he saw in a sick society. His prophecy first took the form of imaginative literature which aroused millions all over the world, and which won him the Nobel Prize for literature. But hidden in secret places he kept the most devastating work of all, composed from the many voices of suffering and of oppression that he had listened to in the transit camps and the prisons and recorded in his memory. These were voices that had been stifled, voices from the grave. But strangely enough, it was only these voices of the dead and dying that kept Solzhenitsyn alive. He blackmailed his oppressors with their guilty secret, threatening to release it if they moved against him. They in turn adopted the very methods which he, as a prophet, had discerned in their political system. Through torture and interrogation they found the manuscript of "The Gulag Archipelago." He countered by publishing it abroad from another secret copy. And so they moved against him step by step, drawing the menacing circle tighter.

A prophet is without honor in his own country. But this prophet had made himself too well known for him to disappear in the night as uncounted thousands had done before him. Solzhenitsyn himself had said in his undelivered Nobel Prize address that one word of truth is sufficient to counterbalance the weight of the whole world. His books now outweighed the system that they attacked. Solzhenitsyn was stripped of his Soviet citizenship, put aboard a plane, and ejected in West Germany.

It was not Solzhenitsyn's desire to be free in West Germany. What he wanted was to be free in Russia. The exile's bread is always bitter. More important than his own freedom is the freedom of the millions who live under Soviet domination. His exile is another step in the long campaign of intimidation and threats conducted by the Soviet government against Solzhenitsyn because he has become the living symbol of dissent within the Soviet Union, the spokesman for the dissidents, and the hope of those who are discriminated against by the intolerable emigration policies of his country. He had become a courageous witness to the truth of Soviet history and the consequences of Communist ideology.

But he speaks not only to the conscience of the Russian peoples; he speaks to the conscience of the whole world, and most particularly to the conscience of the United States as the leader of the non-Communist nations. He has been stripped of his own citizenship, but he has become a citizen of the world. He stands for the wavering hope of all those who wish to see the softening of rigid attitudes in a bipolar world, the loosening of restrictions on creative thought and activity, and an era of peace and freedom for ourselves and our children.

For these reasons, Mr. President, I intend to offer tomorrow a joint resolution which will authorize and direct the President of the United States to declare by proclamation that Aleksandr I. Solzhenitsyn shall be an honorary citizen of the United States of America.

Mr. President, the text of the joint resolution which I will offer tomorrow is as follows:

JOINT RESOLUTION

Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled, That the President of the United States is hereby authorized and directed to declare by proclamation that Aleksandr I. Solzhenitsyn shall be an honorary citizen of the United States of America.

It is a very simple resolution, unadorned by superfluous rhetoric, that proposes a very high honor. In my opinion, it is the highest honor that this Republic can bestow. It is not an honor that can be given lightly or for reasons of passing moment. It would not impose any legal obligations upon him, or prejudice his standing with his native land. Technically, he is a stateless person. This honor is unsought, as his Nobel Prize was unsought. It does not imply that he must accept or reject it. It merely places the United States on record, in a most emphatic way, that we honor him for his contributions to the freedom of mankind.

It is urgent that we make this gesture. Solzhenitsyn is in the West, but is family is not. His friends are still under a totalitarian system. And millions more are waiting to see what the United States is going to do. Solzhenitsyn himself has complained of the "spirit of Munich" that seems to pervade the relations of the United States with the Soviet Union, and our amoral policy of ignoring oppression so that we can make deals—deals for food, deals for trade, deals for disarmament.

He said:

The spirit of Munich has by no means passed away, it was not just a brief episode in our history. I would dare to say even that the spirit of Munich is the dominant one of the 20th Century. The timorous civilized world, confronted by the sudden renewed onslaught of a snarling barbarism found nothing better to oppose it with than concessions and smiles.

The prophets of old always made one uncomfortable; it was their duty to do so. Solzhenitsyn warns us that the only coverup for terror is a lie, and those who make deals with terrorists are liars also. But his harsh judgments and his brusque manner are simply goading us to take a stand. We can take that stand now by conferring upon him this great honor in recognition of his witness to truth.

Mr. President, I am asking now for those who wish to cosponsor this resolution to take that stand, so that when the resolution is offered tomorrow it will be printed with as many signers as we can muster quickly.

Mr. President, I would like to make a few additional remarks about the background of this action. It is an action that has been taken before when citizens of other lands fought shoulder to shoulder with us on behalf of the common free-

dom. It was conferred upon Lafayette. It was conferred upon Winston Churchill. Solzhenitsyn, the Nobel Prize winner, has performed meritorious service for freedom at great personal risk.

The honor conferred upon Lafayette, of course, was not done by an act of Congress, because this Congress was not yet in existence. It was done during the period of the Articles of Confederation by the legislatures of Virginia and Maryland.

Sir Winston Churchill was given honorary citizenship by proclamation of President Kennedy pursuant to an act of Congress in 1963. The report of the Committee on the Judiciary set forth the legal ramifications—or rather, the lack of them—when the bill was brought to the floor. The language of my resolution is identical to that of the act passed for Churchill, and the same considerations would apply.

In reading this report, it becomes clear that no legal obligations of citizenship apply, and no tax complications arise. It is an honor pure and simple.

Mr. President, I ask unanimous consent that Public Law 88-6; 77 Stat. 5 (H.R. 4374) be printed in the *Record* at the conclusion of my remarks, along with the Senate report to accompany H.R. 4374.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibits 1 and 2.)

Mr. HELMS. Mr. President, although this resolution would not make Solzhenitsyn an actual U.S. citizen, I think it is clear that we would be greatly honored by him if he chose to reside in our country. There is no implication, however, that he ought to reside here, or accepts any obligation to do so. If he should desire it, and only if he desires it, I stand ready to offer a private bill that would grant him permanent residence in the United States. This would enable him to qualify for permanent U.S. citizenship if he should also desire that.

Meanwhile, the Senate will, tomorrow, have before it this joint resolution, and I urge my colleagues to have their names added to the roll.

Mr. President, I ask unanimous consent to have printed in the *Record* at the conclusion of my remarks an article entitled "Solzhenitsyn: 'Spiritual Death Has—Touched Us All'" which was published in the *Washington Post* on February 18, 1974.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 3.)

EXHIBIT 1

[Public Law 88-6; 77 Stat. 5; H.R. 4374]

SIR WINSTON CHURCHILL—HONORARY CITIZENSHIP

An Act to proclaim Sir Winston Churchill an honorary citizen of the United States of America.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That: The President of the United States is hereby authorized and directed to declare by proclamation that Sir Winston Churchill shall be an honorary citizen of the United States of America.

Approved April 9, 1963.

EXHIBIT 2

PROCLAIMING SIR WINSTON CHURCHILL AN HONORARY CITIZEN OF THE UNITED STATES OF AMERICA

[April 2, 1963.—Ordered to be printed]

Mr. DIRKSEN, from the Committee on the Judiciary, submitted the following report, to accompany H.R. 4374.

The Committee on the Judiciary, to which was referred the bill (H.R. 4374) to proclaim Sir Winston Churchill an honorary citizen of the United States, having considered the same, reports favorably thereon, without amendment, and recommends that the bill do pass.

PURPOSE

The purpose of the proposed legislation is to authorize and direct the President of the United States to declare by proclamation that Sir Winston Churchill shall be an honorary citizen of the United States of America.

STATEMENT

Similar resolutions have been introduced in the Senate to accomplish the purpose set out by H.R. 4374. Among those are Senate Joint Resolution 3, introduced by the Honorable Jennings Randolph, of West Virginia, and Senate Joint Resolution 5, introduced by the Honorable Stephen M. Young of Ohio, for himself and other Senators, to pay tribute to Sir Winston Churchill.

The Department of State, in reporting to the chairman of this committee on Senate resolutions concerning the conferring of honorary U.S. citizenship on Sir Winston Churchill, advised that that Department welcomes the opportunity to recommend appropriate recognition of the outstanding quality of Sir Winston Churchill's leadership and his contribution to the free world.

The State Department further advised that in view of Sir Winston's advanced age and uncertain health, that Department recommends that, should it be the wish of Congress to grant his honorary citizenship, such action be taken as promptly as possible.

The Department of Justice, in a report submitted to the chairman of this committee, advised the committee that in view of the unparalleled contributions which Sir Winston Churchill has made to the free world, the high esteem in which he is held by the people of this country, and his ties of heritage and sentiment with the United States, the Department of Justice strongly endorses the passage of legislation of the type embodied in each of the two Senate resolutions.

The Department of Justice further observed that while such resolution is without clear legal precedent, that Department perceives no legal objection to its enactment. As the Department understands the joint resolutions, they are not intended to confer citizenship upon Sir Winston in the technical sense of that term so as to impose upon him the legal obligations which ordinarily accompany the acquisition of U.S. nationality. Rather, the resolutions would constitute an expression of the affection and high regard which the people of this country have for him, perhaps stronger in sentiment or similar in effect to legislation conferring a medal or decoration upon him.

The committee concurs in the recommendations of the Department of State and the Department of Justice that legislation of this character and for this purpose should further concur in the observations of the Department of Justice that favorable consideration of this legislation is not intended to confer citizenship upon Sir Winston in the technical sense of that term, but rather, constitutes an expression of the affection and high regard which the people of the United States have for Sir Winston Churchill. There is no intention of conferring hon-

orary citizenship which would have the effect of requiring Sir Winston Churchill to be a national of the United States under the immigration and nationality laws or under the tax laws of the United States or of the individual States of the Union. What this does is to confer on him an expression of esteem rather than U.S. nationality in the technical sense.

The committee believes that this legislation demonstrates the feeling of esteem and admiration of the American people for Sir Winston Churchill just as he has often demonstrated his affection for the United States many, many times. A notable example of his affection is contained in a speech to a joint session of Congress, December 26, 1941, when he said in part:

"I feel greatly honored that you should have thus invited me to enter the U.S. Senate Chamber and address the representatives of both branches of Congress. The fact that my American forebears have for so many generations played their part in the life of the United States and that here I am, an Englishman, welcomed in your midst makes this experience one of the most moving in my life, which is already long and has not been entirely uneventful.

"I wish, indeed, that my mother, whose memory I cherish across the vale of years, could have been here to see.

"By the way, I cannot help reflecting that if my father had been an American and my mother British, instead of the other way around, I might have got here on my own * * *."

The committee is of the opinion that this legislation should be favorably considered in recognition of one of America's greatest friends and the many contributions made by Sir Winston Churchill to the free world. Accordingly, the committee recommends favorable consideration of H.R. 4374, without amendment.

Attached hereto and made a part hereof are the reports of the Department of Justice and the Department of State submitted in connection with similar Senate resolutions.

DEPARTMENT OF JUSTICE

Washington, D.C., February 18, 1963.

HON. JAMES O. EASTLAND,

Chairman, Committee on the Judiciary, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request for the views of the Department of Justice concerning Senate Joint Resolution 3 and Senate Joint Resolution 5, identical resolutions authorizing the President of the United States to issue a proclamation declaring Sir Winston Churchill to be an honorary citizen of the United States of America.

As indicated in its title, each resolution, after appropriate recitations, would authorize and direct the President to proclaim Sir Winston Churchill to be an honorary citizen of the United States. Each would also instruct the Secretary of the Senate to transmit a copy of the joint resolution to Sir Winston.

In view of the unparalleled contributions which Sir Winston Churchill has made to the free world, the high esteem in which he is held by the people of this country, and his ties of heritage and sentiment with the United States, the Department of Justice strongly endorses the passage of legislation of the type embodied in each of the two resolutions. However, it is suggested that the transmittal of the enactment to Sir Winston would have greater ceremonial significance if done by the President rather than by the Secretary of the Senate.

While such legislation is without clear legal precedent, this Department perceives no legal objection to its enactment. As we understand the joint resolutions, they are not intended to confer citizenship upon Sir

Winston in the technical sense of that term so as to impose upon him the legal obligations which ordinarily accompany the acquisition of U.S. nationality. Rather, the resolutions would constitute an expression of the affection and high regard which the people of this country have for him, perhaps stronger in sentiment but similar in effect to legislation conferring a medal or decoration upon him.

So viewed, the resolutions would not have the effect of requiring Sir Winston to be considered a national of the United States under the immigration and nationality laws, for example, or under the tax laws of the United States or of the individual States of the Union. If your committee recommends the enactment of legislation conferring honorary U.S. citizenship on Sir Winston, it may wish to make this clear by an appropriate explanation in its report in order to avoid any possibility of imposing unintended hardships upon him or his estate. Such an explanation would also make it clear that, since what is being conferred on Sir Winston is an honor or expression of esteem rather than U.S. nationality in the technical sense, article I, section 8, clause 4 of the Constitution which authorizes Congress to establish only "a uniform Rule of Naturalization," has no bearing upon these resolutions.

The Bureau of the Budget has advised that there is no objection to the submission of this report from the standpoint of the administration's program.

Sincerely,

NICHOLAS DEB. KATZENBACH,
Deputy Attorney General.

DEPARTMENT OF STATE,
Washington, February 12, 1963.

HON. JAMES D. EASTLAND,
Chairman, Committee on the Judiciary,
House of Representatives.

DEAR MR. CHAIRMAN: I want to thank you for your letter of January 30 concerning the conferring of honorary U.S. citizenship upon Sir Winston Churchill.

We welcome this opportunity to recommend appropriate recognition of the outstanding quality of Sir Winston's leadership and his contribution to the free world.

Subject to the recommendation of the Department of Justice, the Department of State is greatly pleased to support Senate Joint Resolution 3, and Senate Joint Resolution 5.

In view of Sir Winston's advanced age and uncertain health, the Department recommends that, should it be the wish of Congress to grant his honorary citizenship, such action be taken as promptly as possible.

The Bureau of the Budget advises that, from the standpoint of the administration's program, there is no objection to the submission of this report.

Sincerely yours,

FREDERICK G. DUTTON,
Assistant Secretary
(For the Secretary of State).

EXHIBIT 3

SOLZHENITSYN: "SPIRITUAL DEATH HAS ...
TOUCHED US ALL"

Moscow, February 17.—Following is the full text of Alexander Solzhenitsyn's essay "Live Not By Lies." It is perhaps the last thing he wrote on his native soil and is circulating among Moscow's intellectuals. The essay is dated Feb. 12, the day that secret police broke into his apartment and arrested him. The next day he was exiled to West Germany.

LIVE NOT BY LIES

At one time we dared not even to whisper. Now we write and read *samizdat*, and sometimes when we gather in the smoking room at the Science Institute we complain frankly to one another: What kind of tricks are they playing on us, and where are they dragging

us? Gratuitous boasting of cosmic achievements while there is poverty and destruction at home. Propping up remote, uncivilized regimes. Fanning up civil war. And we recklessly fostered Mao Tse-tung at our expense—and it will be we who are sent to war against him, and will have to go. Is there any way out? And they put on trial anybody they want, and they put sane people in asylums—always they, and we are powerless.

Things have almost reached rock bottom. A universal spiritual death has already touched us all, and physical death will soon flare up and consume us both and our children—but as before we still smile in a cowardly way and mumble without tongues tied: But what can we do to stop it? We haven't the strength.

We have been so hopelessly dehumanized that for today's modest ration of food we are willing to abandon all our principles, our souls, and all the efforts of our predecessors and all the opportunities for our descendants—but just don't disturb our fragile existence. We lack staunchness, pride and enthusiasm. We don't even fear universal nuclear death, and we don't fear a third world war. We have already taken refuge in the crevices. We just fear acts of civil courage.

We fear only to lag behind the herd and to take a step alone—and suddenly find ourselves without white bread, without heating gas and without a Moscow registration.

We have been indoctrinated in political courses, and in just the same way was fostered the idea to live comfortably, and all will be well for the rest of our lives: You can't escape your environment and social conditions. Everyday life defines consciousness. What does it have to do with us? We can't do anything about it.

But we can—everything. But we lie to ourselves for assurance. And it is not they who are to blame for everything—we ourselves, only we. One can object; but actually you can think anything you like. Gags have been stuffed into our mouths. Nobody wants to listen to us, and nobody asks us. How can we force them to listen? It is impossible to change their minds.

It would be natural to vote them out of office—but there are no elections in our country. In the West people know about strikes and protest demonstrations—but we are too oppressed, and it is a horrible prospect for us: How can one suddenly renounce a job and take to the streets? Yet the other fatal paths probed during the past century by our bitter Russian history are nevertheless, not for us, and truly we don't need them.

Now that the axes have done their work, when everything which was sown has sprouted anew, we can see that the young and presumptuous people who thought they would make our country just and happy through terror, bloody rebellion and civil war were themselves misled. No thanks, fathers of education! Now we know that infamous methods breed infamous results. Let our hands be clean!

The circle—is it closed? And is there really no way out? And is there only one thing left for us to do, to wait without taking action? Make something will happen by itself? It will never happen as long as we daily acknowledge, extoll, and strengthen—and do not sever ourselves from—the most perceptible of its aspects: Lies.

When violence intrudes into peaceful life, its face glows with self-confidence, as if it were carrying a banner and shouting: "I am violence. Run away, make way for me—I will crush you. But violence quickly grows old. And it has lost confidence in itself, and in order to maintain a respectable face it summons falsehood as its ally—since violence can conceal itself with nothing except lies, and the lies can be maintained only by violence. And violence lays its ponderous paw not every day and not on every shoulder: It

demands from us only obedience to lies and daily participation in lies—all loyalty lies in that.

And the simplest and most accessible key to our self-neglected liberation lies right here: Personal nonparticipation in lies. Though lies conceal everything, though lies embrace everything, we will be obstinate in this smallest of matters: Let them embrace everything, but not with any help from me.

This opens a breach in the imaginary encirclement caused by our inaction. It is the easiest thing to do for us, but the most devastating for the lies. Because when people renounce lies it simply cuts short their existence. Like an infection, they can exist only in a living organism.

We do not exhort ourselves. We have not sufficiently matured to march into the squares and shout the truth out loud or to express aloud what we think. It's not necessary.

It's dangerous. But let us refuse to say that which we do not think!

This is our path, the easiest and most accessible one, which takes into account our inherent cowardice, already well-rooted. And it is much easier—it's dangerous even to say this—than the sort of civil disobedience which Gandhi advocated.

Our path is not to give conscious support to lies about anything whatsoever! And once we realize where lies the perimeters of falsehood—each sees them in his own way.

Our path is to walk away from this gangrenous boundary. If we did not paste together the dead bones and scales of ideology, if we did not sew together rotting rags, we would be astonished how quickly the lies would be rendered helpless and subside.

That which should be naked would then really appear naked before the whole world.

So in our timidity, let each of us make a choice: Whether consciously to remain a servant of falsehood—of course, it is not out of incination, but to feed one's family, that one raises his children in the spirit of lies—or to shrug off the lies and become an honest man worthy of respect both by one's children and contemporaries.

And from that day onward he:

Will not henceforth write, sign or print in any way a single phrase which in his opinion distorts the truth.

Will utter such a phrase neither in private conversation nor in the presence of many people, neither on his own behalf nor at the prompting of someone else, neither in the role of agitator, teacher, educator, nor in a theatrical role.

Will not depict, foster or broadcast a single idea which he can see is false or a distortion of the truth, whether it be in painting, sculpture, photography, technical science or music.

Will not cite out of context, either orally or written, a single quotation so as to please someone, to feather his own nest, to achieve success in his work, if he does not share completely the idea which is quoted, or if it does not accurately reflect the matter at issue.

Will not allow himself to be compelled to attend demonstrations or meetings if they are contrary to his desire or will, will neither take into hand nor raise into the air a poster or slogan which he does not completely accept.

Will not raise his hand to vote for a proposal with which he does not sincerely sympathize, will vote neither openly nor secretly for a person whom he considers unworthy or of doubtful abilities.

Will not allow himself to be dragged to a meeting where there can be expected a forced or distorted discussion of a question.

Will immediately walk out of a meeting, session, lecture, performance or film showing if he hears a speaker tell lies, or purvey ideological nonsense or shameless propaganda.

Will not subscribe to or buy a newspaper or

magazine in which information is distorted and primary facts are concealed. . . .

Of course, we have not listed all of the possible and necessary deviations from falsehood. But a person who purifies himself will easily distinguish other instances with his purified outlook.

No, it will not be the same for everybody at first. Some, at first, will lose their jobs. For young people who want to live with the truth, this will, in the beginning, complicate their young lives very much, because the required recitations are stuffed with lies, and it is necessary to make a choice.

But there are no loopholes for anybody who wants to be honest: On any given day, any one of us will be confronted with at least one of the above-mentioned choices even in the most secure of the technical sciences. Either truth or falsehood: Toward spiritual independence, or toward spiritual servitude.

And he who is not sufficiently courageous even to defend his soul—don't let him be proud of his "progressive" views, and don't let him boast that he is an academician or a people's artist, a merited figure, or a general—let him say to himself: I am in the herd, and a coward. It's all the same to me as long as I'm fed and warm.

Even this path, which is the most modest of all paths of resistance, will not be easy for us. But it is much easier than self-immolation or a hunger strike: The flames will not envelop your body, your eyeballs will not burst from the heat, and brown bread and clean water will always be available to your family.

A great people of Europe, the Czechoslovaks, whom we betrayed and deceived: Haven't they shown us how a vulnerable breast can stand up even against tanks if there is a worthy heart within it?

You say it will not be easy? But it will be the easiest of all possible resources. It will not be an easy choice for a body, but it is the only one for a soul. No, it is not an easy path. But there are already people, even dozens of them, who over the years, have maintained all these points and live by the truth.

So you will not be the first to take this path, but will join those who have already taken it. This path will be easier and shorter for all of us if we take it by mutual efforts and in close rank. If there are thousands of us, they will not be able to do anything with us. If there are tens of thousands of us, then we would not even recognize our country.

If we are too frightened, then we should stop complaining that someone is suffocating us. We ourselves are doing it. Let us then bow down even more, let us wait, and our brothers the biologists will help to bring nearer the day when they are able to read our thoughts are worthless and hopeless.

And if we get cold feet, even taking this step, then we are worthless and hopeless, and the scorn of Pushkin should be directed to us:

"Why should cattle have the gifts of freedom?"

"Their heritage from generation to generation is the belled yoke and the lash."

Mr. DOMENICI. Mr. President, like most observers in the Western, free world, I am dismayed by the Soviet Union's expulsion of Nobel Prize-winning writer, Alexander Solzhenitsyn. It seems to me especially ironic that on that day when Americans celebrated Abraham Lincoln's birthday, the Soviet Union chose to strip of freedom and citizenship one of its most vital voices. Nothing more dramatically illuminates the fundamental differences in belief in the sanctity of human freedom between this Nation and the Soviet regime than Solzhenitsyn's forced exile.

As I testified before the Senate Subcommittee on Defense Appropriations last September, tension and hostility between America and the Soviet Union have not been eliminated. The expulsion of Solzhenitsyn underscores the basic difference between their style of government and our system; his expulsion should make us all step back and take a good look at the real Soviet intentions and beliefs.

I am more concerned than ever that we will be misled by détente. It is a two-way street and we cannot travel it alone. Here are some questions we must raise: Does the Soviet Union have a new attitude toward freedom? Has the Soviet Union's system changed? How far can this Nation, founded in freedom and based on Christian values of the worth of each man, go toward accommodating a system so alien, apparently, toward these values?

I, for one, am going to take a closer look at the legislation that is introduced that would give more concessions to the Soviet Union, that would aid them with better technology, and industry, or that would put this Nation at any disadvantage, theoretical or otherwise, in its dealings with the Soviet Union.

Mr. President, this issue deserves full airing in this body. I am confident that it will get such a hearing during the next months. I intend to insure that it does.

TRANSACTION OF ROUTINE MORNING BUSINESS

The PRESIDING OFFICER. Under the previous order there will now be a period for the transaction of routine morning business for not to exceed 30 minutes, with statements limited therein to 5 minutes.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. HUMPHREY, from the Committee on Agriculture and Forestry, with amendments:

S. 2296. A bill to provide for the protection, development, and enhancement of the national forest system, its lands and resources; and for other purposes (Rept. No. 93-686).

By Mr. HUGH SCOTT, from the Committee on the Judiciary, without recommendation:

S. 354. A bill to establish a nationwide system of adequate and uniform motor vehicle accident reparation acts and to require no-fault motor vehicle insurance as a condition precedent to using a motor vehicle on public roadways in order to promote and regulate interstate commerce.

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first time and, by unanimous consent, the second time, and referred as indicated:

By Mr. HELMS (for Mr. EASTLAND):
S. 3201. A bill to amend title 18, United States Code, relating to the production of false documents or papers of the United States, and the use of false information in obtaining official documents and papers of the United States, involving an element of

identification. Referred to the Committee on the Judiciary.

By Mr. YOUNG (for himself, Mr. DOLE, and Mr. BELLMON):

S. 3002. A bill relating to the date on which the carryover of wheat for any marketing year is to be determined and announced by the Secretary of Agriculture. Referred to the Committee on Agriculture and Forestry.

By Mr. YOUNG:

S. 3003. A bill for the relief of Nieves Ong Caladiao. Referred to the Committee on the Judiciary.

S. 3004. A bill for the relief of Muriel S. Wilton. Referred to the Committee on the Judiciary.

By Mr. EAGLETON:

S. 3005. A bill to provide for a transitional disaster relief program in connection with floods in areas having special flood hazards prior to the time when flood insurance under the National Flood Insurance Act of 1968 as amended is available. Referred to the Committee on Public Works.

By Mr. PROXMIRE:

S. 3006. A bill to require that certain bills and joint resolutions introduced in the Senate or received by the Senate from the House of Representatives be printed with a "fiscal note." Referred, by unanimous consent, jointly to the Committees on Rules and Administration and Government Operations.

By Mr. JACKSON (for himself and Mr. FANNIN) (by request):

S. 3007. A bill to authorize appropriations for the Indian Claims Commission for fiscal year 1975. Referred to the Committee on Interior and Insular Affairs.

S. 3008. A bill to declare that 3,308 acres, more or less, of federally owned land is held by the United States in trust for the Pueblo of Cochiti. Referred to the Committee on Interior and Insular Affairs.

By Mr. HASKELL (for himself and Mr. DOMINICK):

S. 3009. A bill to provide that moneys due the States under the provisions of the Mineral Leasing Act of 1920, as amended, derived from the development of oil shale resources, may be used for purposes other than public roads and schools; and

S. 3010. A bill to provide that moneys due the States under the provisions of the Mineral Leasing Act of 1920, as amended, may be used for purposes other than public roads and schools. Referred to the Committee on Interior and Insular Affairs.

By Mr. JAVITS (by request):

S. 3011. A bill to amend the Public Health Service Act, the Developmental Disabilities Services and Facilities Construction Act, and the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, to revise and extend programs of health services, and for other purposes. Referred to the Committee on Labor and Public Welfare.

By Mr. JAVITS (by request):

S. 3012. A bill to amend the Federal Food, Drug, and Cosmetic Act and the Fair Packaging and Labeling Act to improve the protection of the public health and safety, to repeal the Filled Milk Act, and the Filled Cheese Act, and for other purposes. Referred, by unanimous consent, simultaneously to the Committees on Labor and Public Welfare and Commerce, with the proviso that when and if one committee reports the bill, the other committee must report within 60 days.

By Mr. CURTIS (for himself and Mr. HELMS):

S.J. Res. 187. A joint resolution to express the sense of Congress for the extension of citizenship to Alexander Solzhenitsyn and his family. Referred to the Committee on Foreign Relations.

STATEMENTS ON INTRODUCED
BILLS AND JOINT RESOLUTIONS

By Mr. HELMS (for Mr. EASTLAND):

S. 3001. A bill to amend title 18, United States Code, relating to the production of false documents or papers of the United States, and the use of false information in obtaining official documents and papers of the United States, involving an element of identification. Referred to the Committee on the Judiciary.

Mr. HELMS. Mr. President, by request, for the Senator from Mississippi (Mr. EASTLAND), I introduce a bill for appropriate reference; and I ask unanimous consent that a short statement by Senator EASTLAND with respect to this bill may be printed in the RECORD at this point.

The PRESIDING OFFICER (Mr. ABOWREZK). Without objection, it is so ordered.

STATEMENT BY SENATOR EASTLAND

This bill is intended to fill a gap in the law dealing with persons who improperly obtain or seek to obtain official documents and papers of the United States, or who produce and use false papers of the United States.

This is an original bill reported on February 12 favorably from the Internal Security Subcommittee to the full Judiciary Committee. I have caused it to be formally introduced so that the Judiciary Committee may have printed copies for consideration, and for distribution to interested agencies and individuals.

The bill is short, and its provisions are quite clear so I shall not discuss it further at this time.

By Mr. EAGLETON:

S. 3005. A bill to provide for a transitional disaster relief program in connection with floods in areas having special flood hazards prior to the time when flood insurance under the National Flood Insurance Act of 1968 as amended is available. Referred to the Committee on Public Works.

FLOOD LOANS

Mr. EAGLETON. Mr. President, the National Weather Service has reported that record floods could plague the Nation again this year. Rainfall is up 75 percent above normal along the Mississippi River. High tides are threatening both the Atlantic and Pacific coasts. The water level in the Great Lakes is the highest it has been in 200 years.

Last week, in my own State of Missouri, the Mississippi River was 5 feet over its banks. The flood threat exists all the way downstream to Louisiana, where the river also is above its banks. The spring thaw, coupled with continuing heavy rain, could create a potentially catastrophic situation affecting hundreds of thousands of Americans, including those living in the Missouri-Mississippi flood plain.

What is particularly distressing about this situation is that many flood-prone communities will have less protection and assistance than they have had in previous years. This is a result of two separate, but related, factors. First, administrative and jurisdictional obstacles will delay full implementation of the Flood Disaster Protection Act of 1973.

which expands the national flood insurance program. Second, President Nixon vetoed legislation last year which would have provided loans to disaster victims at lower interest rates than are currently available.

The Flood Disaster Protection Act became effective on December 31, 1973. I supported the effort to substitute flood insurance for costly disaster assistance programs. The act doubles the amount of flood insurance available to owners of residential and business properties, but it requires communities, in turn, to restrict building in flood-prone areas. Provided a community adopts those land-use restrictions, residents would be eligible to buy flood insurance at a low rate of 25 cents per \$100 of coverage, with the Government paying the other 90 percent of the premium.

To qualify for the flood insurance program, a flood-prone community must certify to HUD's Federal Insurance Administration in Washington that it has adopted minimum land use measures to abate damage from future floods. However, despite the recent efforts of FIA to publicize the flood insurance program nationwide, certain local conditions prevail which probably will delay applications from some communities for many months.

Of the 456 flood-prone communities in the State of Missouri, for instance, only 96 currently are eligible for Federal flood insurance. I am certain that number will increase before the spring flood season, but many will not qualify by then.

One reason for that is that some of these communities are unincorporated. Among other things, that means they have no land use authority to regulate building in the flood plain. The Missouri State Legislature is currently considering measures which would permit State authorities to regulate building in the flood plain in unincorporated areas, but this will take time. In the meantime, residents of these communities are ineligible for coverage.

Other programs would prevent flood-prone communities from applying for the program in a timely manner. In some cases, public notice must be given in order to execute the FIA required resolution by which the flood-prone community certifies it has adopted minimum land use standards. In other instances, both a public notice and hearings are necessary. In any event, it appears there will be some unavoidable delays which neither the community nor the individual residents can control.

What happens if flooding occurs while flood-prone communities are making every effort to comply with FIA regulations? Flood disaster victims who have no insurance coverage would be eligible only for 5-percent interest loans with no forgiveness features.

These are the stiffest disaster loan terms in 5 years because last year President Nixon vetoed a measure which would have made disaster assistance loans to homeowners, farmers, and small businesses at 3 percent interest with the first \$2,500 forgiven or at 1-percent interest rate with no for-

giveness. It does not make sense to me to reduce assistance at a time when it appears it will be needed most.

Today, I am introducing legislation which is designed to bridge the gap which now exists in the benefits available to flood disaster victims. It is designed to ease the transition between reliance on disaster loans to full implementation of the Federal Insurance Act. The measure would make 1 percent disaster loans available to those residents living in communities which are eligible to participate in the flood insurance program but whose application had been delayed because of difficulties in complying with local or State regulatory requirements.

Section 3 of the bill would extend the same 1 percent loan terms to residents of communities which have been admitted into the flood insurance program under the emergency application provisions. Residents of these areas are eligible only for the lower limits of subsidized coverage until such time as their communities adopt more comprehensive zoning measures restricting building in the flood plain. This could take several years. The bill I am introducing today would permit low interest loans to be made to these individuals for uninsured losses up to the maximum limits of subsidized insurance coverage or to the maximum allowable disaster loan under existing FHA and SBA regulations.

This interim disaster loan program would be available to flood victims until June 30, 1975, which should be a sufficient time for most communities to meet necessary local administrative and regulatory requirements for participating in the flood insurance program.

I fully support efforts of Congress and the administration to substitute flood insurance for disaster loans. However, a program of this magnitude takes time to implement. My bill would provide some limited relief to those caught up in this transition.

By Mr. PROXMIRE:

S. 3006. A bill to require that certain bills and joint resolutions introduced in the Senate or received by the Senate from the House of Representatives be printed with a "fiscal note." Referred, by unanimous consent, jointly to the Committees on Rules and Administration and Government Operations.

FISCAL NOTE ACT—A PRICE TAG ON
LEGISLATION

Mr. PROXMIRE. Mr. President, every year thousands of bills are introduced in the Senate to further the goals of our Constitution. Yet, seldom do we as Senators have any idea of how much it might cost to improve justice, insure domestic tranquility, or to provide for the common defense. Neither do we know the price of promoting the general welfare nor securing the blessing of liberty.

These mandates must be carried out. And we owe it to our constituents to carry them out to the best of our ability. That means we must, through the committee system, examine all proposals carefully. A part of that examination—since the Legislative Reorganization Act of 1970—has been the inclusion in Sen-

ate and House committee reports of long-range cost projections on authorization bills.

It would be helpful to have some idea of these costs long before that stage. Indeed, only a fraction of the bills introduced ever get to the committee report stage. Yet, the cost of a proposal is a vital piece of information—vital to the Senator introducing it—vital to his colleagues—vital to those affected by the bill—and vital, above all, to those who will have to pay for it, the taxpayers.

PRODUCE PUBLIC DEBATE

Knowledge of the approximate cost of a bill very well could affect its future in the legislative process. A good idea at a bargain price might move along quickly with all due deliberation. A good idea with a high price tag might produce more public debate and promote a search for alternative means of filling the need. Such a search might find a better and cheaper solution.

Knowledge of a proposal's cost can produce efforts to match the reality of need against the reality of meeting that need.

Mr. President, that is the purpose of the bill I introduce today. The Fiscal Note Act would hang a price tag on all spending—or money-saving—legislation introduced in the U.S. Senate.

The Fiscal Note Act would be a taxpayer's guide to proposed legislation. For us in the Senate, it would help us choose better buys in pursuing the good life for the American public.

My bill requires that before a bill may be printed, an estimate of the cost of carrying out its purpose must be placed as a footnote on the first page of the bill.

The estimate would cover its costs in the fiscal year that the bill or joint resolution is introduced and for each of the next 5 fiscal years, if it is to be a continuing program.

VESTED INTERESTS LOBBY

Just what good is this kind of price-tag information?

Pressure against spending on specific bills has been almost nonexistent in the Congress in recent years. Almost all the lobbying comes from vested interest groups which stand to gain directly from every kind of taxpayer ripoff, no matter how unjustified it may be in the overall public interest.

A stark, sharp, direct reminder of cost on every bill that cost money—right there on page 1 of the bill itself—could save billions.

Just as important, such price tags could stimulate the quest for better ways of accomplishing the things that need to be accomplished—at a price we can all afford.

Also, Senators and interested citizens examining the bill would be given a headstart in weighing priorities and in making necessary judgments.

The appropriate committees of the Senate, of course, would continue their careful, detailed assessments of each bill. Still, the price tags would be concrete reminders of the current requirement of law to report on the long-range costs of legislation. Undoubtedly, the committee

study of the bills would result in refined cost estimates.

The idea for placing price tags on legislation is not new. Many State legislatures have been doing it for years.

Just the other day the director of an education association in Wisconsin called my office to talk about a bill pending in the U.S. Senate. During the conversation, he asked—and these are his exact words—“what is the fiscal note on the bill.” He had to be told, of course, that none existed. But he is accustomed to reading price tags on proposed legislation pending before the Wisconsin Legislature.

WISCONSIN WAS THE FIRST

Wisconsin was the first State to require fiscal notes. That was in 1957. Since then a majority of the States have adopted the practice. The Council of State Governments has recommended that all State legislatures require that all bills affecting either income or appropriations be accompanied by an estimate of its fiscal impact.

Wisconsin has developed the fiscal note into a very useful tool. It is useful because all concerned, lawmaker and State agency, treat the preparation of the fiscal note in a professional manner. During that preparation the fiscal note is a confidential document. The legislator requesting it does not have to fear that his idea or information will be lost to others.

He also knows that the fiscal note will be objective. Information gathered in its preparation will not be biased. And the note itself will be written objectively without any attempt to sway the reader in favor of or in opposition to the proposal. The reason is simple: The agency may have to live with the information it supplies for a long time. The incentive, then, is to be objective.

Mr. President, the bill I am introducing today calls for basically the same procedure as is used in Wisconsin. Any bill introduced in the U.S. Senate that affects Federal expenditures directly or indirectly will require a fiscal note before the bill or joint resolution may be printed. The fiscal note may be prepared by the sponsor before introduction, or it may be prepared after introduction. In either case, the responsibility for writing the note is that of the department or agency which will carry out the mandate of the bill after enactment. To prevent delays in introduction, the departments or agencies will be required to have the fiscal note to the Public Printer within 72 hours.

NO EXTRA WORKLOAD

I am assured that basic budgetmaking information available in the departments and agencies will enable them to prepare fiscal notes with ordinary diligence.

As drafted, this bill would affect only bills and resolutions originating in the Senate. It would be presumptuous to try to impose such a requirement on the House of Representatives.

Representative PATRICIA SCHROEDER of Colorado, I am happy to say, having read of my proposal, has informed me that she intends to introduce a similar bill in the House.

What will my bill cost? What would be its fiscal note?

This bill would authorize no direct expenditure of funds. Therefore it would not require a fiscal note on those grounds. But, what about indirect expenditures?

I believe that there would be no requirement for Federal departments or agencies to request added manpower to carry out this bill. All have capabilities that can be called upon to prepare fiscal notes. As a matter of good administration, departments and agencies seek out the same information, in any event, after learning of the introduction of bills affecting them. So there would be no extra workload.

By Mr. JACKSON (for himself and Mr. FANNIN) (by request):

S. 3007. A bill to authorize appropriations for the Indian Claims Commission for fiscal year 1975. Referred to the Committee on Interior and Insular Affairs.

Mr. JACKSON. Mr. President, by request, I send to the desk on behalf of myself and the Senator from Arizona (Mr. FANNIN) a bill to authorize appropriations for the Indian Claims Commission for fiscal year 1975.

Mr. President, this draft legislation was submitted by the Indian Claims Commission, and I ask unanimous consent that the executive communication accompanying the proposal from the Chairman of the Commission be printed in the Record at this point in my remarks.

There being no objection, the letter was ordered to be printed in the Record, as follows:

INDIAN CLAIMS COMMISSION,
Washington, D.C., January 18, 1974.

HON. GERALD R. FORD,
President of the U.S. Senate,
Washington, D.C.

DEAR MR. PRESIDENT: Enclosed is a proposed bill “To authorize appropriations for the Indian Claims Commission for fiscal year 1975.” We recommend that the proposed bill be introduced and referred to the appropriate committee for consideration, and we recommend that it be enacted.

FISCAL YEAR 1975 APPROPRIATION AUTHORIZATION

The legislation under which the Indian Claims Commission conducts its program, the Indian Claims Commission Act, as amended, 25 U.S.C. § 70e (1972), states “There are authorized to be appropriated for the necessary expenses of the Commission not to exceed \$1,500,000 for fiscal year 1973, and appropriations for succeeding fiscal years shall be made only to the extent hereafter authorized by Act of Congress.” In order to meet fiscal year 1975 program requirements, we propose that such sums as may be necessary to continue the program of the Indian Claims Commission be authorized. There is need for enactment of this authorization in order for work to proceed during the next fiscal year.

The Office of Management and Budget has advised that this proposed legislation is in accord with the program of the President.

Sincerely yours,
JEROME K. KUYKENDALL, Chairman.

By Mr. JACKSON (for himself and Mr. FANNIN) (by request):

S. 3008. A bill to declare that 3,308 acres, more or less, of federally owned

land is held by the United States in trust for the Pueblo of Cochiti. Referred to the Committee on Interior and Insular Affairs.

Mr. JACKSON. Mr. President, by request, I send to the desk on behalf of myself and the Senator from Arizona (Mr. FANNIN) a bill to declare that 3,308 acres, more or less, of federally owned land is held by the United States in trust for the Pueblo of Cochiti.

Mr. President, this draft legislation was submitted and recommended by the Department of the Interior, and I ask unanimous consent that the executive communication accompanying the proposal from the Secretary of the Interior be printed in the RECORD at this point in my remarks.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

U.S. DEPARTMENT OF THE
INTERIOR,

OFFICE OF THE SECRETARY,
Washington, D.C., January 24, 1974.

Hon. GERALD R. FORD,
President, U.S. Senate,
Washington, D.C.

DEAR MR. PRESIDENT: Enclosed is a draft of a proposed bill "To declare that 3,308 acres, more or less, of federally owned land is held by the United States in trust for the Pueblo of Cochiti."

We recommend that the proposed bill be referred to the appropriate committee for consideration and that it be enacted.

This bill provides that all right, title and interest of the United States in 3,308 acres, more or less, of federally owned land, acquired for school purposes, together with improvements thereon, will be held in trust by the United States for the Pueblo of Cochiti. Also, the bill provides that the Indian Claims Commission will determine the extent to which the value of the beneficial interest conveyed should or should not be set off against any claim against the United States Government determined by the Commission.

In 1911, the subject property was acquired by the United States for \$150 through condemnation action and was used as a government supported day school for the Cochiti Indians until the mid 1960's. The land and improvements were permitted in 1966 to the school board of the Bernalillo Public Schools, District No. 1, for the purpose of operating a public school and housing for teachers. This permit was in effect until May 31, 1968, when it was terminated by the school board since the construction of a new public school was completed and this school would serve the educational needs of the Cochiti Pueblo.

Upon completion of the new public school, the Cochiti school site became obsolete and the property is excess to our needs. A permit was approved on October 15, 1968, to the Pueblo of Cochiti, for the use of this property. The Pueblo of Cochiti enacted a resolution requesting the parcel as it could be used advantageously by them for community purposes, including the Pueblo Governor's office, council office, library, headstart classrooms, and other community uses.

The school site is located within the village of Cochiti, adjacent to tribal lands, most of which are assigned to individual members of the Pueblo for homesites. Although the Cochiti Pueblo has no formal land consolidation program, it has in the past pursued a policy of acquiring alienated parcels within the exterior boundaries of the reservation through land exchanges in order to consolidate its use areas.

An appraisal of the property indicates a fair market value of \$8,500 for the land, including the water and sewerage system. The

property records at the agency contain the following inventory of the improvements on the land:

School building and quarters.....	\$5,000.00
School building.....	4,144.69
Fuel shed and storage.....	518.00
Garage, storage and bath.....	1,625.00
Dispensary.....	747.00
Pump house.....	905.48
Water system.....	1,200.00
Sewer system.....	1,150.00
Playground equipment.....	1,054.70

The improvements are old and obsolete and would require considerable outlay to be made usable. If the land was held in trust for the Pueblo of Cochiti, the Pueblo would have the security and more incentive to make necessary improvements. At present, utilizing the property under a permit from the Bureau of Indian Affairs, the Pueblo is naturally reluctant to maintain or improve property which it has no firm assurance of continuing to use. Transfer of the property to trust status would also, of course, relieve the Federal Government of responsibility for its upkeep.

This land is in an area where the geologic formations, under suitable stratigraphic and structural conditions, are favorable for the occurrence of oil and gas. However, the nearest producing well is 50 miles to the west and the mineral value for this tract is considered to be quite low. It is without value for other minerals.

As the Cochiti Pueblo has a very definite need for this property and the Federal Government can be relieved of the maintenance and upkeep responsibility, we urge that trust title to the property be given to the Pueblo. As this property is surrounded by trust land, we believe that there should be a declaration of trust.

The Cochiti Pueblo has no claim pending before the Indian Claims Commission. The claim filed by this Pueblo with the Commission, Docket No. 136, was dismissed on March 27, 1959, and the dismissal was reported to Congress on June 29, 1959.

The Office of Management and Budget has advised that the presentation of this proposed legislation is consistent with the program of the President.

Sincerely yours,

JOHN H. KYL,

Assistant Secretary of the Interior.

By Mr. HASKELL (for himself
and Mr. DOMINICK):

S. 3009. A bill to provide that moneys due the States under the provisions of the Mineral Leasing Act of 1920, as amended, derived from the development of oil shale resources, may be used for purposes other than public roads and schools; and

S. 3010. A bill to provide that moneys due to the States under the provisions of the Mineral Leasing Act of 1920, as amended, may be used for purposes other than public roads and schools. Referred to the Committee on Interior and Insular Affairs.

Mr. HASKELL. Mr. President, I am introducing legislation today to amend the Mineral Leasing Act provision which governs the distribution of bonus bid moneys to the States when public lands are leased for oil shale development.

Section 191 of the Mineral Leasing Act of 1920 limits the States to using their portion of the bonus bid moneys, "to be used by such State or subdivisions thereof for the construction and maintenance of public roads or for the support of public schools or other public

educational institutions, as the legislature of the State may direct."

This provision hamstring the State and makes it impossible to do the type of comprehensive planning which is so necessary if the overwhelming impact of oil shale development is to be handled wisely.

A brief look at the promise and problems of oil shale development will make it absolutely clear that this provision needs to be amended.

The oil shale reserves in the Green River formation in Colorado, Utah, and Wyoming contain the equivalent of 600 billion barrels of oil—a quantity approximately equivalent to the entire known world reserves of oil. Others estimate the reserves may be as high as 1.8 trillion barrels a total which would be 47 times the total U.S. reserves.

The vast majority of these deposits—approximately 80 percent—is on public lands.

This Nation has recently embarked on a program of leasing those public lands for the development of our shale resources. Through its prototype leasing program the Department of the Interior has offered two 5,000-acre tracts in Colorado for lease. A combined total of six oil companies has leased these tracts by bidding over \$327 million which will go to the Federal and State governments as a bonus for the development rights.

The oil shale boom which has been long awaited by those who live in oil shale country seems to be here. We are no longer left wondering if there will be shale development, only how big it will be and who will pay for the massive impact on the communities in oil shale country.

As chairman of the Public Lands Subcommittee I held a day of hearings in Grand Junction, Colo., in January to try finding some tentative answers to those questions. Around 25 witnesses testified during the day-long session and the Grand Junction Civic Auditorium was packed with interested citizens. I came away tremendously impressed with the willingness and the ability of local government to prepare for an oil shale boom—if we give them the necessary funds to do the job.

The State of Colorado will receive 37½ percent of the bonus bid moneys. The rest of the funds go to the Federal Government with 52½ percent earmarked for the Bureau of Reclamation and 10 percent credited to "miscellaneous receipts" or the Department of Interior general fund.

That 37½ percent figure means Colorado will receive \$24.5 million annually for at least 3 years. A lease holder is allowed to credit development costs against his bonus bid obligation for the last 2 years' payments so the entire 37½ percent may not be paid. But at least \$73.5 million will go to Colorado.

Obviously schools and roads are just a part of the services local communities will have to provide for thousands of new residents. Water and sewer treatment plants, health and emergency services, police and fire protection all must be considered, planned, and funded. The

amendment I am introducing today will allow that to be done.

Once the Federal law is changed, and assuming a comparable change is made in State law, local governments in the affected area can immediately begin using available funds to plan and provide the entire range of services growth will demand.

This is all we can do until we know exactly what to expect from shale development. I am not at all certain just freeing money paid for the leases for all governmental uses will solve all the problems. But it is a start until we can develop the type of data base to give us an idea in dollars and cents terms of what additional funds will be necessary.

Frank Cooley, executive director of the Oil Shale Regional Planning Commission testified in Grand Junction that the impact of oil shale development—on both public and private land—will result in huge costs which must be met by local government. He said:

From our final report, we know that each new thousand population in Western Colorado is going to require capital expenditure of \$3 million and, with roads, in my own judgment, \$4 million.

What does that mean? According to estimates made by John H. Gilmore and Mary K. Duff of the Denver Research Institute at the University of Denver, the development of a mature oil shale industry will add 160,000 people to the area in the next 15 years. The non-oil-shale population will likely be around 147,600 for a total population of over 300,000. The current population is near 80,000 so the resulting increase will be 3½ times the current figure.

Some of the costs of increased services will be absorbed by the local tax base which will develop as the industry matures. A study of the tax base time lag problem is about to be completed which will give us a better idea of the dimensions of the problem.

As Pat Halligan, executive director of the Colorado West Area Council of Government puts it:

People coming into this area will not expect that there be paved streets or sewer and water or police and fire protection, they'll demand it.

The Federal Government has an obligation to help the people in Colorado meet that demand. Amending the Mineral Leasing Act of 1920 is a first step in that direction.

Now I realize there are those among my colleagues who will question the desirability of amending a law which has served us so well. But a look at the legislative history of the Mineral Leasing Act indicates that the 37½ percent returned to the State was meant by the original authors to insure that costs incurred by State and local communities in accommodating new mining industries would be met by other means than the local tax base.

Floor debate in 1920 indicates that it was the consensus of the Congress that some percentage of royalties and bonuses should be returned to the State from which they were generated, "to an extent intended to reimburse them for the loss of taxing values . . ." as a result of leas-

ing the land. Congressman Mays of Nebraska stated on November 13, 1919:

We desire . . . that some of this money be available to build up immediately upon the beginning of these operations, and if this bill operates as we hope it will, there will be communities built up at once. You have to build schoolhouses and roads, and you have to pay for the administration of justice.

A forest reserve has few requirements, whereas a community of people must have improvements, must have schools, must have teachers. Roads must be constructed, government must be sustained.

If a great portion of a county or State is held in public domain, and will remain untaxed under Federal ownership due to the Mineral Leasing Act of 1920, as is the case in the Western States, funds for public facilities must come from some alternate sources. Mining industry and resultant population increases make supplementary revenue sources mandatory for low-population density areas such as Colorado, Utah, and Wyoming.

The legislators of the 66th Congress made provision for the limited public necessities of transportation and education. The Federal and State governmental services have expanded beyond those two functions in the intervening years and we must expand the legislation to keep pace with that change.

As Gov. John Vanderhoof made the case in Grand Junction:

But Congress does need to move and move rapidly to give us those tools that we can use to do the situation right for once.

The mayor of Grand Junction, Stanley Anderson, put the need succinctly:

If, as has been suggested, the national energy crisis is the result of poor planning and miscalculation at the national level, where virtually unlimited funds have been available, how can we now expect or require that limited local resources are equal to the task of its solution? The single point of contention at the outset of impacted growth will be for the allocation of front end monies.

Mr. President, the need to provide the necessary flexibility to State and local governments to use funds derived from sales, bonuses, royalties, and rentals of public lands for oil shale development is obvious. If we call the local people to help us out in meeting our energy needs we must provide the necessary planning funds to help them.

The Federal Government also leases its lands for coal recovery, oil recovery, geothermal energy recovery and many other energy and mineral resource development projects. The Mineral Leasing Act may well need to be amended so that the funds derived from all sales, bonuses, royalties, and rentals of public lands do not have strings attached which limit their use to roads and schools.

In addition to introducing legislation to untie the strings attached to the money which will result from leasing public lands for oil shale development I am also introducing separate legislation to provide the same flexibility for funds resulting from other Federal mineral leasing activities as well.

I hope that my colleagues will share my view that new flexibility in the use of these moneys must be provided. It must be available to provide for plan-

ning, construction and maintenance of public facilities, and provision of public services. I ask for your support.

I ask unanimous consent that the text of both pieces of legislation be printed at this point in the Record.

There being no objection, the bills were ordered to be printed in the Record, as follows:

S. 3009

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 35 of the Act of February 25, 1920 (41 Stat. 450), as amended (30 U.S.C. 191), is further amended by striking the period at the end of the proviso and inserting in lieu thereof the language as follows:

"And provided further, That all moneys paid to any State from sales, bonuses, royalties, and rentals of public lands for the purpose of research in or development of shale oil may be used by such State and its subdivisions for planning, construction and maintenance of public facilities, and provision of public services, as the legislature of the State may direct."

S. 3010

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 35 of the Act of February 25, 1920 (41 Stat. 450), as amended (30 U.S.C. 191), is further amended by striking "the construction and maintenance of public roads or for the support of public schools or other public educational institutions," and inserting in lieu thereof: "planning, construction and maintenance of public facilities, and provision of public services,".

By Mr. JAVITS (by request):

S. 3011. A bill to amend the Public Health Service Act, the Developmental Disabilities Services and Facilities Construction Act, and the Comprehensive Alcoholic Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, to revise and extend programs of health services, and for other purposes. Referred to the Committee on Labor and Public Welfare.

HEALTH SERVICES AMENDMENTS OF 1974

Mr. JAVITS. Mr. President, I introduce (by request), on behalf of the administration, a comprehensive bill to amend the Public Health Service Act, the Developmental Disabilities Services and Facilities Construction Act, and the Comprehensive Alcoholic Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970 and to revise and extend programs of health services.

In essence this bill incorporates into a comprehensive bill two legislative measures I previously introduced, by request, on behalf of the Administration—S. 1632 and S. 1654—and also provides separate appropriations authorizations, first, to assist in the prevention and treatment of alcoholism—parts C and E of the Community Mental Health Centers Act; second, to provide health services for domestic agricultural migrants—section 310 of the Public Health Service Act; and third, to render services, disseminate information, and promote research in the field of family planning—title X of the Public Health Service Act.

Despite previously indicated concerns and criticisms of S. 1632 and S. 1654 when I introduced such legislation by request, the administration has now decid-

ed to continue to urge these measures without recognition of the deficiencies printed out already.

When I introduced S. 1632, I made crystal clear that a determination to utilize section 314(e) of the Public Service Act for funding programs the Executive chooses to support disregards congressional intent. When Congress passed and the President signed into law Public Law 92-449, the legislative history of section 314(e) was enunciated in Senate report 92-285, where in discussing this section of the law, it cites the House Committee on Interstate and Foreign Commerce in its report on the Communicable Disease Control Amendments of 1970:

In each of its budget presentations each year since the enactment of section 314(e), the Department of Health, Education, and Welfare has earmarked specific amounts of the 314(e) fund request for specific programs for the coming year. In other words, the categorical grant approach has continued since the enactment of Public Law 98-749, except that instead of the Congress setting the categories, the categories have been set by the Department of HEW.

I believe we must restore some control to Congress of the categories of health programs for which project grant funds are to be made available.

The Senate Labor and Public Welfare Committee in respect to this matter in its report on the Health Services Improvement Act of 1970 stated:

The Committee notes with concern the fact that a large portion of the programs funded under section 314(e) continue to be too narrowly focused rather than focused upon the broader area of the organization and delivery of health services.

When I introduced S. 1654, again I made clear my disappointment—and indicated it again when the Department's ICF regulations were published—that my "Bill of Rights for the Mentally Retarded" was not recommended for enactment into law, a view apparently shared by the Department of Justice which is interested in assuring they institutionalized their constitutional right to humane care and treatment. I also indicated that the broadening of the definition of developmental disabilities to include "autism" was far too limited a change. I believe an expanded definitional change is consistent with the original intent of the law and is necessary primarily because of the extremely narrow interpretation the Department has chosen to give "developmental disabilities."

Legislative hearings in regard to much of the subject matter of this bill has also made it clear that the Senate Committee on Labor and Public Welfare, of which I am ranking minority member, and which committee has jurisdiction over these matters, has no intention of proceeding in the fashion contemplated by the provisions of this comprehensive bill in regard to alcoholism or family planning, or for that matter developmental disabilities.

The Labor and Public Welfare Committee, and the Senate when it passed S. 1125, has made clear its commitment to project grants for alcoholism programs. Moreover, the merger into a single National Advisory Council of the func-

tions of the Mental Health and Alcohol Advisory Councils clearly runs counter to the intent of the House passed S. 1125.

Furthermore, I am not convinced we should, as set forth in the bill, eliminate support for community mental health programs. The committee's legislative hearing record is replete with bipartisan opposition to such an approach and there is no evidence that all community mental health center programs can be absorbed and supported by the existing health care system.

Mr. President, I ask unanimous consent that the text of the bill, a section-by-section analysis of the bill, and the executive communication requesting the proposed legislation be printed at this point in the RECORD.

There being no objection, the bill and material were ordered to be printed in the RECORD, as follows:

S. 3011

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 "Health Services Amendments of 1974".

TITLE I—COMPREHENSIVE PUBLIC HEALTH SERVICES, AND HEALTH SERVICES DEVELOPMENT

REPEAL OF MENTAL HEALTH ALLOCATION

SEC. 101. Section 314(d) (7) of the Public Health Service Act is amended to read as follows:

"(7) Allocation of Funds within the States.—At least 70 per centum of a State's allotment under this subsection shall be available only for the provision under the State plan of services in communities of the State."

EXTENSION OF STATE FORMULA GRANTS

SEC. 102. Section 314(d) (1) of such Act is amended by striking out "and" after "1973," and inserting immediately after "1974" the following: ", and such sums as may be necessary for each of the next three fiscal years".

EXTENSION AND REVISION OF PROJECT GRANTS

SEC. 103. Section 314(e) of such Act is amended to read as follows:

"(e) (1) There are authorized to be appropriated such sums as may be necessary for the fiscal year ending June 30, 1975, and each of the next two fiscal years, for grants to any public or nonprofit private entity to pay part of the cost of—

"(A) providing services (including related training) to meet health needs of limited geographic scope or of specialized regional or national significance;

"(B) preventing or treating alcoholism;

"(C) providing or operating centers to make available comprehensive health services (as defined by the Secretary);

"(D) providing or operating health service clinics for domestic agricultural migratory workers or for projects in improving health care or conditions of these workers or their families, or to encourage and cooperate in programs to improve their health services or conditions, including the support of services to seasonal agricultural workers when it contributes to improving the health conditions of migratory workers; or

"(E) providing services (including related training) in the field of family planning.

"(2) With respect to a facility or center, or portion thereof, used or to be used for a purpose enumerated in the preceding paragraph, the Secretary may provide, upon such terms as he deems necessary to protect the financial interest of the United States, that a grant under this subsection shall be available to pay the cost (in addition to any cost for which it may otherwise be made available under this paragraph) of—

"(A) in the case of a facility or center in existence prior to January 1, 1974, amortizing the principal of, or paying the interest in, a loan for the facility's or center's acquisition, construction, expansion, alteration, or remodeling (including a facility or center acquired from, or constructed in connection with, any program or project transferred to the Secretary from the Office of Economic Opportunity), including architects' fees and the cost of acquiring land; or

"(B) its minor remodeling or minor alteration, including architects' fees."

CONSOLIDATION OF ADVISORY COUNCILS

SEC. 104. (a) Section 316 of the Public Health Service Act (establishing a National Advisory Council on Comprehensive Health Planning Programs) is repealed, and there is enacted a new section 316 to read as follows:

"NATIONAL ADVISORY COUNCIL ON HEALTH SERVICES"

"SEC. 316. (a) The Secretary shall appoint, without regard to the provisions of title 5 of the United States Code, governing appointments in the competitive service, and without regard to the provisions of chapter 51 and subchapter III of chapter 53 of that title relating to classification and General Schedule pay rates, a permanent body to be known as the National Advisory Council on Health Services. The Council shall consist of the Secretary or his designee, who shall be the chairman, and not to exceed twenty members, not otherwise in the regular full-time employ of the United States, who are (1) leaders in health care administration or the provision of health services, or (2) representatives of consumers of health care. At least one third of the appointed members shall be individuals representing the consumers of health care. Insofar as practicable, the members shall be appointed from different geographic areas of the United States and, in the aggregate, shall be representative of all areas within the United States in which health services are provided, or their provision assisted, under this Act.

"(b) Each appointed member of the Council shall hold office for such term as the Secretary shall prescribe.

"(c) Appointed members of the Council, while attending meetings or conferences thereof or otherwise serving on the business of the Council, shall be entitled to receive compensation at rates fixed by the Secretary, but at rates not exceeding the daily equivalent of the rate specified at the time of service for GS-18 of the General Schedule (as limited by section 5308 of title 5 of the United States Code), including traveltime, and while so serving away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703(b) of title 5 of the United States Code for persons in the Government service employed intermittently.

"(d) The Council shall advise the Secretary as to matters of policy arising with respect to the financing and delivery of health services under this Act."

(b) (1) Section 217(a) of the Public Health Service Act is amended—

(A) in the first sentence thereof, by striking out "the National Advisory Mental Health Council, the National Advisory Council on Alcohol Abuse and Alcoholism";

(B) in the second sentence thereof—

(i) by striking out "the National Advisory Mental Health Council, the National Advisory Council on Alcohol Abuse and Alcoholism, and", and

(ii) by striking out "psychiatric disorders, alcohol abuse and alcoholism, and dental diseases and conditions, respectively" and inserting "and dental diseases" in lieu thereof; and

(C) in the fourth sentence thereof—

(i) by striking out "(other than the mem-

bers of the National Advisory Council on Alcohol Abuse and Alcoholism);

(ii) by inserting "and" before "(2)"; and

(iii) by striking out "; and (3)" and the remainder of clause (3) preceding the period.

(2) Section 217(b) of such Act is amended, in the second sentence thereof, by striking out "mental health, alcohol abuse and alcoholism."

(3) Section 217 of such Act is further amended by striking out subsections (c) and (d) thereof, and redesignating subsection (e) as subsection (c).

(c) (1) Section 303(b) of such Act is amended by striking out "may be made only upon recommendation of the National Advisory Mental Health Council. Such grants".

(2) Section 303 of such Act is amended by adding a new subsection (c) to read as follows:

"(c) The National Advisory Council on Health Services shall advise the Secretary on matters of policy arising in the administration of this section."

(d) Section 329(e) (1) (E) of such Act is amended by striking out "National Advisory Council on Comprehensive Health Planning" and inserting "National Advisory Council on Health Services" in lieu thereof.

(e) Section 223 of the Community Mental Health Centers Act is amended by striking out, after consultation with the National Advisory Mental Health Council (appointed pursuant to the Public Health Service Act),

(f) Section 266 of such Act is repealed.

TITLE II—EXTENSION OF ALCOHOLISM FORMULA GRANTS

SEC. 201. Section 301 of the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970 is amended by striking out "each of the next two fiscal years" and inserting in lieu thereof "each of the next five fiscal years".

TITLE III—DEVELOPMENTAL DISABILITIES

SHORT TITLE; REFERENCES TO SECTIONS

SEC. 301. (a) This title may be cited as the "Developmental Disabilities Amendments of 1974".

(b) Unless the context otherwise requires, whenever in this title an amendment or repeal is expressed in terms of an amendment, to repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Developmental Disabilities Services and Facilities Construction Act.

EXTENSION OF AUTHORIZATION

SEC. 302(a). Section 122(b) is amended by striking out "and" before "\$9,250,000" and by inserting before the period at the end thereof, "and such sums as may be necessary for the fiscal year ending June 30, 1975, and for each of the next two fiscal years".

(b) Section 131 is amended by striking out "and" before "\$32,500,000" and by inserting before the period at the end thereof, "and such sums as may be necessary for the fiscal year ending June 30, 1975, and for each of the next two fiscal years".

MINIMUM ALLOTMENT FOR TERRITORIES

SEC. 303. Section 132(a) (1) is amended by striking out "any State (other than the Virgin Islands, American Samoa, Guam, and the Trust Territory of the Pacific Islands)" and inserting in lieu thereof "the Virgin Islands, American Samoa, Guam, and the Trust Territory of the Pacific Islands for any such fiscal year shall not be less than \$50,000, and the allotment of each other State".

ELIMINATION OF REQUIREMENTS OF FEDERAL APPROVAL OF EACH CONSTRUCTION PROJECT

SEC. 304. (a) (1) Sections 135 and 136 are stricken, and sections 137, 138, and 139 are redesignated as sections 135, 136, and 137, respectively.

(2) Section 123(a) (2) is amended by striking

ing out "139" and inserting in lieu thereof "137".

(3) Section 134(b) is amended by striking out "and" after the semicolon at the end of paragraph (17), by redesignating paragraph (18) as paragraph (20), and by inserting the following new paragraphs after paragraph (17):

"(18) provide reasonable assurance that adequate financial support will be available to complete the construction of, and to maintain and operate when such construction is completed, any facility, the construction of which is assisted by funds made available pursuant to section 132;

"(19) provide reasonable assurance that all laborers and mechanics employed by contractors or subcontractors in the performance of work on any construction project assisted with funds made available pursuant to section 132 will be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a-276a-5); and the Secretary of Labor shall have with respect to the labor standards specified in this paragraph the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 5 U.S.C. 1332-15) and section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c); and".

(4) The heading of the section redesignated as section 135 by paragraph (1) of this subsection is amended by inserting "Construction," after "Planning".

(5) The heading of the section redesignated as section 136 by paragraph (1) of this subsection is amended by inserting "Construction," after "Planning".

(6) The section redesignated as section 135 (a) (1) by paragraph (1) of this subsection is amended by striking out, "other than expenditures for construction,".

(7) Section 140 is amended by striking out so much thereof as precedes subsection (b) (other than the section heading), by striking out "(b)" and inserting in lieu thereof "Sec. 138.", and by inserting "construction," after "planning".

(8) Section 142(a) (2) (A) is amended by inserting "which was used by the State in which the facility is located" before "to assist in financing the construction of the facility".

(b) (1) Section 401(h) (1) of the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 is amended by striking out "part C of title I or".

(2) Section 401(h) (2) of such Act is amended by striking out "(A) for any project under part C of title I may not exceed 66 2/3 per centum of the costs of construction of such project; and (B)".

(3) Section 401(h) (3) of such Act is amended by striking out "under part C of title I or".

(4) Section 403(a) of such Act is amended by striking out "section 134 in the case of a facility for the mentally retarded or persons with other developmental disabilities, or" and by striking out "section 136 or" and "as the case may be," from clause (2) thereof.

(5) Section 403(b) of such Act is amended by striking out "135 or".

(6) Section 404 of such Act is amended by striking out "135 or" and "136 or" from the first sentence thereof.

(7) Section 405 of such Act is amended by inserting "or section 135" after "section 403".

(8) Section 405(1) of such Act is amended by striking out "135 or" from clause (A) thereof and by inserting "(in the case of a community mental health center" after "205" in such clause.

AMENDMENTS TO FEDERAL SHARE PROVISION

SEC. 305. The section redesignated as section 135(b) by section 304(a) (1) of this Act, is amended to read as follows:

"(b) The Federal share with respect to any State for purposes of this section shall be 70 per centum for the fiscal year ending June 30, 1975; 60 per centum for the fiscal year ending June 30, 1976; and 50 per centum for the fiscal year ending June 30, 1977."

INCLUSION OF LAND ACQUISITION COSTS

SEC. 306. Section 401(e) of the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963, is amended by inserting "for purposes of title II of this Act only," before "the cost of the acquisition of land."

INCLUSION OF AUTISM

SEC. 307. Section 401(1) of the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 is amended by inserting "(including autism)" after "condition of an individual".

INCREASING EMPHASIS OF DE-INSTITUTIONALIZATION AS A PROGRAM OBJECTIVE

SEC. 308. (a) Section 130 is amended (1) by striking out "and" in clause (e), (2) by striking out the period at the end of clause (f) and inserting "; and" in lieu thereof, and (3) by inserting a new clause (g) as follows:

"(g) grants to assist in the elimination of inappropriate placement of persons with developmental disabilities in institutions."

(b) Section 134(b) (1) (4) is amended by redesignating clauses (C) and (D) as clauses (D) and (E), respectively, and by inserting the following new clause (C): "(C) part of such funds will be made available for the elimination of the inappropriate placement of persons with developmental disabilities in institutions;"

TITLE IV—EFFECTIVE DATE

SEC. 401. This Act is effective with respect to appropriations for fiscal years beginning after June 30, 1974, except that section 104 is effective upon its enactment.

SUMMARY OF THE PROPOSED "HEALTH SERVICES AMENDMENTS OF 1974"

The first section of the bill provides the short title: the "Health Services Amendments of 1974."

TITLE I—COMPREHENSIVE PUBLIC HEALTH SERVICES AND HEALTH SERVICES

1. *Repeal of mental health allocations.* Section 101 would repeal the current requirement of paragraph (7) of section 314(d) of the Public Health Service Act that at least 15 percent of a State's allotment under the section be made available only to the State mental health authority for the provision of mental health services. As a conforming change, we would amend the last sentence of that paragraph, which requires a State to spend 70 percent of the amount of its allotment reserved for mental health services, and 70 percent of the remainder of its allotment, in services in communities of the State, so as merely to require that a State spend 70 percent of its allotment for services in communities.

2. *Extension of State formula grants.* Section 102 would extend the Partnership for Health formula grant program, section 314 (d) of the Public Health Service Act, for three years, through fiscal year 1977.

3. *Extension and revision of project grants.* Section 103 would similarly extend the Partnership for Health project grant program, section 314(e) of the Act. In addition, the program would be amended so as to authorize expressly (in addition to the current authority to make grants to meet health needs of limited geographic scope or of specialized regional or national significance) the award of grants for the prevention or treatment of alcoholism, for providing or operating comprehensive health services centers, for conducting the migrant health activities now conducted under section 310 of the Public Health Service Act, and for conducting family planning activities now provided for under title X of the Act.

Grants under the amended section 314(e) of the Act, in addition to being available to pay the cost of program operations now assisted under it, would be made available for the payment of installments of principal and interest on loans for facilities or to centers in existence prior to calendar year 1974 and currently used in the program, and for the minor remodeling of those facilities.

4. *Consolidation of advisory councils.* Section 104 would amend section 316 of the Public Health Service Act to substitute for the existing National Advisory Council on Comprehensive Health Planning Programs, a new council, the "National Advisory Council on Health Services". The new council would replace, in addition to the CHP body, two other statutory councils: the National Advisory Mental Health Council, and the National Advisory Council on Alcohol Abuse and Alcoholism, both established by section 217 of the Act; and one council established administratively, the National Migrant Health Advisory Committee.

The section would substitute the new council for the Mental Health Council in the provision of the Public Health Service Act (section 303(b) requiring council approval of mental health project grants, and would limit it to advisory functions. The new council would also be substituted for the CHP Council in the provision requiring that one member of the CHP Council be a member of the National Advisory Council on Health Manpower Shortage Areas (section 329(e) (1) (E) of the Public Health Service Act).

Provisions in the Community Mental Health Council are repealed. No substitution of the new council is proposed.

TITLE II—EXTENSION OF ALCOHOLISM FORMULA GRANTS

5. Section 201 would amend section 301 of the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970 to extend for three years, through fiscal year 1977, the current program of alcoholism formula grants.

TITLE III—DEVELOPMENTAL DISABILITIES

6. *Short title.* Section 301 would give title III of the bill a short title, the "Developmental Disabilities Amendments of 1974".

7. *Extension of authorizations.* Section 302 of the bill would amend sections 1222(b) (relating to authorization of appropriations for demonstration and training grants) and 131 (relating to authorization of appropriations for the formula grant program) of the Developmental Disabilities Services and Facilities Construction Act to authorize the appropriation of such sums as may be necessary to carry out the purposes of those sections for the fiscal year ending June 30, 1975, and each of the next two fiscal years.

8. *Minimum allotment for territories.* Sec. 303 of the bill would amend section 132(a) (1) of the Developmental Disabilities Services and Facilities Construction Act to provide a minimum allotment of \$50,000 for each of the territories. Currently the minimum allotment for the States is \$100,000, but there is no minimum allotment for the territories.

9. *Elimination of requirements of Federal approval of each construction project.* Section 304 of the bill would amend various provisions of the Developmental Disabilities Services and Facilities Construction Act and the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 to eliminate the requirement of Federal approval of construction projects assisted with funds made available to States under part C (providing for allotments to States on a formula basis) of the Developmental Disabilities Services and Facilities Construction Act.

10. *Amendments to Federal share provision.* Section 305 of the bill would amend section 135(b) of the Developmental Disabilities Services and Facilities Construction Act (formerly section 137(b), but redesignated by section 304(a) of the bill) to provide a single

Federal share with respect to any State for planning, administration, services, and construction. Currently, the Federal share for construction is 66½ percent, and for other activities it is 70 percent. The amendment would make the Federal share for purposes of all activities in any State 70 percent for the fiscal year 1975, 60 percent for the fiscal year 1976, and 50 percent for the fiscal year 1977.

Section 305 of the bill would also delete from the section redesignated as section 135 (b) of the Developmental Disabilities Services and Facilities Construction Act the limitation on the Federal share with respect to any project located in a poverty area. Currently, the Federal share with respect to any such project cannot exceed 90 percent.

11. *Inclusion of land acquisition costs.* Section 306 of the bill would amend section 401 (e) of the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 to include the cost of land acquisition in the construction costs which may be assisted with funds made available under the Developmental Disabilities Services and Facilities Construction Act.

12. *Inclusion of autism.* Section 307 of the bill would amend the definition of "developmental disability" in section 401(1) of the Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 to include in the State program for developmental disabilities individuals suffering from autism.

13. *Increasing emphasis on de-institutionalization as a program objective.* Section 308 of the bill would amend section 130 of the Developmental Disabilities Services and Facilities Construction Act to express as a specific purpose of the Act's program of grants for planning, provision of services, and construction and operation of facilities for persons with developmental disabilities, the purpose of assisting in the elimination of inappropriate placement of persons with developmental disabilities in institutions. Section 134(b)(1)(4) of the Act would also be amended to require the States, in the State plan submitted to the Secretary, to provide assurance that funds will be made available for this purpose.

TITLE IV—EFFECTIVE DATE

14. Section 401 of the bill would make it effective with respect to appropriations for fiscal years beginning after June 30, 1974, except that the new health services council would be established upon the bill's enactment.

DEPARTMENT OF HEALTH,
EDUCATION, AND WELFARE,
February 13, 1974.

HON. CARL ALBERT,
Speaker of the House of Representatives,
Washington, D.C.

DEAR MR. SPEAKER: Enclosed for the consideration of the Congress is a draft bill, "To amend the Public Health Service Act, the Developmental Disabilities Services and Facilities Construction Act, and the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, to revise and extend programs of health services, and for other purposes."

The Department now administers separate project grant structures, containing separate appropriations authorizations, (1) to assist in the prevention and treatment of alcoholism (parts C and E of the Community Mental Health Centers Act); (2) to provide health services for domestic agricultural migrants (section 310 of the Public Health Service Act); (3) to render services, disseminate information, and promote research in the field of family planning (title X of the Public Health Service Act); and (4) to provide services to meet health needs of limited geographic scope, and to develop and support new health services programs (section 314(e) of the Public Health Service Act).

Title I of the enclosed bill would consolidate these programs under the umbrella of the existing project grant portion of the Partnership for Health. It is hoped that the consolidation will enable us to simplify the administration of these activities, and give us a degree of flexibility in marshalling for areas of greatest need the appropriations available for these programs.

Nevertheless, to underscore our intention to continue the activities to be consolidated, the draft bill would amend the Partnership to specify these areas expressly. In addition, it would make express our authority to award grants under the Partnership for Health for the operation of health centers and related facilities, including those formerly assisted under programs of the Office of Economic Opportunity which have now been transferred to the Department.

We would also amend the Partnership to authorize the use of project grants for amortization of principal, and payment of interest, on loans for facilities or to centers in existence prior to calendar year 1974 for the construction or acquisition of facilities used for program purposes, and for the payment of costs of minor remodeling.

Title I of the draft bill would also extend the entire Partnership for Health for three years, through fiscal year 1977. In connection with its extension of the program of formula grants for comprehensive public health services, the bill would eliminate the current statutory reservation of 15 percent of a State's allotment for mental health services. This reservation is inconsistent with the basic concept underlying the Partnership for Health. Under that concept, areas of special national significance were to be provided for through the project grant authority, which permits the precise targeting of Federal assistance to meet identified need. For other areas of health need, the Partnership recognizes that State, rather than national, government is in the best position to determine where funds should be applied, and that this determination may appropriately vary in response to varying State priorities. Accordingly, the Partnership established a formula grant program to assist the States in meeting what they, the States, determined to be their health needs. The earmarking of these grants for specific needs, such as mental health, is, in the context of the purposes of the formula grant, an inappropriate Federal imposition on State decision-making.

Title I of the draft bill would also merge into a single advisory committee, to be styled the "National Advisory Council on Health Services", functions now performed by the National Advisory Council on Comprehensive Health Planning Programs, the National Advisory Mental Health Council, the National Council on Alcohol Abuse and Alcoholism. The new council would also replace the National Migrant Health Advisory Committee, which the Secretary created administratively.

The Department does not seek extension of the separate authorities that title I of the draft bill would consolidate, or of the remaining portions of the Community Mental Health Centers Act. The community mental health services program has proven itself and should now be absorbed by the regular health service delivery system.

Title II of the draft bill would extend for three years the program of formula grants under the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970.

Title III of the draft bill would extend and amend the Developmental Disabilities Services and Facilities Construction Act. The amendments are substantially those submitted to the Congress in our letter of March 23, 1973, in two respects. First, we would increase emphasis in the use of assistance under the Act for eliminating the inappro-

prate placement of persons with developmental disabilities in institutions. Second, we would not seek extension of the currently unfunded program of grants for the construction of university-affiliated facilities.

As we said in that March 23 letter, we have been generally pleased with the operation of the Act. Our experience with its programs, however, has led us to the conclusion that some minor modifications in the statutory authority would improve the capacity of the Federal Government and the States to work cooperatively to improve the lives of the developmentally disabled. The enclosed draft bill, in addition to extending for three years the programs authorized by parts B and C of the Developmental Disabilities Act, would amend those programs in ways which we believe will increase their effectiveness.

Amendments contained in the bill would eliminate the requirement of Federal approval of construction projects assisted with funds made available to States under part C of the Act. The effect of these amendments would be to simplify the approval process, and thereby decrease the time and funds required, for the construction of needed community facilities. This amendment is in accord with the President's objective of returning responsibility to the States and localities whenever possible.

Also in keeping with the Administration's philosophy of greater State responsibility, the bill would delete the 90 percent limitation on the Federal share with respect to any project in a poverty area. We believe the States should judge the needs of their communities. So long as the Federal share limitation with respect to States is met and so long as States meet the State plan provision requiring special assistance to urban and rural poverty areas, each State should be able to apportion Federal funds within the State according to its evaluation of local need.

In order to further simplify the administration of the programs authorized under the Developmental Disabilities Act, the draft bill would provide a single Federal share of State expenditures under the Act for planning, administration, services, and construction. Currently, the Federal share for construction is 66 2/3 percent, and for other activities it is 70 percent. The amendment would make the Federal share for purposes of all activities under the State plan 70 percent for the fiscal year 1975, 60 percent for the fiscal year 1976, and 50 percent for the fiscal year 1977.

Title III of the draft bill would also amend the definition of developmental disabilities by including autism as a disability for which services would be covered under the Developmental Disabilities Act. This would allow for treatment, under the program, of autistic children, whose disability requires treatment similar to that provided to individuals with neurologically caused developmental disabilities. Currently, these individuals are excluded from participation in the program because of the lack of certainty over whether their disabilities are neurologically based.

Other amendments contained in the title would provide a minimum allotment of \$50,000 to the Virgin Islands, American Samoa, Guam, and the Trust Territory of the Pacific Islands and would include in construction costs the cost of land acquisition.

We recommend prompt and favorable consideration of this bill. We are advised by the Office of Management and Budget that enactment of this proposed legislation would be in accord with the program of the President.

Sincerely,

CASPAR W. WEINBERGER,
Secretary.

By Mr. JAVITS (by request):

S. 3012. A bill to amend the Federal Food, Drug, and Cosmetic Act and the Fair Packaging and Labeling Act to im-

prove the protection of the public health and safety, to repeal the Filled Milk Act, and the Filled Cheese Act, and for other purposes. Referred, by unanimous consent, simultaneously to the Committees on Labor and Public Welfare and Commerce, with the proviso that when and if one committee reports the bill, the other committee must report within 60 days.

FOOD, DRUG, AND COSMETIC AMENDMENTS OF 1974

Mr. JAVITS. Mr. President, I am today introducing on behalf of the administration a bill to amend the Federal Food, Drug, and Cosmetic Act and the Fair Packaging and Labeling Act, to improve the protection of the public health and safety, and to repeal the Filled Milk Act and the Filled Cheese Act.

Several Senate committees—the Labor and Public Welfare Committee, of which I am ranking minority member, the Commerce Committee, and the Finance Committee—are concerned with different provisions in the bill. I ask unanimous consent that the bill simultaneously be referred to the Committees on Labor and Public Welfare and Commerce and that if and when reported by one committee, the other be given an additional 60 days to file a report on their version thereof.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. JAVITS. Mr. President, as the Congress seeks to insure consumer safety with respect to foods, drugs, cosmetics, and medical devices many of the provisions of the administration bill have been considered, are being considered, or will be considered with respect to medical device, food surveillance, and cosmetic legislation in the respective committees.

Without passing on the bill itself, I believe the administration is to be commended for its submittal as an earnest advocate of its purposes which seek to protect the public health and to recognize the inadequacy of existing legal authority in crucial areas for example in the Federal Food, Drug, and Cosmetic Act.

The major provisions of the bill follow:

First. Broaden FDA's inspection authority to cover records in food, drug, device, and cosmetic factories. The records would include data on complaints, adverse reactions, product claims, and product composition and processing.

Second. Enable FDA to require recordkeeping and reporting for foods, devices, cosmetics, and all drugs including those placed on the market before 1938.

Third. Authorize the issuance of subpoenas for witnesses and documentary evidence in matters under investigation by the FDA.

Fourth. Authorize the FDA to administratively detain violative food products, drugs, devices, and cosmetics for up to 20 days while initiating appropriate legal action. Over the years there have been instances where such products have been removed from warehouses, et cetera, before effective action by FDA would be taken.

Fifth. Increase fines for criminal violations of the FDC Act from \$1,000 to \$10,-

000 for first offenses and from \$10,000 to \$25,000 for each subsequent violation. This action brings these 1938 fines into closer conformity with those imposed by more recent regulatory statutes.

Sixth. Require the labels of nonprescription drugs to show the quantity of all active ingredients. At the present time, except for a few specified ingredients, nonprescription drugs are required to list only the names of the active ingredients.

I ask unanimous consent that the full text of the letter of transmittal from the Department of Health, Education, and Welfare, which explains the necessity and the purpose of the provisions of the bill and the bill, be printed in the RECORD.

There being no objection, the bill and material were ordered to be printed in the RECORD, as follows:

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 "Food, Drug, and Cosmetic Amendments of 1974".

TITLE I—AMENDMENTS TO THE FEDERAL FOOD, DRUG, AND COSMETIC ACT AND THE FAIR PACKAGING AND LABELING ACT

REFERENCES TO THE FEDERAL FOOD, DRUG, AND COSMETIC ACT

SEC. 101. Whenever in this title an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Federal Food, Drug, and Cosmetic Act.

PART A—PROHIBITED ACTS AND PENALTIES INCREASE OF CRIMINAL FINES

SEC. 111. Section 303 is amended (1) in subsection (a), by striking out "\$1,000" and inserting "\$10,000" in lieu thereof, and (2) in subsection (b), by striking out "\$10,000" and inserting "\$25,000" in lieu thereof.

ADMINISTRATIVE DETENTION

SEC. 112. (a) Section 304 is amended by adding at the end the following new subsection:

"(g) Whenever any article that is a food, drug, device, or cosmetic is found, by any officer or employee duly designated by the Secretary, upon any premises where it is manufactured, processed, packed, or held, for introduction into interstate commerce or after its introduction, or in any vehicle being used to transport or hold the article in interstate commerce, and there is reason to believe that the article is adulterated or misbranded within the meaning of this Act, or is an article which may not be manufactured, introduced into interstate commerce, or sold or offered for sale by reason of any provision of this Act, the article may be detained by that officer or employee for a reasonable period but not to exceed twenty days, pending action under the foregoing provisions of this section or notification of any Federal, State, or other governmental authority having jurisdiction over the article, and shall not be moved by any person from the place at which it is located when so detained (except as the officer or employee may authorize) until released by the officer or employee. Insofar as practicable and consistent with protection of the public health, the officer or employee shall allow the owner or bailee of the detained article to employ reasonable measures to preserve the article from decomposition."

(b) Section 301 is amended by adding at the end the following new subsection:

"(q) The movement of an article detained under section 304(g), except as authorized under that section, or the removal or altera-

tion of any mark, stamp, tag, label, or other device affixed by or at the direction of the officer or employee detaining the article for the purpose of identifying it as a detained article."

(c) Section 201(h) is amended by inserting "301(q)," after "301(i)."

PART B—GENERAL ADMINISTRATIVE PROVISIONS
EXTENSION OF FACTORY INSPECTION AUTHORITY TO RECORDS OF ESTABLISHMENTS SUBJECT TO THE FEDERAL FOOD, DRUG, AND COSMETIC ACT

SEC. 121. Section 704(a) is amended in the first sentence (A) by inserting "consulting laboratory," after "warehouse," each time it appears; and (B) by inserting after "containers," the following: "quality control records (including all records relating to composition, processing, product claims, and complaints or adverse reactions)."

PAYMENT OF TRAVEL AND PER DIEM IN CONNECTION WITH THE TRAINING OF STATE OFFICIALS UTILIZED BY THE SECRETARY TO ENFORCE THE FEDERAL FOOD, DRUG, AND COSMETIC ACT OR THE FAIR PACKAGING AND LABELING ACT

SEC. 122. (a) Section 702(a) is amended by inserting after the first sentence the following: "In connection with the training by the Secretary of any individual who is not an officer or employee of the United States to prepare him to perform the duties described in the preceding sentence, the Secretary may allow such individual travel expenses to and from the place of such training, including per diem in lieu of subsistence while in travel status and during such training, in the same manner as such expenses are authorized by section 5703 of title 5, United States Code, for individuals in the Government service employed intermittently, provided that the individual's training is conducted under an agreement between the Secretary and the State, Territory, or political subdivision, whereby the individual, upon completion of the training, will be employed by the State, Territory, or political subdivision in the conduct of examinations or investigations to carry out the purposes of this Act."

(b) (1) Section 6(c) of the Fair Packaging and Labeling Act is amended by inserting at the end thereof the following: "In connection with the training by the Secretary of any individual who is an officer or employee of any State, Territory, or political subdivision thereof, duly commissioned by the Secretary as an officer of the Department of Health, Education, and Welfare to conduct examinations, investigations, or perform other functions, for the purposes of carrying out this Act, the Secretary may allow such individual travel expenses to and from the place of such training, including per diem in lieu of subsistence while in travel status and during such training, in the same manner as such expenses are authorized by section 5703 of title 5, United States Code, for individuals in the Government service employed intermittently, provided that the individual's training is conducted under an agreement between the Secretary and the State, Territory, or political subdivision, whereby the individual, upon completion of the training, will be employed by the State, Territory, or political subdivision in the conduct of examinations or investigations to carry out the purposes of this Act."

(2) Section 6(c) of such Act, as amended by the preceding paragraph, is transferred to section 7 of such Act and redesignated as subsection (d) of such section, and section 6(d) of such Act is redesignated as section 6(c).

RECORDS AND REPORTS RESPECTING ARTICLES SUBJECT TO THE FEDERAL FOOD, DRUG, AND COSMETIC ACT

SEC. 123. Section 702(c) is amended by inserting "(1)" after "(c)" and adding at the end a new paragraph (2) as follows:

"(2) In addition to any other such require-

ment imposed by this Act, every person who owns or operates any factory, warehouse, consulting laboratory, or establishment in which food, drugs, devices, or cosmetics are manufactured, processed, packed, or held, for introduction into interstate commerce or after such introduction, shall establish and maintain such records, make such reports, and provide such information as the Secretary may, by regulation, reasonably require for the purposes of implementing this Act, or to determine compliance with rules or orders prescribed under this Act. Upon request of an officer or employee duly designated by the Secretary, every such person shall permit the inspection of appropriate books, records, and papers relevant to determining whether such person has acted or is acting in compliance with this Act or with rules or orders prescribed hereunder. The provisions of this paragraph shall not apply to pharmacies, practitioners, and other persons, described in clauses (1) through (4) of the last sentence of section 704(a)."

ISSUANCE OF SUBPENA TO ASCERTAIN VIOLATION OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT

SEC. 124. Section 702 is amended by adding at the end the following new subsection:

"(f) For the efficient administration and enforcement of this Act, the provisions (including penalties) of sections 9 and 10 of the Act entitled 'An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes', approved September 26, 1914 (38 Stat. 722, 723, as amended; 15 U.S.C. 49 and 50) are made applicable to the jurisdiction, powers, and duties of the Secretary in administering and enforcing the provisions of this Act and to any person, firm, or corporation with respect to whom such authority is exercised. The Secretary may prosecute any inquiry necessary to his duties under this Act in any part of the United States, and the powers conferred by those sections 9 and 10 of the Act of September 26, 1914, as amended, on the district courts of the United States may be exercised for the purposes of this Act by any such court."

PART C—DRUGS

REQUIREMENT FOR STATING ON NONPRESCRIPTION DRUG LABELS THE QUANTITY OF THE DRUGS' ACTIVE INGREDIENTS

SEC. 131. A semicolon is substituted for the colon preceding the proviso to clause (ii) of section 502(e) (1), and the proviso is repealed.

MANDATORY REGISTRATION OF FOREIGN ESTABLISHMENTS EXPORTING DRUGS TO THE UNITED STATES

SEC. 132. Subsection (a) of section 801 is amended (1) in the second sentence, (A) by striking out "establishment not so registered" and inserting in lieu thereof "unlisted establishment" and (B) by inserting after "testimony" the following: "on whether such establishment is registered under such subsection", and (2) by striking out "or" in clause (2) and inserting after "505," the following: "or (4) such article is a drug manufactured, prepared, propagated, compounded, or processed in an establishment not registered pursuant to subsection (i) of section 510."

BAN ON EXPORT OF UNOBLIGATED ANTIBIOTICS

SEC. 133. Section 801(d) is amended (1) in the first sentence, by inserting "except as provided by the last sentence of this subsection," after "shall not", and (2) in the last sentence, by inserting "a drug deemed to be misbranded under section 502 (1) or" after "exportation of".

TITLE II—REPEAL OF LAWS REGULATING FILLED MILK AND FILLED CHEESE

REPEAL OF THE FILLED MILK ACT

SEC. 201. (a) The Act of March 4, 1923, 42 Stat. 1486, known pursuant to 57 Stat. 499 (1943) as the Filled Milk Act, is repealed.

(b) Section 902(c) of the Federal Food,

Drug, and Cosmetic Act is amended by striking out "the Filled Milk Act of March 4, 1923 (U.S.C. 1946 ed., title 21, ch. 3, secs. 61-64);".

REPEAL OF THE FILLED CHEESE ACT

SEC. 202. (a) Part II of subchapter C of chapter 39 of the Internal Revenue Code of 1954 is repealed. The table of subchapters of such chapter is amended by striking out "and filled cheese"; the heading of such subchapter C is amended by striking out "AND FILLED CHEESE"; and the table of the parts of subchapter C is amended by striking out "II. Filled Cheese."

(b) (1) Sections 7236 and 7266 of the Internal Revenue Code of 1954 are repealed, and the listing of such sections in the table of the sections of part II of subchapter A of chapter 75, and the table of the sections of subchapter B of such chapter, respectively, are stricken.

(2) Section 7303 of the Internal Revenue Code of 1954 is amended (A) in paragraph (4), by striking out "filled cheese or" in the caption and text of the paragraph, and by striking out "or 4841", and (B) in paragraph (5), by striking out "or filled cheese" in the caption and text of the paragraph, and by striking out, or part II of subchapter C of chapter 39, whichever is applicable, and "in the applicable subchapter or part thereof".

(c) Section 7641 of the Internal Revenue Code of 1954 is amended by striking out "filled cheese,".

(d) Section 902(e) of the Federal Food, Drug, and Cosmetic Act is amended by striking out "the Filled Cheese Act of June 6, 1896 (U.S.C., 1946 ed., title 26, ch. 17, secs. 2350-2362);".

TITLE III—EFFECTIVE DATE

SEC. 301. This Act shall be effective upon the date of its enactment except for the sections contained in part C of title I. In the case of such sections, (1) section 131 shall take effect on the first day of the thirteenth month beginning after the date of enactment, except that such effective date shall be postponed, if the Secretary of Health, Education, and Welfare determines that there is good cause therefor, for a period of not to exceed an additional twelve months with respect to any specific drug not in compliance with section 502(e) (1) of the Federal Food, Drug, and Cosmetic Act as amended by this Act, other than a drug bearing a label printed after the first day of the fourth month beginning after the date of such enactment; (2) section 132 shall take effect with respect to articles imported on or after the first day of the sixth month beginning after the date of enactment of this Act, except that the Secretary may extend such date by regulation for good cause; and (3) section 133 shall take effect with respect to articles manufactured on or after the first day of the sixth month beginning after the date of enactment of this Act.

DEPARTMENT OF HEALTH,

EDUCATION, AND WELFARE,

February 8, 1974.

HON. GERALD R. FORD,
President of the Senate,
Washington, D.C.

DEAR MR. PRESIDENT: We enclose for the consideration of the Congress a draft bill "To amend the Federal Food, Drug, and Cosmetic Act and the Fair Packaging and Labeling Act to improve the protection of the public health and safety, to repeal the Filled Milk Act and the Filled Cheese Act, and for other purposes."

Title I of the draft bill contains amendments to the Federal Food, Drug, and Cosmetic Act and the Fair Packaging and Labeling Act.

Part A of title I would amend chapter III of the Federal Food, Drug, and Cosmetic Act in two respects:

INCREASE OF CRIMINAL FINES

Section 111 of the draft bill would amend section 303 of the Federal Food, Drug, and Cosmetic Act to increase the maximum fine imposed for violation of the Act from \$1,000 to \$10,000. If the violation is a second or subsequent offense, or is committed with the intent to defraud or mislead, the bill would increase the maximum fine from \$10,000 to \$25,000.

The purpose of the amendment is to bring these fines, which were originally established in 1938, into closer conformity with fines, whether civil or criminal, imposed by more recently enacted regulatory statutes. Thus, for example, the maximum criminal fine set for a willful violation of the Consumer Product Safety Act, which was signed into law last year, is \$50,000 (section 21). Violations of the National Emissions Standards Act by manufacturers of motor vehicles may result in a civil fine of \$10,000 for each noncomplying vehicle or engine. (Section 205)

ADMINISTRATIVE DETENTION

Section 112 of the draft bill would amend sections 301 and 304 of the Federal Food, Drug, and Cosmetic Act to empower the Secretary, when he has reason to believe that an article that is a food, drug, device, or cosmetic held in interstate commerce is adulterated or misbranded, to detain the article for up to 20 days pending the initiation, against the article, or appropriate legal action.

At present, when an inspector of the Food and Drug Administration locates such products he is limited to three methods of bringing about compliance with the Act: he may attempt to persuade the holder of the product—the dealer or manufacturer—to retain or destroy the product voluntarily; he may collect one or more official samples for his use in moving for the product's judicial seizure; or he may arrange for his district office to request State or local health authorities to embargo the product under applicable State law, if any.

Inasmuch as the Secretary has no authority to hold the product at the locations where found, the inspector must rely upon the good faith of the holder of the product not to move or ship it. Over the years there have been many instances in which, in consequence, adulterated or misbranded products have been removed from the premises in which they were found before effective action could be taken against them.

For this reason, a recent report of the General Accounting Office, "Lack of Authority Limits Consumer Protection: Problems in Identifying and Removing from the Market Products which Violate the Law", recommended that the Congress enact legislation along the lines proposed by section 112.

The section's amendments to the Federal Food, Drug, and Cosmetic Act are modeled upon language now contained in the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act. Under the latter three Acts, the Secretary shares with the Secretary of Agriculture an authority to detain lots of meat, poultry, egg products, and certain other articles, believed to be in violation of the Food and Drug Act, found outside premises subject under the Meat, Poultry, and Egg Acts to inspection by the Secretary of Agriculture.

Current law confers exclusive jurisdiction upon the Secretary of Agriculture within those premises, however, and the Food and Drug Act is therefore inapplicable within them. Our proposed detainer authority would not alter these jurisdictional lines, and would therefore not apply to premises now subject to that exclusive jurisdiction.

Although the detainer authority would apply to animal biological products, we have by regulation exempted from the Food and Drug Act products subject to licensing under the Virus-Serum Toxin Act of March 14, 1913 (21 U.S.C. 151-158). It is our intention to continue that exemption.

Part B of title I would amend chapter VII of the Federal Food, Drug, and Cosmetic Act, and the Fair Packaging and Labeling Act as follows:

EXTENSION OF FACTORY INSPECTION AUTHORITY

Section 121 of the draft bill would amend section 704(a) of the Federal Food, Drug, and Cosmetic Act to empower the Secretary to inspect a manufacturer's quality control records in the course of an authorized factory inspection.

We are aware of no persuasive reason why manufacturers of all products regulated under the Act should not be required to permit inspection of these records if they are within the inspected establishment and bear on a possible violation of the Act. The Secretary now exercises a broader authority than that proposed in the inspection of premises in which prescription drugs are held.

TRAVEL EXPENSES OF STATE TRAINEES

Section 122 of the draft bill would amend section 702(a) of the Federal Food, Drug, and Cosmetic Act, and sections 6 and 7 of the Fair Packaging and Labeling Act, to authorize the Secretary to pay transportation and per diem expenses incurred by State officials in connection with their receipt of training by the Secretary to carry out examinations, investigations, or other of the Secretary's functions under these Acts.

Since 1968, the Food and Drug Administration has entered into work-sharing agreements with various States in order to avoid a costly duplication by the Federal Government of regulatory effort under the Federal Food, Drug, and Cosmetic Act and the Fair Packaging and Labeling Act that the States were prepared to undertake under State food and drug laws. However, a major problem facing many of the States, with respect to this work-sharing, is their inability to train field and analytical personnel to perform certain sophisticated inspections and laboratory analyses that the cooperative program calls for. The small number of employees in the responsible State agencies have made it economically infeasible for individual States to develop such a training capacity.

The Intergovernmental Personnel Act of 1970 (P.L. 91-648), which permits the Secretary to offer this training, does not authorize Federal payment for a trainee's travel and per diem expenses. Whatever may be the justification for this omission where the purpose of training is to enhance an employee's capacity to discharge functions for which the State is responsible, it would not apply where, as here, the purpose of the training is to improve the ability of the Secretary to enforce Federal law. By empowering the Secretary to pay these ancillary costs, the amendment will remedy a frequent inability of these non-Federal officials to attend out-of-State training that has resulted from State budgetary constraints and has proved a major barrier to upgrading their proficiency.

RECORDS AND REPORTS RESPECTING ARTICLES SUBJECT TO ACT

Section 123 of the draft bill would amend section 702(c) of the Federal Food, Drug, and Cosmetic Act to enable the Secretary to require establishments subject to the Act to maintain such records and make such reports as the Secretary may reasonably require for the Act's implementation. At present only manufacturers of new drugs are subject to such requirements. If the proposal is adopted, it will permit the Secretary to obtain, for example, industry data on clinical experience of drugs not now subject to such requirements, and to monitor industry data relating to the safety of other products subject to the Act, particularly as reflected in industry files of consumer complaints.

USE OF SUBPENAS TO ASCERTAIN VIOLATIONS

Section 124 of the draft bill would amend section 702 of the Federal Food, Drug, and

Cosmetic Act to authorize the Secretary to compel, by subpoena, the attendance of witnesses and the production of documents in connection with any proceeding or investigation in the course of his administration of the Act. A refusal to comply with the subpoena would be subject to criminal penalties. In addition, the subpoena would be enforceable in any United States district court. The amendment is modeled upon section 407 of the Federal Meat Inspection Act which, like the instant proposal, assimilates comparable authority exercised under the laws governing the Federal Trade Commission.

Part C of title I would amend three sections of the Federal Food, Drug, and Cosmetic Act with respect to drugs:

QUALITY OF ACTIVE INGREDIENTS ON NON-PRESCRIPTION DRUG LABELS

Section 131 of the draft bill would repeal the proviso of section 502(e) (1) of the Federal Food, Drug, and Cosmetic Act that exempts non-prescription drugs from the requirement that drug labels show the quantity of the drugs' active ingredients. Now the labels of these drugs need declare quantitatively only certain ingredients specified by the Act. The amendment would aid physicians called upon to administer antidotes for children or others who have ingested the drugs excessively, and would also assist consumers in comparing these drugs.

MANDATORY REGISTRATION OF FOREIGN ESTABLISHMENTS EXPORTING DRUGS TO THE UNITED STATES

Section 132 of the draft bill would amend section 801 of the Federal Food, Drug, and Cosmetic Act to require foreign drug establishments that export drugs to the United States to register annually with the Secretary. Current law now imposes this requirement upon domestic drug establishments under section 510 of the Act, and requires, as well, that registrants file with the Secretary certain information about the drugs that they prepare. The law permits, but does not require, registration of foreign drug establishments, but only if adequate means are available to the Secretary for determining whether drugs prepared in those establishments would, if imported, be in compliance with the Act. Registration of a drug's manufacturer is not a precondition to the drug's importation into the United States, however.

Because imported drugs from unregistered foreign establishments demand from the Secretary an excessive inspectional and analytical effort in comparison to that required by drugs prepared in registered establishments, and because the expenditure of this effort reduces the resources available for the inspection and analysis of drugs imported from registered establishments, we propose through this amendment to make the drug registration requirements universal.

BAN ON EXPORT OF UNCERTIFIED ANTIBIOTICS

Section 133 of the draft bill would amend section 801(d) of the Federal Food, Drug, and Cosmetic Act to prohibit the exportation of antibiotics not certified by the Secretary as safe and effective under section 507. As now written, section 801(d) provides, in substance, that a food, drug (other than an unsafe animal drug), device, or cosmetic intended for export shall not be deemed adulterated or misbranded under the Act if it conforms to the laws of the receiving country.

This section does not have the effect of authorizing the exportation of unapproved new drugs, i.e., drugs for which there is not in effect an approved new drug application, or which have not been approved for investigational use. The exportation of these drugs is directly prohibited by section 301(d). Through an anomaly of the law, however, antibiotic drugs for human use subject to

section 507 do not fall within this prohibition and, if not certified by the Secretary, are merely deemed to be misbranded by section 502(1). Therefore, the effect of existing law is to allow the exportation of a range of unsafe or ineffective drugs. The instant proposal would correct this situation.

Title II of the draft bill would repeal the Filled Milk Act and the laws regulating the sale of filled cheese. The Filled Milk Act prohibits shipment in interstate commerce of any milk, cream, or skimmed milk which has any added fat or oil other than milk fat. The Act has the effect of barring the marketing of combinations of milk solids and vegetable oils which are inexpensive and nutritious, even though properly labeled to disclose their contents. The Act has recently been held unconstitutional by a United States district court. Its repeal would be consistent with a recommendation of the White House Conference on Food, Nutrition, and Health.

In addition, we recommend repeal of the laws regulating the sale of filled cheese. These laws, which use the Federal revenue power to restrict sale of cheese products which contain added vegetable fat, interfere with the marketing of inexpensive and nutritious food products. Their repeal has also been endorsed by the White House Conference.

Title III of the draft bill, which establishes its effective date, would delay this date for the three provisions contained in part C of title I, relating to drugs. Section 131, which would require label changes on over-the-counter drugs, would take effect a year after the date of enactment, except that the Secretary would be authorized to extend the date, within certain limitations, for good cause. The approach taken is the same as that proposed in our bill "To amend the Federal Food Drug, and Cosmetic Act to require the disclosure of ingredients on the labels of all foods," transmitted to the Congress on March 12, 1973, and introduced as H.R. 5642 [S. 1451].

Section 132, which would mandate the registration of foreign establishments exporting drugs to the United States, would take effect with respect to articles imported more than five months after enactment, except that the Secretary would be authorized to extend this date for good cause.

Section 133, the ban on the export of uncertified antibiotics, would take effect with respect to articles manufactured on or after the first day of the sixth month beginning after the date of enactment.

We ask that the draft bill receive prompt and favorable consideration.

We are advised by the Office of Management and Budget that enactment of this draft bill would be consistent with the Administration's objectives.

Sincerely,

FRANK C. CARLUCCI,
Acting Secretary.

By Mr. CURTIS (for himself and Mr. HELMS):

S.J. Res. 187. A joint resolution to express the sense of Congress for the extension of citizenship to Alexander Solzhenitsyn and his family. Referred to the Committee on Foreign Relations.

Mr. CURTIS. Mr. President, first let me say that I wish to commend my distinguished colleague, the Senator from North Carolina, for his remarks and the action that he has taken.

Mr. President, the arrest and forcible banishment of Alexander Isayevich Solzhenitsyn from the Soviet Union has properly prompted a worldwide chorus of indignation. Not since Stalin's order

to exile his rival Leon Trotsky in 1929 have the Kremlin leaders resorted to such a desperate action to suppress one of their own citizens.

Even under the bizarre judicial regulations that intrude upon all facets of Soviet life there is no provision for the punishment laid upon Solzhenitsyn. The legal summons which Solzhenitsyn ignored contained no charges or cause for investigation. No pretense of a trial was even attempted. Instead he was simply arrested and declared guilty of what the Communists refer to as: systematically performing actions that are incompatible with being a citizen of the Soviet Union and detrimental to the U.S.S.R.

They thus labeled him a traitor and therefore subject to a penalty ranging in severity from 10 years imprisonment to death.

And what was his crime really? His actual crime was nothing more than speaking the truth about the manner in which the Communist Party has repressed the people of Russia for over half a century. The actions now taken against Solzhenitsyn by the Soviet leaders, which even violate their system of justice, most graphically illustrates to the entire world the very charges he has made against them.

Just 1 week prior to his arrest Solzhenitsyn prophesied that the Soviet authorities would move against him. Despite what he feared they may have done to him personally he boldly asserted that:

They will not crush the truth. . . . The truth will come to my people. I believe in our repentance, in the purification of our souls, in the Resurrection of Russia.

This faith and fortitude of Solzhenitsyn should be an heroic inspiration to all Americans, especially those who feel that our own difficulties are insurmountable. Solzhenitsyn is today a man without a country simply because he loved his own country so very much. No welcome, however cordial, extended by any other country to Solzhenitsyn can alleviate his anguish over his banishment from Russia. But the enthusiastic reception he has already received in Germany and Switzerland should encourage his hopes that the ideals he stands for remain alive in the free world and may yet be reasserted in his homeland.

Both because of his extraordinary character and the unusual punishment he has been subjected to, I am today introducing a resolution which encourages the extension of American citizenship to Alexander Solzhenitsyn and his family. This sense of the Senate resolution is more than simply a symbolic expression of our sympathy with his plight because quite literally he is a man without a country.

Many other government leaders have informed Solzhenitsyn that he would be welcome in their countries. As the most prominent nation in the free world I believe that it is especially incumbent upon us to extend a welcome to Solzhenitsyn as we have to all innocent refugees fleeing from political tyranny.

Just as fervently as the Communist hierarchy in Russia have rejected Solzhenitsyn we should embrace him. We

should embrace him, however, not simply as a manifestation of the cold war which we now know the Soviets have never abandoned. Instead we should embrace him for what he represents which happens to collide forcibly with the most basic tenets of communism. Both in his life, and the novels which reflect the genius of his life, Solzhenitsyn stands as probably the most profound and eloquent exponent of what it means to be a human being. This insight and his ability to express it threatened the Communist system under which he lived. Solzhenitsyn himself pointed out this threat years ago in "The First Circle" as he wrote:

And for a country to have a great writer . . . is like having another government. That's why no regime has ever loved great writers, only minor ones.

Even as we recognize the great merits of Solzhenitsyn and welcome him to the free world, we must not ignore the broader implications of what has transpired.

Some have already suggested that we should take consolation in the nature of Solzhenitsyn's punishment. It is true that the Soviet Union did not execute Solzhenitsyn or even send him down the well trodden path to Siberian exile, but instead banished him from his home country entirely. The authorities may have forewarned imprisoning him inside the Soviet Union precisely because the threat would remain that the frightening reality of "The Gulag Archipelago" could be supplemented someday with additional autobiographical sketches. This, possibly more than the pressure of world opinion, may have prompted what has been termed the "lessor penalty".

But let us note most emphatically, that, for a literary figure who draws his inspirational sustenance from his native soil, the punishment imposed upon Solzhenitsyn represents nothing less than an attempted literary execution. We might well term this action "litericide"—meaning quite simply the calculated attempt to destroy literary creativity. The Soviets have previously encouraged their great writers and scientists who were dissidents to leave the country or prohibited them from returning when they went overseas for visits and conferences. Out of a similar fear of being denied an opportunity to return to Russia, Solzhenitsyn declined to accept his Nobel prize for literature in Stockholm. In forcibly evicting him from the country the Soviet dictators have never quite so vividly depicted their paranoic fear of the expression of truth.

We can and should be grateful that Solzhenitsyn is alive and free and we can only hope that his family will be allowed to join him. But we severely err if we think that any of this gratitude should be directed toward the Kremlin leadership clique. Solzhenitsyn certainly is not thanking them. Instead our gratitude must go to the seemingly unfathomable power of the ideals he has expressed so eloquently. The resulting accolades of the entire world focused such intense moral force upon the Soviet Government that they would not bring physical harm to him.

We must not now allow this proper indignation of the world community to subside with the exile of Solzhenitsyn. To do this would betray the thousands of other courageous individuals in the Soviet Union who remain as either potential or actual political prisoners. The people Solzhenitsyn has described so movingly must remain a fundamental concern of all civilized societies.

Solzhenitsyn and all those who have also suffered so much at the hands of a ceaselessly suppressive regime must become an indelible lesson to the United States in her dealings with the Soviet Union. Careless talk about the liberalization within Soviet society and convergence theories of political development must be dismissed as euphoric, and hence dangerously misleading, doctrines. We can continue to negotiate with the Soviet Union as a great power, but our own interests, as well as those of the oppressed people within Russia, require that in the course of such negotiations we do nothing to increase either the threat to our own security or the tyrannical rule of the Kremlin over her subjects.

Although we should despair over the actions taken against Solzhenitsyn, the fact that men such as him can arise even in such an oppressive society demonstrates the unquestionable reality of the truths he has borne witness to. The fact that the striving for freedom and decency emerges even in Russia remains a tremendously encouraging element of hope that any tyranny must eventually topple. As Solzhenitsyn comments in his brilliant novel "Cancer Ward:"

A man sprouts a tumor and dies—how, then can a country live that has sprouted camps and exiles.

Such a country may exist, but it cannot really live and thrive. Only when the leadership in the Kremlin allow this truth to penetrate their Marxist-Leninist mythology will the possibility arise that the Soviet Union will join the ranks of the civilized world. Only then can we be assured that peace is possible, and only then can we confidently beat our swords into ploughshares.

We of course most earnestly hope that Solzhenitsyn shall be allowed to return to his homeland. But the historical record of half a century of Communist rule in Russia teaches us how bleak such a prospect must be. Consequently we should welcome Solzhenitsyn and his family to our country. As America approaches her two hundredth anniversary as a refuge for freedom-loving people from throughout the world it is especially appropriate that we offer them citizenship. Moreover, as my resolution states, we should also make clear to the Soviet Union and the world that in this Congress our paramount concern continues to be focused upon human freedom and thus we deprecate most vigorously the violation of basic human rights by the rulers in the Kremlin.

If Solzhenitsyn should decide to come and live amongst the free people of the United States then we may be able to share in a much more direct and personal manner his tremendous insights into our times. Through his life and work we have already learned far more about

the Soviet Union and probably even about ourselves than scores of scholars have taught us.

But whether Solzhenitsyn should accept our offer of citizenship or not, I believe that he should be encouraged as strongly as possible to visit with us so that we can clearly demonstrate our appreciation for the courage and sacrifices he has made.

ADDITIONAL COSPONSORS OF BILLS AND JOINT RESOLUTIONS

S. 2296

At the request of Mr. ERVIN, the Senator from Maryland (Mr. MATHIAS) was added as a cosponsor of S. 1688, a bill to protect the civilian employees of the executive branch of the U.S. Government in the enjoyment of their constitutional rights and to prevent unwarranted governmental invasions of their privacy.

S. 2296

At the request of Mr. HUMPHREY, the Senator from South Dakota (Mr. ABOUREZZK), the Senator from Vermont (Mr. AIKEN), the Senator from Alabama (Mr. ALLEN), the Senator from Oklahoma (Mr. BELLMON), the Senator from Iowa (Mr. CLARK), the Senator from New Mexico (Mr. DOMENICI), the Senator from Mississippi (Mr. EASTLAND), the Senator from Alaska (Mr. GRAVEL), the Senator from Oregon (Mr. HATHFIELD), the Senator from Maine (Mr. HATHAWAY), the Senator from South Carolina (Mr. HOLINGS), the Senators from Washington (Mr. MAGNUSON and Mr. JACKSON), the Senator from South Dakota (Mr. McGOVERN), the Senator from Oregon (Mr. PACKWOOD), the Senator from Mississippi (Mr. STENNIS), the Senator from Illinois (Mr. STEVENSON), and the Senator from Georgia (Mr. TALMADGE) were added as cosponsors of S. 2296, the National Forest Environmental Management Act of 1973.

S. 2801

At the request of Mr. PROXMIER, the Senator from Montana (Mr. MANSFIELD) was added as a cosponsor of S. 2801, a bill to amend the Food, Drug, and Cosmetic Act concerning vitamin supplements and for other purposes.

S. 2846

At the request of Mr. MANSFIELD (for Mr. HART) the Senator from Massachusetts (Mr. KENNEDY), the Senator from Minnesota (Mr. HUMPHREY), and the Senator from Colorado (Mr. HASKELL) were added as cosponsors of S. 2846, the Emergency Chlorine Allocation Act.

S. 2848

At the request of Mr. JAVITS, the Senator from Pennsylvania (Mr. SCHWEIKER) and the Senator from West Virginia (Mr. RANDOLPH) were added as cosponsors of S. 2848, the Alcoholism and Drug Abuse Education Act of 1974.

S. 2933

At the request of Mr. HELMS (for Mr. EASTLAND), the Senator from Tennessee (Mr. BAKER), the Senator from Nebraska (Mr. CURTIS), the Senator from Arizona (Mr. FANNIN), the Senator from Florida (Mr. GURNEY), the Senator from North Carolina (Mr. HELMS), the Senator from

Nebraska (Mr. HRUSKA), the Senator from Arkansas (Mr. McCLELLAN), the Senator from Georgia (Mr. NUNN), the Senator from Georgia (Mr. TALMADGE), and the Senator from South Carolina (Mr. THURMOND) were added as cosponsors of S. 2933, a bill to provide greater security for the U.S. passport.

SENATE JOINT RESOLUTION 186

At the request of Mr. MCINTYRE, the Senator from Pennsylvania (Mr. HUGH SCOTT) was added as a cosponsor of Senate Joint Resolution 186, asking the President to declare the fourth Saturday of each September "National Hunting and Fishing Day."

SENATE RESOLUTION 284—SUBMISSION OF A RESOLUTION AUTHORIZING PRINTING OF ADDITIONAL COPIES OF SENATE REPORT NO. 93-392—NO-FAULT INSURANCE

(Referred to the Committee on Rules and Administration.)

Mr. MANSFIELD (for Mr. MAGNUSON, Mr. COTTON, Mr. BAKER, Mr. HART, and Mr. MOSS) submitted the following resolution:

S. RES. 284

Resolved, That there be printed for the use of the Committee on Commerce one thousand additional copies of its report to the Senate on S. 354, the National No-Fault Motor Vehicle Insurance Act (S. Rept. 93-382).

ADDITIONAL COSPONSORS OF A RESOLUTION

SENATE RESOLUTION 281

At the request of Mr. MANSFIELD (for Mr. INOUE) the Senator from Wisconsin (Mr. NELSON), and the Senator from New Hampshire (Mr. MCINTYRE) were added as cosponsors of Senate Resolution 281, to express the sense of the Senate with respect to the allocation of necessary energy sources to the tourism industry.

NOTICE OF HEARINGS ON LEGISLATION TO AMEND THE CONTROLLED SUBSTANCES ACT OF 1970

Mr. MANSFIELD. Mr. President, on behalf of the Senator from Indiana (Mr. BAYH), I wish to announce that the Subcommittee to Investigate Juvenile Delinquency of the Committee on the Judiciary will hold hearings on S. 1646 and S. 2544, bills to amend the Controlled Substances Act of 1970 to conform with the Convention on Psychotropic Substances.

The Convention of Psychotropic Substances was transmitted on June 29, 1971, to the Senate, for its advice and consent to ratification and is now pending before the Senate Foreign Relations Committee. The aim of the Convention, as that of the Controlled Substances Act of 1970, is to limit the use of psychotropic substances to legitimate medical, industrial, scientific, and research purposes. Although our present domestic statutes enable us to fulfill most United States obligations under the Convention, new legislation, amending the Controlled

Substances Act, is required to satisfy and clarify all our commitments under the Convention. S. 1646 and S. 2544 are designed to accomplish these purposes.

The hearings are scheduled for February 25, 1974, at 10 a.m., in room 2228, Dirksen Senate Office Building. Representatives from the Department of Justice, the Department of State, the Department of Health, Education, and Welfare, the American Medical Association, and the Drug Abuse Council have been invited to testify.

Any person wishing to submit a statement for the record should notify John M. Rector, staff director and chief counsel of the subcommittee at 225-2951.

ADDITIONAL STATEMENTS

NATIONAL OCEANS POLICY RESOLUTION

Mr. ERVIN. Mr. President, approval of the Senate oceans policy resolution (S. Res. 222) is vital to the future best interests of the Tar Heel State of North Carolina and the whole of these United States.

It gives me great pleasure, therefore, to cosponsor it and to speak in its behalf. I do so from the dual perspective of both a coastal and an inland State, for one need only look at the map to realize that among my constituents I count mountaineers and watermen, farmers and industrialists, tradesmen and fishermen—all of the interests and activities of a great and diversified, progressive and growing State.

North Carolina is the third "most coastal" State in the Nation. Our 2,200,000 acres of coastal sounds, salt marshes, and broad river mouths are exceeded only by those of Alaska and Louisiana.

North Carolina has over a thousand miles of general tidal coastline and literally thousands of miles of detailed salt-water shoreline. We have the longest and most beautiful recreational beaches in America.

Our Outer Banks are unique in the world.

Our waters—both inshore and offshore—contain some of the Nation's richest fisheries, a boon to both commercial and sport fishermen.

Hatteras National Seashore is a mecca for sport fishermen the world over.

North Carolina's broad Continental Shelf has an area of 15,000 square miles, above which is one of the Nation's most heavily traveled ocean shipping routes. And Cape Hatteras can be a seaway that tries the sea- and weather-wisdom of skippers that ply its waters—it did not earn its reputation as the graveyard of ships for nothing.

Behind our barrier islands is the Intra-Coastal Waterway which permits both towboats and yachts to travel virtually from New York City to Brownsville, Tex., comparatively safe from ocean wind and wave.

North Carolina's coastal region contains the most extensive area of largely undeveloped wetlands in the contiguous 48 States—exceeded only by Alaska. Coastal North Carolina is on the Atlantic Flyway, and hundreds of thousands of

migratory waterfowl—snow geese, Canada geese, swans, loons, mergansers, ducks, and others—winter there. Bear, deer, raccoons, possum, wild turkeys, quail, and a great variety of other game still roam the cypress swamps and dense woods of these coastal lands.

This beautiful and largely unspoiled estuarine region lies just beyond the southern limit of the northeastern megalopolis that stretches virtually unbroken from Boston to Norfolk, and 100 million people live within 500 miles of this great resource. The threat and the potential—depending on how it is viewed and how it is carried out—of impending intensive development is obvious. The term "coastal zone management" has real meaning for North Carolina.

Developers have already begun to dredge and fill swamps and other wetlands. We now have laws, however, to bring this activity under control. Clearly, we cannot block all such development; it would not be in either the State's or the individual's best interests.

The barrier islands that make up North Carolina's outer banks are long and narrow and made entirely of sand—transported and shaped through eons by wind and wave. Unlike high, hard ground and the rocky spines of mountains, these barrier islands are fluid and in a state of continuous change—maintained by the day-to-day forces of the elements. Whereas inland geology is static—except through eons of time—the outer banks are geologically dynamic. The giant sand dunes—Jockey Ridge, for example, at Nags Head—slowly migrate, pushed by the prevailing winds.

One severe storm can close and open inlets. Of 24 such inlets between the Virginia-North Carolina border and Core Banks known to exist during the last 250 years, only 5 are open today.

The islands themselves move, eroding away at one end and building up at another, sometimes wearing away at both ends. Portsmouth Island used to be a thriving fishing community; today much of it has succumbed to the steady encroachment of the sea, and what is left of Portsmouth Town is deserted.

Were it not for the works and economic interests of man, the constant shifting of the sands could be left to nature's way. Man, however, constructs his highways and his bridges, his motels and his beach houses, his marinas and boat ramps, his fishing ports and minimum-depth channels, and he does not want these things swept away in a storm or consumed by some walking sand dune.

Sometimes when man builds these things he changes the natural contours of both the land and the shoreline. This upsets nature's dynamic balance, and the result often is that the topography in the next storm is drastically changed and many human constructions are destroyed. North Carolina now has laws prohibiting excessive alteration of the dunes and the grasses that help to stabilize them.

For years the U.S. Army Corps of Engineers as well as appropriate institutions of the State of North Carolina have maintained channels and inlets where they were when man built his bridges

and ports. Admittedly this has been and continues to be a very expensive procedure. Recently the Corps of Engineers has raised serious questions about the economics and, indeed, the wisdom of continuing these efforts. They suggest that the very efforts to stabilize may themselves increase the erosion rate, and they question the benefits derived from this particular use of national effort. I am not going to comment on that here today, except to ask: What will we do with the multimillion-dollar bridge over Oregon Inlet, once the inlet has moved out from under it? This is one of the countless problems of coastal zone management that demands critical examination, and will be among the topics to be studied if Senate Resolution 222 is approved.

The U.S. Geological Survey believes that oil exists under parts of the North Carolina Continental Shelf. If it does, the Nation will surely need it. North Carolina itself produces very little of the energy it consumes, so on a smaller scale we know the problem of the Nation as a whole.

If North Carolina does have oil, it does not seem possible or even desirable that we, like the dog in the manger, should refuse to permit its exploitation. Conversely, however, we cannot permit our broad white beaches to be coated with thick, black crude oil. We cannot permit our rich fisheries to be jeopardized. These are important State and national assets too. They have value, and they are needed to foster the growth and sustain the quality of life of this great Nation. Now, nobody can tell me that we cannot have our oil and our beaches and fishes, too. There are ways, or if there are not, they can be developed. If we do not have the means to take oil from beneath the seas and still avoid pollution, we can and must develop them.

The confrontation between environmentalist and developer should not be a forum for adversaries but rather a meeting ground for rational men. Among the purposes of the Senate oceans policy resolution will be to study and analyze the Nation's total stake in the coastal zone and to identify needs and policies necessary to the rational use and management of all coastal resources.

Now, Mr. President, I wish to speak briefly about our commercial fisheries.

In 1959 North Carolina commercial fishermen landed 171,306 metric tons of fish. That was the alltime record year. In 1972, just 1 year ago, my State's fishery production totaled only 87,705 metric tons—a drop of almost half. During that same period the adverse balance of payments from U.S. trade in fish and fish products increased from around \$300 million to a shocking \$1.3 billion.

In 1956 the United States was second in world catch totals, exceeded only by Japan. Today the United States is sixth, topped by Peru, Japan, China, Russia, and Norway. While the world catch as a whole has steadily increased over the last 15 years, the U.S. catch has remained essentially static, even dropped to less than 3 million tons. In 1956, it was over 3 million tons. This situation not only contributes to the decline of the

dollar's value abroad and tends to keep the price of fish to the consumer up, but also it marks just one more instance of American dependence on foreign sources of supply and is stark evidence of what can only be described in many parts of the country as a depressed, dying industry.

Is this deplorable state of our commercial fisheries really necessary? Is it in America's best interest? The answer to both questions is a firm "no." There are things we can do to increase American fisheries production, and they do not necessarily entail massive subsidies or Government assumption of the responsibility of finding and catching the fish.

Quite the contrary. Basically all it takes is giving the American fishermen the same competitive free enterprise opportunities enjoyed by other, more successful segments of the national economy. Speaking for much of North Carolina's commercial fishing industry this means three things: first, assure that stocks of fish are accessible to American fishermen; second, restore free enterprise marketing to the fishermen; and third, adopt both national and State policies and procedures that not only protect but enhance the productivity of commercially valuable stocks.

Speaking to the first point, American fishermen take over three-quarters of their catch from waters inside the limits of the 12-mile fishing zone—where foreign fishing fleets are not permitted to operate. Only 13 percent is taken from American coastal waters beyond the 12-mile limit. The balance, mostly tunafish and shrimp, is taken by distant-ranging American fishing vessels off the shores of other nations.

In terms of actual catch, American fishermen operating 12 miles or more off the Atlantic coast take fewer than 150,000 tons of fish each year, while massive industrial fishing fleets from other nations annually take over 960,000 tons. The Communist nations of Russia, Poland, East Germany, Bulgaria, and Cuba account for almost 800,000 tons of that total. The fishing intensity by these foreign fleets is so great that stocks of fish that would otherwise be available to our American fishermen are being threatened with extinction.

There are supposed to be international agreements to control such fishing efforts within acceptable limits, but they are not working. Illegal fishing by these foreign fleets is common; they set out to catch and take species prohibited under the agreements.

Our own State aircraft fly over and observe them, and North Carolina's fishery research vessel, the *Dan Moore*—itself a fishing vessel—has gone out among the Russian ships, rigged as the Russians rig, and has caught banned species.

Repeated complaints by North Carolina State officials to the State Department have done little good. State authorities are not permitted to enforce the treaty regulations. Even if they had the authority, they would be as a gnat harassing an elephant—so numerous are the Russian vessels.

The Congress right now is considering legislation that would push the U.S. ex-

clusive fishery zone out to 200 miles. This is one solution to the problem, but it may not be the best. This problem, too, is to be studied under the authority of Senate Resolution 222.

Addressing the second point—restoration of a free enterprise market for the fish—in many parts of coastal North Carolina and other regions of the coastal United States, fishermen claim to be deprived of the fundamental American opportunity of a free market. The opportunities provided by the American competitive free enterprise system constitute an inherent right of every individual citizen of these United States. If the fishermen of North Carolina and other States are being deprived of these opportunities, it is necessary that the laws of the land be enforced to restore them.

Meanwhile, some of my fishermen constituents are not waiting. In the northeastern region of North Carolina known as the Albemarle, fishermen have joined together and formed the Sound and Sea Fisherman's Association through which they intend to do their own marketing. Some such fishermen's cooperatives in other parts of the country have worked very well. And, I might add, they have not run the independent buyers out of business, but have merely given them competition. In any event, it would be a purpose of Senate Resolution 222 to examine all the constraints to the expansion of American commercial fisheries productivity and to identify remedial actions and policies.

The third point concerns fishery resource management and enhancement. Included, of course, would be private mariculture, or fish farming, where individuals lease wetlands and conduct their own farming of marine animals for their own profit; and public mariculture, the activities of State and Federal authorities both in protecting and in increasing the productivity of commercially valuable stocks. Present actions by North Carolina in restoring long-depleted oyster beds in Pamlico Sound are an example of public mariculture.

Contrary to first impressions, such activities do not need to be a drain on the public till. In a well-managed and productive operation they can be entirely self-supporting through the sale of licenses.

The whole subject of fish farming needs to be examined anew in the light of present and prospective national and State needs. This, too, will be examined under the authority of the Senate oceans policy resolution.

Finally, I would like to illuminate the need for Senate Resolution 222 with a broader perspective.

As I indicated earlier, stretching as it does nearly 500 miles from the sea to the Great Smoky Mountains, North Carolina is also an inland State. It produces raw materials, including agricultural products, part of which it uses itself and part of which it ships to other States and foreign countries. It is a manufacturing State of considerable and growing importance. Everyone, I am sure is familiar with North Carolina textiles, furniture, and tobacco products.

However, like other States in the country, North Carolina is not self-sufficient. It produces a surplus of some things which it sells elsewhere, using the moneys thus received to buy its needs from outside the State. The State of North Carolina, then—indeed, every State—is directly analogous to the country as a whole. America does not produce all its raw materials needs; its dependence on non-American sources of supply for not only fuels but most of the raw materials needed by American industry has been growing. With the impact of the Arab States' not-so-subtle "black gold" embargo presently affecting every aspect of our lives, there is no need for me to expound on the pitfalls of political dependence on "our friends" abroad for the continued supply of the very lifeblood of America's great industrial economy.

To the degree that this Nation cannot supply its own needs of energy and industrial raw materials from within the limits of our jurisdiction, we must develop and assure the continued availability of alternative sources of supply.

The ocean is particularly attractive in this respect. America buys critical raw materials from all over the world: Tin from southeast Asia, copper from South America and Africa, iron ore from Africa, bauxite from the Caribbean, and so forth. These supplies are subject to political interruption at any time, and they cost us dollars. To the extent that these supplies can be obtained from the ocean beyond the limits of any national jurisdiction—and incredible reserves of many critical raw materials exist on and beneath the floors of the deep ocean—we will increase our independence from others and improve our balance of payments. Access to such resources cannot be cut off at the whim of some Middle Eastern ruler or by the vicissitudes of Latin American politics. The dollars we spend for their recovery, processing and transport will go to American labor and American companies. Considering the sudden devastating impact that the severing of critical sources of supply can have on the whole American economy and the severe problems we have been having lately with our balance of payments, these are factors we can ill afford to overlook.

I favor approval of the National Oceans Policy Resolution, therefore, as being in the total national interest—good for North Carolina and the other coastal States and good, too, for all those States not blessed by a coastline on the sea or one of the Great Lakes. I hope that my colleagues will join me and assure its passage.

SINGLE TAXPAYERS' BILL

Mr. DOMENICI. Mr. President, I have joined as cosponsor of S. 650, a bill to extend to all unmarried individuals the full tax benefits of income splitting, now enjoyed only by married individuals filing jointly. At this time I would like to explain my reasons for supporting this bill.

In 1969 the Senate passed a Tax Reform Act that became law. Although this act improved the situation of single taxpayers, it in no way alleviated the burden carried by this group of taxpayers. Under

the provisions of this act, the single taxpayer still has to pay up to 20 percent more in taxes than the married couple filing a joint return and taking advantage of the benefits of income splitting.

Granted, married couples often have the financial responsibility for their children, but the present law does not differentiate between married couples with children and those without. Consequently, both may share the benefits of income splitting, even though many married couples without children have no other financial burdens beyond supporting themselves.

Moreover, in the United States today there are 30 million single taxpayers who simply because they are not married are forced to pay a larger amount of tax than the married couple in the same income range. When we consider that many of the single taxpayers are widows or widowers supporting children or individuals with the financial responsibility for older mothers and fathers or the young children of their families, then we see what a great burden our present tax laws put on the single taxpayer.

It is my belief that S. 650 would do nothing to hamper our tax system, but would give to all Americans a fair and more uniform tax system. By relieving the single taxpayers of the burden placed on them, we would correct an injustice, affecting a large group of Americans. Accordingly, I urge action on this bill and its swift enactment into law.

YELLOWSTONE CONCERTO

Mr. MANSFIELD. Mr. President, the members of the Montana delegation and I are greatly concerned about the orderly development and planning of the future of the State of Montana and its resources. People of the Big Sky Country certainly want to do their share but we are not going to be exploited. The January 21 issue of the Livingston Enterprise contains an excellent analysis of the past, present, and future of the Yellowstone River Basin which encompasses a large part of eastern Montana. The approach suggested could be applied to the river basin with good effect. The inspiration for the Yellowstone Concerto came to Bill Hornby, a long-time friend, while on a visit to the People's Republic of China and is well worth the time and study of all of us who are interested in the environment, ecology, and energy.

Mr. President, I ask unanimous consent to have printed in the RECORD at the conclusion of my remarks, the W. H. Hornby Yellowstone Notebook.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

YELLOWSTONE NOTEBOOK—OUR RIVER NEEDS A "YELLOWSTONE CONCERTO"

(EDITOR'S NOTE.—The following remarks presented at the Thursday night banquet of the Miles City Area Chamber of Commerce by W. H. Hornby, executive editor and vice president of the Denver Post, are substituted for Hornby's weekly Yellowstone Notebook today.)

(By W. H. Hornby)

A year and a few months ago I was thinking of the Yellowstone River Basin in, of all

places, the ancient Chinese interior capital of Sian. This bustling center has been the locale of organized human life for several thousands of years, not just a few hundreds as with us in the Yellowstone Basin.

But very like us, the life of these Chinese has been for these many, many years dependent upon a great river, its water table and its tributaries. And its human use or abuse. For all these years the Chinese have lived off this water—have drunk it, floated in it, sprinkled it on seeds and trenched it into animals, and into a myriad of other manufacturing machines. They have at various times, depending on changing value systems and political realities, prayed to the river as a God and cursed it as a Devil. They have seen it too empty, in fact bone dry, and too full, in devastating flood. They have tried to control it by dams and channels, with varying success. And by gazing at it, some of them have even become philosophers, not many, but some. And part of that philosophy is a respect for the river as a great natural force, entitled to some awe.

Sian, China, is on the upper reaches of this great Huang Ho, or Yellow River, the life artery of northern China. When our group of editors was there a year ago last fall, we were more out of contact with this country than the moon astronauts—no Houston wiring for our blood pressure. So homeward thoughts were understandable. Perhaps the obvious name comparison—Yellow River, Yellowstone River—turned my mind toward this area, or perhaps it was the similarity of the countryside. In many respects this part of China was reminiscent of Eastern Montana—sparse, a dry beauty interspersed with green patches of irrigation, clean, crisp air, far-off rims touched by the same glint of sun.

The event of this particular Chinese day was a visit to a group organized to bring fine arts performances to the rural communes. We were to hear one of the first Western-type symphonies which had been permitted by the Chinese Communist authorities to be arranged and played. It was called the Yellow River Concerto. As the vigorous young Chinese pianist developed the lovely imagery of the various themes, you could hear those thousands of years of history flow by on the great river, the Flood and Famine, the Irrigation and Harvest, War and Revolution, and, of course, for the finale, with cymbal and trumpet, Victory for the Cause.

A curious place for one's mind to stray home to the Yellowstone, in that very far-off surrounding. I began to muse on what a great concerto could be written for our river. I mused on passages for the explorers and mountain men, for the Indians and the cavalry, with a trumpet for Custer. I tried to figure notes for the miners, rumbles for the buffalo. I could hear the shout of the mule-skinner, smell the dust of the longhorn herd, and somewhere from the woodwinds, the whistle of the NP. The whir of the combine, the thunder of the stampede, the clank of the oil drill (if "clank" is what they do), and the crunch of the coal shovel. And a placid trill or two for the trout stream. Maybe our own cymbals, not for a Cause, but for the mighty Yellowstone Falls, for the great Park with its fires and geysers and its white-capped lake which is the tempestuous mother of much of our exciting life along our river.

Such wanderings were swiftly interrupted by the hosts who were interested, naturally in their river. But ever since I've been looking for an unemployed composer who can paddle a canoe from the Park down to Fairview. No luck—a Yellowstone Symphony is not only unfinished but unwritten.

Why is it unwritten?

Well, the Chinese didn't get around to writing theirs until they began to look at the river as a whole, and had some kind of common approach to its problems.

And, in Chinese fashion, when it comes to great natural facts like a river, they think as

much with their hearts as with their heads. They think of a river in terms of love, beauty, history.

Maybe we haven't thought much about a Yellowstone Concerto because under the pressures of these modern times we've never developed a common approach to the Yellowstone, and we think about it too much with our heads, not enough with our hearts. Chamber of Commerce sermons, such as this, are usually in terms of profit margins, acre-feet, stream flows, water rights, and taxes. Let's talk Watergate and energy, lawsuits, evil politicians and perfidious Arabs. What's with concertos? But indulge me.

As you look at the hundred or so years of organized human living in the Yellowstone Basin, it is clear that our river has more often been a line of battle or a link between hostile camps than a particularly peaceful pathway. The Yellowstone has never been looked upon as requiring interdependence of those living along its shores, or elsewhere on its table. Whether it is the trout fisherman fighting the irrigator, the smalltown retailer fighting the bigger town discount, the environmentalist fighting the miner, you name it. The attitude of the 7th Cavalry toward the Sioux and of the cowboy toward the shepherd is a legacy of watchful hostility, even to this day. The idea of a Yellowstone River legislative voting bloc in Helena, for example, would seem ridiculous. But sometime, for your amusement, figure out the strength there would be in such a grouping. It might not seem so laughable, especially if the stake happened to be our river lifeline.

These divisions are matters of attitude, of concept. Think of the names by which we identify and divide ourselves as cities—Livingston, Big Timber, Columbus, Billings, Forsyth, Miles City, Terry, Glendive, Sidney. Or of Park, Sweet Grass, Stillwater, Carbon, Yellowstone, Rosebud, Custer, Dawson, or Richland as counties. In truth we believe the river we have in common is merely a body of water to be exploited for individual interest alone. The idea of a Yellowstone River identity never arises. Until now there was nothing to be very concerned about.

This concept of river identity has had in the past great obstacles of space and economy to overcome.

It's hard not to be automatically suspicious and uncooperative when the economic margins of survival are as thin as they have been in our region. And when the distances between are still far.

And the forces that would hate to see a common Yellowstone River identity manifest itself politically—those who prosper by the divide-and-conquer technique—have had plenty of fuel with which to set fire to any bridges between our communities and our interest groups.

Adding to this problem is a state of mind common to all Montanans, all of us. Someone once asked what the state bird was, and a not-so-funny wag said it was the schizophrenic ostrich.

We Montanans are of split mind about many things—we want growth, but not more people; better schools and roads, but not more taxes; more tourists, but not on our particular fishing pool or pheasant field. We want Montana to preserve itself as the best place where the American dream is not impossible. But we want outsiders to dream somewhere else.

So the wide spaces, the harsh economic margins, and wishes that the world might pass by, have not been the best foundations for a community of spirit along the river.

But can we afford this legacy of battle, this split of identity today? Must we not try to write a Yellowstone Concerto?

Considering what we used to believe were our major problems along the Yellowstone, the year 1974 should be dawning on a somewhat optimistic note.

In a great food producing area, the low prices for farm products for many years were

sustaining many of our families at a low level in comparison to the returns given other sectors of the economy. Yet as 1974 dawns we see much more substantial price levels, and a general economic climate of world food shortage. This would indicate that the principal products of our agriculture—grain, meat, and produce—will continue in better demand than a few years ago we would have thought possible.

For as many years as we were fretting about price levels on the farm, we were also concerned about the breadth of our economy. There didn't seem to be enough jobs—we were too dependent on the farm sector. Wouldn't anything ever happen to help us broaden out? Now the coal developments while bringing many problems are most obviously going to put another economic leg under our stool, as has oil and developing tourism.

At one point rumor had the railroads going out of business. Today energy developments have blessed railroad freight and are even promising to revive Amtrak. The Interstate system has not been completed as fast as hoped, but it is getting there.

On a broader scale, some 10 years ago the demise of the smaller town was being more widely forecast. Everything—men and money—was seen as tilting toward the cities. But as the mid-70s arrive, the overpowering problems of the cities, the turning of many minds toward the simpler community life, the basic filling-up of the country with people—all of these factors have made Montana residence a hotter topic in the cities, as the real estate markets, especially in the mountain areas, will testify.

It is safe to say that the trend of the future will be for at least a modest reversal of the population flow into the major urban areas. Dispersal and decentralization of population as a national policy, based on greatly improved communication, will in our lifetimes be getting farther off the drawing boards of the planners and more into operative policy.

But even with farm prices up, coal development around the corner, the railroads humming and the highways improving, we are worried. With hometown community life more of a plus in people's psychology than ever, with Montana state government temporarily solvent and structurally much overhauled, with even a small cloud of hope hanging over the Miles City lagoon, we are gloomy. With the war in Vietnam finally over and many of its divisive effects calmed down, with the kids in college actually getting job conscious and work oriented again—with all of this, why aren't we more optimistic about the future?

Part of our malaise is of course national. There is no need to pontificate about the troubles of the presidency or the motives of King Faisal. The problem is deeper than these surface events. The Nixon presidency will come to an end in some fashion in due time and will eventually find its rank with the administrations we have survived but not revered.

And we may hang a medal on Faisal before we're done for convincing Americans, in a fashion available to no domestic politician, that we do need to turn off the lights and slow down the car. Indeed at this moment concern over the potential economic impact of the energy crisis has us all hypnotized.

But our deeper doubts come from the recognition that there are limits, even in America.

The idea of limitation is foreign to our nature. There has always been someplace to move that's better. Always a product improvement that will give us an edge, a dollar comfortably stronger than its competitor. But in the era since the death of John Kennedy 10 years ago, America has come to

realize that its future self-confidence will have to find a new basis—something more than optimism, space, and endless resources. We are not going to win all wars, pack on to virgin country, or guarantee the Declaration of Independence elsewhere to a Free World.

This new sense of limitation is compounded at the regional level because of the complexity and chaos of national problems. It is easy to become gripped by a feeling of regional powerlessness. What can we do when they are out to take all our water, or dig all our coal, or cut our farm prices, or move us off our land?

Yet out of this past decade in which, in so many ways, we have had to recognize new limitations to the old version of the American dream, there have also come some expansions of our older ideas. And some of these expanded ideas, I believe, are the most important legacy of this past decade, not the temporary setbacks to our ego and self-confidence.

For example, it is becoming ever more widely recognized by businessmen and bureaucrats that we have to have new concepts of cost in determining our government or private actions. It is not enough to figure just direct costs of production or sales. Many now believe we bear a cost responsibility for what our endeavors do to the general well-being. We must charge enough for products or accept high enough taxation to support the true social and environmental as well as the economic costs of an activity.

The traditionalist will of course argue that if his particular activity is burdened with these indirect costs, he will go out of business because he cannot compete.

But the broader truth is that if he does not bear these costs, society itself may go out of business, with his market in the wreckage.

This new concept of cost, and of broader social responsibility, is a definite plus. Another, equally important, is the growing recognition of our resource limitations.

Knowing that there are limits can, of course, lead to competitive scrapping for an ever-smaller pie. But it can also motivate cooperative conservation, a rational sharing of the pie, and a drive to enlarge it.

Take the question of water availability in our river. When we did not really fear it would ever run dry, farmer and fisherman, rancher and miner, could afford to feud. Can they now?

If it weren't that there are some of these new attitudes afoot, our New Year gloom might be better founded, particularly as respects our own Yellowstone region. But we have one other great thing going for us. There is a genuine perceived threat to our Yellowstone way of life and to the future balance of its economy. There are smoke signals in the buttes plain enough for anyone anywhere on the river to see. That threat can be the force that brings us together.

A few years ahead is there going to be enough water in our river to support the life we want, let alone to write a concerto about? Or will the water needs of massive development of the coal resource in the form of mine-mouth conversion plants leave everyone else on dry ditch?

A WATER WARNING

In preparing these observations I contacted some of the energy company research departments in Denver. Each was doing a little figuring on its own project, but no one was taking an overview of the water impact on the whole river. Organizations like the Northern Plains Research Council in Billings and the Yellowstone Basin Water Users Assn., are trying manfully with slim resources to force an overall view of the area's water problems. And to slow down individual mine-mouth plant developments until such an overview exists.

But the forces tending to take the overview

are very weak in comparison to those trying to stake out particular pieces of the action, using the national energy crisis as the rationale for ever-greater speed.

Is there really any threat to our Yellowstone River water supply? The National Academy of Science is trying to warn us. They conclude that mining coal and shipping it by rail is one thing, and feasible with proper reclamation of the soil in areas of more than 10 inches of annual rainfall.

The National Academy states, and even though familiar, it's worth quoting again for this record:

"The shortage of water is a major factor in planning for future development of coal reserves in the American West. Although we conclude that enough water is available for mining and rehabilitation at most sites, not enough water exists for large-scale conversion of coal to other energy forms (e.g. gasification or steam electric power). The potential environmental and social impacts of the use of this water for large-scale energy conversion projects would exceed by far the anticipated impact of mining alone. We recommend that alternate locations be considered for energy conversion facilities and that adequate evaluations be made of the options (including rehabilitation) for the various local uses of the available water."

This is disinterested testimony by a prestigious organization of national viewpoint. Let us listen.

Let us also listen to our own state of Montana Environmental Quality Council. An article in its recently released second annual report by engineer Robert Anderson is the clearest exposition I've yet seen of the options facing us in the Yellowstone Valley in this crucial relationship of water supply and coal development.

The two really unique aspects of our great basin are its freeflowing river and its massive coal formation. As Anderson puts it, "It is apparent that Eastern Montana has at least two unusual attributes: the free-flowing Yellowstone River and the vast strippable deposit of Fort Union coal. Decisions could now be made, which would trade one off for the other."

In a nutshell (and I urge you to go further and obtain a copy of this report from the Environmental Quality Council, Box 215, Capitol Station, Helena 59601), if we go for massive conversion at the mining sites of crushed coal into gas or oil, the energy planners foresee a need for as much as 2.7 million acre-feet of water a year. They have already optioned or applied for that amount.

But if that scale of development is to be permitted, there isn't that much water available in the low periods of the Yellowstone River, let alone leaving any for further agricultural, recreational, or municipal use.

One alternative would be to dam the Yellowstone River south of Livingston, flooding Paradise Valley, the so-called Allenspur Project which the Bureau of Reclamation has clung to as a potential over the years. There is massive damage inherent in the Allenspur plan to environmental values, including physical threat to a community of 10,000 which would perch directly beneath a huge dam in potential earthquake country. To say nothing of the threat to one of the Yellowstone's most beautiful mountain valleys and highest recreational assets.

As an alternate to Allenspur, the mention of which still turns on Bureau dam builders like Pavlov's dogs, there are proposals for three holding reservoirs with which you are familiar—Buffalo Creek, Cedar Ridge, and Sunday Creek—the latter just north of us here in Miles City. The concept is to let the water come down the river, dip it out by pump into these large holding reservoirs, and then release it as required through aqueduct to the coal field industries. A large-scale coal

conversion industry using about 2 million acre-feet of water a year (as opposed to the 2.7 million of massive development) could be supported by such off-stream holding reservoir regulation. This would maintain the free-flowing characteristics of the Yellowstone, but might raise other problems.

There are other options, which the state report calls "water conservative alternatives."

DRY-COOLING

Water of the Missouri, already stored by Fort Peck Dam, could be used, either by bringing it down here to add to Yellowstone flow, or by taking it direct to the coal conversion plants. Or the coal could be taken to Missouri River sites for conversion next to the water there. These are the Missouri River options.

Dry-cooling technology, expensive and presumably a long way off in development, could greatly reduce the water demands of conversion factories, which need most of the water to cool their mysterious processes. But dry-cooling would call for holding back coal development until the technology is ready. Such a delay is unlikely in the face of national energy demand.

And, of course, there are the extreme answers of either prohibiting any further conversion industry, thus limiting our problems to those of strip mining and shipping the coal out by rail, or of prohibiting coal development altogether. Neither extreme answer is likely.

The best hope is that the problem will be solved by a mix of these water-conservative alternatives.

It seems obvious that most of the coal will be mined. Much of it will be converted by factory into energy at mine-mouth. The water need will be met by a combination of off-Yellowstone and on mine-site storage, of developing more water conservative technology, and possibly of sharing some of the water burden with the Missouri.

We must remember that the current energy crisis seems to be doing one thing that's good—it is lifting the cost basis of fuels. Hopefully that means that we may now find feasible technologies and solutions which were too expensive under the old massive-use low-cost philosophy about fuel. Admittedly this concept means higher prices to us as consumers. But is not ruination of our habitat for the thousand years to come a higher price than heavier taxes or higher fuel prices today?

The danger is not that adequate solutions to the Yellowstone water vs. coal development problem do not exist, but that they will not be reached. What are the threats to reaching the proper solutions?

There is the threat of haste, even more poignant in the atmosphere of energy crisis which is our national preoccupation at this moment.

BEWARE OF FLAG-WAVERS

The national goal of seeking energy self-sufficiency puts tremendous pressure on our state and community leaders to relax their environmental vigilance in the name of a phony patriotism. We must beware of flag wavers who would drain us dry. The Yellowstone Basin's record of service to the nation is as good as any. And there are many Americans out there who believe that reasonable preservation of these last great open spaces comes closer to being a fulfillment of the American dream than heating one more office building in Portland, Seattle, or Kansas City.

The autumn issue of the State Historical Society magazine, "Montana," has an excellent article on the history of coal mining in our state, much of it in the Yellowstone Basin. One of the significant lessons is the number of times that the sites and techniques of coal production have shifted to match relatively sudden shifts in technology or national policy. For example, when the

railroads shifted to diesel fuel or when war procurement set in. The number of communities which have come and gone or dwindled in the case of coal is formidable.

As it does in regard to the development of so many other resources in Montana, our state's history of boom-and-bust resource exploitation suggests we try for a solemn pace in the development of our coal, however exasperating that may be to national planners. The recent fascinating glimpse that Watergate has given us into the mental depth of our national leadership further suggests that Montanans can take some comfort and counsel from their own commonsense in these matters and refuse to be shoved.

The energy companies should realize that to rush Yellowstone Basin coal conversion development on the pretext of crisis, beyond the point where they reasonably share our water and land with other needs, is to invite in the long-haul massively increased public regulations of their activities. And it could bring the end of their enterprise freedoms as they enjoy them. (In fairness, many of the energy entrepreneurs do not realize that there are greater stakes in this matter than today's profit or production, and most of them mean it when they remind us that their production people are citizens who want a good place to live, too.)

Another threat to finding proper solutions lies in public indecisiveness. We should be proud of the very great strides made by our state legislature and by various private action groups in setting the right kind of initial ground rules for coal development in Montana.

We have made great beginning in legislation regulating strip-mining reclamation and energy factory location.

FOLLOW THROUGH

And you are probably getting tired of being nagged about the necessity for constant vigilance.

Yet, in all candor, it is disconcerting to read press reports of the opening of the 1974 legislature and to find that some members are still bitching about annual sessions and wondering how soon they will be able to go home.

And to note that the governor, who was foremost in his environmental vigilance last year, seems more worried so far this year about the matter of taxes. The governor's State of the State message a week ago made no mention at all of the coal development problem and Yellowstone Water, nor of any requests to increase funding or activity of the Natural Resources Department. Since the Environmental Quality Council report suggests greatly expanding the role of that department in overseeing coal development, the governor's omission of any reference to these matters is puzzling.

If ever there was a state that needed a well-paid annually-convening, professionally-staffed, and tough Legislature, that state is Montana.

If ever a state needed follow-through to make sure that its environmental laws are enforced and regulated, that state is Montana.

As the Environmental Quality Council report stresses, the party with the greatest stake in this coal-water dilemma is the public. The public owns much of the land. The public's way of life is subject to the most dangerous stresses. And who will have to live with and hand on whatever is left of our land and our river after the coal is gone and the country is cheerfully using new forms of energy, developed just a bit too late.

Only the quality of our Montana Legislature stands between us and the fate of the swell guy who buys energy for the house and is out on the street the morning after.

Again, the Montana Legislature has a shining record, but the temptations to dim it

by qualification, corner-cutting, penny pinching, and lack of dedication is always with us, to be played upon by skillful persuaders who would be delighted to see the Montana lawmen stay home.

Indeed, the greatest threat, as our state council points out, is that no great decisions in these matters will be taken in time. Rather, we will have a series of what it calls "non-decisions," that is "non-decisions" by a public which doesn't demand that its interests be represented in a deliberate and thorough fashion.

Under the fate of "non-decision" individual energy plants will be built. Each will take a "little" water, with no attention to overall plan or conservation.

Finally, with the plants built and employing your customers, there won't be enough water. And then, with irrigation low and jobs threatened in dry years, the pressures will sway toward trading off the free-flowing river for the huge, easy answer of mainstream dams. A grim scenario, but at this stage a possible one that almost tends to be probable.

To the two threats already mentioned, haste and public indecisiveness (which means legislative indecisiveness,) we may add a third, public divisions.

I don't want to overextend the sermon, but the threat to our whole Yellowstone way of life is great enough, particularly in terms of the potential claim of coal upon our life-giving water, that many of the historic divisions among us have become luxuries we can no longer afford. From a vantage point a bit, but only a bit, removed from Montana's daily quarrels, one gathers that we have not lost our penchant for fighting each other more fiercely than we fight the common foe. As but one example, the rancher and the recreationist, both environmentalists and conservationists in their own way, seem unable to do anything but tear each other apart over the question of how to use our river shorelines more wisely. I have detected no abatement of the fact that our towns put their individual interests ahead of regional good and find it very hard to cooperate. Downstreamers who want irrigation water look with disdain on upstreamers who want fish, and vice versa, to an idiotic extent, considering the fact that it's one river, and someone else is trying to take the water away from both of them.

Hired GUNS SET POLICY

Compounding these divisions, it seems to me that our political parties and our occupational and other interest-groups associations contribute very little to meaningful debate on the really important problems facing Montana. I am not as interested in politicians' concern about the gas consumption of the governor's or attorney general's cars as I am about their proposals for stream protection.

And it would make one absolutely dumbfounded to read that the Stockgrowers and Trout Unlimited had sat down to build bridges toward common solutions.

But somehow the idea lives that the greatest treachery is to be out-of-step with the program of your group, whatever its name or interest. That program usually has been written by a few hired guns called executive secretaries who are out to score points with their board and to see that there is enough to quarrel about to justify their jobs as professional quarrelers. The desires of the general memberships, that's you, are at best imperfectly polled and considered through our traditional methods of organization. In other words, I'm not sure anymore how many stockgrowers or fishermen or irrigators or Republicans or Democrats their organizations really speak for.

But I am sure that the greatest treachery any of us can commit is not to depart from an interest group or political party program

but to ignore what commonsense tells us is best for Montana and our grandchildren.

In other words, Montanans don't build very good bridges between themselves; they find it hard to discover the common denominators, the common identities—to think with long-run hearts as much as with their wallets. This is not a problem common only to us, but, to me at least, it is made more poignant in Montana by the threats of outside events.

Certainly here along the Yellowstone we need to believe in a greater common identity than we have been able to discover before.

And if my imagery of a Yellowstone Concerto seems overblown, I make no apology.

We need to be emotionally concerned about our free river. It isn't just a matter of slide rules and contracts and potential jobs, which may or may not mean real economic progress.

How often we hear the energy engineers decry the "emotionalism" involved in "unscientific" efforts to regulate their activities.

Well, I'm for the hearts behind that emotionalism, if not for all of its extreme manifestations. We can't always prove that something is wrong. But we usually know it, if we have the courage to heed our instinct.

And we Yellowstone River residents know, if we can't always prove it, that some very great potential wrongs are on our doorstep, with just enough, but only just enough, time left to do something about them.

SOME RECOMMENDATIONS

What do we do?

1. We support the organizations that are trying to protect the public interest and slow down the development pace until it is reasonably planned and regulated. This means support for organizations such as the Northern Plains Resources Council and the Yellowstone Basin Water Users Assn., even if you may not agree with all their positions or love all their personalities. In the battle of mimeograph machines and lawsuits, they will lose if you don't send them the bullets.

2. We insist that the Legislature keep up its pace in enacting and monitoring solid environmental and energy regulatory measures. We don't want state planning agencies such as the Environmental Quality Council or the operational agencies such as the Department of Natural Resources and Conservation cut up in the legislative clutches on the grounds of economy, or because of a presumed trend of attitudes toward the latest political imperative such as the "energy crisis". We must tell our legislators to hang in there, and replace them, regardless of party, if they don't.

And we could stand to pay them more and respect them more, in the process.

3. We must look for the things we have in common as residents of one great river basin, and try to build bridges towards its protection and away from its fragmentation.

4. Recognizing that we have an adversary system of government, and special interests that need protection and representation, still we must do what we can to move our political parties and trade associations toward developing positions on the issues that really matter.

And we must move them away from petty, nickel-and-dime personality politics which feeds on divisions and dogmas and ignores the unique things that Montanans have in common and the very grave new problems they can only face in concert.

May I return to China.

That Yellow River had flowed for thousands of years, past many of the same kind of human divisions and problems we have on the Yellowstone today, albeit in different tongue and garb. Only in recent years has their Chinese society been able to do much about finding a balance in their use of their river, and in its control.

They finally are getting somewhere because they have achieved a certain faith in their future, and a certain political cohesion—a capacity for decisive public action—which was denied them before. Of course, their system, particularly of their present political system, is far different from ours.

But our value system can be just as decisive, if not more, in the field of public action. And it can express just as much faith in the future.

I'm not sure how we recapture that faith nationally, but as far as our river goes, I believe we can do it by finding composers for a Yellowstone Concerto, which would imply that we realize there are just as great values at stake in our hearts as in our pockets, and that we realize that there is no successful way toward our goal than by performing together, which, of course, is what the word "Concerto" suggests.

We said that China has developed a few philosophies among its gazers at the passing flow. We need some river philosophers as well as those doers, on the Yellowstone today.

THE FUEL CRISIS

Mr. GOLDWATER. Mr. President, since the development of the energy crisis, many interesting situations have resulted as a result of the early moves and some early misunderstandings on the part of the Government in its efforts to allocate fuel where it could do the most good.

One of these involved an early proposal by the administration to cut fuel for general aviation in this country by up to 50 percent. The proposal, which never went through, has been referred to recently as "The World's \$2.5 Billion Misunderstanding" or "Wichita's \$2.5 Billion Misunderstanding."

The story of the gigantic "misunderstanding" was described in detail recently to the Wichita Rotary Club by Mr. James B. Taylor, vice president of the Cessna Aircraft Co.

Because of its bearing on the fuel shortage which is now affecting every segment of American life, I believe the Members of Congress should have an opportunity to read this unusual address. Therefore, Mr. President, I ask unanimous consent that Mr. Taylor's speech of January 7, 1974, entitled "Wichita's \$2.5 Billion Misunderstanding," be printed in the RECORD.

There being no objection, the speech was ordered to be printed in the RECORD, as follows:

WICHITA'S \$2.5 BILLION MISUNDERSTANDING

(By James B. Taylor)

The significance of the title of my speech today: "Wichita's 2.5 Billion Dollar Misunderstanding" should really be the "World's 2.5 Billion Dollar Misunderstanding." I'm referring to the loss that could have accrued had the up to 50% fuel cut to General Aviation gone through.

The dramatically inequitable fuel cuts the administration originally proposed for General Aviation fortunately united all sectors of the aviation community, and most effectively . . . the users.

Our thanks also to the people of Wichita, the Chamber of Commerce, Senator Bob Dole, Congressman Garner Shriver, Senator Jim Pearson and Governor Bob Docking. They were most helpful in getting our story across to those in Washington who, despite their initial lack of understanding, were ear-

nestly and honestly seeking a fair-minded solution.

We must now take unified and coordinated action to correct the misconception that the public and the press have of who General Aviation is and what it does. We have a long way to go.

Webster's New World Dictionary defines "esoteric" as "understood by only a chosen few." General Aviation is truly esoteric. Outside of Wichita, there's only a handful of people who know what General Aviation is. The industry trade association (G.A.M.A.) recently had a study completed by the opinion research institute of Princeton, New Jersey. In summary, they learned that 59% of all people in the U.S. never heard of the term "General Aviation." And, of the remaining 41% who thought they'd heard the term, only a few could accurately describe what General Aviation is.

It's no wonder that General Aviation was singled out to carry such a heavy burden in the proposed fuel cuts. Nobody knows who we are or what we do?

No one knows that:

162,000 (98.5%) of all civil aircraft in the U.S. are General Aviation compared to the 2,479 (1.5%) operated by the scheduled and supplemental carriers.

Or worldwide; the General Aviation numbers 235,000 while the airlines total 9,000. (Only 4% of the total world civil fleet are scheduled or supplemental carriers.)

No one knows that:

At the end of 1973, turbine-powered aircraft in the U.S. General Aviation fleet numbered 3,011 compared to 2,300 for the airlines. And by 1984, the turbine-powered business fleet is projected to grow to 8,200 U.S. (10,250 worldwide) and turbine-powered airliners 3,500 U.S. (7,900 worldwide).

No one knows that:

General Aviation accounts for less than 4% of jet fuel consumed nationwide, and only 7/10th of 1% of the total fuel used for all transportation. (Why—other industries spill more than that!)

No one knows that:

80% of all General Aviation flying or approximately 23 million hours in 1973 was for business or commercial purposes.

Or that General Aviation carries one in every three intercity air passengers and is the only air link to more than 19,000 incorporated American communities. And that it serves 379 cities with populations of 25,000 to 100,000 that do not have any kind of air service.

Or that General Aviation aircraft transport 70 million Americans annually. (This is 33% of all U.S. intercity air passengers.)

No one knows that:

In 1973, General Aviation exports exceeded 3,500 airplanes valued at over 250 million dollars. Certainly a very positive contribution to the balance of trade.

Year after year, 25% of all General Aviation aircraft manufactured in the U.S. are exported. Or that 90% of the world General Aviation fleet was made here in this country.

And that 72% of all the air carrier jets (worldwide) are U.S. manufactured.

Aside:

Exports of all aerospace equipment (which averages 10% of all exports) reached an all time high in 1973 (approximately 5.3 billion dollars) compared to exported motor vehicles and automotive equipment totaling less than 1.5 billion dollars . . . I'll bet you're surprised.

No one knows that:

Of the over 12,000 airports in America, less than 500 are served by the scheduled airlines. And 375 of the 500 have minimum service.

No one knows that:

25% of all airline passengers fly out of only three airports; 71% out of the 25 hub airports; and 97% of all air carrier passengers fly out of only 146 airports.

All of these statistics were calculated before the air carriers started unilaterally frequencies and withdrawing from non-profitable locations where they were rendering the minimum service then required by the C.A.B. (And they were calculated before many air carriers started grounding and mothballing some of their best equipment.)

I'm, in no way, trying to degrade the airlines. They do a fine job under some trying circumstances. They have the dubious distinction of being regulated as fully as monopoly utilities, while being exposed to competition as great as that in most consumer industries. And, except for the railroads, they have done and are doing more to sell people on flying than any other factor.

And, speaking of the far less competitive railroads, such regulation has been conspicuously unsuccessful.

Every American's hat should be off to our airframe industry. The Beechcrafts, the Boeings, the Cessnas, the Great-Learjet, the Lockheedes, the McDonnell-Douglases and the Pipers . . . for the tremendous job they are doing to keep such a substantial lead in commercial aircraft everywhere.

I, for one, am confident that we are going to stay ahead. American research and development, ingenuity, productivity and marketing will make it happen. We have been able to accomplish this to date in spite of the heavy government subsidies that practically all foreign airframe and engine manufacturers, and air carriers enjoy. And many countries, particularly those that build competitive aircraft, place other hurdles in our path.

They insist on additional, time-consuming and costly modifications to meet their airworthiness certification requirements.

And they impose extremely high import taxes on our products.

It's high time we re-examine the manner in which our government subsidizes our foreign competition without any reciprocal agreements.

Our airline friends face additional inequities that affect them much more than us. These have emerged as a result of our government's generosity. We give away routes, rights and services.

Landing fees are a good example: to land a single 747 (U.S. or foreign-operated)—at Boston \$190; at our nation's Capitol \$124; and at Miami \$68. But when Pan American, TWA and National land a 747 at London, the charge is \$1,844. At Paris, Pan Am and TWA pay \$1,088 and at Frankfurt \$1,244. The worst examples are in the Pacific. An Australian carrier pays \$240 to land a 747 at Los Angeles, but Pan Am pays a resounding \$3,483 for each landing at Sidney.

Sure—Qantas and all other government-owned airlines around the world pay the same landing fees as American carriers. But government-owned airline fees merely go from one pocket to another—in the same suit.

Incidentally, Pan American is paying one million dollars each week in landing fees around its system. That's 52 million dollars per annum.

I'm sure that you are all familiar with many of the roles of General Aviation airplanes: training, transporting people and things, for agriculture, for mapping, for photography, for patrolling, for search and rescue, for forest fires, for all kinds of services and emergencies, etc., etc., etc.

But are you aware of the reasons for business aircraft which is 80% of all General Aviation flying?

Business aircraft provide a stimulus for spreading industries and branch plants to widely-disposed areas. In 1940, 50% of all plants were in cities of more than 100,000. By 1956, one-third of all new plants were being built in cities of less than 10,000. Today, eight out of ten new factories are being

built in small towns and cities all across America. The reasons include: decentralization, diversification, lower land costs, lower labor costs, lower taxes and better living conditions, which creates a more stable work force.

Airports attract whatever type of industries or corporate headquarters you desire to have in your community. 85% of corporations emphatically state they would not locate plants or offices at a town or city without an airport. And FAA studies verify that airport development is a catalyst for business and industrial growth.

A business airplane is a productive piece of communication equipment that makes it possible for companies to spread the talents of their key people over more territories, more situations, more opportunities.

A business aircraft, just like any other piece of capital equipment (if properly used), will multiply efficiency, improve productivity, save money and make money . . . exactly like a tape-controlled milling machine or a computer. And, it can be justified on the same grounds.

Businessmen operate airplanes for exactly the same reasons that you people sitting out there own automobiles: because the bus doesn't take you where you want to go, when you want to go.

If effective use of executive time . . . by having the right man in the right place at the right time . . . is important for the big firm, it can mean survival for the small company.

A business plane can pay for itself many times over. And, even though some of them have a loud voice (our CITATION speaks quietly), they have never been known to ask for a raise.

Companies like to do business with suppliers who are modern in their approach to things. The company-owned plane helps build prestige and stature because it's a symbol of speed, efficiency and modern management. It helps create, in the customer's mind, the image of a progressive and aggressive operation.

A Fortune Magazine study showed that 43% of this nation's 1,000 largest industrials operate business aircraft. This 43% dominates the American scene in employment, sales, assets, net income and, most notably—return on stockholder equity. And, as a group, they are the largest contributors to the U.S. gross national product. They must be doing something right.

Dun's, last month, reported their selection of the five best-managed companies in the U.S. for 1973. All own and operate business aircraft extensively. (It's also interesting to note that the 20 companies Dun's has selected, since starting this selection process four years ago, have been operators of business aircraft.) Certainly a contributing reason why all of these companies achieve more of their objectives . . . and in less time.

General Aviation in conjunction with the airlines is providing for the spreading and growth of multi-national companies and accelerating overseas investments and returns.

General Aviation and the airlines complement each other by providing a means of travel that has unshackled our families and businessmen from any restrictions of movement here on this earth. A face-to-face communication and travel system so reliable that we will look back some day to realize that it was this single capability, more than any other, that made a peaceful world a reality.

Both the airlines and general aviation are extremely important and necessary contributors to the U.S. economy. Without the continued growth and success of each, the future structure of our country is in jeopardy.

Understanding can only be accomplished, if all of us . . . the manufacturers, the suppliers and, most importantly, the users . . . work together in a coordinated effort to get the general public aware that you cannot

limit the airplane to the air carriers any more than you can limit the powered wheel to railroads and buses.

As long as misunderstanding exists, General Aviation will be vulnerable. The energy crisis is not going to go away. And we cannot return to the supreme optimism and complacency that characterized our outlook just a few months ago.

We must stop talking to ourselves. We have an obligation to make it possible for our customers to publicly advocate, not just privately defend, their use of business aircraft.

WATERGATE: A TEACHING CHALLENGE

Mr. ERVIN. Mr. President, on December 3, 1973, Rozanne Weissman, editor of the National Education Association News Service, interviewed Philip B. Kurland of the University of Chicago Law School on the subject: "Watergate: A Teaching Challenge."

In this interview, Professor Kurland, who is one of the most thoughtful of all Americans, made many penetrating observations upon this subject. Hence, the interview deserved wide dissemination.

For this reason, I ask unanimous consent that a copy of the interview be printed in the RECORD.

There being no objection, the interview was ordered to be printed in the RECORD, as follows:

WATERGATE: A TEACHING CHALLENGE (By Rozanne Weissman)

Watergate has invaded the nation's classrooms. Despite the fact that it is a controversial subject with obvious partisan overtones, today's teachers realize that they cannot play ostrich and pretend that one of the biggest and most complex governmental news stories of our day does not exist. Watergate is a natural discussion topic to stimulate student thinking and make government, history, and other subject areas relevant and alive.

But how does a teacher deal with a hot topic like Watergate without getting burned?

NEA News Service asked the advice of Philip B. Kurland, professor at the University of Chicago Law School who is now also teaching an oversubscribed undergraduate course on the "Constitutional Aspects of Watergate." Parade magazine and others have termed Kurland one of the nation's outstanding authorities on the U.S. Constitution and one of the three foremost professors of constitutional law in the country, along with Alex Bickel of Yale and Paul Freund of Harvard.

Kurland has served for six years as chief consultant for the Senate's Separation of Powers subcommittee under chairman Sen. Sam Ervin, Jr. (D-NC) who has gained national fame as the folksy-but-shrewd, bible-quoting Chairman of the Senate Select Watergate Committee.

Kurland and Ervin seem to have a mutual admiration society. Says Kurland of Ervin, "Sam Ervin asked me to become a consultant to his subcommittee without my ever having known him or done anything. He read my work. He is a scholar. He has never been a political leader in the legislature. He is no Everett Dirksen or Lyndon Baines Johnson. He doesn't head a fraction of the Senate, much less a whole party. He has earned the place he's earned out of respect. He is sincere in what he is trying to accomplish and devoted to the Constitution and the Bible. I have tremendous respect for him, although I think we probably differ on as many conclusions as we agree on."

And says Ervin of Kurland, "He would go

down in history as an outstanding Supreme Court justice if any President possessed the wisdom to nominate him for such a post."

Kurland met with NEA News Service for an exclusive interview in his home on Chicago's South Side near the university. Surrounded by law books piled high on desks, chairs, tables and in bookcases in his third-floor den, Kurland seemed very much at home as he discussed the handling of Watergate in elementary-secondary school classrooms. While the law professor admits that "I am not a pedagogue," he goes on to give usable advice and source suggestions to teachers, emphasizing particularly the need to take Watergate discussion out of the realm of personalities and to deal with it factually, comparatively, institutionally, and historically because "current events cannot be isolated as if they have no antecedent."

Kurland urges teachers to compare the intentions of the Founding Fathers to where this country is now governmentally as highlighted by Watergate. Important issues raised by Watergate, according to Kurland, will not be dealt with in the courts. He specifically points to the undue accumulation of power in the executive branch of government because of a willing surrender of authority by the legislative branch and the subsequent abuse of that power. Observes Kurland about Watergate, "We have arrived at the stage where the love of power—rather than of money—is the root of all evil."

TRANSCRIPTION OF INTERVIEW WITH
PHILIP KURLAND

Q: Tell me about the college course you are teaching on Watergate.

A: Essentially, the effort is to bring undergraduates some concept of how legal rules are applicable in practical situations. Watergate gives a backdrop for dealing with a large number of constitutional questions—separation of powers, impeachment, executive privilege—and such a popular subject assures student interest. The course will be an attempt to suggest that Watergate is simply a symptom of a very serious disease from which we are suffering. I will go down a list of areas or functions which we have entrusted to the White House but which the Constitution did not place in the executive branch, and then ask what are the ways and means for restoring a balance. I will be quite clear that one of the reasons we have turned to the White House is that in the past Congress has not been adequately responsive to the American will. So, part of the Watergate problem is how to make Congress responsive.

Q: How would you recommend dealing with the Watergate experience in elementary-secondary classrooms where teachers have less leeway than college professors?

A: Essentially, the effort is to bring undergraduates some concept of how legal rules are applicable in practical situations. Watergate gives a backdrop for dealing with a large number of constitutional questions—separation of powers, impeachment, executive privilege—and such a popular subject assures student interest. The course will be an attempt to suggest that Watergate is simply a symptom of a very serious disease from which we are suffering. I will go down a list of areas or functions which we have entrusted to the White House but which the Constitution did not place in the executive branch, and then ask what are the ways and means for restoring a balance. I will be quite clear that one of the reasons we have turned to the White House is that in the past Congress has not been adequately responsive to the American will. So, part of the Watergate problem is how to make Congress responsive.

as well as representative government. For the teacher, Max Farrand's four-volume "The Founders of the Union" and his three-volume "The Framing of the Constitution of the United States," both from Yale University Press, are good sources.

In my course, I also want to talk about the role of Congress as the watchdog, the overseer, of the administration of the laws. Many people assume that the only function of the legislature is to make laws, but it is quite clear that the intention of the Founding Fathers was that Congress have the obligation to see that the laws are executed in the way that they intended. The bulk of congressional hearings are not for the purpose of taking evidence on framing a law but are concerned with how the laws that have been passed are being effected—the oversight function. The courts can only supervise the behavior of the executive branch on a retail basis; it remains with the legislature to do it on a wholesale basis.

Q: Can you recommend any other teaching approach to make history and government more interesting and dynamic in light of Watergate?

A: My problem is that essentially I am not a pedagogue. The one thing that law school professors do not have is any educational training. We attempt to engage our students in dialogue and call it Socratic dialogue (questions-and-answer as opposed to lecture approach) because that's the way we pat ourselves on the back.

But while there are a lot of interesting teaching ploys, I think that a factual basis and a historical and comparative government approach are likely to be most productive of a real analysis of the problem. I would like to see teachers confine themselves to facts. One of the things that shocked me during the Watergate hearings was listening to the commentator tell me during the break what he saw, and it was very different from what I saw. One of us was wrong, and me being me, I am quite convinced that he was.

It is important to get back to the facts. In a court of law as opposed to the Watergate hearings, lawyers can only present factual data and would not be able to say, "Are you of the opinion that Mr. Nixon is an evil man?" You say, "What facts do you have that Mr. Nixon approved or didn't approve this, and that Mr. So-and-So was involved in the break-in?" One collection of data which I think would be very useful to the teacher and a helpful tool to get at the facts is published by Congressional Quarterly. The concise presentation of the factual developments in the Watergate case includes press commentary, but without value judgments on factuality. ("Chronology of a Crisis," Vol. 1, can be ordered for \$6 from CQ, 1735 K St., N.W., Washington, D.C. 20006. Vol. 2 is in the works.)

Getting at those facts and building on them should be important to teachers, and I think high school students would be very much interested in digging out the facts, i.e., what did former White House counsel John W. Dean III do—not what newspapers have said Mr. Dean did or reported in interviews. Look at the record and find out what it is Mr. Dean did. You have to get not only from Mr. Dean's testimony but from others who have testified about Mr. Dean and then make a judgment as to who is telling the truth. What is he guilty of? What would you charge him with if you were a United States attorney?

Q: Do you believe that the Watergate-related events have highlighted the difference between the theory of government as it is taught in the classroom and the actual practice?

A: I am not sure that I would adopt that thesis. It isn't so much a conflict between theory and fact as between constitutional intent and the current operation of government. The current situation indicates not

nearly so much a grasping for power as a willing surrender of authority by the legislature to the presidency. We have come a long way from the intention of the writers of the Constitution. Starting with Franklin Roosevelt, we had a huge transfer of power from the states to the national government and then a movement within the national government, transferring power from the legislature to the President. The most recent example is the attempt by the executive branch to assume control of the spending power which the Constitution gave solely to Congress. The executive branch is also concerned with lawmaking, issuing executive orders which reportedly have the same effect as a statute and entering into agreements with foreign countries. They call the latter an executive agreement and avoid the necessity for Senate approval.

Finally, in the most recent days, the White House staff has taken power from the old-line departments—State, Treasury, Defense, Justice. A real symbol of the problem is the Executive Office Building, which once also housed the State Department and several other departments but now houses a part of the executive staff. We have come a long way from where we should be. In 1968-69, we had a grand movement on the part of large numbers at the universities toward the creation of an Orwellian State as depicted in "Animal Farm." I think we successfully avoided that, but now we are moving toward a different Orwellian State which is described in "1984." Rather than go to either one of these—both of which I regard with abhorrence—I think we are going to have to go back to the recognition of the institutional functions of the separate practices of government.

Q: What about the whole issue of executive privilege, perhaps even over and above the court-ordered release of secret White House tapes whose existence was revealed at Senate Watergate hearings?

A: While I think the tapes have been a hot political issue, they have not really been a terribly important one because the secret taping of confidential communications between the President and his staff is not likely, I hope, to be engaged in again. At most, the tapes will reveal either corroboration or contradiction of evidence already on the record—i.e., the statement by Dean as to what he told the President and what the President replied. (The interview was conducted before the President claimed there was no Dean tape.) Fundamentally—and I feel very strongly about this point—I think transferring the issues of Watergate to the courts is a trivialization of the issues. The basic questions which Watergate raises are the undue accumulation of power and the abuse of that power by the President.

If we start breaking it down into questions of whether Dean or former Attorney General John Mitchell should go to jail, we'll get answers to those questions. Either they will, or they won't. But, that is not going to correct the very dangerous situation of the accumulation of White House power.

Raoul Berger, author of a new book on impeachment, has submitted a manuscript on executive privilege, which Harvard University Press will publish, in which he makes the point that executive privilege is a myth. There is no constitutional foundation for the allegation by the executive branch that it can withhold information sought by the legislative branch because Congress has the obligation to oversee what is going on. If materials can be denied Congress, it cannot engage in this oversight function. To that extent, there is a very substantial problem of executive privilege. The oversight function is not an issue with regard to the tapes, though.

Q: Many students, particularly minority students, are more turned off to the system because of Watergate and point to the fact that the Cubans who were caught during

the Watergate break-in landed in jail while the "big fish" go free or are out on bond. Do you see any way that teachers can use Watergate to advantage in educating minority students?

A: I haven't any doubts that everybody will be treated alike, that is, the Cubans will be sent to jail only if the others go to jail. To suggest that the only persons who have access to government authority are the wealthy is less true today than it used to be. Almost all the legislation that the national government has engaged in during the last two decades is concerned with the distribution of wealth accumulated by the rich and disseminated to the less wealthy in terms of services, goods, and, so far as the civil rights acts are concerned, the opening up of opportunity to the heretofore deprived.

What Watergate shows and what should be encouraging to young people is that the system can be made to work. If the press calls the public attention to the deficiencies and if the people whom the congressmen represent make demands, the Congress can be made to do its job. The real danger is that Watergate is going to be a sensational, short-lived affair. Then apathetic students really do have something to worry about. But, teacher-student concern at the moment should be to see that Watergate does not die, that Watergate is a symbol to this country to the same extent that the Dreyfus case was a symbol to France in the late 19th Century. I don't think it was important whether Dreyfus did or did not go to jail or did or did not do what he was alleged to have done, but the abuse of the executive powers and the abuse of the judicial system that were represented there and are represented here is what has to be cleaned up. I'm concerned that the public is going to lose interest, that after the trials and after people are sent to jail, everybody will say, "Okay, we've done all that's needed to be done." That's not true. We must have constant supervision of the legislative and executive branches.

The best way to supervise the executive branch is through the legislative branch. The best way to see that the legislative branch does its duty is for the people to keep themselves informed and to let their legislators know what they want done. I have been working with Sen. Sam Ervin's (D-N.C.) Subcommittee on Separation of Powers for six years now, and I must say I am surprised at the extent to which the Congress responds to the mail. Nothing moves them—not the dollars or whatever it is that an industry can bring to bear—so much as a huge mail turnout indicating what the people want.

Q: What force could NEA bring to bear, other than lobbying for a strong campaign financing act, to see that Watergate-type incidents do not recur?

A: I think that NEA has a particular responsibility to educate the educators of this country—to attempt to service them with the data as to what is happening. NEA maintains headquarters in Washington primarily to let the legislature know what it thinks education interests demand and to get money for education. That is a one-way street. What NEA is not doing—if you will excuse me—is taking the data about what is going on in Washington and communicating it to the education community so that they in turn can transmit it to the people they are dealing with. At the legislative level, NEA lobbyists will have to let the legislators know that the organization does not regard the end-all and be-all of the Watergate scandal as sending half a dozen or two dozen or three dozen people to jail. NEA and its teacher-members have to let legislators know that they understand the basic issue is excessive accumulation of power in the White House.

Q: I think it may be for that reason that NEA leaders landed on the White House

enemies list. NEA criticized the President's stand and influence on the parochial issue.

A: Well, I congratulate you, but that is not enough. The enemies list is like one pox in a bad case of chicken pox; it is not very important in itself. There is another problem that has to be carefully recognized. We tend to think of these things in terms of personalities, and if you have a distaste for President Nixon as I have a distaste for President Kennedy, then we tend to see Nixon as the devil. The fact is that the institution is creating the problem. It was not Nixon, it was President Kennedy who engaged in the Bay of Pigs invasion. It was not Nixon, but President Kennedy who entered the Korean War. It was not Nixon, but Presidents Kennedy and Johnson who got us involved in the Vietnamese War. The problem is that we tend to say, "If Kennedy does it, it must be right, and if Nixon does it, it must be wrong." It is wrong whoever is doing it!

Q: Do you attribute this all to the growth of presidential power?

A: That's right. It is an assumption by these men that they can do anything. They can commit what I think is the important act of American government—to cause this country to enter into a war. The Constitution didn't give them that authority. For a long time, starting with Franklin Roosevelt, the liberal elements in our community assumed that White House power was good. Roosevelt, Truman, Kennedy, and Johnson were friends of the liberals and, therefore, liberals wanted the power in the White House rather than in the Congress. They should have spent their efforts educating Congressmen rather than allowing this growth of power in the White House because you can't always count on having the right kind of man in the White House.

The other basic element of the Watergate controversy is the election problem. With all due respect to Sen. George McGovern (D-N. Dak.), we did not have a choice in the last election. The McGovernites captured the Democratic convention every bit as ruthlessly as others who capture their own convention. What we clearly must have is a different kind of system so that the American people have a greater choice—not merely the two men that the machinery of a particular convention offers. The Constitution started out with a system which made sense to the Founding Fathers. They decided, "Let all the wise men of our state get together with the wise men of all the other states, and then these wise men will in turn choose the President and Vice-President of the United States." That is what the electoral college is about. The people could determine their own wise men because they came from their own community. And, when you put all these people together, they would know who was the best man for the national office. Our party system destroyed that.

We have changed the Constitution. We can't go back to the old system because we're no longer a series of small communities. But, we ought to give basic thought to how we choose the President of the United States. Sen. Birch Bayh (D-Ind.) notwithstanding, I do not think nationwide primary elections are going to provide us with that answer because, again, we would be forced to choose between a Democrat and a Republican, and that Republican and that Democrat would be chosen by the organization not by the people.

Q: Teachers have been criticized or even fired for bringing controversial issues into the classroom—whether or not they mentioned their viewpoints. How can teachers best deal with Watergate when some parent-supporters of President Nixon think that the problem has either been intensified or created by the media and does not belong in the classroom?

A: The only way teachers can deal with it is by attempting to persuade both the students and parents that teachers are concerned about institutional values. Taking it

out of the level of personalities and bringing it up to the level of institutions would permit a sounder framework for teachers to operate on. This is why I suggest that the problem is not Nixon and what he did and Mitchell and Dean and what they did, but whether it is a healthful situation for all this authority to be collected by that small group of men headed by the President of the United States—whoever he may be. The parents, too, tend to think in terms of personalities, and they have their pros and cons. If teachers are willing to recognize that the problem is as great with Truman's Korean War as with the Vietnam War of Kennedy, Johnson, and Nixon, and can show that both to the students and to the parents, they are likely to get less flack.

Q: Can you suggest how this could be done?

A: You have to use history. You cannot isolate current events as if they have no antecedent. Let's talk about the war-making power. Sen. Jacob Javits' (R-N.Y.) new book "Who Makes War?" goes through the war-making activities of every President. The problem outlined: ought the President of the United States to have the authority to commit our troops to battle? It isn't written in terms of whether Nixon has that authority or Kennedy or Truman did. It goes back to the days of George Washington. That is the kind of approach needed.

Q: As part of the historical approach, are you also suggesting that teachers discuss Watergate in relation to other previous scandals?

A: The scandals of our past have been comparatively simple and irrelevant to the scandal of Watergate. There was a time when the love of money was really the root of all evil. That does not seem to be true anymore. We're not dealing with a scandal in which a number of politicians are trying to line their own pockets. This is one of the things that makes Watergate frightening. They weren't taking money; they were spreading it around as if it didn't count. They weren't interested in accumulating money for themselves. What they were interested in was accumulating power. We have arrived at the stage where the love of power is the root of all evil.

My problem in dealing with Watergate in relation to other scandals is that the scandal is overshadowing far more threatening problems, such as the rise of a police state. We're appalled, I think, by the break-in by the presidential "plumbers." Why? At the time of the founding of this country, Americans were concerned that there not be a standing army—a military or semi-military power available to a President as a means of controlling the country. The problem has become whether the President ought to have a private police force. Former FBI Director J. Edgar Hoover in one thing was absolutely sound: he fought the notion that the FBI should become a national police and that all crime should be subject to FBI investigation and control. That was the way Hitler and most South American dictators came to power and controlled their dictatorships, either through an internal police force or a military force. That is what is going on now in Russia: that's what was going on in Germany and Italy when those were totalitarian states.

Q: A study indicated that people responded very negatively to rights cited in our Bill of Rights when they did not know the source. Do you think that teachers are doing a good enough job of teaching about the Bill of Rights and the Constitution in the schools? If not, how can this be improved?

A: Teachers are not doing a good enough job. What we read in the newspaper is often only the use of this Bill of Rights for the protection of those we don't like—those we might consider enemies of society. Somehow, teachers have to convey a realization that any individual might be on the wrong end of an

investigation. We permit all people to assert these rights only because we want to be assured that the society as a whole is entitled to that protection. The 5th Amendment, which gives a person the right of silence against his accusers, was not created for the dope peddler or what have you, but like the search-and-seizure amendment and others, was created to see that the government does not impose on the ordinary individual.

Teachers can also deal with the Bill of Rights historically. If you look at the Bill of Rights and the Declaration of Independence, you can see a very close correlation. The Declaration of Independence says, "These are the wrongs that the Crown committed against our people." And the Bill of Rights says that the "national government shall not do these things." And they are the same things. The Bill of Rights was a direct response to impositions by the royal government on the colonists and to some extent on the residents of England. That's why clauses cover such things as freedom of religion, speech, and assembly.

We have obsolete provisions in the Bill of Rights that we no longer regard as important because the possibilities of their being abused really don't exist, such as a provision that troops should not be quartered in private homes except in times of war. The due process clause goes back to King John's day. The rule of law is purported to be established in the Magna Carta—at least that is the myth that we have carried.

Q: Do teachers have a role of bringing honesty into politics?

A: I don't think that is the role of teachers. That is the role of the citizen, and every teacher is a citizen. The primary function of the teacher is to teach students to raise questions. Former Supreme Court Justice Felix Frankfurter was fond of saying that the right answer depends on the right question, and the more I see of what goes on, the more I think that's true. There is a very fine line, however, between skepticism, which I think is healthy, and cynicism which I think is unhealthy, diseased, if you will. And the teacher has got to maintain that line, and what you are asking me is how does a teacher get wisdom? I can't tell you.

Q: Teachers are educating tomorrow's future politicians and government workers and officials. How can they best deal with the attitude expressed during the Senate Watergate hearings on nationwide television by White House aide Gordon Strachan, who urged other young people to stay away from politics and Washington?

A: I don't know how idealized Strachan's notions of government were when he came to the job, but nothing is so disillusioning as having engaged in wrong-doing and having been caught at it. If young people come to Washington with their own ideals and the right attitude of skepticism—not cynicism—and say, "How can we work within this system so as to accomplish our ideals," I think the United States would be very much strengthened by an in-pouring of these people into the political process.

The United States suffers politically from the fact that most people don't give a damn about what happens in government. Most Americans can't tell you who their local representative is in the city council or the state legislature. It's not that past participation has been put down, so much as that there hasn't been any effort at participation. In 1968-69, nothing riled me so much as the attack on the universities. All this force was directed at institutions which were not guilty of creating the wrong-doing that the students wanted to correct. That was simply a paroxysm of hopelessness, revenge, striking out at the nearest object because the object you want to reach isn't at hand.

Q: How can educators combat the attitude that the individual cannot effect change?

A: It is quite true that no one of us in

a society can live exactly the way he would like. The chaos that would result would be totally destructive of the society, and we would be back to an aborigine state. If that is the goal, it can be accomplished by dropping out and trying to get away with as much as you can. Historically, the lot of the common man has been improved only to the extent that he has a real voice in government, and a real voice in government is by organization, not by mobs. Mobs have always been put down. The use of violence in Anglo-American history has repeatedly been unsuccessful. It creates an excuse for those with real force to destroy those who are engaging in violence. Violence is successful only if you have a majority of the force in the country with you. Otherwise, all you can do is get yourself destroyed. That is part of the lesson of the 1968-69 activities, which also gave an excuse to Mr. Nixon to say that the reason he had to engage in these Watergate illegalities is because others have engaged in illegalities. Now, you can say that's an absurd position, but it is a popular one that convinces a lot of people. After all, he is doing what is necessary in order to prevent these agitators from engaging in the same kind of thing.

I think that educators can urge students to accomplish their goals through organization. Nothing makes a congressman move faster than the recognition that the person who is speaking to him is speaking on behalf of X-thousand voters. The consumer and the average American individual is not organized. They could take a lesson from labor—whatever you think of its position at the moment. At the time of Franklin Roosevelt's election, there was no organized labor force. Labor came to the fore by organizing itself and now is one of the strong forces in government.

Q: Do you feel that Watergate highlights the value of a free press?

A: Certainly there is a useful point to be made about the role of the press in this country. Comparisons with other countries are likely to make our government look pretty good in certain areas. I understand that after the Watergate news broke, someone tried to make a scandal out of the fact that the French are wiretapping everywhere and everyone. When the French minister was accused of it, he said, "Certainly we do," and that, as far as France was concerned, was the end of the matter. And, while the English press isn't as free as the American press, I think the English government is nonetheless more responsive to the will of the people. Overall, though, I don't think that Watergate has been terribly revealing of the necessity for the 1st Amendment to the Constitution. The press isn't the only institution that we should use for our self-protection. Let's come back to the fact that the American Congress is the representative of the American people.

Q: John Wilson, the attorney for former White House aides H. R. Haldeman and John Ehrlichman, proposed that under the guise of national security, anything including burglary is permitted. What do you think of his position?

A: There is no constitutional basis for Mr. Wilson's position. None whatsoever. I thought his behavior was abominable and left a lot to be desired. The national television cameras have a strange effect on people. The whole Senate Watergate committee has behaved miserably. Wilson did ill service to his clients as a lawyer. A lawyer ought not make an absurd point to begin with, and certainly ought to make a point which will not help his client and which may certainly injure him. Wilson starts off by saying the President can do anything for national security. But then in regard to the Watergate burglary, the President reportedly knows nothing about it. Next down the line are Haldeman and Ehrlichman. Maybe they could do it as alter egos of the President. But they supposedly don't know anything

about it, according to the story. Then we get down to the point that Howard Hunt could do what he pleased because he thought national security was involved.

Q: Sen. Ervin said that you would make an outstanding Supreme Court justice if a President had the foresight to pick you. Could you comment?

A: I've always said that prediction is the function of either scientists or fools, and I am not a scientist.

CAMBODIA

Mr. HUGH SCOTT. Mr. President, I wish to make a few remarks on the tragic situation in Cambodia. More than a year has passed since the Government of the Khmer Republic tried to end the increasingly bloody conflict in its country. Khmer leaders with full U.S. support have unilaterally stopped their offensive operations, have offered talks with any authorized representative of their opponents and have explored other channels that might bring peace to their country.

The response of the Khmer Communists and their North Vietnamese patrons have been a murderous escalation of the war. During the past 3 months an intensified systematic campaign of terror bombardment has been directed against the civilian population in Phnom Penh. Over 1,000 civilians have been killed or wounded in these rocket and artillery attacks and thousands have been left homeless.

The women and children killed, wounded or burnt out of their homes were neither combatants nor accidental victims of attacks aimed at military bases or depots. They are the intended targets of an enemy who, failing to destroy the Khmer Republic's Army, has turned its weapons against helpless civilians.

Long after any American soldier has fired a weapon or dropped a bomb in Indochina, innocent civilians continue to be deliberately slaughtered to further the interests of Communist forces. Self-appointed war crimes tribunals no longer attract the interests of faddists. The murder of civilians in areas controlled by governments friendly to the United States is apparently regarded as less tragic or less criminal than those deaths that somehow could be made purely an American responsibility.

While the Communists in Cambodia are shelling civilians, the people in areas under their military control seek to escape at any opportunity. To the north of the Cambodian capital in just the last few days some 10,000 refugees fled to the government after 3 years under Communist control. Despite the dangers and hardships of life in the government areas, these villagers have registered another dramatic referendum on the unpopularity of their former Communist masters. World opinion, which should be struck by this rejection of the so called people's forces in Cambodia, is strangely silent. International opinion and an elementary sense of justice which should be outraged at a systematic and deliberate war of terror against a civilian populace seems fatigued or bored.

However, the Congress of the United States and the American people should not remain untouched or uninterested in

this tragic situation daily brought to their attention by the media. The Khmer Republic fights entirely alone. Congress ended the last U.S. air combat operations there over 6 months ago.

In summation, the Khmer Government has repeatedly offered to end the fighting on honorable terms to all. On the other hand, thousands of North Vietnamese troops remain illegally in Cambodia aiding the Khmer Communists who cannot command the loyalty of many of the people in their own areas. The Communists refuse proposals for a ceasefire, for negotiations, or for any discussion of a political solution. Instead they threaten the leaders of the Cambodian Government with hanging and turn their guns on women and children.

I think that the Congress and the American people can draw their own conclusions as to the responsibility for the continuing death of innocents in Cambodia.

SOLZHENITSYN AND DÉTENTE

Mr. JACKSON. Mr. President, the administration has chosen, when it spoke at all, to waffle in the face of the action of the Soviet authorities in abducting and forcibly expelling Alexander Solzhenitsyn from his homeland. The White House has limited its public expression on this matter to a press spokesman's statement that Secretary Kissinger has "eloquently spelled out" the conception of détente according to which silence is deemed appropriate; and the Secretary himself has once again obscured the relationship between détente and human rights by implying that firm American support for human rights will somehow increase the chance of nuclear war.

At a time when men and women throughout the free world—ordinary citizens, government officials and even heads of state—have voiced their revulsion at the mistreatment and brutal expulsion of this great and brave man, I cannot allow the silence of the President to be understood as representing the sentiments of the American people; it does not.

The American people support the conduct of relations with the Soviet Union on the basis of constructive negotiation and accommodation. This approach to the resolution of differences is characteristic of our relations with more than 120 nations; and as a means of enhancing our security, diminishing the risks of war and safeguarding our national interests it is wholly appropriate.

The process of negotiation, whether with the Soviet Union or any other country, is a means to certain ends; and the ends we may wish to pursue through negotiating channels are not self-defining. What is so deplorable about the President's silence and the Secretary's waffling on the Solzhenitsyn affair is the clear indication that the administration has narrowed its conception of détente to exclude issues of human rights. In so doing, the administration has posed a false choice between avoiding nuclear war and keeping faith with traditional values of human decency and individual liberty.

Are we to take seriously the proposition that the President and the Secre-

tary of State of the United States cannot give voice to the grave concern with which the American people view Solzhenitsyn's forced exile without increasing the likelihood of nuclear war? Is the moral leadership of the Western World to be left to the heads and foreign ministers of states—which though less powerful and more vulnerable than the United States—have nevertheless expressed on behalf of their people the dismay that I am confident lies in the hearts of the American people as well?

It is false and misleading to suggest that the pursuit of peace requires official indifference to the fate of those brave men and women who are struggling to resist tyranny. Nuclear war would be mutual suicide—and that is reason enough for making sure that it never take place. Carefully negotiated arms reductions can stabilize the nuclear balance and reduce the risks of war—and that is reason enough for entering into them. Restraint in the use of military power has its own logic and its own rewards. References to nuclear war as a response to challenges on the issue of human rights may divert questions at press conferences, but neither the conception nor the practice builds a foundation for the sort of détente that the American people will support.

It is high time for the administration to indicate that the pace of the developing détente, and the inevitable accommodation on our part that this will require, must be conditioned on reciprocal accommodation by the Soviet Union. The administration should reconsider its understanding and definition of détente and the objectives of the process of negotiation.

The issue before us is not, as has sometimes been claimed, whether the pursuit of détente with the Soviet Union should encompass the restructuring of Soviet society. No one is proposing so ambitious a goal. The effort of the Congress to define the objectives of détente to include progress on issues of human rights, including the freer movement of people and ideas, is modest and, in my judgment, manageable. More modest still is my hope that the administration will find the voice of the American people and endorse a genuine human détente—the only long-term hope for a more stable and peaceful world.

THE SECURITY OF THE NATION

Mr. GOLDWATER. Mr. President, during the year 1973, I placed in the CONGRESSIONAL RECORD, from time to time, position papers on "The Security of the Nation," prepared by the Association of the U.S. Army.

These papers proved invaluable to those of us who are concerned with a proper understanding of the rapid moving events of today as they affect our Nation's defense interest.

In this connection, Mr. President, I wish to point out that the AUSA recently published a year-end assessment of defense matters with the idea of providing useful information on how to best channel our most productive efforts during 1974.

The AUSA surveyed in particular the

concept which has become known as détente and discussed events that took place in 1973 which had a direct bearing on this alleged relationship with the Soviet Union. It found, for example, that not only was the latest Arab-Israel war a major jolt to détente but that the follow-up oil blackmail of the United States and other free world countries by the Arabs promised to be even more dangerous.

The report said:

The American people have been slow to appreciate the full impact of the energy crisis which is upon us—and which will be harsher on our most valued allies, NATO, Europe, and Japan. At the moment, we are on the threshold of inconvenience, but in a very short time, we shall face a young abyss of recession, disruption, and real hardship unless we can solve the energy crisis or abandon some of our commitments.

The AUSA warned particularly of a rapid decline in our credibility as a Nation capable and willing to stand up for its right and commitments. It stated that our potential adversaries believe they perceive, in recent developments, a decline of the American spirit as well as a lowering of our military capabilities. As a result, the report stated the situation has encouraged "some of the most dangerous military adventurism since the outbreak of the war in Korea."

Mr. President, because of the great importance of this assessment to the Members of the Congress, I ask permission to have the text of the report entitled "The Security of the Nation—1973—A Year-End Assessment," printed in the RECORD.

There being no objection, the report was ordered to be printed in the RECORD, as follows:

THE SECURITY OF THE NATION

NOTE. Illustrations are not reprinted in RECORD.

INTRODUCTION

During the past year, AUSA has issued a series of position papers entitled *The Security of the Nation*. In these papers, we have attempted to present in an objective manner the extent and validity of our country's national interests and commitments overseas. We discussed in considerable detail our views on what kind and size of a defense establishment we needed, the difficulties we foresaw in providing adequate manning, as well as the role of our Army Reserve Components in our total defense structure.

Much has happened in the intervening months that has impacted on our defense needs and posture. We felt it appropriate, therefore, to make a year-end assessment of these matters with the thought that it would prove useful in suggesting the most productive areas in which to channel our efforts during 1974.

Events of recent weeks have proven the substance of General Abrams' comments on détente to the Annual Meeting of the Association of the U.S. Army in mid-October. He said, in part, "the environment today is a difficult one for the country's security. The word détente, which for some people evidently colors everything rose and turns their perceptions away from even obvious threats has gained some currency." He went on to say, "Détente means only that the tension between countries in the world may have in some way decreased. This is a matter of quality and degree." Secretary of Defense Schlesinger has argued further that "détente doesn't imply further defense cutbacks and the atmosphere of tension should not govern our decisions about defense. Ten-

sion can be created, and can disappear in a day or two; but it takes years to build a defense establishment."

Not only was the latest Arab-Israeli war a major jolt to détente, but the follow-up oil blackmail of the U.S. and other free-world countries by the Arab countries promises to be even more dangerous. The American people have been slow to appreciate the full impact of the energy crisis which is upon us—and which will be even harsher on our most valued allies, NATO Europe and Japan. At the moment, we are on the threshold of inconvenience, but in a very short time we shall face a yawning abyss of recession, disruption and real hardship unless we can solve the energy crisis or abandon some of our commitments.

One thing that came through all of this loud and clear was the decline in our credibility as a nation capable and willing to stand up for its rights and commitments. The dramatic reductions in recent months in the size of our forces, the elimination of the draft, the obsolescence of much of our military equipment and the constant public drumfire of those who seek to reduce our defense has not been lost on our potential adversaries. They have perceived it as a decline of the American spirit, as well as in our military capability and it has encouraged some of the most dangerous military adventurism since the outbreak of the war in Korea. Such dubious political ploys as the passage of the War Powers Act may be great material for the domestic political stump, but they are dangerous moves in international diplomacy—as we have just seen.

Before we look overseas for scapegoats for the very serious dilemma we are facing, let us look closely at home to see how we talked ourselves into our present state and what we need to do to retrieve our prestige and the control of our destiny.

OUR NATIONAL INTERESTS OVERSEAS

When we look at our national interests overseas, we must examine the impact of the October Arab-Israeli war and the subsequent use of oil resources for blackmail by the Arab states. The oil chart on the following page makes abundantly clear the susceptibility of our NATO allies as well as Japan to such blackmail. While the two week war was short enough to avoid the outright choice of sides, it was clear that a number of our NATO allies chose to disassociate themselves from our support of Israel because they are completely dependent on Arab oil. Secretary of State Kissinger described it thus, "One cannot avoid the perhaps melancholy conclusion that some of our European allies saw their interests so different from those of the United States that they were prepared to break ranks with the United States on a matter of grave international consequence, and that we happen to believe was of profound consequence to them as well." The Arabs responded by rewarding these allies with continuing fuel—contingent on continued good behavior—while punishing those who did not follow this course, such as the Netherlands, which is under an oil embargo by the Arabs, as is the U.S. This raises the question as to the extent which the Arabs can influence the policies of our NATO allies in future conflicts. It is too early to assess the damage these strains may have caused to our Atlantic alliance.

Another aspect of oil diplomacy was evidenced when Singapore refused to refuel our Pacific fleet, lest their oil supply be severed. So the implications of the energy crisis go beyond the purely economic sphere. We are seeing in our own country the impact of fuel shortages on our defense capabilities, despite the fact that only 2.4% of our total U.S. energy goes for defense. Diesel fuel for ground operations has been cut by 60%, gasoline by 36%. Fuel for ship operations is down by 27%, and fuel for air operations by 24%. It may be necessary to keep 50% of our Pacific fleet in port at any given time.

Obviously, then, the energy crisis is cutting deeply into our training activities, and could cut into our responsive capabilities too, over a long period, unless we increase our fuel output.

A second point we must consider when we talk about our national interests overseas in the markets and trading partners we need in order to remain an economically viable nation. The chart describing the world gross national product gives a clear indication that there is a pretty sound correlation between our national interests and our national commitments overseas. Our national policy is far more pragmatic than altruistic.

Other on-going negotiations are also testing the viability of our Atlantic alliance. These include negotiations on offset, burden sharing and Mutual and Balanced Force Reductions, as well as the Conference on Security and Cooperation in Europe. The SALT II talks likewise impact on the alliance, but not so directly.

We are engaged in bilateral negotiations with the West German government to offset the foreign exchange costs which we attribute to maintaining U.S. forces in Germany. We are also pushing NATO for some sort of multilateral arrangement which would cover not only all of the foreign exchange costs of keeping U.S. forces in Europe, but also the incremental budgetary costs—those additional expenditures which we estimate are incurred as a result of stationing U.S. forces in Europe which would not be incurred if the same forces were stationed in the U.S.

Allied with these fiscal problems are our efforts to get our NATO allies to share a greater portion of the financial burden, and also to improve materially their own forces so that their defense role in NATO could be expanded. A NATO study group has been wrestling with these issues for the past several months. The importance of this particular issue was highlighted in the conclusions of a staff report issued by the Senate Foreign Relations Committee:

"To many in the United States, European willingness to make a greater contribution to the maintenance of U.S. forces in Europe is regarded as a primary index of the devotion of the European NATO countries to the principle of common defense. On the other hand, while they accept the necessity of some greater effort on their part, Europeans appear to believe that the United States must acknowledge that its own national interests are served by the maintenance of significant conventional forces in Europe regardless of what the Europeans do to support them. They also believe that the American willingness to acknowledge European concerns is, in turn, a measure of our willingness to make the alliance a true partnership and not only an instrument of U.S. policy."

Late in October of this year, a group of western nations sat down with a group from Communist Eastern Europe to begin negotiations to see if it is feasible to bring about mutual reductions in NATO and Warsaw Pact forces and armaments. The problem for the West is to hold the NATO alliance together while seeking step-by-step practical arrangements which will ensure undiminished security for all parties at a lower level of forces in Central Europe. This tremendous challenge was one of the primary reasons for AUSA's continuing opposition to unilateral U.S. troop reductions in Europe. It is too early yet to make any assessment of the possible success of these negotiations. News reports have indicated an initial Soviet proposal that suggests cuts on the order of 15% for NATO and 19% for the Warsaw Pact. The U.S. and NATO continue to press for cuts that will establish parity between the forces and not perpetuate the imbalance that now exists and would continue to exist under the Soviet proposal. Some leaders here, and more in Europe, are dubious that Soviet long-term intentions have changed and wonder whether or not the

Soviets have entered the MBFR negotiations in good faith. The fact remains however, that the possibilities of stabilizing Central Europe at lower levels of risk and expenditure has great appeal to both sides and every effort will be backed by the West, at least, to achieve this prospect.

It is worth noting that our continued strength and perseverance in Europe has been the backbone of NATO and, in fact, has made it possible for negotiations to take place. There obviously would be no need for the Soviets to negotiate if they could impose their will on a weakened Europe by other means. This is another outstanding example of how military strength and determination unite to provide a powerful force for peace and not for war.

The Conference on Security and Cooperation in Europe got under way in Geneva on September 18. Almost all nations of Europe from both sides are participating, as well as the U.S. and Canada. Four primary issues are being considered: political and military aspects of security in Europe; economic cooperation; broadened contacts between people; and possible follow-up arrangements to put conference decisions into effect. Moscow has been pushing for this Conference for almost 20 years. Their desire for some sort of rapprochement is based on a number of points, but not the least of which is their perception of the bug-a-boo of a resurgent Germany which could dominate the West if NATO should weaken and the Common Market efforts fail.

The situation in Europe is a difficult one. The alliance is under great strain, as are the other efforts, such as the Common Market, which we hope will gradually unify the Western European countries. The fuel shortages, if prolonged, will surely impact heavily on the economy of the Common Market countries and, in turn, affect our own trade with the European community.

Our own self-interest requires that we continue to support NATO fully while at the same time negotiating to lower the physical defense requirements. We must not lose sight of the fact that our forward deployments are intended not only to deter potential enemies, but at the same time and equally as important, give assurances to our allies—our presence should represent a stabilizing element in societies that might become volatile without it.

Our interests in Asia are not as easy to define. But foremost is our relationship with Japan. Japan is most significant to the United States. Under the security cloak provided by the United States since World War II, Japan's industrial capacity has expanded to an economic giant power surpassed only by the U.S. and the U.S.S.R. Japan has a gross national product of \$200 billion, which is growing in excess of 10% annually—twice the rate of growth of most developed countries—and this expansion is expected to continue if the fuel crisis can be solved. Japanese iron and steel production has grown to the point where she is the world's largest steel exporter—80% of this production going to the U.S. As a trading partner with this country, Japan is exceeded only by Canada.

For the next ten years, at least, areas to the east of India probably will be changing more rapidly and will be more important for U.S. policy. The course of development in Communist China will not necessarily repeat the grim story of the Soviet Union. One difference is the fact that the West Pacific Basin is now the most dynamic region of the world. A realistic U.S. China policy must recognize not only what happened within that country in 1949, but also the other revolution, the political-economic one, perhaps more fundamental, that has occurred around China in the past 10 or 15 years.

Stability, the objective of U.S. policy in Asia, is threatened from many sources. Asia is the geographic point of contact of the divergent interests of four of the world's five

major power centers. In brief, these interests are:

The Chinese desire for a position of prestige in the world—particularly dominance on the Asian mainland.

Japanese desire for exploitation of Asian markets and raw materials.

Soviet desire to contain China and exclude U.S. influence.

U.S. desire to prevent dominance by a single power in the area.

To this collection of conflicting pressures is now added considerable anxiety on the part of the U.S. allies. This anxiety is caused by the discrepancy between the stated U.S. policy of continued interest and assistance and the policy perceived by Asians as they observe the withdrawal of U.S. military power and the reduction of assistance from Asia and initiatives towards normalization of U.S.—Chinese relations.

Japan has reacted very promptly and strongly to the oil embargo, for she imports 85% of her oil, mostly from the Mid-East. So she falls hostage, too, to Arab blackmail and must note our inability thus far to be in a position to do much about it. Japan must therefore negotiate the best arrangement she can with the Arab countries to restore the fuel supply she so urgently needs. It is obvious from their point of view that friendship with the U.S. is no guarantee from blackmail.

These kinds of strains, coupled with the draw down of our troops in Asia, certainly create in Asian minds serious doubts about ability, desire or will to fulfill our SEATO commitments. Here again we see clearly the potential for defeat of our interests without armed conflict because our military posture and our perceived will are not credible.

While our draw down in Asia may have satisfied critics of our national policy, it is not clearly understood, particularly by the Asians. We will have to do a better job both at home and abroad in clarifying our interests and intentions in that important area if we are to continue the associations we have there now that are so important to our national interests. We would not support further drawdowns in the immediate future from our present dispositions in Asia.

HOW MUCH DEFENSE DO WE NEED?

Earlier in the year, when we took a look at how much defense we needed, we made certain strategic assumptions which must be reviewed as a preface to this section of our year-end assessment. Because of the devastating nuclear arsenals of both the United States and the Soviet Union, AUSA supported the agreements and treaty that resulted from SALT I. We felt it was a first step toward relieving mankind of the burden and terror of nuclear weapons. We felt it was an important beginning in bringing a halt to the senseless and spiraling strategic arms race. But we prefaced our support by stating clearly that we gave it only on the basis that the U.S. could continue vigorously to modernize and maintain a comparable capability with the Soviets so that we might be in a position to negotiate further acceptable limitations on offensive systems and also to prevent the U.S. from being in a position of strategic vulnerability. It is important that our allies and the uncommitted nations have positive evidence of our intention to maintain at least nuclear parity with the Soviet Union. Many of them consider this strategic deterrence essential to their security.

As 1973 draws to a close, we find a further weakening of our defenses vis-a-vis the Soviet Union. For at least the last five years, U.S. military strength has been declining while that of the U.S.S.R. has been increasing. In constant dollars, U.S. defense spending in 1973 is 40% below the level of 1968; Soviet spending, meanwhile, has increased 16% in real terms. Unless this trend is reversed, the U.S. will be militarily inferior to the Soviet Union in a few years.

The SALT II talks are apparently deadlocked. Recent Soviet proposals have been so one-sided as to be totally unacceptable to the United States. Moreover, changes in strategic capabilities are occurring which affect SALT I agreements, as well as any future agreements. Essentially in SALT I we traded some numerical superiority on the part of the Soviets for some technological superiority on our side.

The Russians can now launch more and larger nuclear missiles propelled by rockets of greater power than ours. We still have a substantial lead in weapons technology and precision guidance; principally in our multiple independently targeted reentry vehicles (MIRVs). Minuteman III missiles can launch three and Poseidon missiles up to fourteen warheads each on a separate trajectory for different targets. MIRV has given us the ability to increase the number of warheads we can launch from 4,500 to 7,100 during the past five years, even while the number of our launchers remains unchanged.

Last fall, the Russians conducted test flights of their own MIRVs. While scientists agree that it will take them from five to seven years to perfect this system, it is further evidence that they are striving mightily to close the technological gap.

It seems abundantly clear that much greater efforts need to be made to buttress and improve our strategic forces and our research, development and technological effort if we are not to lose our strategic balance with the Soviets.

Among the U.S. strategic programs calling for more urgent action are the Trident submarine program, the B-1 strategic bomber and the Site Defense ABM advanced technology package.

Trident program continues to enjoy the support of Congress, but they prefer to see the program develop at a much slower pace than the military leaders have proposed. The House Appropriations Committee recommend that the production rate be slowed from 3 to 1 a year, and the Senate went along with this.

The B-1 strategic bomber continues in engineering development. Congress has expressed some dissatisfaction with the management of the program and threatened to slow the pace of development even further. However, this has not been done and the program is moving, but with the same sense of urgency that is required.

Last January, the Army requested \$170 million for the research and development of a new ABM system called "Site Defense." This is a system separate from Safeguard. It is designed to provide a point defense for Minuteman missiles. The research and development in this program is required to provide use with a timely and credible hedge against failure to conclude a final agreement on offensive weapons. This program has had rough sledding in Congress. A more effective effort to explain its urgency is required. The Senate restored the very major cuts made by the House, but the program needs more.

The changes in our strategic balance continue against our U.S. interests. A greater understanding of our strategic needs must be developed if we are to obtain the support needed for these important programs.

During the Arab-Israeli war we had further evidence of the outstanding strategic mobility which our C5A provide. Now that the emotion has been stripped from that program, the addition of more squadrons of these highly efficient carriers would greatly enhance our flexibility and security.

In our whole general purpose forces area, the trend has continued downward. We have less combat troops, fewer ships, fewer planes and less equipment. We are at the lowest level in all of these categories since the 1950s.

During the past four years, for example, the number of Army and Marine divisions has dropped from 22 to 16, the number of Navy

ships from 976 to 535, our tactical Air Force squadrons from 210 to 163. This leaves us with smaller conventional forces now than before the Vietnam buildup began.

In another section of this paper, we discuss in more detail our defense manpower needs. We should point out here, however, that the Army is about 22,000 men below the baseline force supported by the Department of Defense. One Army combat division takes 16,000 men, which serves to give a measure of the current shortfall. Nevertheless, the Congress has tacked onto the FY74 budget still another personnel cut.

In the area of general purpose force hardware, FY74 can scarcely be termed one of great progress. In close support aircraft, for example, the Senate Armed Services Committee has insisted on setting back the new and badly needed A-10 close support airplane by withholding funds until such time as there is staged a fly-off between it and the Air Force AD-7D Corsair aircraft which has been in the inventory for several years.

The House Appropriations Committee had recommended cutting out \$29.3 million of the advance procurement funding for the first sea control ship. Fortunately, the Senate Appropriations Committee restored these funds which, hopefully, will survive the conference and be approved by both houses. Funds for the continued development of the Army's advanced attack helicopter were made available, as were those for work on the new battle tank, the utility transport aircraft system and the mechanized infantry combat vehicle. The Army's new tactical air defense system, SAM-D, was cut about 11% or \$22.6 million, however, and the Senate Armed Services Committee directed that an immediate cost-effectiveness study be made of the system.

The short-sighted view would hold that none of these cutbacks seriously degrade our total defense effort and, taken alone, few of them do. But in total they not only represent a continuing diminution of our defense capability, but also a complete lack of any sense of urgency about the serious state of our defense posture. If we are to accept the judgements of the nation's military leaders and their civilian colleagues, our general purpose forces are not now capable of carrying out all the missions to which they have been assigned. Moreover, the FY74 budget will not provide the means to reach this capability.

To restate our earlier view of how much defense we need: "We need enough, with our allies, to deter warfare at all levels and to defend our interests, should deterrence fail. We need enough to maintain technological superiority over the Soviet Union. And above all, we need enough to provide the strength upon which negotiations can be pursued." We do not now measure up to these criteria.

MANPOWER FOR DEFENSE

As the total strength of our nation's Armed Forces continues downward, the efforts to recruit them solely through voluntary means remains the boldest military manpower experiment in the history of our country. It is still one of the most controversial as well.

Charts in this section indicate our military manpower trends over the past years, as well as summarizing the results of our all-volunteer efforts thus far.

Respective of the all-volunteer effort, it should be emphasized that our overall strength levels are dangerously low, particularly when examined in conjunction with the Reserve Component portion of our total force, which is similarly below strength. The Reserve Components are discussed in more detail in a later section.

While no one can say with certainty exactly how many soldiers, sailors and airmen we need at this moment in history, we have been told consistently by the administration and its military leaders that the FY74 per-

sonnel requests represented a bare-bones, baseline level below which we could not go with safety. Nothing on the international scene has transpired since those submissions which rationally could be construed as lessening international crises, quite the contrary. Tensions are at a substantially higher level than they were last October. So we can only conclude that we are now short of our actual military manpower needs and the only way we have, at the moment, to make up that shortfall is through the all-volunteer effort. Without Presidential authority for inductions under Selective Service, we have no strategic backup for procuring needed military manpower.

The volunteer effort is in fact doing better. In November, for example, the Army slightly exceeded its adjusted quota for the first time ever and contributed a couple of hundred extra toward the shortages that have been experienced in every month since the program was started. Those who work closely with the program are optimistic that it has turned the corner, that momentum is improving and that the upward trend lines will continue. It now appears in the judgment of key personnel people that it is entirely possible that an Army end strength in the range of 760-775 thousand is possible by 30 June.

Certainly there is no lack of effort on the part of the military to make a success of the program. In the Army, for example, from the Secretary on down to units in the field, there is enthusiasm, optimism and momentum. There are no signs of foot dragging or half-hearted efforts at compliance with all-volunteer programs. This is salutary, not only from the standpoint of the success of the program, but for the additional benefits that derive from a difficult task attacked by a team effort.

We are not yet at the point where the all-volunteer program can be acclaimed a success, nor do we yet have evidence that when we do reach the initial goals they can be sustained over a period of time.

Congress has expressed increasing restiveness over the costs that they associate with the all-volunteer program. The House Appropriations Committee in its report on the Department of Defense Appropriation Bill was at great pains to point out their continuing view that soaring military personnel costs were "the direct result of the decision to move from the draft to the all-volunteer force." The report goes on to say, "The Committee discussed the all-volunteer force concept at considerable length and concluded that the program should be supported for one more year. This decision was made despite the long range effect of the all-volunteer force concept on America's military posture." This attitude in the Congress has been one of AUSA's continuing concerns about putting all eggs in the all-volunteer basket. The effort simply cannot succeed without the continued strong financial support of the Congress.

The perception by young men and women of the military forces as an attractive career has been an important target of our recruiting advertising and efforts. Improving the will and attitude of youth toward military service has been among the more important goals of the all-volunteer effort. It is discouraging, therefore, to see statements such as that attributed to an Assistant Secretary of Defense favoring reduction of appropriated fund support for commissaries, exchanges, golf courses, hobby shops and day-care centers because "They are an affront to private enterprise." This means a strange pronouncement from a civilian leader of the Defense Department whose colleagues are spending millions of dollars on programs to attract young people to the volunteer program. Whatever the confusion, no one disputes that cutbacks in these types of fringe benefits do impact unfavorably on service attractiveness and hence recruiting.

The volunteer program will suffer setbacks

in the months ahead in any period when more of the remaining draftees leave the service than we are able to replace with volunteers. The last big batch of these draftees should be leaving the service in the late summer or early fall. Coincidentally, these same departing draftees represent the last big pool of prior service personnel for the National Guard and Reserve to draw on for their recruiting efforts.

Should our country experience an economic downturn as a result of the energy crisis, unemployment could be expected to rise with a diminution in civilian job opportunities for young people. Presumably, this could help the all-volunteer effort. On the other hand, it may be essential for this country to take a more belligerent foreign stance and even conceivably engage in limited combat. It remains to be seen what impact these possibilities might have on the flow of volunteers, since we no longer stress as a matter of national policy the obligation of every able-bodied citizen to serve his country if needed.

Not only is there great effort and enthusiasm in the services to meet all-volunteer goals, but a solution may be working out to the problem of maintaining adequate educational and quality levels amongst the volunteers, which would have applicability to draftees as well.

In the absence of more precise criteria, the measuring stick of the quality of input has been the level of formal education and a categorization of skill potential based on a battery of aptitude tests. Not only is such measurement fairly imprecise, it can be misleading and wasteful as well. So several other approaches are being devised to insure that we get the maximum out of those young people who can be persuaded to volunteer.

The Army, for example, has embarked on an experiment with a trainee discharge program which provides a new quality screen. During the first 179 days of a volunteer's military training (basic and advance individual) his leaders are particularly on the lookout for the misfits, the trouble-makers and the inept so that they may be purged from the system, with honorable discharges, before being assigned to their units.

The Army is also experimenting with a "whole-person" approach as a screening device. This application of tests, background information, etc., is similar to the testing of applicants for many colleges, service academies, etc. Behavioral scientists believe strongly that the results of these efforts are easily correlative to the individual's potential for success or failure as a soldier. In connection with this, a whole new battery of tests has been developed.

There are other experiments ongoing as well to try more precisely to make better use of available manpower. The experience thus far shows that four out of five non-high school graduates can become effective soldiers. Hopefully, the efforts described above will help weed out the one that won't.

In summary, it would appear that the all-volunteer effort has made great progress due jointly to the enthusiastic, persevering, can-do attitudes of the military and the strong financial support of the Congress. AUSA will continue to support all measures possible to maintain the momentum that has been established.

Prudence demands that we have in hand also the authority of the President to induct people into the Armed Forces promptly if needed. An analogy can be drawn easily between having the induction authority on the books and the provisions of the War Production Act which permitted the government to act promptly to get oil for defense needs in the present energy crisis. That provision of the law had never been used before, but it was important to our national defense to have it right there when it was urgently needed.

Despite the great effort and all of the good will of our defense leaders, both civilian and

military, the volunteer effort is prey to obstacles which they cannot control. We applaud, encourage and support their continued efforts and urge at the same time the prudent back-up of induction authority on the books. It may never be needed, but it doesn't cost anything either. We think it is the best national insurance investment we can make.

THE ARMY'S RESERVE COMPONENTS

In our detailed examination of our Army's Reserve Components in June of last year, we called attention to several points that we thought were particularly important.

The administration has consistently characterized the active forces provided for under the FY74 budget as "a baseline force—the minimum force that the President and the Secretary of Defense consider necessary to carry out our national security objectives." In achieving this baseline force, the administration has assigned far greater responsibility to the National Guard and the Reserve than has heretofore been the case and, for most units, assigned them an early readiness requirement considerably beyond anything they have been asked to do in the past. The rationale in today's environment was to require that the Reserve Components meet certain of our national security requirements which heretofore were the responsibility of active duty forces.

We have indicated in our earlier papers our assumption that the basis for our strategic planning is the one and one half war strategy, which we have previously described in detail. We need only mention our commitments in NATO, the precarious balance in Southeast Asia, the very tenuous situation in the mid-East and the always volatile situation in Latin America to suggest a climate in which complacency has no place. We could respond to none of these precarious situations without the firm backup of our Reserve Components. The Active Army simply does not have sufficient tools to do the job. Of 21 divisions, 8 are in the Guard. And in support elements, two-thirds are in the Reserve forces.

We went on to describe recent Army reorganizations that were designed specifically to assist the Reserve Components with training and readiness problems.

Finally, we analyzed Reserve Component strength and recruiting problems and their impact on our total defense posture.

The authorized strength of the Reserve Components as of FY73 constituted 45% of the Army's total force manpower requirements. This will approximate the requirement in the immediate future.

To be sure that this strength problem is more clearly in focus, consider the following:

The authorized overall paid drill strengths for these forces is 411,979 for the Guard and 260,554 for the Reserve, which is really what they should have to meet mobilization requirements.

DOD reduced its requests for Army Reserve manpower authorizations to 379,144 for Guard and 232,591 for the Reserve. This represented an assessment by the Department of the manpower problem and how difficult it has been to solve. Defense leaders have been adamant in their testimony on these lower strength requests that they are not recommending a smaller Reserve Component. They point out clearly that no priority missions have been eliminated. What they are asking for is a floor upon which they hope to rebuild the strength.

Congress mandated by law that a minimum average strength of the Army National Guard would be 379,144 for FY74. The Army Guard is projected to end FY74 with a strength right at 400,000. As their low was only 384,424, they will exceed the funded average. Money will most certainly be provided by Congress for the overage.

In the case of the Army Reserve, the Congressionally established minimum average

strength was 232,591. The USAR recruiting trends have been slower to bottom out, but Reserve leaders feel that these can be reversed and that at year end they will approach the 232,000 goal.

The full TO&E strength for the force structure of the Army's Reserve Components is 711,000. The Congress has appropriated money for about 79% of the actual TO&E strengths of these units, believing these to be the actual goals that will be met.

We mention the TO&E strength only to point up the fact that when our Reserve Components reach the full strengths authorized by Congress, they are still short 21% of their TO&E strength and approach the point where meaningful team training is jeopardized.

As a result of a truly Herculean effort, it now appears that the Army National Guard has a good chance of meeting a strength goal of 400,000 by the end of the fiscal year on 30 June. This will be accomplished without the requested special incentives package which the Congress has failed to enact. It also has been accomplished with some sacrifice of training and administrative time and effort. We cannot expect to develop well-trained and adequately ready Reserve Component units if the greater part of their energies must be devoted consistently to recruiting. There is also serious concern that in their drive to meet the 400,000 goal, the Army Guard has failed to meet their quota of non-prior service recruits. This is a situation which can be tolerated only in the short term if the organization is not to suffer. The prior service pool of prospects is drying up fast now that the Army strength is getting down to all volunteer. By early fall, all the draftees will have left the active duty services.

Unfortunately, the trend in the Army Reserve has continued downward. The Reserve has not met a recruiting goal since the draft was eliminated. Reserve leaders are hopeful that an uptrend in the last six months will enable them to approach their goal. Their recruiting problems are obviously very similar to the Guard's.

An additional source of concern that has received almost no public attention is the downward plunge of those available in the Individual Ready Reserve—the pool from which fillers are to be supplied to both the Active Army as well as our Reserve Components. In FY73, the IRR was projected 70,323 officers and 680,111 enlisted men for a total of 750,434. By the first of October 1973, there were actually 705,000 on board. Projections out over the next five years would indicate that the total availability in the IRR pool could drop to around 200,000.

It should be obvious that the Reserve Components need assistance. The House Appropriations Committee alluded to this in their report when they discussed "Increased benefits or a Reserve draft." They also urge a realignment of the Reserve structure.

We also see in the press obviously knowledgeable stories about a Defense Department proposed cutback in our Army Reserve Components. The figure that most frequently is mentioned is 48,000 plus the 4,500 air defense spaces the Guard will lose with the phase out of its air defense units.

Such a cut would be most unwise unless there were a compensating increase in the size of our active forces. As we pointed out earlier, it has been the consistent position of the administration and defense leaders that our total force structure is truly a bare-bones, baseline force and that we need every single slot. To suggest a cut of this magnitude in our Reserve Component forces at a time when our active establishment is at its lowest ebb in more than 20 years seems to us the height of folly. We should now be embarked on a vigorous program for filling up and strengthening our Reserve forces rather than cutting them.

This, in our opinion, is the time to bend

our energies toward helping our Reserve Components meet their goals—not to further demoralize and disrupt them.

We suggest that two actions can be taken promptly that will materially improve the situation: 1) pass the special incentive legislation that has been pending before the Congress, and 2) restore the authority of the President to induct under the Selective Service Act. It's a very feasible way to provide all the essential manpower we need for all components at a reasonable cost.

Once the manpower problems have been suitably addressed, allow the new Reserve Readiness organization of the active Army the opportunity to get on with their task of assisting the Reserve Components with their training and readiness problems. Nothing constructive can be accomplished by any organization in a constant atmosphere of reorganization, upheaval and change. We have inflicted so many reorganizations on our Reserve Components already that it is a tribute to the dedication or perversity of our Reserve Component leaders at all levels that we have the capable unit organizations that do exist.

If there are some small marginal units that are not needed for our combat or combat support structure, these can be converted into more pertinent organizations. There will frequently be minor adjustments in types of units that will be required, but we feel it is time that the major organizations be left alone.

Conclusion

From the standpoint of our national defense, our country faces the new year in a relatively weaker defense posture than twelve months ago. The international tensions and the strains on our old alliances are more dangerous than a year ago. So the prudent course of action seems completely clear—to strengthen our own defenses.

We were struck by the philosophy enunciated by the Senate Appropriations Committee in stating the principles which guided their consideration of the Defense Appropriation Bill. One of the principles was obviously the need for economy, but they described the other thusly: "... the necessity for an adequate defense posture—one that will honor our treaty commitments, discourage aggressive action, and protect our way of life. In the last three decades, the United States has engaged in three major conflicts. At the outset of each of these struggles, we were either woefully unprepared, as in World War II, or only marginally prepared, as in the Korean War and the war in Southeast Asia. It would be idle to speculate over imponderables as to the degree to which our military lack of preparedness encourages these aggressions. Because of the advent of nuclear fission, America can expect no grace period of months or years in which to ready our defenses as it enjoyed in the past. In time of crisis, we would be forced to utilize the resources we have at hand... We are well aware of the fate of nations who are forced to negotiate through weakness. And those nations who in years past have amply demonstrated their desire for world dominance have more recently increased, rather than relaxed, their military potential. Under these conditions, it behooves this country to maintain a military strength commensurate with an anticipated threat not merely as a bargaining agent, but rather as a condition of national survival."

We agree. What is needed now is to match our deeds to the words.

RULES OF PROCEDURE—COMMITTEE ON GOVERNMENT OPERATIONS

Mr. ERVIN. Mr. President, in accordance with section 133B of the Legislative

Reorganization Act of 1946, as amended, which requires the rules of each committee to be published in the CONGRESSIONAL RECORD no later than March 1 of each year, I ask unanimous consent that the rules of the committee be printed in the RECORD.

There being no objection, the rules were ordered to be printed in the RECORD, as follows:

RULES OF PROCEDURE ADOPTED BY THE COMMITTEE ON GOVERNMENT OPERATIONS

PURSUANT TO SECTION 133B OF THE LEGISLATIVE REORGANIZATION ACT OF 1946, AS AMENDED

Rule 1. Meetings and meeting procedures other than hearings

A. *Meeting dates.* The committee shall hold its regular meetings on the first Thursday of each month, when the Congress is in session, or at such other times as the chairman shall determine. Additional meetings may be called by the chairman as he deems necessary to expedite committee business. (Sec. 133(a), Legislative Reorganization Act of 1946, as amended.)

B. *Calling special committee meetings.* If at least three members of the committee desire the chairman to call a special meeting, they may file in the offices of the committee a written request therefor, addressed to the chairman. Immediately thereafter, the clerk of the committee shall notify the chairman of such request. If, within three calendar days after the filing of such request, the chairman fails to call the requested special meeting, which is to be held within seven calendar days after the filing of such request, a majority of the committee members may file in the offices of the committee their written notice that a special committee meeting will be held, specifying the date and hour thereof, and the committee shall meet on that date and hour. Immediately upon the filing of such notice, the committee clerk shall notify all committee members that such special meeting will be held and inform them of its date and hour. If the chairman is not present at any regular, additional or special meeting, the ranking majority member present shall preside. (Sec. 133(a), Legislative Reorganization Act of 1946, as amended.)

C. *Meeting notices and agenda.* Written notices of committee meetings, accompanied by an agenda enumerating the items of business to be considered, shall be sent to all committee members at least three days in advance of such meetings. In the event that unforeseen requirements of committee business prevent a three-day notice, the committee staff shall communicate such notice by telephone to members or appropriate staff assistants in their offices, and an agenda will be furnished prior to the meeting.

D. *Open business meetings.* Meetings for the transaction of committee or subcommittee business shall be conducted in open session, except that a meeting or portions of a meeting may be held in executive session when the committee members present, by majority vote, so determine. The motion to close a meeting, either in whole or in part, may be considered and determined at a meeting next preceding such meeting. Whenever a meeting for the transaction of committee or subcommittee business is closed to the public, the Chairman of the committee or the subcommittee shall offer a public explanation of the reasons the meeting is closed to the public. This paragraph shall not apply to the Permanent Subcommittee on Investigations.

Rule 2. Quorums

A. *Reporting legislation.* Eight members of the committee shall constitute a quorum for reporting legislative measures or recommendations. (Sec. 133(d), Legislative Reorganization Act of 1946, as amended.)

B. *Transaction of routine business.* Six

members of the committee shall constitute a quorum for the transaction of routine business. For the purpose of this paragraph, the term "routine business" includes the convening of a committee meeting and the consideration of legislation pending before the committee and any amendments thereto, and voting on such amendments.² (Rule XXV, Sec. 5(a) Standing Rules of the Senate.)

C. Taking sworn testimony. Two members of the committee shall constitute a quorum for taking sworn testimony: *Provided, however,* That one member of the committee shall constitute a quorum for such purposes, with the approval of the chairman and the ranking minority member of the committee, or their designees. (Rule XXV, Sec. 5(b), Standing Rules of the Senate.)

D. Taking unsworn testimony. One member of the committee shall constitute a quorum for taking unsworn testimony. (Sec. 133(d)(2), Legislative Reorganization Act of 1946, as amended.)

E. Subcommittee quorums. Subject to the provisions of section 5(a) and 5(b) of Rule XXV of the Standing Rules of the Senate, and section 133(d) of the Legislative Reorganization Act as amended, the subcommittees of this committee are authorized to establish their own quorums for the transaction of business and the taking of sworn testimony.

F. Proxies prohibited in establishment of a quorum. Proxies shall not be considered for the establishment of a quorum.

Rule 3. Voting

A. Quorum required. No vote may be taken by the committee, or any subcommittee thereof, on any measure or matter unless a quorum, as prescribed in the preceding section, is actually present.

B. Reporting legislation. No measure or recommendation shall be reported from the committee unless a majority of the committee members are actually present, and the vote of the committee to report a measure or matter shall require the concurrence of a majority of those members who are actually present at the time the vote is taken. (Sec. 133(d), Legislative Reorganization Act of 1946, as amended.)

C. Proxy voting. Proxy voting shall be allowed on all measures and matters before the committee, or any subcommittees thereof, except that, when the committee, or any subcommittee thereof, is voting to report a measure or recommendation, proxy votes shall be allowed solely for the purposes of recording a member's position on the pending question and then, only if the absent committee member has been informed of the matter on which he is being recorded and has affirmatively requested that he be so recorded. All proxies shall be addressed to the chairman of the committee and filed with the chief clerk thereof, or to the chairman of the subcommittee and filed with the clerk thereof, as the case may be. All proxies shall be in writing and shall contain sufficient reference to the pending matter as is necessary to identify it and to inform the committee as to how the member wishes his vote to be recorded thereon. (Sec. 133(d), Legislative Reorganization Act of 1946, as amended.)

D. Announcement of vote. (1) Whenever the committee by rollcall vote reports any measure or matter, the report of the committee upon such measure or matter shall include a tabulation of the votes cast in favor of and the votes cast in opposition to such measure or matter by each member of the committee. (Sec. 133(d), Legislative Reorganization Act of 1946, as amended.)

(2) Whenever the committee by rollcall vote acts upon any measure or amendment thereto, other than reporting a measure or recommendation, the results thereof shall be announced in the committee report on that measure unless previously announced by the

committee, and such announcement shall include a tabulation of the votes cast in favor of and the votes cast in opposition to each such measure and amendment thereto by each member of the committee who was present at that meeting. (Sec. 133(b), Legislative Reorganization Act of 1946, as amended.)

(3) In any case in which a rollcall vote is announced, the tabulation of votes shall state separately the proxy votes recorded in favor of and in opposition to that measure, amendment thereto, or recommendation. (Sec. 133(b) and (d), Legislative Reorganization Act of 1946, as amended.)

Rule 4. Hearings and hearing procedures

A. Announcement of hearings. The committee, or any subcommittee thereof, shall make public announcement of the date, place, time and subject matter of any hearing to be conducted on any measure or matter at least one week in advance of such hearing, unless the committee, or subcommittee, determines that there is good cause to begin such hearing at an earlier date. (Sec. 133A(a), Legislative Reorganization Act of 1946, as amended.)

B. Open hearings. Each hearing conducted by the committee, or any subcommittee thereof, shall be open to the public unless the committee, or subcommittee, determines that the testimony to be taken at that hearing may (1) relate to a matter of national security, (2) tend to reflect adversely on the character or reputation of the witness or any other individual, or (3) divulge matters deemed confidential under other provisions of law or Government regulations. (Sec. 133A(b), Legislative Reorganization Act of 1946, as amended.)

C. Radio, television, and photography. The committee, or any subcommittee thereof, may permit the proceedings of hearings which are open to the public to be photographed and broadcast by radio, television or both, subject to such conditions as the committee, or subcommittee, may impose. (Sec. 133A(b), Legislative Reorganization Act of 1946, as amended.)

D. Advance statements of witnesses. A witness appearing before the committee, or any subcommittee thereof, shall file a written statement of his proposed testimony at least one day prior to his appearance, unless this requirement is waived by the chairman and the ranking minority member, following their determination that there is good cause for failure of compliance. (Sec. 133A(c), Legislative Reorganization Act of 1946, as amended.)

E. Minority witnesses. In any hearings conducted by the committee, or any subcommittee thereof, the minority members of the committee shall be entitled, upon request to the chairman by a majority of the minority to call witnesses of their selection during at least one day of such hearings. (Sec. 133A(e), Legislative Reorganization Act of 1946, as amended.)

Rule 5. Committee reports

A. Timely filing. When the committee has ordered a measure or recommendation reported, following final action, the report thereon shall be filed in the Senate at the earliest practicable time. (See 133(c), Legislative Reorganization Act of 1946, as amended.)

B. Supplemental, minority, and additional views. A member of the committee who gives notice of his intention to file supplemental, minority or additional views at the time of final committee approval of a measure or matter, shall be entitled to not less than three calendar days in which to file such views, in writing, with the chief clerk of the committee. Such views shall then be included in the committee report and printed in the same volume, as a part thereof, and their inclusion shall be noted on the cover of the report. In the absence of timely notice, the committee report may be filed and

printed immediately without such views. (Sec. 133(e), Legislative Reorganization Act of 1946, as amended.)

C. Draft reports of subcommittees. All draft reports prepared by subcommittees of this committee on any measure or matter referred to it by the chairman, shall be in the form, style, and arrangement required to conform to the applicable provisions of the Standing Rules of the Senate, and shall be in accordance with the established practices followed by the committee. Upon completion of such draft reports, copies thereof shall be filed with the chief clerk of the committee at the earliest practicable time.

D. Cost estimates in reports. All committee reports, accompanying a bill or joint resolution of a public character reported by the committee, shall contain (1) an estimate, made by the committee, of the costs which would be incurred in carrying out the legislation for the then current fiscal year and for each of the next five fiscal years thereafter (or for the authorized duration of the proposed legislation, if less than five years); (2) a comparison of such cost estimates with any made by a Federal agency; or (3) a statement of the reasons for failure by the committee to comply with these requirements as impracticable, in the event of inability to comply therewith. (See 252(a), Legislative Reorganization Act of 1970.)

Rule 6. Subcommittees and subcommittee procedures

A. Regularly established subcommittees. The committee shall have four regularly established subcommittees, as follows:

Permanent Subcommittees on investigations

Intergovernmental Relations

Reorganization, Research, and International Organizations

Budgeting, Management, and Expenditures

B. Ad hoc subcommittees. Following consultation with the ranking minority member, the chairman shall, from time to time, establish such ad hoc subcommittees as he deems necessary to expedite committee business.

C. Subcommittee membership. Following consultation with the majority members, and the ranking minority member, of the committee, the chairman shall announce selections for membership on the subcommittees referred to in paragraphs A and B, above.

D. Subcommittee meetings and hearings. Each subcommittee of this committee is authorized to establish meeting dates and adopt rules not inconsistent with the rules of the committee.

E. Subcommittee budgets. Each subcommittee of this committee, which requires authorization for the expenditure of funds for the conduct of inquiries and investigations, shall file with the chief clerk of the committee, not later than January 10 of that year, its request for funds for the 12-month period beginning on March 1 and extending through and including the last day in February of the following year. Each such request shall be submitted on the budget form prescribed by the Committee on Rules and Administration, and shall be accompanied by a written justification, addressed to the chairman of the committee, which shall include (1) a statement of the subcommittee's area of activities; (2) its accomplishments during the preceding year; and (3) a table showing a comparison between (a) the funds authorized for expenditure during the preceding year, (b) the funds actually expended during that year, (c) the amount requested for the current year, and (d) the number of professional and clerical staff members and consultants employed by the subcommittee during the preceding year and the number of such personnel requested for the current year. (Sec. 133(g), Legislative Reorganization Act of 1946, as amended.)

UKRAINIAN INDEPENDENCE

Mr. TAFT. Mr. President, I have received a copy of the remarks made by Prof. Michael S. Pap, Ph. D., of John Carroll University, Cleveland, Ohio, at the Commemoration Academy sponsored by the United Ukrainian Organization on January 20. His views are indicative of my feelings, and I am sure of the majority of the Members of Congress, that world freedom is, and has always been, one of our primary goals. I ask unanimous consent that the remarks of Dr. Michael Pap be printed in the RECORD.

There being no objection, the remarks were ordered to be printed in the RECORD, as follows:

THE PROCLAMATION OF THE INDEPENDENT UKRAINIAN DEMOCRATIC REPUBLIC IN JANUARY 1918

(Remarks by Professor Michael S. Pap, Ph. D.)

The Anniversary celebrated by the Ukrainians in the free world each January has a meaningful significance not only for the Ukrainians but for the people of the United States and the whole free world as well. It is obvious that when freedom is obliterated in one country, it indirectly affects all the other free peoples. At a time when Moscow tries to impress the world as the champion on anti-colonialism, there is an urgent need to remind our people of the fate of nations forced to live under the brutal oppression of Communist Russian dictatorship.

Ukraine, with a population of 45 million, was the first victim of Soviet Russian aggression. It is the largest non-Russian nation within the Soviet Russian Empire. This entitles it to rank in Europe next to Russia, Germany, and France not only in terms of population, but also in terms of strategic geographic position and rich resources. Because of its resources, it had always been regarded as a coveted prize of aggressors—first the Mongols, then Moscovite Tsars and finally the Russian Communists.

When, in 1917, the Russian autocratic Government disintegrated, the Ukrainian people availed themselves of the opportunity to regain their own independence. A National Government was formed which then issued decrees and promulgated laws, securing liberty and equality for all citizens of Ukraine. At the same time, the Russian Communist Party issued its declaration in favor of the right to self-determination. It soon became apparent, however, that this Soviet declaration was only a clever Bolshevik maneuver to preserve the unity of the former Russian Empire. Simultaneously with the ostentatious proclamation of the right to self-rule, the Soviet Russian Government dispatched to the Ukrainian National Government a 48-hour ultimatum dated December 17, 1917, signed by Lenin and Stalin, demanding unconditional surrender and the acceptance of Soviet Russian domination over Ukraine.

The reply by the Ukrainian Government of December 19, 1917, is regarded today as an historical and a classic document which clearly exhibits a unique comprehension of the potential Communist threat not only to the young Ukrainian Republic, but to the free peoples throughout the world. Ukrainians realized already in 1917 that between the Tsarist and the Bolshevik imperialism, there was little or no difference. Rejecting the Soviet Ultimatum, Ukraine proclaimed for Independence on January 22, 1918. A proclamation of the reunification of all Ukrainian territories in one single democratic state followed a year later on January 22, 1919. With these two significant acts, the Ukrainians demonstrated to the world that Moscow and Kiev represented two different cultures, two different nations, and two different mentalities. Kiev personified the democratic concept of government based on respect for human rights and the dignity of man, while

Moscow represented not only totalitarianism but also a godless force of destruction.

The ensuing Russian-Ukrainian war of almost four years' duration (1917-1921) is rather obscure, because at that time Communism was not recognized as a danger to the free world. The Russian Communists were aided in their war against Ukrainians by a majority of the Russians who sacrificed democracy in order to preserve the unity of the Russian Empire. How well the Ukrainians understood the danger of Russian Bolshevism can best be described by quoting the Ukrainian Representative Liubinsky at the Brest-Litovsk Peace Conference in February, 1918, when following Trotsky's declarations of Communist "peaceful" aims, he stated:

"The noisy declarations of the Bolsheviks regarding the complete freedom of the people of Russia is but the vulgar stuff of demagoguery. The Government of the Bolsheviks, which has broken up the Constituent Assembly and which rests on the bayonets of hired Red Guards, will never elect to apply in Russia the very just principle of self-determination, for they know only too well that not only the Republic of the Ukraine but also the Don, the Caucasus, Siberia, and other regions do not regard them as their government, and that even the Russian people, themselves, will ultimately deny their right; only because they are afraid of the development of a National Revolution do they declare here at the peace conference and within Russia, with a spirit of demagoguery peculiar to themselves, the right of self-determination of the peoples. They themselves are struggling against the realization of this principle and are resorting not only to hired bands of Red Guards but also to meaner and even less legal methods."

Since the Bolshevik Russian occupation of Ukraine, ten million Ukrainians or more died in the defense of their Independence. Ukraine would have remained free had the Western nations paid heed to her warnings of the potential Communist menace and answered her desperate call for moral and military assistance. Without Ukraine's strategic position and her immeasurable mineral resources the Soviet Russian Government would have difficulties in initiating aggressive policies toward the West. We, Americans, should find comfort in knowing that the Union of Soviet Socialist Republics is not all Russia, but a chain of captive nations yearning for an opportunity to break this chain of bondage and become masters of their destinies within their respective Republics. During and after World War II, the Ukrainian Insurgent Army was actively engaged in fighting Nazism and Communism alike. Paradoxically, the Western Powers again were not interested in the emergence of this freedom force in Eastern Europe and unwittingly helped the Kremlin pave its way to the heart of Europe and Asia. On the basis of our experience with the Communists, we should know by now that the only policy capable of shaking the foundation of the Soviet Russian slave empire is a policy motivated by the idea of individual and national liberty for all. It is this ideological weapon the Communists fear most. For this reason, the Ukrainians would wholeheartedly support the U.S. ideological reorientation which would include an open support for Ukraine's as well as for other nations' right to liberty and independence. Such a policy would force the Kremlin into a defensive position and may prove to be the best deterrent to a nuclear war.

SUNSET IN THE DESERT

Mr. GOLDWATER. Mr. President, Arizona, which abounds in scenic wonders, also has its share of able poets. One of the latter is Judge Carr Bailey of Sun City, Ariz., who has written a poetic tribute entitled "Sunset in the Desert." Judge Bailey's poem was first published on

October 5, 1973, in the Sun City News Sun. It described a sunset which Judge Bailey informs me he saw on October 3, 1973, and which "could be viewed only in Arizona."

I ask unanimous consent that Judge Bailey's poem be printed in the RECORD.

There being no objection, the poem was ordered to be printed in the RECORD, as follows:

SUNSET IN THE DESERT

(By Judge Carr Bailey)

A sunburst sinks slowly behind the crags
And peaks of Arizona; aloft glows a flaming
Expanse of western skies. There's a hush of
Death about the landscape; no chirrup of the
Cricket is heard; nightbirds are silent
While the mating call of the coyote from
Hilltop to hilltop is muted.

Now, the budding horns of a new moon
appear.

To blend the day into evening twilight as life
Again begins to stir for survival in the desert.
Out of the darkness high above, the incessant
Cry of wild geese penetrates the stillness; on
Tired pinions they fly unerringly south-
ward to

The gulf, a haven from the wintry storms on
the
Coastal plains of their Arctic home.

In the false-dawn of the morning a wolfcall
Streams across the sky to herald a new day;
shafts

Of sunbeams steal above the distant ram-
parts as

The domes and spires of the city glisten in
the

Splendor of dewdrops and sunshine; a mouse
Scurries on little white feet before the
fluttering

Wings of a screeching owl. A horny toad
blinks sleepily

Eyes as it drifts into slumber.

Desert life seeks the shadows from a blazing
orb as

Man goes blithely on, oblivious to the long
night

Awaiting—a night of mystery and eternity.

THE GENOCIDE CONVENTION

Mr. PROXMIER. Mr. President, the record is clear: 78 nations of the world have ratified the United Nations' Genocide Convention treaty, but ours has not. We must act now, before the name of the United States falls even further down the list of those endorsing this affirmation of human rights.

As I have said before, our claims to moral leadership suffer every time this treaty is mentioned in an international forum. No matter how fervently we may argue our commitment to liberty, that commitment can always be questioned: "Why do you not support the Genocide Convention?" And our diplomats are always at pains to give an answer, for they themselves do not know. The truth is that there is no satisfactory reason for our failure to ratify this document, and the time to correct that failure has long been upon us.

Mr. President, it is bad enough that we were not the very first to approve this treaty; that would have been consistent with our traditions and heritage. Let us take action before we are in danger of being the last.

SOLZHENITSYN: LIVE NOT BY LIES

Mr. JACKSON. Mr. President, I ask unanimous consent to have printed in

the RECORD the essay written by Alexander Solzhenitsyn dated February 12. The essay is called "Live Not By Lies" and is currently being read and distributed by Moscow's intellectuals. The text is from the Washington Post, Monday, February 18, 1974.

There being no objection, the essay was ordered to be printed in the RECORD, as follows:

LIVE NOT BY LIES

(Moscow, February 17.—Following is the full text of Alexander Solzhenitsyn's essay "Live Not By Lies." It is perhaps the last thing he wrote on his native soil and is circulating among Moscow's intellectuals. The essay is dated Feb. 12, the day that secret police broke into his apartment and arrested him. The next day he was exiled to West Germany.)

At one time we dared not even to whisper. Now we write and read *samizdat*, and sometimes when we gather in the smoking room at the Science Institute we complain frankly to one another: What kind of tricks are they playing on us, and where are they dragging us? Gratuitous boasting of cosmic achievements while there is poverty and destruction at home. Propping up remote, uncivilized regimes. Fanning up civil war. And we recklessly fostered Mao Tse-tung at our expense—and it will be we who are sent to war against him, and will have to go. Is there any way out? And they put on trial anybody they want, and they put same people in asylums—always they, and we are powerless.

Things have almost reached rock bottom. A universal spiritual death has already touched us all, and physical death will soon flare up and consume us both and our children—but as before we still smile in a cowardly way and numbe without tongues tied: But what can we do to stop it? We haven't the strength.

We have been so hopelessly dehumanized that for today's modest ration of food we are willing to abandon all our principles, our souls, and all the efforts of our predecessors and all the opportunities for our descendants—but just don't disturb our fragile existence. We lack staunchness, pride and enthusiasm. We don't even fear universal nuclear death, and we don't fear a third world war. We have already taken refuge in the crevices. We just fear acts of civil courage.

We fear only to lag behind the herd and to take a step alone—and suddenly find ourselves without white bread, without heating gas and without a Moscow registration.

We have been indoctrinated in political courses, and in just the same way was fostered the idea to live comfortably, and all will be well for the rest of our lives: You can't escape your environment and social conditions. Everyday life defines consciousness. What does it have to do with us? We can't do anything about it.

But we can—everything. But we lie to ourselves for assurance. And it is not they who are to blame for everything—we ourselves, only we. One can object; But actually you can think anything you like. Gags have been stuffed into our mouths. Nobody wants to listen to us, and nobody asks us. How can we force them to listen? It is impossible to change their minds.

It would be natural to vote them out of office—but there are no elections in our country. In the West people know about strikes and protest demonstrations—but we are too oppressed, and it is a horrible prospect for us: How can one suddenly renounce a job and take to the streets? Yet the other fatal paths probed during the past century by our bitter Russian history are, nevertheless, not for us, and truly we don't need them.

Now that the axes have done their work, when everything which was sown has sprouted anew, we can see that the young and

presumptuous people who thought they would make our country just and happy through terror, bloody rebellion and civil war were themselves misled. Now think, fathers of education! Now we know that infamous methods breed infamous results. Let our hands be clean!

The circle—is it closed? And is there really no way out? And is there only one thing left for us to do, to wait without taking action? Maybe something will happen by itself? It will never happen as long as we daily acknowledge, extoll, and strengthen—and do not sever ourselves from—the most perceptible of its aspects: Lies.

When violence intrudes into peaceful life, its face glows with self-confidence, as if it were carrying a banner and shouting: "I am violence. Run away, make way for me—I will crush you. But violence quickly grows old. And it has lost confidence in itself, and in order to maintain a respectable face it summons falsehood as its ally—since violence can conceal itself with nothing except lies, and the lies can be maintained only by violence. And violence lays its ponderous paw not every day and not on every shoulder: It demands from us only obedience to lies and daily participation in lies—all loyalty lies in that.

And the simplest and most accessible key to our self-neglected liberation lies right here: Personal nonparticipation in lies. Though lies conceal everything, though lies embrace everything, we will be obstinate in this smallest of matters: Let them embrace everything, but not with any help from me.

This opens a breach in the imaginary encirclement caused by our inaction. It is the easiest thing to do for us, but the most devastating for the lies. Because when people renounce lies it simply cuts short their existence. Like an infection, they can exist only in a living organism.

We do not exhort ourselves. We have not sufficiently matured to march into the squares and shout the truth out loud or to express aloud what we think. It's not necessary.

It's dangerous. But let us refuse to say that which we do not think!

This is our path, the easiest and most accessible one, which takes into account our inherent cowardice, already well-rooted. And it is much easier—it's dangerous even to say this—than the sort of civil disobedience which Gandhi advocated.

Our path is not to give conscious support to lies about anything whatsoever! And once we realize where lie the perimeters of falsehood—each sees them in his own way.

Our path is to walk away from this gangrenous boundary. If we did not paste together the dead bones and scales of ideology, if we did not sew together rotting rags, we would be astonished how quickly the lies would be rendered helpless and subside.

That which should be naked would then really appear naked before the whole world.

So in our timidity, let each of us make a choice: Whether consciously to remain a servant of falsehood—of course, it is not out of inclination, but to feed one's family, that one raises his children in the spirit of lies—or to shrug off the lies and become an honest man worthy of respect both by one's children and contemporaries.

And from that day onward he:

Will not henceforth write, sign or print in any way a single phrase which in his opinion distorts the truth.

Will utter such a phrase neither in private conversation nor in the presence of many people, neither on his own behalf nor at the prompting of someone else, neither in the role of agitator, teacher, educator, nor in a theatrical role.

Will not depict, foster or broadcast a single idea which he can see is false or a distortion of the truth, whether it be in painting, sculpture, photography, technical science or music.

Will not cite out of context, either orally or written, a single quotation so as to please someone, to feather his own nest, to achieve success in his work, if he does not share completely the idea which is quoted, or if it does not accurately reflect the matter at issue.

Will not allow himself to be compelled to attend demonstrations or meetings if they are contrary to his desire or will, will neither take into hand nor raise into the air a poster or slogan which he does not completely accept.

Will not raise his hand to vote for a proposal with which he does not sincerely sympathize, will vote neither openly nor secretly for a person whom he considers unworthy or of doubtful abilities.

Will not allow himself to be dragged to a meeting where there can be expected a forced or distorted discussion of a question.

Will immediately walk out of a meeting, session, lecture, performance or film showing if he hears a speaker tell lies, or purvey ideological nonsense or shameless propaganda.

Will not subscribe to or buy a newspaper or magazine in which information is distorted and primary facts are concealed.

Of course, we have not listed all of the possible and necessary deviations from falsehood. But a person who purifies himself will easily distinguish other instances with his purified outlook.

No, it will not be the same for everybody at first. Some, at first, will lose their jobs. For young people who want to live with the truth, this will, in the beginning, complicate their young lives very much, because the required recitations are stuffed with lies, and it is necessary to make a choice.

But there are no loopholes for anybody who wants to be honest: On any given day, any one of us will be confronted with at least one of the above-mentioned choices even in the most secure of the technical sciences. Either truth or falsehood: Toward spiritual independence, or toward spiritual servitude.

And he who is not sufficiently courageous even to defend his soul—don't let him be proud of his "progressive" views, and don't let him boast that he is an academician or a people's artist, a merited figure, or a general—let him say to himself: I am in the herd, and a coward. It's all the same to me as long as I'm fed and warm.

Even this path, which is the most modest of all paths of resistance, will not be easy for us. But it is much easier than self-immolation or a hunger strike: The flames will not envelope your body, your eyeballs will not burst from the heat, and brown bread and clean water will always be available to your family.

A great people of Europe, the Czechoslovaks, whom we betrayed and deceived: Haven't they shown us how a vulnerable breast can stand up even against tanks if there is a worthy heart within it?

You say it will not be easy? But it will be the easiest of all possible resources. It will not be an easy choice for a body, but it is the only one for a soul. No, it is not an easy path. But there are already people, even dozens of them, who over the years have maintained all these points and live by the truth.

So you will not be the first to take this path, but will join those who have already taken it. This path will be easier and shorter for all of us if we take it by mutual efforts and in close rank. If there are thousands of us, they will not be able to do anything with us. If there are tens of thousands of us, then we would not even recognize our country.

If we are too frightened, then we should stop complaining that someone is suffocating us. We ourselves are doing it. Let us then bow down even more, let us wait, and our brothers the biologists will help to bring nearer the day when they are able to read our thoughts.

And if we get cold feet, even taking this step, then we are worthless and hopeless, and the scorn of Pushkin should be directed to us:

"Why should cattle have the gifts of freedom?"

"Their heritage from generation to generation is the belled yoke and the lash."

LITHUANIAN INDEPENDENCE DAY

Mr. JAVITS. Mr. President, on February 16, people throughout the world—especially those of Lithuanian descent—observed the 56th anniversary of Lithuanian Independence Day. The Republic of Lithuania was established in 1918, however, that nation's political liberty was shortlived. In 1940, following Stalin's infamous bargain with Hitler, the Soviet Union invaded and overran this heroic little country. But the independence of the Lithuanian spirit and Lithuanian culture has not been extinguished.

The world has continued to witness many manifestations of the Lithuanians' continuing aspirations for freedom and independence. Recent demonstrations of this undying desire are the signing by 17,000 Roman Catholic Lithuanians of a petition to United Nations Secretary General Waldheim calling his attention to continued religious persecution in Lithuania and throughout the Soviet Union, the self-immolation of Romas Kalanta in protest to the Soviet regime and the tragically truncated attempt of Simas Kudirka to seek asylum in this country.

Mr. President, these expressions of the desire for freedom and independence have not gone unnoticed in the free world. It would be tragic, indeed, if in our search for a basis of understanding with the Soviet Union, we abandoned our solidarity with those Lithuanians who crave their freedom. The sacrifices of Lithuanian men and women over the centuries in the search for freedom and self-expression demand no less.

ARTICLE IN THE FBI MAGAZINE ENTITLED "ATTORNEY GENERAL WILLIAM BART SAXBE"

Mr. THURMOND. Mr. President, the February issue of the magazine, the FBI, contains an article of interest to all Americans, and particularly to the Members of this body. It is a brief résumé of the distinguished public career of our former colleague, and now U.S. Attorney General, William Bart Saxbe.

Mr. President, I ask unanimous consent that this article be printed in the Record, and I again commend our former colleague on his fine public career and wish him every success in the future.

There being no objection, the article was ordered to be printed in the Record, as follows:

ATTORNEY GENERAL WILLIAM BART SAXBE

On January 4, 1974, the United States gained its 70th Attorney General, the Honorable William Bart Saxbe. He succeeds the Honorable Elliot L. Richardson, who recently resigned from this position.

With his long and distinguished career of public service, Mr. Saxbe brings to the position as head of the Department of Justice a rich reservoir of experience. At the time of his nomination by President Richard M. Nixon,

Mr. Saxbe was the senior U.S. Senator from Ohio.

Born in Mechanicsburg, Ohio, on June 24, 1918, Mr. Saxbe can trace his ancestral roots to Patrick Henry, the great American orator and patriot. In 1940, following graduation from Ohio State University, Mr. Saxbe entered on active duty with the U.S. Army. During World War II, he served in cavalry and armored divisions, with subsequent transfer to the Air Corps where he was a bomber pilot. After the war, Mr. Saxbe enrolled in the Ohio State Law School, from which he received his LL.B. degree in 1948. He is also a veteran of the Korean War, having served honorably from 1951-52.

In 1946, Mr. Saxbe was elected to the Ohio House of Representatives, beginning his public service career at the age of 29. He was reelected to the House three times, and at the age of 34 became majority leader. Three years later, he was chosen Speaker of the Ohio House. From 1957-58 and from 1963-68, he was the Attorney General of Ohio, serving as the State's chief legal officer longer than any other person.

Mr. Saxbe was admitted to the Ohio bar in 1948 and was a practicing attorney there from 1948-58 and from 1960-63. In addition to membership in the Ohio State Bar Association, he is a member of the American Bar Association and of the American Judicature Society. Six Ohio colleges have recognized Mr. Saxbe's accomplishments and have awarded him honorary degrees.

On November 5, 1968, Mr. Saxbe was elected to the U.S. Senate. During his tenure there, he earned the respect of his colleagues. His assignments included the Armed Forces Committee, the Government Operations Committee, and the Post Office and Civil Service Committee.

Mr. Saxbe has been married to the former Ardath (Dolly) Kleinhans since 1940. They have two sons, a daughter, and three grandchildren.

LITHUANIAN INDEPENDENCE DAY

Mr. PROXMIER. Mr. President, February 16 was the 56th anniversary of Lithuania's independence. It is my privilege today to pay tribute to the gallant and courageous people of Lithuania whose history reaches back to the 11th century.

Lithuania has been thwarted time and again from functioning as an independent state. On February 16, 1918, at the close of World War I, the Lithuanian people proclaimed their independence and established a free government. The Bolsheviks invaded the newly established state, but after a bitter struggle the Lithuanians drove them back and forced the Bolshevik government to sign a peace treaty on July 19, 1920.

During the period between the two world wars Lithuania knew peace and independence. These 20 years were years of national revival when Lithuanian literature and culture blossomed.

But in 1940 Soviet troops marched into the Baltic and occupied Lithuania, along with Latvia and Estonia. Domination by the Soviets, however, did not quench the spirit and resolve of these free and independent thinking people. Even now, after almost 24 years of Soviet control, Lithuanians are risking and sacrificing their lives in defiance of the Soviet regime, seeking religious and political freedom for their country. The unsuccessful escape attempt of the Lithuanian sailor, Simas Kudirka; the self-immolation of 20-year-old Romas Kalanta; the subsequent demonstration by thousands of

young Lithuanians, and the petition of 17,000 Lithuanian Roman Catholics to the United Nations, demonstrate Lithuanian thirst for freedom.

Mr. President, we the people of the free world cannot forget our good friends, the Lithuanians. Even after decades of Communist and Nazi domination and persecution, these liberty-loving and stouthearted people cherish and pursue their freedom. We Americans should rededicate ourselves to the ideals of freedom and justice that motivated the Lithuanians in 1918 and continue to motivate them to this day.

PRESSING AIR FORCE NEEDS

Mr. GOLDWATER. Mr. President, it might surprise some Members of the Senate to learn that the United States "sees" almost instantly any intercontinental ballistic missile regardless of when and where it is launched, and also knows where it is going.

Details of this early warning capability were outlined recently by Air Force Secretary John L. McLucas in an interview with Mr. Edgar Ulamer, senior editor, Air Force magazine.

In this lengthy interview, Secretary McLucas reported in detail on the unique advantages which space offers for such military missions as early warning, command control, communications, navigation, reconnaissance, and related functions. He also detailed possible changes in the Air Force's B-1 program, discussed the shrinking research and development budget of the Air Force, and reported on the need to modernize the aeronautical test facilities of the Air Force.

Mr. President, I highly recommend that Secretary McLucas' interview for any Members of Congress interested in the Air Force and its achievements and problems. I ask unanimous consent to have the McLucas interview from the January issue of Air Force magazine printed in the Record.

There being no objection, the interview was ordered to be printed in the Record, as follows:

SECRETARY MCLUCAS LOOKS AT PRESSING AIR FORCE NEEDS

(By Edgar Ulamer)

The United States "sees" almost instantly any intercontinental ballistic missile regardless of where and when it is launched and also knows where it is going. What's more, this worldwide monitoring capability has been tested over a number of years and has proved "very reliable and highly credible." This high degree of credibility, in turn, enables the National Command Authority to react rapidly and decisively on such warning information, according to Air Force Secretary John L. McLucas.

"The basic objective of our early warning satellites," which provide that information, Dr. McLucas told this reporter, "is to keep track of missile activities going on around the world; these satellites are deployed in such a way that they can see missile launches anywhere and at any time. The system reports in essentially real time any missile launches and gives an indication where the missile is going. This worldwide capability provides precise, unambiguous information about test launches or an actual attack."

Early warning satellites consist of so-called integrated satellites, meaning spacecraft using a number of different sensors that augment one another. These sensors detect and

track missiles and also monitor nuclear explosions in the atmosphere and space. While it might be possible to attack these warning satellites, it would seem impossible, at least on the basis of presently available technologies, to do so with any real chance of surprise; the system would presumably detect interceptor missiles fired against it hours before the aggressor could reach the satellites' high orbital altitudes.

Almost ten years ago, Secretary McLucas told *Air Force Magazine*, the Air Force started the development of a nuclear-armed anti-satellite system at the request of former Defense Secretary Robert S. McNamara. Known as Program 437, this system was premised on Secretary McNamara's belief that the United States "needed assurance that if the Soviets or anybody else started playing around with our satellites, we should have the ability to do likewise. Of course, the subsequent prohibition against the use of nuclear weapons in space caused us to change our position on this matter."

USAF'S SPACE BUDGET: MORE THAN \$1 BILLION ANNUALLY

The Air Force, Secretary McLucas revealed, spends more than \$1 billion annually on military space programs. Control over most USAF space activities is exercised by its Satellite Control Center at Sunnyvale, Calif., an agency of AFSC's SAMSO. The Center operates ground stations scattered around the globe, which relay information to and from the individual satellites "so that we can, in effect, control a worldwide satellite network," according to Dr. McLucas. "We do have in the works a new approach, a satellite relay system that would give us the same kind of controls, but, instead of ground stations, would use space stations or satellites." The advantage of the spaced-based control system, the Secretary explained, is "that it gives us more communication channels to a given satellite," and, by eliminating the need for ground stations on foreign territory, the political and military vulnerabilities of the control system will be reduced significantly.

Now under development by Hughes Aircraft Co. is such a system, the Satellite Data System (SDS), part of the Air Force Communications System (AFSATCOM). SDS will eliminate some of the ground stations.

THE AIR FORCE IN SPACE

Although formerly the government's executive agency for all military space programs, the Air Force, under a 1971 Department of Defense directive, is no longer the sole service with space responsibilities. But while service responsibility for new programs is now considered on individual merit, the Air Force remains the principal designer, manager, and operator of space systems. "The only decision to date—as a result of the change of 1971—that involved a service other than Air Force is the [Navy's] Fleet Satellite Communications System (FLTSATCOM). But even in this instance, DoD agreed that the Air Force should act as the Navy's subcontractor to actually contract to build and manage the system and put it into orbit. The Navy is in charge, of course, in the sense of procedural operations, but we provide the routine management function such as station keeping."

Because the Air Force has the people, know-how, and facilities, Secretary McLucas said, "it would not make sense for the Navy to duplicate all this at high cost." While any service that can convince the Department of Defense that it has a good case can be granted a given space mission, it is likely that the Air Force will continue "to perform the actual work," he suggested. This is likely to include space launches, since there are no plans to build new launch facilities.

Cooperation with the Navy on FLTSATCOM extends beyond routine management matters, Dr. McLucas pointed out. Although primarily designed to serve a large number of Navy ships and aircraft, the system will also carry Air Force transponders, which are

part of the Air Force Satellite Communications System (AFSATCOM). The Navy satellites, Dr. McLucas revealed, are to become operational in about two or three years. Four satellites will form the system and be spaced around the equator at ninety-degree intervals to provide broad coverage.

Concurrent with the Navy's initial interest in FLTSATCOM as a means of providing reliable communications with the fleet, the Air Force was probing the design of AFSATCOM to assure "worldwide control of our strategic forces," Secretary McLucas explained, adding that "by joining up with the Navy, we will be able to use these four platforms in space for our own transponders and, thereby, be able to control our strategic forces in all areas of the globe except the polar regions. These gaps, which result from the equatorial placement of FLTSATCOM, will be closed by AFSATCOM, which is to incorporate components of the Satellite Data Relay System, some of whose spacecraft are in polar orbits.

"By combining the capabilities of the two systems, the Air Force will be able to communicate with its strategic forces, be they bombers, other aircraft equipped with satellite terminals, or an airborne command post, anywhere in the world." This combined system will have the additional virtue of intrinsic redundancy. If one satellite fails, others can take its place. In the case of FLTSATCOM, for instance, only three out of the four in orbit are actually needed.

The redundancy that assures reliable operations automatically makes the two systems fairly survivable, Dr. McLucas pointed out. "The two systems can be categorized as medium-survivable. We have not gone all out and tried to do everything we can think of because that would cost too much; besides, it is more important to develop the needed communications capabilities expeditiously rather than come up with a design that will last forever," he said.

Present trends point clearly toward multiple uses of spacecraft. "I think the kind of redundancy that is gained from using piggyback arrangements [putting different transponders and other components aboard individual satellites], and thereby making each satellite a space bus of sorts, makes good sense," Dr. McLucas said.

Secretary McLucas expressed strong support for efforts to assure the survivability of space-based military systems. If we are going to rely on space communications, then we must insist that these systems be as reliable and survivable as possible. One side of that effort is redundancy, the other involves hardening of the satellites [against EMP—electromagnetic pulse—and other destructive radiation of nuclear explosions. Overpressure, the most lethal effect of nuclear weapons in the atmosphere, is not a factor in space]. It would seem certain that over a period of time more and more hardening will be incorporated into our space systems."

The Air Force, Dr. McLucas said, is working on SURVSATCOM, the Survivable Satellite Communications Development Project—a highly survivable communications satellite that can perform vital general-war command and control functions. The project involves two satellites, LES 8 and 9, which are being developed by Lincoln Laboratory and are scheduled for launch in Fiscal Year 1975.

Military experts and the scientific community remain divided over whether the survivability of space systems is better attained through hardening or through redundancy, according to Dr. McLucas. Because hardening runs up both costs and weight, he said, "I personally tend toward redundancy, but it will take more time and research to answer this question." Dr. McLucas agreed with the majority of USAF leaders that an attack on the US military satellites is not likely; such an act, of itself, would signal, categorically, the attacker's intent and could trigger a US response.

He nevertheless advocated "a fallback position through hardening and redundancy, especially in case of a relatively inaccurate attack. In the case of a head-on hit, of course, hardening would not help anyway."

Hardening or shielding involves a variety of techniques to contain the energies of EMP in the outer shell of a spacecraft, design of the electronics to minimize damage from what EMP reaches them, and shutdown of on-board circuitry during the split second of EMP effectiveness.

Finally, the survivability is also being enhanced through the development of advanced optical space communications systems, including lasers and other techniques that are impervious to the communications blackout that accompanies the explosion of large nuclear weapons in space.

POSITION-FIXING AND NAVIGATION SATELLITES

It is axiomatic that the efficacy of military operations depends on the accuracy with which the forces involved know where they are, where they are going, and at what rate of speed. The more mobile these forces and the greater the accuracy and range of their weapons, the more urgent becomes the need for precise position-fixing and navigation. This has been recognized by a multiservice program that probes navigation-satellite systems and associated technologies. It will culminate—between the years 1977 and 1979—in a major navigation-satellite experiment to test and demonstrate satellite-navigation technology and its potential. In mid-1974, the Air Force will launch an experimental satellite to explore the complex phenomena of signal propagation and modulation in space, in concert with a special simulation facility that was placed into operation at the White Sands missile range last year.

The potential inherent in navigation and position-fixing satellites, Dr. McLucas pointed out, "is virtually unlimited and largely untapped. We have had some important lessons from the Navy's Transit Navigation Satellite system, of course, and we have run some hardware experiments that show what could be done with a multiple satellite system in terms of distance measuring techniques—TOA [Time of Arrival] and Time Difference of Arrival."

"What's involved here is precise measurement of how long it takes signals from different satellites, whose locations are known with high precision, to reach a point whose position is to be fixed, thereby establishing its location. We have demonstrated the feasibility of these techniques with aircraft for some time now and know that it can be done with extremely high accuracy. It seems entirely reasonable to predict that it should be possible to fix the location of any point on the globe or in the air with a three-dimensional accuracy of at least 100 feet. This, by itself, offers a revolutionary potential for blind weapon delivery standoff systems, and—to a degree—the elimination of weather and visibility as major factors in military operations."

While the feasibility of systems with these kinds of capabilities has been demonstrated convincingly, the "major remaining question is what constitutes the optimum hardware configuration," Secretary McLucas said. This boils down largely to a decision on where to put the computer, into the spacecraft or the user systems, such as aircraft.

"You could either keep the satellites very simple and have big, complicated computers in each aircraft or other users, or you could build a very sophisticated system into the satellites and put only a small electronics package into the aircraft. We in the Air Force tend in the latter direction—that is, put the complexity into the satellites. We have had a somewhat competitive atmosphere with the Navy in this regard, with the Navy advocating one approach and the Air Force supporting another. But recently, all of us agreed on a compromise that resolved this

problem, and we now have an approach that all services think is feasible. One could say that we have adopted a policy of compromise where we acknowledge that the Navy's disposition of satellites makes sense, provided they radiate Air Force-like signals. The present proposal is to place enough of this type of satellite into space to find out how the system can work best; subsequently, the idea would be to put up enough of them so that we can get worldwide coverage." This is likely to take between eight and ten years, according to Dr. McLucas.

THE AIR FORCE AND THE SPACE SHUTTLE

The Air Force is aware of the potential of manned military space missions, but knows that it costs a great deal more to operate a manned system than an unmanned one. The cancellation of the MOL program is a case in point. The Air Force considers it fortunate that "we don't have to foreclose the option of future manned space missions because of the national Space Shuttle program," a two-stage reusable space transportation system scheduled to reach operational status by the end of this decade. The system will be capable of delivering military and civilian payloads of up to 65,000 pounds into low earth orbit.

The Shuttle is, however, limited to orbital altitudes of about 200 miles. Another vehicle, usually referred to as the Space Tug, is needed to deliver payloads from the Shuttle's orbit to geosynchronous or other high-energy orbits. Present Pentagon estimates indicate that about fifty percent of all military payloads will require the higher orbits in the foreseeable future.

Secretary McLucas told Air Force Magazine that NASA—the developer of the Space Shuttle—and the Air Force have agreed in principle that the latter should pay for and develop an interim Space Tug. The initial upper stage would be a minimum cost modification of an existing expendable stage that would meet most requirements during the period when payloads are transitioning from current launch vehicles to the Shuttle. The stage will deliver payloads to high orbits, but will not be capable of retrieving payloads. The stage itself may be reusable.

This tentative agreement "has not been fully staffed throughout government, and, as a result, I don't know how far we will get with it," he said. The main reason why the Air Force supports this arrangement is that "we want to get on with a program of this type. It doesn't make sense to have the Shuttle and not be able to go the rest of the way," according to Dr. McLucas.

From the Air Force's point of view, the principal appeal of the Shuttle is that this system will make it possible to fix, refurbish, retrieve, and reuse expensive space systems operating within the Shuttle's orbital range. Obviously, extending this capability into high-altitude orbits would be equally desirable. But the high R&D investment associated with a recoverable, reusable, and possibly man-rated "upper stage" militates against such a program at this time, the Air Force Secretary said. "On a long-term basis, it can be shown that it would make economic sense to recover space systems from synchronous orbit, but I seriously doubt that this will happen any time soon."

The argument in favor of recovery of space systems, so far as the Air Force is concerned, must be tempered with a number of realistic considerations. One is that the longevity of space systems usually exceeds the original specifications with the result that, by the time many of these systems fail, their components, or even their basic concept, may be obsolete. Recovery of such older systems that have outlived their usefulness would not be economical or even desirable, Dr. McLucas pointed out.

"Simply put, the longer the life of a payload, the less productive it is to recover. Obviously, the most profitable recovery involves systems that fail as you put them up and

where, by replacing a \$10 component that doesn't work, you salvage a multimillion-dollar spacecraft."

THE B-1 PROGRAM REVIEW

On July 12, 1973, Secretary McLucas reported to the Congress a slippage in the schedule of the B-1 program and, concomitantly, an increase in the R&D costs as well as a postponement of the program's key milestone—the production decision—to May 1976. Shortly thereafter, Dr. McLucas appointed, under the aegis of the Air Force's Scientific Advisory Board, a thirty-odd member review committee. Headed by Dr. Raymond L. Bisplinghoff, Deputy Director of the National Science Foundation, the Committee is currently completing its final report on the program, covering both management and technical qualities.

The Committee's basic findings, conveyed orally, contained, according to Dr. McLucas, "some good news and some bad news." In the first category, he said, was the fact that the Committee's intensive, one-month study confirmed that the B-1 "looks like a good design, in the sense of being able to execute the mission assigned to the aircraft, and that it is within the state of the art." At the same time, Dr. Bisplinghoff and his panel of experts found the program "too success-oriented" meaning that, in the Committee's view, the B-1 effort is funded and phased in an "optimistic way." It is Dr. Bisplinghoff's opinion that it would take "a great deal of luck" for things to go the way we planned. "Given the perverse nature of inanimate objects, [Dr. Bisplinghoff] felt," Secretary McLucas said, "we are bound to run into some problems."

A third feature of the B-1 program that is being questioned by Dr. Bisplinghoff's committee is "the fact that it is not easy to see how we get from the first three test aircraft to the production aircraft. In the committee's opinion, there should be an intermediate step, a preproduction stage, in order to accommodate the changes that the flight-test program demonstrates ought to be made. This would enable us to test out these changes on the preproduction aircraft, before we commit ourselves to full production," Secretary McLucas said.

The Air Force views the findings and recommendations of the Committee as "quite realistic, especially so far as the recommendation for a preproduction stage is concerned," according to Secretary McLucas. The variance between the actual structure of the program and what's being sought now is anchored in differences in objectives. "Our original approach was geared to give us, at minimum cost, the answer to one question: 'Do we, in fact, have a B-1 design that we can go into production with?' This meant that we had to flight-test an aircraft that wasn't just a bare airframe, but included the kind of equipment, such as avionics, radar, and so on, that showed we could actually execute the assigned mission. If our objective had been to go into production quickly, we would not have taken the course we did."

"Our initial reaction to the Committee's recommendation is positive, because more than three years have gone by since we formulated the program, the B-52s have gotten older, people are getting more concerned about the obsolescence of these aircraft, and the likelihood of a decision in favor of a production go-ahead on the B-1 has increased. Three years ago, the time was not yet right for such a program structure, but now we have a coalescence of opinions regarding full program go-ahead, and, therefore, Dr. Bisplinghoff's recommendation for a preproduction stage makes more sense. As a result, we are now pricing out such a change, and the B-1 Program Office is analyzing the specific recommendations to establish what should be adopted," Dr. McLucas told Air Force Magazine. A decision should have been reached by the end of 1973, he added.

USAF R&D SHRINKS WHILE SOVIET EFFORTS INCREASE

USAF's R&D budget has dropped, expressed in FY '74 dollars, from \$4.4 billion in 1968 to \$3.2 billion in the current fiscal year. "I am not sure that we can continue to function with an R&D budget of this type. Much depends, of course, on the outcome of SALT [whose phase II is to be concluded by the end of 1974]. If we don't reach any agreements with the Soviets about their pulling back from further development and deployment of strategic systems, then we will have to modernize and improve our defensive and offensive missile systems, as well as update other weapons. In such an eventuality, we would have to show greater progress and increase our R&D effort because we can't afford to be left behind. At present, the technical quality of our systems is still quite good, but if the Soviets continue with their high-level efforts [manifested by recent missile and MIRV tests], we might have to step up our own efforts," Dr. McLucas explained.

The Air Force Secretary was sanguine about the present level of military R&D providing "reasonable assurance against major technological surprise five or ten years from now." He emphasized the need for a "balanced approach to our R&D effort, unless there is good reason to panic, and I don't see that. I do see a definite need to maintain a very aggressive effort in the ICBM field, and we must somehow cope with the ECM challenge." While the Soviet weapons introduced during the recent Middle East war proved very effective, he said, they contained no technological surprise, and after an initial period of adjustment, the U.S.-supplied systems "proved quite effective."

In the tactical weapons field, the Air Force has made great strides in terms of smart weapons, "but they have to be deployed on a much larger scale than is the case at present. We don't have Europe stocked with these weapons to anywhere near the degree that we achieved in Southeast Asia. This must be remedied. Also, we have not applied these new technologies to nearly the extent that we could and should. Finally, we must recognize that any system embodying sophisticated components is susceptible to countermeasures. We have to assume that there will be countermeasures, and we will have to concentrate our efforts on defeating them," according to Dr. McLucas.

In the related area of RPVs (Remotely Piloted Vehicles), Dr. McLucas cautioned that, in spite of the enormous potential of this technology, it might take years before the rank and file of the Air Force will fully accept the robot airplane. "We started out with RPVs flying photographic missions, and this, in time, has become a widely accepted mission. There are many other applications of equal promise, including high-altitude radio relay and a strike role. There are many missions where we can use RPVs to form something like a LORAN grid to guide missiles and other weapons to a target. We have already demonstrated that RPVs can be used to launch Maverick missiles against moving tanks; we have shown that they can be used for both high- and low-altitude photo reconnaissance; and we have proved their capability in the radio-relay area. The real issue is to get people to accept the RPVs. It is only natural for the Air Force to be biased toward the manned system, but it is also clear that there are missions that can be performed better with RPVs. I have no doubt that gradual acceptance of this fact will set in."

NEEDED: A NEW APPROACH TO AERONAUTICAL TEST FACILITIES

A currently pressing Air Force concern is the inadequacy of certain of our national aeronautical test facilities, to meet modern needs. For example, the Arnold Engineering Development Center has some equipment dating back to World War II. This is costing the Air Force and others a good deal of money, because it requires more flight testing

than would be otherwise necessary. Dr. McLucas disclosed that the Air Force and the Department of Defense are currently "working with NASA in order to come up with precise requirements for high Reynolds numbers [high-performance] wind tunnels as well as V/STOL wind tunnels and other facilities," to assess the performance of new aircraft and engine designs.

"We have more or less agreed on what's needed and what these new test facilities should be. It now becomes a question of putting enough emphasis on this matter. I believe that we can get the support we need on Capitol Hill once we can come up with a fully coordinated program."

The Air Force, traditionally, has advocated a government-wide, centralized approach to aeronautical test facilities in the belief that this would cut costs and permit more effective utilization and ease the funding of what, in effect, becomes a general national resource.

TOUR OF THE WASHINGTON VA HOSPITAL

Mr. THURMOND. Mr. President, on February 12, 1974, it was my pleasure to visit the Washington VA Hospital as a part of a national salute to our hospitalized veterans.

February 12 marked the first anniversary of the initial return of our POW's from North Vietnam, and it was the POW returnees who led the salute to the VA patients.

Adm. Thomas H. Moorer, Chairman of the Joint Chiefs of Staff, Members of Congress, representatives of the VA and the national service organizations, and players on the Washington Redskin football team were present.

Mr. President, I think it was a morning well spent. Our attention was directed toward the problems of the hospitalized veterans. We live in a free society today because of the sacrifices made by our veterans. Their problems deserve our constant vigilance.

My visit to the wards of the Washington VA Hospital impressed on my mind once again the great debt our Nation owes to the veterans of the Armed Forces.

I hope the American people will never forget the great debt we owe our veterans.

COURT UPHOLDS SERVICEMEN'S CONSTITUTIONAL RIGHTS

Mr. ERVIN. Mr. President, I wish to bring to the attention of the Senate a recent opinion of Judge Gerhard A. Gesell of the U.S. District Court for the District of Columbia, in which he held certain features of the drug prevention plan implemented by the Army's European Command in 1973 to be unconstitutional. The opinion is important not only as it applies to the particular facts of the case but also as an eloquent exposition of a serviceman's rights under the Constitution.

The case is titled *The Committee for G.I. Rights, et al. v. James R. Schlesinger, et al.*, Civil Action No. 835-73, announced on January 14, 1974. The court ruled that certain provisions of USAREUR Circular 600-85 which permitted mass searches without probable cause, and which provided for the imposition of administrative sanctions without a hearing, violated the serviceman's rights under the fourth

and fifth amendments. It found that the Army's intrusion upon these rights was not justified by its claim of military necessity:

The doctrine of military necessity does not embrace everything the military may consider desirable. One does not automatically forfeit the protections of the Constitution when he enters military service. The constitutional rights of G.I., including his privacy, may not be infringed except to the extent that the military can demonstrate by concrete proof an urgent necessity to act unconstitutionally in order to preserve a significant aspect of discipline or morale . . .

The limited amount of drug involvement within the [European] Command creates a situation which obviously requires attention and perhaps even limitation of the constitutional right of particular troops in highly sensitive duty assignments, but it does not reflect the type of urgent and generalized threat to military morale or discipline which would warrant ignoring constitutional safeguards as to everyone in this large Command . . .

In the absence of a showing of military necessity, illegal searches and the imposition of penalties and other discipline without fair hearing cannot be permitted. Inspections without probable cause undertaken for the specific purpose of identifying drug users which involve the use of dogs, strip searches, examinations of body cavities and the most intimate inspection of a G.I.'s most private belongings cannot be justified under any circumstances unless the results of such inspections are confined to medical treatment of the drug abusers so identified. Soldiers forced into the rehabilitation program on mere suspicion must be protected against discipline or unfavorable discharge based on information developed during medical processing. Moreover, failure to provide a hearing prior to the imposition of non-medically oriented administrative sanctions which significantly affect a G.I.'s liberty or property is constitutionally unsupportable.

Mr. President, I ask unanimous consent that the full text of Judge Gesell's fine opinion be printed in the Record.

There being no objection, the opinion was ordered to be printed in the Record, as follows:

[In the United States District Court for the District of Columbia]

(Civil Action No. 835-73)

MEMORANDUM OPINION

(The Committee for G.I. Rights, et al., Plaintiffs, v. James R. Schlesinger, et al., Defendants)

This is a class action brought on behalf of all G.I.'s attached to the United States Army's European Command. Plaintiffs claim that certain features of a drug abuse prevention plan developed by the Army for that command are unconstitutional and they seek a declaratory judgment and injunctive relief.

The issues have been narrowed and clarified during several pretrial proceedings. Plaintiffs have abandoned damage claims. The Army published a revised comprehensive statement of the plan on September 10, 1973, which reflected a reevaluation of the program and coincidentally satisfied some objections previously urged by plaintiffs. The plan as now before the Court is embodied in the elaborate circular designated as USAREUR Circular 600-85 (Sept. 10, 1973),¹ and the litigation has focused on certain clearly identifiable provisions in that document. The parties have filed affidavits and briefs and the case is before the Court after full oral argument on cross-motions for summary judgment. The pertinent facts are not in dispute, although the legal positions of the parties are in sharp conflict.

¹ Hereinafter cited as Cir. 600-85.

The original complaint filed in April, 1973, was somewhat defuse and raised a variety of issues reflecting the uneven manner in which a drug program had been administered in its early stages and uncertainties caused by some confusion in the implementing directives. Defendants at that stage properly opposed certification of the alleged class. In view of the pretrial development mentioned, however, certification under Rules 23(b)(2) and 23(c) of the Federal Rules of Civil Procedure is now appropriate. The named plaintiffs have ably represented the class, joinder of some 145,000 G.I.'s is impractical, the challenged plan, as clarified, is applicable to the entire class, and common issues of fact and law can be readily identified and can be most efficiently adjudicated in a single action. The class will be certified as representing all soldiers in the European Command with ranks of E-1 through E-5 who are subject to the drug provisions of Cir. 600-85.²

The USAREUR drug prevention plan is designed to identify drug pushers and users, to provide users with medical assistance, counseling and other support directed toward rehabilitation, and, where rehabilitation fails, to eliminate confirmed drug users from the service. The program is directed against use of both hard and soft drugs. In broad outline, the authorizing circular in pertinent part contemplates the following procedures.

A soldier enters the USAREUR drug program when he is either "suspected" of drug abuse or "identified" as a drug abuser. Suspicion may be established by such vague criteria as "unexplained changes in job performance, behavior, or physical condition related to the use of . . . drugs" or the frequenting of known drug sales points. Cir. 600-85, § 7a. Identification is based upon reliable witness reports or possession of drugs. Cir. 600-85, § 8a. Possession may, in turn, be established through the use of special drug inspections of individual billets as well as public areas.

The Army drug inspection has developed over the past few years and is specifically authorized under the new plan. See Cir. 600-85, Annex I (3.4). Inspectors are permitted to examine all of the soldiers' property (although they may search personal items such as wallets only cursorily in order to determine the presence of contraband), their clothing and even their entire exterior skin area for drugs or indications of drug use. All inspections are to be conducted without undue harassment, in the presence of those whose property is under examination, and, in the case of skin searches, with as much privacy as is possible. Groin or anal inspections must be conducted by qualified medical personnel in complete privacy. Drug detector dogs may be used throughout the inspection process. Cir. 600-85, Annex C (5).

When a soldier is identified as a possible drug user, whether on the basis of an inspection or otherwise, he is subject to mandatory drug processing. Cir. 600-85, §§ 7-13. He is first confronted by his Commanding Officer, who informs him of the basis for the identification, warns him of his rights, and permits him to provide relevant information to dispel the suspicion. The Commander may then refer the soldier to a Community Drug and Alcohol Assistance Center (CDAAC). If

² The Court takes notice of the fact that Cir. 600-85 authorizes virtually identical procedures for the detection and rehabilitation of alcohol and drug abusers. The holding of the Court is, of course, limited to the drug aspects of the circular, since plaintiffs have not challenged the USAREUR alcohol program. However, since many of the findings below apply with equal force to the treatment of alcohol abusers, the Army is urged to take the rights of this group into account in bringing the circular into compliance with this Opinion.

the Center finds credible evidence of drug abuse, it must send the soldier to a Medical Treatment Facility (MTF) for clinical evaluation. Counsel is provided during the MTF interviews, if requested.

Prior to medical confirmation of drug abuse by the MTF, no disciplinary or rehabilitative measures may be taken except for the temporary suspension of access to classified material, the loss of flight status, the suspension of nuclear duty, and, if the soldier has been involved in an automobile accident, the temporary suspension of his driver's license. Cir. 600-05, ¶ 14d(3).

Once a soldier has been designated a "confirmed drug abuser" by the MTF, however, a variety of restrictive sanctions may be imposed. The MTF will either admit the soldier to a hospital or return him to CDAAC for development of a 60-day rehabilitation program, which may include urine and other testing, treatment, and counseling at a variety of drug facilities. In addition, the Commander may elect to impose one or more administrative sanctions, including temporary withdrawal of pass privileges and/or suspension of a driver's license without hearing. Medically confirmed drug abusers may be required to move onto the base (even if billeted with wife and family off base) and may be segregated into a separate section of the barracks. Cir. 600-85, Annex J.

By the end of the 60-day period, the Commander must determine whether or not the drug abuser is a "rehabilitative success." If not, he must be processed for administrative discharge under circumstances that may adversely affect his military record. If his rehabilitation is deemed satisfactory, he may be returned to normal duties but will be subjected to 300 days of follow-up testing and observation, including unannounced urinalysis testing twice a month. The effects of this processing, including preclusion from promotion and the stigma of having been labeled a confirmed drug abuser, may continue long after even the follow-up period has terminated successfully.

When rehabilitation fails, a confirmed drug user may be separated under other than honorable conditions, and the circular permits military authorities to advise prospective employers, Government or civilian, of the soldier's drug involvement. Moreover, under varying circumstances that need not be detailed, the circular contemplates use of facts developed as a result of the identifying and rehabilitative process as evidence in court martial trials. Thus, the program combines rehabilitation with the prospect of strict disciplinary action when deemed appropriate by the Army.

An analysis of this drug program reveals serious constitutional infirmities when measured against established civilian standards. The special drug inspections authorized without probable cause are made in a most intrusive manner solely to ferret out drugs and are not analogous to the Army's traditional preparedness. Compare with *United States v. Lange*, 15 USCMA 486 (1965); *United States v. Grace*, 19 USCMA 409 (1970). Such distinguishing features as the use of dogs, strip skin examinations and detailed intrusion into a soldier's personal effects take this procedure out of the narrow exemption from traditional Fourth Amendment restrictions that has been carved out for legitimate inspections. Compare *United States v. Biswell*, 406 U.S. 311 (1972), with *Almeida-Sanchez v. United States*, 413 U.S. 266 (1973). The drug inspection described above constitutes a mass search, and would be illegal in a civilian context if conducted in the absence of particularized probable cause. See *Lankford v. Gelston*, 364 F.2d 197 (4th Cir. 1966). Moreover, the subsequent use for disciplinary purposes of facts developed during such a search or during participation in a rehabilitative program ordered by reason of an illegal search would be equally improper. The fruits

of an initial illegality cannot be used to punish. *Wong Sun v. United States*, 371 U.S. 471, 487-88 (1963). In fact, since the rehabilitative program contemplated by the circular itself entails intrusive searches and interrogation, information obtained during drug processing could not be used for disciplinary purposes unless the Army had probable cause, obtained independently of that processing, to believe that a particular soldier was guilty of drug abuse.³

The circular also provides for the imposition of numerous administrative sanctions without hearing. These sanctions may restrict the immediate liberty of the soldier, reduce his eligibility for promotion, taint his military record, and lead to forms of discharge carrying a serious stigma affecting his future civilian status. Such sanctions are serious and often are not dictated by emergency health or safety concerns, so the complete absence of a hearing in any form⁴ offends due process. See *Morrissey v. Brewer*, 408 U.S. 471 (1972); *Fuentes v. Shevin*, 407 U.S. 67 (1972); *Bell v. Burson*, 402 U.S. 535 (1971); *Wisconsin v. Constantineau*, 400 U.S. 433 (1971).

There is no need to elaborate on these constitutional infirmities in detail, for the law has been well defined in these areas and, indeed, defendants have not seriously quarreled with this analysis. They assert, however, that because of military necessity they need not comply with constitutional safeguards otherwise applicable.

At the very outset of these proceedings, and continuously thereafter, the Army has interposed its claim of military necessity. It urges that the USAREUR drug abuse program is required to prevent serious impairment of morale and discipline and that, accordingly, under the well-established doctrine enunciated in such cases as *Burns v. Wilson*, 346 U.S. 137 (1953), and *United States v. Jacoby*, 11 USCMA 428 (1960), the constitutional rights of soldiers affected by the program must be judicially determined to be inapplicable under these circumstances. The Army has the burden of establishing military necessity, however, and it has failed to do so.

The doctrine of military necessity does not embrace everything the military may con-

³ It is arguable that both individual rights and the detection and rehabilitation of drug abusers could be maximized by a total ban on the use in punitive proceedings of any information obtained during the drug processing described in paragraphs 7 through 13 of the circular. The Senate adopted just such a prohibition in 1971, see H.R. 6531, 92d Cong., 1st Sess., 117 Cong. Rec. 22411-12 (1971), but it was dropped by a conference committee on the principal ground that such an important step required further study of the constitutional, statutory and evidentiary principles involved. See Conf. Rep. No. 433, 92d Cong., 1st Sess. (1971). The record in the instant case is similarly insufficient to permit judicial resolution of these complicated issues, but no such resolution is required by the pleadings. Since plaintiffs have attacked this aspect of the drug program solely on Fourth Amendment grounds, the Court may properly limit its consideration to those soldiers who are forced to participate in the program on the basis of illegally obtained evidence or of suspicions which do not rise to the level of probable cause.

⁴ The confrontation presently guaranteed by the circular, see p. 3 *supra*, coming as it does before confirmation of drug abuse and long before a rehabilitation program is developed, offers the accused soldier no opportunity to challenge the sanctions eventually applied. The formal complaint procedures available to soldiers are normally unavailable until after administrative sanctions have been imposed, and so do not satisfy the requirements of due process. *Bell v. Burson*, 402 U.S. 535, 542 (1971).

sider desirable. One does not automatically forfeit the protections of the Constitution when he enters military service. The constitutional rights of a G.I., including his privacy, may not be infringed except to the extent that the military can demonstrate by concrete proof an urgent necessity to act unconstitutionally in order to preserve a significant aspect of discipline or morale. The present drug program, which also applies to alcoholics, arose not solely from some military situation encountered in the field but rather represents the Army's effort to implement a congressional statute. In 1971, Congress directed the Secretary of Defense to "prescribe and implement procedures, utilizing all practical available methods . . . [to] identify, treat, and rehabilitate members of the Armed Forces who are drug or alcohol dependent persons. . . ." Pub. L. No. 92-129, Title V (Sept. 28, 1971). This statute provided the primary legal basis for the Army's action in establishing the program here under review. An examination of the language and legislative history of this and related statutes demonstrates that Congress at no time intended to authorize the military to proceed with a drug/alcohol program in disregard of fundamental constitutional safeguards. Indeed, its focus has been entirely upon treatment, not punishment. See Pub. L. No. 92-129 (Sept. 28, 1971); 21 U.S.C. §§ 1101-91; H.R. Rep. No. 775, 92d Cong., 2d Sess. (1972). See also note 3 *supra*.

The Army sought to support its claim of military necessity by referring to information indicating the extent of the drug problem in the European Command. Surveys of drug abuse since 1970 reveal a fairly stable level of daily drug use: ten to fifteen percent for cannabis and one to two and one-half percent for other drugs. There are no reliable statistics with respect to addition, and the Army's claim of increasing drug use is subject to serious question because of changes in testing procedures. It is certainly clear that drug use in the Command has not reached anything comparable to the epidemic proportions detected in Vietnam and is not particularly different from drug use encountered among civilians in major United States cities. See generally *Defs.' Ex. 2*.

Even this limited extent of drug involvement within the Command creates a situation which obviously requires attention and perhaps even limitation of the constitutional rights of particular troops in highly sensitive duty assignments, but it does not reflect the type of urgent and generalized threat to military morale or discipline which would warrant ignoring constitutional safeguards as to everyone in this large Command.

The difficulty with the circular, as plaintiffs repeatedly point out, is that it attempts to deal with the drug abuse problem not only as a health problem, as Congress intended, but also as a disciplinary problem. The Army has, since 1970, moved gradually in the direction of rehabilitation rather than discipline in dealing with medical problems such as drugs, alcohol, personality disorders, and the like, but it has not foreclosed its punitive options. While the Court can see nothing unreasonable in conducting intrusive searches without probable cause for the sole purpose of placing individuals into a medically oriented drug rehabilitation program, or with placing soldiers merely suspected of drug abuse into such a program, the USAREUR drug plan is not so limited. Far more than reasonable health monitoring precautions are involved. Cf. *Wyman v. James*, 400 U.S. 309 (1971). Information developed for medical purposes can be used in court martial proceedings, to impose strict administrative sanctions, and to justify an unfavorable discharge which will follow the G.I. for the rest of his life.

In the absence of a showing of military necessity, illegal searches and the imposition of penalties and other discipline without fair hearing cannot be permitted. In-

spections without probable cause undertaken for the specific purpose of identifying drug users which involve the use of dogs, strip searches, examinations of body cavities and the most intimate inspection of a G.I.'s most private belongings cannot be justified under any circumstances unless the results of such inspections are confined to medical treatment of the drug abusers so identified. Soldiers forced into the rehabilitation program on mere suspicion must be protected against discipline or unfavorable discharge based in information developed during medical processing. Moreover, failure to provide a hearing prior to the imposition of non-medically oriented administrative sanctions which significantly affect a G.I.'s liberty or property is constitutionally unsupportable.

Two other aspects of the USAREUR drug plan can be dealt with summarily. First, the provisions permitting dissemination of drug information to non-military government agencies and even, under more limited circumstances, to civilian applicants are in direct conflict with 21 U.S.C. § 1175, through which Congress sought to protect from stigma those who entered federal drug programs. See H.R. Rep. No. 775, 92d Cong., 2d Sess. (1972). Defendants argue that this statute was not intended to apply to the Army, but the Special Action Office for Drug Abuse Prevention, an agency set up to administer the statute, has ruled otherwise. See 37 F.R. 24636-37 (Nov. 17, 1972), and its reasoning is persuasive. See *Udall v. Tallman*, 380 U.S. 1, 16 (1965).

Second, the circular's poster regulation is impermissible. Paragraph 14d(4) authorizes Commanders to prohibit the display on barracks walls of posters and other items which, in their estimation, constitute "a clear danger to military loyalty, discipline, or morale." Cir. 600-85, ¶ 14d(4). This is obviously too vague a standard by which to regulate First Amendment liberties. See *Avrech v. Sec. of the Navy*, 41 U.S.L.W. 2497 (D.C. Cir. March 20, 1973); *Stolte v. Laird*, 353 F. Supp. 1392 (D.D.C. 1972); *Keyishian v. Bd. of Regents*, 385 U.S. 589 (1967); *NAACP v. Button*, 371 U.S. 415, 432-33 (1967); *Cox v. Louisiana*, 379 U.S. 536, 555-58 (1965).

In light of this analysis, the Court concludes that the existing USAREUR drug plan is so interlaced with constitutional difficulties that Cir. 600-85 must be withdrawn and cancelled, along with all earlier related orders and instructions. The Army is, of course, free not only to reestablish its drug rehabilitation program but also to punish drug offenders. The Court requires only that any directives with regard to disciplinary proceedings, courts martial, administrative discharges, the regulation of posters or the dissemination of drug information conform to the limitations set forth in this Opinion and in the relevant legislation.

Counsel shall submit an Order within one week.

GERHARD A. GESELL,
United States District Judge.
January 14, 1974.

THE NATIONAL HEALTH PLANNING ACT OF 1974

Mr. JAVITS. Mr. President, I am pleased to join with Senator KENNEDY in the introduction of a bill to amend the PHS Act to revise the programs of health services research and statistics and to extend the program of assistance for medical libraries.

This legislation addresses itself to three important facets of the Nation's health care problems:

First. The need for an increased commitment to health service research aimed at improving the use of our health care dollars.

With a strong commitment backing it, health care research will assist in answering fundamental questions about national health insurance, quality of care, effective use of personnel and technological resources.

Second. The need for accurate and comprehensive statistics about the Nation's health. Without such information, we can never know what benefits we have obtained from the billions of dollars we spend on health nor what directions we must take in the future to improve the health of the Nation. Responsibility for gathering, analyzing, and distribution of this vital information rests with the National Center for Health Statistics. The center has achieved a worldwide reputation as an objective and competent reporter of the health status of the American people.

Third. The need for funding authority for medical libraries assistance programs. The effectiveness of these programs in the important function of disseminating medical knowledge justifies continuing support for this worthwhile investment.

The principal modification this legislation makes in these three authorities is that it does not mandate, as does the House-passed bill, that the existing HEW units which conduct health services research and which gather health statistics be combined into a new National Center for Health Services Research and Statistics in order to obtain statistics which are responsive to the needs of health services researchers as well as the generally close relationship between health services research and statistic gathering activities.

With respect to medical libraries, the only change of substance is the elimination of moneys for the construction of medical libraries which was not funded last year.

I believe this legislation will help to insure that the rapid advances in medicine and science will not leave public and professional knowledge far behind.

CHILI VERSUS NORTH CAROLINA BARBECUE: THERE IS JUST NO COMPARISON

Mr. HELMS. Mr. President, on February 5, the distinguished Senator from Texas (Mr. Tower) and the equally distinguished Senator from Arizona (Mr. Goldwater) engaged briefly in debate about a subject which I gather was of substantial importance to them. It was not heated debate, Mr. President. In fact, I am tempted to say that their discussion was rather chill.

In any case, Mr. President, a distinguished newspaperman from my State, Mr. Don Hill, took note of the exchange between Senators Goldwater and Tower. Mr. Hill is chief of Landmark Washington Bureau, which serves the Greensboro Daily News and Record in my State, along with the Virginian-Pilot and Ledger-Star in Norfolk, Va., and the Roanoke Times and World-News in Roanoke, Va.

Noting the debate between Senators Goldwater and Tower, Mr. Hill decided that their chili dispute was largely academic. He wrote to me, pointing out that regardless of which State, Texas or Arizona, may have the best chili, it is still

second-rate when compared to that epicurean delight known as North Carolina barbecue.

Mr. Hill knows whereof he speaks. Moreover, he is a topflight newspaperman. He was recently honored for the excellence of his craftsmanship by the North Carolina Press Association.

Mr. President, I ask unanimous consent that Mr. Hill's letter, bearing date of February 8, be printed in the Record.

There being no objection, the letter was ordered to be printed in the Record, as follows:

DEAR SENATOR HELMS: I have been less than edified—in fact I have been disheartened—in recent days by news accounts of the Senate debate over the relative merits of Texas and other kinds of chili. Senator Goldwater went so far as to say that Texas chili could be compared to the leavings in a cow pasture.

This sort of frivolous concentration on inconsequential offenses the dignity of the United States Senate as a great deliberative body. It is quite apparent to anyone of epicurean tastes that chili of any kind, while good enough to eat perhaps when one is hungry, is as nothing relative to Southern barbecue. Even bad barbecue is better than good chili.

Of course, North Carolina barbecue has no peer. The feeble efforts of Virginians, West Virginians, Georgians and others may be noble insofar as they DO produce barbecue for the beknighted; but man has not risen to the heights to which his palate can take him until he has partaken of North Carolina pit-cooked barbecue at its best.

It's sad to see the United States Senate debating such things as the merits of chili when so many really pressing matters face America. May I respectfully suggest that you seek to get the Senate back on a course of significance to our nation. You could start with North Carolina barbecue.

Sincerely

DON HILL,
Bureau Chief,
Landmark Washington Bureau.

THE FROZEN SUMMER OF 1816

Mr. MCINTYRE. Mr. President, with the current shortages of fuel oil, many of us in the New England area have been keeping our fingers crossed for a mild winter. Now, as March approaches, it might be thought that our worries are over.

I would just like to add one small note of caution against overoptimistic predictions for spring thaw. An excellent article in the current issue of New Hampshire Echoes provides an account of the "frozen summer" of 1816—a phenomenon that brought great suffering to the State of New Hampshire.

By all reports, 1816 was truly "the year winter never really left." Heavy frost was experienced throughout June, July, and August. Crops were destroyed and many towns subsisted on emergency supplies.

Usually, New Hampshire is blessed with beautiful summers—warm days and cool nights—that lend themselves perfectly to the booming tourism industry. Its clear waters and green forests are playgrounds for visitors from all over the world. But 1816 was a different story—it was a summer "cold at both ends."

Mr. President, I ask unanimous consent that the enjoyable and interesting article, "1800—And Freeze-to-Death,"

by Raymond E. Derouin, be printed in the Record.

There being no objection, the article was ordered to be printed in the Record, as follows:

1800—AND FREEZE-TO-DEATH: 1816 WAS THE YEAR WINTER NEVER REALLY LEFT

(By Raymond E. Derouin)

(That summer was "so cold in the meeting house, I wanted a great coat," according to one shivering diarist.)

Remember those icy winters of yesteryear when you would stare with childish eyes through frosty window panes at snow drifts so large it seemed as if they would engulf the entire country side in their snowy folds? Back then, spring was a May thing, not a March present, appreciated like Christmas after an interminable wait. But even back then, in the throws of the fiercest storm, grandma sat clucking away from beneath her afghan that it wasn't much more than a heavy frost compared to when she was passing fair. Then like rain from the down spout, one would pour tales of those winters of days gone by. And you would wonder to yourself as, no doubt, your heirs wonder now, is it just the passing years? Is it simply the tricks time plays on our fallible memories or is it really milder than in the good old days? Are winters really melting like the spring snow?

Although we owe much to our forefathers for the weather records they kept in their diaries and notes, they are not consistent and accurate enough to give us much more than a general picture. After all, when you are hacking a living out of a wilderness, the barometric pressure is far from your mind, even if you were possessed of a device to record it. Scientifically accurate weather information has been recorded only since 1870. Still, even allowing for a bit of exaggeration, the old folks had a time of it with the weather. Take 1816, for instance.

That year, Robert Wiggins of Wolfeboro, New Hampshire told of the ground being bare until the month of March, when in one storm, four feet fell. He must have been accurate as only fourteen hardy souls made it to town meeting that year. The whole affair caused a local to quip "We had six weeks of sledding this March." But that was only the beginning. An old Chester diary tell of the ground, on the fifteenth of May being "froze hard enough in plowed land to bare a man." The spring was indeed "very cold and backward."

Then came June.

At first, it seemed almost normal. The temperature crept up until on the fifth, a reading of eighty-eight degrees was recorded in at least one town. And then Jack Frost made a return engagement. The *Farmers Cabinet*, an early Amherst newspaper, put it aptly when they said "Great and sudden changes in the weather . . . considerable snow . . . standing water froze(n) to the thickness of window glass . . . destroyed garden vegetables and corn, so much so that many have planted anew." Marian Newton was more explicit in her Marlboro diary "From the fifth to the twelfth." On the eleventh a Chester man lost five-sixths of his apples, and snow was reported in Antrim on the same date. Even on the coast, "So far in June, there has been a frost on eight nights."

Like the snow, June melted away, but the July that followed was little improvement. The *New Hampshire Sentinel*, published in Keene on the fifteenth reported, "The spots on the Sun have returned and were to be seen by good eyes the week past through smoked glass . . . whether the unusual cold for a number of days can be attributed to the obstruction of the rays, we pretend not to judge, but that light is less intense is plainly discernible . . . we begin to despair of corn and the hay crop will be light."

While the country was celebrating the fortieth anniversary of its independence,

John Plummer of Rochester was noting in his diary "Dreadful windy and cold and frosty nights four days in succession" and later "On the ninth a full moon and a great frost" and "A frost on the seventeenth."

The history of Andover confirms the frost on the ninth and adds that the hay crop was so light that many were forced to sell off their stock, for want of feed. Further north it was so bad people were travelling miles to the south, returning with a bushel of corn on their backs.

August showed little change, and in Keene it was noted, "So great a change from heat to cold has hardly ever been observed as was felt on the twentieth and twenty-first . . . and again on the twenty-eighth a frost that ended all hope of a crop, so much so, that what remained was cut up for fodder." In Swansey too, the crop failed entirely and the town subsisted on emergency supplies from the Connecticut River towns. Deacon Enoch Little of Boscawen despaired of his corn crop "From four acres not eight bushel."

To the north, in Bristol, "Farmers made heroic efforts to save their crops when whole nights were spent, feeding giant bonfires near the corn, to keep away the frost. But on the night of the nineteenth, there came a frost even the bonfires could not drive away, and the entire crop was lost. Not even enough remained for seed the following year." And on August twentieth, "Snow on the mountains at Goffstown."

The summer ended in September, as it began "So cold in the meeting house, I wanted a great coat" and on the twenty-eighth "A frost three nights past." But at least the drought, twelve long weeks in some areas, washed away with the fall rains. It was a summer, as a Windham man quipped "Cold at both ends."

Earlier, when it became apparent that crops would fail, suggestions were rampant, such as plowing under and replanting heartier crops such as oats and Indian corn. And a Sunday sermon cautioned "Let it be remembered that he who destroys a single kernel of good seed corn, deprives his family of two good ears in the coming season."

The following March, hay was twenty-five dollars and thirty dollars a ton. Many had none at all, and their cattle died. Corn climbed steadily from a normal dollar a bushel to two, three, four and even five dollars.

The year became known as poverty year or Mackerel after the necessary addition of salted mackerel to the diet. But not all was distressing. The passenger pigeons were especially heavy that year, so great that nearly any shot skyward brought a welcome addition to an otherwise sparse table. And some crops did well. Jacob Carr of Weare boasted of a crop of potatoes that "Did not get less than five hundred bushels to the acre and never allowed one picked, smaller than a tea kettle!" And turnip! A Sullivan, New Hampshire man placed one on exhibit that weighed in at ten pounds fifteen ounces and was three feet in circumference. But it was quickly topped by another of fourteen and a half pounds!

But these were little solace to the wretched misery the season had caused. It was a time often talked about in the years that followed and never forgotten by those who lived it.

Could another year without summer come along? No doubt it's possible. While the long term averages of snowfall and temperature are definitely on the milder side, no one is putting out a written guarantee for any individual year. So, although the chances of it lessen as the years pass by, don't pack your long Johns where you can't get at them!

IN SUPPORT OF S. 2938, INDIAN HEALTH LEGISLATION

Mr. DOMENICI. Mr. President, in this age of increasing concern for minority

rights, the plight of the American Indian merits special attention. The distress of the Indian is severe. On virtually every scale of measure—health, education, income, employment—the Indian ranks at or near the bottom.

This deplorable condition, the legacy of centuries of injustice and neglect, is one of the most glaring failures in the American experiment. One of the most important areas of concern, and perhaps the most basic, is that of health. For centuries the Indians were ravaged by diseases brought from Europe against which they had no native resistance. To this day the tuberculosis rate, infant mortality rate, and life expectancy are still below the national average.

In recent years progress has been made toward redressing the wrongs of the past and bringing the condition of Indians toward parity with the rest of America. The infant death rate among Indians and Alaska Natives declined by nearly 62 percent between 1955 and 1971. The 1955 death rate of 62.5 per 1,000 live births was reduced to 23.8 deaths per 1,000 by 1971. This is a gratifying improvement. Similarly, tuberculosis death rates for Indians and Alaska natives declined by 86 percent from 1955 to 1971. As a result, the Indian and Alaska Native tuberculosis death rate, which was more than 6 times the U.S. rate in 1955, was 3.7 times as high in 1971. Also significant progress, but, obviously, not enough.

But I do not want to dwell on statistics. My point is the need for continued attention to Indian health and continued progress in combatting Indian health problems. As stated by the Indian Health Service before the 1974 appropriations hearings:

There have been marked improvements in the health of Indians and Alaska natives since 1955; however, their current health status is still deficient when measured against that of the general population. These people live for the most part under severe deprivation caused by the extreme physical hardships of their home environment, characterized by gross unsanitary living conditions, substandard and crowded housing, and unsafe water supplies; they also suffer from inadequate nutrition, limited educational opportunities, emotional, and sociological problems brought about by a culture in transition.

In spite of very substantial program achievements, morbidity and mortality among Indians remains considerably higher than in the general population. Significant strides have been made in recent years, particularly in the prevention of the infant deaths and deaths from tuberculosis. However, the environment, both physical and economic, in which the Indians find themselves, predisposes them to the ravages of disease to a far greater degree than found in the general population.

Furthermore, on February 7, 1974, in the Senate Appropriations Committee room, a planning conference was conducted to discuss Indian health care. Representatives from both Indian and Government agencies spoke out on the needs and possible solutions.

I believe that S. 2938 addresses itself to these needs. S. 2938 would further implement Federal responsibility for care and education of Indians by improving the services and facilities of Federal Indian health programs. A further purpose of the bill is to encourage maximum participation of Indians themselves in

administering such programs—a reflection of the Government's recognition of the need for greater Indian self-determination in the conduct of Indian affairs.

Specifically, S. 2938 addresses these major problem areas: The deficiency of health personnel serving Indians; excessive backlogs of patient care; lack of hospitals and hospital facilities; and inadequate Indian health care in urban areas. As stated in the bill:

A major national goal of the United States is to provide the quantity and quality of health services which will permit the health status of Indians to be raised to the highest possible level and to encourage the maximum participation of Indians in the planning and management of those services.

Thus I strongly support S. 2938 as an integral part of the Indian self-determination policy as well as an essential milestone in the attack on the grave problems of Indian health in our country today.

A CONCURRENT RESOLUTION ADOPTED BY THE SOUTH CAROLINA GENERAL ASSEMBLY

Mr. THURMOND. Mr. President, on February 8, 1974, the South Carolina General Assembly adopted a Concurrent Resolution memorializing the Congress of the United States to utilize all of its facilities to effect a reduction of the use of commercial fertilizers on established grass areas on highway rights-of-way and to obtain the cooperation of the U.S. Department of Transportation in this effort.

Mr. President, there exists in this country an extreme shortage of commercial fertilizer for agricultural purposes. This shortage is aggravated by a shortage of all types of fuels used in the production of fertilizer. As a result of the shortages, and the increased cost of shipment, the cost of commercial fertilizers has substantially increased, with such increases being reflected in the cost of food and fiber.

A reduction in the use of fertilizer on a nationwide scale on grass areas of highway rights-of-way would materially assist those engaged in the production of food and fiber by making available additional supplies for agricultural use.

The South Carolina Highway Department has estimated that a ninety percent reduction in the use of fertilizer on highway rights-of-way in South Carolina alone would result in a savings of 900 tons of fertilizer at an approximate cost of \$100 per ton, 1,200 man hours of labor and 1,500 gallons of gasoline. I am confident that comparable savings would result in the 49 other States.

Mr. President, on behalf of the Junior Senator from South Carolina (Mr. HOLLINGS) and myself, I ask unanimous consent that this concurrent resolution be printed in the RECORD, and I urge all of my colleagues in the Senate, as well as appropriate officials in the Department of Transportation, to give this resolution their most careful consideration.

There being no objection, the concurrent resolution was ordered to be printed in the RECORD, as follows:

H. 2602

Whereas, there exists in this country an extreme shortage of commercial fertilizer for agricultural purposes; and

Whereas, this shortage is aggravated by a shortage of all types of fuels used in the production of fertilizer; and

Whereas, as a result of such shortages and the increased cost of shipment thereof the cost of commercial fertilizer has substantially increased with such increases being reflected in the cost of food and fiber; and

Whereas, a reduction in the use of fertilizer on a nationwide scale on grass areas of highway rights-of-way would materially assist those engaged in the production of food and fiber by making additional supplies available for agricultural use; and

Whereas, a nationwide effort to accomplish this purpose would be substantially assisted by the cooperation of highway departments in each state; and

Whereas, a program of conservation by the Highway Department of South Carolina, resulting from a resolution of the General Assembly, will reduce the use of fertilizer on highway rights-of-way in South Carolina by approximately ninety percent; and

Whereas, it is estimated by the State Highway Department that this South Carolina program will result in a saving of nine hundred tons of fertilizer at an approximate cost of one hundred dollars per ton, twelve hundred manhours of labor and fifteen hundred gallons of gasoline. Now, therefore, be it

Resolved by the House of Representatives, the Senate concurring:

That by this resolution the Congress of the United States is hereby memorialized to utilize all of its facilities and influence to encourage each state and the United States Department of Transportation to substantially reduce the amount of commercial fertilizer used on areas of the highway rights-of-way of this country where grass has already been established in order to conserve fertilizer for use in the production of food and fiber so necessary for all the people of the nation. Be it further

Resolved, That copies of this resolution be forwarded to each member of the South Carolina Congressional Delegation and the Secretary of the United States Department of Transportation in Washington, and that a copy of the resolution concerning the above-mentioned matters, enacted by the South Carolina General Assembly, be attached to all copies so forwarded.

COURT HOLDS FIRING OF VETERAN UNCONSTITUTIONAL

Mr. ERVIN. Mr. President, I wish to bring to the attention of the Senate a recent decision of the court of appeals for the fifth circuit, which has great significance for veterans with discharges under less than honorable conditions.

The case, *Thompson v. Gallagher*, No. 73-1415, was decided on December 28, 1973. The court held that a city ordinance which prohibited veterans with other than honorable discharges from holding employment with the city to be unconstitutional under the due process clause of the 14th amendment. Writing on behalf of the three-judge panel, Circuit Judge Lewis R. Morgan noted:

Numerous factors which have absolutely no relationship to one's ability to work as a [city employee] may lead to other than honorable discharges from the military, including security considerations, sodomy, homosexuality, financial irresponsibility and bed-wetting. The point is not that some of all of these considerations must, as a matter

of due process, be excluded from consideration of fitness to hold the position of a [city employee]. However, a general category of "persons with other than honorable discharges" is too broad to be called "reasonable" when it leads to automatic dismissal from any form of municipal employment. We have no hesitancy in calling the ordinance which bars that class of persons from city employment, without any consideration of the merits of each individual case, irrational.

In addition, the statute distinguishes between veterans and non-veterans. By eliminating veterans with other than honorable discharges, the city eliminates veterans with those characteristics which lead to other than honorable discharges. Yet there is no effort to "weed out" civilians who have the same characteristics . . .

Mr. President, I would submit that although the facts of this case apply to a veteran who lost his employment with a small town in Louisiana, the court's rationale is a lesson to all employers. Any public or private employer who refuses to hire veterans with other than honorable discharges without bothering to look at the merits of each individual case is acting irrationally. As the court notes, there are many and varied reasons for discharge under honorable conditions from the Armed Forces. The reason for such discharge may have nothing to do with the ability to perform the job being sought. Furthermore, the discharge itself may have been awarded by means of administrative procedures which did not accord the serviceman adequate opportunity to challenge the discharge he received. To discriminate against such individuals may be doing them a great injustice.

Mr. President, I ask unanimous consent that the text of this fine opinion be printed in full in the RECORD. I also request that two related pieces which recently appeared in the New York Times be printed in the RECORD. One is an editorial entitled "Badge of Dishonor" which appeared in the January 16 edition, and is a commentary on the Thompson decision. The other is a column by Tom Wicker entitled "Good, Bad, and 'Other'" which appeared in the edition of December 30. It is a compelling critique of the military administrative discharge system, in general.

There being no objection, the opinion was ordered to be printed in the RECORD, as follows:

[In the United States Court of Appeals for the Fifth Circuit, No. 73-1415]

TOMMY THOMPSON, PLAINTIFF-APPELLANT, VERSUS HONORABLE HARRY K. GALLAGHER, MAYOR FOR THE CITY OF PLAQUEMINE, LOUISIANA, DEFENDANT-APPELLEE

Appeal from the United States District Court for the Middle District of Louisiana, (December 28, 1973), Before Tuttle, Dyer and Morgan, Circuit Judges.

Morgan, Circuit Judge: Tommy Thompson served in the United States Army for 22 months before being discharged under other than honorable conditions on May 14, 1970. He went to work for the City of Plaquemine, Louisiana, on December 16, 1971, as custodian at the city diesel plant. Five weeks later, the city council passed the following ordinance:

"Resolved that any person employed by the City of Plaquemine or by the Emergency Employment Act, if said person is a veteran

must have an Honorable Discharge and must be a man of good character."

The day after the ordinance was passed, the City of Plaquemine fired Thompson because his employment violated the ordinance. Thompson sued the Mayor Plaquemine under 48 U.S.C. § 1983, charging that his dismissal violated his rights under the due process and equal protection clauses of the Fourteenth Amendment, that it was a bill of attainder and that it was an *ex post facto* law. Jurisdiction was asserted under 28 U.S.C. §§ 1331, 1343, 2201 and 2202. Thompson sought a declaration that the ordinance as applied to him is unconstitutional an injunction restraining the mayor from applying the ordinance to him, and an order reinstating him to his position at the power plant, with compensation for wages lost as a result of the dismissal.

After hearing on the merits, the District Court of the Middle District of Louisiana entered judgment for the defendant on the ground that the dismissal pursuant to the ordinance violated none of Thompson's rights. Thompson appeals.

I.

The first question we must consider is whether Thompson's interest in his job is protected by the Fourteenth Amendment.¹ Faced with the question of whether a state government as employer must comply with the requirements of due process in its employment practices, some courts have concluded that since a job with the government is neither life, liberty nor property, courts may not review the hiring and firing of government personnel. See, e.g., *Bailey v. Richardson*, 182 F.2d 46 (D.C. Cir., 1950), *aff'd*, by an equally divided court, 341 U.S. 918 (1951), *Jenson v. Olson*, 353 F.2d 825, 828 (8 Cir., 1965), and *Orr v. Tinter*, 444 F.2d 128, 133 (6 Cir., 1971).

The intellectual progenitor of all these cases is *McAuliffe v. Mayor of City of New Bedford*, 155 Mass. 216, 29 N.E. 517 (1892). Judge (later Justice) Holmes summarily rejected a policeman's complaint that he had been fired because he exercised his rights under the First Amendment, saying simply, "[t]he petitioner may have a constitutional right to talk politics, but he has no constitutional right to be a policeman. 155 Mass. at 220, 20 N.E. at 517."

Notwithstanding Holmes' distinguished imprimatur, we feel that this reasoning does not come to grips with the question in cases such as this. The real question is whether the Fourteenth Amendment's prohibition against governmental actions which violate due process of law reaches a government's actions as employer. We feel that it does.

The Fourteenth Amendment is a general prohibition against arbitrary and unreasonable governmental action. It no longer suffices to say that although a government may not deprive someone of a right arbitrarily, it may do so in the case of a privilege. *Goldberg v. Kelly*, 397 U.S. 254, 262 (1970), *Shapiro v. Thompson*, 394 U.S. 618, 627 n.6 (1969). The right-privilege distinction has been rejected as a method of analysis in Fourteenth Amendment cases, because the question is not whether a person has a right to something denied by the government, but whether the government acted lawfully in depriving him of it. *Bell v. Burson*, 402 U.S. 535 (1971), and cases cited therein at 539. "One may not have a constitutional right to go to Baghdad, but the government may not prohibit one from going there unless by means consonant with due process of law." *Homer v. Rich-*

mond, 292 F.2d 719, 722 (D.C. Cir., 1961), cited in *Cafeteria and Restaurant Workers Union v. McElroy*, 367 U.S. 886, 894 (1961).

II.

In the context of public employment, the question of whether employment is protected by the Fourteenth Amendment usually arises when an employee is dismissed for actions which may be characterized as the exercise of some other specifically defined constitutional right. In *Slochower v. Board of Education*, 350 U.S. 551 (1956), a tenured professor was dismissed from his position at Brooklyn College for asserting his Fifth Amendment privilege against self-incrimination at a Congressional hearing. The court held the dismissal invalid both because it punished assertion of constitutional rights and because "constitutional protection does not extend to the public servant whose exclusion pursuant to a statute is patently arbitrary or discriminatory." 350 U.S. at 558. *Slochower* was reaffirmed recently in *Connell v. Higginbotham*, 403 U.S. 207 (1971).

As precedent for the latter proposition, the court relied on *Wieman v. Updegraff*, 344 U.S. 183, 192 (1952), in which certain staff and faculty members of the Oklahoma Agricultural and Mechanical College were fired for refusing to take an oath disclaiming membership in certain allegedly subversive organizations. The court invalidated the dismissals, holding that the oath lumped together innocent and knowing activity, and as such was an assertion of arbitrary power. 344 U.S. at 191.

In *Hobbs v. Thompson*, 448 F.2d 456 (5 Cir., 1971), this court invalidated sections of the city charter and ordinances of Macon, Georgia, which restricted electioneering activities of that city's firemen. We held there that the statutory scheme was overboard and interfered with the firemen's First Amendment rights. In doing so, we specifically relied on the proposition in *Pickering v. Board of Education*, 391 U.S. 563, 568, that "the theory that public employment which may be denied altogether may be subjected to any conditions, regardless of how unreasonable, has been uniformly rejected." *Keyishian v. Board of Regents*, [385 U.S. 589, 605-06 (1967)]. 448 F.2d at 474.

This case differs somewhat from the *Wieman-Slochower-Pickering* line of cases since it involves no constitutional right other than the right to be free from arbitrary and unreasonable government action. But the same reasoning applies. Just as a public employee does not give up his First Amendment rights when he begins receiving a pay check from the government, neither does he give up his right to due process of law. The Fourteenth Amendment stands for the proposition that the government must act, when it acts, in a manner which is neither arbitrary nor unreasonable. This stricture is in addition to those which restrict the government from acting in a manner which impinges on freedom to speak or associate, or to be free from self-incrimination. It is one which most certainly applies not only to the government as policeman but also to the government as employer. Public employees are every bit as protected by the Fourteenth Amendment's safeguards as in the rest of the populace. *Gratusam v. Murphy*, 448 F.2d 197 (3 Cir., 1971), *Buckley v. Coyle Public School System*, 476 F.2d 92 (10 Cir., 1973), *Fitzgerald v. Hampton*, 467 F.2d 755 (D.C. Cir., 1972).

III.

Having determined that Thompson's dismissal must be evaluated according to Fourteenth Amendment standards, we turn now to the question of whether the city's dismissal of him violates due process or equal protection. Thompson was dismissed pursuant to a city ordinance forbidding the employment by the city of any veteran not having an honorable discharge from the

armed forces. The ordinance thus creates two different classifications. First, it divides the employees of the city into veterans and non-veterans. In addition, it distinguishes between veterans with honorable discharges and those with other than honorable discharges.

Thompson attacked the ordinance on both equal protection and due process grounds. In many cases, of which this is one, it makes little difference which clause of the Fourteenth Amendment is used to test the statute in question. *Bolling v. Sharpe*, 347 U.S. 497 (1954). The question is whether the challenged statute is a rational means of advancing a valid state interest. A regulation not reasonably related to a valid government interest may not stand in the face of a due process attack. Likewise, a classification which serves no rational purpose or which arbitrarily divides citizens into different classes and treats them differently violates the equal protection clause.

Although it is proper for a city to create different classes of citizens and treat them in different manners, the classifications thus created must serve a rational and valid governmental purpose. Thus, we are faced with two questions. In there a valid governmental interest at stake in this case? Does the ordinance bear a rational relationship to the fulfillment of those interests?

In an effort to determine what interest of the City of Plaquemine was at stake in this ordinance, we have listened to oral argument, read the briefs presented by both parties, and examined the entire record, including the transcript of the trial held in district court. The defendant seems to feel that there are three interests which the ordinance is intended to fulfill.

The first is that persons with other than honorable discharges should not be employed by the city. The district court apparently accepted this as a valid justification for the ordinance, stating:

"The burden is upon the plaintiff to prove his case and everyone who has testified in this case has testified that this ordinance was passed because first they felt that no one with a Dishonorable Discharge or a Discharge under other than honorable conditions should work for the City of Plaquemine. I personally would wholeheartedly agree."

Of course, to state that persons with other than honorable discharges should be fired because a person with other than an honorable discharge is unfit to be a city employee is totally circular. The question is, what is it about a person with other than an honorable discharge that makes him unfit to be a city employee?

It was suggested at trial that the ordinance was an effort to comply with the Emergency Employment Act of 1971, P.L. 92-54, 85 Stat. 146, which provided funds to the city for Thompson's wages of \$350.00 per month. The act, insofar as it is relevant here, authorized financial assistance for federal, state and local governmental units to hire people particularly affected by high unemployment. Congress was particularly concerned about low-income persons, migrants, those from socio-economic backgrounds generally associated with high unemployment, young persons entering the labor force, persons recently separated from military service, and others likely to have trouble finding jobs. Governmental units seeking assistance under the act must submit to the Secretary of Labor applications which describe the programs to be instituted. The act further provides that these applications must include:

"... assurances that special consideration in filling public service jobs will be given to unemployed or underemployed persons who served in the Armed Forces in Indochina or Korea or after August 5, 1964 in accordance with criteria established by the

¹ The Fourteenth Amendment states, in part, "... nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

Secretary (and who have received other than dishonorable discharges); . . . P.L. 92-54 § 7(c)(4)."

Thus, the act provides preferences for veterans with "other than dishonorable discharges." The Plaquemine ordinance, however, requires the discharge of veterans with other than honorable discharges. Thompson has an undesirable discharge under other than honorable conditions. This is clearly demonstrated by the record in this case, although Thompson's attorney, at the beginning of the trial, stipulated that he had a dishonorable discharge. An undesirable discharge is not an honorable discharge, but neither is it a dishonorable discharge. Thompson's dismissal not only fails to further the purposes of the act, it actually subverts them. As a veteran who has received other than a dishonorable discharge, Thompson is actually entitled to a preference under the act. Thus, the employment act cannot provide any justification for the ordinance which led to Thompson's dismissal.

Finally, the appellee appears to argue that the characteristics which cause a person to receive other than an honorable discharge from the military are characteristics which hinder that person's effectiveness as a city employee. This rationale is stated in the appellee's brief in the following manner:

"Certainly, the fact that a person does not get an honorable discharge from the armed forces connotes, [sic] if not criminality, at least antisocial character. The City undoubtedly has an interest in not hiring persons with such character. . . . It cannot be gainsaid that the exclusion of persons with criminal and/or strongly antisocial character will not, in the long run, operate to create a better serving, more efficient and more reliable service."

We agree that the city has an interest—indeed, a very strong interest—in maintaining the quality of its work force and assuring that its employees perform their tasks as well as possible. Of the three governmental interests advanced by the appellee, this is the one that may be considered for the purposes of Fourteenth Amendment analysis.

IV

The next question, therefore, is whether the classifications in question are reasonably related to the city's interest in maintaining the quality of its work force. First, we consider the distinction between veterans with honorable discharges and other veterans.

Numerous factors which have absolutely no relationship to one's ability to work as a custodian in a power plant may lead to other than honorable discharges from the military, including security considerations, sodomy, homosexuality, financial irresponsibility and bed-wetting. The point is not that some or all of these considerations must, as a matter of due process, be excluded from consideration of fitness to hold the position of power plant custodian. However, a general category of "persons with other than honorable discharges" is too broad to be called "reasonable" when it leads to automatic dismissal from any form of municipal employment. We have no hesitancy in calling the ordinance which bars that class of persons from city employment, without any consideration of the merits of each individual case, irrational.

In addition, the statute distinguishes between veterans and non-veterans. By eliminating veterans with other than honorable discharges, the city eliminates veterans with those characteristics which lead to other than honorable discharges. Yet there is no effort to "weed out" civilians who have the same characteristics. We have been directed to no ordinance limiting city employment to those who are financially responsible, or who are good security risks, or who have never committed sodomy, or who do not wet their beds. There has not even been a showing that the city excludes convicted felons

from employment. This is not to imply that any or all of these restrictions would be valid. On that question we express no opinion. The point is only that the ordinance being challenged might stand in a very different light if it were part of a general comprehensive scheme which enumerated characteristics deemed to be conducive to competent performance as a city employee, and which excluded all those who lacked those characteristics. That is not what we have here. As it now stands, the Plaquemine ordinance subjects veterans to standards to which non-veterans are not subjected. It also disqualifies veterans who have received other than honorable discharges, in spite of the fact that a veteran may receive a discharge for a wide range of reasons, many of them totally unrelated to performance as a city employee. By no stretch of the imagination could such a scheme be called rational.

The cause is reversed and remanded to the district court for proceedings not inconsistent with this opinion.

BADGE OF DISHONOR

The United States Court of Appeals for the Fifth District has taken an important step toward eliminating abuses of the classification system used in labeling those men and women who leave the Armed Forces.

The court held unanimously that an Army veteran was unjustly dismissed from a city job in Plaquemine, La., after it was discovered that he had been given an "undesirable" discharge for his refusal to go to Vietnam. The ruling challenges both the manner in which the Armed Services administer the discharge system and the way in which society applies that system to unrelated civil situations, from the exclusion from employment to the denial of insurance.

At the heart of the court's strongly implied criticism of the existing process is the fact that many of those who are not "honorably" discharged have had no opportunity for due process. Many discharges below the honorable level are issued by administrative fiat or at the order of commanders, without benefit of trial, yet they may nevertheless have a permanently punitive effect. A discharge resulting from a former serviceman's conscientious objections or even from a physical or psychological unsuitability to special requirements of military life could unfairly haunt him for years to come.

By holding that such broad applications of vaguely defined military yardsticks violate the Fourteenth Amendment, the court does not deny potential employers the right to refuse to hire persons who have been dishonorably discharged for the commission of criminal offenses. At issue is merely the automatic substitution of an inadequately defined military labeling system for the fair judgment of individuals on their merit.

The military is clearly within its rights in attesting to the quality of the services rendered by those who leave the Armed Forces. But it is wrong in a democratic society to allow military demerits to be transferred automatically from uniform to mufti, without taking into account whether they bear any relationship to civilian law, life, and responsibilities.

GOOD, BAD AND "OTHER" . . .

(By Tom Wicker)

In a striking article in the new quarterly *Civil Liberties Review*, Prof. Howard Zinn of Boston University points out that the Supreme Court and the Constitution do not, in fact, protect our liberties nearly to the extent that "power and money" constantly endanger them.

The real threat, he writes, is in "the situations of every day: where we live, where we work, where we go to school, where we spend most of our hours. Our actual freedom is determined . . . by the power the policeman

has over us on the street, or that of that local judge behind him; by the authority of our employers; by the power of teachers, principals, university presidents, and boards of trustees if we are students; by parents if we are children; by children if we are old; by the welfare bureaucracy if we are poor; by prison guards if we are in jail; by landlords if we are tenants; by the medical profession or hospital administration if we are physically or mentally ill."

He might have added: "by the military, even after we have left its ranks and returned to civilian life." For another article in *Civil Liberties Review*, by Haywood Burns of the National Conference of Black Lawyers, details how the military services cause unfair unemployment, social stigma and loss of Government benefits for those veterans, many of whom endured combat in Vietnam—who are encumbered with "general" or "undesirable" discharges.

These discharges fall somewhere between "honorable" and the "bad conduct" or "dishonorable" discharges that result from court-martial convictions. Generally termed "other than honorable," they are awarded through administrative action and, as Mr. Burns points out, "can be given for a variety of 'good of the service reasons,' including bed wetting, failure to achieve, and minor rules infractions 'related to not toeing well enough someone's line.' At worst, whatever offense might be involved usually would be no more than a misdemeanor in civilian life; often, the trouble is no more than nonconformity."

Yet these discharges—in reality, a veteran's inability to show an "honorable" discharge—cause employers to refuse to hire, colleges to turn down applicants, veterans' hospitals to refuse to treat even men who were wounded in combat, the Government to withhold G.I. Bill and other benefits, and other agencies—the courts, the police, civil service boards—to take hostile attitudes. Ironically enough, the men and women who suffer these penalties often received their "administrative" discharges from nonjudicial bodies within the military services, after little, if any, counseling and protection of their rights; while those given "bad conduct" or "dishonorable" discharges are sentenced by court-martial after full exercise of their rights and with ample opportunity for appeal.

In a report prepared last November on the same subject, Ottilio A. Mighty, veterans' affairs director for the New York Urban League, said that "during the Vietnam era (August 1964 to 1972), 161,917 servicemen have been shackled and burdened with undesirable discharges" alone. Even without including those who received "general" discharges, therefore, the services discharged the approximate equivalent of eighteen infantry divisions of Vietnam war veterans under "other than honorable" conditions.

Aside from the questions this raises about military policies and procedures, this "army of the forgotten," as Mr. Mighty labeled it, has been placed in roughly the position of the offender emerging from prison—society wishes him or her to do better, to be "rehabilitated," to become a useful citizen, but at the same time it so stigmatizes and restricts opportunity for the person involved as to make such human reform all but impossible.

Even those with "honorable" discharges can find their service records penalizing them in civilian life, through "separation" code numbers. There are over 200 separate numbers, one of which is stamped on every discharge paper. Some of these numbers, decoded, mean "unsanitary habits," "homosexual tendencies," "apathy," "unsuitability—multiple reasons," and the like—even "obesity." What right the military has arbitrarily to stigmatize men and women for life is not clear; but it is clear that many civilian

employers know the code and apply it to veterans seeking jobs.

Haywood Burns—who served in 1972 on a civilian-military task force to study the administration of military justice—believes that the whole system of graded discharges ought to be abolished. In his view, every person leaving the military should get a simple certificate of service; thereafter, only actual records of criminal conviction, determined judicially by courts-martial, could be held against veterans.

After all, why should those who served in the military—often draftees—be more categorized, graded and judged—arbitrarily at that—than those who did not serve? And anyway, who gave the military the power to classify American citizens as good, bad or indifferent?

LITHUANIAN INDEPENDENCE DAY

Mr. CURTIS. Mr. President, a few days ago, an elderly gentleman was in my office to visit with me as any other constituent would do. But he wasn't the usual constituent with average concerns.

John Kreivenas, who has relatives in Neligh, Nebr., had just been permitted to come to America after 33 years of captivity behind the Iron Curtain. Mr. Kreivenas was not allowed, in all that time, to leave Lithuania to rejoin his wife in Pennsylvania.

Through the efforts of my office, through the efforts of the State Department and the American Embassy in Moscow, Mr. Kreivenas was finally granted his independence. And it means so much to him.

It is with this poignant memory that I urge all Americans to commemorate the 56th anniversary of the establishment of the Republic of Lithuania.

February 16 marks Lithuanian Independence Day, but it has been 34 years since independence has had any real meaning in that Soviet-invaded country.

As Americans who cherish the ideals of freedom and mutual cooperation, we should look to Lithuania and the other Baltic States with compassion, but not with pity.

There is a future ahead for all of us. Détente could create a new world community where captivity behind "curtains" becomes obsolete.

We, in Congress, should actively strive to use all opportunities to achieve this ideal of a peaceful world community and to help other countries become part of this dream. And all of us should keep this idea in our hearts, so John Kreivenas may be only one of many to return to America's open arms.

SERVICE TO THE PEOPLE IN DURHAM, N.H.—THE RED CROSS

Mr. MCINTYRE. Mr. President, in these days when our major attention is turned to oil embargoes, long lines at the gas station, rampant inflation, and the many other vicissitudes of life today, we may forget that great accomplishments continue to be made by our people in thousands of communities throughout the Nation—accomplishments which unfortunately do not always get reported in the headlines.

The American Red Cross is at the forefront of those organizations that carry

on service to the people day in and day out every day of the year.

The publication "The Good Neighbor" which reports on what the Red Cross is doing in communities across America recently turned its attention to Durham, N.H., home of the University of New Hampshire. This report reveals that the Durham Red Cross has achieved an outstanding level of community service by association with the university and the community in general.

Mr. President, I ask unanimous consent to print this article from "The Good Neighbor" in the RECORD so that my colleagues may know of the accomplishments of the Durham Red Cross.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

THE GOOD NEIGHBOR

DURHAM, N.H.—In this lovely old (first settled 1623, incorporated 1732) New England town, the Red Cross is a living presence of people who care, a "web of organization"—in the words of one of its leaders—"that if something comes up, somebody—A, B or C—is going to do something about it."

Durham has 5,000 permanent residents. Some 10,000 University of New Hampshire students live there for parts of the year. The community has more than 2,000 Red Cross members; over 700 are active Red Cross volunteers. The Red Cross in Durham has 12 programs and scarcely a penny's overhead. It has the highest per capita rate of blood donation in the highest per capita blood donation region of the American Red Cross blood program. It made 159% of fund goal in 1973; it has exceeded every regular and special fund goal for 8 consecutive years.

Readers don't need to write to Durham to find out the magic used to accomplish these things; it's magic available in every U.S. community. Durham's Red Cross applies people power to people needs, keeps up with what's happening and needed in its community and involves the community's leadership in Red Cross leadership. Any chapter that isn't afraid of able people and hard work can do likewise.

The Good Neighbor visited Durham to talk with some of its volunteer Red Cross leaders. The words and photos that follow portray the flourishing health of the American volunteer spirit there.

While we derive satisfaction from our small share of the work of the American Red Cross on a nationwide basis, it is at the chapter level, on a person-to-person basis through the work of our community service programs that most of us have the opportunity to feel a part of the Red Cross, to be the good neighbor. And it is at the chapter level that most of our responsibilities lie. To be the good neighbor in Durham, we of the Red Cross must be alert to the new needs of the community and willing to begin new programs in addition to continuing and expanding existing ones.—Nobel K. Peterson, University of New Hampshire teaching/research scientist and Durham chapter chairman.

The program of this chapter is used by the people. It's seen as a very strong and positive factor in the life of the community.—C. Robert Keesey, UNH ombudsman and Red Cross chapter vice chairman/chairman of Service to Military Families.

We let the community know we're here and what we do. On almost every bulletin board in town is a complete list of the chapter's directors and service chairmen, with telephone numbers. . . . We invite everyone in the community to the annual meeting and we welcome everyone who comes with a program that's informative, warm and fun, an event at which everyone is thanked and has a good time. . . . I try for a story a week with one or another of the media that cover

Durham—Doris Peterson, chapter chairman of public relations and information.

How we raise money for the Red Cross is simple and basic. We ask each area leader (we call them leaders, not captains) to recruit 6 to 10 solicitors, and each area leader is assigned a fund goal. We have found that by setting a realistic goal, area leaders have been motivated to work hard to obtain their individual goals. People call on people they know; personal contact with followup is the key.—Eugene A. Savage, UNH director of admissions and New England Red Cross division advisory council member.

I can see why in some university communities the Red Cross chapter doesn't work with students. It has to be a constant thing. And you no sooner get them trained than they graduate. But there is great reward in bringing students into the experience of volunteering. I think university community chapters that don't work with their students are missing an important opportunity.—Doris Peterson.

It's competition, it's morale, it's excitement. That's why students get involved. For us it started with giving blood and then planning and staging the blood drive. We got wrapped up in it; we psyched each other. It grows. We now have some 20 to 25 campus groups and maybe 25 dormitories involved in some way in Red Cross projects.—Tom Hammett III, UMH student and member of the Red Cross chapter board of directors.

In another perspective, the Red Cross blood drive is an outward and visible sign to the rest of the state of what we students here in the Durham community are really like.—Tom Hammett.

In the Air Force ROTC and its auxiliaries our primary concern is to develop leadership, and the Red Cross helps us in this, especially by giving our students leadership opportunity in blood drives and fund raising. These do a lot for our students and their feeling of accomplishment. . . . On a more personal plane, I have been impressed by the Red Cross ever since as an enlisted man I got a lot of help during an emergency leave situation. I hope to plant some seeds here that will grow in Red Cross support when these students are out of school and scattered around the world.—Maj. Darrel D. Lynch, USAF, UNH ROTC instructor in aerospace studies and Red Cross membership enrollment chairman.

We emphasize membership. It's more than just making a donation. It's joining our community's Red Cross.—Nobel K. Peterson.

Red Cross helps us instill a sense of purpose, leadership and accomplishment.—Lt. Col. Wilfred West, U.S. Army, UNH, ROTC.

It has always amazed me, the number of New Hampshire children who don't know how to swim. Swimming is the one sport you can learn for life and you don't have to be in a team to learn. It's one gift that should be given to every child. . . . Teaching children to swim is like watering flowers every day for 5 weeks. And then they bloom!—Margaret Sumner, Red Cross water safety program chairman.

The Red Cross disaster plan is one part of the total community-wide disaster plan. Specifically, it's the social service branch of the community disaster plan.—E. Warren Clarke, UNH civil defense training program director and Red Cross disaster services chairman.

I like to hear the telephone ring. I like the civic life, and I like our convalescent equipment loan program because there's a lot of good in it and no waste motion. We hold ourselves ready and when we are needed we do what we have to do. I think we do a very useful service.—Wayne Shirley, retired university librarian and supervisor of the Red Cross convalescent equipment loan program.

I am impressed by the role the Red Cross plays on the campus here. In fact, I was sur-

prised by the extent to which the chapter is intertwined with the life of the university and the degree to which staff and faculty are involved in Durham's Red Cross leadership. We encourage this kind of outreach and involvement. We think it's healthy. It's also necessary for a university that wants to keep in tune with its community and its state.—Thomas N. Bonner, president, University of New Hampshire.

The personality of the instructor has as much to do with the progress of first aid instruction as does the need for the instruction in the community—Caroline Wooster, UNH emeritus associate professor of physical education and state volunteer consultant in Red Cross safety services.

I became involved because I was asked. I was retired and they thought I had lots of time. Well, to tell the truth, I had taught school all those years as a way of giving service, and I wanted to continue being of service. I felt it a privilege to be asked.—Dorothy Wilcox, Red Cross volunteer motor corps director.

Our chapter works because of people who take an interest and put in the work. Moreover, we have been blessed with leaders who have the knack of making one ashamed to say no and who pay attention to the little formalities that are so important—recognition for service well performed, a story in the paper, a mention at a gathering of those you want to think well of you.—Alden L. Winn, chairman, Durham Board of Selectmen, UNH professor of electrical engineering and Red Cross chapter board of directors member.

We began in 1951 with one campus blood drawing a year. Then we went to a fall-spring schedule. Then to 2-day operations. Then, with the help of the ROTC students, to 3 days in the fall and 4 in the spring. All told, we now have 14 days of blood drawings a year in Durham. We collected 4,040 units of blood last year.

Campus recruitment for each drawing is conducted by a volunteer committee of 16 students. They help with everything from theme to radio announcements. Volunteers working at the drawings are about half from the campus and half from the town.

Another thing we do. Every University of New Hampshire freshman gets a letter on university stationery from a committee of students inviting him to become a blood donor.—Mrs. William Stearns, volunteer Red Cross blood program chairman.

I'm always almost in tears because we're about to lose one of our best student workers, and then I realize there's another one just as tremendous coming along.—Mrs. Charles McLean, volunteer Red Cross blood program nursing chairman.

I teach Red Cross home nursing because I believe in preventive medicine, good service and economy.—Mrs. Robin Willits, instructor in adult home nursing programs.

CHARTER NO. 1—CHAMBER OF COMMERCE, FREDERICK, MD.

Mr. MATHIAS. Mr. President, no matter how much harder we try, there can only be one No. 1. It is not unusual that the Chamber of Commerce of Frederick, Md., which serves a unique community, should hold the first charter issued to a local chamber by the Chamber of Commerce of the United States.

It was my privilege to attend the Frederick chamber's 62d annual dinner on January 24, 1974. During the evening there was an interesting review of the chamber's history and its development. Since this a facet of our national, social, and economic evolution, I thought it

would be of interest to Members of the Senate and others across the country.

I ask unanimous consent that the accompanying history of the Frederick chamber and the list of past and present officers be printed in the RECORD.

There being no objection the history was ordered to be printed in the RECORD, as follows:

CHAMBER OF COMMERCE OF FREDERICK COUNTY, INC.—CHARTER NO. 1, CHAMBER OF COMMERCE OF THE UNITED STATES

The beginnings of the Chamber of Commerce movement are traced back almost 6,000 years to the city of Mari in Mesopotamia.

The evolution of the modern Chamber began in 1599 when merchants in Marseilles, France formed an independent, voluntary organization to represent commercial interests of the port.

The first American Chamber of Commerce was the Chamber of Commerce of the State of New York, which was organized in 1768.

As a result of a suggestion by President William Howard Taft that some system of national cooperation between business and government be established, the Chamber of Commerce of the United States was created on April 22, 1912. It was a new step in commercial organization—a representative federation with autonomous chambers of commerce and trade associations from every part of the country and from every type of industry as its controlling and directing force.

The Frederick Board of Trade, first organized in 1895, was the forerunner of today's organization. It was in April 1912 that Officers and Members of the Frederick Board of Trade responded to the call of President Taft to attend a meeting in Washington that resulted in the formation of the Chamber of Commerce of the United States.

The Frederick delegates were enthusiastic about the formation of a National Chamber of Commerce. Within a few hours after their arrival home, a letter was sent to the national association accompanied by a certified check for \$25.00—the fee for membership in the national body. The letter was purposely sent so that the Frederick Board of Trade would hopefully be the first membership of the association.

On May 8, 1912, a letter was received from the Secretary of the National Chamber of Commerce informing the local association that it was the first association of the country to join the national body. Being the first body to join the national association was considered as one of the greatest advertisements that Frederick could possibly get. The actual value would be hard to estimate, but would be considerable, it was stated. The Charter, bearing "Number One," was received on May 21, 1912 and is now displayed in our Chamber office.

This organization continued to function under the name of the Frederick Board of Trade until June 1920. At that time the officers and executive committee resigned in the interest of the reorganization of that body. The resignation was signed by: Raymond G. Ford, President; J. M. Dronenburg and Casper E. Cline, Vice Presidents; Lewis R. Dertzbaugh, Secretary and Treasurer; Edwin C. Markell, R. Ames Hendrickson, Holmes D. Baker, D. John Markey, and J. H. Gambrill, Jr., members of the Executive Committee.

The first meeting of the Board of Directors of the Chamber of Commerce was held at the YMCA on July 26, 1920. Officers elected were: Casper E. Cline, President; James H. Gambrill, Jr., P. A. Hauver and Mrs. W. Hayes Brown, Vice Presidents; J. M. Dronenburg, Treasurer; and Edgar H. McBride, Act-

ing Secretary, until a permanent one could be secured.

From the time of affiliation with the Chamber of Commerce of the United States to present, many of our citizens have given freely of their time, energies and talent to help build our community into one that is a highly desirable one in which to live, to raise families, to do business and to work.

This organization was honored with the election of one of its Past Presidents to the Board of Directors of the Chamber of Commerce of the United States. Elected to a two-year term (1955-56) was Mr. Elmer I. Eshleman who, to this day, holds the distinction of being the only member of our organization to have been elected to that body. He is "Number 1" for Charter No. 1!

The list of those serving in any and all capacities is endless. They are honored for their valuable contributions toward the success of this organization.

IN HONOR OF OUR PAST PRESIDENTS, 1912 THROUGH 1973

Baker, Holmes, D.—1918-19
Bowers, Charles F.—1949-50
Bowlus, E. Robert—1970
Bush, Sr., Francis W.—1967
Callan, Jr., G. Bernard—1971
Cline, Casper E.—1920
Cramer, Noah E.—1916-17
Daugherty, Edward J.—1972-73
Dronenburg, J. M.—1914-15
Eshleman, Elmer I.—1946-47
Fanos, Nicholas G.—1962
Ford, Raymond G.—1920
Freeman, James W.—1963
Gallup, Girard—1935
Garber, Glenn O.—1927
Grove, James H.—1959-60
Hardy, William E.—1952
Hartmann, Edward C.—1951
Hendrickson, R. Ames—1924-26
Hooper, J. Harold—1964
Keller, Lemuel D.—1958
Kline, Joseph M.—1961
Kolb, Jesse W.—1935
Markey, D. John—1912, 1921-23
Morgan, John W.—1965
Mottet, S. Lewis—1913
Offutt, W. Jerome—1966
Payne, Paul I.—1929-30
Rice, Donald B.—1956-57
Roney, Clyde M.—1954-55
Sanner, Charles S. V.—1963
Seeger, Charles F.—1931
Simmons, Richard F.—1932-34
Taylor, Charles K.—1948
Trubac, Charles M.—1969
Wilson, Louis L.—1928
Wolfe, R. Brad—1936-45

OFFICERS AND DIRECTORS 1973

Edward J. Daugherty, President
Gilbert P. Bohn, Vice President
Donald C. Linton, Vice President
William F. Moran, Jr., Vice President
Kenneth E. Fogle, Treasurer
Richard D. Hammond, Executive President
Louie J. Brosius
G. Bernard Callan, Jr.
William L. Haugh, Jr.
Robert E. Haynes
Robert G. Hooper
Noah E. Kefauver, Jr.
William G. Linehan
George H. Littrell
Frank R. Martin
Donald B. Rice
Arthur J. Reilly
Charles A. Schroer
F. L. Silbernagel
Ralph Stottliemyer

1974

Donald C. Linton, President
William L. Haugh, Jr. Vice President
William G. Linehan, Vice President

F. L. Silbernagel, Vice President.
Kenneth E. Fogle, Treasurer
Gilbert P. Bohn
David E. Bork
Louie J. Brosius
Edward J. Daugherty
Brooks R. Edwards
George B. Gernand
Robert G. Hooper
Lawrence W. Johnson
Noah E. Kefauver, Jr.
Robert C. Lindquist
William Parkins
Donald B. Rice
Arthur J. Reilly
Dr. Alfred Thackston

SOYBEANS COME TO THE MEAT MARKET

Mr. HUMPHREY. Mr. President, in view of our present meat shortage and further indications that meat prices will be rising substantially in the future, I would like to bring to the attention of the Congress an outstanding article by Daniel S. Greenberg entitled, "Slaughterhouse Zero."

In a highly informative manner, Mr. Greenberg points out that the use of soybean extract as a meat extender is sweeping the country's supermarkets. According to Mr. Greenberg, sales this year of the "extended" product are estimated at 100 million pounds, but government projections for the market run as high as 3.7 billion pounds in 1980.

From all indications, the soybean extract industry has clearly offered the "red meat" industry ample competition in the areas of taste, cost, and nutrition. In addition to being considerably cheaper, the extended meat is cholesterol-free and comes close to equalling the protein content found in real meat. And according to Mr. Greenberg, who sampled many of the "extended" products at a General Mills test kitchen, the "ham chunks" were—to my astonishment—indistinguishable from the animal-grown version.

Mr. Greenberg also pointed out that the major companies are rapidly expanding their research programs. For instance, Miles Laboratories raised its research budget from \$1 million to \$3 million in a year or two to do further soybean research.

Mr. President, I ask unanimous consent that this article be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

[From Harper's magazine, November 1973]
SLAUGHTERHOUSE ZERO: HOW SOYBEAN SELLERS
PLAN TO TAKE THE ANIMAL OUT OF
MEAT

(By Daniel S. Greenberg)

Among some dozen major firms in America's vast culinary-industrial complex, the rise of simulated meats is regarded as the biggest opportunity for the triumph of an ersatz product since margarine took over two-thirds of the nation's butter trays. Already, by employing new and revived technologies for creating meat-like texture and tenderness in extracts of the celebrated soybean, the companies are bypassing slow-

growing meat on the hoof. On fast-moving production lines, they are manufacturing credible and edible highly nutritious "engineered" simulations of ham, chicken, beef chunks, pork sausage, bacon bits, hamburger, and other products. The flavors are wholly man-made or are extracted from the real thing.

The present-day consumption of these products—which bear the unpalatable generic name of "textured vegetable protein"—is still relatively small. But no longer are sales concentrated in health food stores, where the stuff attracted an initial following. Hundreds of supermarket throughout the country are now selling ground meat "extended" approximately 25 percent with textured vegetable protein. The extended product is supposed to be clearly labeled as such, and that generally seems to be the case, but the opportunities for deception are obviously inviting. Numerous regional hamburger chains now serve mass-produced "extended" hamburger patties, and all-vegetable simulations of breakfast sausage and patties are routinely available in supermarkets. Finally, the institutional market—factory cafeterias, hospitals, schools, and so forth—is slowly yielding to the use of simulated ham and chicken chunks that defy detection. Figures are closely held by the manufacturers, but sales curves are reported to be sharply upward.

Aided by food prices that are dislodging shoppers from deeply set habits, and by popular concern over cholesterol (which is abundant in red meat but absent from the protein-rich soybean), big-league companies like General Mills and Miles Laboratories are selling these new products in big and ever-growing quantities. Sales this year are estimated at 100 million pounds; government projections for the market run as high as 3.7 billion pounds in 1980. (The latter figure is about one-fifth of the current annual consumption of ground meat in all forms—from hamburger to chili.)

All this arises from new techniques that give the new soyfoods a meaty texture. The process starts with the soybean, of which American farmers will produce some 1.5 billion bushels this year. Most of this output is put through giant presses to squeeze out oil for margarine, shortening, paint, and other products. What's left behind is soybean meal of approximately 50 percent protein content: golden stuff for animal feed, since protein is the essential ingredient for producing meat on the hoof, and the soybean contains more of it than any other high-volume crop. Soybean meal can also be processed for direct human consumption. Asians have been doing this for years.

However, in the bygone era of relatively cheap and plentiful meat, soy preparations fared poorly in penetrating the American diet, outside of their use as invisible protein "fortifiers" for pasta products. Efforts to expand the use of this cheap source of protein were also thwarted by soy flour's tendency to become a soggy, non-rising mush when moistened. What was needed to make it conform to traditional American food preferences was some means of giving it "chew."

Research on the texturizing process began in the 1930s, when the elder Henry Ford became fascinated with the soybean and assigned a team of researchers to transform it into products ranging from fenders to upholstery material. Following laboratory successes that were not economical enough for the production line, the team eventually split up, but two of the researchers, Robert A. Boyer and William T. Atkinson, maintained an interest in rendering the soybean palatable to American tastes. In 1954, Boyer patented a process for isolating protein from soybean meal and spinning it into resilient

threads that could be fabricated into simulated meat products, known in the trade as "analogs." In other words, they look and taste like the real thing. The process, however, was relatively expensive, and beyond the vegetarian market there was little demand for these simulations.

The real break came in 1970, when Atkinson patented a cheap and comparatively simple process for imparting "chew" to soybean flour by moistening it into a "plasticized" mass, bringing it to a high temperature, and rapidly forcing it through perforated dies into a chamber of lower temperature and pressure. The result is a neutral-tasting granular material of any desired size and shape, depending on the dies, which contains about five percent moisture. When these granules are mixed with water, they retain their structural integrity, and in feel and texture resemble moist bits of hamburger. Rather than being analogs of whole products, they are employed as "extenders"—i.e., they're mixed in with hamburger or other ground meat preparations and they soak up the flavor of the surrounding material.

The product is close to meat in protein quality, the main deficiency being one amino acid, methionine, which, after long supplication from the manufacturers, was recently certified for addition by the Food and Drug Administration. Another difference is that, while the product is fat-free, and therefore cholesterol-free, it also contains 31 percent carbohydrates. Meat has none. The manufacturers point out that the carbohydrates reaching the consumer are relatively small in amount, since the end product must be heavily diluted with water for use and is usually mixed with two parts of real meat to make a table-ready preparation. The analogs of real meat are far richer in protein than the extenders and are relatively low in carbohydrates.

The arithmetic of producing meat on the hoof or "meat" in the factory is simple. Feed a steer on the meal extracted from the 1440 pounds of soybeans yielded by the average acre and you'll end up with roughly 58 pounds of protein. Process that same soybean meal into textured vegetable protein and the result is approximately 500 pounds of material that in laboratory and feeding tests approximates the protein content of meat. As for price, it turns out to be almost dirt cheap for extenders. The factory price has been about 40 cents a pound in recent months, but to make the material usable for extending other foods, each pound must first be moistened with two pounds of water, which brings the cost down to about 13 or 14 cents a pound. Even as the price of soybeans goes higher, the price of textured vegetable protein necessarily remains substantially below the price of meat for the simple reason that it takes a lot more soybeans to make meat than it takes to make textured vegetable protein.

While a number of consumer groups and public-nutrition officials are skeptically eyeing what they suspect may be still another industrial raid on the nutritional welfare and pocketbooks of the American public, the firms involved are exuding both economic optimism and nutritional righteousness. "Margarine was the last big one to invade a national market," explained Cy L. Ducharme, a General Mills executive. "Now we're next," he said, motioning to a platter of "ham" and "chicken" chunks that had never resonated to an oink or cackle. "Nutritionally, it's fine, too, since we take the position that if it's a replacement, it must be the equivalent of the real thing"—a claim that is a matter of some dispute.

Dr. Michael F. Jacobson, a microbiologist from MIT who is co-director of the Washing-

ton-based Center for Science in the Public Interest, questions the need for all the factory processes: "Why don't the concerned companies and governmental agencies tell people about tempting sauces and recipes that allow [natural] soybeans to be made part of delicious meals?" The answer, says Dr. Jacobson, is that "the companies are salivating at the prospects of enormous profits that can be reaped from fabricated foods."

Opposition has also been expressed by the Bureau of Nutrition of the New York City Department of Health, whose director, Catherine Cowell, stated last May in a letter to the U.S. Department of Agriculture: "Since both textured vegetable protein and enriched macaroni products do not have a balance of the known essential amino acids, these products would not contribute toward efficient utilization of essential nutrients that growing children need to meet their increased demands."

In response to these criticisms, the industry replies that experience demonstrates that Americans are unresponsive to natural soybeans and that with the amino acid methionine now certified by the FDA for addition to textured vegetable protein, the product is nutritionally comparable to meat. While consumer groups have not yet had time to evaluate these claims fully, the industry's arguments have been supported by a number of scientists in the field. Dr. Jean Mayor, the well-known Harvard nutritionist, acknowledged that soybean proteins are nutritionally inferior to animal proteins in a pure scientific sense, but his conclusion appears favorable to the simulated products: "In actual practice, the textured vegetable protein is used in a mixture that has 70 percent meat, fish, or poultry. When you put the various proteins together, the whole is nutritionally better than the sum of its parts. Proteins have a way of 'boosting' each other when you combine them in the right way." Dr. Aaron M. Altschul, head of the nutrition program at the Georgetown University School of Medicine, is more outspoken: "The ability to produce texture out of soy flour will probably rank with the invention of bread as one of the truly great inventions of food. It is possible to allow people the enjoyment they expect from meat-like compounds and yet avoid the excesses in calories, fat, and a high proportion of saturated fat that ordinarily come from such consumption."

Nutrition is one thing, but taste is another, and the companies know that they must at least win the battle of the palate. While it is doubtful that three-star pantries are about to be invaded by textured vegetable protein, many of the products I sampled could easily slip into the typical American diet without much—if any—notice.

The General Mills test kitchen served us a long succession of dishes that were described as containing the company's own "extenders," plus several with ham and chicken analogs, and a few "controls" made wholly of the real stuff. Unsauces, and thawed directly from the cartons in which they come frozen, the "ham" chunks were—to my astonishment—indistinguishable from the animal-grown version. They were chewy, moist, and perfectly ham-like in flavor. Mixed in with cheese and noodles, however, they seemed a bit watery, a conclusion that my fellow diner, a General Mills executive, said he found hard to understand. But when I asked the cook whether the "ham" was inclined to pick up excessive moisture, he replied, "Yeah, that's a problem we haven't licked yet." His superior emitted a slight groan. The unsauces "chicken" was slightly less credible than the "ham"—it seemed to be a bit pulpy than the barnyard variety. But mixed into "chicken" chow mein, it was indistinguishable from the real thing.

The dishes presented as real tuna salad and extended tuna salad—the latter containing about 30 percent textured vegetable protein—

defied my telling them apart, as was the case with ham and "ham" salad.

As for hamburgers, two platters were presented, one described as pure ground meat, the other as pure ground meat extended 30 percent. I got the impression that the extended hamburgers tasted a bit grainy, but I wasn't certain. In any case, the two became indistinguishable when covered with a thick "mushroom" sauce containing, I was later told, manmade "mushrooms."

In the test kitchens of Archer Daniels Midland, another pioneering firm in textured foods, my impressions of the ground meat preparations were identical to those I got at General Mills. ADM, however, is venturing beyond the hamburger market. Its subsidiary, Gooch Foods, Inc., of Lincoln, Nebraska, is marketing "Noodles Stroganoff with Beef-flavored Vegetable Protein Chunks," as well as other dishes containing simulated beef. The "beef" pieces were small but could easily have passed for overcooked, heavily sauced bits of meat. (Big chunks of "beef" turn out to be something of a problem for the simulated "meat" makers. Requesting a sample of a big chunk, I was presented with something that looked and tasted like a mahogany-colored marshmallow that had got mixed into last week's beef stew. My ensuing grimace brought the explanation that it was an "experimental" model that had been in a can for three years.)

Given the variety of flavors and textures employed by the breakfast sausage industry, Miles Laboratories' "Breakfast Links" could probably pass muster at any roadside diner. In fact, they tasted quite good, as did the "sausage" patties. The ham analogs, sold under the name of "Breakfast Slices," gave the impression of something that was trying hard to resemble ham but wasn't quite making it. Nevertheless, they were extremely tasty, and I downed more than a sample slice simply because I liked them.

The industry is clearly plugging away on all its problems—taste, cost, nutrition, government regulations. Though predictions of factory-made, mile-long "beefsteaks" turn out to have been no more than technological braggadocio, the industry has come much further in making and selling textured meat substitutes than most people realize. In February 1971, after years of badgering by the industry, the Food and Nutrition Service of the U.S. Agriculture Department finally sanctioned the use of extenders for the meat portion of the school diet to a maximum of 30 percent. The enabling document—FNS Notice 219—is generally regarded as the Magna Carta of textured vegetable protein. During the first year of certification, the schools used 23 million pounds of the stuff; this year they're up to 40 million pounds, and with meat prices soaring, no one thinks it unreasonable to expect at least a doubling of that amount in the next year or two.

"Now we've got a whole generation coming through the school lunch program and experiencing this product," said General Mills' Ducharme, who directs the company's commercial protein operations. "It was 219," he said, "that really put this on the map."

Ducharme noted that the Red Owl supermarket chain, some 130 stores in the Midwest, had recently introduced ground meat extended 25 percent with textured vegetable protein, labeled "Juicy Blend II" to conform with a Minnesota ban on using "burger" for extended products. It sells at about 20 cents a pound below the undiluted version, and is said to be outselling the all-meat counterpart by three and four to one. "Red Owl," said Ducharme, "was courageous to try this. There is nothing more sacred to a supermarket manager than the red-meat counter. People relate to supermarkets through the red-meat counter, and most managers would rather have you fool around with their wives than do anything that might hurt the image of the red-meat counter. But now we've got the stuff in there, side by side with the regu-

lar ground meat, and it's outselling the ground meat."

If you eat in a company cafeteria, there is more than a slight chance that you've encountered simulated ham or chicken in heavily sauced dishes. General Mills is "spinning" ham and chicken analogs for the institutional market at a Cedar Rapids, Iowa, plant and is selling them frozen and diced in five-pound cartons, six to a case, waste-free, in ready-to-use form. The price, 70 to 75 cents a pound, is extremely appealing to purveyors of low-price meals.

Miles Laboratories, best known for Alka-Seltzer, is pursuing the general market under its Morningstar Farms brand names. "What we're aiming for with Morningstar is the general grocery trade," said Miles' president, George Orr. "We want people to like these products enough to eat them in preference to other things. We'll make it the Alka-Seltzer of the food business," he predicted—a metaphor that made his public-relations assistant wince.

Miles' Morningstar lineup currently includes analogs of sausage links, sausage patties, and thinly sliced ham, all of which, after extensive market testing, are available in the Southeast and a few other places, with marketing scheduled to expand as production increases. Like all analogs, they're just as perishable as real meat, and so they're marketed in frozen form to cut down the chance of spoilage. The label on the package says the "sausages" are free of cholesterol, whereas the amount in two real pork sausages of equivalent weight is listed at 38 milligrams. The calorie count in two of the analog sausages is listed at 175, compared with 260 for pork sausages. The protein content of the analogs is rated at 10.5 milligrams, compared with 9.8 for the real thing.

These breakfast "meats" currently cost about the same as the foods they simulate, but Miles executives say prices should come down when the production lines are automated. A sales advantage is now sought in the proclamation of "No cholesterol, no animal fat. And for those who seek to harmonize religious dietary laws with a liking for 'sausage-like' or 'ham-like' flavor, there's a 'K' on the packages, signifying 'kosher.'"

Meanwhile, at Archer Daniels Midland, in Decatur, Illinois, "soy capital of the world," Richard Burket, president of protein specialties, looks back on recent meat boycotts and rising prices "as the best thing that ever happened to us." ADM, one of the giants of the soybean processing industry, holds Atkinson's patent for textured vegetable protein, as well as the trademark "TVP." ADM is solidly booked up for every granule of the 2,000 tons a month coming from its own plant and is expanding facilities to raise production to 4,000 tons a month. "We could sell that amount right now," Burket said. "You'd be surprised at how much of this stuff is going into the hamburger business." He noted, however, that as far as he knew, no manufacturer had yet penetrated beyond regional hamburger chains. "People have approached McDonald's," he said, "but they've made it on their 'pure beef' reputation and they're not interested. But if they ever make the move, then the sky's the limit for TVP."

Perhaps the biggest problem the manufacturers have faced since rising meat prices opened the market for them involves legalities of labeling, which accounts for the early concentration on the institutional market, where the ultimate consumer never sees the label. But even that problem has been tossed aside by the FDA, which recently responded to the industry's appeals by rewriting the rules governing the use of the word "imitation" in a fashion reminiscent of Humpty Dumpty's dictum, "When I use a word, it means just what I choose it to mean—neither more nor less." The old rules specified that "A food shall be deemed to be misbranded" if it is an "imitation" of another

food and does not bear the word "imitation" on the label. The new rules simply say that "nutritional inferiority" shall be the only criterion for evaluating the difference between reality and verisimilitude. The man-made version, if it's nutritionally equal, need not bear the pejorative "imitation," though it may not be labeled as the real thing either. What's needed is some sort of madeup name, such as Miles employs when it calls its sausage limitations "Breakfast links; Sausage-like flavor; Textured protein links."

State and local authorities are similarly reluctant to allow the nomenclature of the real stuff to be applied to simulated or extended products, and the result is a plethora of names that come close to hamburger but semantically shy off. Thus, in El Paso, it's Pattl-Mix; in Colorado, Sooper Blend; in Tucson, Better Burger; in Virginia, Protein Plus; in Albany, Blend-O-Beef.

What next for textured vegetable protein's invasion of the meat market? The answer is that the major companies are rapidly expanding their research programs. Miles raised its soybean research budget from about \$1 million to \$3 million in a year or two, and General Mills plans to double its present expenditure of about \$1 million a year. At General Mills, they're talking about whole shrimp and scallop analogs "within five years." And bacon, now amounting to about 1.5 billion pounds a year from the on-the-hoof variety, is also being looked into.

Further down the research trail are more exotic projects. Dr. John Luck, who directs a staff of 280 researchers at General Mills' Minneapolis research staff, noted simply that "we give vegetable protein a very high priority and we're expanding our research program." Toward what goals? "Well," he explained, "you could take scrap meat that now goes into sausage, and you could mix it with vegetable protein and texturize the mix into, let's say, sandwich steaks."

What about factory-made "beefsteaks"? "Oh," said Dr. Luck, "there was some interest in that years ago, but we're a long way off. Too difficult a problem with what we know now."

Whatever the consequences for our stomachs or our taste buds, there seems to be little reason to doubt the determination of the plucky food companies. The transformation of food has a momentum of its own, striving for every possibility. As Miles board chairman Walter A. Compton puts it: "If you can do it in a cow's stomach, there's no reason you can't do it in a factory."

EFFECT OF THE ENERGY CRISIS ON THE ECONOMY OF MARYLAND

Mr. BEALL. Mr. President, on December 27, 1973, my distinguished colleague from Maryland (Mr. MATHIAS) and I conducted hearings in Baltimore on the effect of the energy crisis on Maryland and its citizens.

I ask unanimous consent that the statement of the Honorable Joseph G. Anastasi, secretary of the Department of Economic and Community Development for the State of Maryland, which was presented by Mr. John Nelson, director of tourism for the department, be printed in the RECORD. I believe my colleagues will find Secretary Anastasi's comments most informative and valuable.

There being no objection, the statement was ordered to be printed in the RECORD, as follows:

STATEMENT BY JOSEPH G. ANASTASI, SECRETARY STATE OF MARYLAND, DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
Mr. Chairman: The interest and concern

of Maryland's two senators in the impact of the national energy crisis on the State of Maryland is greatly appreciated. The problem is presently one of grave significance to the State, both in terms of Maryland's economy and its standard of living.

I very much regret that I cannot personally attend today's hearing on this important issue due to unavoidable prior commitments. In my stead, I am directing Mr. John Nelson, Director of Tourism for the Department of Economic and Community Development to speak to you in my behalf. I want particularly to assure you that this Department will keep you up to date on its efforts in dealing with the crisis situation during the coming months.

At the present time, a general lack of substantive information clouds the energy picture for Maryland as it does for the nation as a whole. We do not know the character of federal policy which will evolve from the Emergency Petroleum Act of 1973. We as yet only know fragments of the Maryland problem. The Department of Economic and Community Development's Office of Business Liaison, which works to aid local residents, business and industry in obtaining appropriate State and Federal assistance, reports that, while the Maryland problem is worsening, our efforts are frustrated by the cumbersome Federal machinery. For instance, Mr. Bruce Faltenburg of the Maryland Glass Company in Baltimore reports that three appeals to the federal authorities remain unanswered even though a payroll supporting 700 employees is threatened. We are hopeful that the amended federal mandatory petroleum allocation regulations, effective December 27, will provide policy leadership, but it will take time for a direction to be established and take hold.

Because the economy and needs of Maryland are unique, we must work out our own approaches and policies for dealing with the energy shortage. We expect to have developed at least a rough research capability to support policymaking by late February, 1974. This will require our Department to consolidate a number of operations under one roof. We must locate, collect and store data on energy users and suppliers from a multitude of Federal, State and local government agencies and private sources. We must design a computerized system for quick access and analysis of the stored information. Given this capacity, we will provide Maryland policy makers with a system which can measure the economic impact of alternative policies regarding energy restrictions to classes of households, firms and industries in terms of employment, personal and corporate incomes, State and local tax revenues, and indices of health, discomfort or inconvenience impacts.

Shortages of petroleum, natural gas and electric power will probably have large direct and important secondary effects on the Maryland economy. Assessment of such secondary effects, however, requires knowledge of inter-industry relationships of the State's economy which will, in turn, necessitate a widening of the information base. While the scope of the energy problem is vast, the time-frame within which the State must initially react is short. The Department of Economic and Community Development is diverting a significant portion of its resources to energy studies, in an effort to create a quick response capability in analytical support of the State's policy formulation. Even in this very early stage, it is clear that, unless maximum collaboration is obtained among all the public and private institutions, progress toward an informed approach to the crisis will be frustrating and slow.

In light of the limited time and resources which Maryland and its sister states have available to meet the pressing energy research and policy problems, I urge that our senators use their influence with the Federal

Executive to insure that, to the extent feasible, the federal government attains and passes on the states information and analytical conclusions which otherwise they would have to develop individually. The nation cannot afford, at this juncture to have fifty states performing research and analysis on the same problems of energy restriction impacts on user categories or energy conservation methods.

EDITORIAL PUBLISHED IN NATION'S BUSINESS ENTITLED "OUCH"

Mr. THURMOND. Mr. President, the February 1974, issue of the magazine Nation's Business, contains an editorial which is very brief, but which contains a message that we all should heed. The editorial is entitled "Ouch!" and I would like to quote it in full.

OUCH!

In all the years between the founding of our republic and the middle of World War II, federal government spending totaled about \$300 billion.

The budget for the next fiscal year proposes \$300 billion for that single year.

Does that make sense to you?

If it doesn't, let your Senators and Congressmen know you want spending brought under control.

Mr. President, I can state without reservation that I want the Federal budget brought under control. Fiscal irresponsibility simply must stop, and we in the Congress are the ones who can stop it. I sincerely urge all of my colleagues to listen to this editorial and to keep it firmly in mind when the appropriations bills are again considered in the Senate.

FORD'S THEATER—A BEAUTIFUL AND EXCITING NATIONAL ARTS FACILITY

Mr. HUMPHREY. Mr. President, Abraham Lincoln once said:

Some think I do wrong to go to the opera and the theatre; but it rests me. I love to be alone, and yet to be with people. A hearty laugh relieves me; and I seem better able after it to bear my cross.

These words of President Lincoln eloquently explain man's need for cultural sustenance. Today, our leaders and our people, beset as they are by endless problems, also need a resting place—a spot where the soul and mind can be refreshed and the spirit renewed.

President John F. Kennedy spoke of a connection, hard to explain logically but easy to feel, between achievement in public life and progress in the arts. He said:

I look forward to an America which will steadily raise the standards of artistic accomplishment and which will steadily enlarge cultural opportunities for all of our citizens.

Both of these great and tragic Americans urged us not to forget the passion and pride we can feel through an appreciation of our cultural heritage. They shared a common concern and appreciation for the performing arts and actively promoted their proliferation as a means of appreciating and preserving our national heritage while we also give our people an opportunity to understand and appreciate man's ascent to our present civilization.

It, therefore, seems most appropriate

that both Presidents Lincoln and Kennedy, whose burdens of office were eased by an occasional escape into the performing arts, are memorialized by thriving performing arts programs.

The success of the recently established Kennedy Center for the Performing Arts, under the leadership of Roger L. Stevens, has done much to realize President Kennedy's desire to enlarge cultural opportunities for our citizens. The Kennedy Center has afforded the American public an opportunity to enjoy superior theater, opera and music.

President Lincoln knew well the charm and beauty of another great theater—Ford's Theater. He attended perhaps a dozen performances at Ford's during his 4 years as President.

In light of his great love for the performing arts, it is a tragic irony that the fact of his assassination at the theater provoked an attitude of hate toward the very thing that he valued so highly. In the aftermath of Lincoln's assassination at Ford's, actors were stoned in the streets and theaters were closed all over America. Secretary of War Edwin Stanton ordered Ford's Theater permanently closed, its beautiful interior gutted, and for more than 100 years it stood as a bleak reminder of the tragedy brought on by the act of a madman.

No small part of the tragedy was that Abraham Lincoln's humanistic involvement with the performing arts was all but forgotten. And perhaps it would have remained so but for the dogged perseverance of two quite dissimilar but both extraordinary people.

One is a Member of this body—Senator MILTON YOUNG, whose persistent efforts to have Ford's Theatre reconstructed to reflect the beauty and elegance it enjoyed in 1865 spanned some 15 years. Year after year Senator YOUNG made his appeal for restoration of this beautiful building and slowly but surely he lined up the support for its eventual reconstruction.

During those early years Senator YOUNG conceived of the restoration as a museum project. He wanted the theatre to look as it did in 1865 so that when visitors came from all over the world they would see a national historic site worthy of the name. It was midway in the planning for this museum that a meeting took place which altered this concept.

Frankie Hewitt, an energetic, intelligent, dynamic and beautiful woman, whose own life of dedication to bettering the lot of mankind is not unlike that of President Lincoln, ran into an old acquaintance at the theatre in New York one evening in 1965. He was then Secretary of the Interior Stewart Udall, under whose direction the reconstruction of Ford's Theatre was about to begin.

In casual conversation about the restoration project, Frankie asked if plans were included to use it as a theatre, and was told they were not. She suggested that restoring the site of an assassination as such was akin to building a monument to a murder, and suggested, instead, that restoring it as an active theatre would make it a living memorial to a great President's love for humanity and the performing arts.

Fortunately, she found a ready ally in Secretary Udall who shared her love for the performing arts. His only question was how such a theatre program could be financed and run in a national historic site. The Government could not and should not undertake such a program directly, he felt, and he did not know if alternatives were available.

Mrs. Hewitt assured him that the theatrical community would enthusiastically support a program at Ford's, and she felt equally sure that sufficient private funds could be found to support such an undertaking. At that time, she was merely expressing an opinion, in no way expecting that almost the whole burden of making it all come true would eventually fall to her.

And so began what must seem like a lifetime of weekly commuting from her home in New York, where her husband, Don Hewitt, producer of the immensely successful CBS-TV news show, "60 Minutes" and her two children live, to Washington. She called on Senator YOUNG and found an ally; she got Mrs. Lyndon Johnson and the White House involved; she explained her idea to interested Members of Congress; she worked long and hard trying to win over a reluctant bureaucracy. And then, once the political decisions had been made, she undertook to find a theatrical producer and the private funds necessary to launch Ford's as a national theatre.

I still remember with much pleasure the night of January 30, 1968, when this beautiful restored building was unveiled for the whole world to see. As Vice President, I was one of the hosts for that evening, along with all the members of President Johnson's cabinet. Frankie Hewitt had arranged for the event to be telecast as a CBS-TV news special called "Inaugural Evening at Ford's Theatre," and she and Stewart Udall had convinced some of America's most illustrious performers to come and pay homage to President Lincoln's love for the performing arts.

America's first lady of the theater, Helen Hayes, was the first performer to set foot on Ford's stage since the assassination in 1865. She was followed that night by an all-star roster—including Henry Fonda, Robert Ryan, Andy Williams, Fredric March, and Harry Belafonte.

These stars all contributed their time and talent so that a large grant from the Lincoln National Life Insurance Co., sponsors of the television program, could be used to launch an ongoing theatrical program at Ford's.

And so, with perseverance, imagination, and a great deal of hard work, Frankie Hewitt had turned the Government around, mobilized a group of theatrical greats, and found the necessary funds from private sources to make a theater season at Ford's possible. She felt at that point that she ought to be able to withdraw and go back to her life in New York. Never expecting to actually run the theater herself, she sought out the experts—two different established theatrical producing organizations whom she hoped would build a strong professional program for Ford's.

Both failed. And again, Mrs. Hewitt had to find the money to underwrite large deficits and somehow keep the theater going. Finally, in the fall of 1971, after four generally lackluster seasons under outside producers, attendance had dropped to a dismal 35 percent of capacity and funds were drying up. Frankie decided that—in addition to raising the money—she would have to take on the job of producing a theatrical season as well. The rest is happy history.

With characteristic imagination, sensitivity and not a little courage, she began her producing career by choosing a new, partially developed all-black musical, the first show written by a young black woman named Micki Grant.

The show was "Don't Bother Me, I Can't Cope," and, of course, since its premiere at Ford's in September of 1971, it has gone on to become a major international hit. Cope has been on Broadway for nearly 2 years; it broke box office and attendance records in Los Angeles and has played to standing room only audiences in theaters across the country. It has won more than 25 major awards for excellence.

With several interesting, innovative shows in between—among them "Mother Earth, An Unpleasant Evening With H. L. Mencken," and an appearance of Hal Holbrook as "Mark Twain Tonight"—Frankie ended her first season as producer by arranging for Washington's own production of a musical called "Godspell." Her audience for that first season averaged 76 percent of capacity. What she had not anticipated was that "Godspell," alone, would be her second season. Quite literally, the people would not let "Godspell" go and so it stayed in Washington at Ford's for an unprecedented 18 months.

This season, her third as producer, Mrs. Hewitt has concentrated much of her energy and resources on finding and presenting shows which highlight the American heritage, with a special eye toward our country's bicentennial celebration. She commissioned Paul Sills to use his "Story Theater" technique to dramatize the beginnings of the American Revolution. She brought to Washington a rousing John Philip Sousa operetta, "El Capitan," which had not been professionally produced since the 1890's, and it helped many people to realize that Sousa not only was the "March King" but a many faceted and very talented writer of musical comedy as well.

"El Capitan" was followed into Ford's by George and Ira Gershwin's "Funny Face," for its first production since 1928. Again, it offered a unique slice of Americana for today's theater audience. Of course, I was particularly pleased to see the return of the "Will Rogers' U.S.A." one-man show, starring James Whitmore. It premiered at Ford's 3 years ago and, frankly, the more time that passes, the more pertinent and contemporary Will Rogers' comments become.

The rest of this year's season—"Oh, Coward!", a visit by the immensely talented City Center Acting Company and a return of the champion "Don't Bother Me, I Can't Cope"—promises to make 1973-74 at Ford's the most exciting year yet.

No theater in America is better known than Ford's and so it is important that our constituents have an opportunity to visit it as an historic site during the day, and enjoy its theatrical delights in the evening.

Mrs. Hewitt's organization provides moderately priced programs for all, as well as many thousands of low cost tickets to young people and senior citizens each year, and endeavors to arrange free programs for many inner city children who otherwise would not have the exciting experience of live theater.

One very important question is: "How does Frankie Hewitt do it?" She operates in a small theater of only 741 seats, consistently presents first class productions, and less than 9 percent of her budget comes from the Government.

One of the answers is that she runs a tight ship. Her staff is small, efficient and dedicated. Another answer is that she has been extraordinarily successful at enlisting the interest and aid of remarkable groups of people. Stars such as Andy Williams, James Stewart, Pearl Bailey, Raymond Burr, Bob Hope, Tennessee Ernie Ford, Henry Mancini, the Supremes, the Pat Boone Family, Carol Channing, Melba Moore, Charlie Pride, and Jonathan Winters all have donated their talents to make the exciting "Festival at Ford's" telecasts smashing successes.

Large corporations, such as Armco Steel, Atlantic Richfield, Occidental Petroleum, TRW, Inc., IBM, Reynolds Metals Co., Rockwell International, J. Walter Thompson, The Quaker Oats Co., Kaiser Industries, and the Western Pennsylvania National Bank have helped by making regular annual contributions.

Successive Secretaries of the Interior—first Stewart Udall, then Walter Hickel and today Rogers Morton—all have given their personal attention to this project, thanks in large measure to Frankie Hewitt's enthusiasm and perseverance. And she has successfully enlisted the aid of both the Johnson and the Nixon White House; she has assembled an impressive Board of Trustees, and very soon she will be launching a truly national membership and fund-raising campaign to assure that Ford's Theater continues to thrive as an independent, exciting, creative center for America's theater arts.

Surely, Abraham Lincoln, if he were alive today, would be first in line to help. The National Park Service, which administers Ford's, can be justifiably proud of the splendid use to which this national historic site is being put.

And I, for one, think the American people have reason to be proud of and grateful to Frankie Hewitt for sticking with it and finally realizing her dream of a beautiful, exciting, alive Ford's Theater.

ENERGY CONSERVATION AT THE SOCIAL SECURITY ADMINISTRATION

Mr. BEALL. Mr. President, all Americans, and particularly Federal employees, have been asked by the President

to conserve our Nation's valuable energy resources during the current shortage. I am most pleased that all figures indicate that conservation plans are being followed by most Americans, and that their efforts are paying major dividends in stretching our petroleum stocks.

On February 1, 1974, the Baltimore Evening Sun published an article detailing the success of the Social Security Administration in saving fuel. The SSA complex, which is located near Baltimore, has shown a 23.3 percent decrease in units of energy used to heat and cool the enormous agency. Additional gasoline savings have occurred through the use of car pools by SSA employees and reductions in the use of agency motor pool cars.

Mr. President, I commend the Social Security Administration and its employees for this significant accomplishment and ask unanimous consent that the article be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

THE FEDERAL SCENE—SSA EMPLOYEES RESPOND TO BUS, CAR POOL PLEAS

(By Anne S. Philbin)

"Take twice a day to relieve your congestion" sounds more like a cough medicine commercial than part of Social Security Administration's campaign to get more employees to take a bus or join a car pool.

The prescription must be working because latest figures show that in December, 1973, about 30 per cent more employees were riding the bus and 21 per cent more were in car pools than in December, 1972.

SSA and other federal agencies initiated their energy conservation programs in July after President Nixon's order to cut consumption by 7 per cent before June 30, 1974.

HEATING, COOLING DECREASE

Energy conservation figures for SSA were compiled for the period July through December, 1973, and compared with the same period in 1972.

As a result of actions taken in many areas, SSA showed a 23.3 per cent decrease in units of energy used to heat or cool buildings in the Woodlawn complex.

Actions include daytime cleaning, temperature ranges from 65 to 68 degrees for heating and 80 to 82 degrees for air-conditioning, using window blinds and turning off all heating systems except window units at night and on weekends in unoccupied areas.

LIGHTING DECREASE

In the last six months of 1972 energy used for lighting decreased from 7.8 per cent to 21.5 per cent. September's reduction was the greatest, 23.4 per cent.

To accomplish savings in lighting, SSA rearranged shift parking and turned lights off on unused parking lots, and turned off lights at work sites at the end of each shift except for overtime and night shift areas.

Less lighting is also being used in corridors, lobbies and restrooms, and cleaning is done in daylight hours.

MILEAGE CUT

Mileage of motor pool sedans and station wagons has been cut from 11 per cent in July to 42.6 per cent in December, 1973, over the same 1972 period.

Presently, SSA is computerizing the results of a survey of Woodlawn employees to help match those wishing to participate in a car pool. Those living within a specific grid area will be mailed a computer printout showing other SSA employees living within the same grid.

After that, it's up to employees to get together to form car pools. The computerized

system is replacing a 10-year-old manual system, which has had its difficulties.

OTHER STEPS

SSA also plans to minimize evening overtime, reschedule night classes and night shifts, shut down ventilation equipment when buildings are unoccupied and arrange for more buses from Glen Burnie, Columbia and Ellicott City. A Catonsville-Woodlawn bus schedule went into effect this week.

Established work schedules of employees have also been liberalized and employees are allowed a 15-30 minute variation to accommodate those on different shifts who use the same car pool.

Those now riding in the approximately 1,151 car pools carrying a minimum of three persons to work include Arthur Hess, deputy SSA commissioner.

WE CANNOT TAKE FOOD FOR GRANTED ANY MORE

Mr. HUMPHREY. Mr. President, recently I read an excellent article by Laurence A. Mayer, entitled "We Can't Take Food for Granted Any More," which explores both the short- and long-term implications of rising world demand for food and with it, substantially higher food costs.

The article discusses many of the principal findings of 2 days of Senate hearings on the "World Food Situation" held by Senator HUDDLESTON and myself on October 17 and 18, 1973.

According to Mr. Mayer, there are several major reasons to be concerned about recent price pressures. First, nations are becoming increasingly more dependent on others for both food and fertilizer. Second, developing nations hardly produce enough food to feed their growing populations. Third, Mr. Mayer states that if harvests continue to be as poor in future years as they proved to be in 1973, reserve stocks of the United States and Canada will be totally inadequate to meet world food needs.

Mr. Mayer offers several important suggestions regarding how we and other nations might cope with the current food shortage, specifically the meat, wheat, and rice scarcities. These suggestions include: Using soybean products as a meat extender, extending the research in agriculture, developing the breeding and cultivation of fish, placing greater emphasis on tropical agriculture, and speeding the growth and quality of various forms of plant life.

But beyond these suggestions, Mayer concludes that with the demand-supply relationship as it is today, the price of food will go up—perhaps substantially.

Mr. President, the findings of this important article reinforce in my mind the urgent need to provide American consumers, and those throughout the world, with a minimum level of food security. Toward this end, a strategic domestic reserve of the most important grains, as I have proposed in S. 2005, as amended, must be created. The United States must also take the lead in the cooperative creation of a world food reserve system.

Mr. President, because of the importance of this subject, I ask unanimous consent that Mr. Mayer's article be printed in the RECORD.

There being no objection, the article

was ordered to be printed in the RECORD, as follows:

WE CANNOT TAKE FOOD FOR GRANTED ANYMORE

(By Lawrence A. Mayer)

The idea of a bounteous American food supply, which goes back to the first Thanksgiving Day, some three hundred and fifty years ago, has rather suddenly been called into question. In the past year the U.S. has had shortages of many foods—a fact evidenced by soaring prices. Retail food prices last summer were 20 percent above those of a year earlier; beef alone was up 25 percent.

In the years when they took cheap food for granted, Americans could also assume that the trend of food spending could be pretty much taken for granted by anyone making general economic forecasts. Housing, capital goods, defense, inventories—these were the dynamic sectors of the economy, where sizable swings had major impacts on economic growth. But food spending, whose magnitude is about equal to spending on capital goods (both were around \$140 billion last year), could nevertheless be viewed as a "given"; its total in any one year could be predicted fairly readily, as could the proportion of total consumer income spent on food. (The proportion declined steadily, from around 20 percent in 1960 to around 16 percent nowadays.)

The sudden emergence of food prices as a dynamic element in the economy hit a lot of businessmen hard. For companies like Avon Products and Simplicity Pattern, both of which reported that sales were running below expectations because consumers were straining to pay those higher food prices, the higher prices were obviously jolting. They also jolted our eminent economists, whose forecasts of the inflation rate last year were almost uniformly wrong.

And the full impact of the higher prices may not have been felt yet. William Feilner, a member of the Council of Economic Advisers, observed recently that workers' real hourly earnings would have risen substantially last year but for the higher food prices; as it was, price increases offset all of the effect of wage increases. It is now generally believed that union wage demands become explosive following any prolonged period in which there are no real income gains. Hence we may well find this year that, after a period in which the unions have been rather moderate in their demands, those higher food prices will propel us into still another round of inflationary wage settlements.

The short-term outlook for U.S. food prices is not bad. Our prices are affected by worldwide currents of supply and demand, and right now world food supplies are increasing again. In general, crops have been good recently. The Russians claim to have harvested a record amount of grains, and the Chinese seem to be doing well too. Wheat prices in the next year or two could drop quite a way from the recent price of well above \$5 per bushel, as the price of wheat futures suggests.

PLENTY OF REASONS TO BE CONCERNED

Any yet a question remains about the long-term implications of last year's explosion in food prices. It is possible that the soaring prices were the result of a number of special, nonrecurring circumstances; it is also possible that those prices were the harbinger of a new era. It is at least clear that the U.S., which is by a wide margin the major food exporter, cannot be insulated from price pressures in other countries. In a world where many nations are increasingly dependent on others for food, where the less developed nations barely produce enough food to keep pace with population growth, and where reserve stocks will be inadequate if harvests turn poor again, there are plenty of reasons to be concerned about price pressures.

Indeed, there are some pessimists around who are concerned about the danger of famines. Lester R. Brown, a senior fellow of the Overseas Development Council—a group funded by several U.S. foundations and companies to study problems in the less developed countries—is one of the most vociferous of the pessimists. Brown cites a number of reasons for believing that, within a few years, the growth of population will outstrip that of food, and that chronic malnutrition or hunger will then give way to outright starvation in many countries. He believes, for example, that food production will be limited by inadequate supplies of water, deteriorating soil conditions, floods caused by man-made alterations of nature, and long bouts of bad weather (for a report on why the weather has been getting worse, see page 90 of this issue).

Those who argue, hopefully, that last year's price rises were a result of nonrecurring special events can certainly point to some remarkable events. Some of them trace back to 1972, when total world food production declined by about 1 percent, the first dip since World War II. With total population growing by 2 percent, the decline meant a shocking 3 percent decline in food supplies per capita.

The trouble seems to have started with the poor 1972 rice crop. Rice production was off by 5 percent, world rice exports fell by 12 percent, and by late 1973 the world price of rice was up about 150 percent. The shortfalls in the supply of rice shifted some demand to wheat—but wheat too came up short in many countries.

It is a fact of the world's agricultural economy that a relatively small change in output and trade can generate a relatively large change in price. The reason is that a shortfall in production means that additional supplies must come from reserves, and world reserves for most foods are badly distributed; grains constitute the basic world food supplies, and the U.S. and Canada have traditionally held by far the largest stockpiles.

ENOUGH WHEAT FOR 4 WEEKS

The recent history of wheat is a prime illustration of the relationships between output and price changes. World output dropped 3 percent in 1972. Exports, principally from the U.S., increased about 30 percent to make up for the shortfall. The powerful export demand for wheat depleted existing stockpiles, which declined 40 percent worldwide. As this drawdown in stocks became apparent, the price of wheat in world markets started to soar. So thin was the supply in 1973, according to a report by the Food and Agricultural Organization of the United Nations, that wheat reserves in exporting countries were down to a level representing only about four weeks of world consumption.

Another piece of bad luck in both 1972 and 1973 was the well-publicized failure of the anchovy catch off the coast of Peru. The reduction of the anchovy supply put pressure on soybeans, which are also an important animal feed. The going price of a bushel of soybeans in the U.S. rose from less than \$3 in late 1971 to a peak of \$12.27 in June, 1973.

The weather was also a problem in 1972-73. There was a below-normal monsoon that cut India's grain crop in 1972. Last year floods wiped out harvests in Pakistan. And south of the Sahara, the countries in what is known as the Sahelian Belt—Mauritania, Mali, Chad, Senegal, Upper Volta, and Niger—suffered their sixth consecutive year of drought, which has severely affected both cattle and crops.

All these events contributed to higher food prices by reducing supply; in addition, prices were bolstered by the great worldwide economic boom, which steadily drove up demand. Meanwhile, the two devaluations of the dollar—at one point during July, 1973, its trade-weighted value was down 22.5 per-

cent from the level at the end of June 1970—made U.S. food abnormally cheap abroad, and Japan, among other nations, loaded up on U.S. supplies.

The loading-up process included a good deal of speculative buying. Don Paarlberg, the director of Agricultural Economics at the Department of Agriculture, points out that his staff's forecasting equations, which attempt to determine the price consequences of various demand-and-supply conditions, were able to account for only one-half to two-thirds of last year's sudden price rise in foods. "The rest is psychological and speculative activity and these are not in our models," says Paarlberg.

BAD LUCK WITH THE RUSSIANS

The U.S. also had some bad luck—and some bad management—in its dealings with the Soviet Union, which needed grain after the 1972 harvest came up short. The bad luck began, in a sense, with a shift in Soviet policy. When the U.S.S.R. has had poor crops in the past, it has liquidated part of its livestock herds, i.e., by feeding more meat to its citizens, it lessened the demand for grains. One trouble with this policy is that it takes years to rebuild depleted livestock herds; if the herds had been slaughtered in 1972, Soviet citizens would have had much less meat for a long time. Nowadays, however, there are intense new demands for higher standards of living in the Soviet Union, and there have been riots at food stores than run short of supplies.

In consequence, the government decided not to cut back when the 1972 grain harvest turned out to be a disaster (the official figures show a harvest of 168 million metric tons, versus 181 million a year earlier). Instead, Soviet buyers went into the world market to get wheat for their people and feed grains for the livestock. Demand from the Soviet Union accounted for a great deal of the additional grain and feed exports that hit world markets beginning in 1972.

U.S. agricultural officials did not spot this basic shift in policy very early. One reason they did not is that the Soviet buyers entered the U.S. market very adroitly—for instance, by first expressing a great interest in U.S. corn and soybeans when it was wheat that was really critical to them. As a result of this shortage, the Russians were able to pick up amazingly large quantities of grain at amazingly low prices.

All together, they committed themselves to buy nearly 20 million metric tons of grain from the U.S. This represented about 20 percent of all the grain stocks held by the U.S. as of the end of June, 1972. These massive purchases were helped along by U.S. export subsidies and by a \$750-million Export-Import Bank credit. After the effects of this buying hit the markets, prices of wheat leaped from below \$60 per metric ton to \$200 recently.

One reason the Russians were able to buy so astutely is that they were dealing with a number of individual American companies, no one of which could see the pattern of the purchases. A monopoly state trading organization (Exportkhleb) was buying in individual batches from an array of companies that were competing among themselves, and the monopoly could be a big winner if it played its cards right—which it did. The Agriculture Department had no method by which the export sales of private traders were reported to it, and so there was no intelligence system to warn that a concerted buying plan was afoot. (The department has now begun a monitoring mechanism to keep tabs on foreign grain orders, while the Russians have undertaken to give the U.S. access to reports on the state of its crops.)

It is not possible to say with certainty whether the Russians would have ended up with as much of our grain as they did if they had laid their cards on the table right at the beginning. Had they done so, of course, mar-

ket prices would have gone wild, and the U.S.S.R. might then have preferred to buy less. In addition, the Department of Agriculture might well have asked them to spread their purchases over a longer period of time.

And yet, for all the special circumstances of 1972-73, there are reasons to wonder whether the pressure for higher food prices might not emerge again—and on a permanent basis. It is certain that world demand for food is on a long-term uptrend. It is going to keep rising if only because world population is likely to grow about 2.1 percent annually—a rate that represents about 75 million people a year just now. The overall growth involves a 1.1 percent annual increase in the developed countries and 2.4 percent in the less developed world.

Furthermore, demand will grow more rapidly than population as people try to improve their diets. The FAO projects that demand will increase 1.1 percent a year faster than population in the developed countries and about 0.6 percent faster in the less developed ones.

The improvement in eating standards will be reflected powerfully in two ways. In the poorer nations the principal improvements are expected to come from adding new varieties or improved strains of cereals. In addition, people are expected to get more proteins from vegetables, including soybeans.

In the more developed countries, the improvements will involve more meat, particularly beef. U.S. consumption of meat, mainly beef, pork, poultry, and fish, is already running about 250 pounds per capita. Beef alone accounts for about 116 pounds of that amount, although last year, because of the buyers' strike and shortages during the summer, it came to only 111 pounds.*

THE LIMITS TO MEAT EATING

Americans' consumption of meat will certainly increase in the future, with the increase centered in the lower-income groups. Low-income families seem to have been making relative gains in real income recently. The number of food-stamp recipients has swelled from 3.3 million to 12.5 million in four years, and outlays for all federal food programs have climbed from \$1.1 billion to \$3.8 billion. In addition, social-security benefits have been increasing rapidly, and another 11 percent rise is scheduled to take effect by next June. If the real incomes of poorer families continue to improve, the U.S. as a whole might someday approach a kind of limit to meat consumption per person. Richard Lyng, president of the American Meat Institute, has suggested that so far as beef alone is concerned, high-income Americans may have already reached a practical upper limit at 140 to 150 pounds.

Perhaps even larger gains in meat consumption will come in Europe, Japan, and the U.S.S.R., where per capita consumption is now much lower than in the U.S. Western Europeans are apt, not only to increase their meat consumption per se, but also to shift to beef from pork and veal. Some of the effects of the broad ingoing shift to beef have already been seen in beef prices around the world. Although the sharp upward turn of beef prices last year attracted enormous attention, the fact is that they were rising steadily before then—and had doubled since 1963.

Japan's beef consumption could increase tremendously, even though virtually all of

the beef would have to be imported. (Japan doesn't have grassland on which large numbers of calves could be raised.) Right now per capita consumption of all kinds of meat in Japan is only 106 pounds; most of that is in fish, with only seven pounds in beef and veal. If the present population of Japan were to eat as much beef per capita as the present population of the U.S., current world beef slaughter would have to increase by some 20 percent.

While demand for meat will surely be rising, it is also possible to discern some trends that may ease the pressure. One important trend has to do with the expanding use of soybeans to supply proteins. Soybeans, which have long been used to feed animals, are increasingly entering the human diet directly. In the U.S., soybean products are now used in many baked foods, dessert toppings, Metrecal, and other prepared foods. There is also greater interest in the use of soybeans as meat extenders. They are used in, for example, canned chili con carne and meatballs and spaghetti. And last year, when meat prices began to soar, soybean preparations got their first big trial as additives to hamburger meat sold at meat counters. General Mills, Miles Laboratories, Cargill, Archer-Daniels-Midland, and Central Soya are among the companies that produce soya derivatives. Ralston Purina has joined with Continental Can to market a form of processed soybean called SPE-200 that takes on the taste characteristics and texture of whatever meat or fish a processor combines it with. It appears that soybean products used as meat extenders can take the place of quite a lot of meat; depending on the kind of meat involved, the derivatives can "stretch" it by 10 to 30 percent.

At present, soybean products are still insignificant in relation to all the meat in American diets. But estimates cited by Secretary of Agriculture Earl L. Butz suggest that by 1980 soybeans will be stretching all the pork and beef consumed in the U.S. by 8 to 10 percent. Obviously, the more expensive meat and fish get, the more soybean products are likely to be used for this purpose.

Meanwhile, the overall pressure of demand on food supplies would be eased by anything—including higher meat prices—that led consumers to shift from meat to cereal products. Eating meat is a very inefficient way to consume grain; so is eating dairy products and eggs. It is estimated that cattle have to take in about seven pounds of grain in order to put on one pound themselves. The ratio for hogs is about four to one, for poultry about three to one. The average American consumes about 1,600 pounds of grain a year, but he eats only 150 of those pounds in the form of bread, cereals, cake, and the like. He takes in the balance indirectly, by eating a lot of meat. (A consumer in a less developed country puts away perhaps 400 pounds of grain, most of it eaten directly.)

For all imponderables that affect the future demand for food, supply is a good deal more difficult to gauge. It can be affected, not only by economic considerations, and in several different technologies associated with food production.

The supply of beef, for example, would be enhanced considerably if other countries followed the lead of the U.S. and increased the proportion of animals brought to maturity on feedlots rather than on grazing lands; feedlot operations can speed up the growing process considerably (see "Monfort Is a 'One-Company Industry,'" *FORTUNE*, January, 1973). It would also be much more economic for Europeans to eat more beef and less veal—because the weight of the animals being slaughtered would be greater. Then there is the possibility of getting cows to give birth to more than one calf at a time. Several different research approaches are now being ex-

plored in efforts to discover a "twinning" process that will produce a litter of two calves.

Yet most of the major opportunities for expanding the supply of meat abroad present problems. Raising more cattle would create a need for a major expansion of grazing lands, and some of that land would have to be irrigated to make it usable. Large-scale feedlot operations would create air- and water-pollution problems for nearby towns. And, of course, feeding all those additional animals would put still more pressures on the supplies of soybeans and feed grains.

What about the possibility of expanding soybean supplies? It seems likely that much of the additions to world soybean output will have to come in the U.S.—but several problems are involved in increasing U.S. output. One is that any rise in our total, which is around 1.5 million bushels now, will depend mainly on increases in acreage. In the past, farmers have found more acres for soybeans by shifting out of hay or small grains. But any sizable gains in the future will probably involve diverting acreage from corn. And the trouble with that is that soybean yields are smaller than corn yields per acre and increase much more slowly. Consequently, farmers would have to see a lot more profit in soybeans than in corn. Agricultural economists calculate that in the U.S. it takes a soybean price that is three times as high as that of corn to provide the incentive to divert acreage. At year-end, the ratio was only 2.2 to 1 (and U.S. farmers have been switching back to corn).

The world's protein supplies might also be expanded significantly by increasing our fishing output. The FAO estimates that the worldwide catch could expand to 83 million metric tons by 1980, a rise of 20 percent over 1970. This supply estimate is admittedly somewhat conjectural. For one thing, it is not yet clear whether the Peruvian anchovies have been badly overfished or have simply disappeared for a while because of a shift in ocean currents. (The Peruvian catch alone constituted about 17 percent of all the fish caught in 1970.) And even apart from the sudden scarcity of anchovies, it appears that the sharp rise in the world fish catch, which went up 75 percent between 1960 and 1970, has abated.

It is conceivable that this fall-off reflects some strenuous overfishing during the late 1960's in several traditional fishing areas—in the Grand Banks of Newfoundland, for example. It is also conceivable that the lower growth rates in the early 1970's are a consequence of cooler water in northern seas, compliance with internationally agreed-upon quotas, or attempts to fish only at sustainable rates. Any of these explanations would imply difficulties about reaching that FAO level by 1980.

On the other hand, smaller catches might be offset to some extent by boosting our efforts in aquaculture—the breeding and cultivation of fish. Trout, carp, eel, and pike have long been raised in ponds, particularly in Europe. Japan and China have cultivated shellfish and mollusks as well as ordinary fish; turtle farming is flourishing in the Bahamas and elsewhere; and catfish farming has become an American specialty.

Moreover, an FAO conference reported, there are major possibilities in the extension of fishing to waters not yet fully exploited. There are also possibilities in the retention of catches now discarded as "trash fish" because of local prejudices about taste. These two approaches, combined with the fishing of previously neglected species, might yield 35 million or 45 million additional tons.

Food supplies might also be increased by the use of some interesting new techniques. One process, which involves large-scale production of single-celled organisms in petroleum-based cultures, is described in an article elsewhere in this issue (see page 96.)

*These often cited consumption figures are somewhat misleading in one respect. The beef-consumption average is calculated by dividing the weight of carcasses by the population. Subtracting the portion represented by bones, discarded fat, and other inedible parts of the carcasses, plus the portion cook but thrown away, may reduce the consumption of beef per person to something like sixty pounds rather than 116 pounds.

There is a good deal of interest right now in the use of petroleum-based urea cakes as animal feed—American cattle were fed quite a few such cakes last year because of the squeeze in soybeans. And cattle, in particular, can be nourished on their own wastes are specially processed. (The digestive system of cattle is such that many nutrients remain in the manure.)

HOW TO HELP THE PLANTS

Researchers are also working on a host of projects to speed the growth or improve the quality of various forms of plant life. There are, for example, efforts to speed up the process of photosynthesis; to produce hybrid strains without conventional bisexual pollination; to make it possible for plants to grow in saline soils (rather than to remove the salt); to grow plants hydroponically (i.e., in a liquid nutrient rather than in earth).

Some of these techniques might, in time, help the less developed as well as the affluent countries to feed themselves more adequately. The new techniques would thus supplement the most publicized agricultural development of our times, the so-called "green revolution"—the application of new seed strains and advanced methods to the growing of food crops in the less developed countries.

So far the revolution has been limited mainly to two crops, wheat and rice. But it already has some solid gains to its credit. Cultivation of the new strains helped India build up a stockpile of 4.5 million tons of wheat, a savior during recent bouts of bad weather. When the monsoon failed in 1965 and 1966, India had to import 15 million tons of wheat; after the 1972 failure, only about five million tons were needed.

Until now, the green revolution has been pretty much confined to several Asian countries, and to Mexico and Cuba. The revolution is only now getting under way in the rest of Latin America and in Africa. Because of its geographic confinement, the growth rate was slowing by 1970, i.e., the yearly increase in acreage devoted to the new seeds was down. It is possible that there has been a speedup lately; still, a return to the growth rates of the late 1960's seems unlikely.

THE POTENTIAL OF THE TROPICS

Beyond the particular techniques associated with the green revolution, there are interesting possibilities for expanding supplies of food simply by placing greater emphasis on tropical agriculture. Former Secretary of Agriculture Orville L. Freeman believes that tropical agriculture must be improved if the world is to avoid a serious food squeeze after 1976. Freeman also believes that the tropics have a tremendous productive potential. "I have been in places where test plots, with multiple crops, will produce, three, four, and five times as much as the best land in the U.S.," he observed recently. "When you have 360 days of sunshine to work in, and you know what you are doing, then new seeds, pesticides, chemicals, and fertilizers can give you an explosion of production."

Secretary Butz agrees, adding that the possibility of growing several crops a year makes the tropics "one of the great untapped agricultural areas of the world." Freeman and Butz make expansion of tropical agriculture seem like a self-evident proposition. It should be added that some scientists believe the ecological balance of tropical regions to be quite delicate, and warn that development there must be undertaken cautiously.

Aside from the tropics, how much land is available for expansion of the food supply? How much new acreage might be put to work? The statistics pertaining to this important matter are not entirely unsatisfactory, but several points are worth noting.

The total amount of land now under cultivation in the world is estimated to be about 3.8 billion acres (of which 9 percent are being farmed in the U.S.). Another 7.2

billion acres are being used for grazing. Some of this grazing land could be planted; in addition, another four billion acres or so of "virgin land" might be available.

But these "spare acres" tend not to be where they are most desperately needed. There are few in Japan, for example, where land is so scarce that to build a new golf course requires the approval of the central government. And in China, India, Pakistan, and Indonesia, which together account for more than half of the world's existing population, there is not much opportunity to bring new land under cultivation. "They have no cushion of rangeland and meadows to bring under the plow," says Professor Daniel G. Sisler of Cornell University. Sisler points out that most of the remaining open spaces are in Australia, Brazil, or Central Africa, i.e., a long way from where the food is apt to be needed most.

In addition, there are all sorts of hazards involved in putting some land under tillage. Lester Brown believes, for example, that last year's disastrous floods in Pakistan resulted in part from the earlier deforestation of mountainsides in Nepal in an effort to create more farmland.

Some additional farmland might be found in the U.S. However, the easy part of our expansion—releasing the 60 million acres set aside two years ago, when the Agriculture Department was still concerned about surpluses—has already taken place. Of the 335 million acres being planted to major crops in 1974, some 12 percent have been brought into use since 1972.

Some heavy investments would be needed in order to make more arable land available. These might in fact prove to be worthwhile for farmers if the value of their land continues to rise. (All together, the value of U.S. farm real estate is now estimated at \$310 billion, up over 300 percent from 1950. It went up 20 percent in 1973 alone). On the other hand, farmers have been borrowing heavily in order to buy land going on the market, and also to pay for new machinery; and so in some circumstances, e.g., in a period of falling prices, many of them would have difficulty making investments for terracing, irrigation, and other improvements.

SOME PROBLEMS DOWN ON THE FARM

In many ways, American farmers have the problems of American businessmen; there is a powerful demand for their output but they are short of capacity; they have heavy debt charges, have trouble getting raw materials—and now confront a new range of uncertainties and cost pressures related to energy. The principal raw-material problem these days has to do with fertilizers. Several years ago, world capacity was greatly overbuilt, and many fertilizer plants were taken out of production. Today there is a fertilizer squeeze, and there may be less available than will be needed for U.S. plantings next spring. Potash is the only major kind of fertilizer in sufficient supply. Demand for phosphates is running ahead of production, while anhydrous ammonia is particularly scarce because its manufacture requires a lot of natural gas, which is itself scarce at the moment. U.S. fertilizer prices had to be decontrolled last fall because so much of the available supply was being shipped abroad, where prices were well above the domestic ceilings. Domestic prices have since risen as much as 50 percent.

The long-run prospects for abatement of food price pressures are somewhat different from those in the short run. In the short run, we should get some abatement because harvests are generally expected to be abundant both here and abroad. World production of wheat and feed grains, which were off 2.8 percent during the last crop year, are expected to be up 9.5 percent in the present crop year. It is true that the Russians and others are still buying our grains and also true that worldwide grain stocks are low.

Still, if the harvests turn out as expected, the price pressure will be less.

But prospects further out are not so favorable. It seems certain that demand for food will continue to rise—and uncertain that supplies can keep pace. On balance, the demand-and-supply relationship makes it likely that the price of food will go up—perhaps substantially. In addition, food producers face higher costs from a number of different directions, e.g., the costs involved in giving up some efficient pesticides that create ecological damage, and these may also boost prices.

THE BIN MAY BE EMPTY

Meanwhile, it seems likely that food prices will fluctuate more from one year to another than they have in the past. In the wake of last year's farm legislation, the world can no longer expect the U.S. government to buy and accumulate excess stocks when prices fall below specific levels. Instead, U.S. farmers will be selling their output of wheat and corn in a free market (they will be reimbursed to the extent that market prices fall below minimums announced by the government). Thus the U.S. government, which has served for years as the world's principal storage bin, may no longer have immense backlogs of grain for the world to fall back on in emergencies.

Fears of excessive price fluctuations, as well as the threat of famine in some of the less developed countries, are the reasons given by Adede H. Boerma, Director-General of the FAO, in pushing for a world food-reserve plan. Most countries now agree that some such arrangement is necessary because of the change in U.S. farm policy. Boerma's idea is for each country to maintain its own stockpile of cereals. The machinery to coordinate stockpile policies, as well as the problems of managing and financing a reserve plan, will be among the matters discussed at a World Food Conference scheduled to take place in Rome next November.

The prospect of some famines in a world grown increasingly small and interdependent suggests that U.S. food prices will be affected by political decisions of a peculiarly sensitive nature. The task of those trying to project food prices may be, in the circumstances, even more difficult in the future. And food, already established as a "dynamic sector" of the U.S. economy, may become a new source of instability in the economy.

DEATH OF LARRY LEWIS

Mr. THURMOND. Mr. President, on February 1, a man whose life was, perhaps, the best example of keeping physically fit died in San Francisco, Calif., at the age of 106. His name was Larry Lewis and he had maintained a vigorous and active pace until recently.

Mr. Lewis had made exercise and fitness part of his daily routine throughout his life. Until his recent illness he jogged through Golden Gate Park for a distance of 6.7 miles every day. He could run 100 yards in a little over 17 seconds and boxed regularly in a local gymnasium.

Additionally, he walked several miles each day and, until last year, worked as a hotel banquet waiter where his job required the lifting of heavy trays.

Mr. President, in our fast-paced lives these days with the pressures of stress taking such a toll on the physical well-being of so many people, one lesson of Mr. Lewis' life is obvious. Exercise and regular physical activities are beneficial to human health.

Such vibrant health is truly one of the

blessings to mankind. However, each of us can do much to attain and keep this level of physical fitness which makes our lives more useful and meaningful.

Mr. President, at the time of Mr. Lewis' death an article, entitled "Former Circus Acrobat Larry Lewis, 106, Dies," appeared in the State newspaper of Columbia, S.C., February 3, 1974. I ask unanimous consent that this article be printed in the RECORD at the conclusion of my remarks.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

FORMER CIRCUS ACROBAT LARRY LEWIS, 106, DIES

SAN FRANCISCO.—Larry Lewis, the 106-year-old former circus acrobat and assistant to Houdini who ran 6.7 miles every day through Golden Gate Park, died Friday of cancer.

The centenarian could run 100 yards in just over 17 seconds, carry a 200-pound sack across a hotel ballroom, and he boxed every day at the Olympic Club.

Lewis, who became ill only recently, was a veritable dynamo and could outrun and outwalk men half his age.

Lewis celebrated his 102nd birthday by running 100 yards in 17.3 seconds, half a second faster than on his 101st birthday.

Dr. S. Barrie Paul, his physician, credited Lewis' health to good living habits and genetics—"the right combination of parents."

Until he "retired" at the age of 105 Lewis also walked several miles every day to his job as a hotel banquet waiter where he lifted heavy trays.

After "retirement" he took a job as goodwill ambassador for an employment agency, but continued his athletic activity without a slowdown.

Born in 1867, Lewis grew up playing with Indian children.

"A Navajo Indian, Chief Iron Shell, my grandfather, taught me the most important thing in life. He told me to never stop exercising and to try to treat everyone as you want to be treated."

When he was 15, he joined P. T. Barnum's circus as an acrobat and acrobat.

For 33 years Lewis was an assistant to the legendary magician Houdini, and until Lewis' death he delighted in amusing friends by escaping from straitjackets.

Lewis hardly had an ounce of fat on his five-foot-seven, 136-pound frame. He subsisted on a daily small portion of lean meat, steamed vegetables and three gallons of spring water. He did not drink, and he did not smoke.

"I can outrun almost anyone, and outwork them, too," he said at age 100. "That shouldn't be so remarkable. It's just that everyone else lets themselves get out of shape."

"Anybody can do what I've done," he once said.

"Nobody is too old, either. If they started regular exercise and worked up to it gradually, they'd be like me, too."

Lewis left no survivors. His second wife, Bessie, whom he married when he was 86, died of a heart attack in 1972 at the age of 75.

His death at Hahnemann Hospital was attributed to cancer of the liver.

THE ENERGY CRISIS AND THE DEVELOPING WORLD: AMERICAN RESPONSE TO A GLOBAL ECONOMIC CRISIS

Mr. HUMPHREY. Mr. President, the energy crisis is beginning to have a serious impact on every household in America. Gasoline is becoming a luxury and

extremely difficult to obtain. Utility rates are climbing and will go higher before winter's end. Shipments of vital foodstuffs and manufactured products have been slowed by the truck strike and the general economic downturn.

American workers are losing their jobs in ever-increasing numbers as a result of the energy shortage. The energy related layoff is becoming a tragic fact of life for hundreds of thousands of working people. And the threat of job loss looms large in many communities across the Nation. The President's economic advisers are already talking "mild recession." Without a strong economic antidote administered over the next several months, the predicted recession could cause unacceptable economic suffering for millions of Americans.

While the energy crisis reaches into American towns and cities and creates hardships of growing magnitude, its impact on the hundreds of millions of poor living in the urban slums and remote villages of the developing world will be devastating. Too many Americans will lose their jobs and be inconvenienced by the energy crisis. But a significant percentage of the already suffering poor in Asia, Africa, and Latin America will very likely face starvation and increasing deprivation.

The magnitude of the energy crisis in the developing world and what it portends for global economic stability are gradually becoming known. Unfortunately, neither the U.S. Government, international financial institutions such as the World Bank nor private groups are able to predict the final impact of the energy crisis on the world's poor. Here are the dimensions of the crisis as they are understood now:

The massive increase in the price of oil will force developing nations to spend approximately \$14 to \$15 billion in 1974 on oil imports alone at prices set last December 22. In 1973, the oil imports of these countries amounted to only \$5.2 billion. In 1972, only \$3.7 billion was spent on imported oil.

This three-fold increase in the cost of imported oil will mean that developing countries will have to deplete their meager foreign currency reserves. But they still will not be able to buy all the oil they need. Some nations may even be forced to sell already scarce agricultural products on the export market to gain foreign currency, thus depriving their own people of these supplies.

Lack of energy supplies will cause severe slowdowns in the few industries developing countries possess. India has already announced that it will cut back its oil purchases, thus stalling economic advancement.

In the industrialized world, high oil prices, the Arab embargo and increased consumption have increased prices of manufactured goods which are needed by developing nations. On top of high priced oil, these poor nations will be forced now to pay higher prices for other needed commodities.

Foodstuffs and fertilizer—two commodities indispensable to the developing world—are becoming increasingly expensive. Fertilizer prices have doubled since 1972 and urea now sells for \$250 a

ton. Poor nations will pay more than \$5 billion additional for food and fertilizer imports in the crop year 1973-74. Experts indicate that their bill for wheat imports alone could run as high as \$3 billion. Even if developing countries can afford to purchase these commodities at exorbitant prices, their availability is questionable.

The sharp increases in prices for petroleum products, fertilizer and food will cause developing countries to expend more than \$15 billion additional for these essential commodities this year. James Grant of the Overseas Development Council has estimated that the impact of these price increases on developing countries is demonstrated by the fact that the combined increases are equivalent in amount to five times net American development assistance in 1972.

Alarming increases in oil prices and resulting price increases in other commodities will place such a heavy financial burden on developing nations that economic growth will be greatly slowed in some countries and completely halted in others. Increased growth rates remain the only hope for improved lives for over 1 billion people. Without continued economic growth, developing countries cannot even begin to remedy their massive problems of unemployment, unchecked population growth, rural stagnation, and inequitable distribution of income.

Recession in the industrialized world and depression in the developing world will take an immediate toll on agricultural production. Lack of fertilizer will definitely reduce American output and the export of foodstuffs to poor nations under our Food for Peace Public Law 480 program. Few developing nations are self-sufficient in food production. They must depend upon the United States, Canada, and a few other exporters for the prevention of mass starvation. It is questionable whether we will be able to provide the world with the customary food commodities to halt starvation. Our present reserves are at an all-time low.

In the poor countries, lack of fertilizer and oil will have an extremely adverse impact on food production. The world-renowned food expert, Dr. Norman Borlaug, has predicted that as many as 20 million people may die this year because of crop failure related to the curtailment of fertilizer production as a result of the oil shortage.

Industrialized nations are becoming sharply aware of the impact of oil price increases upon imports of essential raw materials from less developed countries. Unable to purchase petroleum products at previous levels, these countries must slow down the extraction of critical minerals, thereby increasing the export price and the price of the finished product. And increased oil prices will also result in higher shipping costs, which will boost still further the cost of exported raw materials, and the price that less developed countries must pay for the manufactured goods they must import.

No facet of any nation's economic and commercial life remains untouched by the staggering increase in the price of petroleum products, the artificially

created oil shortage and resulting price increases. In fact, high-priced crude oil has become a major factor in global inflation.

It is clear that in 1974 the developing world could be faced with a depression while the economies of industrialized nations undergo recessions of varying degrees of severity.

A depression in the developing world this year will cause untold human suffering. Without a doubt, the coming economic crisis among the poor nations will wipe out gains made over the last few years. The economic setback could be so severe as to reduce gravely the effect of bilateral American economic assistance and assistance from multilateral sources. In other words, in many countries, American foreign aid dollars will not be able to have a significant impact on development at a time of economic stagnation and regression.

The answer to this dilemma is not to reduce foreign assistance. Rather, an all-out diplomatic effort should be made to obtain a significant reduction in the price of crude oil established by the Organization of Oil Exporting Countries. The Government of the United States and the major American oil companies must work toward this end.

Without a major price reduction for crude oil, a global economic crisis cannot be avoided. No other factor adds such a destabilizing element in the economies of all nations—rich and poor—as the artificially high price of crude oil. A crude oil price rollback has become imperative. Certainly the developing countries must join with the industrialized nations in asking that this be done in the interest of all concerned.

U.S. SUPPORT FOR IDA ESSENTIAL

We have already witnessed in our own country the political repercussions of high oil prices. The recent vote in the House of Representatives on the American contribution of \$1.5 billion to the International Development Association is an excellent example of how skyrocketing oil prices have poisoned the atmosphere for increased multilateral economic assistance. The measure was defeated on January 23, 1974 by a vote of 248 to 155.

Although I understand the atmosphere in which the House considered this authorization, I consider the action taken to be a regrettable and harmful response to an international economic crisis. The IDA authorization was to be spread over 4 years with the American contribution to this soft loan window of the World Bank falling from 40 percent to 30 percent.

It is truly unfortunate that we responded to the coming economic crisis by withdrawing our commitment to develop the resources of the poorest nations. It was argued in the House that the United States should no longer contribute to IDA because we were going to have economic difficulties ourselves. As James Reston has pointed out:

This was like saying that if you're gouged by the rich, you are justified in turning around and kicking the poor.

It also reveals a very short-sighted perception of our own national interests. We can only gain from the development of natural resources—energy, mineral, agricultural and human—throughout the world. And IDA contributes significantly to the development of the Earth's vast untapped resources. A significant percentage of these undeveloped resources is to be found in the less developed countries of the world.

It was further argued in the House that loans to the least developed countries would only go to the Arab States to pay for oil. We would thus be indirectly aiding those who are causing so much misery in the poor countries. Those who made this argument were obviously unfamiliar with the nature and purpose of IDA loans.

Through IDA, the World Bank has sought to improve the conditions of the world's poorest people and bring them into the development process. IDA funds are used to distribute improved seeds to farmers and teach them better farming methods. They are used to transform subsistence into market economies. They are used to establish small industries to employ the jobless and for training the unskilled. Such projects do not yield immediate high returns. Governments of extremely poor countries cannot afford to undertake them without some assistance.

It is therefore not a question of these governments spending money on oil that they would otherwise spend on IDA-type projects, if they did not receive this assistance. Regardless of whether IDA aid is forthcoming, they will have to buy the oil needed to keep what industry they have running and the fertilizer needed to maximize their agricultural production. Without IDA funding, projects which develop the as yet untapped resources of these countries will simply not be initiated.

The United States must respond to the Arab countries' disruption of the international economic structure, not by abandoning all efforts to secure greater international economic cooperation, but by reaffirming the importance of that cooperation. The International Development Association is vital to this effort.

In the long and arduous negotiations leading up to the recent U.S. pledge of \$1.5 billion over 4 years, the United States convinced the other developed countries that they should play a greater part in the funding of IDA. While the U.S. share of IDA funding was decreased from 40 percent to one-third, the shares of the EEC and Japan increased significantly.

If Congress does not authorize our contribution, there is a strong possibility that the other developed countries will not follow through on their pledges; and this important institution for international cooperation in the development of the world's resources will be lost.

We must not let this happen. We must not respond to nationalistic selfishness with similar nationalistic selfishness. We must, rather, reaffirm our commitment to international cooperation in building a more prosperous world.

And we must strongly encourage the Arab States to join us in this effort. The Arab States should now be asked to play a greater part in international development assistance, since they have a greater share of the world's wealth. The hard currencies they will earn are desperately needed in the poor countries of the world, as is their oil. The Arab States could, in fact, contribute significantly to development in the poorest countries simply by producing and distributing fertilizer, an important by-product of their valuable resource. There is little likelihood that the Arab States will heed appeals to assist the developing countries, either through aid or through lower oil prices, if the first response of the more affluent countries to economic hardship is to cut off assistance to the world's poorest countries.

A second set of reasons given for the House failure to authorize IDA funds did not center around the international economic crisis, but around the current domestic crisis—the crisis in leadership. This was an administration bill.

It was argued by many that the Nixon administration impounded funds and vetoed bills providing assistance to the poor of this country. Why should we grant that same administration's request to help the poor of other countries? It was also felt that the administration did not care that much about assisting the poor of other countries either. The fact that only 47 Republicans supported the IDA authorization bill, while 108 Democrats supported it, indicates that the administration did not work very hard to organize its own forces in support of this measure.

Mr. President, if Congress is to reassert its position as a coequal branch of Government, we cannot use lack of Executive support as an excuse for inaction. If there is a crisis in leadership in the executive branch, we must fill the void by exerting more forceful and more responsible leadership in the legislative branch. This is particularly important in building a "structure for peace," in establishing a lasting framework for international cooperation. This cannot be accomplished by a few leaders in each nation alone. All the people of each nation must be committed to it and participate in building if it is going to last.

I am certain that the majority of my colleagues in the Senate would agree that "assistance" to the poor of this or any other nation is not just an expensive, inflationary give-away program. It is, rather, an investment in the well-being and prosperity of all men and in domestic and international stability. We are all poorer when valuable human and natural resources go untapped and undeveloped. We know that extreme poverty and poor living conditions are a threat to domestic stability, just as unrelieved misery and famine are threats to international peace. When there is no hope for those who are poor, when they see no possibility of improving the conditions in which they live, when those who are more affluent are either apathetic toward or contributing to the conditions of poverty—then the threat to domestic

stability or international peace is the greatest.

FIRM DECLARATION BY WASHINGTON ENERGY CONFERENCE REQUIRED

In the past few weeks while the House rejected the IDA authorization, the administration embarked on the convening of an international energy conference. Recognizing the need for collective action at the time of crisis, the President issued invitations to the major oil consuming nations of the industrialized world to meet in Washington this month.

Although the conference will, of course, deal with the role of the developing countries as it relates to the energy crisis, the economic superpowers will attempt to determine international economic policies without the direct participation of governments which represent the majority of the world's population. It is clear to me that the chances of achieving "global solutions" to the energy problem cannot occur until the developing world becomes a participant in the process of dealing with this global crisis. International cooperation in the field of economic assistance or economic planning is essential.

The urge for short-run national advantages at the expense of greater international cooperation will only lead to a prolongation and worsening of the economic crisis. The United States has a choice. We can either encourage the evolution of a cooperative world order to deal with the crisis or we can retreat into isolation and the securing of momentary economic advantage at the cost of greater prosperity for all the world's people.

Mr. President, I would like to make one final appeal. I address this directly to all of the foreign ministers who will be attending the energy conference in Washington on February 18. There must be a strong and unanimous declaration from this conference that the oil producing nations should roll back their crude oil prices to reasonable levels. Unless such a declaration is forthcoming and unless it is unanimous, the conference will be a failure.

Without a substantial price reduction in the per barrel price of crude oil—even if the embargo is terminated tomorrow—there will be a global economic crisis of massive proportions. I urge the foreign ministers to work toward this end. Any action short of a joint declaration will only be a remedial step which avoids the major problems of skyrocketing inflation, recession, depression and mass starvation caused by artificially high crude oil prices.

Mr. President, in the past few weeks there have been numerous articles concerning the energy crisis as it relates to the developing world and House rejection of the IDA authorization. I ask unanimous consent that these articles be printed in the Record.

There being no objection, the articles were ordered to be printed in the Record, as follows:

[From the New York Times, Jan. 26, 1974]

PARLEY SAYS OIL CUT REDUCES FERTILIZER
(By Walter Sullivan)

Weather changes, notably a southward migration of the monsoons, combined with a sharp reduction in fertilizer production,

threaten food supplies for a considerable part of the world population, according to experts on climate and agriculture who completed a two-day meeting yesterday at the Rockefeller foundation.

The southern shift of monsoon rains is thought to account for the five-year drought in Africa that, it was reported, is causing mass migrations to the south. It is blamed, as well, for severe droughts in India and Latin America.

The curtailment in fertilizer production is a result of the oil shortage. According to Dr. Norman E. Borlaug, of the Rockefeller Foundation, often called "father of the green revolution," as many as 20 million people may die because of crop shortages in the next year. He attributed this in part to the climate changes, but primarily to the fertilizer cutbacks.

Japan, which has been the chief exporter of nitrate fertilizers, has cut its production in half because of the fuel shortage. Since this fertilizer goes to India and other areas already affected by the climate change, the effect may be devastating, he said.

Dr. Borlaug, who won the 1970 Nobel Peace Prize for development of high-yield strains of wheat and rice in what was termed the "green revolution," did not attend the meeting, but was reached by phone at his offices in Mexico City.

An ample petroleum supply is a key to fertilizer production, both because the process demands much energy and because petroleum components, such as naphtha, are used. Dr. Borlaug commented, bitterly, that the Arab oil embargo, aimed at the industrial countries, would ultimately strike most heavily at the developing nations of Asia.

At the conference it was suggested that, while China depends heavily on Japanese fertilizer, the Japanese for political reasons, would probably honor their obligations to China at the expense of India, Southeast Asia and Indonesia.

Japan itself has been hit by the shift of the monsoon, which in recent summers has not spread its customary rains over Hokkaido, the large northern island of the archipelago.

Monsoons are the dominant winds in regions, such as southern Asia, where they blow from the land toward the sea part of the year and in the opposite direction the remainder of the time. In India the dry monsoon blows from the northeast between April and October and the wet monsoon comes from the southwest the rest of the year, producing the rainy season.

Because of the southward shift of monsoon rains in Africa, it was reported, the Sahara is spreading its sands southward at a rate, in some areas, of 30 miles a year. The result is great social upheavals.

DROUGHT HAS WIDE IMPACT

Bernard Oury, an agricultural economist at the United Nations concerned with aid to this part of Africa, said some six million residents were seriously affected by the drought. Great numbers are migrating south with their cattle, over grazing land that is already heavily burdened.

While there was no consensus as to the cause of the climate changes—or the likelihood of their duration—it was generally agreed that current fluctuations are more extreme than any on record.

Dr. Reid Bryson, director of the Institute for Environmental Studies at the University of Wisconsin, displayed a record of climate in Iceland over the last thousand years, showing an unprecedented shift in the first half of this century.

The record showed a gradual cooling over the 10 centuries until about 1900, when there was a sharp rise in temperature, followed by an equally abrupt drop to the earlier low. The temperatures, except for those of the last few years, were derived by Berg Torsson.

He used temperature records as far back as available and, prior to that, the records of sea ice conditions in the area, which are a sensitive climate indicator.

COOLING TREND REPORTED

Dr. Kenneth Hare, a meteorologist who was formerly president of the University of British Columbia and who was chairman of the meetings, reported that for 19 consecutive months, centered in 1972, weather stations across most of Canada recorded abnormally low temperatures. Some were the lowest on record.

The head of the Soviet weather service, Dr. Yevgeny K. Federov, was quoted as saying that temperatures in central Russia, in 1972, were the lowest in several hundred years.

Dr. Bryson argued that the chilling of climate in the entire Northern Hemisphere, that began a few decades ago, had intensified the westerly flow of air in mid-latitudes and driven the monsoons southward.

The purpose of the two-day meeting was to examine present knowledge on weather and climate change, both natural and man-made, and their influence on food production and interstate conflict. Great concern was expressed at the decline in food reserves, particularly in view of climate uncertainties.

Lester R. Brown, food production specialist at the Overseas Development Council, presented figures on grain reserves of the grain exporting countries—those capable of averting famine in other regions. In 1961, he said, they were sufficient to feed the world for 95 days. By 1971 the figure was 51 days. Now, he said, it is 29.

DECLINE HELD SERIOUS

This decline in reserves, as population and food requirements rise, is extremely serious, Dr. Borlaug said. "I hope and pray that in the next two years it will be possible to build up some reserves again," he added.

It was recognized that great climate changes occurred in the past, bringing about the rise and fall of civilizations. The Sahara has, at times, extended further south than it does today. During the ice ages it was a grassland.

But it was noted, earlier, less deeply rooted civilizations were better able to cope with change. Today some of the tribes moving south in Africa are nomadic in any case. But for the farmers who fled the "dust bowl" of the Western Plains, the droughts of the mid Nineteen thirties were catastrophic.

Not only is an industrialized civilization firmly rooted, Dr. Hare pointed out, but great migrations are also impeded by national boundaries.

It was noted that much concern was expressed in recent years that air pollution or other factors might be altering the climate in an irreversible manner.

A particularly sensitive Achilles heel of world climate, Dr. Walter O. Roberts said, is the pack ice covering the Arctic Ocean. Dr. Roberts was formerly head of the National Center for Atmospheric Research in Boulder, Colo.

MELTING THE ARCTIC PACK

From time to time it has been proposed that the Arctic ice, which on the average is only about six feet thick, could be melted—for example by spraying with coal dust in summer. Some believe that, once gone, it would form again and world climate would be drastically altered (though in ways that are uncertain).

Reliable predictions of long-term weather or climate change could be a mixed blessing, it was pointed out. If a northern country were faced by the sure prospect of prolonged drought, it might be tempted to melt the Arctic pack, affecting all inhabited lands in drastic ways.

Hence, it was agreed, some form of international agreements are necessary to avoid conflicts. Yet, it was also proposed, the prospect that, for centuries to come, drought

in one region will often be matched by plentiful rain and good crops elsewhere could bring nations closer together.

The massive grain transactions of recent years have, it was said, fostered a new spirit of "global cooperation." With the prospect of more such deals, plus the needed creation of a "world food bank," it was proposed that the one-world atmosphere could be enhanced.

[From the New York Times, Jan. 26, 1974]

SUB-SAHARA DROUGHT IS TERMED WORSE

(By Thomas A. Johnson)

LAGOS, Nigeria, Jan. 25—Dr. Adedeji A. Adenuga, director general of the Food and Agriculture Organization, has declared that the drought in the sub-Saharan region is worse this year than ever before, while pledges of aid have fallen far short of needs.

Dr. Adenuga, whose organization supervised a broad international food distribution program in the region last year that was credited with saving many thousands of lives, has just toured the stricken areas, which include wide swaths of northern Nigeria.

In talks with newsmen here on Wednesday, Dr. Adenuga said: "The situation has not improved—the rains were too short. Some crops came up during the rains but they withered and died and people are continuing to move south. It is necessary to ask again for the world to help."

Dr. Adenuga said the nations most affected—Chad, Mali, Mauritania, Niger, Senegal and Upper Volta—would require about 500,000 tons of grain plus about 60,000 tons of high protein foods to avoid widespread starvation and malnutrition.

These figures come from F.A.O. officials in the region who have balanced the food needs of the region against stocks on hand from last year's relief effort and from the harvest.

At present, Dr. Adenuga said, the organization had commitments for only about 300,000 tons of grain.

He said that about \$15 million would be necessary for transportation and that no pledges had as yet been received to meet this need.

He added that food commitments and shipments would have to be made soon if they were to reach the region before summer rains wash out the roads and make traveling almost impossible.

Because of a late start in the drought relief programs last year, it was necessary to transport much of the food by air, a very costly operation.

Last year, F.A.O. officials said that about six million of the region's more than 25 million people were in danger of dying from starvation because of the drought, then in its fifth year.

Many thousands have died and are dying in the region from starvation and, because weakened by hunger, from diseases that are not normally fatal. Officials have declined to attempt to give a figure for the number of deaths because of the remoteness of the vast area involved, the poor communications and the lack of statistics.

In a far smaller area of northern Ethiopia, the drought was reported to have taken more than 50,000 lives.

Throughout the sub-Saharan region a number of international organizations are working to resettle farmers and rebuild cattle, camel and sheep herds. Many thousands of farmers and herdsmen in the region are receiving no help at all, however.

Long-range solutions to the problems of drought, famine and the steady southward movement of peoples in the region are being pursued.

Last September, the leaders of the six hard-hit sub-Saharan nations proposed a series of programs to advance water and soil conservation, forestation, irrigation and animal husbandry over a 10-year period at a cost of \$1.5-billion.

They asked international organizations and richer nations to lend the money and provide the expertise for the purpose.

Dr. Adenuga noted that since then the F.A.O., in cooperation with representatives of the sub-Saharan nations have identified 126 major rehabilitative programs in the region.

[From the Washington Post, Jan. 30, 1974]

INDIA STAGGERS AS OIL SCARCITY SAPS ECONOMY

(By Lewis M. Simons)

NEW DELHI.—India is finding itself peculiarly vulnerable to the oil crisis, and the government, faced with the prospect of the economy grinding to a halt, appears to be stunned into ineffective fumbling. India's optimistic new five-year plan has been rendered wholly meaningless.

The problem is simple: India's crude-oil import bill is expected to rise by \$1 billion in the next year and the government cannot even remotely afford to pay it.

The results, however, are far from simple: If India does not get the oil it must import—about 119 million barrels at today's rate of consumption—a disastrous chain of events will be set in motion.

At one end of the chain, oil-fed fertilizer factories will fall behind in production; farmers will be unable to feed their fertilizer hungry "Green Revolution" wheat crops; food will grow scarcer and costlier than it already is; and suffering will reach new heights.

At the opposite end of the chain, the government looks to industry to step up production for increased sales abroad, bringing in foreign currency to help meet the oil bill. In fact, government economists estimate that at least 80 per cent of this year's export earning will go for oil. But industry, too, needs oil.

What's the answer? So far the government has said much but done little, if anything, other than flounder around helplessly, blaming developments outside India.

Perhaps the area most talked about and most sorely required is oil exploration. At the moment, India has only two producing fields in all of its vast territory—one in the remote northeastern state of Assam and the other in Gujarat, on the west coast.

Between them, these two fields pump out 56 million barrels of crude oil a year, about 30 per cent of the nation's requirement. All the rest must be imported.

Last week, after two years of negotiating, the government reached an agreement with Esso Eastern, Inc., to buy out 74 per cent of the American-owned company in the next seven years. The agreement is expected to set a precedent for taking over the other two major foreign oil firms in India, the American-owned Caltex and the British-owned Burmah-Shell.

The Esso agreement initially raised fears that foreign exploration companies would be scared off. However, most observers are now confident that the terms are amenable enough to Esso to have little negative effect. At the same time, serious doubts have been raised that the government will be able to improve upon—or even match—Esso's management.

While exploring for oil obviously is chancy, experts are convinced the chances warrant an intensified program—beginning immediately.

"A great deal of this country has never been explored," one veteran Western specialist said recently. "And the geology, both inland and offshore, is such that a great effort ought to be made. The quantity and quality of exploration should be stepped up dramatically."

In a widely publicized step taken a week ago, the Soviet Union agreed to assist India in inland exploration as well as in boosting the production of the Assam and Gujarat fields. However, examination of the new

agreement indicates that it is little more than a reaffirmation of a bilateral accord that has been in existence since 1971.

The principal motivation behind the agreement, from the Soviet viewpoint, appears to be the sale of Soviet equipment to India.

Offshore, the Soviets are not able to help: Their technology in the field is inferior. India has just one offshore project in operation. The rig, built in Japan by the Offshore Company International of Houston, is located in the so-called Bombay High Area, 90 miles off Bombay in the Arabian Sea.

Although the self-propelled platform and its massive drill, built at a cost of \$15 million, have been described as "the best in the world," the project has been plagued from the start. The major problem is that the French exploration team that decided on the Bombay High Area failed to recognize that the seabed there was covered with unusually thick and deep mud.

When the rig was installed last summer, the American technicians aboard discovered that the platform legs were not long enough to penetrate the mud and support the platform safely. Lloyds of London, which insures the rig, has refused to allow Offshore to extend the legs, claiming that they would not hold up in the 150-mile-an-hour cyclones that rake the Bombay High.

Until designers come up with something new, the drill is working in a less dangerous—but so far unproductive—area. The drill is currently boring its first hole, which was begun last October. According to a knowledgeable source, as many as 500 bores may have to be made before oil is struck—if it ever is.

Meanwhile, foreign companies have made bids to explore elsewhere on the Arabian Sea and Bay of Bengal coastlines. The government has not disclosed any details about the bidding, but one informed source said they are at the "nitty-gritty stage" and should be complete in the next few months.

But experts point out that at best, any new exploration could not reach the production stage in anything less than five years. Even if a strike were made today at the Bombay High, for example, oil would not be in production for at least three or four years.

Some Indian experts maintain that while oil exploration should be stepped up, India should be turning far more attention to developing its impressive coal deposits. Others urge that greater attention be paid to developing nuclear energy.

In fact, coal and nuclear power are linked. Although India already ranks among the world's leaders in the use of nuclear energy for peaceful purposes, further development is in a lull, largely because coal and hydroelectric-generated steel mills have fallen behind in the last year so that not enough stainless steel has been produced to move ahead with building nuclear generators.

In an editorial this month, the sober Economic and Political Weekly complained that government planners preferred to woo Middle East oil suppliers rather than get down to developing India's own oil- and coal-producing capabilities.

"What is it precisely that the government of India hopes to achieve by courting the oil suppliers?" the editorial asked. "Even if they were keen to help India, it is unlikely that any of them would be willing to sell oil to India at lower than the going market prices."

Planners themselves take a largely hands-off attitude to the oil crisis. The planning commission keeps reminding everyone that the fifth five-year plan, which is to go into effect in April, was completed before the crisis struck.

Conversations with commission officials make it clear, though, that they are going to be forced to reduce the plan's optimistic goals. Arguments are centering on whether cuts must be made across the board or if

selected areas of development can be singled out for the axe.

The question poses a thorny political problem for Prime Minister Indira Gandhi, particularly since she is now facing the most serious socio-economic problems India has had in its quarter-century of independence.

Some observers believe that there is no workable solution and that the nation faces disaster. Others point to the Indians' incredible ability to absorb punishment and to muddle through.

In either case, India surely faces a year that will test its government and its people to the utmost.

[From the New York Times, Feb. 4, 1974]
INDIA TO CUT BACK ON OIL PURCHASES—3 MILLION-TON REDUCTION DUE—ARAB'S PRICES ARE CITED

(By Bernard Weinraub)

NEW DELHI, Feb. 3.—India is planning a major reduction in imported oil this year, a move that will stall economic advancement.

Senior government officials say privately that India will cut back on import oil by at least three million tons, in the light of the decision of Persian Gulf nations to double their price of crude oil. Prime Minister Indira Gandhi is to make the final decision in the next few weeks.

The move will deeply affect production of fertilizers and foods, rail transportation, generating of power, shipping and industrial growth. Government officials, while dismayed at the prospect of the cutbacks, say in effect that India can no longer afford her current requirements of 17 million tons of imported oil.

SITUATION CALLED CRITICAL

One official said that the cutback might amount to as much as four million tons. He termed the situation "critical" for India.

"Unless the oil producers or the U.N. does something," another official said, "India and the third world are doomed to poverty. You will find standards of living, already meager, and built up in the last 20 years at great sacrifice, completely nullified in less than a year."

An Indian Government source said that officials involved in drawing up contingency plans were "benumbed" and "frightened," adding, "People are preparing papers, shifting suggestions from one box to another, setting up committees. But they have not been able to deal with this crisis in a sensible way."

So far, India has sought and has apparently failed to obtain "concessional financing" from oil producers—either repayment over a long period, or a major increase in exports to Persian Gulf nations that would balance the higher prices.

NATION'S MOOD IS ANGRY

The move comes at a time of riots over food shortages and hoarding, the worst inflation in decades, labor strikes, diminishing production and amid charges of official mismanagement and corruption.

"The dramatic hike in oil prices threatens to bring the country to its knees only because New Delhi is unable to rally the country to meet the challenge," Dilip Mukerjee, a columnist, wrote in the Times of India yesterday. "If this drift continues, central ministers may find themselves going around hat in hand from one oil-rich country to another before the end of the year."

India consumed 24.5 million tons of petroleum and petroleum products in 1973, of which 17 million tons were imported, mostly from Iran and Iraq, at a cost of about \$500-million. Similar imports this year would cost about \$1.4-billion, or 40 per cent of India's export earnings.

"We have little fat to cut from our total consumption, perhaps 5 per cent, without reducing our growth," said an official. "Im-

port cuts are inescapable, and so is a reduction in our rate of growth."

"We will meet the needs for fertilizer," the official said. "The most critical areas are transport, railways, power generation and agriculture."

FUEL CUTS PLANNED

The government plans to reduce this year's consumption of gasoline by 6 per cent, of furnace oil—used mostly by industrial plants—by 10 per cent, and kerosene for cooking and lighting, 15 per cent. Foreign economists, think the crisis may set back India's industrial production by 20 per cent and diminish over-all investment by 20 to 25 per cent.

Officials are convinced that India's energy needs must be turned toward her huge coal reserves, which have been estimated at 200 billion tons. But economists and Government officials concede that India's nationalized coal industry has performed dismally. Production has not budged from 76 million tons a year since 1969.

"The trends in the physical production of coal are disappointing and ominous for the future," said Subramanya Bhoothalingam, a former Finance Secretary and now director general of the National Council of Applied Economic Research, an autonomous group that receives Government support.

The Government has set a goal of 135 million tons of coal a year within five years. "The prospects are bleak," the economist said in a weekend report. "With the current attitudes toward production and development, the achievement of a target of 135 million tons is just not possible. But the time has come when it will be tragic if something is not done to make it possible."

[From the Washington Post, Feb. 3, 1974]
THE HOUSE DEALS A BLOW TO A WORLD BANK AFFILIATE

(NOTE.—The writer is co-author with Edward S. Mason, of the 1973 Brookings book, "The World Bank Since Bretton Woods.")

The House of Representatives on January 23 voted down the authorization for the U.S. contribution to the palinstakingly-negotiated fourth replenishment of the funds of the World Bank's soft-loan affiliate, the International Development Association (IDA). The action seems brilliantly calculated to serve a number of deplorable purposes.

It adds significantly to the already staggering problems of the world's poorest countries.

It further shakes the dwindling confidence of the rest of the globe in the good sense and fundamental decency of the United States.

Since the principal change in World Bank/IDA policy in recent years has been a much greater effort to help directly the poorest people in poor countries, it can be interpreted as repudiating this new policy.

It substantially increases the opportunities of the Arab countries to blackmail poor countries by using the excess proceeds of oil exports in the same play-it-my-way fashion that they have been using the oil itself.

It undergoes the patient work of more than a quarter of a century devoted to building up an efficient and effective group of international development agencies.

It undermines the position of the distinguished American, Robert S. McNamara, who heads the group.

The United States was the principal architect of the IDA. Enthusiasm in other rich countries in the late 1950s was well below the infectious level, but thanks to the efforts of Secretary of the Treasury Robert B. Anderson and Under Secretary of State C. Douglas Dillon, the IDA came into being in 1960. It has won its spurs. Without IDA, its older brother, the World Bank, could continue to make loans at close to commercial rates of interest to what are called less de-

veloped countries but are really middle-income countries: Mexico, Brazil, Columbia, Iran, Malaysia and certain others. But the Bank could do little or nothing for India, Pakistan, Bangladesh, Indonesia and the drought-stricken areas of Africa.

In previous replenishments, the United States has contributed 40 per cent of IDA funds. The United States is still by far the strongest economic power, much less damaged by inflation, skyrocketing oil prices and other body blows to the economy than most other nations. The logic of lowering its share in IDA from 40 to 33½ per cent is dubious at best, but it has been accepted. Failure at this stage to pony up the reduced portion could easily trigger the chain reaction that abruptly terminates IDA on June 30, 1974. This is because the replenishment agreement cannot become legally effective without the U.S. contribution. Theoretically, other contributing countries can keep the program alive by advance voluntary contributions. But the temptation will be almost overwhelming for Great Britain, Benelux and others to say they are in no better position to contribute now than is the United States. And who could gainsay them?

Even if one grants the IDA concept may need rethinking and its operations may need revamping, more than five months will be needed for the job. Therefore, unless the United States wishes to accept the entire blame for killing a highly respected multilateral agency, IDA must be permitted to function beyond next July 1. If the House cannot reverse its action in any better way, let us make certain that clear, affirmative action in the Senate gives the House a chance to be less short-sighted when considering the Senate's view.

ROBERT E. ASHER.

Washington.

[From the New York Times, Jan. 25, 1974]

THE POOR OF THE EARTH

(By James Reston)

WASHINGTON, Jan. 24.—One of the bitter tragedies of the present world crisis is that the heaviest blows are falling, as usual, on the poor of the earth.

For the rich, inflation, the energy shortage and rising food prices and unemployment are an irritation and at worst an inconvenience, but for the poor they are a disaster.

The point is obvious, but it seems to have been missed by the House of Representatives in its recent vote to kill President Nixon's bill to aid the world's poorest countries through the World Bank's International Development Association.

This vote tells a lot about the present mood of the Congress and the state of Presidential and Democratic leadership. Though the danger of mass starvation in sub-Saharan Africa and in India and Bangladesh is now alarming, the House voted 248-155 against the relief sought by the Administration, with 108 Democrats voting for it and 118 against it, and 130 Republicans voting against the President and only 47 Republicans supporting him.

Now we are beginning to see the consequences of Vietnam, Watergate, and the turmoil of the Middle East. The House is surly and frustrated, disillusioned with foreign aid and foreign adventures, and hostile to a President who impounds funds for the poor at home while seeking more aid for countries overseas.

President Nixon anticipated this mood but he underestimated it. By diligent private negotiating over the last year, and with the help of Robert McNamara, the head of the World Bank, he managed to persuade the other industrial nations of the world to increase their "soft loans" to the poorest countries from 40 per cent to 66½ per cent, al-

lowing the United States to reduce its contribution to one-third from 40 per cent.

Even at 40 per cent of the total funds contributed by the rich nations through I.D.A. to the poor nations, the United States was putting up less of its gross national product than fourteen of the sixteen most prosperous countries.

Nevertheless, though inflation has reduced the value of I.D.A.'s soft loans by almost 30 per cent in the last few years, and though starvation is an immediate problem in most of the countries concerned, the vote for relief in the House wasn't even close.

If this were an isolated case of nationalism, it might be passed over as a regrettable and correctable offense; but the tide of nationalism is running strong in the world again, and there is little doubt that the vote in the House will probably be popular with the voters in this country.

Wherever you look in the advanced countries today, you will find leaders arguing for a new world order and pointing to the monetary crisis and the energy crisis as evidence that this is an increasingly interdependent world, requiring mutual aid and cooperation.

But at the same time, many of these same nations turn protectionist whenever they get in trouble. Europe is trying to form a more cooperative union, but when the Netherlands irritates the Arab oil-producers, the Dutch are left to fend for themselves.

Likewise, though Europe is engaged in the most delicate monetary negotiations in order to bring stability to its currencies, the French flat and devalue the franc on their own. Now it is the House of Representatives that recognizes the danger of world hunger but votes against relief.

The leadership on both sides of the aisle was appalling during the debate. A White House preoccupied with its personal and legal problems gave its bill very little support—in fact, the President's name was seldom mentioned by his own House leaders—and the Democrats were just as bad.

Representative George Mahon of Texas, who is normally a sensible man except in election years, warned the House that he wouldn't be for appropriating the money requested by the President even if the House authorized it, and Representative Wayne Hays, Ohio's gift to diplomacy, was worse.

He argued that money voted for the poor countries would merely be used to pay for higher gas and oil prices, and thus would probably wind up in the pockets of the oil sheikhs. This was like saying that if you're gauged by the rich, you are justified in turning round and kicking the poor.

The situation is particularly awkward now, not only because the World Bank will run out of "soft-loan" funds at the end of June but because no nation is obliged to meet its commitments to I.D.A. if other nations refuse to meet their quotas.

State Secretary Kissinger and Treasury Secretary Shultz reached strongly against the House vote, but the following day, Mr. Kissinger was condemned on Capitol Hill for doing so.

Accordingly, they are now turning to the Senate for a more careful reappraisal of the problem. Their aim is to get the decision reversed or at least modified before Feb. 11, when the world on producers and consumers meet here to discuss cooperative action on the cost and distribution of fuel.

"How can we expect cooperation on oil if we will not cooperate to relieve hunger?" Mr. Kissinger asks. But Congress has its mind on other things and so has the President.

[From the Washington Post]

CRISIS OF AID

The House vote denying new funds for development aid is the shocking but logical result of the world economic crisis created by the oil price increases. In recent years, the

margin of congressional tolerance for aid, whether given straight to the recipients or channeled through the international development agencies, has been extremely thin. That margin utterly disappeared in the wake of the oil price increases, whose cost to the poor countries more than wipes out the foreign funds they could expect to get for development. Why should the United States help the poor, the Congress asked, when the money will merely be passed on to the oil producers? This argument ignores not only the poor countries' desperate needs but the political and moral interest of the United States in continuing participation in development. But it provided Congress with the excuse it needed to say no.

So it was that House Republicans voted by almost 3 to 1 not to contribute the proposed \$1.5 billion over four years to the World Bank's easy-money branch, the International Development Association (IDA), which helps the poorest of the poor. Democrats opposed the administration bill too, though by a lesser edge. Since other donor countries will likely seize on the American example to justify their own retreat, the House vote means in effect that the whole carefully negotiated \$4.5 billion IDA package may go down the drain. Donor support for the regional development banks now also comes into deep jeopardy.

The administration's reaction to the reversal is indicative of the general confusion generated by the energy crisis. It had worked long and carefully before October to reduce the American share in IDA from 40 per cent to a more palatable 33 and to nourish congressional support. It argued, correctly, that without American leadership in IDA, the basic structure of international development assistance would crumble. What the administration failed to do, however, was to crank the post-October turmoil into its political thinking on aid. After the House vote on Wednesday, the Secretaries of State and Treasury scolded the Congress as though nothing had changed. They displayed no hint of awareness that the basis of political support for aid had been shredded. Whether it can be restored, though unquestionably worth the effort, is problematical. Congress, listening to rumbles of voter discontent at home, is hardly in the mood to heed appeals to do the statesman-like thing.

The problem of presidential leadership aside, the root trouble is that in Congress' eyes—and not only in its eyes—it is now the Arabs and other oil producers and not the United States and its Western partners who have the extra cash which can be put to use for development. This is, as we say, a shortsighted view, but it is liable to be the controlling view until the oil producers start showing some responsibility for the massive blows they have struck against their friends, the poor. So far the producers have been brutal. They have not only hurt their friends but have refused to consider means of relief, such as a two-tier price system. The blow must be particularly galling to those African nations which, at Arab bidding, broke relations with Israel during the October war.

Already it is becoming clear that the deepest effects of the war lie not in terms of political relations in the Mideast but in terms of a fundamental change in relations between the world's consumers and producers of natural resources. In turn, this bids to render inadequate, if not entirely obsolete, the whole mechanism by which capital and technology have been transferred from "rich" countries to "poor" countries at least since World War II. The World Bank, the regional development banks and the various national aid programs have made up a large part, the official part, of this transfer mechanism. But the terms on which it will continue its operations must now be reappraised. This is a large task that will take many minds, many nations, many

years. The shock of the House vote is just one early indication of the need to get the process under way.

[From the New York Times]

NO AID, NO TRADE

The House of Representatives threw much more into jeopardy than its members may have realized when it refused to authorize funds for an enlarged development loan pool to be operated by the World Bank for the poorest nations of the world. Several reasons for defeat of the Administration's proposal are obvious; there are many more reasons why this unthinking action should be quickly reversed, if it is not too late.

The mass defections among Republicans—only 47 supported the measure despite strong urging from the White House—gives one more sign of weakened Presidential influence, even in his own party. Neither among voters nor, more inexcusably, among their elected representatives does the notion of foreign aid seem able to overcome its earliest years of being considered an American "giveaway." However often it is argued, the Congress seems reluctant to recognize that development assistance brings mutual benefits to industrialized and less developed nations alike.

The program just defeated a \$1.5-billion contribution to the World Bank's International Development Association, represented a positive and sophisticated approach to foreign aid. First of all, it is multilateral in its funding, avoiding the dangers inherent in attaching political strings. Through its multilateral structure, the I.D.A. is equipped to draw on the new resources of oil-rich countries, as well as the convention donors, for redistribution among countries still in need of investment funds.

Secondly, the World Bank sponsors development projects of direct benefit to the poorer segments of the population in the less developed countries, as opposed to the earlier practice of strengthening national economic institutions from the top and hoping that the benefits would "trickle down" to the poor—hopes that were often shown to be futile.

Finally, the I.D.A. loan pool, negotiated last September at the World Bank meeting in Nairobi, represents a genuine trend toward burden-sharing among the richer states—another retort to the traditional critics of American giveaways. The United States share would have been dropped from 40 per cent to one-third; Japan, in contrast, had agreed to triple its contribution; West Germany's share would have more than doubled.

The essence of worthwhile foreign aid in the coming decade is to create productive economic ties among richer and poorer nations, to realize the benefits from cooperation as opposed to short-term advantages that might be gained from embargoes, unilateral price hikes and expanding cartels. The threats of economic warfare that have arisen over the Middle Eastern oil powerplays should stand as ample lesson of what is endangered when a country or group of countries goes its own way into economic confrontation rather than cooperation.

[From the New York Times, Jan. 24, 1974]

HOUSE CURB ON AID "DISASTER" FOR POOR, McNAMARA SAYS

(By Edwin L. Dale, Jr.)

WASHINGTON, Jan. 24—Robert S. McNamara, the president of the World Bank, said today that the vote yesterday by the House of Representatives to deny new United States contributions to the bank was "an unmitigated disaster for hundreds of millions of people in the poorest nations of the world."

In an unusual public statement on an action in one of the bank's member countries, Mr. McNamara said the arm of the bank that was affected, the International Development

Association, "is the major source of development assistance for 21 countries classified by the United Nations as 'least developed,' to whom the United States and other nations have pledged a special assistance effort."

Most of these countries are small and most are in Africa. But the association is also important to much larger countries. In the past year it supplied 30 per cent of all the aid received by India, for example.

High officials of the World Bank said the bank's strategy for the moment was to "give the United States another chance"—that is, to see whether the legislation can be revived—before contemplating an appeal to the 24 other relatively rich countries that provide funds to the development association to put up their share without the United States.

The sharing agreement, negotiated last September in Nairobi, Kenya, at the annual meeting of the International Bank for Reconstruction and Development, or World Bank, provides for \$4.5-billion over three years, with the United States share \$1.5-billion. This is the smallest share ever for the United States, which, unlike the others, would be allowed to spread its contribution over four years instead of three. It was this contribution that was killed by the House yesterday.

Secretary of the Treasury George P. Shultz was in charge of the negotiations for the United States and pledged to do his best to win Congressional approval. Mr. Shultz, it has been reliably learned, was taken by surprise by the adverse house vote yesterday, having believed that the bill would pass. The vote to kill it was 248 to 155, with Republicans voting overwhelmingly against the bill.

Mr. Shultz is still groping for the best way to revive the legislation. One possibility would be to seek passage in the Senate and then, in the words of one official, "give the House another chance to do the right thing." But no decision on tactics has been made.

Once before in 1969, the House voted down the bill authorizing a three-year United States contribution to the development association and then later reversed itself and approved the bill by a narrow margin. The necessary appropriations for these three years were also approved, but with a long delay, leaving the United States far behind schedule in the current round of contributions.

One result of the surprise vote, which came at a time of growing disillusion with foreign aid, was a decision by Mr. Shultz and the House leadership to postpone indefinitely consideration of a companion bill that would provide new United States contributions to the much smaller Asian Development Bank.

Mr. McNamara, in his statement, emphasized that "the United States total development effort today runs 14th among the 16 principal donor countries, and in relation to its national income is only one-tenth of what it was 25 years ago."

"Moreover," he said, "United States per capita income now is 30 to 40 times that of people in the poor nations of Africa and Asia."

DROUGHT CITED

Mr. McNamara said the poorest nations that rely on the World Bank unit for much of their external assistance include such countries as Niger, Upper Volta, Mali, Mauritania, Senegal and Chad, which "have been undergoing one of the worst droughts in human history."

He added that other large recipients of these funds such as India, Pakistan and Bangladesh, "have also recently been hit by drought, tripling the cost of imported food grain."

He said that to people in these countries international aid, including that from the development association, which makes loans on easy terms, "means the difference between some alleviation of their poverty and desperation."

[From Newsweek, Feb. 11, 1974]

SHOULD FOREIGN AID BEGIN AT HOME?

(By Kermit Lansner)

Now why did Robert McNamara go out of his way to appear on the "Today" show one dark morning early last week? Since he became president of the World Bank he has kept a studiously low profile in his own country.

Well, McNamara was disturbed. The House had just defeated a bill that would have provided \$1.5 billion over four years to the International Development Association (IDA)—the soft-loan "window" of the World Bank. The Secretary of State joined with the Secretary of the Treasury in calling the vote a "major setback." The former Secretary of Defense called it an "unmitigated disaster."

These vigorous comments might have been more useful before the vote than afterward. Indeed, it is generally felt that one of the major reasons for the unexpected defeat was the indifferent way the Administration managed the bill. A lesser reason was the tendency of the World Bank to use a kind of financial shorthand in talking about its work. This finally obscures what it is really doing for the countries it helps.

So it was easy (with the energy crisis in full swing) for Rep. Wayne Hays to say: "The amount of money we are asking for today will not even soak up the amount of money that the Arab states are taking away from the underdeveloped nations in the price raises they have put on oil in the last 90 days."

It was easy, too, for Rep. John Dent to argue: "We have plants closing down all over my area because they are paying 10 and 11 per cent interest on their money . . . Yet we are giving this money and billions more for 1 per cent interest for ten years and 3 per cent for 30 years."

REBUTTAL

Sensitive to these arguments, McNamara made the point that no IDA funds would go for oil purchases and that they would be used only for such things as irrigation projects in the Sudan, food and grain in Bangladesh and education in Ethiopia. He also explained the loans. It will be interesting to see if the Middle American TV audience to whom he directed these remarks are favorably impressed. Their congressmen certainly brought back another message.

The way things go in Washington, there is a good chance that the IDA bill will be saved in one form or another. But its fate suggests the steady erosion of support for foreign aid—a process that began long before the Arabian blitz.

This weakening of support has been visible everywhere. In the White House, where Kissinger and Nixon showed little concern for the grungy business of the underdeveloped nations; in the Congress, which has never been very enthusiastic about foreign aid; and out in the country, where people find it difficult to take a deep interest in places they know nothing about.

Even the foreign-affairs Establishment often questioned foreign aid and wondered about the waste and the bureaucracy that seem to accompany it. It became one of the great sports for political humorists to point out the cultural idiocies (bathtubs in the Sahara) that seem to follow aid programs. More brutally, there were critics who insisted that aid was counterproductive. They argued that it kept the recipients from taking the harsh steps—exploitation, regimentation or revolution—that might be necessary to put the countries on the road to some kind of progress.

CRY HAVOC

I suppose that under normal circumstances the vast and ramshackle house of aid

with its interlocking bureaucracies, its foundation support and its international connections would have kept growing. But now it is coming under a concentrated attack—at a time when it may be needed more than ever.

If the oil-producing cartel has caused havoc among the Developed Countries, consider what it has done to the Less Developed Countries and the Least Developed Countries. (This last category—an official one—numbers 21 nations.)

In one blow, the rise in oil price may knock the pins out from under the development structures that had been so painfully built up over the years. For example, in the past decade, India has had two massive crises—the famine of 1966-67 and the influx of refugees from Bangladesh during the Pakistani-Indian war. The first cost some \$500 million to import wheat, the second some \$700 million to take care of those who had fled. Three hundred million dollars was in aid. But in one year, the rise in the cost of oil will cost India an additional \$1 billion. For all the LDC's, the Arabian blitz will send the price of pesticides, fertilizers and fuel soaring and bring to a halt the process of development.

True, there is some optimistic talk that the Arab countries (such as Kuwait and Saudi Arabia), with a new sense of statesmanship, will try to help the LDC's in some way. Perhaps. But there is also some macabre talk that one should not worry too much about people living so close to the subsistence level, since they will not feel the impact of a little more pain. (This line of thought raises the interesting problem of the calculus of suffering. Is it more painful for a prosperous American to pay an extra 3 cents for a gallon of gas than it is for a subsistence farmer in drought-ridden Mali to find his daily ration of sorghum fall by one-half?)

CRAZY QUILT

These are questions which are always buried during periods of prosperity and growth but which move to the forefront at moments of great world stress. And they will multiply and intensify as the economic crazy quilt of the world changes during the next few years and a new distribution of blessedness and blight marks the globe. For we can now expect the copper countries and the bauxite countries, the zinc countries and the tin countries to join forces and try to find some economic purchase in the world. And we will find the advanced technological countries fighting back. Most ominous would be an irreconcilable split between the industrialized and nonindustrialized worlds.

So the search continues for some logically compelling reasons for giving aid, and you could see the congressmen wrestling with the question during the House debate. There was the argument of self-interest (new markets, assured sources of raw materials) and the argument of social justice and charity. The argument of political advantage (keep the Commies out) seems to have disappeared.

I think that it would be a failure of never for the United States to turn away from the Third World. It would mean that we are turning inward toward an anxious isolation, a sour independence that is neither proper nor satisfying for a country of our history and our ideals.

But, unfortunately, none of these arguments is compelling.

A few days ago, I spoke to an Indian diplomat who is one of the directors of the United Nations Development Programme. He told me about a moment some years ago when he was in search of aid for his own country. A Soviet official asked him why he thought that the Russians have an obligation to help poor countries. And Dr. I. G. Patel replied: "I am a Hindu, and we Hindus believe in life after

death. You may be reborn a Hindu—in my country."

DEATH OF LOUIS W. CASSELS

Mr. THURMOND. Mr. President, Louis W. Cassels, an eminent journalist and devout Christian who combined the talent of his profession with the wisdom of his faith, died January 23, 1974, at his Aiken, S.C., home.

The subjects of his writings had varied greatly, involving people of all stations and events of all magnitudes, but his greatest contributions involved the religion he believed. As a staff member of United Press International he began writing about religion and its deep significance in our everyday lives. It was a contribution he was to make through his articles, columns, and books until his death last month. Although he was only 52 at the time of his death he had made a major impact on the public view of our lives and times.

As a college student at Duke University Mr. Cassels had considered the ministry as his life's work. However, he was drawn to writing and turned his outstanding talent to that field where he left such a distinguished legacy of performance. Moreover, it was only natural that he should combine his writing skill with the insight of his religious convictions to blaze trails in the applied journalism of our day. His column "Religion in America" circulated in 400 newspapers throughout the Nation and was recognized as one of the outstanding voices on this subject in America.

True to his beliefs he was an active layman in the Episcopal Church, whether he was in Aiken or the Washington area where he and his family lived so many years.

His pen was ever busy during the 32 years he spent with UPI which he served as senior editor. Presidential elections, racial conflicts, and human events of all grades were his interest. Between the tasks of his daily life he wrote books of great lyrical and persuasive qualities. Interlaced through his written observations and views were the moral and ethical considerations which he knew to be the foundation of human existence. The awards he received for his work were numerous; his reputation for excellence and depth of understanding was complete.

The contributions of wisdom were great which Mr. Cassels made to people who came within the realm of his words or his deeds. He helped us see events for what they really were and all who knew him or his work benefited by his life. He will be sorely missed.

Mr. Cassels, who was born January 14, 1922, grew up in the town of Ellenton, S.C., an Aiken County community which was later to disappear from the map. When the Federal Government built the Savannah River plant of the Atomic Energy Commission, the town of Ellenton was engulfed in the huge compound that was created. However, in 1970, when Mr. Cassels faced semiretirement as the result of a heart attack, he returned to Aiken to live. There, he continued to write two columns a week. He became a part-time journalism lecturer at the

University of South Carolina. His latest book, "Coontail Lagoon," will be published in the spring.

The memory of this eminent man whose life and work are filled with meaning for all of us will be honored tomorrow at Washington Cathedral. His ashes will be placed in a niche of the Cathedral's Bethlehem Chapel. This is a fitting honor to the memory of this devout and distinguished man.

Mr. President, I wish to extend my deepest sympathy to his devoted wife, Mrs. Charlotte Norling Cassels; his son, Horace Michael Cassels IV of Rockville, Md.; and his sister, Mrs. J. Reese Daniel of Columbia, S.C.

At the time of his death, a number of articles and editorials about Louis W. Cassels appeared in newspapers around the country. Mr. President, I ask unanimous consent that several of these be printed in the Record at the conclusion of my remarks, as follows: "Louis Cassels, 52, UPI Editor, Dies," Aiken Standard, Aiken, S.C., January 24, 1974; "Louis Cassels Dies in Aiken," the Augusta Chronicle, Augusta, Ga., January 24, 1974; "Louis Cassels Dies in Aiken," the State, Columbia, S.C., January 24, 1974; "Service Set Today for Louis Cassels," Aiken Standard, Aiken, S.C., January 25, 1974; "Religion Writer Louis Cassels Rites in St. Thaddeus Today," the State, Columbia, S.C., January 25, 1974; "Cassels Memorial Service Set," the Augusta Chronicle, Augusta, Ga., January 25, 1974; "Cassels' Ashes Will Rest in Washington Cathedral," the Greenville News-Piedmont, Greenville, S.C., February 3, 1974; "Louis Welborn Cassels," Aiken Standard, Aiken, S.C., January 25, 1974; "Louis Cassels," the Greenville News-Piedmont, Greenville, S.C., January 27, 1974; and "Louis Cassels," the Augusta Chronicle, Augusta, Ga., January 25, 1974.

There being no objection, the material was ordered to be printed in the Record, as follows:

[From the Aiken (S.C.) Standard, Jan. 24, 1974]

LOUIS CASSELS, 52, UPI EDITOR, DIES

Louis Welborn Cassels, 52, well-known senior editor of United Press International and well-known author, died here early yesterday evening at his home from a coronary.

Mr. Cassels, who started his own newspaper at the age of 12 in his hometown of Ellenton, pursued a lifetime career in journalism.

At 17, he began as a police reporter for the Augusta Herald, working during the summers while he was in college.

He was graduated Phi Beta Kappa from Duke University in 1942 and began work with UPI in New York. After an intermediate period in the United States Air Force during World War II, he returned to UPI. In 1947, he joined the Washington Bureau. In that post, he covered every presidential election from 1948 until his retirement here in 1970.

Mr. Cassels wrote two religious columns from his Aiken home, Coontail Lagoon, "Of God and Man", in addition to a political and social commentary, "National Window".

Mr. Cassels won a host of national press awards, including the Christopher Award and the Newspaper Guild of New York Front Page Award, but the one he coveted the most was a trophy for his series, "The Nation's Negroes in Revolt". He covered many of the major race riots in the nation and was considered to be an expert in urban riots by his coworkers.

Although Mr. Cassels has written 11 books on the subject of religion, he insisted he never specialized in religion. "I am simply a newspaperman who believes in God," he said. It was Mr. Cassels who persuaded the national wire service to start covering religion.

"I felt that they (the news media) were covering religion in a superficial way. They treated religion as if they were scared to death of it," Mr. Cassels urged them to start treating it "with the gloves off".

In 1956, his first UPI religion column dealt with the Roman Catholic Church in the deep South and its effects on politics, a quasi-political subject.

Next he took on a controversial subject, the reality of hell, straight reporting, giving the pros and cons. It brought in such an abundance of mail that religion became a routine assignment at UPI.

One of his major books is "What's The Difference", a book delving into the various religions of the world. He has written a number of books since a coronary forced him to become semi-retired in Aiken, including "Halrcuts and Holiness", "The Reality of God" and "The Real Jesus".

His 12th and latest book, a secular work, "Coontail Lagoon", is due out in April and revolves around his rediscovery of God's world of nature and life in a small town since his first illness. An untitled detective book will be released in September.

Mr. Cassels owned and operated Cassels Oil Company here, a family business he and his family have held for many years.

He has taught journalism at the University of South Carolina in Columbia and Aiken.

Discussing his career when he moved here in 1970, Mr. Cassels said, "If I had it all to do over, I wouldn't do anything differently," referring both to his professional and private life.

"If you really want to do something to make the world a little less insane," he said writing is the way to do it. You may not solve everything, he said, but at least you can get in the fight.

Mr. Cassels was the recipient of the Bryan McKissick Lecture Chair at USC in 1973. He is listed in "Who's Who in America" and "Who's Who in the World". He was a member of St. Thaddeus Episcopal Church. He was a member of the National Press Club, Sigma Delta Chi and Alpha Tau Omega.

Surviving are his widow, Charlotte Norling Cassels, a son, Horace Michael Cassels IV, and a sister, Mrs. J. R. Daniel of Columbia. He was the son of a prominent Ellenton family, the late Mr. and Mrs. Horace Michael Cassels.

Interment will be private. Plans will be announced later for St. Thaddeus Episcopal Church.

Memorials may be sent to the Washington National Cathedral, Washington, D.C.

[From the Augusta (Ga.) Chronicle, Jan. 24, 1974]

LOUIS CASSELS DIES IN AIKEN

Louis Cassels, a senior editor and award-winning religion writer for United Press International, died Wednesday evening at his home in Aiken. He was 52.

Cassels apparently suffered a coronary attack shortly after finishing dinner at his home, his wife Charlotte said. Medical help arrived within four minutes of the attack but was unable to revive him.

A veteran of 32 years service with UPI, Cassels was the author of numerous magazine articles and five books on religion and ethical problems in the modern day.

Besides his wife, Charlotte, survivors include a son, Michael. Mrs. Cassels said he would be buried near their Aiken home in a private ceremony. Arrangements were not complete Wednesday night.

Cassels was born Jan. 14, 1922, in the town of Ellenton, where his family operated a general store. After graduation from high school,

he enrolled at Duke University with an inclination to study for the ministry. But he found more and more of his time being devoted to newspapers and decided instead on newspapering as a career.

[From the Columbia (S.C.) State, Jan. 24, 1974]

LOUIS CASSELS DIES IN AIKEN

AIKEN.—Louis Cassels, a senior editor and award-winning religion writer for United Press International, died Wednesday evening at his home in Aiken. He was 52.

Mr. Cassels, who had a history of heart trouble, apparently suffered a coronary attack shortly after finishing dinner at his home, his wife Charlotte said. Medical help arrived within four minutes of the attack but were unable to revive him.

A veteran of 32 years service with UPI, Mr. Cassels was the author of numerous magazine articles and five books on religion and ethical problems in the modern day.

His weekly column, "Religion in America," appeared in afternoon papers; another "World of Religion," was for morning newspaper use. He was the first wire service reporter to write regularly and in depth on religion as a topic of continuing importance to newspaper readers.

Mr. Cassels recently served as J. Rion McKissick Lecturer in the University of South Carolina School of Journalism.

He wrote penetratingly on topics other than religion. Noteworthy was a 4,600-word report for UPI in 1967 titled "The Negro in Revolt—What Now?"

As a Sunday School teacher for a class of high school seniors, Mr. Cassels was keenly interested in the problems of youth. He was in Ohio on a survey assignment in May, 1970, when the shootings occurred on the Kent State University campus. He went immediately to the scene to help with the spot coverage of the event.

[From the Aiken (S.C.) Standard, Jan. 25, 1974]

SERVICE SET TODAY FOR LOUIS CASSELS

A memorial service for Louis Welborn Cassels, 52, of Spring Lake, Aiken, a senior editor of United Press International, who died Wednesday, will be held at 5 p.m. at St. Thaddeus Episcopal Church with the Rev. Howard McKay Hickey and the Rt. Rev. Monsignor George Lewis Smith officiating. Private funeral services were held this morning.

Surviving are: his widow, Mrs. Charlotte Norling Cassels; one son, Horace Michael Cassels IV, Rockville, Md.; and one sister, Mrs. J. Reese Daniel, Columbia.

Friends may call at the home. Memorials to the Washington Cathedral, Mt. St. Albans, Washington, D.C., or a favorite charity are suggested.

[From the Columbia (S.C.) State, Jan. 25, 1974]

RELIGION WRITER LOUIS CASSELS RITES IN ST. THADDEUS TODAY

AIKEN.—Memorial services for Louis Welborn Cassels, United Press International senior editor and prize-winning religion writer who covered nearly every major religious and social welfare story during the turbulent 1960s, will be 5 p.m. today in St. Thaddeus Episcopal Church. Burial will be private.

The family suggests that those who wish may make memorials to the Washington Cathedral, St. Alban's, Washington, D.C., or a favorite charity.

George Funeral Home is in charge.

Mr. Cassels, 52, who had a history of heart trouble, apparently suffered a coronary attack Wednesday evening shortly after finishing dinner at his home, his widow, Char-

CXX—201—Part 3

lotte said. Medical help arrived within four minutes of the attack and he was taken to Aiken County Hospital but efforts failed to revive him.

After his first heart attack, he had written "To say that God is with you when you enter the valley of the shadow doesn't mean you're assured of getting safely through. It simply means that in serious illness you can be aware of His presence and confident of His love to a degree not often attained in the peaceful and painless passages of everyday life."

Mr. Cassels was a veteran of 32 years service with UPI. He covered every presidential election from 1948 until his retirement in Aiken in 1970.

Mr. Cassels won the Christopher Award and the Newspaper Guild of New York Front Page Award. The award he prized most was a trophy for his series, "The Nation's Negroes in Revolt."

He covered many of the major race riots in the nation and was considered to be one of the experts in urban riots by his co-workers.

He wrote eleven books on the subject of religion but insisted he never specialized in religion. "I am simply a newspaperman who believes in God," he said.

It was Mr. Cassels who persuaded the national wire service to start covering religion. "I felt that they were covering religion in a superficial way. They treated religion as if they were scared to death of it." He urged the wires to start treating religion with the gloves off.

In 1956 his first UPI religion column dealt with the Roman Catholic Church in the Deep South and its effect on politics, a quasi-political subject.

Despite his long years in New York City and Washington, D.C., with United Press, and then its successor UPI, he never lost touch with his kinfolk or his native state.

A coronary forced him to become semi-retired in Aiken in 1970.

Although born in Augusta, Ga., Jan. 14, 1922, Mr. Cassels claimed old Ellenton, S.C., as his home. He was a son of the late Horace Michael Cassels II and Mollie Welborn Cassels.

Mr. Cassels paid great tribute during his life to the influence of his parents. His mother "Miss Mollie" taught school and was very active in her church and in Aiken County community affairs. His father was the popular "Big Mike" Cassels, mayor and general store proprietor in Ellenton, the town which hit the headlines in the 1950's when it was forced to disappear from the South Carolina map and was taken over as the site of the Savannah River Atomic Energy Plant.

He started his own newspaper at the age of 12 in his home town of Ellenton. At 17 he became a police reporter for the Augusta Herald, working during the summers while he was at college.

After graduation from high school, he enrolled in Duke University with an inclination to study for the ministry. But he found himself devoting most of his time working on the student newspaper, The Duke Chronicle, and decided instead on newspapering as a career. He graduated Phi Beta Kappa from Duke in 1942.

After a brief period of recuperation after his retirement in Aiken, he turned to his typewriter again and enjoyed making frequent reference to the national scene as viewed from his Aiken Southern grassroots perspective.

For a time, he was doing a live radio report for United Press International each morning... a kind of "commentary from Coontall Lagoon", as he called his Aiken home surrounded by tall pines.

He was for years an active layman of the Episcopal Church and his family attended when they lived in Bethesda, Md.,

and later at St. Thaddeus Episcopal Church in Aiken. He was a contributing editor for The Episcopalian for many years.

At the time of his death, he was J. Rion McKissick lecturer in the University of South Carolina College of Journalism.

He was named to the part-time post to teach feature writing in September, 1973. Mr. Cassels had taught at the USC Aiken Regional Campus in spring, 1972.

In April 1973 Mr. Cassels presented a collection of over 200 items from his personal papers to the University of South Carolina Library. The papers reflect 35 years of his career, beginning with his experience as college editor for the Duke University Chronicle and continuing to his present assignment with UPI.

Mr. Cassels delivered the invocation at the dinner Dec. 7, 1970, on the 20th anniversary of the site selection for the Savannah River Plant.

Mr. Cassels spoke last October to the fall meeting of the South Carolina UPI Association and observed "Race relations in South Carolina today are light-years ahead of race relations in Washington or New York, or Chicago, or Detroit, or San Francisco, or Los Angeles or nearly any other big city of the North, East, or West."

His twelfth and latest book, "Coontall Lagoon," is due out in April and revolves around his rediscovery of God's world of nature and life in a small town since his first illness.

An untitled detective book will be released in September.

Mr. Cassels owned and operated Cassels' Oil Co. in Aiken, a business he and his family have held for many years.

He was a member of National Press Club, Sigma Delta Chi and Alpha Tau Omega.

Surviving are his widow, Mrs. Charlotte Norling Cassels; a son, Horace Michael Cassels IV of Rockville, Md.; and a sister, Mrs. J. Reese Daniel of Columbia.

[From the Augusta (Ga.) Chronicle, Jan. 25, 1974]

CASSELS MEMORIAL SERVICE SET

AIKEN.—A memorial service for Louis Welborn Cassels, of Spring Lake, Aiken, a senior editor of United Press International, will be held today at 5 p.m. in St. Thaddeus Episcopal Church, with the Rev. Howard M. Hickey officiating. Burial will be private.

Born in Augusta, Mr. Cassels claimed Old Ellenton as his home. He started his career at the age of 12 by publishing his own community newspaper. At 17 he became a police reporter for the Augusta Herald, working during summers while he was in college.

He was graduated Phi Beta Kappa from Duke University in 1942 and began work with UPI in New York. After service in the Air Force during World War II, he returned to UPI and in 1947 joined the Washington Bureau. In that post he covered every presidential election from 1948 until his retirement to Aiken in 1970.

From his Aiken home, Coontall Lagoon, he continued writing two nationally known columns, one entitled "Of God and Man" and the other a political and social commentary, "National Window." He insisted he had not specialized in religion, but was "simply a newspaperman who believes in God."

He had written 11 books on the subject of religion. His latest book about his home, "Coontall Lagoon," is to be published in April.

His many national press awards included the Christopher Award and the Newspaper Guild of New York Front Page Award. He was also cited for a series, "The Nation's Negroes in Revolt," and was considered an expert in urban riots by his co-workers.

He also owned and operated Cassels Oil Company in Aiken, a business which has been in his family many years.

Survivors include his widow, Mrs. Charlotte Norling Cassels; one son, Horace Michael Cassels IV, Rockville, Md.; and one sister, Mrs. J. Reese Daniel, Columbia, S.C.

Memorial contributions may be made to the Washington Cathedral, Mt. St. Albans, Washington, D.C., or a favorite charity.

[From the Greenville (S.C.) News-Piedmont] Feb. 3, 1974]

CASSELLS' ASHES WILL REST IN WASHINGTON CATHEDRAL

WASHINGTON.—The Washington Cathedral will honor the memory of Louis Cassels on Feb. 19 when the ashes of the late UPI senior editor and religion writer are to be placed in a niche of the Cathedral's Bethlehem Chapel.

Arrangements for the memorial service for Cassels, who died a week ago at his home in Aiken, S.C., are being made by Dean Francis B. Sayre Jr.

A Cathedral spokesman said the immurement in the Cathedral is reserved for outstanding members of the congregation and friends of the Cathedral.

Others who have been similarly honored in the past include President Woodrow Wilson, Adm. George Dewey, former secretary of state Cordell Hull, Nobel peace prize winner John R. Mott, former U.S. ambassador to Russia Joseph Davies, Helen Keller and her childhood teacher, Ann Sullivan Macy.

In his long career as a Washington newsman, Cassels was a member of the congregation of St. Johns Episcopal Church in suburban Bethesda, Md.

On behalf of UPI, he often worked closely with Dean Sayre, arranging coverage of major events at the Cathedral such as the funeral of secretary of state John Foster Dulles.

He was the author of numerous magazine articles and more than half a dozen books on religion and ethical problems in America. At the time of his death, he wrote two columns a week for UPI entitled "Religion in America" and "World of Religion."

[From the Aiken (S.C.) Standard, Jan. 25, 1974]

LOUIS WELBORN CASSELLS

Louis Welborn Cassels lived and died ahead of his time.

Death, which had been a mere heartbeat away for the past several years, overtook him Wednesday night at his home here.

As a hard-driving United Press International newsman, he had roamed the world, rubbing elbows with royalty and peasants, bishops and atheists. He had visited most of the celebrated international centers of beauty and culture, of industry and world power. When a severe coronary in 1971 forced a change of pace, he came back to Aiken.

While his roots in Aiken run deep, it was not the same community he had left in the days prior to the revolutionizing advent of the AEC's Savannah River Plant. Quickly, however, he meshed into the changed community and drew to himself a host of new friends in addition to those he had known and loved from childhood days in Ellenton, the little town of dear hearts and gentle people that was wiped from the face of the earth by the AEC.

Lou Cassels was displaced physically, but his heart never strayed far. It was a part of his sentimental make-up that he could never forget it through the years. Two decades after Ellenton was obliterated, he wrote: "Pompeii at least has some ruins which

show where a home stood before it got in the way of a volcano 2,000 years ago."

Lou Cassels was never one to bite his tongue. Anyone interested in his views quickly found that he had opinions backed by scholarship. One never had to remain in doubt as to how he stood. This quality, along with his empathy and compassion were outstanding attributes of Lou Cassels' character.

As a professional writer, he was prolific, and he possessed that greatly cherished ability of all reporters—the ability to tell a story so that people can understand it. He once wrote a description of another journalist's style which actually described his own: "... a gift for bringing scientific intricacies down to poolroom terms."

A Phi Beta Kappa at Duke University, he remained an avid scholar throughout his life. He was an urbane world traveler. Yet he never lost a friendly, folksy personal interest in people that so endeared him to so many.

His numerous books and articles incidentally told much about Louis Cassels the man.

When he was recovering from his near-fatal attack in 1971, he had a spiritual experience which made him impatient with convalescence—he wanted strength to write about it. He did, in a deeply moving book entitled "God Is With You." He felt that serious illness could be a blessing making a person aware of God's presence and "confident of his love to a degree not often attained in the peaceful and painless passage of everyday life."

His was a rich life—made so in large measure by his enrichment of other lives.

Lou Cassels at death was nearly two decades short of the three score and ten years long considered the promised normal lifespan.

But then he had packed into 52 years more real living than most people realize in a much longer lifetime.

[From the Greenville (S.C.) News-Piedmont, Jan. 27, 1974]

LOUIS CASSELLS

Louis Cassels lived a relatively short life, but it was a fruitful one. A native South Carolinian, he became a nationally respected journalist and expert on religion and ethics.

A senior editor for United Press International, Cassels was best known for his wire service reporting, columns and books on religion and ethics. But he handled many other subjects as a good all-around journalist.

A native of Ellenton, one of the small towns razed to make room for the Savannah River atomic energy plant, Cassels was the first wire service reporter to write about religion in depth. He became famous because of his ability to report on and explain development in the complex field relating to mankind's deepest emotions and most personal experiences.

He was a credit to the profession of journalism.

Cassels returned to South Carolina a few years ago after developing heart trouble, and lived in Aiken. He continued working, writing wire service columns for both morning and afternoon newspapers.

In addition he was taking on an important new work, training prospective young journalists as a part-time instructor in the University of South Carolina's College of Journalism. He was coming to be regarded as a fine teacher of journalism.

Louis Cassels' recent death at age 52 is a

severe loss to his many readers, numerous religious leaders and many promising young writers. But the products of his pioneering career will endure for many years.

[From the Augusta (Ga.) Chronicle, Jan. 25, 1974]

LOUIS CASSELLS

The death of Louis Cassels of Aiken removes from the journalistic and literary scene a writer of national stature, who for 32 years had been a staff member for United Press International.

Louis Cassels was that rare type of newspaperman who, through personal interest which in early years led even to contemplation of the ministry as a career, could write and speak with unquestioned authority on the subject of religion. In addition to wire service reporting in that field, he was the author of five books dealing with religion and ethics. Needless to say, he will be missed by millions of readers all over the United States who knew him through the printed page.

Mr. Cassels held a deep, but broad, view of the role of the Church. He did not limit his concept of worship to the sanctuary, but affirmed the need to live religion in daily life.

He was a man not only devout, but devoted to his family, his friends and his community. One of the sorrows of his life was the destruction of his native town of Ellenton, which the federal government felt was necessary in order to provide a site for the Savannah River plant.

He was a man who for many years gave unstintingly of his time and effort in making addresses to groups interested in his area of activity. In this process, he extended tremendously his circle of friends.

As those friends and his family mourn his unexpected death at the relatively early age of 52, we add our heartfelt sympathy.

HISTORY OF FISCAL YEAR 1974 DEPARTMENT OF DEFENSE RESEARCH, DEVELOPMENT, TEST AND EVALUATION AUTHORIZATION AND APPROPRIATION

Mr. MCINTYRE. Mr. President, once again the Subcommittee on Research and Development of the Armed Services Committee has compiled in tabular form the complete history of the actions of Congress on the fiscal year 1974 authorization and appropriation requests for the Department of Defense research, development, test and evaluation appropriations. This information is of widespread interest. It is presented in detail by military department and by program element. Certain program elements have been excluded because of security considerations, but the total amounts by budget activity and by military department or defense agency are complete. Copies of these tables may be obtained in room 224 of the Russell Senate Office Building.

I ask unanimous consent to have a set of these tables printed in the RECORD.

There being no objection, the tables were ordered to be printed in the RECORD, as follows:

(In millions of dollars)

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
R.D.T. & E. ARMY										
Military sciences:										
61101A	In-house laboratory, independent research	11.1	10.7	11.0	11.0	11.0	11.0	11.0	10.8	10.8
61102A	Defense research sciences	70.7	67.5	69.0	69.0	69.0	69.0	69.0	67.0	67.0
62101A	Information processing	1	3	5	5	5	5	5	5	5
62102A	Electronic warfare	2.9	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6
62103A	Surface mobility studies	1.2	.6	.6	.6	.6	.6	.6	.6	.6
62105A	Materials	10.3	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
62106A	Human factors in military systems	4.3	3.7	4.2	4.2	4.2	4.2	3.7	3.7	3.7
62107A	Military selection, training and leadership	3.0	2.5	1.3	1.3	1.2	1.2	1.2	1.2	1.1
62108A	Performance effectiveness American soldier	2.3	3.4	4.7	4.7	4.7	4.7	3.4	3.4	3.4
62110A	Medical investigations	21.0	35.6	38.0	38.0	38.0	38.0	38.0	37.0	37.0
62111A	Atmospheric investigations	3.4	3.7	4.8	4.8	4.8	4.8	3.8	3.8	3.8
62112A	Terrestrial and construction investigations	1.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
62114A	Fluidic technological investigations	1.1	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1
62115A	General biological investigations	5.2								
62116A	General chemical investigations	5.7	3.9	5.3	5.3	5.3	5.3	5.3	4.1	4.1
62117A	Nuclear munitions and radials	1.7	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
62118A	Nuclear weapons effects research—test	6.1	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
62119A	Nuclear power applications	2.1	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
62120A	Combat development investigations	2.6	2.6	2.8	2.8	2.8	2.8	2.8	2.3	2.3
62121A	Civil engineering technology	4.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
63101A	Manpower resources development	4.4	3.7	4.9	4.9	4.9	4.9	3.9	3.9	3.9
65101A	Studies and analysis	8.8	7.2	8.1	8.1	8.1	8.1	7.0	7.0	7.0
Total, military sciences		178.0	176.5	187.4	187.4	187.3	187.3	182.4	177.5	177.5
Aircraft and related equipment:										
62201A	Aircraft weapons technology	1.7	2.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4
62202A	Aircraft avionics technology	5.0	4.8	6.1	6.1	6.1	6.1	5.1	5.1	5.1
62203A	Air mobility technology	2.4	1.6	2.2	2.2	2.2	2.2	2.2	2.2	2.2
62204A	Aerodynamics technology	2.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
62205A	Aeronautical technology	6.1	6.4	6.0	6.0	6.0	6.0	6.0	6.0	6.0
62206A	System synthesis analysis	.6	.9	.9	.9	.9	.9	.9	.9	.9
62207A	Aircraft propulsion technology	2.9	3.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4
62208A	Aircraft loads and structures technology	2.3	3.1	2.9	2.9	2.9	2.9	2.9	2.9	2.9
63201A	Aircraft powerplants and propulsion	3.1	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5
63203A	Heavy lift helicopter	29.5	38.0	59.9	59.9	59.9	59.9	59.9	59.9	59.9
63204A	Advanced helicopter development	1.9	4.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63205A	Aerial scout	9.8	6.1	1.0	1.0	0	0			
63206A	Aircraft weapons	9.8	7.1	6.9	6.9	6.9	6.9	6.9	6.9	6.9
63207A	Aircraft avionics equipment	1.8	3.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8
63208A	Aircraft loads and structures	3.1	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
63209A	Air mobility support	4.7	2.9	1.1	1.1	1.1	1.1	1.1	1.1	1.1
63210A	Aerial surveillance, target acquisition, and night observation	1.2								
63211A	Rotary wing research aircraft	11.8	3.4	10.6	10.6	10.6	10.6	10.6	1.06	10.6
63212A	Tilt rotor research aircraft		3.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
64201A	Aircraft avionics	5.8	8.3	9.6	9.6	9.6	9.6	9.6	9.6	9.6
64202A	Aircraft weapons	7.6	1.3	.6	.6	.6	.6	.6	.6	.6
64204A	Air mobility support equipment	1.4	4.2	7.7	7.7	7.7	7.7	7.7	7.7	7.7
64206A	Utility tactical transport aircraft system (UTTAS)	23.5	50.4	108.8	102.6	102.7	102.6	102.6	102.6	102.6
64207A	Advanced attack helicopter	0	20.0	49.2	49.2	45.7	45.7	45.7	49.2	49.2
64209A	Air mobility readiness techniques	2.1	.6	.4	.4	.4	.4	.4	.4	.4
64210A	Advanced attack helicopter evaluation	8.6								
64211A	Aerial surveillance, target acquisition, and night observation system	2.8								
64212A	Cobra TOW	10.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
23625A	Cheyenne AH56A	9.3	3.5							
Total, aircraft and related equipment		175.3	193.9	301.4	295.2	290.8	290.7	289.7	293.2	293.2
Missiles and related equipment:										
62301A	Missiles	8.6	8.4	7.9	7.9	7.9	7.9	7.9	7.9	7.9
62303A	Missile technology	18.2	16.9	22.0	22.0	22.0	22.0	20.0	19.0	19.0
62304A	Exploratory ballistic missile defense	37.2	43.4	39.3	39.3	23.9	34.0	34.0	23.9	23.9
63301A	Advanced forward area air defense system	3.0	8.1	28.1	28.1	8.6	11.1	11.1	11.1	11.1
63303A	Surface-to-surface missile rocket system	2.0	.1	3.3	3.3	3.3	3.3	3.3	3.3	3.3
63304A	Advanced ballistic missile defense	58.8	49.2	60.7	60.7	33.7	52.7	77.7	37.7	37.7
63306A	Terminal homing system	9.9	11.0	27.1	27.1	27.1	27.1	27.1	27.1	27.1
63307A	Missile effectiveness evaluation	7.5	5.2	6.1	6.1	6.1	6.1	6.1	6.1	6.1
63308A	Site defense	59.7	80.1	170.0	145.0	100.0	135.0	0	135.0	110.0
63309A	Cannon launched guided projectile	7.2	8.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4
63310A	Heliborne missile—(Hellfire)	4.9	11.1	11.1	11.1	11.1	11.1	6.1	6.1	6.1
64306A	Stinger	7.5	20.0	24.6	24.6	24.6	24.6	24.6	24.6	24.6
64307A	Surface-to-Air Missile Development (SAM-D)	115.5	171.1	193.8	193.8	193.8	193.8	193.8	171.2	193.8
65301A	Kwajalein Missile Range	79.6	75.9	69.7	69.7	69.7	69.7	69.7	69.7	69.7
65302A	White Sands Missile Range	77.6	74.8	71.3	71.3	71.3	71.3	71.3	71.3	71.3
12514A	Safeguard defense system	297.6	299.4	216.0	191.0	193.7	181.0	181.0	181.0	181.0
22233A	Surface-to-Air missile Hawk; Improvement program	3.3	6.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9
22234A	Chaparral/Vulcan	4.8	3.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3
22251A	Division support missile—Lance	25.9	7.7							
22254A	Surface-to-surface missile—Pershing	5.8	6.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0
23623A	Land combat support system	2.0	1.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Total, missiles and related equipment		840.4	912.4	967.2	917.2	819.0	866.9	751.7	811.2	808.8
Military astronautics and related equipment:										
63403A	Defense navigation satellite system	.9	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
33142A	Satellite communications ground environment	11.3	15.0	16.2	16.2	16.2	16.2	16.2	16.2	16.2
Total, military astronautics and related equipment		12.2	16.7	17.9	17.9	17.9	17.9	17.9	17.9	17.9

[COMMITTEE PRINT]

FISCAL YEAR 1974 R.D.T. & E. AUTHORIZATION—Continued

[In millions of dollars]

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
R.D.T. & E. ARMY—Continued										
Ordnance, combat vehicles, and related equipment:										
62601A	Tank automotive technology	5.5	5.6	6.3	6.3	6.3	6.3	6.3	6.3	6.3
62603A	Firepower other than missiles	15.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
62604A	Army small arms program	5.6	5.4	5.3	5.3	5.3	5.3	5.3	5.3	5.3
62605A	Vegetation control chemical investigations	1.5	.9	.5	.5	.5	.5	.5	.5	.5
62606A	Riot control agent investigations	1.5	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
62607A	Incapacitating chemical investigations	.7	.7	.7	.7	.7	.7	.7	.7	.7
62608A	Lethal chemical investigations	1.6	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0
62609A	Laser technology and application									
62610A	Weapons technology	2.3	2.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5
62611A	Fuels and lubricants	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
63601A	Power systems converters	.9	.7	.9	.9	.9	.9	.9	.9	.9
63604A	Nuclear munitions and radials	.6	.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63606A	Mine warfare	5.4	5.0	6.4	6.4	6.4	6.4	6.4	6.4	6.4
63607A	Army small arms program	4.9	4.3	6.0	6.0	6.0	6.0	6.0	6.0	6.0
63608A	Weapons and ammunition	4.6	2.7	4.3	4.3	4.3	4.3	4.3	4.3	4.3
63611A	High energy laser development									
63613A	Advance fuze design	2.6	.6	.8	.8	.8	.8	.8	.8	.8
63614A	Incapacitating chemical munitions concepts	2.0	.8							
63615A	Lethal chemical munitions concept	2.6	2.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3
63619A	Mine neutralization	5.7	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
63620A	Tank systems	20.0	19.6	52.1	52.1	52.1	52.1	52.1	52.1	52.1
63621A	Vehicle engine development	9.7	7.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7
64601A	Infantry support weapons	.3								
64602A	Weapons and ammunition	11.4	13.9	15.1	15.1	15.1	15.1	25.1	15.1	15.1
64603A	Nuclear munitions	16.0	11.5	14.5	0	6.1	6.1	6.1	6.1	6.1
64604A	Mobility	1.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
64605A	Howitzer light 105mm. (XM204)	1.7	3.1	7.8	7.8	7.8	7.8	7.8	7.8	7.8
64606A	Fortifications, mines and obstacles			7.0	7.0	7.0	7.0	7.0	7.0	7.0
64608A	Army small arms program	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0
64609A	Riot control agent systems	.9	.4	.6	.6	.6	.6	.6	.6	.6
64610A	Chemical munitions		1.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3
64612A	Mine neutralization	.9	2.7	3.0	3.0	3.0	3.0	3.0	3.0	2.0
64613A	Incapacitating chemical munitions			.3	.3	.3	.3	.3	.3	.3
64614A	Howitzer medium 155mm. (XM198)	7.6	18.8	6.0	0	6.0	6.0	6.0	6.0	6.0
64615A	M60A1 thermal sight	1.0	1.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3
64616A	Mechanized infantry combat vehicle (XM723)	2.2	8.1	9.8	9.8	9.8	9.8	9.8	9.8	9.8
64617A	Vehicle rapid fire weapon system—Bushmaster		1.8	13.7	13.7	9.8	9.8	9.8	9.8	9.8
64618A	Armed reconnaissance Scout vehicle (XM800)	6.3	12.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
64619A	Mine systems	4.8	9.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2
23618A	Shillelagh	2.1	.3							
23619A	Main battle tank (MBT-70)	1.5								
23624A	Antitank assault weapon TOW	1.1	1.6	8.1	8.1	6.5	6.5	6.5	6.5	6.5
23627A	Medium antitank assault weapon Dragon	12.5	4.3	.7	.7	.7	.7	.7	.7	.7
23630A	M60A1 tank product improvement program	5.0	7.4	3.4	3.4	3.4	3.4	5.1	5.1	5.1
Total, ordnance, combat vehicles, and related equipment		194.9	190.1	240.8	220.3	226.9	226.9	235.7	228.6	228.6
Other equipment:										
62701A	Communications electronics	6.3	4.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5
62703A	Combat surveillance target acquisition and identification	4.9	5.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6
62705A	Electronics and electronic devices	11.7	11.6	10.7	10.7	10.7	10.7	10.7	10.7	10.7
62707A	Mapping-geodesy	2.8	3.1	2.9	2.9	2.9	2.9	2.9	2.9	2.9
62708A	Combat support	7.0	11.4	12.1	12.1	12.1	12.1	12.1	12.1	12.1
62709A	Night vision investigations	4.5	4.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0
62710A	Defense against chemical agents	7.4	7.0	6.7	6.7	6.7	6.7	6.7	6.7	6.7
62711A	Defense against biological agents	5.5	1.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6
62712A	Mine detection and neutralization	3.8	5.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9
62713A	Technical support of the military man	10.1	9.9	9.3	9.3	9.3	9.3	9.3	9.3	9.3
63701A	Land warfare laboratory	7.0	6.3	5.2	5.2	5.1	5.1	5.1	5.1	5.1
63702A	Electric power sources	3.2	3.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
63703A	Automatic data systems—field army	1.4	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
63706A	Identification, friend or foe developments	.1	.3	.3	.3	.3	.3	.3	.3	.3
63707A	Communications development	4.8	1.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4
63711A	Electronic warfare									
63712A	Mapping-geodesy	6.8	.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3
63713A	Therapeutic development	9.0	7.7	7.0	7.0	7.0	7.0	7.0	7.0	7.0
63715A	Subsystem reliability	2.2	1.4							
63718A	Missile electronic warfare									
63719A	Surveillance, target acquisition, and night observation	21.3	16.8	10.9	10.9	10.9	10.9	10.0	10.9	10.9
63720A	Biological defense materiel concepts	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
63721A	Chemical defense materiel concepts	1.7	.7	2.4	2.4	2.4	2.4	2.4	2.4	2.4
63722A	Tactical Operations System (TOS)	8.4	8.4	8.2	8.2	8.2	8.2	8.2	8.2	8.2
63723A	Command and control	6.4	5.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
63724A	Low cost ownership development		.5							
63725A	Remotely piloted vehicles and drones	3.2	2.5	4.0	4.0	4.0	4.0	3.0	4.0	3.5
63726A	Combat support equipment	.5	4.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9
63729A	Counter battery radar		8.0	8.6	8.6	8.6	8.6	8.6	8.6	8.6
64701A	Communications—engineering development	10.1	7.3	5.6	5.6	5.6	5.6	5.6	5.6	5.6
64706A	Nuclear surveillance survey	1.0	.9	.6	.6	.6	.6	.6	.6	.6
64709A	Identification, friend or foe equipment	1.6	1.9	1.1	1.1	1.1	1.1	1.1	1.1	1.1
64711A	Electronic warfare									
64712A	Joint advanced tactical command, control, and communications program (C3P)	3.2	2.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0
64713A	Combat feeding, clothing and equipment	5.3	4.6	4.1	4.1	4.1	4.1	3.1	4.1	4.1
64715A	Manpower resources and training applications	3.2	2.2	3.7	3.7	3.7	3.7	3.7	3.7	3.7
64716A	Mapping and geodesy	2.4	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
64717A	General combat support	14.7	10.7	10.0	10.0	10.0	10.0	10.0	10.0	10.0
64723A	Surveillance, target acquisition and night observation system	10.4	13.7	15.6	15.6	15.6	15.6	15.6	15.6	15.6
64725A	Chemical defense materiel	1.6	1.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5
64726A	Meteorological equipment systems	.5	.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
64727A	Command and control		.6	1.4	1.4	1.4	1.4	1.4	1.4	1.4
64728A	Family of military engineering construction equipment		.9	1.1	1.1	1.1	1.1	1.1	1.1	1.1
64729A	Counter mortar radar		5.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
65710A	Communications—electronics testing activities	9.7	9.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
65702A	Testing	47.5	44.3	43.6	43.6	43.6	43.6	43.6	43.6	43.6
65704A	Deseret Test Center	10.9	9.1	9.5	9.5	9.5	9.5	9.5	9.5	9.5
65705A	Modern Army selected systems, test, evaluation and review	4.0	1.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0
65706A	Materiel concepts evaluation	7.8	7.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5
65707A	Support operational test and evaluation combat equipment		10.0							
65709A	Evaluation of foreign components	2.6	1.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
23626A	Tactical fire direction system (TACFIRE)	3.2	4.2	10.0	10.0	10.0	10.0	8.0	8.0	8.0
23629A	Surveillance, target acquisition, and night observation development	.4								
28010A	Tri-Service tactical communications program	5.1	12.2	20.8	20.8	20.8	20.8	20.8	20.8	20.8
31011A	Cryptologic activities									
33401A	Communications security equipment									
	Total, other equipment	336.1	339.5	335.9	335.9	335.9	335.9	331.0	333.9	332.5
	Programwide management and support:									
65801A	Programwide activities	51.2	51.1	52.8	52.8	52.8	52.8	52.8	52.8	52.8
65802A	International cooperative research and development	.3	.3	.3	.3	.3	.3	.3	.3	.3
65803A	Technical information activities	2.2	3.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
91212A	Civilian training pool	.9	.5	.5	.5	.5	.5	.5	.5	.5
	Total, programwide management and support	54.7	55.3	58.1	58.1	58.1	58.1	58.1	58.1	58.1
	Undistributed reduction				-.3			-1.0		-1.0
	Financing adjustment (transfer from R.D.T. & E. Army) fiscal year 1973-74							-3.5		-3.5
	Total, R.D.T. & E.—Army	1,791.6	1,884.6	2,108.7	2,031.7	1,935.9	1,983.8	1,866.5	1,915.9	1,912.1
	R.D.T. & E. NAVY									
	Military sciences:									
61152N	In-house independent laboratory research	13.7	12.4	13.0	15.6	15.6	15.6	12.3	12.3	12.3
61153N	Defense research sciences	110.9	103.4	108.1	105.5	105.5	105.5	100.5	100.5	100.5
65151M	Studies and analysis support, Marine Corps	2.2	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2
65152N	Studies and analysis support, Navy	9.2	9.2	9.8	9.8	9.8	9.8	9.0	9.0	9.0
65153M	Center for naval analysis, Marine Corps	.7	.5	1.0	1.0	1.0	1.0	.7	1.0	.7
65154N	Center for naval analysis, Navy	6.5	3.5	7.1	7.1	7.1	7.1	5.5	7.1	6.5
	Total, military sciences	143.2	131.3	141.2	141.2	141.2	141.2	130.2	132.1	131.2
	Aircraft and related equipment:									
63201N	Airborne ASW detection system	1.0	1.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
63202N	Avionics	1.1	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
63203N	V/STOL developments	1.5		1.3	1.3	1.3	1.3	1.3	1.3	1.3
63204N	Air/surface fire control systems	2.0	1.2							
63206N	Airborne electronic warfare equipment	20.7	9.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
63207N	Environmental applications	1.6	1.6	1.9	1.9	1.9	1.9	1.9	1.9	1.9
63210N	Advanced aircraft propulsion systems	1.2	1.3	2.8	2.8	2.8	2.8	2.8	2.8	2.8
63216N	Airborne life support system	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63228N	CV tactical support center	1.2	3.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
63254N	Air ASW	26.8								
63257N	V/STOL for sea control ship (prototype)	8.0	7.5	26.3	26.3	22.4	24.3	24.3	24.3	24.3
63258N	Advanced propulsion for V/STOL	1.3	7.0	11.3	11.3	5.9	5.9	5.9	5.9	5.9
63259N	Acoustic search sensors (advanced)	10.4	9.8	11.8	11.8	11.8	11.8	11.8	9.8	9.8
63260N	Airborne mine countermeasures	2.2	4.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0
64203N	Avionics development	2.4	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2
64204N	Target development	.3	.5							
64205N	Laser target designator	2.6	1.0	.1	.1	.1	.1	.1	.1	.1
64206N	TRAM (Target recognition attack multisensor)	1.0	.1							
64210N	Search and rescue system	.5		.9	.9	.9	.9	.9	.9	.9
64211N	AIMS/ATCRBS (Air traffic control radar beacon) MARK XII	1.9	1.6	.8	.8	.8	.8	.8	.8	.8
64215N	Aircraft handling and servicing equipment	1.8	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4
64218N	Environmental modification system	1.0	.6	.5	.5	.5	.5	.5	.5	.5
64219N	Airborne ASW developments	8.6	11.5	12.7	12.7	12.0	12.0	12.0	12.0	12.0
64220N	Aircraft infrared signature suppression	4.2	7.7	.4	.4	.4	.4	.4	.4	.4
64223N	Visual target acquisition, identification and weapon control system development	2.1	1.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6
64252N	Aircraft propulsion	100.2								
64255N	Air electronic warfare	5.4	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2
64258N	Aerial target systems development	7.9	9.5	14.4	14.4	12.5	14.4	10.4	10.4	10.4
64259N	VCX			1.0	1.0	1.0	1.0	1.0	1.0	1.0
64260N	CH-53E		10.0	30.0	30.0	28.8	28.8	28.8	28.8	28.8
64261N	Acoustic search sensors (engineering)		.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5
24134N	A6 squadrons	2.0	6.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
24135N	A7 squadrons	2.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
24152N	Early warning aircraft squadrons	30.8	14.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
24234N	S-3 squadrons	204.2	38.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2
24243N	LAMPS (Light airborne multipurpose system)		18.5	9.3	9.3	9.3	9.3	9.3	9.3	9.3
25662N	Aircraft propulsion evaluation general	6.4	3.7	4.0	4.0	4.0	4.0	4.0	4.0	4.0
25663N	Aircraft flight test general	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
25666N	F14B		104.6	17.0	17.0	17.0	17.0	17.0	17.0	17.0
25667N	F14A	126.0	58.0	40.4	40.4	40.4	40.4	40.4	40.4	40.4
25674N	Electronic warfare counter response	14.9	7.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Total, aircraft and related equipment	610.3	353.7	252.9	252.9	239.8	243.6	239.6	237.6	237.6
	Missiles and related equipment:									
63301N	Long range surface weapon system	3.1	6.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
63303N	ARM system technology	1.6	1.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2
63305N	Air-launched air-to-air missile system (AGILE)	21.7	15.9							
63306N	Advanced air-launched air-to-surface missile system	5.1	8.8	6.4	6.4	6.4	6.4	6.4	6.4	6.4
63307N	Advanced fuze design	1.2								
63312N	Air-launched/surface-launched anti-ship missile (HARPOON)	38.4	59.9							
63353N	Air-to-ground weapon technology			.6	.6	.6	.6	.6	.6	.6
63358N	Weaponizing of ships (prototype)	.5	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
63361N	Strategic cruise missile		4.0	15.2	15.2	0	2.5	2.5	2.5	2.5
63362N	Cruise missile	5.7	1.4							
63363N	HARM (high-speed anti-radar missile)	2.1	6.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
63364N	Encapsulated Harpoon	4.3	12.0	11.5	11.5	11.5	11.5	11.5	11.5	11.5
64302N	3T major systems development	2.0	1.2							
64303N	AEGLIS	100.0	78.5	43.1	43.1	40.1	40.1	40.1	40.1	40.1
64352N	Surface-launched weaponry, systems and technology	7.2	5.9	9.3	9.3	4.8	4.8	4.8	4.8	4.8
64354N	Air-to-air weapons technology			21.5	21.5	21.5	21.5	21.5	21.5	21.5
64358N	Close in weapon system (PHALANX)	10.6	10.9	4.7	4.7	4.7	4.7	4.7	4.7	4.7
64359N	Standard surface-to-surface missile	16.6	25.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
64361N	NATO SEA SPARROW	5.7	2.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
64362N	Point defense improvements	6.3	21.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
64363N	TRIDENT missile system	59.1	348.4	529.0	529.0	529.0	529.0	517.0	529.0	523.0
64364N	Anti-ship weaponry			66.4	66.4	66.4	66.4	66.4	66.4	66.4
64366N	Surface missile guidance	5.8	11.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8
65351N	Pacific missile range	64.5	65.8	65.7	65.7	65.7	65.7	65.7	65.7	65.7
65352N	Systems test and instrumentation	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
11221N	Heel ballistic missile system	33.1	15.5	14.0	14.0	14.0	14.0	14.0	14.0	14.0
11224N	SSBN defense	14.2	11.8	18.8	18.8	18.8	18.8	16.8	16.8	16.8
11401N	SANGUINE	4.5	9.1	16.6	16.6	16.6	16.6	16.6	16.6	16.6
11402N	GRYPHON	6.3	5.0	9.5	9.5	9.5	9.5	9.5	8.0	9.5

[COMMITTEE PRINT]

FISCAL YEAR 1974 R.D.T. & E. AUTHORIZATION—Continued

[In millions of dollars]

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
R.D.T. & E. NAVY—Continued										
Missiles and related equipment—Continued										
11043N	HYDRUS	2.8	4.0	5.9	5.9	5.9	5.9	5.9	4.4	5.9
25638N	Surface missile systems project	7.2	1.7							
25664N	SIDEWINDER (AIM 9L)	2.0	6.7	7.6	7.6	7.6	7.6	7.6	7.6	7.6
25665N	PHOENIX	3.7	5.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1
25668N	SPARROW (AIM 7F)	21.3	9.0	5.4	5.4	5.4	5.4	5.4	5.4	5.4
25669N	CONDOR	21.1	8.0	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Total, missiles and related equipment		479.4	767.6	921.9	921.9	899.2	901.8	871.1	894.7	899.5
Military astronautics and related equipment:										
63401N	Navigation satellite	3.4	8.1	12.4	12.4	12.4	12.4	12.4	12.4	12.4
63451N	Space technology	19.2								
33109N	Satellite Communications	13.9	41.1	41.4	41.4	41.4	41.4	41.4	41.4	41.4
35111N	Weather service	2.4	2.1	1.7	1.7	1.7	1.7	1.7	1.7	1.7
35131N	Mapping, charting and geodesy	.4								
Total, military astronautics and related equipment		39.3	51.4	55.5	55.5	55.5	55.5	55.5	55.5	55.5
Ships, small craft, and related equipment:										
63501N	Reactor propulsion plants	6.9	7.1	7.2	7.2	6.9	6.9	6.9	6.9	6.9
63502N	Advanced mine countermeasures	.6	.4	.5	.5	.5	.5	.5	.5	.5
63504N	Submarine sonar developments (advanced)	3.0	2.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6
63505N	Advanced surface ship sonar development	1.7	3.6							
63506N	Acoustic countermeasures	2.1	1.7	2.4	2.4	2.4	2.4	2.4	2.4	2.4
63507N	ASW ship integrated combat systems	.8								
63508N	Marine gas turbines	6.7	15.9	18.2	18.2	18.2	18.2	18.2	16.2	16.2
63509N	New ship design	.8	.6	1.4	1.4	1.4	1.4	1.4	1.4	1.4
63511N	Air control	.5	1.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4
63512N	Aircraft launching and retrieving	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
63513N	Shipboard systems component development	1.4	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8
63514N	Shipboard damage control	2.9	2.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2
63515N	Advanced identification	3.1	1.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4
63516N	Radar surveillance equipment	.5	.7							
63518N	Advanced navigation development	1.2	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
63519N	Advanced command data system	2.7	2.1	5.8	5.8	4.8	5.8	3.8	3.8	3.8
63520N	Advanced communications	.7	1.7	5.5	5.5	5.5	5.5	3.5	3.5	3.5
63521B	Surface electronic warfare	16.9	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
63522N	Advanced submarine surveillance equipment program	5.4	3.9							
63531N	HY 130 steel	2.9	4.4	3.9	3.9	3.9	3.9	3.9	3.9	3.9
63534N	Surface effect ships	21.7	32.0	72.8	72.8	60.9	60.9	60.9	60.9	60.9
63538N	BLUE MAIL	1.2	.5							
63541N	Nuclear electric power plants	.7								
63553N	Surface ASW		1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
63561N	Submarines (advanced)			2.7	2.7	2.7	2.7	2.7	0	0
63562N	Submarine tactical warfare systems (advanced)			1.6	1.6	1.6	1.6	1.6	1.6	1.6
63564N	Ship development	18.7	12.6	14.0	14.0	14.0	14.0	14.0	13.0	13.0
63566N	Amphibious assault craft	5.8	12.2	15.8	15.8	15.8	15.8	15.8	15.8	15.8
63567N	Hydrofoil craft	7.5	3.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63578N	A4W/A1G nuclear propulsion plant	9.1	9.1	7.5	7.5	7.2	7.2	7.2	7.2	7.2
63579N	D2W nuclear propulsion reactor	7.8	7.3	7.2	7.2	7.0	7.0	7.0	7.0	7.0
63580N	Advanced design submarine nuclear propulsion plant	10.7	18.3	11.7	11.7	11.6	11.6	11.6	11.6	11.6
63582N	Combat system integration			2.0	2.0	2.0	2.0	2.0	2.0	2.0
63583N	Joint sonar development	4.6	7.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3
63584N	OTH (over the horizon) technology	.4	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0
63585N	Shipboard automation development		1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63586N	Naval inshore warfare craft	2.8	4.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0
63587N	Test bed development and demonstration			10.0	10.0	10.0	10.0	10.0	10.0	10.0
64502N	Advanced ASW communications system	9.3	7.2	5.8	5.8	5.8	5.8	5.8	5.8	5.8
64503N	Submarine sonar development (engineering)	.3	1.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6
64506N	BR/CW countermeasures	.4								
64508N	Radar surveillance equipment	1.8	3.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
64510N	Communications systems	2.9	2.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2
64511N	Intelligence systems	3.5	2.4							
64513N	Electronic warfare QRC (quick reaction capability)	.7								
64514N	Navigation systems	.3	.3							
64515N	Submarine surveillance equipment program (engineering)	12.1	9.7							
64517N	Joint advanced tactical command and control	2.8	4.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6
64518N	Combat information center (CIC) conversion	1.9	3.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
64521N	Ship antimissile integrated defense (SAMID)	3.3	2.8							
64523N	ASW acoustic warfare	6.2	4.6							
64554N	Surface electronic warfare	9.9	16.4							
64559N	Deep submergence technology (nuclear power)									
64560N	TRIDENT submarine system	45.7	122.0	125.0	125.6	125.6	125.6	125.6	125.6	125.6
64562N	Submarine tactical warfare systems (engineering)	35.0	1.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7
64564N	NATO PHM (patrol hydrofoil missile)		30.4	24.0	18.8	18.8	18.8	18.8	18.8	18.8
64565N	Sea control ship		10.0							
64566N	Acoustic communications	7.2	8.9	11.8	11.8	11.8	11.8	11.8	9.3	9.3
24281N	Submarines		30.0	18.2	18.2	18.2	18.2	18.2	18.2	18.2
24291N	Cruisers	.6								
25617N	All weather carrier landing system	.7	1.0							
25623N	Sonar AN/SQS-26	4.3	2.0	1.8	1.8	1.8	1.8	1.8	1.1	1.1
25634N	Submarine silencing	9.3	7.7							
25670N	Tactical intelligence processing support	1.3								
31011N	Cryptologic activities	4.4	5.4	8.4	8.4	8.4	8.4	7.4	8.4	7.4
31015N	Technical sensor collection	4.5	1.5							
31022N	Scientific and technical intelligence		.5	.5	.5	.5	.5	.5	.5	.5
31025N	Intelligence data handling system (IDHS)			.5	.5	.5	.5	.5	.5	.5
32016N	National Military Command System-Wide Support									
33401N	Communications security	2.2	4.1							
34111N	Special activities	169.7	128.4	127.7	127.7	127.7	127.7	125.7	127.7	127.7
Total, ships, small craft, and related equipment		493.6	583.1	620.1	621.0	600.6	602.1	595.1	589.2	588.2
Ordnance, combat vehicles and related equipment:										
63601N	Mine development	23.9	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
63605N	Advanced conventional ordnance	2.0	.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
63606M	Advanced Marine Corps weapons systems	.6	1.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6
63609M	Surface launched munitions	2.9	6.5	6.9	6.9	6.9	6.9	6.9	6.9	6.9
63652N	Fire control system (advanced)			1.1	1.1	1.1	1.1	1.1	1.1	1.1
63653N	Gun systems			.5	.5	.5	.5	.5	.5	.5
63654N	Joint service explosive ordnance disposal development (advanced)	.6	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
64603M	Unguided conventional air-launched weapons	1.2	2	1.6	1.6	1.6	1.6	1.6	1.6	1.6
64608M	Marine Corps ordnance/combat vehicle systems	1.8	2.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6
64652N	Fire control systems (engineering)	18.6	5.1	9.2	9.2	9.2	9.2	9.2	9.2	9.2
64654N	Joint service explosive ordnance disposal development (engineering)		.6	.6	.6	.6	.6	.6	.6	.6
24304N	Mines and mine support		21.3	13.2	13.2	13.2	19.9	19.9	19.9	19.9
25645N	Modular guided weapon improvement program	2.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
25660N	MK-48 torpedo (operational systems)	18.6	6.8	8.3	8.3	8.3	8.3	13.6	13.6	13.6
26620M	Marine Corps weaponry	.5	.5	.4	.4	.4	.4	.4	.4	.4
Total, ordnance, combat vehicles, and related equipment		72.8	48.9	50.1	50.1	50.1	56.8	62.1	62.1	62.1
Other equipment:										
62751N	Target surveillance technology	38.0	35.7	38.4	38.4	38.4	38.4	38.4	38.4	38.4
62752N	Command and control technology	17.9	19.4	18.3	18.3	18.3	18.3	18.3	18.3	18.3
62753N	Weaponry technology	70.2	69.0	73.7	73.7	73.7	73.7	73.7	73.7	73.7
62754N	Naval vehicle technology	39.6	36.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
62755N	Support technology	80.8	79.9	82.9	82.9	82.9	82.9	80.9	77.9	77.9
62756N	Laboratory independent exploratory development	13.7	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
62757N	Nuclear propulsion technology	21.6	21.0	21.6	21.6	21.6	21.6	21.6	21.6	21.6
63702N	Ocean engineering systems development	7.2	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2
63704N	Oceanographic instrumentation development	1.3	.2	.4	.4	.4	.4	.4	.4	.4
63705N	Logistics		1.0							
63706N	Medical development (advanced)	3.5	3.9	4.8	4.8	4.8	4.8	4.8	4.8	4.8
63707N	Manpower effectiveness	1.6	1.7	2.5	2.5	2.5	2.5	2.0	2.5	2.5
63709N	Advanced marine biological system	1.7	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5
63713N	Ocean engineering technology development	9.3	8.7	9.0	9.0	9.0	9.0	9.0	9.0	9.0
63714N	Nuclear vulnerability/survivability	.8	1.1							
63715N	Electronic intercept system	1.5	2.9	5.8	5.8	5.8	5.8	5.8	5.8	5.8
63717N	Integrated ocean surveillance information system (OSIS)	.6								
63718N	Biological/chemical protection	2.4	2.1	5.5	5.5	5.5	5.5	5.5	5.5	5.5
63720N	Education and training	1.6	4.1	9.1	9.1	9.0	9.0	5.9	7.4	7.4
63721N	Environmental protection	4.9	2.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8
63722N	Naval special warfare	1.9	4.1	5.6	5.6	5.6	5.6	5.6	5.6	5.6
63723N	ASW force command control system	11.7	18.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
63754N	Hi energy laser	2.9	33.0							
63763N	Aerospace Ocean surveillance	3.7	2.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4
63765M	Other Marine Corps developments (advanced)	2.1	3.2	4.5	4.5	4.5	4.5	4.5	4.5	4.5
63766M	Marine Corps data systems (advanced)	2.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
63791N	Reliability and maintainability initiative		1.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63793N	ASW sensors (prototype)	16.5	21.5	31.6	31.6	31.6	31.6	31.6	23.0	23.0
63794N	ASW surveillance	9.7	7.0							
63795N	Long range acoustic propagation (LRAP)	.5	.7	.7	.7	.7	.7	.7	.7	.7
63796N	Airborne electro-magnetic and optical systems	3.9	1.2							
63797N	Surface electro-magnetic and optical systems (advanced)			14.8	14.8	14.8	14.8	14.8	43.4	43.4
63798N	Special processes	.7	.4	.4	.4	.4	.4	.4	.4	.4
64702N	Counterintelligence systems	.6	2.0	4.8	4.8	4.8	4.8	7.6	7.6	7.6
64703N	Training devices prototype development	2.3	2.7	.6	.6	.6	.6	.6	.6	.6
64706N	Remote unattended sensor warfare	10.1	4.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2
64765M	Other Marine Corps developments (engineering)	.5	.5	.3	.3	.3	.3	.3	.3	.3
64766M	Marine Corps data systems (engineering)		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
64771N	Medical development (engineering)	.8	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7
64792N	Surface electro-magnetic and optical systems (engineering)	24.7	29.0	38.6	38.6	38.6	38.6	38.6	34.3	36.3
24311N	Undersea surveillance systems	.5								
25635N	SAW environmental prediction system	.8	.9	.2	.2	.2	.2	.2	.2	.2
26617M	Marine Corps operational logistics development	2.3	.6	.9	.9	.9	.9	.9	.9	.9
26619M	Marine Corps operational electronics development	1.4	3.4	4.1	4.1	4.1	4.1	4.1	4.1	4.1
26622M	Marine Corps data systems (operational systems)		3.1	3.6	3.6	3.6	3.6	3.6	3.6	3.6
28010N	TRITAC, Marine Corps			2.0	2.0	2.0	2.0	2.0	2.0	2.0
28010N	TRITAC, Navy									
33131N	Support of MEECN (minimum essential emergency communication net)		1.0							
Total, other equipment		419.4	458.5	523.6	523.6	523.5	523.5	512.8	527.5	529.5
Programwide management and support:										
65803N	Electromagnetic compatibility and effectiveness	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65804N	Technical information centers	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65852N	Atlantic undersea test and evaluation center (AUTEC)	15.6	12.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
65853N	Management and technical support (ASW)	10.0	9.1	8.7	8.7	8.7	8.7	8.7	8.7	8.7
65854N	Special laboratory support (Marine Corps)	3.4	3.8	2.4	2.4	2.4	2.4	2.4	2.4	2.4
65855N	Naval arctic research laboratory, Point Barrow		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
65856N	Strategic technical support	1.2	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8
65857N	International R.D.T. & E.	.6	.6	.6	.6	.6	.6	.6	.6	.6
65858N	Tactical electronics support	.6	3.1	3.5	3.5	3.5	3.5	3.5	3.5	3.5
65859N	ASMD (antiship missile defense) test range		5.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
65860N	U.S.S. "Hip Pocket"	1.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
65861N	R.D.T. & E. laboratory and facilities management support	46.9	42.2	42.9	42.9	42.9	42.9	42.9	42.9	42.9
65862N	R.D.T. & E. instrumentation and material support	31.2	26.1	29.5	29.5	29.5	29.5	29.5	29.5	29.5
65863N	R.D.T. & E. ship and aircraft support	38.9	37.0	38.5	38.5	38.5	38.5	41.9	41.9	41.9
65864N	Test and evaluation support	.9	.9	.9	.9	.9	.9	.9	.9	.9
65865N	Other test and evaluation capability			2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total, programwide management and support		153.0	150.2	146.4	146.4	146.4	146.4	149.8	149.8	149.8
Undistributed reduction					-36.4			-1	-1	-1
Petroleum, oil, and lubricants								-1.4	-1.4	-1.4
Total, Navy		2,411.1	2,544.6	2,711.7	2,675.2	2,656.2	2,670.7	2,616.1	2,648.0	2,651.9
Military sciences:										
61101F	In-house laboratory independent research	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
61102F	Defense research sciences	81.7	74.7	74.6	74.6	74.6	74.6	74.6	74.6	74.6
62101F	Environment	7.5	7.0	9.5	9.5	9.5	9.5	8.0	8.0	8.0
62102F	Materials	25.2	24.0	26.0	26.0	26.0	26.0	25.0	24.0	24.0
63101F	Preliminary design and development	5.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
63102F	Innovations in training and education	6.1	6.7	6.0	6.0	6.0	6.0	6.0	6.0	6.0
65101F	Air Force project RAND	9.6	8.5	8.7	8.7	8.7	8.7	8.7	8.7	8.7
65102F	Analytic Services Incorporated (ANSER)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total, military sciences		141.9	130.7	134.6	134.6	134.6	134.6	132.1	131.1	131.1

Footnote at end of table.

[COMMITTEE PRINT]

FISCAL YEAR 1974 R.D.T. & E. AUTHORIZATION—Continued

[In millions of dollars]

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
R.D.T. & E. NAVY—Continued										
Aircraft and related equipment:										
62201F	Aerospace flight dynamics.....	35.9	31.5	30.0	30.0	30.0	30.0	30.0	30.0	30.0
62202F	Aerospace biotechnology.....	20.3	20.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
62203F	Aerospace propulsion.....	28.5	28.5	29.3	29.3	29.3	29.3	29.3	29.3	29.3
62204F	Aerospace avionics.....	46.7	46.5	45.0	45.0	45.0	45.0	45.0	45.0	45.0
63202F	Aircraft propulsion subsystem integration.....	8.3	4.3	4.7	4.7	4.7	4.7	4.7	4.7	4.7
63203F	Advanced avionics for aircraft.....	13.5	12.9	8.2	8.2	8.2	8.2	8.2	8.2	8.2
63205F	Flight vehicle subsystem concepts.....	21.1	8.8	6.4	6.4	6.4	6.4	6.4	6.4	6.4
63208F	Advanced reconnaissance and target acquisition capability.....	2.7	2.1	2.4	2.4	2.4	2.4	2.4	2.4	2.4
63211F	Aerospace structural materials.....	13.9	11.1	12.7	12.7	12.7	12.7	12.7	12.7	12.7
63216F	Advanced turbine engine gas generator.....	13.7	11.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0
63225F	Subsonic Cruise Armed Decoy (SCAD).....	10.0	48.6	72.2	22.0	0	11.0	5.0	11.0	11.0
63232F	Advanced aerial target technology.....	5.7	6.6	5.2	5.2	5.2	5.2	5.2	5.5	5.2
63235F	Lightweight fighter prototype.....	6.0	40.0	46.5	40.0	46.5	46.5	46.5	46.2	46.5
63236F	Advanced medium STOL transport prototype.....	6.0	25.0	67.2	67.2	65.2	65.2	0	65.2	25.0
63237F	Stall/Spin inhibitor.....		1.0							
63238F	Advanced turbofans engine.....			15.6	15.6	0	0			
63240F	Lightweight fighter engine.....	3.0	6.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
63241F	Electronically agile radar.....	1.6	3.8	8.2	8.2	8.2	8.2	8.2	8.2	8.2
64206F	F-4 avionics.....	11.5	3.9	2.4	2.4	2.4	2.4	2.4	2.4	2.4
64212F	Aircraft equipment development.....	13.8	7.9	8.0	8.0	8.0	8.0	8.0	6.5	6.5
64215F	B-1 aircraft.....	370.3	444.5	473.5	473.5	373.5	448.5	448.5	448.5	448.5
64220F	EF-111A aircraft.....			15.0	15.0	15.0	15.0	15.0	15.0	15.0
64225F	A-10 aircraft.....	47.0	48.1	112.4	112.4	92.4	107.4	107.4	97.4	107.4
01007F	International fighter aircraft.....	42.5	17.7	2.6	2.6	16.6	16.6	16.6	16.6	16.6
27129F	F-111 squadrons.....	19.2	3.5							
27130F	F-15 squadrons.....	420.2	454.5	229.5	229.5	229.5	229.5	258.0	258.0	258.0
41119F	C-5 airlift squadrons.....	22.4								
Total, aircraft and related equipment.....		1,183.8	1,288.8	1,226.0	1,169.3	1,030.2	1,131.2	1,088.5	1,148.2	1,118.0
Missiles and related equipment:										
62302F	Rocket propulsion.....	20.2	21.4	20.1	20.1	20.1	20.1	20.1	20.1	20.1
63305F	Advanced ICBM technology.....	8.4	7.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0
63311F	Advanced ballistic re-entry system.....	95.8	95.0	95.3	95.3	95.3	95.3	90.0	90.0	90.0
63314F	Strategic bomber penetration.....	1.3	3.4	4.0	4.0	4.0	4.0	4.0	4.0	4.0
64301F	Tactical air-to-ground missile (Maverick).....	7.8	8.3							
64309F	Hound Dog II.....	5.0	2.2							
65301F	Western test range.....	64.6	57.4	59.1	59.1	59.1	59.1	59.1	58.1	58.1
65304F	Western test range (telecommunications).....	4.8	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5
11118F	Short-range attack missile AGM-69.....	5.9								
11213F	Minuteman squadrons.....	181.6	139.7	99.8	99.8	99.7	99.7	99.7	99.7	99.7
27141F	Tactical AGM missiles.....	1.6								
27161F	Tactical air interceptor missiles.....	7.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
27243F	Tactical drone support squadrons.....		.5					2.5	0	2.5
Total, missiles and related equipment.....		404.8	344.5	292.4	292.4	292.3	292.3	289.5	286.0	288.5
Military astronautics and related equipment:										
63401F	Space vehicle subsystems.....	7.2	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1
63402F	Space test program.....	18.7	12.0	19.9	19.9	19.9	19.9	19.9	19.9	19.9
63404F	Satellite balloons and rockets.....	1.6								
63408F	Advanced liquid rocket technology.....	1.6								
63411F	Space shuttle.....	3.0	4.0	5.5	5.5	5.5	5.5	5.0	4.0	4.0
63421F	Satellite system for precise navigation.....	2.7	3.5	10.7	10.7	10.7	10.7	3.5	10.7	10.7
63424F	Advanced surveillance technology.....	22.6	11.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
63428F	Missile and space defense concepts.....	2.5	1.5	.7	.7	.7	.7	.7	.7	.7
63429F	Missile attack assessment.....		1.0	10.3	10.3	6.1	8.7	1.0	1.0	1.0
63431F	Advanced space communications.....	10.1	16.2	18.8	18.8	18.8	18.8	18.8	18.8	18.8
64406F	Space defense system.....	3.1	.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65402F	Aerospace.....	15.0	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
12431F	Defense support.....	31.6	32.3	50.2	50.2	50.2	50.2	67.2	67.2	67.2
31035F	Defense system applications program.....	3.3	6.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5
33110F	Defense satellite communication system.....		1.6							
33601F	Air Force satellite communications system.....	6.9	15.1	17.3	17.3	17.3	17.3	17.3	17.3	17.3
34111F	Special activities.....	154.6	188.4	299.4	299.4	299.4	299.4	299.4	299.4	299.4
35110F	Satellite control facility.....	31.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
35119F	Space boosters.....	3.4	1.8	3.1	3.1	3.1	3.1	3.1	3.1	3.1
35153F	Satellite data system.....	17.8	23.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Undistributed Reduction.....								-20.3	-20.3	-5.9
Total, military astronautics and related equipment.....		337.3	339.8	529.1	529.1	524.9	527.5	507.8	515.0	529.4
Ordnance, combat vehicles, and related equipment:										
62601F	Advanced weapons.....	14.8	21.9	21.0	21.0	21.0	21.0	21.0	21.0	21.0
62602F	Conventional munitions.....	12.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
63601F	Conventional weapons.....	8.6	10.0	11.1	11.1	11.1	11.1	11.1	11.1	11.1
63605F	Advanced radiation technology.....	26.1	27.1	26.2	26.2	26.2	26.2	26.2	26.2	26.2
64601F	Chemical/biological defense equipment.....	.5	.5	.5	.5	.5	.5	.5	.5	.5
64602F	Armament ordnance development.....	10.6	8.8	9.4	9.4	9.4	9.4	9.4	9.4	9.4
64603F	Improved aircraft gun systems.....	14.0	16.4	22.7	22.7	22.7	22.7	22.7	22.7	22.7
64605F	30mm close air support weapons gun system.....	6.3	9.0	10.3	10.3	10.3	10.3	10.3	10.3	10.3
64608F	Close air support weapon system.....	2.0	3.0	8.0	8.0	0	5.0	5.0	5.0	5.0
Total, ordnance, combat vehicles, and related equipment.....		94.9	110.6	123.2	123.2	115.2	120.2	120.2	120.2	120.2
Other equipment:										
62702F	Ground electronics.....	38.8	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
62703F	Human resources.....	5.7	5.3	8.2	5.2	8.2	8.2	5.2	5.2	5.2
63702F	Over-the-horizon radar technology.....	1.7	2.4							
63706F	Advanced tactical command and control capability.....	3.2								
63714F	Base security.....	4.3	2.7	3.6	3.6	3.6	3.6	2.7	2.7	2.7
63715F	Reconnaissance/intelligence.....		1.7							
63718F	Electronic warfare technology.....	11.5	9.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
63719F	Simulator for air-to-air combat.....	4.2	3.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
63723F	Aerospace facilities technology.....	3.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
63727F	Advanced communications technology.....	1.5	.7	1.2	1.2	1.2	1.2	1.2	1.2	1.2

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
63728F	Advanced computer technology	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63731F	Advanced detection system development	6.4	5.2	5.6	5.6	5.6	5.6	5.6	5.6	5.6
63738F	Advanced drone/remotely piloted vehicle development	2.4	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
63740F	Ground based sensors technology	1.9	.9							
63741F	Defense suppression	16.1	9.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2
63742F	Air-to-air identification of noncooperative targets	3.8	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9
63743F	Electro-optical warfare	4.0	3.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3
64701F	Tactical information processing and interpretation	10.4	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0
64702F	Air Traffic Control Radar Beacon System/Air Identification Mark XII system (ATCRBS/AIMS)	.3								
64706F	Life support systems	5.8	4.9	5.3	5.3	5.3	5.3	5.3	5.3	5.3
64708F	Other operational equipment	5.7	8.0	6.3	6.3	6.3	6.3	6.3	6.3	6.3
64709F	Improved tactical bombing	1.7	2.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1
64710F	Reconnaissance/electronic warfare equipment	11.7	8.6	6.1	6.1	6.1	6.1	6.1	6.1	6.1
64711F	Systems survivability	3.1	5.2	8.3	8.3	8.3	8.3	8.3	8.3	8.3
64714F	Improved aircraft firefighting equipment	.5	.5	.5	.5	.5	.5	.5	.5	.5
64715F	Integrated program for air base defense	.8	.3							
64716F	Sensors for weather reconnaissance aircraft	5.3	3.5							
64718F	COBRA MIST	8.3	.5							
64720F	Mapping, charting, and geodesy	.9								
64721F	Common mobility support	2.1	.3	.4	.4	.4	.4	.4	.4	.4
64723F	Advanced airborne command post (AABNCP)		48.3	37.3	37.3	33.1	33.1	33.1	27.3	27.3
64728F	Tactical Loran	2.7	4.8	9.1	9.1	9.1	9.1	9.1	9.1	9.1
64730F	Ground-based sensors development and testing	2.0	.3							
64732F	Drone/remotely piloted vehicle system development			8.4	8.4	8.4	8.4	5.0	8.4	6.7
64733F	Surface defense suppression	9.9	7.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0
64735F	Improved capability for operational test and evaluation	2.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
64736F	Foreign weapons evaluation	1.0	1.7							
64738F	Protective systems	19.6	6.7	8.4	8.4	8.4	8.4	8.4	8.4	8.4
64739F	F-4/F-105 protective systems	.2	5.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5
64741F	Side looking radar			5.0	5.0	5.0	5.0	5.0	5.0	5.0
64742F	Precision emitter location strike system		10.2	8.0	8.0	8.0	8.0	8.0	8.0	8.0
64743F	Tactical support jamming		4.4	5.6	5.6	5.6	5.6	5.6	5.6	5.6
64744F	Airborne warning and control system AWACS	139.3	194.2	197.8	155.8	155.8	153.5	155.8	155.8	155.8
64745F	F-4 support jamming		1.8							
64746F	Expendable drones		.3							
64747F	Electromagnetic pulse test facilities		8.3	8.1	8.1	8.1	8.1	8.1	8.1	8.1
64748F	Advanced fighter protective systems	9.4	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
64750F	Intelligence equipment	.7	.9	2.5	2.5	2.5	2.5	2.5	2.5	2.5
65704F	Electromagnetic compatibility analysis center (ECAC)	5.0	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0
65705F	Lincoln Laboratory	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
65706F	MITRE	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
65707F	Aircraft navigation system verification	1.1	.9	.6	.6	.6	.6	.6	.6	.6
11316F	Strategic air command communications	4.6	4.8	4.9	4.9	4.9	4.9	8.9	8.9	8.9
12311F	NORAD-COC							12.5	12.5	12.5
12417F	Conus Over-The-Horizon (OTH) radar system	3.0	3.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5
12425F	Over The Horizon (OTH) radar	1.0								
27412F	Tactical air control system	4.2	3.2	4.5	4.5	4.5	4.5	13.5	13.5	13.5
28010F	Joint tactical communications program (TRI-TAC)	.4	2.9	8.6	8.6	8.6	8.6	8.6	8.6	8.6
31015F	Technical sensor collection	.2								
31025F	Intelligence data handling system	1.2								
31036F	Special reconnaissance vehicles	7.2	10.9							
33125F	Air Force communications (defense communications support)	1.4	3.9	3.4	3.4	3.4	3.4	3.4	3.4	3.4
33401F	Communications security (COMSEC)	1.2	2.1	.6	.6	.6	.6	.6	.6	.6
35114F	Traffic control approach and landing system (TRACALS)	3.2	6.1	7.4	7.4	7.4	7.4	20.1	20.1	20.1
	Total, other equipment	422.9	524.6	516.9	471.9	470.7	470.7	504.1	499.2	500.0
Programwide management and support:										
65801F	International cooperative research and development	.3	.3	.3	.3	.3	.3	.3	.3	.3
65802F	Arnold engineering development center base costs	12.5	53.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0
65805F	Development and test support	138.4	138.7	146.6	146.6	146.6	146.6	146.6	146.6	146.6
65806F	Acquisition and command support	190.5	187.5	185.8	185.8	185.8	185.8	185.8	185.8	185.8
01004F	International military hqs. and agencies	1.1	.9	.6	.6	.6	.6	.6	.6	.6
	Total, programwide management and support	342.8	381.1	390.3	390.3	390.3	390.3	390.3	390.3	390.3
	Undistributed						-32.0	-32.0	-32.0	132.0
	Petroleum, oil & lubricants							-1.0	-1.0	-1.0
	Total, Air Force	2,928.4	3,120.0	3,212.5	3,110.8	2,958.2	3,034.8	2,998.0	3,057.0	3,042.9
DARPA PROGRAM										
Military sciences:										
61101E	Defense research sciences	35.4	35.3	37.1	37.1	36.6	36.6	36.6	36.6	36.6
62101E	Technical studies	5.4	3.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Total, military sciences	40.7	38.4	41.1	41.1	40.6	40.6	40.6	40.6	40.6
Missiles and related equipment:										
62301E	Strategic technology	76.7	70.8	72.5	72.5	69.8	69.8	69.8	69.8	69.8
Other equipment:										
62701E	Nuclear monitoring research	35.8	24.4	21.4	21.4	21.1	21.1	21.1	21.1	21.1
62702E	Tactical technology	26.8	27.0	27.6	27.6	27.1	27.1	27.1	27.1	27.1
62703E	Advanced sensors	9.0	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
62706E	Distributive information systems	18.9	19.2	20.3	20.3	20.3	20.3	20.3	20.3	20.3
62708E	Advanced command, control and communications technology		4.5	9.8	9.8	8.8	8.8	8.8	8.8	8.8
62709E	Training, forecasting and decision technology	1.2	3.8	6.2	6.2	6.2	6.2	6.2	6.2	6.2
	Total, other equipment	91.7	87.1	93.5	93.5	91.7	91.7	91.7	91.7	91.7
Programwide management and support:										
65801E	Project management support	3.3	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4
	Total, ARPA	212.4	199.7	210.5	210.5	205.5	205.5	205.5	205.5	205.5

[COMMITTEE PRINT]

FISCAL YEAR 1974 R.D.T. & E. AUTHORIZATION—Continued

[In millions of dollars]

Program element number	Program element title	Fiscal year 1972 program	Fiscal year 1973 program	Fiscal year 1974 estimate	Fiscal year 1974 authorization action			Fiscal year 1974 appropriation action		
					House	Senate	Final	House	Senate	Final
DCA PROGRAM										
Other equipment:										
28012K	Defense special projects group.....	9.3								
32016K	National military command systemwide support.....	1.4	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
32017K	Worldwide military command and control system—Joint technical support agency.....	1.5	1.7	2.0	2.0	1.0	2.0	2.0	2.0	2.0
33127K	Defense communication system.....	11.1	7.4	9.5	9.5	8.8	8.8	8.8	8.8	8.8
33131K	Minimum essential emergency communications net.....	2.6	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
33143K	Defense communication system test and evaluation.....		.1	4.1	4.1	3.9	3.9	3.9	3.9	3.9
	Undistributed reduction.....							-1.1	-1.1	-1.1
	Total, other equipment.....	25.9	13.2	21.1	21.1	20.2	20.2	20.2	19.1	19.1
	Total, DCA.....	25.9	13.2	21.1	21.1	20.2	20.2	20.2	19.1	19.1
DIA PROGRAM										
Other equipment:										
31021L	Intelligence production activities.....	.6	.6	4.5	4.5	2.0	3.1	4.5	4.5	4.5
31022L	Scientific and technological intelligence.....	.1	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
31025L	Intelligence data handling system.....		.3	.5	.5	.5	.5	.5	.5	.5
31026L	Intelligence and mgt. spt. activity.....	.2	.2	.5	.5	.5	.5	.5	.5	.5
	Undistributed reduction.....							-1.3	-1.3	-1.3
	Total, other equipment.....	.9	1.6	6.4	6.4	3.9	5.1	5.1	5.1	5.1
	Total, DIA.....	.9	1.6	6.4	6.4	3.9	5.1	5.1	5.1	5.1
DMA PROGRAM										
Other equipment:										
63701B	Mapping, charting, and geodesy investigations and prototype development.....		7.8	8.0	8.0	7.6	8.0	8.0	8.0	8.0
64701B	Mapping, charting and geodesy engineering development.....		3.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9
	Total, other equipment.....		11.0	11.9	11.9	11.5	11.9	11.9	11.9	11.9
	Total, DMA.....		11.0	11.9	11.9	11.5	11.9	11.9	11.9	11.9
DNA PROGRAM										
Other equipment:										
62704H	Nuclear weapons effects development.....	53.5	53.5	53.5	53.5	52.4	52.4	52.4	52.4	52.4
62710H	Nuclear weapons effects test.....	64.0	70.0	73.7	73.7	69.8	69.8	69.8	69.8	69.8
	Total, other equipment.....	117.5	123.5	127.2	127.2	122.2	122.2	122.2	122.2	122.2
	Total, DNA.....	117.5	123.5	127.2	127.2	122.2	122.2	122.2	122.2	122.2
DSA (DDC) PROGRAM										
Programwide management and support:										
65801S	Defense documentation center.....	11.3	10.2	11.1	11.1	11.1	11.1	11.1	11.1	11.1
65802S	Information analysis centers.....	1.9	2.1	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	Undistributed reduction.....							-1.0	-1.0	-1.0
	Total, programwide management and support.....	13.2	12.3	13.5	13.5	13.5	13.5	13.5	12.5	12.5
	Total, DSA (DDC).....	13.2	12.3	13.5	13.5	13.5	13.5	13.5	12.5	12.5
NSA PROGRAM										
	Total, other equipment.....	65.2	70.6	93.5	93.5	91.7	91.7	91.7	91.2	91.2
	Total, NSA.....	65.2	70.6	93.5	93.5	91.7	91.7	91.7	91.2	91.2
TECHNICAL SUPPORT TO OSD/OJCS										
Military Sciences:										
65101D	Studies and analyses.....	7.2	6.2	7.7	7.7	7.7	7.7	7.7	7.7	7.7
65102D	Net technical assessment.....	5.8	6.8	7.2	7.2	7.2	7.2	7.2	7.2	7.2
65103D	Manpower studies.....	1.5	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	Total, military sciences.....	14.5	14.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
Programwide management and support:										
65805D	Support of test and evaluation.....	3.8								
	Total, programwide management and support.....	3.8								
	Total, technical support to OSD/OJCS.....	18.3	14.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
	Undistributed reduction.....				-21.0	0	-5.4	-25.0	-25.9	-25.9
	Total, defense agencies.....	453.4	446.3	500.4	479.4	484.8	481.0	461.4	457.9	457.9
DIRECTOR OF TEST AND EVALUATION										
Programwide management and support:										
65804D	Test and evaluation.....		27.0	24.6	24.6	24.6	24.6	24.6	24.6	24.6
Civil defense program (nonadd):										
13814C	Civil defense research and development.....	3.5	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Total, defense agencies and test and evaluation.....	453.4	473.3	525.0	504.0	509.4	505.6	486.0	482.5	482.5
	Grand total, research, development, test and evaluation.....	7,584.5	8,022.5	8,557.9	8,321.8	8,059.7	8,194.9	7,966.6	8,103.4	8,088.5

* Includes \$3,000,000 million in fiscal year 1973 and \$2,600,000 in fiscal year 1974 special foreign currency program.

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER. Is there further morning business? There being none, morning business is closed.

ORDER FOR PERIOD FOR TRANSACTION OF ROUTINE MORNING BUSINESS TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that after the special orders, if there are any, there be a period for the conduct of routine business tomorrow, with a limitation of statements therein of 3 minutes, and that the time not extend beyond the hour of 1:30 p.m., at the latest. However, if it extends until 1:30, or if it is concluded before 1:30, I ask that at the conclusion of morning business the time from then until the hour of 4 p.m. in the afternoon be equally divided between the distinguished Senator from Arizona (Mr. FANNIN) and the distinguished Senator from Washington (Mr. JACKSON).

The PRESIDING OFFICER. Without objection, it is so ordered.

ORDER FOR ADJOURNMENT

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the order calling for the Senate to convene at 10 o'clock tomorrow morning be vitiated.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that when the Senate completes its business today, it stand in adjournment until the hour of 12 noon on tomorrow.

The PRESIDING OFFICER. Without objection, it is so ordered.

THIRD UNITED NATIONS LAW OF THE SEA CONFERENCE—APPOINTMENTS BY THE VICE PRESIDENT

The PRESIDING OFFICER. The Chair, on behalf of the Vice President, appoints the following Senators to attend the third United Nations Law of the Sea Conference to be held in Caracas, Venezuela, June 20 through August 29, 1974: The Senator from Washington (Mr. MAGNUSON), the Senator from Maine (Mr. MUSKIE), the Senator from Rhode Island (Mr. PELL), the Senator from South Carolina (Mr. HOLLINGS), the Senator from New Jersey (Mr. CASE), and the Senator from Alaska (Mr. STEVENS).

ORDER FOR RECOGNITION OF SENATOR MONTOYA TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the distinguished Senator from New Mexico (Mr. MONTOYA) be recognized for not to exceed 15 minutes tomorrow after the joint leadership has been recognized.

The PRESIDING OFFICER. Without objection, it is so ordered.

THE NATIONAL TRANSPORTATION SYSTEM—MESSAGE FROM THE PRESIDENT

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the message received from the President today, which is at the desk, relative to public transportation and Federal rail regulations, be jointly referred to the Committees on Banking, Housing and Urban Affairs, Commerce, Finance, and Public Works.

The PRESIDING OFFICER. Without objection, it is so ordered.

The message is as follows:

To the Congress of the United States:

From the earliest days, ours has been a diverse and mobile society. Americans are constantly in motion. For much of our early existence, the history of America was in great part the history of the constant push westward, with the related development of our canals, our highways, and our railroads. And as we developed our internal transportation system, we also pushed out across the seas in our sailing ships, our steamboats, and later in our tankers and freighters and airplanes.

One of the foundations of our free society is our highly developed system of commerce. And that system of commerce is based on our diverse system of transportation. Transportation accounts for much of the progress we have made as a nation in 200 short years. We have developed sophisticated and effective ways to move goods and produce, and we have developed varied systems for moving people.

Recently, however, the energy crisis has underscored an important lesson: our system of national transportation is not working at maximum efficiency.

It is time to take another hard look at the overall structure of our national transportation system. It is time to improve on existing systems and to develop new ones designed to serve individual needs in individual communities. It is time for innovation and diversity.

As our society grows and our economy continues to expand, we must ensure that the efficiency of this system keeps stride with the changing demands placed on it. Our efforts must center on achieving the goals of *flexibility* in the use of our transportation system, *economy* in the use of our energy resources, and *balance* in the availability of diverse forms of transportation.

—Let us develop an outstanding system of public transportation within and between our cities and towns and rural areas, a system sufficiently flexible to serve the needs of diverse individuals in diverse communities.

—Let us revitalize our railroads so that once again they will be a healthy alternative form of transportation, moving people and freight efficiently and competitively.

—Let us complete the magnificent Interstate Highway System that provides a model for the world.

—Let us maintain our worldwide supremacy in air commerce.

—Let us continue to rejuvenate our maritime fleet so that it once again competes effectively on the world's seas.

—Let us press ahead with our safety programs in the air and on the highways, so that every American can travel free from fear of the drunk driver and the hijacker.

—In short, let us ensure that in the third century of our Nation's existence, our total system of transportation fulfills the promise of our first two centuries.

I. RECENT PROGRESS

Over the past five years, the Federal Government has laid considerable groundwork for a transportation network which can meet the challenges of America's third century. In addition to moving ahead effectively with programs already in existence, we have proposed, and the Congress has enacted, landmark legislation to expand capacity, to ensure safety, and to minimize the adverse impact on the environment of our transportation systems.

One of our highest priorities has been to help our cities reduce transportation pollution, energy consumption and congestion. Under the Urban Mass Transportation Assistance Act of 1970, Federal financial assistance to urban public transportation has grown from \$125 million in 1968 to \$1 billion this year. And for the first time, under the provisions of the Federal-Aid Highway Act of 1973, States and localities can now use a portion of their Federal highway funds for public transit purposes.

This assistance has already saved or improved public transportation in more than 150 cities. The annual decline in total transit ridership in the United States has stopped, and for the first time since World War II, the trend is moving upwards.

Five years ago, the steady decline of rail passenger service throughout the country threatened the Nation with the possibility that we might soon lose the alternative of traveling by train. With the enactment of the Rail Passenger Service Act of 1970, that threat was largely erased. AMTRAK, a private corporation created by the 1970 act, has preserved quality passenger service and reversed steadily declining passenger trends. Over the past year, the number of passengers carried has increased by 14 percent.

During the past year we were also faced with a major rail crisis in the Northeast and Midwest. I proposed and the Congress enacted the Regional Rail Reorganization Act of 1973, which provides for the restructuring of eight bankrupt railroads into a new streamlined system. Within the next several years, we expect that this new system will be able to operate profitably and can survive as a producer, not a consumer, of tax revenues.

In the water transportation area, the enactment of the Merchant Marine Act of 1970 marked the most comprehensive change in our approach to the problems

of the U.S. flag merchant marine in nearly four decades. We have challenged our ship construction industries to rebuild our fleet at reasonable expense and our ship operating industry to move toward less dependence on subsidy. At the same time, we will continue to provide all essential support to make such a significant transition possible. The results of these efforts are becoming increasingly apparent, with private orders for ships at a record high of \$2.4 billion and ship construction subsidy rates at the lowest level in history. Some ships are being built for the foreign trades without direct subsidy, and modern ships which will operate without direct subsidy are now under construction. Comparison of recent trends between our shipyards and those of foreign countries indicates a long-range possibility that we will be able to compete successfully in the world's ship construction market.

Another of our major concerns has been to protect the safety of the traveling public and the Nation's commerce. We have taken resolute and firm action to protect our air passengers from the threat of the hijacker.

The highway safety picture has both encouraging and discouraging aspects. While we have made steady progress in reducing the fatality rate, the total number of deaths has increased. Although the new mandatory 55 miles per hour speed limit seems to have resulted in a somewhat lower rate thus far this year, the problem of highway safety remains one of the toughest we face.

Our comprehensive highway safety program has encouraged the production of safer motor vehicles, eliminated many hazardous areas on the Nation's highways, and sought new ways to improve driver performance. In the next fiscal year, funding for State and community highway safety programs will be increased to \$148 million. Half of this increase will be earmarked for a program authorized by the 1973 Highway Act which allows special incentive grants to States which pass mandatory seat belt laws. And continued emphasis will be placed on keeping the drunk driver off the road. In addition, I have proposed in my fiscal year 1975 budget, a \$250 million highway safety construction program. This will, for example, help eliminate dangerous obstacles on our highways.

Finally, I would note that over 35,000 miles of interstate highways are now open—an increase of about 8,000 miles since 1968. By the early 1980's, when completed, this system will carry more than 20 percent of all highway traffic.

II. NEW DIRECTIONS

To continue the forward progress of recent years, I propose that we take new actions in 1974 on two major legislative fronts: public transportation and Federal rail regulations. I am submitting proposals to the Congress in both of these areas. They are designed to increase the flexibility of our Federal transportation programs, to allow State and local officials more latitude in the way they spend Federal transportation dollars and to modernize Federal regulation of the railroads.

1. UNIFIED TRANSPORTATION ASSISTANCE PROGRAM (UTAP)

It has long been apparent that dramatic improvements were needed in our public transportation systems. Now the energy crisis has given new urgency to that need.

Currently most of the Federal funds available for public transportation are provided under the Urban Mass Transportation Act. While this program has enabled us to make a substantial improvement in our urban transportation systems, it can be improved in several important respects. First, it is administered on a project-by-project basis, requiring extensive Federal involvement in reviewing these projects. Priorities have been determined in Washington, not back home where it counts. In addition, communities are unable to predict how much money they will receive from one year to the next. Finally, local communities are restricted in the ways they can spend the money.

By reforming the Federal highway aid program in 1973 to permit some of its funds to be used for public transportation, we took an important step toward increasing the financial resources available to large cities.

As we look to the future, it is apparent that we must further broaden our programs of public transportation assistance, providing more funds and giving greater flexibility to those who spend the money. Our public transportation system itself must be diversified and strengthened. We need not only more physical assets, such as buses, but also sufficient financial support to assume that our buses, trains, and other public conveyances can be operated with greater frequency and reliability and comfort for our communities in both urban and rural areas.

We have also too long taken the transportation systems of rural America for granted. Often, the social and economic needs of our rural citizens are left unfulfilled because of the lack of good public transportation. Expanded public transportation will be a key element in our program to assist rural community development.

To reach these goals, I am submitting to the Congress today legislation to create a Unified Transportation Assistance Program. This program would provide \$15.9 billion to urbanized areas over a six-year period and \$3.4 billion for small urban and rural areas through fiscal year 1977. This act would mark the largest single commitment by the Federal Government to metropolitan and rural transportation in our history.

This legislation would make several critical improvements over current programs:

- It would permit recipients of funds—State and local communities—to determine their own transportation priorities.
- The recipients could spend the money not only on capital improvements, such as new buses, new rail cars, new rapid transit systems, and non-interstate highways, but also on other transit needs. Broadening the law in this way would permit

local tradeoffs between capital investments and costs to improve services. I believe this is the most effective way for the Federal Government to provide transit assistance, and I will continue my strong opposition to any legislation which establishes a new categorical program solely for local operating assistance. Such a program would unnecessarily inject the Federal Government into decisions which can be far better made by State and local governments.

- UTAP also would allocate over two-thirds of metropolitan funds on a population-based formula so that our cities would receive an assured flow of transportation assistance. We are aware of the concerns voiced by some that our proposed formula should be altered to meet the unique problems of some of our largest cities. We intend to work closely with the Congress, elected officials and others, in examining alternative formulas.

- Finally, UTAP would also provide additional, more flexible assistance for public transportation systems in smaller urban and rural areas. Most of these funds would probably be used by the localities for improving the service and safety on main highways and roads. Funds would also be available for public transportation equipment and demonstrations in smaller urban and rural areas.

Enactment of the Unified Transportation Assistance Program would augment my budget for fiscal year 1975, which already calls for an increase of 50 percent in spending for transit capital improvements under existing programs.

2. TRANSPORTATION IMPROVEMENT ACT (TIA)

The problem of transporting freight between our communities is as crucial as transporting people within them.

Our railroads, once the pride of the Nation, have been gradually deteriorating. Frequently, the blame is placed upon poor management and rigid labor contracts, but a more fundamental cause lies with our outmoded complex system of Government regulations which govern the railroads. These regulations were drawn up early in the century to protect the public from monopolistic practices by the railroads and to protect the companies within the industry from each other. Over time, however, industry has increasingly given up its managerial powers to the Government, while the rules applied by the Government have become inflexible and inefficient.

This inflexibility is most evident in the rate-making process where it prevents rail managers from managing their affairs effectively and competitively. The low earnings of our railroads are directly linked to this rate-making inflexibility.

The current system of regulations is also harmful to the railroads because it prevents them from abandoning lines that have become unprofitable. In 1971 the Interstate Commerce Commission required the railroads to maintain service on 21,000 miles—about 10 percent of the total—of lightly traveled track for which

revenues were less than operating costs. To make up the difference, the railroads have sought to charge higher rates on other, more profitable lines. Economic distortions have been inevitable, so that today we often have railroads carrying freight on short runs even though trucks would be more efficient, while trucks carry freight on some of the longer hauls even though the railroads would be more efficient.

The inability to compete in a more open market has seriously affected the railroad industry. Often railroads cannot afford to make necessary improvements in tracks, terminals and equipment, and their service has steadily declined.

Within recent years the Federal Government has been forced to rescue the Penn Central railroad from collapse and, through the Regional Rail Reorganization Act of 1973, to save seven other railroads of the Midwest and Northeast from undergoing liquidation. While we cannot afford to let railroads like the Penn Central fail, neither can we afford to bail them out every time they get in trouble. Our economy cannot afford it, and our taxpayers will not tolerate it. If we are to revitalize this industry we must instead find a modern approach to Federal regulation of railroads.

To serve that purpose, I am today submitting to the Congress the Transportation Improvement Act of 1974, a bill aimed at restoring this Nation's railroads to their proper place in the national transportation system.

This new legislation would substantially overhaul the Interstate Commerce Act to permit liberalized railroad abandonment in cases where rail service is continually shown to be uneconomic. State and local governments, as well as private interest parties, would have the opportunity to provide an operating subsidy to a railroad for the continuation of such uneconomical service or to arrange outright purchase of the right of way if that is their desire. Furthermore, substitute service by land or water carrier would be required prior to abandonment.

Beyond this liberalization in abandonment policies, the bill would provide improvements in the rate-making procedures and would abolish discriminatory State and local taxation of interstate rail carriers. If rail managers are truly to direct their own affairs, the ability to raise or lower rates without engaging in a protracted and complex ratemaking process is essential.

The Transportation Improvement Act would also provide significant financial assistance to the railroads for long-term improvements. Some \$2 billion in Federal loan guarantees would be provided to finance improvements in rights of way, terminals, and other operational facilities and systems and rolling stock where needed. In addition, \$35 million would be available for a research effort to improve freight car utilization through design of a national rolling stock schedule and control system.

The thrust of this entire legislation is to revitalize and modernize freight rail service throughout the country and to

provide an economic regulatory environment which would permit the sort of efficient and economical service that can only result from fair competition, free from burdensome and unnecessary regulation.

I recognize that this bill would not solve several basic problems that confront our railways. In the future, substantial investments will be needed in better transportation technology, in improvements and diversification of types of freight service, and in rehabilitation of deteriorating physical facilities. Before such investments are made, we must also complete a comprehensive evaluation of the regulatory and institutional structure of both the railways and of the rest of the surface transportation industry. The Department of Transportation and others within the Federal Government will be conducting such an evaluation in the coming months. In the meantime, however, the Transportation Improvement Act can serve as a vehicle for making important improvements in the condition of the railroads, and I urge its enactment during this session of the Congress.

While the focus of the Transportation Improvement Act is on freight service, we must continue to be equally concerned about the quality of passenger service on our railroads. It is clear from the energy crisis that an increasing number of Americans are anxious to build and use a better passenger system. My budget for fiscal year 1975 provides significant new capital and operating funds for AMTRAK to expand and improve its current service. In addition we will move ahead promptly in carrying out the Regional Rail Reorganization Act of 1973.

One of the most exciting moments in our history occurred in 1869 when the Union Pacific Railroad, building west from Omaha, met the Central Pacific, building east from Sacramento. The joining of our Nation in this manner opened a whole new era of economic growth for America. Today our railroads are more necessary than ever. They make efficient use of fuel with little negative impact on the environment, and they deliver nearly 35 percent of the Nation's freight at low cost. The essential tracks are there, the system that crisscrosses the country with a web of steel rails is in place. Now we must make it work again.

III. CONCLUSION

For too long we have focused a great deal of attention on some forms of transportation to the detriment of others, we have permitted decision-making at the Federal level to scramble priorities at the State and local levels, and we have begun to lose the diversity and flexibility in transportation systems that encourage competition and, therefore, great efficiency and greater effectiveness in the employment of these systems.

We have a clear understanding of these problems now, and we have begun to come to grips with them. I believe 1974 will see a crucial breakthrough in expanding and enhancing America's national system of transportation so that it once again serves our Nation with a

maximum of flexibility, diversity, and balance.

RICHARD NIXON.

THE WHITE HOUSE, February 13, 1974.

ENERGY EMERGENCY ACT—CONFERENCE REPORT

The PRESIDING OFFICER. Under the previous order, the Senate will now resume the consideration of the conference report on S. 2589, which the clerk will state by title.

The legislative clerk read as follows:

The report of the committee of conference on the disagreeing votes of the two Houses to the bill (S. 2589) to authorize and direct the President and State and local governments to develop contingency plans for reducing petroleum consumption, and assuring the continuation of vital public services in the event of emergency fuel shortages or severe dislocations in the Nation's fuel distribution system, and for other purposes.

Mr. FANNIN. Mr. President, most of what I will say at this time has been said before on the floor of the Senate but I trust this condensed recap will be helpful for all of us to better understand the facts we must face in considering this legislation, the energy bill S. 2589 conference report.

In the last few months we have seen unprecedented increases in the price of oil, both imported and domestic. These increases are being reflected in product prices. As a consequence, there is a great deal of consternation and confusion over the cause of the price increases. In general, many Members of Congress and others conclude that there must be some conspiracy to raise the price. Most persons who have carefully studied the subject, however, can generally agree as to the real reasons behind these developments and as to policies which should be followed in the future with respect to both oil and gas prices in the United States.

For many years the United States lived "off the shelf" in the sense that we consumed vast quantities of oil and gas which had been discovered in the 1930's, 1940's and 1950's when the cost of doing so was much cheaper than it has been for the last 10 or 20 years. In other words, the price of oil and natural gas did not reflect its then current replacement cost, and we did not in fact replace the oil and gas we were consuming. Commencing particularly with the first closing of the Suez Canal in 1956, many in the industry spoke out loudly about the perils of such a policy, but these warnings were generally ignored.

There were many who argued there was no need to develop expensive domestic energy resources when cheap foreign oil was available and would always be available. We have now found, however, that foreign oil is no longer cheap, is not likely to be so in the future and may not even be available. There is general agreement that we must strive toward achieving a reasonable degree of energy self-sufficiency within the shortest possible time. Such a goal necessarily implies that the price of energy must be

high enough to make its development possible.

Free market forces ultimately will determine what this level has to be. Free market forces, however, have not been permitted to determine the price of energy in the past and may not be permitted to determine the price of energy in the future. Governmental interference in this price mechanism can be and has been a serious impediment to the development of a sound energy base.

Most qualified neutral observers agree that the governmental restraints on natural gas prices in the 1950's and 1960's constituted one of the principal factors which led to our present shortage of domestic energy resources. For this reason, it is important to look at natural gas pricing as a case history of the kind of mischief that can and will be created by governmental price interference. When the Federal Power Commission was saddled with the responsibility of setting producer prices as a result of the Phillips decision in 1954, it felt that it must do so under the general pattern of consumer protection contemplated by the Natural Gas Act. Thinking the lowest "reasonable" price must be related to cost—rather than value—it applied a public utility rate methodology which sought to determine the cost of production of gas. Under this methodology, one looks back at a test period and takes into account the various components of cost and rate base in order to derive a regulated price.

The Commission eventually learned that it would be impossible for it to determine individual cost of service for each gas producer in each area of the country. Furthermore, it learned that this type of individual company cost of service determination would result in wildly different prices for different producers even in the same producing field. In an attempt to cope with this problem the Commission then went to area rates where it attempted to determine cost of service on a composite basis for all producers in a given area. This incredibly complex determination was based inevitably on data that was several years old by the time any decision could be reached. The Commission was always looking backwards at cost factors that were several years out of date by the time it could complete its determination and such factors might be a decade out of date by the time the courts could review such determination. Furthermore, any such determination at best could determine only what it had cost to find gas in the past and could not remotely indicate what future price would be required to develop additional gas.

In other words, Mr. President, there would be no question of determining under that formula whether gas could be obtained in the future or be regulated on that basis.

As a result of these inherent disabilities in attempting to determine an appropriate price for gas on a cost or public utility basis, both the Commission and the courts concluded that some other method would have to be followed. So, as a result, the Commission, with the sanction of the courts, has attempted

to consider "noncost" factors and to allow prices which would elicit the necessary response. Even with these commendable efforts prices have continued to lag well below replacement costs and well below the value of gas compared with other sources of energy.

The result of 20 years of producer rate regulation is a severe shortage of natural gas and a severe shortage of other domestic energy resources. Specifically, as the price of then abundant gas was held to artificially low levels, an artificially high demand was created for it. Where gas was interchangeable for coal or oil and where it cost only a fraction of the cost of coal or oil, obviously it would supplant these other less desirable and more costly forms of energy. There is no question that low gas prices resulted in low oil prices and low coal prices. Gas took over more and more energy markets and inhibited the development of our oil and coal resources. Depressed oil and oil products, together with reduced levels of domestic production, discouraged the construction of additional domestic refining capacity. The advent of nuclear energy for power generation in truly significant quantities was stunted. Many plants were not built. Now, we are running out of cheap natural gas resources developed in past years. Gas is no longer available for many of the markets it has previously supplied. The development of additional gas resources is inhibited still by the continuing restraints on its price.

No one wants energy to be priced at levels in excess of those required to permit the full development of our known and potential energy resources. No one is in favor of true "windfall" profits, meaning profits that are not necessary to develop an adequate energy base. Our problem is that we have priced energy too low in the past. As a result, we have not kept pace with our normal requirements of energy. Furthermore, by pricing energy so low, we were creating an artificial demand for it. With 6 percent of the world's population we were consuming one-third of its energy.

There was absolutely no incentive for anyone to conserve energy since its cost was trivial in relation to income.

Gas and oil and other energy resources must be priced at levels which will cause the necessary development of our energy resources. Energy must be priced to consumers at its true cost to avoid excessive and profligate use. Price in the final analysis is by far the best allocator of any resource. Pricing energy at its replacement cost has the added advantage of putting the cost of energy in the proper account, namely, that of the user. Permitting all forms of energy to compete among themselves is the best allocator of these different energy sources and will eliminate the irrational results we have achieved by holding the price of natural gas at a level which reflects neither its energy value nor its replacement cost.

There is general agreement the United States still has a very large and adequate energy resource base. We simply have not developed that base in keeping with our essential energy needs. There also is general agreement that the supply of energy

is elastic—meaning that it is unusually responsive to the price stimulus. Some estimate that a domestic price for oil of \$10 a barrel would result in a relatively short time in a domestic production level as high as 20 million barrels a day. Even if this estimate of increased production levels is only half right, the increased level of oil production plus a concomitant increase in gas production, coal production, and nuclear energy production would more than satisfy our essential energy needs.

In order to avoid short-term windfalls it may be necessary to adopt on a temporary basis proposals of the type recently made by the administration so long as there is incorporated in any such proposal a provision for crediting against the tax the reinvestment of additional revenues in domestic energy producing projects. Such a measure should be expressly limited to a 2- or 3-year period during which our domestic resource base is rebuilt.

Similarly, governmental regulation of new gas prices should be phased out over the same period with a proviso that the rates during this interim period should reflect the energy value of gas in relation to other fuels such as oil and should not be set on any historical cost of service basis. Regulation of old gas prices should be continued until contract termination or price redetermination becomes operative.

Price increases will be reflected, of course, in cost to the consumer of energy. Nevertheless, they will still have a relatively small impact on such cost. For example, a \$1 per barrel increase in the cost of crude oil translates into an increase of approximately 2 cents per gallon in the cost of gasoline. A 25 cent increase in the producer price of natural gas will result in a relatively modest price increase to a consumer in the Middle Atlantic States since the great part of such cost is the transmission and distribution charges. These price increases can be more than offset by even a modest degree of conservation in the use of energy by the consumer.

In the final analysis, so long as the cost of domestic energy does not exceed the cost of imported oil or liquefied natural gas, we have not burdened the consumer with any cost he would not have to pay in any event, and we have benefited our entire economy. We simply cannot afford to become more and more dependent on imported energy.

Such a policy would inevitably lead to a drastic lowering of our living standards. Our economy cannot stand the outpouring of \$30 to \$40 billion annually for foreign oil when there is no substantial balancing of foreign trade. We are indeed fortunate among the developed countries to have the requisite energy base to avoid such a catastrophe. We are also fortunate in having the most highly developed energy industry in the world to secure this energy base. The only way we could create a long-term catastrophe for this Nation would be to impose governmental decisions at this time which would destroy our ability to develop this adequate domestic energy base.

Rolling the prices back as provided in

this conference report could prove devastating to the economy of this Nation. The net result will be less energy which will result in longer lines at the service stations with prices rising as a result of passthrough of higher cost for foreign petroleum that it will be necessary to import to replace the cut back domestic production caused by marginal wells being unable to produce at the reduced prices.

Mr. President, I yield the floor.

Mr. WEICKER. Mr. President, I would like, if I can, to express in a few words some of my feelings on this subject prior to the conference report coming to a vote tomorrow afternoon.

I must confess that I am still quite undecided as to how I will vote should we have a motion from the floor to recommit the report. I do not have any difficulty with the work done by the conference and its very able leadership. I do have a great deal of difficulty with the fact that the report provides merely for permissive action on the part of the President relative to rationing.

Let me describe what the situation is today—a situation that is getting worse. And this does not apply only to my State of Connecticut, the States of the Northeast, or the more populous areas of the country. The situation is widespread, and growing.

Basically, we were told when this started that it was a national crisis, and yet the response of both the President and Congress has been not to devise a national solution, but rather to importune the service station operator, the local government, and the State government to respond to the crisis, rather than taking that responsibility on their shoulders.

If we have a national crisis, then indeed it demands a national solution. The situation today is quite simple insofar as the gas station operator is concerned. He is the one who gets the abuse. He is the one who is asked to play the enforcement official. He is the recipient of ill-will on the part of the public. I do not think that is the way it ought to be.

By the same token, because of our failure to act on a national basis, human beings are now behaving like animals. There is no dignity. There is no respect. There is panic. Because of our failure of leadership at the Federal level, the individual citizen has been placed in a situation such that, if he saw it reflected in a mirror, he would be aghast.

I was aghast when, during the course of the State of the Union Message, the President made the statement, "There will be no rationing," whereupon a good majority of Congress stood up and started to applaud.

So it is not only a question of inadequacy of response by the President, but also by Congress. What was there to applaud about? If indeed we have a crisis, is it not best to measure what a proper response should be, rather than come forward with a response rooted in past history?

We with that statement, both the President and Congress, took away the

number one alternative for resolving the crisis.

Why should we define, for instance, rationing in terms of a World War II system? That is what the politicians keep on talking about. They say we cannot have that \$500 million front money for the program, that we cannot have the large bureaucracy that rationing would entail.

Mr. President, two things have happened since World War II. We have acquired an expertise in Government where we can apply another type of solution, No. 1; and No. 2, the American public is perfectly capable of being treated in a mature way and of having a full understanding of the problem, rather than being patted on the head, and told, "Even though we have a crisis, don't worry, the solution will be painless," when it will not be.

I repeat, if we have a national crisis we need a national solution. We cannot stop human emotions. We cannot stop the energy crisis at the boundaries of the service station, any more than at the boundaries of a local government or of a State. That is like saying you can stop air pollution at a State boundary. It is impossible. You cannot handle it at the State level or at the local level; and when I say "you," I mean we in Congress and the President. We tend, if there are negative points, to try to let them fall on the other fellow; but the other fellow in this instance happens to be the gasoline retailer and the American public.

I am not afraid of the American people. I think they are far ahead of the politicians when it comes to understanding what needs to be done in this situation. And if you think the situation is bad now watch it grow worse. If we go out to the news ticker, we find that crisis situations have developed in States not just in the Northeast but also in the West, the South, and the Midwest. All this during the period of time when we estimate in the way of a gasoline usage somewhere around a 15 percent shortfall, and at a time in January and February when we are at our lowest period of gasoline usage. Just exactly what do we think will happen when that shortfall goes to 30 percent which will be the case this coming spring and summer? The lines then will be four times as long. So if we have only a small line now, figure out what four times as long this summer will mean in many areas of the country.

The tempers that have flared now will be four or five times worse in the future. The same goes for the violence.

It is up to us here in the Senate and House, and at the White House, to go ahead and lead and not try to sample the fears of the Nation.

There is no easy answer. There is going to have to be discomfort. There is going to have to be sacrifice. Maybe some of us will even lose votes of some of our constituents as a price for our leadership.

I believe that the public today expects honesty insofar as its politicians are concerned, both in telling the public what the situation consists of and in advising the remedy. We started off, as I indicated, with the words "national crisis," I

have noticed some weasel words creeping into statements of the administration and in Congress, when they now say it is only restricted to a few localities or to a few States. That does not quite sound like a national crisis. But we do have that crisis. The Senator from Arizona pointed out that we are 6 percent of the world's population and use roughly—and he was on the conservative side—33½ percent—my estimate would be 40 percent—of the world's energy.

Well, if we do not have any other figure in hand to convince ourselves that there is a crisis, that one should do it.

Just how long do you think, Mr. President, the United States of America, 6 percent of the world's population, can use 40 percent of the world's energy?

How long is someone in Central Africa, the Middle East, or South America going to have to suffer or die so that an American can be more comfortable?

It will not happen.

So the crisis is real. It is with us to stay.

Anyone who says it will be over in a month or two is lying.

The response by Congress and the President as to mass transit system is inadequate because we will not get them for 5 or 10 years—again, one of the principal solutions which has long been denied because we did not anticipate this crisis.

I have heard the Democratic responses regarding the matter of transportation. Let us make it clear that on both sides of the coin there has been a handful fighting for mass transit, but there has been very little interest on the part of the administration and the Democratic majority in Congress putting an end to the highway trust fund or bringing about additional funds for mass transit systems. So the fault lies with government as a whole at the Federal level.

Solar energy will not come to pass immediately. We have not even started in that direction to the point we should have reached by now. We need time to develop these concepts. It is not a matter of hitching up our belt a notch for a week, for a month, but rather for years. Yet, for some reason, we are giving the impression that this crisis will clear up when the embargo is lifted. It will not. It will get worse. We have also got to know that the sacrifice required is not going to be insignificant. All that has happened now is that leadership in the Federal Government is setting person against person, town against town, State against State. We are being set one against the other—individuals, towns, and States.

That is a solution for a national crisis?

Mr. JACKSON. Mr. President, will the Senator from Connecticut yield at that point?

Mr. WEICKER. Right after my statement I would be pleased to yield.

Mr. President, I have got nothing else to say in this regard except for the fact that I know self-sufficiency is a great concept. But self-sufficiency requires self-discipline. That is one hard fact of life. It does not involve gambling on the Arabs' giving up their boycott while, at the same time, we curse the Arabs. It

should involve gambling on ourselves, not one else.

Yet, the leadership which is supposed to come from Washington, D.C., engages in exercises which solve nothing but cause a great deal of misery.

I know that the motion comes up tomorrow and I am not particularly enthusiastic about blocking the energy bill any longer than we have to, but I must confess that I am deeply concerned about the permissive grant of authority in this area. We should have some guts in the Senate. The American people are way ahead of us. It takes guts to say yes to rationing. But we are going to have to do it in order to solve this crisis.

I am happy now to yield to the Senator from Washington.

Mr. JACKSON. Mr. President, I want to compliment the able Senator from Connecticut for his very fine statement. I happen to share his view of rationing. The Senator will recall that we had a vote on this, that is, the mandatory rationing question, and we lost by, what? Seven or eight votes?

Mr. WEICKER. Right.

Mr. JACKSON. May I also say that in the conference, we went through this same business and the House, of course, previously, had voted down a mandatory rationing requirement. I think it is only a question of time that we will be forced to rationing simply because there is not enough gasoline to go around. I would point out that even if there is a settlement tomorrow in the Middle East, it will not provide the necessary additional crude supply that will take care of our demands.

As the Senator knows, they were queuing up in New England and all over the United States last summer, before the October conflict. Therefore, even if we assume that they go back to pre-October production levels in the Middle East, it will not change. It is my own personal judgment that the countries over there are not going to increase their production. The reason is, they have learned, by cutting back on production and raising their prices, that they can make more money and will conserve their own petroleum resources. So we are in a very tight situation.

May I suggest this to my good friend. I believe that as a condition precedent to action, and this bill gives the President the rationing authority, not on a mandatory basis but on a discretionary basis, as a condition precedent to actual rationing. Would it not be wise to extend the authority contained in this bill that is before the Senate as provided for in section 105 to require the station operators to be open at a specific time and close at a specific time, and that the public be fully apprised of what stations are open and what stations are closed?

I wonder what experience my colleagues are encountering—but when I came to work this morning, I had to check with the policeman in the Old Senate Office Building and inquired what gas stations around here were open, and I had a member of my staff out looking for gas. My wife is doing the same thing. I am suggesting, Mr. President, that we are wasting millions of gallons of gas-

oline every day just sitting in line for gasoline.

My point is that in this bill the President can set the hours of opening and closing. Then he can back it up under the allocation authority with a reserve of gasoline which will insure that the stations that are open will have a sufficient supply to meet the demand. I would suggest this course as a court of final action prior to the imposition of rationing. I know of no other way out.

I believe that something must be done without delay. If this situation continues the way it is going now, we are going to have riots. We have already had a number of bad incidents in our large metropolitan areas.

I hope the President would have the authority—by that I mean, of course, Mr. Simon—to work out that kind of scheme. I think it is outrageous that we have areas of surplus and areas of shortage and nothing is really being done about reallocation.

I believe that the public is entitled to know what gas stations are open in their neighborhood or community, what hours, and what hours they are going to close. If we have that kind of arrangement, we will know that all options have been exercised, that every effort of last resort is being utilized to come up with an answer short of rationing.

I just wanted to say to my good friend that it is of critical importance that this bill not go back to the conference again. If it does, we are going to have the wrath of the people of the United States on us. While this bill is not perfect, it does give the tools that are needed here to do the job. I must say that if it goes back to committee, we are going to find ourselves wallowing in a mess in which Congress is going to take the blame, and properly so, for not going forward with at least some of these tools. That is my point. We know what the House will do and will not do.

I just wanted to say to the Senator from Connecticut that I share his view. As he knows, I supported it.

Mr. WEICKER. I know how hard the Senator from Washington has worked on this problem, and it has gone back and forth between the Senate and the conference. Certainly, his efforts speak for themselves. They have been without equal. But I want to make a couple of points.

No. 1, I realize the difficulties I would have. As the Senator has indicated, we did turn down rationing about 2½ months ago when we were debating the bill itself. So probably I would be subject to a point of order, which would rule me out of order, if I made a motion to recommit with instructions.

Mr. JACKSON. I do not think so. I think it would be in order.

Mr. WEICKER. I say this to the Senator: If that is the case—if it is not re-committed—then I still feel that we in the Senate should immediately move on a separate bill dealing with rationing, and I will tell the Senator why. I do not think it is fair to excuse ourselves by saying we have given the power to the President. If I am ready to come down on his head on this issue, I am also willing to come down on ours. If he does

not move and the crisis accelerates, the finger can be pointed at him. But as far as I am concerned, this is a shared responsibility. The Senate is also responsible, and we should say that we are willing to go ahead and ration.

We talk about riots and the service station operators, a portion of whom are going to go on strike probably in the middle of this week in my State. But the fault does not belong there. The fault is ours. Even the situation that the distinguished Senator from Washington has mentioned is merely a distribution system. It does not conserve fuel. A rationing system is going to cause a little discomfort for everybody, but I believe it is much better than riots and the animalistic behavior going on in this country now.

What about a system whereby each one of us designates 1 day a week when the car can stay in the garage. Such a system is conservation.

Let us assume that the Arab embargo stays on. We are going to have no more fuel oil produced and available to us this year than last year. It is not there. It is the same amount, except that we know that usage will soar.

Mr. JACKSON. If the Senator wishes to introduce a bill, or plans to, I assure him that we will have early hearings on rationing. I want to assure him on that, because we are going to have oversight hearings on this matter. It is clear to me that we cannot go on the way we are going now. This is anarchy.

Mr. WEICKER. It is anarchy.

Mr. JACKSON. It is getting worse. We do have some safeguards in here so far as the operators are concerned. We have the safeguards that affect the franchise dealers, both branded and nonbranded, and those franchises cannot be terminated without cause. Many of those people are being terminated, period, just put out of business.

Mr. WEICKER. Does the Senator from Washington know that in Connecticut, for example, the independents, I gather, are possibly considering forming a consortium to buy some spot gasoline from Canada? And if that happens, such gasoline will be selling at 75 cents a gallon.

I recall the initial debate on the floor of the Senate. We were debating whether or not we should put a tax on gasoline, and we all agreed that it would be unfair to the poor. What we have done is to permit this matter to get so far out of hand that it is indeed unfair to the poor, and this time I define poor not by a few people at the lower end of the spectrum but by defining who the rich are, and only they will be able to afford gasoline.

Mr. JACKSON. As the Senator knows, we provide for a rollback on the price of petroleum in a sensible way. We provide for incentives but say that it cannot go above \$7.09.

Speaking of the poor, I was in the Tennessee Valley Friday evening. One of the typical letters that was received was from a couple drawing \$160 a month in social security. The previous month, their propane bill—this was in the wintertime—was \$30 a month. The next month, it was \$100 a month. The cost of

propane has gone through the roof. This hits all the little people—the people living out in the country, away from the gas pipelines. They are being clobbered.

I add that to the additional point the able Senator has made of perhaps a spot price market being utilized for Canadian gasoline. I would be surprised if it would not go higher than 75 cents a gallon.

Mr. FANNIN. Mr. President, will the Senator yield?

Mr. WEICKER. I yield.

Mr. FANNIN. Mr. President, I commend the distinguished Senator from Connecticut for bringing out the important part involved in whether or not we are going to be successful in achieving legislation. Here we have an all-encompassing bill with so many controversial provisions that it has not passed. We would have passed a bill such as he has suggested in November, if it had been a simple bill.

The Senator speaks of the price of fuel and about the use of Canadian fuel. If we pass this bill, we are going to see a much larger amount of that Canadian fuel, or fuel from across the water, coming into this country, and the price is going to be higher.

Naturally, we cannot roll back the price of foreign fuel, but if we are going to roll back the price of domestic fuel, there will be less domestic fuel.

I have talked to a number of small independents who have stripper wells, and they are successfully bringing those stripper wells up to capacity.

We have discussed this many times, but let us look at it from the standpoint of the 350,000 stripper wells in the country.

In Texas alone there are 84,000 that produce about 3.8 barrels a day, but in the 3.8-barrels-a-day wells there is 1.8 billion barrels of oil that is available to be pumped out. But here is the catch. If this bill is passed it rolls back the price. There is no insurance that the \$7.09 is high enough for the stripper well to operate. I have talked to men operating these wells and they say that at a price around \$8 most of them can go ahead in that area. Some need a higher price. The situation requires flexibility.

They say they can double their production in 6 months. Twelve and a half percent of our oil comes from stripper wells so if we double that and produce 25 percent from stripper wells they will make a significant contribution. This bill would kill that opportunity.

I think the Senator from Connecticut is on the right track on what should be done, and that is to pass legislation which is needed. Then we can discuss the other bills, some of which are in the House and some of which are in the Senate, to take care of this great need that we have. But if we go forward with this bill we are in deep trouble.

Mr. JACKSON. I wish to say a word about the stripper bill. I wrote it and I thought it was something that would be useful. We debated it on the floor of the Senate in connection with the Alaska pipeline bill and finally we had it put into the mandatory allocation bill. Oil was then at \$3.90 a barrel. The debate on the

floor centered on the fact that it would go up a dollar or maybe \$1.50; that would be the maximum. I will put all of that information in the RECORD tomorrow. What happened? It went from \$3.90 to as high as \$10.35 a barrel. That is what we are talking about.

So that my colleagues can understand, let me say that under the existing regulations there is a stripper loophole in the bill. It is as big as an oil well. Let me tell Senators what it is. All they have to do in a given oilfield that is already functioning is to put a well down alongside the one that is already in the oilfield, where they are taking out oil. They can take out new oil which is really old oil and it is unregulated.

Mr. FANNIN. Mr. President, if the Senator will yield, the Senator knows that is not the stripper well. The Senator is talking about 29 percent and I am talking about 25 percent. I am fighting to hold the stripper wells.

Mr. JACKSON. Very well. Let us explain it to the Senate.

Mr. FANNIN. Let us be factual.

Mr. JACKSON. You are talking about a stripper well?

Mr. FANNIN. The Senator is talking about the new oil wells or other wells that bring the total up to 29 percent. I am talking about 12½ percent going up to 25 percent.

Mr. JACKSON. The impression the industry is trying to give is that by taking the lid off they are going to open up new oilfields. I am saying you can run a well on a property adjacent to a stripper well and take oil out of that area which is part of the same oil pool and it is deregulated. This is a big, big loophole.

Mr. HANSEN. Mr. President, will the Senator yield for a question?

Mr. JACKSON. It means in a well area—that is, where there is a pool—if you want to take it out faster under present regulations you run another well and for every new barrel of oil you are taking out of the same pool that is deregulated you deregulate another barrel alongside of it that is under the lid.

That is a fact and if anyone wants to dispute it we have checked it out.

Mr. HANSEN. I would like to.

Mr. JACKSON. The Senator from Connecticut has the floor.

Mr. WEICKER. Mr. President, I would like to yield but I do wish to make one statement. I want to repeat that for 25 years Congress, aided and abetted by Democratic and Republican Presidents, invested about 95 percent of our transportation moneys in highways and in the automobile. We are the ones responsible for hooking the American public on that as the form of transportation.

Now ingredients basic to that form of transportation are denied us. We stand here and talk about a variety of issues. One is giving leadership, in a temporary sense, so that everybody will be treated fairly; and that can be done only by a national system of rationing.

Second, long-range steps in exploration and making certain that the oil companies are dealing fairly with the American public. At least, I think we owe that type of responsibility and action to the American people.

Mr. GRAVEL. Mr. President, will the Senator yield? I should like to ask him a question on that point.

Mr. WEICKER. I yield.

Mr. GRAVEL. I suppose that in this legislation there are some short-run measures that do achieve this operation equitably among the American people. But suppose in the bill there is also the seed of not solving the long-term energy crisis, and also going in the opposite direction by creating more scarcity. What does the Senator say about that?

Mr. WEICKER. I have made myself clear as to the steps that should be taken. Let us be candid. We are not going to take the inadequacies that have developed over 25 years and resolve them in one bill.

Mr. GRAVEL. What is the main point? It is increasing production, is it not? Capital is needed. Does it not take dollars to do what is needed to be done?

Mr. WEICKER. There is no question about it.

Mr. GRAVEL. Where will the dollars come from, in the short or the long term, to build a refinery, to build pipelines, to drill for oil and gas, to liquefy gas. Where will the capital come from?

Mr. WEICKER. Principally from the private market.

Mr. GRAVEL. So if the price is frozen at an unreasonable point, or if the price is rolled back, it will not be possible to get the capital.

Mr. WEICKER. That is very possible. I remember the amendment offered by the Senator from New York (Mr. BUCKLEY). He offered an amendment which would have kept the price steady on old gas, but would have lifted it on new gas, so that the production of new gas would have been encouraged. It was defeated. So what we were telling the American people was that they were going to get more gas at no cost.

Mr. GRAVEL. Does not the Senator agree that there is demagoguery, that it is a shame? It is not possible to get something for nothing.

Mr. WEICKER. There is no question about that.

Mr. GRAVEL. So where are we going to get the capital?

Mr. WEICKER. From the private market.

Mr. GRAVEL. How can we stand here and say that we are being responsible to the American people if we recognize—as I recognize—that the problem of getting capital is more serious in Connecticut than it is in Alaska? I just came from Connecticut this morning.

Mr. WEICKER. How did the Senator get here?

Mr. GRAVEL. We recognize that the only solution is to tell the American people that we are going to get it from the gasoline.

Mr. WEICKER. The Senator from Connecticut has already expressed his reservation as to no mandatory rationing. There is a problem of getting gasoline through the short term, which relates to rationing. However, for the long term, it relates to explorative mass transit, solar energy, and so forth.

Mr. GRAVEL. But the Senator has to vote on the totality of it. So if he is vot-

ing for this bill, he is voting for cutting back on money.

Mr. WEICKER. The Senator from Alaska can describe his vote; I will speak for mine. I would only say that what we are looking for, is that everybody be treated fairly. Under the present system, when we leave enforcement, when we leave the solution, to the gasoline retailers and the State governments, such cannot happen. The panic, the crisis, is going to go ahead and get worse.

Insofar as the long-range policies, are concerned, those that been alluded to by the distinguished Senator from Arizona and the distinguished Senator from Wyoming, about the need to encourage exploration, about mass transit being made available, about solar energy being made available, the fact is that none of these are available to the American people, and they will not be available to the American people for some time. The first relief might come in 6 months to 1 year, but most of the things we are talking about here are a matter of 1 or 2 years, and I do not think the people of this country want to live like animals for that long.

So I would hope, regardless of the long-range policies—the Senator from Washington, upon the adoption of this conference report, should hold hearings on rationing. We should not say, "We gave the power to the President, but he did not use it." We all ought to stand up and be counted on that issue.

I yield to the Senator from Wyoming.

Mr. HANSEN. I thank my distinguished colleague from Connecticut very much.

There are many statements that I would like to debate, but I did ask permission to address the one statement that I think was made by the distinguished Senator from Washington. I thought what he was saying was that today, with the situation as it is—and I quote from a press release that was issued today, Monday, February 18, wherein the Senator is quoted as saying—"Unregulated prices are encouraging drilling for loopholes rather than oil."

The Senator went on, just a few moments ago, to suggest that with the regulations as they are now, or with the lack of regulations, it is possible for a person to drill a new well alongside a stripper well and to produce new oil that would be unregulated.

Am I quoting the Senator correctly?

Mr. JACKSON. The Senator is very correct.

Mr. HANSEN. Very well. The facts are these: If I am not mistaken, it was the distinguished Senator from Oklahoma (Mr. BARTLETT), the present occupant of the chair, who proposed the stripper well amendment, and I do not recall any great enthusiasm among some of the members of the Committee on Interior and Insular Affairs at that time to exempt stripper well oil, but because I like to believe reason prevailed, we were able to attach the stripper well amendment to the Alaska pipeline bill and it became law.

What does that law say? The law says that stripper wells are identified as those

wells producing not more than 10 barrels of oil per day based upon a field or a leasing unit, and if the average production in that leasing unit is not in excess of 10 barrels of oil per day, based upon what was produced the previous year, the Senator from Alaska was implying in his question, that is stripper well oil.

It would be absolutely insane for any oilman to drill a new well alongside a stripper well to get exempted oil. It is already exempted.

So I repeat to the distinguished chairman of the Interior and Insular Affairs Committee, what he said is not true. It is not true because stripper well oil is oil coming from a leased field that, on a previous year's production, was producing under 10 barrels a day.

Mr. JACKSON. Mr. President, will the Senator yield?

Mr. HANSEN. I would like to make this statement first. Then I will be happy to yield for a question.

I will say this: The only way a person would have any interest at all in drilling a well today alongside a qualified stripper well would be to anticipate a continuance of the present regulations for 1 more year, and then to be hooked with the increased production which I assume impliedly goes above 10 barrels of oil a day for the entire leased field. If that were the case, that would be the only reason on earth anybody would be willing to drill a new well alongside a stripper well.

Now I yield to the Senator from Washington.

Mr. JACKSON. Is it not a fact that under the regulations, exclusive of the stripper provision, a new well can be drilled, because it is not a stripper well, taking oil out of that oil pool, and it becomes unregulated oil? That is the interpretation we have received.

I would point out further that when there is a large pool that covers a vast area, the same thing applies.

Stripper wells are defined in the legislation as those having production of 10 barrels or less under that lease, but those are existing wells. Drill a new well and it is no longer a stripper well, and it is exempt under the regulations.

We have checked this out. This is what the answer is. I just point it out to my good friend.

I would say the real problem in opening up new fields relates to manpower, pipe, rigging, drilling equipment, and so on. This is the drawback to getting new oil reserves. That is what we are talking about. I want an incentive to getting new oil reserves.

Mr. President, I would like to insert into the RECORD at this point the pertinent sections of the Cost of Living Council Regulations of August 22, 1973, which define "new oil" and "released oil".

There being no objection, the material was ordered to be printed in the RECORD, as follows:

SECTION 150.354. CEILING PRICE RULE: CRUDE PETROLEUM

(a) *Applicability.* This section applies to the first sale of domestic crude petroleum.

(b) *Definitions.* As used in this section—"Based production control level" for a particular month for a particular property means:

(1) If crude petroleum was produced and sold from that property in every month of 1972, the total number of barrels of domestic crude petroleum produced and sold from that property in the same month of 1972;

(2) If domestic crude petroleum was not produced and sold from that property in every month of 1972, the total number of barrels of domestic crude petroleum produced and sold from that property in 1972 divided by 12.

"Property" is the right which arises from a lease or from a fee interest to produce domestic crude petroleum.

"New crude petroleum" means the total number of barrels of domestic crude petroleum produced and sold from a property in a specific month less the base production control level for that property.

(c) *Rule.* (1) *General.* Except as provided in paragraphs (c) (2) and (3) of this section, no producer may charge a price higher than the ceiling price for the first sale of domestic crude petroleum.

(2) *Special release rule.* Notwithstanding paragraph (c) (1) of this section, a producer of new crude petroleum produced and sold from a property may in the month produced, beginning with the month of September 1973, or in any subsequent month, sell that new crude petroleum without respect to the ceiling price. However, if the amount of crude petroleum produced and sold in any month subsequent to the first month in which new crude petroleum was produced and sold, is less than the base production control level for that property for that month, any new crude petroleum produced from that property during any subsequent month may not be sold pursuant to this subparagraph until an amount of the new crude petroleum equal to the difference between the amount of crude petroleum actually produced from that property during the earlier month and the base production control level for that property for the earlier month has been sold at or below its ceiling price.

(3) *Released crude.* Notwithstanding paragraph (c) (1) of this section, if during a particular month new crude petroleum which could be sold at other than the ceiling price pursuant to paragraph (c) (2) of this section is produced from a property, the entire base production control level crude petroleum for that month may be sold at a price which exceeds the ceiling price provided that the maximum price charged per barrel of that base production control level crude petroleum does not exceed the following:

$$P_{max} = P_e + \left[\frac{C_{pr}}{C_{bpci}} - 1 \right] [P_m - P_e]$$

Where:

P_{max} —Maximum price that may be charged for the crude petroleum (other than new crude) purchased from the property (dollars per barrel);

P_e —Ceiling price of the crude petroleum (dollars per barrel);

C_{bpci} —Base production control level for property (barrels);

C_{pr} —Total amount of crude petroleum produced from the property during the month (barrels); and

P_m —Current free market price of the particular quality and grade of crude petroleum (dollars per barrel).

Application of this formula may be illustrated by the following example:

Example: During September 1973, Firm X produces 3,170 barrels of a single grade of crude petroleum from a particular property. During September 1972, 6,420 barrels of crude petroleum were produced from the same property. The ceiling price for the September 1973 crude petroleum is \$4.10 per barrel, and its free market price (i.e., the price X can get on the market for the 1,750 barrels of new crude) is \$4.95 per barrel. The maximum price that X may charge for the 6,420 barrels of other than new crude petroleum (i.e., old plus released crude) produced in September 1973 is:

$P_{max} = \$4.10 + (8,170/6,420 - 1) (\$4.95 - \$4.10)$
 $P_{max} = \$4.10 + (.27) (\$0.85)$
 $P_{max} = \$4.10 + \0.23
 $P_{max} = \$4.33/\text{barrel}.$

(4) *Certification.* Each producer of domestic crude petroleum which charges a price above the ceiling price pursuant to the provisions of paragraphs (c) (2) or (3) of this section, must, with respect to each sale of domestic crude petroleum, certify in writing to the purchaser: (i) The ceiling price of domestic crude petroleum, (ii) the amount of the new crude petroleum, and (iii) the amount of the base production control level crude petroleum. The certification shall also contain a statement that the price charged for the domestic crude petroleum is no greater than permitted pursuant to this section.

Mr. JACKSON. The Senator from Wyoming is correct that there is no incentive to drill a well beside an existing stripper well just to get a decontrolled price for old oil, because oil from stripper wells is already decontrolled. My point is that there is a special incentive to drill new wells on properties adjacent to existing wells producing controlled oil, but draining the same reservoir. Not only does this loophole let the operator charge almost twice the controlled price on the oil he produces from the new well, but he gets to increase the price on an equal quantity of old oil from his other properties. At a controlled price of \$5.25 and the current uncontrolled price of \$10.35, that means the producer gets an additional profit of \$10.20 for every barrel that comes up the new well, even if most of that oil would have been produced from the previously existing wells.

Suppose that the new and released oil loophole, by virtue of drilling new wells in old reservoirs, does actually increase production by 10 percent. Does the Senator from Wyoming realize that consumers are paying more than \$100 per barrel—or \$2.10 per gallon—for that increase in production.

By this loophole we have created a powerful incentive, indeed, to drill wells, but mainly on known structures, an incentive much more powerful than the incentive to take the risks of exploratory drilling on wildcat acreage, the only kind of drilling that will increase our ultimate producing capacity.

What I am talking about is drawing down of oil out of an existing field and doing it in a way in which there is developed, technically, a new field and that oil is drawn out and it is exempt.

Mr. HANSEN. What I must say to my friend from Washington I think has been illustrated by him. He does not deny my allegation that it would be wrong to say that there would be an incentive now to drill a new well alongside a stripper well to get that oil out of that, because in that leased unit all that oil is exempt. It is a little bit of double talk to imply that the regulations as they are presently enforced would give any incentive to anybody to drill a new well alongside a stripper well. That oil is already exempt.

Mr. JACKSON. It is not exempt.

Mr. HANSEN. It is exempt.

Mr. JACKSON. Ten barrels and less.

Mr. HANSEN. Exactly right.

Mr. JACKSON. But all over that—

Mr. HANSEN. No. Read the regulations. If the Senator is going to talk about what is going to happen—

Mr. JACKSON. New oil is exempt.

Mr. HANSEN. I would be happy to yield to the Senator.

Mr. JACKSON. Would the Senator say that if a new well were drilled to take oil out of an existing field, that is new oil, or is that old oil? I ask that question of the Senator.

Mr. HANSEN. I would say that any time anyone drilled a new well he could argue it is new oil.

Mr. JACKSON. He could argue, but what is it under the regulations? We have checked it out. It is exempt from price control, and it has been going as high as \$10.35.

Mr. HANSEN. The point the Senator from Washington very conveniently fails to recognize or admit is that this oil is already exempt. He does not deny. He does not deny because he cannot deny. He knows it is not true. He knows it is not true that with stripper wells there is any incentive to go in and drill alongside a stripper well to get oil out of a new well. The Senator from Alaska has said this repeatedly. He chaired a number of hearings in the Energy Subcommittee, and he did a great job. I would also say we had better listen to what he is saying, because he happens to make good sense.

Mr. GRAVEL. Mr. President, will the Senator yield?

Mr. HANSEN. I was hoping the Senator would wish to make a comment on that.

Mr. GRAVEL. I would like to make what I hope will be good sense on the point the Senator from Washington addresses himself to. That is the point that we are faced with a problem of getting rigs, pipe, steel, et cetera. I would like the Senator to explain to me and to the American people, if we have \$10 world oil prices and \$5 American oil prices, how anybody in this country will be able to compete to buy steel or to buy anything they need to drill for oil, and compete with the rest of the world. And if we cannot compete, are we talking about an embargo on steel pipe or on the technology, or an embargo on the cybernetics, so that we can address ourselves to a problem which involves uneconomical waste because we have created fortress America by the embargo. How can we get steel, rigs, and all of the other things we need if we cannot compete with the other countries.

Mr. JACKSON. Mr. President, I would be happy to make a brief statement at this point in response to the Senator from Alaska.

We have been checking with the oil analysts on Wall Street and elsewhere.

Respected oil analysts on Wall Street and elsewhere say that these price levels will not buy increased supply. We can get the oil. That is what is being missed here. We are talking about whether or not there is an opportunity to have new reserves. The real constraint on supply is not price. At \$5.25 a barrel, there is plenty of incentive. I am talking about figures from the Petroleum Council. I am taking the figures of the Independent

Petroleum Association. We have done a brief survey of industry price studies which shows that as late as December of 1973, their own target price for incentive was, I think, \$4.50 a barrel.

Mr. President, I ask unanimous consent that this survey be printed at this point in the RECORD.

There being no objection, the survey was ordered to be printed in the RECORD, as follows:

SUMMARY OF RECENT PRICE STUDIES

A number of recent studies have focused on determining the long run supply price of crude oil needed to elicit adequate domestic supplies of oil. A summary of the findings of these studies is given below.

Federal Energy Office (January 1974):

"... The long term supply price of bringing in the alternate sources of energy in this country, as well as drilling the Outer Continental Shelf and the North Slope ... is \$7 a barrel, current 1973 dollars."

Department of the Treasury (December, 1973):

"No one knows exactly what the long-term supply price is, as no one can predict the future that clearly. Our best estimate is that it would be in the neighborhood of \$7 per barrel within the next few years."

Independent Petroleum Association of America (1973 projections):

"In terms of constant 1973 dollars ... an average price of about \$6.65 per barrel for crude oil ... would be required over the long run to achieve 85% self-sufficiency in oil and gas by 1980."

National Petroleum Council Oil and Gas Availability (Dec. 1973):

For maximum attainable self sufficiency by 1980, average revenue required per barrel of crude is shown on the following table for different rates of return.

TABLE 653.—AVERAGE UNIT REVENUE REQUIRED PER BARREL OF CRUDE OIL¹

	[Dollars per barrel] ²				
	10 percent rate of return	12.5 percent rate of return	15 percent rate of return	17.5 percent rate of return	20 percent rate of return ³
1971 ..	2.739	2.981	3.223	3.465	3.706
1972 ..	2.819	3.066	3.315	3.563	3.812
1973 ..	2.855	3.112	3.370	3.623	3.836
1974 ..	2.941	3.214	3.486	3.759	4.031
1975 ..	3.468	3.359	3.650	3.941	4.232
1976 ..	3.216	3.530	3.844	4.158	4.472
1977 ..	3.398	3.738	4.078	4.418	4.758
1978 ..	3.612	3.978	4.344	4.711	5.077
1979 ..	3.815	4.208	4.601	4.995	5.369
1980 ..	4.056	4.476	4.896	5.317	5.737
1981 ..	4.288	4.738	5.188	5.639	6.087
1982 ..	4.553	5.037	5.520	6.004	6.487
1983 ..	4.864	5.281	5.899	6.417	6.935
1984 ..	5.151	5.707	6.262	6.818	7.374
1985 ..	5.500	6.093	6.687	7.280	7.873

¹ Based on economics for lower 48 States and South Alaska.

² Constant 1970 dollars.

³ All rates of return are annual book return on average net fixed assets.

Oil and Gas Journal (September 17, 1973):

"The price outlook for domestic crude thus has to be rated promising ... The new prices make investment attractive in the new equipment and services to rejuvenate marginal wells ... Risks are becoming worth taking."

Petroleum Independent (November 1973):

"There's no doubt that prospects are for increased drilling. Everybody I know is planning on it. With new oil priced from \$5.30 to \$6.00 per barrel, there's incentive now to go looking for oil."

Mr. JACKSON. Under this bill it is 32 percent higher than the price of \$5.25

a barrel. This is 32 percent higher than the price of less than a year ago. The constraints today are shortages: shortages of trained manpower, pipe, drilling rigs, and practically every other material a high technology industry needs.

In fact, the unregulated and artificially high price of domestic crude oil is counterproductive. It is retarding exploration for and development of new oil discoveries. Instead of encouraging the development of new "wildcat" acreage, the present price structure does the opposite. It encourages the drilling of new wells on old reservoirs that are already in production.

These new wells divert scarce drilling rigs, pipe, other equipment and manpower away from new exploration for the sole purpose of taking advantage of major loopholes in the price system. These loopholes enable unscrupulous producers to double the value of their "old" oil—their presently producing fields—by simply drilling and pumping the oil through a new well.

Pursuit of this loophole enriches owners of producing fields. It does not produce more oil. It does waste precious materials already in short supply. It can damage the ultimate recovery from these reservoirs. It does penalize the honest operator who is trying to bring in real new production. It does force consumer prices up and up. It does not produce any public benefit in the form of increased supply. It does impose unreasonable burdens on the American people.

Mr. GRAVEL. Mr. President—

Mr. HANSEN. Mr. President, I believe I have the floor.

Mr. GRAVEL. The Senator from Wyoming does have the floor. However, I posed a question to the Senator from Washington, and in response he read a paper which did not respond to the question.

Would the Senator from Wyoming permit me to get a response to my question?

Mr. HANSEN. Mr. President, I would appreciate very much the Senator from Alaska getting a response from the Senator from Washington. However, before he does so, I would like to make a few observations.

I think that one of the problems we have today in trying to research a rational decision as to what should be done results from the fact that we have been barraging the American people with a great number of statements that are sheer demagoguery.

One of the reasons why the average citizen of today is so upset and so frustrated and so persuaded at times to engage in fist fights and in other actions of seeming violence is that he has been told day after day after day that all oilmen are alike, that all oilmen are wealthy, that they have tax loopholes that are unconscionable, that they have windfall profits. These things are simply not true.

Mr. President, the fact is essentially that oil production in foreign countries has become very profitable and has produced a windfall profit not because of contrivance on the part of the American industry to withhold supplies, but simply because most of the oil in the world today happens to come from the Arab

countries or the non-Israel oriented countries. And by that, of course, I include the country of Iran.

The Senator from Oklahoma (Mr. BARTLETT), the Senator from Arizona (Mr. FANNIN), and I have been over there, as have many other Senators.

The reason the Arabs have been boycotting those nations in the free world that have evidenced an attitude toward helping Israel is simply that they do not like what we are doing over there. They have said that as long as we continue to make funds available to Israel and as long as we continue to supply them with the munitions of war, with planes, rockets, and everything else, they are going to use everything at their command to retaliate against us.

I do not want to get into an argument as to what our foreign policy should be. For a long time it has been my opinion that we ought not—this Nation, the United States of America—to get ourselves into a position where we can be dictated to by any foreign country.

I have heard people remark about conditions a few years ago and about some of the commissions. And we have had plenty of them, believe me. Some of these commissions were talking about how silly it was to operate stripper wells in America.

They said, "Why don't you go about this in another way and buy the oil where it is cheap?" I did not hear anyone at that time talking about the tax advantages that we have given to multinational oil companies operating in the Middle East. There was not anyone saying then that they are getting wealthy.

Why was that not said? It was not said because the oil was not bringing very much at that time. The people were saying then, "You can buy it over there." A lot of the people in the United States were saying that we should buy it over there for one-third of what it would cost over here. They were saying that we should buy it over there and save the American consumers at least \$5 billion a year.

That is what the commission recommended. And they said in addition that we could do even better and put a tax, an import tariff on this oil as it comes in. We would then not only save the American consumers a lot of money, but we would also be able to replenish the depleted Federal Treasury at the same time.

What happened, Mr. President, is that the Arabs thought we were getting a little too friendly with the Israelis. They cautioned us, as the distinguished Senator from South Dakota knows, because he was over there. They cautioned us and told us that we should take a more even-handed position in the Middle East.

They told us that they would shut off the oil. We said that we would not be blackmailed. And I say that we should not be blackmailed. However, there is only one way that we should have acted, and that is to reduce our dependence upon any foreign source of supplies.

My friends used to say that we can always count on Canada because we are just like sister countries. We have also said—some of us have, although I have

not—that Canada is the 51st State. And they refer to us as the 17th Province, or whatever the number may be. There is great rapport between these two countries; I recognize that. But what has happened?

You know, for a long time the Canadians had the best of all worlds. Most of their oil and gas production, as we all know, occurs in the western part of Canada, and they had a great market in the United States. They could ship their oil down here, and for a while we had quotas on what they could bring in; in order to give some degree of stability to the domestic oil produced, we imposed some quotas. We had the mandatory oil import program.

Then that was phased out a couple of years ago, as our domestic supply failed to measure up to our needs. That is another story, and I shall not go into it now, but I simply say this, Mr. President: Canada was selling oil and gas to the United States which came from western Canada, and it was importing oil for eastern Canada, where most of the people live, at a far lower unit price than what it got for the western Canadian produced oil and gas. So they had the best of all worlds. You could not make money any better than that.

But what happened? When the Arabs started closing the valves a little bit, and as consumption worldwide increased to the point where we did not have enough production worldwide to meet all of the demand, under the laws of supply and demand—and I suggest that despite intentions to the contrary, the United States will not repeal those laws of supply and demand—we found that there was not quite as much to go around as there had been. So Canada has increased the tax on its oil, and right today what does Canada receive at the borders for oil? I think about \$10.40 a barrel. They were not about to keep sending oil down to the lower 48 for far less than it was costing them to bring the oil in from the Middle East. And we were suckers. We were foolish. We were extremely naive ever to have believed that they would have done anything else. Of course they did what their best national interests would dictate, and I suggest that any other country is going to do the same thing.

Without getting into the merits of the contests between armies in the Middle East, let me say that we can depend on it that the Arab countries and the non-Arab countries alike which oppose our Middle Eastern policy are going to continue to use oil as a weapon. And what does that have to do with this debate? It has this to do with the debate: Senator JACKSON and a majority of the conferees on the energy conference bill, both the House and the Senate conferees—I think there were only three of us who voted "nay" on that conference report, and I have forgotten how many signed it, but everyone else did, as I recall—are trying to say to the American public today, "We are going to solve your energy problem. You do not like waiting in line; you do not like being unable to find any gasoline. We'll fix that up. We'll ration it. And we'll go you one better than that:

We will not only say that you do not have to put up with these inconveniences that you abhor and inveigh against, we'll roll the price back. You are sure going to have the best of all possible worlds."

And I guess if I were running for the Presidency of the United States, I might say the same thing. But, Mr. President, I want to say this: I do not believe we are really going to fool the American people, in the long run. Because it will not take very long, if this bill passes and we institute rationing, for the average American motorist to find out that it is one thing for the Congress of the United States to say, "By law you will have your filling station opened certain days of the week, certain hours of the day"; but if there is no oil in the tank, it really will not do you much good to open up your filling station. They can say, "We are open for business," but they cannot get another drop out of the gas hose.

That is exactly why I think that the American people need to understand a few basic facts of life. The first is that if we want more oil produced in this country, we have got to make it profitable for those people with money, just as the Senator from Alaska was saying, to invest in oil.

What has happened? Since 1957, comparing 1957 with 1972, a period of 15 years, about half of all of the people in the oil business in the United States—half of all of the independents, and that is more than 20,000—have gone out of business. And why did they go out of business? For one very simple, basic, elemental business reason: There were better ways of making money.

We changed the tax laws. We have done all sorts of things. We had encouraged overseas production, because at the time most of the people in the Congress of the United States—and I say specifically most of the representatives from the Eastern States—were all for that, because they could see cheap oil coming in, and they thought it was great. They did not oppose it; they were leading the pack, saying "Let's do this."

Now, of course, we have found out, though it takes a long time for some of these facts to digest, that it has not worked out as well as we thought it would, and over half of the independents, roughly, have gone out of business. In 1972, we drilled only half as many wells as we drilled in 1957. And yet, the authors of this bill, the proponents of this rollback legislation, are trying to say to the American public, "We will not only ration gasoline, so that you will not have to wait in line, so that you can be sure of getting your fair share; maybe it will be 1 day a week you can buy it, or 1 day a week you cannot buy it"—there are 10,000 ideas on rationing gasoline, and they have all the answers—they are saying to the American people today, "Let us roll the price back, so that the poor people can buy gas."

You know, India has had famines for thousands of years. The story is told about one of the early emperors experiencing the pangs of hunger among his people that inevitably accompany a famine, who said, "We are going to control

the price of grain in India, so that the poor people can get it."

What happened? That was probably the first black market, so far as I know, in the world, and a lot of people starved to death because they found out, in India, many thousands of years ago, that by pegging the price, a black market immediately sprung up, and the people who needed the grain were not able to buy it.

I know that in a short supply situation there is no way to make everyone happy, and I do not think it becomes a Member of the Congress of the United States to try to think for one moment that we are going to make everybody happy about this situation, because we simply are not going to.

But let us not make matters worse. Later on, another emperor of India, confronted with the same situation, said, "Here is what we are going to do. We will publicize throughout all of India what grain is selling for, and we know, on the basis of past history, that those areas which are in critically short supply are going to find that the prices rise, so we will let people throughout the whole nation know that if they have surplus grain, they can get more by shipping it from there over to here and as they do that through the mechanism of a free market the best solution of a short supply will result." It worked out, just as the second emperor noted that it would. While there were hungry people and while prices did rise, there was not the starvation the second time around that there was the first time around.

The reason I tell this story, Mr. President, is that it seems elementary to me that all of us should recognize what the facts are. We are dependent upon foreign countries for more than one-third of the oil we use in the United States today. That is the highest priced oil we buy.

What are we doing?

We are saying, let us solve this problem. We cannot, by the passage of laws in Congress, tell the Arabs, the Canadians, and the Venezuelans, or the Indo-Chinese what they will get for their oil. We know that we are going to have to pay whatever they ask us to pay if someone else is willing to pay about as much.

So, what are we doing?

We are saying, let us roll the prices back. Let us treat this poor man in America—and we have a number of them, I do not minimize at all the problems of inflation—but I say this, that the most important thing America has going for it today is its standard of living, its productive capacity, and the fact that so many of us are at work.

Now if we really want to bring about unemployment, and this bill talks about unemployment, we can do that very easily. All we have to do is to shut off the supply of oil and gas.

Why will that bring about unemployment?

It will bring about unemployment because 78 percent or 79 percent of all the energy we consume in the United States today comes from oil and gas. If we roll the prices back, as this bill would have us do—Senator Jackson said that if the price of new oil—\$10.30—\$10.40—I have

forgotten the precise figure—is rolled back to \$5.25—and I admit this does make the provision that if the President wants to go through the Administrative Procedure Act—he can, in addition to the requirement that he comply with the Administrative Procedure Act, and by submitting substantial evidence as well, authorize the price to be raised another 35 percent, and that would be the top price, then, at \$7.09 a barrel.

Mr. ABOUREZK. Mr. President, would the Senator from Wyoming yield at that point?

Mr. HANSEN. As quickly as I can finish my statement. Has the Senator a question?

Mr. ABOUREZK. I wanted to ask a couple or three questions of the Senator.

Mr. HANSEN. I understood the Senator might, but I would like to finish my statement first and then I will be very happy to yield to the Senator.

Mr. President, what would this do?

All we are talking about is the price of domestic oil. We are saying that we will take care of America by lowering the price of that oil.

Now, if Senators will look at the CONGRESSIONAL RECORD for February 7, 1974, beginning at the top of page 2768 and continuing all the way through the bottom of the first column on page 2781, I think they would agree with me that there is evidence in that portion of the RECORD to point out the lack of economic reality in some of the statements made on this floor. It has been said that the price of \$7 a barrel is more than adequate, that even \$5.25 is more than adequate, to assure all the domestic production we need.

Mr. President, that is poppycock to make such a statement, because I have included in here the testimony from some of the most reputable people we can find, including a very eminent member of the staff of Harvard College who says that that is not so, that it does not work that way.

Of course, if we stop to think about it, we can easily understand why it is that if we control prices—and there has been a great stimulation given the oil business recently, I grant that, and the stimulation has come from the increased price of oil and gas. That is what has got the oil people out working. It has caused a lot of the old stripper wells to be opened up and brought back into production. That is just one reason—just one reason, Mr. President. There are not many people in the oil business, in the cow business, in the lumber business, or any other business that I know of who are willing for very long to operate just because they are altruistically inclined.

Most of them, sooner or later, have to pay the note at the bank, they have to meet the payroll, and they have to pay their taxes. If they do not make some money, they are not going to be in business very long. Despite their good intentions and despite all of their desire to help America, the fact remains that, for most of them, they have got to make some money or they cannot stay in business.

That is precisely why the distinguished Senator from Oklahoma (Mr. BARTLETT) proposed the stripper well amendment. He knows what he is talking about. Senator FANNIN of Arizona also spoke about the amount of oil that is being recovered today from stripper wells. Senator BARTLETT said that if we want to get into production, take the price controls off the stripper wells. That is what is done. It is simply not true to say that there is any economic reason at all why a person would go into a stripper well field today and drill for a new oil well alongside a stripper well, to tap that well because that oil would be exempt, when the fact is it is already exempt. We all know that. The only test that is made of this is on the previous year's production.

But now to get back to what the price rollback would be, I will admit it has great appeal. It has great appeal because the American people have been bombarded with the phony arguments that everyone in the oil business is a millionaire, that they have earned unconscionable profits, when the facts are that the biggest bulge in profits today in the oil business has come not from domestic production but rather from foreign production. It has come from foreign production not because of contrivance on the part of the oil industry but because the Arab-banded, non-Israeli-oriented countries have gotten together and said, "We are going to do something about that price. We are going to have a boycott." I would say simply—

Mr. GRAVEL. If the Senator from Wyoming would yield at that point, just to underscore the point he has just made—

Mr. HANSEN. I would like all my points to be underscored, so I am happy to yield to the Senator to underscore one of them.

Mr. GRAVEL. The profits of the integrated oil companies have come from sales abroad and not from profits abroad. I repeat, from sales abroad. No oil in Saudi Arabia is transported to the United States of America, but oil from Saudi Arabia is transported either to Europe or Japan. So those profits created have helped our balance of payments. I would just like to underscore that.

Mr. HANSEN. I thank my colleague from Alaska for his observation. He is exactly right.

Mr. ABOUREZK. Mr. President, will the Senator from Wyoming yield for one question on that point?

Mr. HANSEN. I am happy to yield to the Senator from South Dakota.

Mr. ABOUREZK. Is the oil that is sold by the multinational oil companies to Europe and Japan subject to the foreign tax credits we provide here in this country?

Mr. HANSEN. As nearly as I know, in response to the question of the distinguished Senator from South Dakota, any tax paid, any royalty—I do not say for a moment that we should not re-examine our tax laws, that is precisely, of course, what the Senator from Alaska (Mr. GRAVEL) has been doing—

Mr. GRAVEL. If the Senator will yield there, we held extensive hearings on that subject, and I might say, in response to

my colleague's question about the foreign tax credits, that, yes, the oil companies have foreign tax credits, and they have had them for some time.

Mr. ABOUREZK. That is, when we say profits, does not the majority of the profits that come from Middle East oil to any other country—does not the majority come from foreign tax credits?

Mr. GRAVEL. No. The integrated oil companies on an international basis are paying the taxes wherever they are operating, and that tax, when it is fully accounted, amounts to about 60 percent. If they do not pay the taxes to us, they pay it to Saudi Arabia or to other countries. That is as it should be. If we do not give them an investment tax credit, they will suffer double taxation. It will put them in an uneconomic position with other nations in the world.

Mr. ABOUREZK. That is why I am asking. I am not sure about this. Is not the amount of the royalty they pay credited as a foreign tax credit and subtracted from the tax bill in this country?

Mr. GRAVEL. No question. In fact, you could increase that tax bill if you considered it as royalty. All you would be doing would be taking more money from the oil companies operating abroad, money which helps our balance of payments.

Mr. ABOUREZK. And that gives them an additional profit.

Mr. GRAVEL. No question.

If we take the example of Exxon, they had a 16-percent increase in profit for domestic sales in this country, not the high figure we have heard of 69 percent. They had an 83-percent growth abroad. That is why we have over a billion dollar net balance of payments this year, which helps the farmers in the Senator's State and the rest of the people in this country. We can throw that away.

My colleague is right. If we take away the investment tax credit from the oil companies, we have to do it to the motion picture industry, and we have to do it to all other industries. When we do that, we make America uneconomic in the world, and then we really will have a problem with our balance of payments.

The rollback in this bill would guarantee that we would have to buy abroad. Why would a person take a million dollars and invest and drill for oil in the United States, where he can sell it for \$5, when he can go to Venezuela, Canada, and Saudi Arabia and find oil and sell it for \$10? We are going to force capital to go abroad, and we will have scarcity in this country.

Mr. ABOUREZK. What is being posed is a choice between paying highway robbery prices for oil or not having any oil at all, apparently.

Mr. GRAVEL. That is the choice, because we gave the highway robbers the guns and we left ourselves naked. If we want to control inflation and the price of oil, the way to do it is by supply. You cannot legislate against the laws of economics, just as you cannot legislate against the law of gravity. If you want oil, increase supply. If you have the supply, then you can depress the price. If you want to create scarcity, you keep the price low, so that nobody would provide

oil. Then you will have continued scarcity; and we can pass a law which will provide rationing not just for this year but for the next 20 years as well.

Mr. ABOUREZK. If we want the law of economics to apply to the oil industry, perhaps we ought not allow a monopoly to exist that does exist.

Mr. GRAVEL. That is an interesting charge. Let us compare that monopoly. Does the Senator feel that there is a monopoly in automobiles in this country?

Mr. ABOUREZK. Yes.

Mr. GRAVEL. Why do we not do something about it?

Mr. ABOUREZK. I wish we would.

Mr. GRAVEL. Three percent of the automobile manufacturers control the entire automobile industry.

Mr. ABOUREZK. Three automobile manufacturers.

Mr. GRAVEL. Ninety-seven percent is controlled by three manufacturers. In oil, it is only 59 percent. Not many industries in this country are as competitive as the oil industry.

What we are going to succeed in doing with the policy we are developing here is to make sure that, like every other part of American industry that the government has fiddled with, the little guy will be driven out.

Mr. BARTLETT. Mr. President, will the Senator yield?

Mr. ABOUREZK. Mr. President, will the Senator from Wyoming yield?

Mr. HANSEN. Mr. President, I have a few concluding remarks to make, and then I would like to yield to the distinguished Senator from Oklahoma. I have two further statements in mind that I think need to be underscored and clearly understood by all of us before we vote on this matter tomorrow afternoon.

What has transpired already underscores the good wisdom displayed by the Senator, from Arizona when he objected to a motion that had been proposed by the Senator from Rhode Island (Mr. PASTORE) just before the recess, when the Senator from Rhode Island wanted to move to recommit at that time. Senator FANNIN pointed out that this is a very complicated bill. It contains approximately 40 sections, with a great deal of new material. We have things in this conference report that were not in either the Senate bill or the House bill.

It is not difficult these days, with long lines of people queued up before gas stations, with the frustration that accompanies a short supply situation at any time, to demagog an issue and have a lot of people think—who do not take enough time to think—about a simple answer. But we must not, in the Senate or in the House of Representatives, make the fatal error of acting on this kind of emotionally charged situation; because if we do, we are going to get out of the frying pan and smack dab into the fire.

If we think the situation is bad now, let us consider for a moment what would happen if we were to roll these prices back. I have pointed out that a stripper well is a well with 10 or fewer barrels per day average production, based upon the previous year's record. There is no reason

at all to think that anybody with enough money to drill a well would drill a well along side a stripper well to have exempt oil, because it is already exempt.

Mr. BARTLETT. Mr. President, will the Senator yield?

Mr. HANSEN. I yield.

Mr. BARTLETT. On that point, the distinguished chairman made the statement that there is a big loophole in the stripper well amendment, that an operator would have an incentive to drill a well right next to an already exempt stripper well, that he has checked this out, and that this is correct. However, I do not think he has checked it out with a stripper well operator or with an independent.

In drilling a well next to any well, the best that the operator could hope to achieve, if it is a producing well, would be to have that well produce about half of what the other well produces. The two wells together, with twice the investment and twice the lifting cost, would lift the same amount of oil. So the well is not going to be drilled unless it is drilled to some other horizon or unless the stripper well for some reason is impaired.

What is an operator going to do? If an operator thinks that this well will produce more oil because the sand has become plugged off by basic sediment out of the oil or that some gyping is going on or that there is something to restrict the permeability, to prevent the oil from flowing into the well, he may enter into a number of remedial measures designed to enhance that production, all of which costs money, but normally much less than the drilling of a new well. If it is a well completed with an old shot hole, he might use nitroglycerine and shoot the well again, or he might acidize to remove some of the limestone, to open the permeability. He may also fracture it with water or the different "fracs" they have now, designed to create fractures in the producing formation and designed to bring in more oil. This is happening today, and it is happening because of the stripper well amendment, and it is bringing immediate results.

The president of the Stripper Well Association said that he estimates that the increased production is about 250,000 barrels a day from stripper wells.

We estimated it in our office. One of my staff members, who is one of the few petroleum engineers in Washington, estimated the life of the average stripper well is extended 2.6 years by the stripper well amendment at the present time and this means that if this conference report would roll back the price and fix it in legal cement where it would stay, there is going to be a sharp reduction in the amount of stripper production that could be produced because it would not be economically feasible; it is marginal and there would not be the opportunity to stay on production because they would not be making a profit.

I ask if it makes sense to cause early abandonment of the stripper well in order to replace that barrel of oil with higher cost oil from a foreign country, to add to our balance of payments deficit and also to pay more money for a product

that normally is not of such high quality. It makes more sense to encourage the stripper well operator who is going to keep his money in this country, where it goes from pocket to pocket and has the advantage of rubbing off on more people; and also it would not add to the problem we have of the balance-of-payments deficit.

So the loophole the Chairman referred to does not exist. A prudent operator is not going to drill a well because he does not want to drill a well and not have it produce; nor will he drill a well beside a good producing well because the most he could hope for would be to share in the production equally.

One thing that is happening in stripper well areas because of the extra incentive of higher prices, the operators of marginal leases are drilling step-out wells and other wells in the stripper field, increasing total production because at the present time in a certain field a three-barrel well may pay out the whole cost of the well, or a five-barrel well, whatever it is. So they are interested in adding to production that is available for refining and use in this country.

I think the distinguished Senator from Wyoming for making this point.

Mr. President, who has the floor?

The PRESIDING OFFICER. The Senator from Wyoming has the floor.

Mr. HANSEN. I thank my distinguished colleague from Oklahoma.

Mr. President, I conclude by making two points. First, if we are concerned, as certainly we must be, by the Arab boycott, the best thing we can do is to increase our domestic production. It is that simple. If we do not want to give any foreign country a bigger club than they have with this short supply situation, we can do that by increasing our own production here, and we will not increase that production in this country by rolling back the price.

I am happy to yield to the Senator from South Dakota. I think that he and the Senator from Alaska have not concluded their colloquy. I am happy to yield now.

Mr. GRAVEL. I will let the Senator from South Dakota proceed first.

Mr. ABOUREZK. Mr. President, first I wish to ask, by way of getting some facts on the record so far as production and oil prices are concerned, if the chairman of the Committee on Interior and Insular Affairs will answer several questions. He has indicated he is willing to answer the questions.

First of all, What is the price of uncontrolled oil in terms of domestic oil?

Mr. JACKSON. Domestically produced oil?

Mr. ABOUREZK. Yes. What is the price of new, uncontrolled oil in a stripper well?

Mr. JACKSON. The average price has been about \$9. I am advised that in January the average price was \$10.35 a barrel.

Mr. ABOUREZK. That is new, stripper well, and the controlled oil at this point, I understand, is selling for a controlled price of \$5.25, and that price went to \$5.25 in December 1973.

Mr. JACKSON. There was a \$1 increase permitted by the Cost of Living Council.

Mr. ABOUREZK. It is my understanding there was no justification provided by the oil industry to the Cost of Living Council for that increase.

Mr. JACKSON. They alleged this was necessary in order to provide an incentive. An incentive for what, I do not know. They already were producing. There was no formal representation, to my knowledge, by the industry. The Cost of Living Council simply adjusted it upward.

Mr. ABOUREZK. I wonder if the May 1973 increase was done also without any cost justification.

Mr. JACKSON. Dr. Dunlop stated that the May increase of 35 cents was based upon cost increases, but the \$1 increase in December was not justified by cost. If I recall correctly, Dr. Dunlop justified the December rise of \$1 by the so-called disequilibrium between controlled and uncontrolled crude oil prices.

Mr. ABOUREZK. So we have gone up, as I understand it, about \$1.40 or \$1.50 a barrel.

Mr. JACKSON. \$1.35.

Mr. ABOUREZK. \$1.35 a barrel, and without any cost justification whatever. Now, under the provisions in the conference report—

Mr. GRAVEL. Mr. President, will the Senator yield on that point for a question?

The PRESIDING OFFICER (Mr. BARTLETT). Does the Senator yield?

Mr. ABOUREZK. I yield for a question.

Mr. GRAVEL. I think I understood my colleague to state that there was no justification given by the oil industry for an increase in price. Is that what my colleague and the Senator from Washington are saying?

Mr. JACKSON. There was no—

Mr. GRAVEL. We made a record in hearings in the Committee on Finance showing justification, part from the industry and part from the academic community.

Mr. ABOUREZK. Was there justification to the Cost of Living Council?

Mr. JACKSON. The answer to the question by the Senator from South Dakota is that the Cost of Living Council did not provide a justification for the December increase. The record is undenied on that point.

Mr. GRAVEL. I disagree with that record, because I have before me a paper from the Cost of Living Council, and they say the reason they did it was to create a desire within the domestic community to increase production, and they succeeded.

Mr. JACKSON. Wait a minute.

Mr. GRAVEL. There was a rapid increase in oil activity and it has been as a result of prices.

Mr. ABOUREZK. Mr. President—

Mr. GRAVEL. They are merely following the lead of Congress. They realized this worked so they tried it in November and again in December.

Mr. ABOUREZK. Mr. President, do I have the floor?

The PRESIDING OFFICER. The Senator from South Dakota has the floor.

Mr. ABOUREZK. The question was: Was there any cost justification to the Cost of Living Council by the oil industry for the price increase of \$1.35 a barrel?

Mr. JACKSON. May I respond? My response was and is that at the time the increase was granted neither the industry nor the Cost of Living Council gave a justification for those increases.

Mr. GRAVEL. Mr. President, will the Senator yield?

Mr. ABOUREZK. I yield.

Mr. JACKSON. I do not know what the Senator from Alaska is reading from.

Mr. GRAVEL. For the last 15 years intelligent industry representatives have been pleading for a free market situation, starting with gas and, after 1971, with oil. They have been pleading to let the price rise so we can entice production. We had testimony from representatives of the Chase Manhattan Bank. I can show Senators the chart we received from Mr. Simon on this particular matter, and others. When he is testifying before a committee of Congress and gives a justification, if the Senator from Washington cannot accept that justification, that is fine. We have ample evidence.

Mr. ABOUREZK. Excuse me just a moment. Just the statement by the oil industry that they needed incentive is not cost justification in terms of what I consider to be justification. If their costs increase they should be able to justify them.

Mr. GRAVEL. If days and days of testimony cannot convince my colleague, obviously nothing will convince him, and he can say they offered nothing to justify it. They have been offering material to justify this for many years.

Mr. ABOUREZK. I mean, have they done it in the structured manner that most industries have to follow?

Mr. GRAVEL. They come before the committee, they come before the Senator and his committee, and me and my committee, and they make their case. If we do not like their case, we can query them. What justification do they have to have? Do we expect them to have an opinion poll of every member of the industry asking the question: "Do you want a dollar increase? Yes or no?" Is that the justification the Senator wants?

Mr. ABOUREZK. No. What I am now talking about is that procedure generally followed by any company requesting a price increase under the structure of the Cost of Living Council. It has to go before that office and show that costs of production have increased so that it needs an increase.

Mr. GRAVEL. We have had an 8.8 percent increase in the cost of living.

Mr. ABOUREZK. Was that offered as a reason?

Mr. GRAVEL. The testimony that was presented brought out that for the past 10 to 15 years we have had a flight of capital. So this administration finally came to realize, under the leadership of Mr. Simon, that the only way we are going to increase production is by making it profitable for money to flow back into oil.

I have a chart here. The chart shows the price and the amount that is allo-

cated to the private sector for drilling for oil. They both have been going downhill. The administration realized that if the industry received an increase, perhaps it would drill for oil, and if it did, it might find it, and if it did it might be able to sell it to the American people, and if there were enough oil produced, it could proceed to decrease the price because of the increased production.

Mr. ABOUREZK. That really is not price justification.

Mr. President, I yield briefly to the Senator from Washington.

The PRESIDING OFFICER. The Senator from Washington is recognized for a question.

Mr. JACKSON. Mr. President, I appreciate the yielding by my friend from South Dakota in pursuit of the price question.

I want to point out that in the debate on July 14, 1973, in connection with the stripper well amendment, on page S. 13438 of the Record there is a letter that the able Senator from Wyoming (Mr. HANSEN) inserted in the Record from the National Stripper Well Association, Tulsa, Okla., dated May 19, 1972, addressed to the Price Commission.

It is a very interesting letter, Mr. President, in light of this talk about the need for a free market and \$10.35 oil. I want to read this letter. We will see what they are talking about. I might also say to my friend from Alaska, when he is talking about the oil companies wanting a free market, I wonder where the international oil companies stood then when they had the import oil quota system. They did not want a free market; they wanted it fixed. They wanted quotas. They did not want oil to come into the United States because they wanted to keep prices up. I want to read this letter. I want to read from part of this letter, and I will ask unanimous consent that the entire letter then go into the Record.

Mr. GRAVEL. Mr. President, will the Senator yield on that point?

Mr. JACKSON. I yield.

Mr. GRAVEL. It is strong language to say that the oil companies wanted import quotas because they wanted to increase prices. They did it to decrease prices, not to increase prices. They wanted to be competitive when the Government would not permit them to be competitive.

Mr. JACKSON. Let us not kid ourselves. It is a price-support program. The program was to keep oil out, so that you would not drive the price of domestic oil down.

Mr. GRAVEL. It was not a price-support program; it was for defense purposes. I was not even in the debate.

Mr. JACKSON. I was here. I want to explain to the Senator that its purpose was to keep oil out, so that domestic oil prices would not go down. Instead of being self-sufficient, we went the other way. American companies drilled abroad. We went down from being a net exporter of oil to being a net importer of oil.

Let me read excerpts from the letter; then I shall ask that the entire letter be printed in the Record. It is from C. John Miller, president of the National Stripper Well Association. It appears on page

S. 13438 of the CONGRESSIONAL RECORD of July 14, 1973. It is a very interesting letter. Let me read in part:

A recent study by this Association indicates that a price increase of only 25 cents per barrel in crude oil from marginal wells would result in continued operation of approximately 15,400 wells which are expected to be plugged this year for economic reasons. As a result of such price increase, an additional 10.7 million barrels of crude could be expected to be produced in the following 12 months from wells currently facing abandonment.

Mr. Miller then goes on to say:

However, substantial and prolonged results would be gained from a realistic crude price increase to \$5 per barrel. In this case, and using the same limiting factors, a well would produce for 6 years before a new break-even point would be reached.

I ask unanimous consent to have the entire letter printed in the Record.

There being no objection, the letter was ordered to be printed in the Record, as follows:

NATIONAL STRIPPER WELL ASSOCIATION,
Tulsa, Okla., May 19, 1972.

THE PRICE COMMISSION,
MR. C. JACKSON GRAYSON, JR.,
Chairman, Washington, D.C.

Gentlemen: This letter proposes an increase in the price of domestic crude oil as being in the best interest of the Nation and the consuming public.

It is our understanding from reports in the oil press that it is not a prerogative of the Price Commission to consider appeals by groups or associations. Within these parameters it is therefore urged that the Commission favorably act on requests by individuals or specific firms seeking an increase in the price of crude oil, or other constructive improvement in incentives which would assure greater longevity for present producing oil wells, thereby adding to the nation's recoverable petroleum reserves as advocated in this submission.

Information presented specifically refers to marginal or stripper wells and the price of crude oil as the controlling factor in the essential contribution such wells make to the national economy and the total domestic crude oil supply. Fundamentally, economic conditions determine the amount of oil which may be recovered from known reservoirs.

A marginal or stripper well is defined as being one which has an average production of less than 10 barrels daily. Nationwide, these wells averaged only 3.37 barrels of oil daily in 1970.

Marginal wells total approximately 359,000. It is revealed in a survey sponsored by this Association and represent 70% of all the Nation's oil wells. In 1970 marginal wells accounted for more than 1/4th of total domestic oil supply, or 441 million barrels.

As the production of a well gradually but inevitably declines an economic break-even point is approached. As such level, these wells and the otherwise producible reserves they represent are abandoned.

Increased operating costs through recent years in materials, taxes, wages and maintenance combined with only a minimal increase in the price of produced crude oil have seriously impaired the producer's ability to continue operation of marginal wells, forced cancellation of plans for normal development drilling, made it economically less desirable to convert properties to secondary recovery projects, and hastened the break-even point. These factors have jeopardized the position of the marginal well as an essential segment of the entire producing industry.

There is ample evidence that this Nation's

immediately available supply of crude oil is at the critical stage. Productive capacity in excess of domestic demand has been exhausted. Exploration and development drilling has declined constantly since 1956. A proper and adequate balance between increasing demand for petroleum and available reserves no longer exists.

This imbalance, resulting from lack of a reasonable crude oil price, is forcing the abandonment of thousands of small wells while substantial proven reserves remain to be recovered from underlying reservoirs.

During the past five years for which data are available abandonments were as shown:

1966	16,207
1967	14,986
1968	20,496
1969	15,618
1970	15,631

A recent study by this Association indicates that a price increase of only 25¢ per barrel in crude oil from marginal wells would result in continued operation of approximately 15,400 wells which are expected to be plugged this year for economic reasons. As a result of such price increase, an additional 10.7 million barrels of crude could be expected to be produced in the following 12 months from wells currently facing abandonment.

Applying these same factors to the total of presently operated marginal wells, additional recovery would be 235,000,000 barrels, equivalent to the total production from two major oil fields.

Considered in arriving at this added production figure have been the following elements:

1. Well has reached the zero profit/loss status
2. Production continues its typical production decline of 5% per year for a well that has reached a 2 barrels per day producing level
3. That taxes and royalty payments to farmers and landowners be applied against the increased price as these are integral to the value of produced oil
4. That other cost elements . . . wages, materials, etc., remain constants.

The effective value of the 25¢ crude price increase would be reduced by approximately 32% through allowances made for No. 3 above. This was taken into consideration in the calculations extending total recovery. Despite the substantial gain of 10.7 million barrels in production resulting from the application of the effective balance available to the producer from a 25¢ price increase, the total thrust would be inadequate to the Nation's needs for oil. The measure would only be a short term gain, and limited in results to a 12-month period at which time normal depletion through continued production would establish a new zero profit/loss point.

However, substantial and prolonged results would be gained from a realistic crude price increase to \$5.00 per barrel. In this case, and using the same limiting factors, a well would produce for six years before a new break-even point would be reached.

Production anticipated from one typical well would be as follows:

	Barrels
1st year	693
2nd year	659
3rd year	626
4th year	595
5th year	565
6th year	536

During the extended productive life of six years this typical well would produce 3,674 barrels which would have been left in the reservoir without the price increase. Applying this factor only to present marginal wells as they reach their break-even point, an additional 1.32 billion barrels of crude would be recovered. It is observed, however, that

the total number of marginal wells is augmented each year as production in larger wells declines below the 10 barrels per day definition.

No attempt is here made to project total future production resulting from the proposed price increase to present non-marginal wells. Whatever the figure, it would be quite substantial. Further, benefits in additional available crude oil would be cumulative.

Direct advantages would also accrue to other segments of the economy. Continued operation of marginal wells would provide jobs and wages which cease with abandonments. Further, well services, chemicals, tubing, casing, pumping units, purchased power, taxes and royalty payments would be continued in support of a desired overall economic posture.

It is submitted that a realistic increase in the price of crude oil is consistent with sound economics, is in the best interests of the consuming public, and would assure a substantially greater recovery of this valuable energy resource from known and proven reserves.

Respectfully,

C. JOHN MILLER,
President.

Mr. JACKSON. Now we have reached \$10.35 a barrel. What has happened? It is very obvious that they do not want to curtail that price, which is the price set by OPEC. I would point out that the Independent Petroleum Association said only 2 months ago that:

In terms of constant 1973 dollars, the average price of \$6.65 per barrel for crude oil would be needed over the long run to achieve 85 percent self-sufficiency in oil and gas by 1980.

It is clear that what the oil companies are talking about is not any specific target price. They want to get whatever they can get at the world price.

I think it is tragic, when we are confronted with a situation in which they used these figures for the current purpose as late as December. In December, the National Petroleum Council had a target price of \$4.50. But when oil jumped to \$10.35 or \$10.55—

Mr. FANNIN. Mr. President, will the Senator yield for a question?

Mr. JACKSON. I should like to finish. The Senator from South Dakota has the floor.

Mr. FANNIN. Mr. President, will the Senator from South Dakota yield?

Mr. ABOUREZK. I will yield to the Senator from Arizona.

Mr. FANNIN. I thank the Senator.

It is not true that the extent to which oil can be pumped from these wells is dependent on the price? Many of the wells are marginal. They would be marginal at \$5.25; they would not be marginal at \$18. Is that not true?

Mr. JACKSON. I do not know. The point I want to make is that taking their figures—

Mr. FANNIN. That is true; but we want to recover more oil. They sell it to the independents, and here we have the independents reporting to us that for every barrel of oil they produce in Texas, they must dispose of two barrels of prime. That is quite expensive. At \$5.25, they could not possibly do that. At \$8, they could.

All we are talking about is the 84,000 wells in Texas that produce only 3.4 barrels a day. However, in the combined

pool of that structure, there is 1.8 billion barrels of oil. This is what we are talking about it. It takes more money. However, why should we not pay that much when we get our own oil?

Mr. JACKSON. Mr. President, are they producing any more oil at \$10 a barrel than at \$6 a barrel?

Mr. FANNIN. Absolutely. They are producing more oil at \$10 a barrel than they were at \$6 a barrel.

Mr. JACKSON. Does the Senator have any statistics?

Mr. FANNIN. The operators say that they cannot produce oil unless they have a price of around \$8. This is probably true.

Mr. JACKSON. Mr. President, I am reading from the statement of the president of the National Stripper Wells Association of last year. It was \$5 a barrel last year.

Mr. GRAVEL. How much did they say they were producing?

Mr. JACKSON. I do not know.

Mr. FANNIN. I am sure that the Senator will agree that in many wells they cannot recover the oil at that price.

Mr. ABOUREZK. Mr. President, I have the floor.

Mr. JACKSON. Would the Senator yield to me so that I might complete my thought?

Mr. ABOUREZK. I yield.

Mr. JACKSON. Mr. President, we have debated the stripper well amendment. Did anyone come in here and say that if we increase prices from \$3.90 to \$10 a barrel, we can get strip well production?

Mr. FANNIN. Did anyone realize it then? Nobody realized it.

Mr. JACKSON. However, the Senator is not saying that the price to get them producing jumped that much?

Mr. FANNIN. I am saying that the price was there to begin with.

Mr. JACKSON. Why did they not say it? I am referring to what was debated here at the time.

Mr. FANNIN. No one thought the oil would ever go to that level and that they would be able to recover that oil.

Mr. JACKSON. Mr. President, if it goes to \$50 a barrel overseas, should we be able to charge \$50 a barrel here also?

Mr. FANNIN. No. However, if we roll the price to \$6 or \$6.25 a barrel, it could be done. We are talking about rolling it to \$6.25.

Mr. JACKSON. Mr. President, I have read from the Record when we were debating the stripper well amendment, we were talking about a maximum of \$5 a barrel. I was quoting directly from the letter of the president of the Stripper Well Association. I think the record speaks for itself.

The logic of the argument is simply that the price of oil can go to any level worldwide, and then that level is reached over here.

Mr. President, this is the way to destroy the American economic system.

We had spot prices in Iran that went as high, I think, as \$28 a barrel. If they want to destroy our free enterprise system, I cannot think of anything more effective than that. These are not market prices. They are cartel prices.

Let me say to my good friend, the Sen-

ator from Alaska, in connection with the pipe shortage, that there is a very interesting article in the Oil & Gas Journal of February 4, 1974. The headline is "Pipe Shortage Blamed on Majors' Stockpiling."

I will read pertinent paragraphs from the article and will then have it printed in the RECORD. It reads:

The shortage of oil-country steel among independent operators was blamed last week on stockpiling by major oil companies.

A study by the Government showed that, on the average, as of Dec. 1, 1973, stocks of the 22 largest oil companies were 30% greater than their monthly average since Jan. 1, 1972. Furthermore, the Federal Energy Office and, eight of these companies held 74% of the inventory.

The shortages are real to independents, in particular, and to some of the majors as well "as a result of higher than normal inventory of tubular goods by some of the major companies," FEO said.

If adequate rigs were available, FEO says the demand for tubular goods would be still higher this year. The task force is also looking into the problem, as well as availability of associated services and manpower.

Pipe is available only on a steel-mill order basis, FEO said, adding that an order placed now by a consumer, either with the mill or through a distributor, cannot be completed for 9-12 months.

Mr. President, I ask unanimous consent that the entire article be printed at this point in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

PIPE SHORTAGE BLAMED ON MAJORS' STOCKPILING

The shortage of oil-country steel among independent operators was blamed last week on stockpiling by major oil companies.

A study by the Government showed that, on the average, as of Dec. 1, 1973, stocks of the 22 largest oil companies were 30% greater than their monthly average since Jan. 1, 1972. Furthermore, the Federal Energy Office said, eight of these companies held 74% of the inventory.

A joint task force of FEO, the Cost of Living Council, and the Commerce Department will continue its investigation, FEO said. It promised to "develop recommendations to correct the current maldistribution."

FEO didn't say how it would get casing and tubing from stockpiles of the majors with plentiful supplies to those who are short. Earlier, the agency offered its assistance to any independent operator who is holding off drilling wells because of lack of oil-country goods.

The shortages are real to independents, in particular, and to some of the majors as well "as a result of higher than normal inventory of tubular goods by some of the major companies," FEO said.

The tubular goods situation, and the resulting uncertainties, add up to "a major detriment to maintenance and expansion of our domestic petroleum exploration and development effort," William E. Simon, FEO administrator, declared.

Total 1974 supply should be adequate to meet projected industry demands, according to the study, with specific shortages in individual types, weights, grades, and sizes of tubular goods. Government and industry experts project an increase in 1974 drilling to 156 million ft, an increase of about 20 million ft, according to FEO. This will require an estimated 1.75 million tons of oil-country tubular goods, the study says, well within the scheduled production of 1.85 million tons.

If adequate rigs were available, FEO says the demand for tubular goods would be still higher this year. The task force is also looking into the problem, as well as availability of associated services and manpower.

"The effect of his maldistribution," FEO adds, "is compounded by the fact that the majority of drilling activity is performed by the independent operators." Historically, companies have depended on stocks held by the manufacturers and distributors. But the inventories by these groups as of Dec. 1, 1973, were more than 60% below the average monthly volumes held between January 1972 and October 1973, according to the survey of 26 major distributors and steel producers. Current inventories are believed to have diminished further, and the balance is said to be fully committed.

Pipe is available only on a steel-mill order basis, FEO said, adding that an order placed now by a consumer, either with the mill or through a distributor, cannot be completed for 9-12 months.

Mr. JACKSON. Mr. President, I call attention to the fact that there is authority in the pending bill to provide for allocations. Section 107 provides for material allocations. It can be moved from the large companies, the majors, that have a corner on this, to the independents.

So I think the record ought to be made very clear as to what is going on and who has what and why. These are findings by the FEO.

Mr. President, that concludes my statement.

Mr. GRAVEL. Mr. President, will the Senator yield?

The PRESIDING OFFICER (Mr. HANSEN). The Senator from South Dakota has the floor.

Mr. ABOUREZK. Mr. President, I would like to finish the question I started quite some time ago of the Senator from Washington. Then I would be happy to yield.

Mr. GRAVEL. Mr. President, will the Senator yield to me at this time? A point has been made, and if we do not reply to that point at this time, the point has been made, and we have lost.

Mr. ABOUREZK. I yield to the Senator from Alaska.

Mr. GRAVEL. Mr. President, the Senator from Washington makes the best point of all for my argument; namely, if it is tied up, all of the money is lost and economics prevail.

The people who bought up the necessary stocks to satisfy their demands took the money and bought up the necessary stocks. They paid 2 or 3 times what those tubular goods would normally be worth. That is exactly what happened. Now we have a bill to insure that it not only happens to the majors but also happens to the United States, because we will make more money to be able to compete. The foreign countries are competing unfairly with the Americans. How can the American oil companies compete and buy rigs, tubular goods, and all of the technology necessary to drill when we can sell a product for \$5 and a foreigner can sell it for \$10?

The Senator from Washington says that we have section 107. That is just a booby trap. It really says to the administration that we will create a problem and that the administration can come forward and clean up our mess. It says that the administration shall

come up with a plan in 30 days with respect to all of these products. That is insanity, because it is a return to the economics of fortress America.

We have to compete. If we in the United States embargo the technology necessary to handle the product inside of the wells, we can shut down every market in the world.

That would be the beginning of an international trade war. I know that the distinguished Senator would not want to see that because of the difficulties we could experience, difficulties such as when we had a run on the dollar.

My distinguished friend very ably proved my point on the law of economics.

Mr. JACKSON. Mr. President, section 107 is not an embargo authority. I am very amazed that my friend, the Senator from Alaska, wants to justify a hoarding by the multinational oil companies, and they have over half of it.

Section 107 makes it possible to take it away from those who are hoarding.

Mr. President, my second point is a very simple one. It goes to the heart of the whole business where there has been an argument going on for months in the Senate that if the price of oil would only go up, production would go up. I have two tables here with FEO and industry statistics on crude of prices and production. I ask unanimous consent that they be printed in the RECORD at this point.

There being no objection, the tables were ordered to be printed in the RECORD, as follows:

AVERAGE U.S. WHOLESALE PRICES OF CRUDE PETROLEUM

(Cost per barrel)

	Domestic old	Domestic new	Average domestic
1971.....	()	()	\$3.38
1972.....	()	()	3.39
1973:			
January.....	()	()	3.40
February.....	()	()	3.40
March.....	()	()	3.41
April.....	()	()	3.47
May.....	()	()	3.62
June.....	()	()	3.78
July.....	()	()	3.79
August.....	()	()	3.85
September.....	\$4.18	\$5.12	4.27
October.....	4.11	5.62	4.49
November.....	4.25	6.17	4.73
December.....	5.25	9.51	6.31
1974: January.....	5.25	10.35	6.75

¹ Not available.

Source: FEO estimates.

DOMESTIC PRODUCTION OF CRUDE OIL AND NGL

(In millions of barrels per day)¹

	Crude and condensate	NGL	Total
1971.....	9.463	1.692	11.155
1972.....	9.441	1.744	11.185
1973:			
January.....	9.179	1.680	10.859
February.....	9.373	1.745	11.118
March.....	9.175	1.734	10.909
April.....	9.233	1.749	10.982
May.....	9.290	1.739	11.029
June.....	9.209	1.727	10.936
July.....	9.195	1.737	10.932
August.....	9.161	1.748	10.909
September.....	9.077	1.741	10.818
October ¹	9.331	1.750	11.081
November ¹	9.118	1.750	10.868
December ¹	9.143	1.750	10.893

¹ IPAA sources with exception of October-December 1973 statistics.

Note: API estimates.

Mr. JACKSON. It is interesting that the average domestic price on January 23, 1973, was \$3.40 a barrel.

By January 1974 it had almost doubled to \$6.75 a barrel.

What happened to production? It stood still. Production did not increase. It started out—

Mr. FANNIN. Will the Senator yield on that? What is the source of that?

Mr. JACKSON. I will give the Senator the figures.

Mr. FANNIN. All right, fine.

Mr. JACKSON. In January 1973 production stood at 10,859,000 barrels a day, and at the end of the year, it stood at 10,893,000 barrels a day, and the price doubled. What happened to production? That is all I have to say.

Several Senators addressed the Chair. The PRESIDING OFFICER. The Senator from South Dakota has the floor.

Mr. ABOUREZK. I have had the floor for quite some time. I would like to try to finish my questioning, and then make a short statement, if I could.

Mr. JACKSON. Mr. President, will the Senator yield? The Senator from Arizona asked a proper question.

Mr. ABOUREZK. I yield.

Mr. JACKSON. The figures come from sources that I know he would agree is absolutely reliable, the Independent Petroleum Association, and the American Petroleum Institute.

Mr. FANNIN. I will not take the time now, but it is—

Mr. ABOUREZK. Mr. President, I have the floor.

Several Senators addressed the Chair. The PRESIDING OFFICER. The Senator from South Dakota has the floor.

Mr. FANNIN. Will the Senator from South Dakota permit me to say—

Mr. ABOUREZK. Let me say to the Senator from Arizona that if I can finish my question, I will be happy to give him the whole shooting match, as soon as I finish. I have tried to accommodate everyone during the debate.

Mr. JACKSON. Everyone but the Senator from South Dakota. Be careful; you know there is a lot of hoarding going on here.

The PRESIDING OFFICER. The Senator from South Dakota has the floor. Does he desire to yield?

Mr. ABOUREZK. Mr. President, I think we established, before we got off on another track, all the prices, as I recall, of oil as it is selling today. The price is \$10.35 a barrel for uncontrolled oil, and \$5.25 under the controlled price. If you figure out an average of what that would be—I have done it with some arithmetic here—

Mr. JACKSON. May I correct one thing?

Mr. ABOUREZK. Yes.

Mr. JACKSON. The \$5.25 figure is an average figure, because you have different grades of crude oil, but that is the average, regulated price—\$5.25—of sweet crude and sour crude.

Mr. ABOUREZK. And so is the \$10.35.

Mr. JACKSON. That is correct. I wanted to be sure the record was straight on that.

Mr. ABOUREZK. And the domestic production right now is 11.2 million barrels a day?

Mr. JACKSON. I think that is in the ballpark.

Mr. ABOUREZK. So that comes out, in essence, to a minimum cost to the American public, per day, of \$76.5 million, if my figuring is correct. That is what it is costing the American consumer for oil produced domestically in this country.

Mr. JACKSON. That sounds right, if it computes accurately.

Mr. ABOUREZK. If this rollback goes into effect, as I understand it, it will freeze all oil prices, old, new, stripper, and whatever else, at \$5.25 a barrel, plus a 35-percent optional increase if the President can somehow justify the cost. Is that an accurate statement?

Mr. JACKSON. Yes; it sets the ceiling. It could go lower than \$5.25. That is not a floor; that is a maximum.

Mr. ABOUREZK. And it could go as high as \$7.09 a barrel, if my figures are correct.

Mr. JACKSON. Yes, if the President—and only if the President—makes a detailed finding demonstrating that there is an unusual or specific requirement that necessitates such an upward adjustment. I will read the exact language.

Mr. ABOUREZK. No, that is all right. In other words, in trying to establish that my arithmetic also shows that if it does go up to \$7.09 a barrel, the cost to the consumer per day of domestically produced oil can be about \$78 million a day.

Mr. JACKSON. How much?

Mr. ABOUREZK. \$78 million, which is our daily production multiplied—

Mr. JACKSON. That is the total price, yes. But I would not anticipate that it will go up to that level.

Mr. ABOUREZK. I would hate to make book on what President Nixon will do with that option, very frankly.

The point I am trying to make to the distinguished Senator from Washington is that if the Senate passes this particular price provision, which is called a rollback by some people—I call it a price increase provision—if we pass this provision, I would be willing to bet that we will never see any crude oil priced lower than \$5.25, and most likely we will see crude oil priced at \$7.09 a barrel within a very short time, and it will go on from there, and we will never be able to achieve a real price rollback, where the oil industry will have to justify whatever increased costs they incur for production of oil.

Mr. JACKSON. The Senator has to decide whether he is going to allow it to go the way it is going. That is, that by the end of this year, based on existing projections, we are going to have as much as 42 percent of all domestically produced crude oil unregulated, and that will have a disastrous impact on the economy.

Mr. ABOUREZK. Yes, I know.

Mr. JACKSON. This is what you have to decide. We provided elasticity in this formula for the simple reason that there is a justification for a price adjustment

in those operations where the cost per barrel is very high, as compared with a gusher well. This is what we have to face up to, and this is what we attempted to do.

The Senate has a choice, here, of whether we are going to have unrestricted pricing of petroleum products, which will increase the price on everything—we have seen that in what has already taken place. The Senate has to decide also whether we are going to have an unfair apportionment of the product from the barrel of crude oil. That is what is happening now. Take propane prices as an example, which have gone up 3½ times in a matter of weeks. Such price increases are killing the little people in this country. The Senate has to decide whether we are going to permit to become law the formula which we have in the legislation, which requires an equal apportionment of costs among the refined products.

I would point out further that the airlines are being clobbered. The price of kerosene has gone up from 11 cents to over 40 cents per gallon, because they are at liberty now, under existing law, to apportion it any way they want to.

Without this bill, the President could decontrol the oil to \$10.35. We stopped that.

Mr. ABOUREZK. Yes, without this bill; I agree with the Senator from Washington that without this bill that is true. But in addition to that, if we do pass this particular price freeze provision in the conference report, I would not hesitate at all to predict that there will never be another rollback bill which will have any effect whatsoever.

Mr. JACKSON. It is a ceiling, I emphasize, and there is no ceiling now.

Mr. ABOUREZK. Yes.

Mr. JACKSON. Therefore, you take your choice. It is a difference between a ceiling we know about—there is not a ceiling now, and prices are at \$10.35—and \$7.09, which is a difference of \$3.26 per barrel. That is a lot of money.

Mr. ABOUREZK. Mr. President, there are people in my State of South Dakota at this time—I just returned, like almost everyone else in Congress, from my own State and my own district—there are people in my district of South Dakota, particularly the elderly, the Indians, and low-income people, who, with the price of fuel right at this time, which has increased by tremendous proportions, have to make a choice between food and fuel at these prices. If we are not going to roll them back any further than this, I am afraid that, as the Senator has said, there is going to be violence.

Mr. JACKSON. The poor people in the rural areas of my State depend on propane. We have rolled back propane specifically. Under this bill its price will be rolled back, I think, some 14 cents a gallon.

Let us do something about it. This is the best we could get out of the conference. That is what I want to say to my good friend from South Dakota. But I do not think the Senator from South Dakota wants to go on record and say he

wants the price of propane to stay way up.

Mr. ABOUREZK. Oh, no.

Mr. JACKSON. There is a specific rollback provision. I think my colleagues have to decide whether they will do anything about the problem. We have been on this since last October, trying to get the best bill we could.

Mr. ABOUREZK. I want to point out that while we have been arguing this issue for weeks and months and some people think we have cut prices too far, and as we have heard in the debate today, I do not think we have rolled them back far enough by a long ways. We should put them back to the January 1973 prices and then put the burden of proof on the oil industry to see if they need a cost increase. Further, while we are doing that, I want to make the point that the President does have the authority under the Economic Stabilization Act to roll back prices to whatever level they should be, and he has not done it.

Mr. JACKSON. But we are mandating a lid here by action of Congress. Just because we cannot get everything in a bill—I have been here a long time and I learned a long time ago that we have to compromise. This is the best we can get. We are going to save here \$20 million a day, which amounts to some \$7.7 billion a year. That is a big saving.

If we do not do that and we allow this inflation to go on, it will go on to another higher plateau. Then when we come in here later and try to roll it back, we will not be able to roll it back even as far as we are now. That is my judgment.

Mr. ABOUREZK. The Senator says we will save over \$7 billion a year. Looking at it either way—

Mr. JACKSON. As against no controls on oil.

Mr. ABOUREZK. There is also another point. We can also roll it back further. It depends on whether the glass is half full or half empty.

Mr. JACKSON. If we wait to come in here 6 months later and try to do this, we will not get legislation through to roll back prices to the level as low as the Senator from South Dakota is talking about. We will have other factors aggravating the situation.

Take Canada. There was discussion on the floor about the price the Canadians are charging. The Canadians came back at us and said, "Look, we are going to put a tax on that is equal to what you are paying your own producers of unregulated oil." Let us face the fact that our largest source of supply from abroad is Canada—1 million barrels a day.

Mr. President, they just said to us, "We are not going to put our price below what you are paying your producers on an unregulated basis."

How can we ask OPEC to roll back its prices if we do not roll back ours?

They will come back and say, "Well, look you are just following the same price scheme that we have set—"

Mr. BARTLETT. If the Senator would yield there, is the Senator trying to imply that OPEC is going to roll back its prices?

Several Senators addressed the Chair.

The PRESIDING OFFICER (Mr. HANSEN). The Senator from South Dakota has the floor.

Mr. GRAVEL. Mr. President, will the Senator from South Dakota yield now?

Mr. ABOUREZK. I would like to try to make just one more point. Let me just finish, if I may, and then I will be happy to yield the floor.

I was not suggesting that we wait a few months for a rollback. For the first time, we can undertake our responsibilities and do it now, because we are here and in session. We should do it. What I would like to see done is this provision being removed or, in the alternative, lowered lower than it is now. If the chairman of the committee says he cannot get it done in conference, we should try to do it on the floor.

Mr. JACKSON. If the Senator will join me, I will help him. I have a bill before the committee and we properly held hearings on a rollback bill, that is open to amendment in the Committee on Interior and Insular Affairs, separate from the conference report.

Why kill the whole bill? It has provisions for unemployment insurance. It requires public disclosure by the oil companies of their assets and their holdings. There is a long list of things in the bill, including antitrust provisions, and provisions providing for protection of air quality standards during the energy crisis. We will be killing a bill—if this is what the Senate wants to do—that has all of these vital requirements in it, that we have been debating and discussing since last October.

Look at the independent operators. We provide for protection to that little independent operator with a franchise. Under this bill, they cannot cancel his franchise. It is the long list of things that we are going to kill. Perhaps the Senator from South Dakota feels it will not matter, that these other things are not necessary. That is something each Senator has to decide for himself. But we have to look at the whole bill. I have never found a bill yet that I agreed with everything in it. This is the best we could get. We have been back to conference on a recommitment once and if it goes back again, it will just be dismembered.

There are 250,000 men out of work today due to the oil crisis—the energy crisis. We have, as you know, a provision in here to provide for a year's unemployment coverage if the State meets the minimum 6 months requirements. All of these things are crucial. They are vital. I hope that my good friends from South Dakota will look at the entire bill and not at one paragraph.

Mr. ABOUREZK. I am not suggesting that we kill the bill—

Mr. JACKSON. I can assure the Senator that—

Mr. ABOUREZK. But that we kill the price freezing provision that has been called the price rollback provision, and then I would be happy to support it.

Mr. JACKSON. The last time we debated this bill, those who voted to recommit it were saying they did not like the provision of the excess profits. Well, we did not have an excess profits provision in there. We had the so-called renegotiation provision, put in there by the

House. I was not happy with it. My colleagues know this. We tried everything we could to avoid that unworkable situation. We passed the bill in the closing days just before Christmas. We took out that provision and sent the rest of the bill to the House and the House rejected it, with 20 votes supporting the Senate amended bill. If we send an amended bill to them again, let us forget it. We will have to start all over again. What we have here is a complete omnibus bill which I think is crucial so far as the energy crisis is concerned.

The head of the FEO will be able to do something about the people standing in line. He has the authority to ration. He has all of the necessary authorities that he does not have today. I think we should look at the whole bill and I would hope that my colleague from South Dakota would approach it on that basis and vote against any motion to kill the bill, because that is what is going to happen if the motion prevails. The oil industry is active in trying to kill it. The White House is active in trying to kill it. They are lobbying all over the place. I would hope that there will be enough people in this body who will support what I think is a very sensible bill.

Mr. President, I would also like to place in the RECORD at this time an exchange of letters referring to yet another provision of the bill, section 16. The letters refer to a recently reported study on the health effects of sulfur dioxides.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

U.S. SENATE,
Washington, D.C., February 18, 1974.

MR. S. DAVID FREEMAN,
Director, Energy Policy Project,
Washington, D.C.

DEAR MR. FREEMAN: I understand that the Ford Foundation has funded, through your Energy Policy Project, a study by the American Public Health Association regarding health effects of energy by-products.

Recent news accounts of this study suggest that the report is directed to the matter of conversion of electric power plants from petroleum-based fuels to coal. Because the Senate will consider legislation tomorrow which would direct or permit certain limited conversions of this type, I would appreciate a copy of the referred to study.

I am particularly interested in the basic assumptions of the study; how it relates to the pending legislation; and the extent to which its findings could or should be applied to the legislation before the Senate.

Thank you for your cooperation.

Sincerely,

EDMUND S. MUSKIE,
Chairman, Subcommittee on Environmental Pollution.

THE ENERGY POLICY PROJECT,
Washington, D.C., February 18, 1974.

Senator EDMUND S. MUSKIE,
Chairman, Subcommittee on Environmental Pollution, Senate Public Works Committee, New Senate Office Building, Washington, D.C.

DEAR SENATOR MUSKIE: This is in response to your letter received this morning for a copy of a study of "Health Effects of the Various Forms of Energy" undertaken as part of the research for this Project by a Task Force of health experts assembled by the American Public Health Association. I am responding to your letter since the APHA officials are not available because of the holiday.

Members of my staff have had access to

some working papers associated with the study but a completed draft has not been submitted to us. When it is the study will be reviewed by outside experts and will then be published. I therefore cannot supply you with a copy of the study because as far as I know it has not yet been completed even in a preliminary draft.

The grant to the APHA was made in December of 1972 to undertake a comparative evaluation of the health effects of alternative source of energy on the basis of available information. Our purpose was to provide such an evaluation as part of our Project's analysis of national energy policy options in order to give relevant weight to the important objective to protecting human health. The study was designed as part of the Energy Policy Project's objective of providing public information in the energy field. It, of course, had no relationship to any legislation and in fact was designed and well underway before the present emergency situation began in October of 1973.

It was certainly not designed to answer the questions inherent in the emergency legislation before the Congress which I gather turns on judgments as to how long the emergency may last.

Sincerely,

S. DAVID FREEMAN,
Director.

Mr. GRAVEL. Mr. President, if the Senator from South Dakota would yield, I should like to ask him a question or two.

Mr. ABOUREZK. I yield.

Mr. GRAVEL. We do not have a great deal of wheat in Alaska, but I know that the Senator from South Dakota has a lot of wheat in his State. I am not terribly expert in that field, but I do know that the price of wheat in the world market trebled in 1973. I wonder whether there is any justification on a cost basis for wheat going up three times.

Mr. ABOUREZK. I do not even know if that is a proper parallel to make, simply because the wheat producers in South Dakota and anywhere else in the rain belt in the middle part of the country do not really set the price on the products they sell. They take what they are offered and if they do not like it, they can dump it. They have to take what they are offered.

Mr. GRAVEL. Is there not a guaranteed parity on wheat so that they do not have to throw it away, and they will make money?

Mr. ABOUREZK. It takes subsidies, but they are not in use this year because the market price is up.

Mr. GRAVEL. To be fair to my colleague, he is aware that in wheat we have a parity and if we produce too much—

Mr. ABOUREZK. Not in parity, no—we have a subsidy which is not anywhere near parity.

Mr. GRAVEL. If a fellow produces too much oil, is there anyone who will buy his oil at a set price so that he will recover the cost of his drilling?

Mr. ABOUREZK. The Senator says, if he produces too much oil will there be someone there to buy it?

Mr. GRAVEL. If he cannot sell his oil at the price of the guarantee, they will have a minimum purchase and someone will store it for him?

Mr. ABOUREZK. I do not believe so.

Mr. GRAVEL. Wheat has trebled, oil has trebled, which is about the same

thing. My colleague feels that the argument is that there is no cost justification for this trebling of the price of unregulated oil at \$9.51, and therefore we should roll it back. Would not that same logic apply to wheat. We all need bread and flour and all the other things from wheat? Would it not apply that we should roll that back, also?

Mr. ABOUREZK. If it goes too high, yes.

Mr. GRAVEL. They both trebled in price in 1973. Is there something wrong with oil?

Mr. ABOUREZK. If I may finish my statement, the prices to farmers were way too low, and that is why they had to have subsidies. The Senator from Alaska knows that. What the farmers are getting now is just about an adequate price, and they are making an adequate profit. Before oil prices increased—which were not set by the buyer but were set by the seller, the producer of oil, generally the major oil companies—

Mr. GRAVEL. What is an adequate price?

Mr. ABOUREZK. Let me finish my statement. What has happened is that the oil companies have been making adequate profits. Now they are making windfall profits, and they are going to make more this year and more next year.

Mr. GRAVEL. The wheat business has trebled their price in 1 year, and they are not making any windfall profits?

Mr. ABOUREZK. No; they are just making adequate profits.

Mr. GRAVEL. What is adequate?

Mr. ABOUREZK. They are making a living now, for a change.

Mr. GRAVEL. What is the return? The Senator is a farmer.

Mr. ABOUREZK. I am not a farmer. I am a lawyer.

Mr. GRAVEL. The Senator has a constituent with a million dollar equity in his farm. What is he making this year? What is the return on his capital?

Mr. ABOUREZK. I do not know what it is this year, but before the prices increased, before 1972, he was making about 1 percent.

Mr. GRAVEL. One percent return?

Mr. ABOUREZK. One percent on his investment.

Mr. GRAVEL. Then I agree with the Senator that we should raise the price of wheat so that he can get a decent return. Otherwise, nobody is going to invest in wheat.

Mr. ABOUREZK. If the Senator from Alaska, who continues to talk about the laws of economics, would bear with me for just a minute, I might say that the laws of economics were repealed a long time ago, when the oil industry grew to a monopoly. I do not recall the figures, but I believe that 90 percent of the oil reserves are owned and controlled by the 20 top companies. As I understand it, that is a monopoly in the oil industry.

Mr. GRAVEL. That is not nearly as monopolistic as most American industry.

Mr. BARTLETT. Mr. President, will the Senator yield?

Mr. ABOUREZK. May I retain the floor for a minute, Mr. President?

The PRESIDING OFFICER. The Senator from South Dakota has the floor.

Mr. BARTLETT. Mr. President, will the Senator yield the floor?

Mr. ABOUREZK. In a minute, as soon as I finish.

Mr. BARTLETT. Will the Senator yield for a question?

Mr. ABOUREZK. In a minute.

The laws of economics were repealed by the oil companies and the oil industry when it grew to a monopoly, whenever that happened. So that what we have now is something that does not apply to the laws of economics, simply because they have grown to a monopoly. They have gotten the Government involved in tax benefits, in oil imports restrictions.

Mr. GRAVEL. We have not done that in wheat? We have not repealed the laws of economics for wheat?

Mr. ABOUREZK. If the Senator from Alaska will allow me to finish, I would be most grateful.

We have the situation that follows now, in which they can demand, without price control, almost any price they wish, and they would be above \$10.35 a barrel if they thought they could get away with it.

The people in my State—I do not know about Alaska—are choosing between food and fuel, and it is a tough choice for many people out there.

If the oil companies, who say they need some kind of profit incentive to keeping going, are not satisfied with an adequate profit, then the U.S. Government ought to take over the oil reserves and let out the drilling and production and refining, and so on, and see what real competition is like.

Mr. GRAVEL. Let me ask the Senator what he would consider the average return on manufacturing, the average profit on manufacturing, in the average industry in this country? Would he say that is an adequate profit?

Mr. ABOUREZK. I have no idea. What is the average return?

Mr. GRAVEL. This is not a trap.

Mr. ABOUREZK. What is the average return?

Mr. GRAVEL. It is about 13 percent; 12.5 to 13 percent is the average return.

Mr. ABOUREZK. Based on what?

Mr. GRAVEL. On equity.

Mr. ABOUREZK. On investment?

Mr. GRAVEL. Yes. Someone invested his money, and if he gets 12 or 13 percent, that is average in this country for manufacturing. Is that adequate?

Mr. ABOUREZK. It seems to me that it is more than adequate.

Mr. GRAVEL. The oil industry, on average, has been one to two points below average in its profit return for the last 15 years; and Exxon, the one we would like to throw rocks at, only made 12 percent this year on domestic activity. So they are one point below the average of manufacturing. How can anybody say that this is a windfall profit?

Mr. ABOUREZK. I wonder whether the Senator from Alaska knows anything about the accounting system used by the oil industry.

Mr. GRAVEL. I have some knowledge of it.

Mr. ABOUREZK. Is it any different

from that used by ordinary industries, such as airlines?

Mr. GRAVEL. I think that each accounting system is germane to the activity in question. With respect to the wheat and land and farming and subsidies and the Government payoffs, you have a system in which you play with your financial statement. So you do things with your financial statement that serves a purpose.

I asked the same question the Senator from South Dakota did in a hearing, because I was suspicious of the machinations that have taken place. We hear this charge here and that charge there. But when we come to the final report card, the American people, does the Senator know what the true test is? Are the American people willing to invest their money? That is, the Senator and me and John Q. Public. Are we willing to take our dollars that we saved and invest them in an industry? If we are, then what we are saying, collectively, is that it is profitable to move into that industry.

For the last 15 years, the American people have said "no" to oil. Here is the chart of the capital activity that has taken place in oil and gas, and it shows there has been a flight of capital. Why the flight of capital? It is very simple. It is not profitable—just like wheat. It was not profitable to do it, so we had to prop it up.

Mr. ABOUREZK. There has been a flight of capital because of the oil import quotas which were put on at the request of the oil industry and which were kept on at the insistence of the oil industry, and it was cheaper and more profitable for them to invest overseas.

Mr. GRAVEL. There has been a great misunderstanding. I think the Senator from Washington alluded to it, and did so erroneously.

First, as to the quotas, there was an argument made in this country by segments of the oil industry and by segments of those people in Government who are particularly concerned about our defense posture. The argument was made that if we did not have enough oil to satisfy the present and projected needs in this country, we would become dependent upon foreign nations.

Incidentally, that is exactly what the situation is today with our Mediterranean fleet and our NATO forces, which cannot move 10 miles without the beneficence of foreign governments. Be that as it may, that is what they were afraid of. So they were able to sell this to Congress, and we had an import quota system.

It worked very well for the purpose, except for one thing. There was another element in Congress that barely won—if I may have my colleague's attention.

Mr. ABOUREZK. The Senator may. I was checking on a point he mentioned. It was not a program voted on by Congress. The oil import quota system was put in effect by Executive order.

Mr. GRAVEL. I accept that correction.

In the last year of the Eisenhower administration, 1957, a quota system was established by the Executive and obviously was sustained by Congress on a de facto basis, because they could have

passed a law to the contrary immediately. So we had a de facto agreement between Congress and the Executive that it was in the national interests of this country from a defense posture and from an energy point of view.

Many people took the argument in Congress and said, "What is this? The oil companies want to feather their nest by having an artificially high price to produce more oil or to enrich themselves."

What happened? Through the pressures of Congress and through the reticence and lack of decisiveness in the Executive, we began to see a quota system. There was an exception for this company and that company, an exemption so we could bring in cheaper oil from the Caribbean. As a matter of fact, all the exceptions were valid and acceptable to the American people, because they wanted cheap oil. The only way to get cheap oil was from abroad. The Arabs had cheap oil. As a matter of fact, American oil companies in the 1960's—that is what started OPEC—rolled back the price of oil unilaterally on the Arab countries. They did it to get cheaper oil to the United States.

Mr. ABOUREZK. What percentage of imports were in existence at that time?

Mr. GRAVEL. I do not have the figures offhand. It was a growing figure.

Mr. ABOUREZK. Was it 5 percent of our total use, our total consumption in this country? Was it less than 5 percent?

Mr. GRAVEL. I do not know.

Mr. ABOUREZK. The statement given late last year by the administration was 6 percent, and this was 1973; so that 6 percent of our total use came from the Middle East or embargoed countries.

The Senator's argument that the oil companies were trying to bring cheaper oil to the United States by pushing back prices in the United States does not ring valid because they were not providing enough oil from the Middle East.

Mr. GRAVEL. We are talking about the total world market. If the oil came from Venezuela, or Canada, the total world market is involved. If there is a lot of oil and someone drops the price, other countries have to follow suit. All OPEC countries have to follow suit.

Mr. ABOUREZK. The reason there was not enough oil being brought in makes a lot of difference. I find it hard to believe that these companies have the interests of America at heart.

Mr. GRAVEL. These people, like the Senator and I, are Americans. I think it is unfair to say they are thieves and rip-off artists. How would the Senator feel if that were said about his wheat farmers.

Mr. ABOUREZK. It is not true.

Mr. GRAVEL. It is not true there, nor is it true about the oil industry here.

Mr. ABOUREZK. The top executive of Phillips oil said on CBS television, when he was asked if it came to a choice between his company's interests and the country's interests which he would choose, and he said he would take the company's interest. I do not know how many feel that way, but one does. It tends to prove they do not really care. If they did, they would not be price gouging the people of this country.

Mr. GRAVEL. Doubling the wheat price is not gouging, but with respect to oil it is. Is that right? We covered that ground.

Mr. ABOUREZK. If I may finish my statement, if it got to be price gouging on the part of wheat farmers, I would be one of the first Members of the Senate to do something about it, but they do not set the price.

Mr. GRAVEL. The Senator cannot stand here and tell me how much profit they are making. I have a relative who grows a little wheat. I know what a good year they had, if the Senator wants to talk about increases in profits. It has been substantial. They were starving before. They had a growth of profit that was unbelievable. When they have had a return equal to the industry average how can the Senator make that statement? It is not so.

Mr. ABOUREZK. When did they have this return equal to the average industry. Does the Senator mean 1973?

Mr. GRAVEL. 1973.

Mr. ABOUREZK. They had an average return.

Mr. GRAVEL. Let us take Exxon.

Mr. ABOUREZK. That is before the price went up.

Mr. GRAVEL. That is the end of the year.

Mr. ABOUREZK. That is before the new oil was \$10.35 a barrel.

Mr. GRAVEL. The figure I have is \$9.61 in November. Maybe in February it is \$10.

Mr. ABOUREZK. How much was it in July of last year?

Mr. GRAVEL. This oil was not de-regulated then.

Mr. ABOUREZK. How much?

Mr. GRAVEL. \$3.77.

Mr. ABOUREZK. How about September for new oil?

Mr. GRAVEL. I beg the Senator's pardon.

Mr. ABOUREZK. How much in September?

Mr. GRAVEL. \$4.02.

Mr. ABOUREZK. New oil.

Mr. GRAVEL. Oh, new oil; \$5.06.

Mr. ABOUREZK. So even with those prices on new oil and old oil being down to \$4.25 they made just about the average profit according to their bookkeeping system. Now, with prices going up considerably since then, what are they going to make this year?

Mr. GRAVEL. That is pretty interesting arithmetic. The Senator has lumped together returns of the last quarter and has said that is average. How does the Senator know it did not take the balance of the last quarter to make the year right?

Mr. ABOUREZK. I am taking the Senator's statement.

Mr. GRAVEL. That is it for the entire year. I do not have a breakdown quarter by quarter.

Mr. ABOUREZK. The first 3 quarters oil never went above \$5.

Mr. GRAVEL. What was wheat?

Mr. ABOUREZK. Just a minute. Let us talk about oil.

Mr. GRAVEL. They both trebled. Wheat is more a factor in the family budget than is oil. Why go through a

cathartic process of slitting the throat of oil when wheat had as much impact on the cost of living?

Mr. ABOUREZK. Is wheat involved in this conference report?

Mr. GRAVEL. No, let us talk about oil, but we should be consistent. I presume my colleague recognizes the needs of the country and wants to see more capital flow into oil production, which would depress prices.

Mr. ABOUREZK. If we decrease the prices of oil now that will increase production.

Let me say that if there were not a monopoly it would be true but they control the price in a very small, select group of oil companies. They control most of the production and there is no way they are going to lower prices.

Mr. GRAVEL. Is the Senator saying there is more free enterprise in wheat than there is in oil?

Mr. ABOUREZK. A great deal more.

Mr. FANNIN. Mr. President, will the Senator yield?

Mr. GRAVEL. There is no monopoly on the part of people looking for oil. There are 10,000 independent oil producers looking for oil. How many independent wheat farmers are there in this country?

Mr. ABOUREZK. One or 6 million.

Mr. FANNIN. Mr. President, will the Senator from South Dakota yield?

Mr. GRAVEL. Maybe the Senator from Arizona can enlighten us.

Mr. FANNIN. I was going to give a few figures that might be helpful. We are all interested in higher production.

Mr. ABOUREZK. The Senator from Arizona is not too concerned because he is arguing for higher oil prices.

Mr. FANNIN. There will be lower oil prices as the end result. But I would like to give a few figures to indicate the percentages of the cost-of-living price. For energy it is 6 percent; food is 22.5 percent; but in 1973 food increased 20.1 percent and energy increased 18.6 percent.

Just to give an idea so the Senator will know what we are up against, the percentage increases in 1973 were as follows: For ferrous scrap, 92 percent; all nonferrous metals, 32.5 percent; raw cotton plus all cotton products, 32.4 percent; raw wool plus all wool products, 18.3 percent; corn, 65.8 percent; wheat, 102.7 percent; soybeans, 43 percent.

I regret as the Senator from South Dakota does that these prices have gone up to this extent; but I still feel that if we pass this legislation as now constructed, prices will continue to increase. For every barrel of oil we do not produce in this country—and this conference report does not give any incentive to produce more oil in this country—we must displace it with a barrel of foreign oil. The cost of foreign oil has been going from \$10 to \$20 a barrel. That is as much as domestic crude. This is something very important. Also I call to the attention of the Senator that "because of the improved prices for crude oil that occurred in 1973 there has been a very substantial and widespread reactivation of independent explorers and producers as

has not been witnessed for more than 15 years."

We have been talking much of the independents in this country. This is a letter from the Independent Petroleum Association of America. I ask unanimous consent to have printed in the RECORD this letter dated February 14, 1974.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA,

Washington, D.C., February 14, 1974.

HON. PAUL J. FANNIN,
U.S. Senate,
Washington, D.C.

DEAR PAUL: This is to express our deep concern about the rollback of domestic prices as proposed by Senator Jackson in the Emergency Energy Act (S. 2589).

In our opinion, the proposal would cause a drastic curtailment in exploration and development of domestic reserves forcing U.S. consumers to become more dependent on imports which cost from \$10 to \$20 per barrel, about twice as much as the average for domestic crude oil. Because of the improved prices for crude oil that occurred in 1973 there has been a very substantial and widespread reactivation of independent explorers and producers, as has not been witnessed in more than 15 years. The Jackson proposal would apply to "new" oil and stripper well production. The Cost of Living Council exempted "new" oil from price controls and the Congress exempted stripper well production for the sole purpose of permitting the market place to stimulate domestic exploration and production. This is now working most effectively and the average price of this exempted oil is only \$9.50 per barrel, well below the price being paid for imports which would continue to be passed on to U.S. consumers.

We also submit that Senator Jackson is completely wrong in holding out to the U.S. consuming public that his proposal will bring about a meaningful reduction in consumer prices. His rollback applies to only 15 percent of total oil supply from both domestic production and imports. At most this could mean about 1 cent per gallon reduction on all oil products. This savings would be temporary because domestic exploration and production will be reduced, aggravating existing shortages and necessitating an increased use of far higher priced imports.

Furthermore, the domestic production that is rolled back is primarily owned by independents who do most of the exploratory drilling. They would thus be denied funds vitally needed to expand domestic exploration and development.

For your further information there is enclosed a fact sheet on this matter.

Very best regards.

Sincerely,

L. DAN JONES.

Mr. FANNIN. The rollback applies to only 15 percent of the total oil supply from both domestic production and imports. At the most, it could mean a 1 cent a gallon reduction on oil production.

Mr. ABOUREZK. Does the Senator mean the rollback provision in the conference report?

Mr. FANNIN. The rollback would apply to only 15 percent of the total oil supply from both domestic production and imports. That is right.

Mr. ABOUREZK. It really applies to—

Mr. FANNIN. 39 percent.

Mr. ABOUREZK. To domestic oil.

Mr. FANNIN. 15 percent of the total oil supply from both domestic production and imports.

I have read from the letter of the Independent Petroleum Association of America.

I also ask unanimous consent to have printed the fact sheet on crude oil prices that goes with it.

There being no objection, the fact sheet was ordered to be printed in the RECORD, as follows:

FACT SHEET ON CRUDE OIL PRICES

A rollback of domestic crude oil prices, as proposed by Senator Jackson, would result in less U.S. oil and gas supplies, increased dependency on higher cost foreign oil and higher prices for oil products to consumers.

During 1973, the government permitted the price of U.S. crude oil to rise. According to the Federal Energy Office, the average price of controlled domestic crude oil is \$5.25 per barrel; the average price of uncontrolled crude oil which includes new and stripper production is \$9.51 per barrel; and the average price of all domestic crude oil is \$5.95 per barrel.

The increased prices have brought forth an increase in the activities related to domestic petroleum exploration. The number of active rotary rigs at the end of January 1974, for example, had risen by 12 percent over the same period in 1973. Although there is a time lag between increased exploration and production there is some evidence already that domestic supplies are being increased. U.S. crude oil production declined steadily from 9,637,000 barrels daily in 1970 to 9,077,000 in September 1973, a decrease of 560,000 barrels per day. This trend has been reversed and preliminary figures indicate that production in January 1974 was approximately 9,200,000.

A price rollback hurts the independent producer to a far greater degree than the major oil company. This is so because independents drill 80 percent of exploratory wells and it is estimated that they operate 80 percent of the stripped wells. Most of the oil which the major oil company sells is "old" or controlled oil. But the price rollback would only apply to new and stripper well oil.

To approximate the financial loss to the independent due to this rollback, new and stripper oil produced by independents constitutes approximately 1.9 million barrels of the 9.2 million barrels of oil produced each day. The price of this oil would be rolled back from \$9.51 to \$5.25 per barrel, a reduction of \$4.26 per barrel which would deprive the independent segment of over \$3 billion per year, a large portion of which would be spent on domestic exploration and development.

The professed reason for the rollback is to save money for the consumer through lower product prices. The rollback would apply to only 15 percent of total supply (domestic and foreign) and could result in temporary savings to consumers of about 1 cent per gallon on all oil products.

There has been understandable concern as to increases in price of oil products to the consumer and speculation that we may be facing gasoline prices of 75 cents or even \$1.00. In this regard, it is pertinent to keep in mind that the current average price of domestic crude oil is only some 6 cents a gallon over the 1972 price. Obviously, since the average price of gasoline in 1972 was 36 cents, domestic crude oil prices have not been, and will not be, the cause for 50 cent, 75 cent, or \$1.00 prices for gasoline. Sharply higher gasoline prices can be attributed to high prices of imported foreign crude oil ranging in price from \$10.00 to \$20.00, and

higher charges for refining and marketing, not domestic crude oil prices.

A rollback of domestic crude oil prices would not solve the problem of increased prices for gasoline, home-heating oil, jet fuel and industrial fuels. By reducing domestic supplies of crude oil, the rollback would result in increased dependency on foreign oil and higher prices for oil products to consumers.

What percent of CPI is energy? 6%.

What percent of CPI is food? 22.5%.

By what percent did food increase in 1973? 20.1%.

By what percent did energy increase in 1973? 18.6%.

Figures in percentages

Percentage increases* in 1973 for:

Ferrous scrap	92.0
All nonferrous metals	32.5
Raw cotton plus all cotton products	32.4
Raw wool plus all wool products	18.3
Corn	65.8
Wheat	102.7
Soybeans	43.0

*All figures are WPI.

Mr. FANNIN. Mr. President, I do not want to take the Senator's time, but this document gives a full report of what has happened. U.S. crude oil production declined steadily from 9,637,000 barrels daily in 1970 to 9,077,000 in September 1973, a decrease of 560,000 barrels per day. This trend has been reversed and preliminary figures indicate that production in January 1974, was approximately 9,200,000.

I think we are receiving, as a result of the increase in price, a return in the form of stripper well and new oil. We see results already. I know, from my investigation, this is so. I bring these facts to the Senator's attention because I think they are very important to this colloquy.

The PRESIDING OFFICER. The Senator from South Dakota has the floor.

Mr. ABOUREZK. Mr. President I want to say one thing in conclusion of what I have been saying. If the oil companies, the major companies, which are now admitting, in their public statements and in their advertising, that to explore and drill for more oil and refine more oil they have to have a higher price, and thereby admitting that for a year they have been holding back production in order to hold for higher prices, if there is no other way for them to gouge us unless we have a crisis situation, and if they insist on doing what they are insisting on doing, and if they do not want to produce oil at an adequate profit, then what we ought to do as a U.S. Government is take over the reserves and produce it ourselves, because it is too essential and too important to leave it to the oil companies of this country.

Mr. HANSEN. Mr. President, will the Senator yield?

Mr. ABOUREZK. If I may complete my statement, I will yield to the Senator. As a matter of fact, I will yield the floor to the Senator in just a second.

I for one am not going to tell the people of my State that we are passing legislation in the Senate that essentially will freeze prices the way they are right now without an effort on the part of the Senate to roll them back. I am not going to tell my people that, because they are

not going to stand for it, and I do not blame them. I am with them.

I will be glad to yield the floor to the Senator from Alaska.

Mr. GRAVEL. Mr. President, I yield to the Senator from Wyoming.

Mr. HANSEN. Mr. President, I thank the Senator from Alaska and the Senator from South Dakota.

I know people are frustrated. I know they are angry about prices. But I must say that to turn the oil industry over to the Government of the United States to operate would be the worst possible of all solutions. The Senator from Oklahoma, the Senator from Arizona, and I had the experience of touring the Middle East this year. We were in London. The British, you will recall, decided that private industry was doing the job poorly, so they nationalized a number of things. They nationalized transportation. Then they nationalized the coal mines. If Senators could have been with us flying into London and seeing how few lights were burning, and be in a hotel room where the hot water was turned off from 4 in the afternoon until 10 the next morning, they might have second thoughts about the desirability of turning over to a bunch of politicians something as vital and as important to this country as oil is. I just have to say that, and I assume my friend from Alaska might be in accord with me. I do appreciate his courtesy in yielding to me.

Mr. GRAVEL. Mr. President, I would only add, it is not so much turning the oil industry over to politicians. It is the fact that it is impossible for us of good will, through the Executive or ourselves, to really plug all of the holes in the sieve. Our free enterprise system is a great one. I do not advocate the laissez faire system of the turn of the century vintage. There are places where the Government must come in and require accountability, but our system says I can make the choice; that it is not going to be the Government that is going to tell me how to live every step of my life. That is really what I have been fighting for. I have been privileged, because energy is an important part of my State, to become acquainted with some of the problems. I get thoroughly chagrined when I see good friends of mine continue to misunderstand the workings and the dynamism of what is going on in our system today.

I will hold on that, because I am prepared to speak at some length on it, but I see the Senator from Oklahoma may want to take the floor for a moment.

(Mr. HANSEN assumed the Chair as Presiding Officer.)

Mr. GRAVEL. I would hope the Senator from Washington will be returning to the floor, because there are certain statements that he made that I think deserve amplification.

The first was the one he made about hoarding; that the major oil companies are hoarding tubular material. Well, hoarding means that someone takes it and pulls it off the market, hides it, and nobody uses it. That is the furthest thing from what is happening today. There is no hoarding going on. What is

going on is a competitive system between the various companies, and if one has the money, it goes out and buys the tools that it needs. That is exactly what these big oil companies are doing, because they have the money to buy the material, and a lot of the independents do not have the capital to do that kind of speculation. So when we say the oil companies have tied up all the tubular goods, they have tied it up to use it.

I think the best example of that is to show that last year Exxon made profits of \$2.4 billion. At the same time, Exxon spent \$2.9 billion on exploration. That is \$500 million more than they received in profits. This year their capital budget is \$3.7 billion, and they do not know what their profits are going to be. All they know is that they have a job to do, and they are going to do it.

Mr. BARTLETT. Mr. President, will the Senator yield?

Mr. GRAVEL. I am glad to yield to the Senator from Oklahoma.

Mr. BARTLETT. The Senator mentioned the word "profit." In listening to the debate earlier, did the Senator not make the statement, or was he not in the process of making the statement, that the profits of the oil companies, based on a 10-year look at it, or a 10- or 20-year look at it, were lower than that of all manufacturers, even though in those profits of the big oil companies there were sizable profits from foreign operations at a time of cheap foreign oil, which was quite profitable, with low lifting cost, and that this was not necessarily the picture of the domestic oil industry?

Mr. GRAVEL. Quite the contrary. In fact, the great confusion—and I am sure it is not intentional—of many of our colleagues who talk about the fantastic growth of profits is illustrated by the example of Exxon, which last year had an increase in profits of 16 percent domestically, while the increase in foreign operations was 83 percent.

Mr. BARTLETT. Mr. President, will the Senator yield again?

Mr. GRAVEL. I yield.

Mr. BARTLETT. In the colloquy of a few minutes ago the price of wheat and the price of oil were discussed. It was mentioned that the price of oil in 1973 was at \$3-something a barrel. I have forgotten the exact figure.

Mr. GRAVEL. In the beginning of the year, domestic oil was \$3.40.

Mr. BARTLETT. Is it not correct that the price of oil in 1957, 17 years ago, was \$3.09, and then the price went down and did not regain the \$3.09 figure until 1969?

Then, is it not true that at that point the law was passed which decreased the depletion allowance from 27.5 percent to 22 percent, and that that added an additional expense to the oil industry of approximately \$500 million, which is about 40 cents a barrel for oil. So, at that point, the price was far less than the \$3.09 in dollars and cents of 1969. And, following that, in 1970 the price went up 9 cents a barrel and then in 1971 it went up 21 cents a barrel. It was then frozen on August 15, 1971.

What I am trying to say is that from 1957 until 1973, which was a period of

16 years, the price of oil had only the slightest of movement. And yet during that period—in fact, not even for the entire period but for the first 13 years of that period—the cost of labor went up 30 cents and the cost of steel then went up over 40 cents. And those are the largest expenses to the industry. The cost of drilling wells went up some 75 percent.

Mr. GRAVEL. Mr. President, I did not have that figure on the actual cost of drilling wells. What I had in this chart was the combination of figures on prices from Chase Manhattan and the amount of capital going in, and the price to the Bureau of Mines.

It is interesting, I think, that the Senator is using figures without extracting inflation. And we confront inflation when we talk about the increases that took place.

This is the way it looks when we have constant dollars. In this chart we have constant dollars. In 1957, the cost in constant dollars was about \$2.80 a barrel. In 1970, in constant dollars, taking out inflation, the cost is about \$2 a barrel. So, in point of fact, the cost of oil to the buying public has decreased in that period of time. Little wonder that if we take the amount of money invested in looking for oil and gas in this country from a chart that is in constant dollars, we find that we had a high point shortly after 1957 of a little over \$7 billion, about \$7.5 billion that went into exploration in the private sector. And in 1971 that came down to somewhere around \$3.6 billion. This money was continuing to be spent for new production.

So we can see what is really happening and what caused the energy crisis. The point made by the Senator is a very valid point.

Mr. BARTLETT. Is it not also true that one of the results of the passage of that law was a virtual drought in the oil industry insofar as the domestic oil industry is concerned, that the number of independents decreased by 53 percent in the same period.

Mr. GRAVEL. The Senator is correct. Those were the little people who left the business. It was not the big companies. Exxon, Mobil, and Texaco are still in business. The little guys were wiped out. That was the result of government action when we passed the law. We now propose to go in exactly the opposite direction. That is exactly what this conference report would do. It will go in exactly the opposite direction.

Mr. BARTLETT. The point was made earlier about a monopoly that is claimed for the oil industry. Is it not correct to say that the control or the impact of large companies in the drilling business is very minor? The 30 largest companies control only 21 percent of all the domestic wells drilled in this country. To compare the impact, as I think it was compared, of the steel industry, the computer industry, the aircraft industry, or whatever it is, a comparison of more or less, eight companies in those areas of specialization in industries which have a power, impact, control, or influence of 65 to 85 or 90 percent?

Mr. GRAVEL. That is the reason why I just cannot fathom the developments

of recent months in what is probably one of the most competitive areas of our society. We seem bent on turning it into a military-industrial complex similar to aviation.

We are going to destroy the last vestiges of the free enterprise system because of the crisis, because the people of the country do not understand what has happened. And the leadership of the country has not been able to enlighten the people as to what has happened. Nor are the media of the country carrying their full responsibility in focusing on areas which really deserve it by getting the facts of the case to the people.

Mr. BARTLETT. I should like to ask the Senator from Alaska about the mandatory import program, which was discussed earlier. The mandatory import program was created in order to protect the domestic industry, and I certainly agree that we have to have a prop under it, so that it will have the ability to create national security and create a strong economy.

But is it not true that even though that was the intent of the mandatory import program in a domestic industry, to permit a certain amount of cheap foreign oil to come into the country, but not to the detriment of the domestic industry—is it not true that the mandatory import program was used to coerce the industry into increasing prices when costs went up? As costs went up 30 or 40 percent for steel and labor, and 75 percent for drilling a well, there was not the opportunity to justify the increased costs or to have those costs passed on.

Instead, the managing of the program during different administrations created a tendency to cause prices to go up. Then foreign oil was permitted to come in in larger and larger amounts.

The major companies, and even the independents, said, in effect, that if that went on too far and too long, so that domestic industry was weakened, then we would see, instead of plentiful, cheap foreign oil, a very short supply of expensive foreign oil.

Was the mandatory import program designed to protect the domestic industry, or actually was it to weaken it in the full hope of having cheaper and cheaper foreign oil?

Mr. GRAVEL. Exactly. It was done with knowledge and forethought, I believe, in the 1950's and 1960's, so that what we call cheap foreign oil—and there was a place in the world that had cheap oil, and it was the Middle East—could be imported, and the American people became accustomed to it.

It was done so that the American people could have cheap energy. That is what happened. We went on a binge. We went on a drunk. We had cheap energy for a while, and we glutted ourselves to the point that we destroyed elements of the industry. We have skewed other parts of the industry so that they cannot be recognized.

Take the natural gas company in Chicago, which sells natural gas cheaper than the Btu cost of the oil. We realize a sense of disaster that has been brought on the country. Now the chickens are coming home to roost. They are coming

home to roost because the Arabs, when they are in a command position, have just raised the price of oil.

We have all the figures. We did not make the price of oil like this; it was the Arab nations that did it.

Mr. BARTLETT. I recall the Senator from Washington said he voted against, or opposed, whichever was the case, the mandatory import program. But it seems to me that that position in opposition to the import program as it was designed was an opposition against an effort designed to strengthen the domestic industry.

Mr. GRAVEL. Exactly.

Mr. BARTLETT. But that in our quest for the cheaper and cheaper oil, finally it seemed to hit a high point in 1970, I believe, when the AREEDA Committee was appointed by President Nixon, and the report of that committee to the Cabinet level committee was that the mandatory import system should be completely dismantled, and they estimated that the price of oil would then go to \$2 a barrel, and the estimates were made that the price would stay and be stabilized at \$2 a barrel, for the simple reason that there was so much foreign oil that there would not be the opportunity to make political judgments by the Arab nations, and have an embargo or have a cartel setting the price, but that the argument was made, am I not correct, during that period that this would come about at such time as our reliance on foreign oil had increased to the extent that we would not be self-sufficient and could not take care of ourselves, and that at that time the price would rise and the amounts available would drop, so that we would be blackmailed, or at least the attempt would be made to blackmail this country and change its foreign policy, and that all this would result from the weakened condition of the domestic oil industry, because people wanted cheaper and cheaper oil.

Mr. GRAVEL. I call to the attention of my colleague from Oklahoma a speech that was made on this very floor 15 years ago, saying exactly the same thing, containing the statement the Senator has made, that the market would control, that we would have cheap oil until they get control, and then there is no more cheap oil, and dire consequences would ensue; and I think that is the situation today.

Mr. BARTLETT. If the Senator will yield, he urged an interesting comparison that can be made with the price of wheat. My State is a large wheat producer as well as a producer of oil and gas and other energy. It would seem to me that we had a chance to observe the price of wheat, and that in order to produce the larger amounts required by the world market, it was necessary for the market price to go up, in order to do the fertilizing and increase rather drastically the production, because up to the point of the large wheat sale to Russia, we had had surpluses for a long time; but that if, however, this kind of a proposal would make sense to bring about lower prices and higher productivity, it would make sense in the case of wheat.

I say heaven forbid, because I think

we have seen from the baling wire shortages, fertilizer shortages, steel shortages, and all the other shortages we have a chance to experience, including propane, that higher prices in the free market, set by thousands of purchasers, are prices that will do several things to bring on more production of a commodity, or, in the case of energy, to bring out alternate sources of energy; and, in addition, it works to dampen the demand.

Mr. GRAVEL. I think that is what we are talking about, because I for one rest my case on the argument of free enterprise and the movement of capital. Because we do not have what we consider a real free enterprise system domestically or internationally, we then must have a free enterprise system that has some government involvement. When we talk about the cheap energy of the sixties and early seventies, that is a free market. Then all of a sudden when the Arabs have control of the market, having driven out the competitors, they have a monopolistic situation, and jack it up. In order to assure continuity of the situation, we must, therefore, have government involvement.

I think that is where many of us go askew philosophically.

We had the "cheaper gas" problem given to our Committee on Finance, where the instigation of our energy problem was tracked back to this regulation of gas in 1954. It was interesting to see the machinations that took place in the marketplace as a result of that first intrusion by government into the domestic situation.

I think we can arrive at, within certain boundaries, a very competitive situation within the Nation, and then, when we go abroad, we have to look at a different type of problem. But essentially our problem is one of capital.

When I made the comparison with wheat, I was trying to get across to my colleague that we have problems with inflation in all parts of our society, and that, to my mind, that inflation is caused primarily by a lack of understanding of what has to be done in our economy. That is the reason why many of our colleagues stand here and say, "We are going to roll back the price of oil."

You cannot roll back the price of oil, and you cannot roll back the price of wheat. You must pay what it costs. If you try to avoid the cost, you skew and distort the system, and then you have to distort it again and again and again.

So I advocate fighting inflation, and hope that it might sell here in Congress, so that we can try to return to some fundamentals of this business.

What we are talking about, when we say we are going to roll back the price of oil, is not going to decrease inflation; it will actually cause inflation. The price of oil will be higher by the month of July, if this legislation passes, for the very simple reason that we cannot put a gun to everyone's head; and what investor in these United States of America is going to take his money and invest it in oil in this country, if his investment can only return a price of \$5 a barrel, when he can go to Canada and sell his product for \$10?

There is no one in his right mind who will take his money and do that with it, and there is no way to pass a law to take money away from the people and force them to make the investment, unless we make this a socialistic country.

My colleague from Wyoming remarked that we may see the Government go into the oil business. That has happened in the last few months. It is happening at Elk Hills, and it is happening in Alaska, where the Navy sits on the national reserves that the people have in oil. The Navy is sitting on that oil, and if we develop that oil, it would depress the market. Likewise, it would cause the inflationary prices in energy to subside; and do not blame the oil industry for that one. Blame the Navy and the Members of Congress who insist on keeping that 33 billion barrels of oil in the hands of the Government.

I would be happy to continue the dialog with my colleague, because I find him very expert in these areas.

Mr. BARTLETT. I would like to ask the Senator from Alaska, if he will yield a little further, he mentioned, I think, the Brookings report. The Brookings report gives a very valid explanation as to how the control on the price of gas, starting in 1954, led to the present shortage of gas.

Mr. GRAVEL. And oil.

Mr. BARTLETT. That is what I was going to add. Because the point that the Senator made earlier about gas being underpriced on a Btu basis as much as one-tenth, but at least a third compared to oil, and because of its attractiveness as an environmentally acceptable fuel, that it did keep the price of oil and coal down; and also the mandatory import program and the manner in which it was administered was the depletion allowance plus the effort to do away with the mandatory import program in 1970, so that the price of oil has also been controlled both directly and indirectly, which has followed the same pattern.

Mr. GRAVEL. This report is actually humorous in that regard. It has a section in it which tells the utility companies, through the President, to convert such utilities from gas to coal. So if we are telling them to raise the price of electricity, we are playing a shell game. The Government on the one hand says, "Gas is cheap at 30 cents, therefore you utility companies are supposed to do the job for your consumers, to buy gas because it is cheaper than oil." Now we get to another arm of Government around and saying, "Don't you buy that cheap gas. You have got to buy the more expensive coal."

Would it not be better if we turned around and deregulated gas and let the people choose freely on a priority basis from the best energy available?

Mr. BARTLETT. It seems to me there is confusion about what this proposal would do. From my understanding of it, it would roll back only that part of the domestic price structure that represents about 19 percent of total consumption—around 29 percent of total production. But it does not affect approximately one-third of the oil we consume, which consists of some 5 million plus barrels of im-

ports. This price is not controlled in any way by this country but is a cartel-set price by the OPEC nations and others.

Mr. GRAVEL. What figures is the Senator using?

Mr. BARTLETT. The figures I used are about 19 percent and 20 percent.

Mr. GRAVEL. Could I help my colleague there, as I have some recent figures from the—

Mr. BARTLETT. That is on consumption not on production—29 percent on production and only 19 percent or 20 percent on consumption.

Mr. GRAVEL. The figures I have here are the total amount of foreign and domestic crude oil and foreign products. So often I used to follow that pattern; but in Connecticut, Massachusetts, New York, when they cannot find any oil, they go to Germany and buy some. So we have to look at the total picture. The total picture on crude oil and refined products is, imported 37.8 percent. This is totally unregulated.

Mr. BARTLETT. Right.

Mr. GRAVEL. Almost 40 percent will be unregulated. So what will happen is, we are going to cause a scarcity because people will not drill. That will create more scarcity at home in order to buy more abroad. It will place a greater burden on the balance of the resources of the world.

Mr. BARTLETT. Where will the larger companies that might prospect to a greater extent in this country do their drilling? Will they not go after higher prices in other countries?

Mr. GRAVEL. The majors are already abroad in their integrated status, so let us not talk about the majors. I do not know of any independent in his right mind who would drill in this country under those circumstances. Why would a person go to a bank to borrow \$100,000, or take \$1 million in borrowed money from the bank and drill in Oklahoma or Texas or in Alaska, when he can go to Canada and drill, or go to Indochina or to Saudi Arabia or to Libya, or any other place that will let him in—the North Sea—if he can find oil and sell it for \$10 a barrel? His banker would never lend him the money in the first place. People will go where they can get a return on their money. If we make money non-competitive—which is exactly what this bill would do—we will create additional domestic scarcity. Prices will go up abroad and therefore we will cause more inflation plus—we have not even touched on this, and I know my colleague is aware of how serious it is—jeopardizing the outflow of dollars. When we begin to buy oil abroad at \$10, \$15, \$20 a barrel, the amount of dollars that will go abroad—at a time when our own oil companies are being nationalized abroad so that they will not be able to bring back any more profits—there will be no more contributions to our balance of payments, and we will have an accelerated "double whammy" on our trading position. This is much more serious than the energy crisis—very much more so.

Mr. BARTLETT. I believe that the current estimate of our foreign balance-of-payments deficit amounts to about \$20 billion—that is, at the current vol-

ume and current prices. They could both increase, and we would like an increase in volume, if we could, of course. The price, we hope, will come down. But at this level of expenditure, I think it is safe to say that we cannot afford it without serious erosion—

Mr. GRAVEL. My colleague is talking a little bit like the Senator from Washington (Mr. JACKSON) when he says he hopes the price will come down. He hopes that Canadians will roll back the price of oil and that the Arabs will roll back the price of their oil. Since when do people have a desire to make money?

Mr. BARTLETT. That is a very good point, but the point I was going to make is that currently it is \$20 billion and that is an amount we cannot afford. Also, to get back to—

Mr. GRAVEL. That is \$20 billion in purchases abroad?

Mr. BARTLETT. Yes.

Mr. GRAVEL. Right. The figures I have, if I could amplify on them, indicate that last year, when we were debating the Alaska pipeline, the best projections were that by the mid-1980's—1985—we would have a net—not just purchases—but a net outflow of \$30 billion. That is the key thing. In order to keep up our balance we not only have to produce oil in Oklahoma, but we had better also produce a lot of wheat. We know the only way right now that we will get by is in the quantity of dollars we send abroad to buy oil. That was last year's projection. This year, the best projection we could put together is that by 1980 we will have a deficit—net outflow—of \$30 billion a year.

From the end of the Second World War until last year—roughly 30 years—we pushed abroad, with the war costs, with foreign aid, and so forth, between \$80 billion and \$100 billion. That of course, is one of the things that triggered the devaluation we experienced in 1971 and again in 1973. What we are talking about, if we continue with this, from our dependency on oil, whether to Venezuela, Canada, Saudi Arabia, Great Britain, Norway, or wherever—if we try to push that many dollars abroad, we are going to go bankrupt. Our monetary system will fail. That means unemployment and poverty on the grandest scale possible.

Mr. BARTLETT. My figures are a little bit different from yours. They show a \$20 billion balance-of-trade deficit currently being spent in purchases of oil. If we add 2 million barrels per day, which we would like to do, and which at the present time we cannot do, we would be approaching something like \$27½ billion in balance-of-trade deficits. If we really accept the challenge, there is no chance we can have as much energy as we want, because we cannot afford the amounts we would like to bring in. We are going to have to suffer larger and larger shortages.

If I might carry this one point further, I would like to mention that, as I understand it, this price rollback—the fixed price rollback provision in the bill—applies only to about 19 percent of our consumption, about one-fifth of the total consumption of crude oil and oil products in this country; that the average

price of new oil, matching and new oil itself, and stripped oil, as of about 2 weeks ago, was \$9.51; that the price of imported oil at that time, although it ranged up to \$22, was priced, on an average, about \$10.40; that the price of domestic oil was \$5.25; that the price of all domestic oil was \$5.95.

The point I am trying to make is that the price of oil that would be rolled back and the price of oil that is now providing the incentive is just 19 percent of the total consumption; further, that if this rollback is accomplished to \$5.25—and I think if it is accomplished to that point, because it is written into law with a small limit of 35 percent that can be increased, it is going to stay there—and all the savings to the consumer are realized by the consumer, he will only benefit to the amount of 1.4 cents a gallon. I think that somehow the consumer feels that there is going to be a large saving involved, but I do not believe this is the case.

Mr. GRAVEL. I am grateful to my colleague for making that point. That is probably the best point of the day.

The hoax that is being perpetrated upon the public is that they are going to get something for nothing. Even this bill, which is trying to do that, cannot do that because of the economics in question.

Mr. FANNIN. Mr. President, last Monday, the Washington Post published a most enlightening editorial on oil prices and controls. While I do not agree with the idea of a ceiling on any oil price, or a price ceiling on any other commodity, for that matter, I certainly do agree with the Post editorial that—

Both the petroleum industry and the government often speak as though, except for offshore drilling, our domestic production has a rigid physical limit and is now irrevocably declining. In fact, the amount of oil drawn from a well depends on the price for which that oil can be sold. If the oil is forced up the well by the pressure of gas or water trapped underground, producing it is comparatively cheap. But in time the pressure will fall, and then recovery begins to get expensive. At that point it becomes necessary to pump the oil up. In time, again, the pump no longer reaches the oil. Then recovery becomes still more expensive, and perhaps the producer has to pump water or gas down to force the oil up. Or perhaps he just closes the well as exhausted. In this country wells have typically been shut down with two-thirds of the oil still in the reserve that it has tapped. But at present prices it will become profitable to get many of these wells back into production. It will also be worth sinking wells deeper in the old fields.

One of the best examples I know of is an old field in west Texas that has been rejuvenated and is now producing almost twice as much oil per day—127,000 barrels—as it did at its peak production 30 years ago.

Not only has production been doubled but ultimate recovery of oil in the formation is now estimated at about 45 percent rather than 41 percent when the new recovery effort was begun and the national average of some 32 percent.

As Jim C. Langdon, chairman of the Texas Railroad Commission and an authority on secondary and tertiary recovery methods said recently:

The state's known reservoirs contain at least 98 million barrels of presently unrecoverable oil, part of about 300 billion barrels in the same category in the U.S. as a whole.

In my judgment, at a cost not exceeding the cost of extracting an equivalent amount of energy from tar sands, shale oil, gasification or liquefaction of coal, nuclear power, or the importation of natural gas... an additional 10 percent of our "unrecoverable" crude oil could be produced.

This would permit the nation to almost double its present recoverable reserves, or expressed in other terms, would be equivalent to the discovery of three new North Slope Alaskan oilfields.

Mr. President, I ask unanimous consent to have printed in the RECORD the editorial published in The Washington Post.

There being no objection, the editorial was ordered to be printed in the RECORD, as follows:

OIL PRICES AND CONTROLS

For one narrow category of American oil production, a price roll-back makes sense. A limit needs to be set on the oil that is not currently controlled at all. But it is disingenuous for Sen. Henry Jackson (D-Wash.) to suggest that this kind of roll-back would result in large reductions in gasoline prices for consumers. The dispute revolves around a provision in the Energy Emergency Bill, which has been reported by the conference committee but still faces a sharp challenge from the oil state delegations in both Houses of Congress. The first question is whether Congress ought to legislate oil price ceilings at all, and the second is where to fix them.

Legislating fixed ceilings, and trying to write prices into law, is always a bad idea. It is particularly dangerous when applied to a commodity like oil, the future prices of which are very difficult, to predict precisely, Congress is, of course, thrashing about in frustration as it tries to find some way to express its constituents' wrath over gasoline costs. So far none of the various proposals to attack excess profits or to sell prices has given any hope of working effectively. But there is one thing that Congress could do immediately. It could extend the price controls to cover all of our domestic oil production, not just part of it. That would compel the administration to set a top price for the oil that, under the present exemptions, is now selling for about \$10 a barrel. The Energy Emergency Bill would let the President put the ceiling as high as \$7.09, which is just about the right range under present circumstances. But circumstances change quickly, as we have all seen, and Congress would be wiser to leave the figure flexible.

About one-fourth of our domestic production is now exempt from controls. The administration took the controls off oil from new wells to stimulate drilling, and Congress exempted small wells. The rest of our domestic production is controlled at \$5.25 a barrel. Domestic production is two-thirds of the oil that we are now consuming. The country imports the other third, and the world price for crude oil is now around \$10 a barrel.

The trouble with the present very high, uncontrolled prices is that they are inducing more expensive production than we are likely to need. It is perhaps a strange thought in midst of the present shortage. But it is important not to let the shortage chase us into extremely costly petroleum ventures that require \$10 a barrel to be viable. Most evidence suggests that the Treasury Department is probably in the right range when it says that, over the next several years, the price of crude oil in the United States will come to rest at about \$7. Since the administration itself assumes that the country does

not need more expensive oil, it is hard to see any reason to induce production based on higher prices. It is not only the producers who have a stake in the question. If very high prices become established in practice, and a substantial part of the industry adapts to them, it can be expected to use its very considerable political influence to protect them.

The chief reason for expecting a price of \$7 a barrel is that large new sources of oil become profitable at that figure. Shale extraction is one example, and coal liquefaction is possibly another. A number of economists also believe that, at that same price, conventional drilling and the present methods of recovery may give us enough oil to meet our national requirements.

Both the petroleum industry and the government often speak as though, except for offshore drilling, our domestic production has a rigid physical limit and is now irrevocably declining. In fact, the amount of oil drawn from a well depends on the price for which that oil can be sold. If the oil is forced up the well by the pressure of gas or water trapped underground, producing it is comparatively cheap. But in time the pressure will fall, and then recovery begins to get expensive. At that point it becomes necessary to pump the oil up. In time, again, the pump no longer reaches the oil. Then recovery becomes still more expensive, and perhaps the producer has to pump water or gas down to force the oil up. Or perhaps he just closes the well as exhausted. In this country wells have typically been shut down with two-thirds of the oil still in the reserve that it has tapped. But at present prices it will become profitable to get many of these wells back into production. It will also be worth sinking wells deeper in the old fields.

The administration is letting crude oil prices rise in order to induce more production. It is letting retail prices rise to discourage consumption. But both of these processes take time. Bringing in new wells and reviving old ones will take months and years. For the consumer, it will be a slow process of switching to more efficient cars and appliances, insulating houses and reorganizing patterns of commuting. To keep the shortages in hand during this time of adjustment, the country will require gasoline rationing. While some parts of the Energy Emergency Bill can better be deferred, the section providing the authority for rationing needs to be enacted immediately.

Mr. FANNIN. Mr. President, I think this is very significant, because it indicates the vast amount of oil that can be recovered if we give our domestic industry a chance to go forward with their work at a decent price level, and not restrict them to the point that they will not be in a position to make the development being discussed.

I ask unanimous consent to have printed in the RECORD an editorial published in the Los Angeles Times, which brings out the danger in the oil price rollback.

There being no objection, the editorial was ordered to be printed in the RECORD, as follows:

DANGER IN THE OIL PRICE ROLLEBACK

The House-Senate conference committee working on emergency energy legislation has adopted a proposal by Sen. Henry M. Jackson (D-Wash.) that purports to aid consumers by rolling back the price on some domestically produced crude oil.

Jackson estimates that his plan would cut gasoline prices by 4 cents a gallon, and perhaps it would, for a while. But there is also a good chance that the measure would work to shrink the output of U.S. petroleum, thereby adding to shortages and ultimately

leading to still higher prices because imports of expensive foreign oil would rise.

Under the Jackson measure, a basic price of \$5.25 a barrel would be set on U.S.-produced crude oil. That is the regulated price at which about 70% of U.S. crude is now selling. This is so-called "old oil," pumped from wells that were in operation in 1971, when price controls were imposed.

The rollback would affect the 30% of U.S. production where price is not now controlled. This involves "new oil," meaning oil from wells that have boosted output since 1971, or wells that came into production since then. It also involves oil from stripper wells, which produce 10 barrels or less a day. Many of these wells, which now account for about 12% of U.S. production, had been shut down for years because it was not economical to operate them.

Oil from these sources could be permitted to sell for as much as \$7.09 a barrel, as against the nearly \$10 it is now commanding. But energy chief William E. Simon argues that, given the costs of production, even \$7.09 is not enough to keep this oil flowing, and that, if that limit was imposed, the output of some new oil would decline and a lot of stripper wells would again be shut down. There is no certainty of that, but there is a good possibility, and that is the great risk of the Jackson plan.

Some congressional action on soaring oil prices is plainly needed. But, as we have argued before, that should come as part of a comprehensive approach to the whole price, profit and tax situation in the oil industry. A main aim of reform must be to encourage, through the tax structure, greater investment in U.S. production and refining. The Jackson measure could have the opposite result, and for that reason Congress should say no to it.

Mr. FANNIN. Mr. President, we should realize what is being done when we start talking about rolling back prices. The oil industry has been going forward very rapidly since it was given the opportunity to sell oil at a price the market would stand, which is still lower than the price of oil that is being imported.

When we are talking about domestic oil we are talking about jobs in this country; we are talking about taxes being paid in this country; we are talking about keeping industries going that are vital to the economy of the country.

Why should we pay a higher price for foreign oil? For every barrel of oil that is not produced in this country, to take care of our needs we must import a barrel of oil from a foreign country at a premium price. Even then, we do not know whether we can get that additional barrel beyond the ones that could be produced domestically. It is certainly a fallacy to say that we should roll back these prices to a point where it will not be profitable for us to produce the oil that is available in this country.

We are talking about approximately 350,000 stripper wells now producing in this country, 84,000 of them in Texas alone. The Texas Railroad Commission further brought out that those 84,000 stripper wells produce 3.8 barrels a day, involving deposits of 1,800 million barrels of oil.

So it just seems ludicrous that we could even think about rolling back prices that would curb production of this oil.

Mr. HANSEN. Mr. President, will the Senator yield?

Mr. FANNIN. I am pleased to yield to the Senator from Wyoming.

Mr. HANSEN. Mr. President, I appreciate very much the observations just made by the distinguished Senator from Arizona. What we need to understand is how the laws of economics do work. I am certain that if we have been listening, as I hope we have, to the Senator from Arizona he has pointed out very graphically exactly what does happen in the free enterprise system as the prospect for profit increases, because I think I have materials which supplement and corroborate what he has said.

Mr. President, I ask unanimous consent to have printed in the RECORD at this point an article from the Oil and Gas Journal dated January 14, 1974, describing in detail the Texas Slaughter field.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

TEXAS' SLAUGHTER FIELD OUTPUT SOARS

One of the largest oil fields in Texas is undergoing extensive infill drilling, and production is surging as a result.

Over 600 additional wells have been drilled in Slaughter field since late 1969. And the rigs are still running. As a result of the performance of these wells and price increases since the start of redevelopment, another 150-200 wells probably will be drilled in areas too poor to justify this work under earlier economics.

The infill drilling, coupled with secondary recovery by waterflooding, has resulted in a dramatic increase in oil production. In the early 1960's, when waterflooding was instituted, production had declined to about 22,000 b/d from a high of 76,000 b/d in 1944. By 1968, waterflooding had pushed production up to 60,000 b/d. Latest production figures show field output at 127,000 b/d, and it is expected to peak at about 150,000 b/d in 1975.

Recovery efficiency also has been increased. Under waterflooding, ultimate recovery of a typical portion of the field was expected to be about 41% of original oil in place—about 9% above the national average. Infill drilling, however, is expected to boost recovery to 44.6%—and in a field the size of Slaughter, those 3.6 additional percentage points represent a lot of oil.

Slaughter field was discovered in 1936 and as presently defined covers 100,000 acres. Production is from the San Andres at about 5,000 ft. During primary development, operators drilled 2,500 wells in the field, most on 35.4-acre spacing.

The odd spacing pattern is due to the surface ownership being based on Spanish land grants which used the "labor" measure. Labors vary somewhat in size but in general contain about 170 acres.

In Slaughter, spacing was set at five wells to the labor, with the option of infill drilling to 10/labor. The result was a "chicken-wire" pattern of development for secondary recovery with two injectors for each three producers.

Amoco Production Co., which holds about 40% of the field, found through a numerical model that additional recovery could be obtained by infill drilling of two additional producing wells spaced in the middle of the pattern. And in the best part of the field infill drilling could be extended along the legs of the injection pattern.

The company believes that present economics will allow this to be expanded to the lower quality areas of the field.

Pumping units and production equipment are being added continually to handle the increased oil and water, but pipeline capacity is adequate, Amoco says.

Completion of the infill drilling is expected to take about 2 years or longer.

TERTIARY RECOVERY

Operators hope to boost the take still higher if tertiary recovery proves feasible. Although the secondary-recovery projects in Slaughter field have yet to reach peak production, Amoco already has initiated two tertiary pilot projects—both miscible drives. Still another has been started by Texaco.

In planning its two projects, Amoco selected small areas which had not been affected by waterflood, drilled new wells on a double five-spot pattern, and is sweeping the reservoir with water before initiating tertiary efforts.

The Slaughter Estate Unit project will be using CO₂ injected at 2,600 psi (bottom-hole). Injection pressure is critical and was carefully engineered to avoid fracturing the formation.

The Central Mallet Unit project is using natural gas enriched with propane. Cost of the enriched gas, however, will impact on the economics of the project.

Close spacing is being used in both projects in order to speed their evaluation.

Amoco says that if either is expanded, it will be done on normal spacing.

Texaco's tertiary project is on the Bob Slaughter block, which is considered to be one of the lushed portions of the field.

The experimental project will be a polymer flood with four injectors and one producer on a 4-acre, five-spot pattern.

A Texaco official said the area has been partially flooded and will be completely flooded before polymer injection begins next September or October.

Two of the wells were converted and three are new holes.

Texaco also has done quite a bit of infill drilling, maps indicate. A rough count shows 123 producing wells on infill locations on the Bob Slaughter block.

The Mallet Land & Cattle Co. "E" lease, which adjoins the Bob Slaughter block on the northwest, appears to have 19 wells drilled and three location on infill spots.

To the south, on the Mallet C, D, and F leases, 33 wells are in what appear to be infill spots.

Other principal operators in Slaughter field are Mobil Oil Corp., Gulf Oil Corp., Skelly Oil Co., and Getty Oil Co., Sun Oil Co., Union Oil Co. of California, Atlantic Richfield Co., and Crown Central Petroleum Co. have lesser holdings.

In almost every feasible area, operators have conducted infill drilling programs similar to those of Amoco and Texaco.

Some work still is in progress, particularly on the thin edges of the field where higher prices are making it economic.

Mobil started its program in 1970, has completed 84 wells, and plans to drill another 15 by the end of 1974. Getty drilled 82 wells on its Dean A unit between 1966 and 1973. The company says it has no plans for additional infill wells or tertiary projects on the unit.

A Conoco spokesman, noting that the reservoir thins out considerably and gets tighter under its Dean Unit, said the unit was developed on a diagonal 40-acre spacing. Only one infill well has been drilled, and its performance will dictate whether to drill any more.

Atlantic Richfield started early on its miscible test, which was conducted from 1958 to 1962 on the H. T. Boyd lease.

ARCO injected small propane slugs into three areas, followed by gas and finally with alternate slugs of water and gas to improve the sweep efficiency.

The project is considered a limited success, spokesmen say. The lease is under waterflood at this time.

ARCO developed the 1,247-acre lease on 24-acre spacing, closer than in the bulk of the field, and as a result has had to do little infill drilling. The company has 44 wells on

the lease, 17 of which are employed for injection.

Another three wells will be drilled next year.

Mr. HANSEN. Mr. President, in the Texas Slaughter field the output has soared as infill drilling has taken place. It is expensive. The only reason the added interest and activity in that field occurred is that it becomes a profitable operation due to these things that are taking place. Secondary and tertiary efforts are being implemented. The field is being drilled more intensively than before because it is profitable to do that.

Mr. President, I also ask unanimous consent to have printed in the RECORD an article from World Oil dated October 1973, which is headlined "Improved Oil Recovery Could Help Ease Energy Shortage."

There being no objection, the article was ordered to be printed in the RECORD, as follows:

IMPROVED OIL RECOVERY COULD HELP EASE ENERGY SHORTAGE

(By Ted M. Geffen)

TEN-SECOND SUMMARY

Economic incentives plus advancement up the "learning curve" will enable industry to produce more "unrecoverable oil." The Big Four tertiary recovery methods, their advantages and limitations, are outlined.

TERTIARY RECOVERY is one answer to the existing energy crisis that has not been given sufficient consideration to date. With better economic incentives will come more research and development of recovery methods needed to produce a potential 55 billion barrels of already-discovered oil. Industry, with the aid of associations such as the API, has begun and will continue to develop ways to economically produce these currently unrecoverable reserves.

This article discusses tertiary recovery methods now in use and those of the future. An explanation of various methods, and a means of selecting an appropriate method for a particular reservoir, are given.

Future U.S. oil demand will be supplied from domestic sources plus imports. The domestic supply will be derived from three sources:

1. Exploration
2. Secondary recovery
3. Tertiary recovery

Exploring for new oil requires, to a large extent, drilling deeper and moving further from inhabited areas, making financial investment less desirable under existing economic conditions. In addition to increasing difficulty in finding new oil, costs for drilling wells deeper are not directly proportional to depth. Generally, for each 5,000 feet of added depth, cost about doubles. In hostile environments (offshore and Arctic) it doubles again. And ecological protection continues to be a major cost factor.

Secondary recovery has reached maturity with waterflooding the most used method. Opportunities of adding to domestic supplies from existing fields are dwindling rapidly. Of course, new discoveries will add a future storehouse of oil to be recovered by waterflooding. But even after prudent flooding, most oil discovered in a field will be left in the ground.

Secondary recovery has been a significant contributor of low-cost oil, but this low cost has given a false reflection to the real overall cost of supplying domestic needs. Replacement crude oil supplies will not enjoy all the benefits in costs provided by extensive waterflooding.

Tertiary recovery refers to recovering part of the oil left after waterflooding. Capturing this oil economically is today's challenge to

industry. It is not a new objective, since millions of research dollars have long been invested to develop technology that might provide a third crop of oil.

Tertiary recovery adds a new dimension of difficulty for the operator. This "hard-to-get" oil is in known locations but is also in lean deposits. These conditions present both advantageous and disadvantageous economic situations. Like exploration, tertiary recovery projects are heavily front-loaded financially, with large initial investment and long income delays. Environmental difficulties should be minimal since conventional and in-place production facilities would be used. Operational wells must be available, as tertiary operations usually will not be able to carry the financial burden of redrilling.

U.S. OIL RESOURCE

A simplified picture of U.S. original oil-in-place (OOIP), discovered to date (excluding North Slope), is shown in Fig. 1. Of 408 billion barrels, recognized reserves are 33 billion barrels, which include all oil ultimately recoverable by presently used methods from presently found fields. This is about one-third as much as the 100 billion barrels already recovered. With no change in operating mode, ultimate recovery will be about 32.5% of oil found. The other 67.5% can be divided into three categories: unrecoverable, possibly recoverable and potentially recoverable.

Some experts judge that about 40% of OOIP will not, for practical reasons, be recovered. The remaining 27% is divided into two parts. Half is thought, by some visionaries, reachable by future innovative developments, while the other half is considered recoverable using current and soon-to-be-developed technology together with favorable economic environment.

Fifty-five billion barrels in this category may be optimistic. It is 1 1/4 times the current recoverable reserve figure. Even if this amount is not ultimately realized, there could still be a volume equal to current reserves. This is the target for tertiary recovery and it offers a significant contribution in easing the energy shortage.

Industry is spending more than \$25 million per year on tertiary recovery research. This is being done to reduce the time factor in achieving viable recovery methods. Essentially, all funds for tertiary recovery research have been and are being supplied by the producing industry. Stimulations to increase this effort have been suggested by individuals in responsible positions inside and outside industry.

TERTIARY METHODS

Unconventional, improved fluid injection or tertiary methods, whatever name is used, also are operable in the secondary recovery mode since the same technology applies. They can be used instead of waterflooding, but their value is in terms of incremental oil recovery to incremental cost over waterflooding.

Tertiary methods are listed in Fig. 2. Boxed-in words refer to manner in which supplied energy is moved through reservoirs which exist between wells. A few methods incorporate a substance in the injection water which, in effect, improves performance of conventional waterfloods.

Methods offering greatest incremental recovery potential involve injecting a slug, or small bank, of one fluid and driving this slug through reservoir with another fluid(s). These combinations are indicated by connecting lines. The first material injected is characteristically small in volume, but high in cost.

Objective of the active ingredient (solvent or hot zone) is to mobilize and push forward oil that remains in pore spaces. This, in turn, is propelled from injection to production wells by drive fluids such as water or a selected gas.

A dilemma exists in using methods to maximum potential since the more effective the oil clean-out job (displacement efficiency) by the active ingredient, the greater the tendency for the method to contact less oil-bearing formation (sweep efficiency). This can be disastrous to oil recovery efficiency.

A remedy, called mobility control, is performed by selecting injection fluids, such that each fluid bank is driven by fluid having a lesser ability to flow. This allows for displacement efficiency as well as forcing fluids to spread out and increase sweep efficiency, or volume of rock contacted. Examples of mobility controls now used are polymers added to drive water and water slugs injected alternately or continuously with drive gases.

In waterflooding, a certain amount of injected fluid, cycling through high-flow conductor zones, can be tolerated because of water's low cost and handling. Economics demand that these conditions, if severe, be corrected in tertiary projects. Means to overcome this detrimental condition are under development and so far are not widely used.

For treating thin, low-volume, highly permeable zones, materials such as time-set gels and very high molecular weight polymers are encouraging. If the culprit is a fracture, then a promising treatment is to inject a slurry of solid fines (powders).

Tertiary operations have to support costs of handling large volumes of water put into formation by previous operations. Thus, it is often desirable, when possible, to use an improved recovery method instead of waterflooding as a secondary recovery approach. This could have favorable economic benefits in some fields. Total life would be shorter and further savings would be realized by handling water only once.

However, there is a benefit from waterflooding first, particularly in formations where there is little or no tertiary experience. The waterflood can be used as a low-cost evaluator of reservoir floodability. This information would be critically useful—first, in making the decision as to desirability of specific tertiary operations, and second, in design.

Fig. 2 shows the considerable tertiary technology available. Some methods are being used commercially in selected fields, while others are being evaluated by field pilot tests. Most technology originated in industrial laboratories, but the API Fundamental Research Program also has contributed significantly. Project 37, in particular, provided basic information and led to miscible hydrocarbon methods. And discussions and symposia sponsored by the former API Oil Recovery Technology Domain Committee introduced ideas which were the starting point, or contributed many of currently recognized improved recovery techniques.

"BIG FOUR"

Recovery methods with promise for commercial application include hydrocarbon miscible, CO₂ miscible, water miscible and thermal.

Hydrocarbon miscible methods involve displacing crude from pore space by solvent action, which prevents formation of interfaces between driven and driving fluids. Elimi-

ination of interfaces allows complete displacement of oil from the part of reservoir contacted by solvent. Existence of interfaces in waterflooding and other immiscible drives causes capillary trapping and incomplete displacement of oil.

Since solvent is expensive, only a bank or slug is used. Final drive fluids is a less valuable material, miscible with the solvent, which can be either hydrocarbon or non-hydrocarbon gas. Injected fluid compositions and pressure are selected so that fluids will exist as single phase in the reservoir. Sometimes the ultimately injected fluid can be water.

Solvent slugs can be generated on site using some hydrocarbon components native to the crude, or by injecting intermediate molecular weight (i.e., C₂-C₆) components. In high pressure gas drives, solvent consists mostly of intermediate materials that vaporize from in-place crude. In rich gas and LPG slug methods, intermediates are injected.

When using LPG solvent, miscibility occurs on first contact with reservoir oil. But when using rich gas, the solvent bank forms by condensation of intermediate molecular weight hydrocarbons from injected fluid into reservoir crude. Thus, like high pressure gas drive, rich gas requires some contact between injected fluid and in-place crude to form solvent. This is commonly referred to as multiple contact miscibility.

Solvent and drive fluids are not as dense or viscous as reservoir crude. Because of this, in horizontal floods injected fluids tend to override oil and preferentially penetrate more permeable zones. These effects can be catastrophic toward efficient oil recovery. However, both natural conditions and operating controls can reduce these effects significantly.

For example, gravity effects can be used advantageously by flooding downward in pinnacle reef or other high relief type reservoirs. Thin shale lenses in the pay can reduce gravity override tendencies. Operating controls to force injected fluids to spread through more reservoir can be accomplished by injecting water continuously, or in slugs, with solvent and drive fluids.

Major investment items for hydrocarbon miscible flooding are costs of compressors and injected fluids. Availability of solvent and drive gas materials is critical as demand for these materials (as energy supplies) increases directly with demand for crude to be recovered.

Carbon dioxide miscible conditions can be realized with some crude oil by multiple contact mechanisms. Preceding comments regarding hydrocarbon miscible flooding also apply to CO₂ since it can be classified as a solvent.

In CO₂ miscible applications, density and viscosity contrasts are not as severe as when using hydrocarbon solvents, so there is a lesser degree of overriding and bypassing. In some geographic areas CO₂ is inexpensive, particularly where there is a naturally occurring deposit, large plants releasing high volumes of stack gases of CO₂, and where CO₂ is removed from natural gas for pipe line transportation.

Where a very low cost, large CO₂ supply is available, consideration can be given to driving a CO₂ slug immiscibly by water in-

stead of miscibly by more valuable gas. Then, an "extra large" slug of CO₂ can be injected to allow for trapping by the drive water.

Water miscible floods use chemical mixtures both for solvent-acting slug and drive fluid, and are mostly water. The slug is a combination of surfactant solutions that form a micellar fluid, or micro-emulsion. Drive fluid is "thickened" water made by adding a polymer to injection water. Since injected fluids are primarily water, gravity segregation effects are minimal. To maximize sweep and oil recovery efficiency, mobilities of slug and drive fluids are designed to provide a favorable viscosity contrast with the reservoir fluid.

Chemicals used tend to plate-out (i.e. absorb) on pore surfaces. This loss adds to cost. Acceptable chemical costs and higher crude prices will be the key to commercialization of this method.

Thermal methods use heat to thin oil and make it flow more easily to production wells. Steam injection, both in "huff-and-puff" mode and straight-forward drive, is used commercially in recovering heavy oils. From a technical standpoint, steam drive also could be used for tertiary recovery of some high gravity crudes.

Combination of forward combustion and waterflooding (COFAW) involves igniting formation oil in some wells and then propagating a combustion zone by continuous air injection toward producing wells. Water injected has two potentially favorable effects. It conserves generated heat and moves it forward, thus minimizing amount of air which must be injected and amount of crude which must be burned to maintain combustion. It also improves sweep efficiency by mobility control.

Both of these add to potential oil recovery. Major investment is for compressors, and compressor fuel can be a significant expense. Air and water supply present no general availability problems. COFAW can be used to recover any API gravity oil that could be or has been waterflooded.

SCREENING GUIDE

Table 1 gives tentative preferred criteria for screening projects that are prospects for application of Big Four methods. This guide is based on reported information derived from laboratory and field studies and is useful only as an initial filter. But prospects that pass this screen are candidates for further engineering study.

Screening Guide items are related to suitability of a reservoir, both as to operability and economic potential. One screening factor deserving special mention is oil saturation. It is not uncommon to find that calculated average oil saturation remaining in a reservoir is higher than that which exists in the portion of pay that can be processed by tertiary recovery methods. This situation is particularly prevalent in reservoirs where length is many times greater than width, and where pay stringers have limited horizontal continuity. Before committing to tertiary recovery operation, it is advisable to make direct measurements of oil saturation by at least one of several means, such as log-inject-log, pressure core analysis, tracer injection, etc.

TABLE 1.—SCREENING GUIDE—PREFERRED CRITERIA FOR UNCONVENTIONAL RECOVERY METHODS

Process	Oil grav. API	Reservoir temp. °F	Operating press. psia	Oil visc. cp	Perm. md	K _{field} /K _{core}	Thickness feet	kh/μo md-ft/cp	φh	S _{oi} %	φS _{oi} frac.	Depth feet	Well spacing acres	Favorable factors	Factors which increase risk
High pressure gas drive	>40	(?) >3,500	<1	(?)	<5	(?)	Low, best	>25	(?)	>25	(?)	(?)	(?)	1. Deep formation (see pressure). 2. High dip. 3. Undersaturated crude with high C ₂ -C ₆ concentration.	1. Extensive fractures. 2. Strong water drive. 3. Gas cap. 4. High vertical permeability in a horizontal reservoir. 5. High permeability contrast. 6. Natural gas supply limitations.

Process	Oil grav. API	Reservoir temp. °F	Operating press. psia	Oil visc. cp	Perm. md	$\frac{K_{field}}{K_{core}}$	Thickness feet	kh/μo md-ft/cp	φh	S _o , %	φS _o , frac.	Depth feet	Well spacing acres	Favorable factors	Factors which increase risk
Enriched gas ¹ drive (condensing gas drive).	>30	(*) >1,300	<3	(*) <5	<5	(*)	do.	>25	(*)	(*)	(*)	(*)	(*)	1. At low pressures gas required with high C ₂ and low N ₂ . 2. High dip. 3. Thin pay, low k _v .	Items 1-6 same as above. 7. LPG supply limitations
LPG slug	>30	(*) >1,300 (900-1,000 with modif.).	<5	(*) <5	<5	(*)	do.	>25	(*)	(*)	(*)	(*)	(*)	1. Distress (cheap) LPG available. 2. High dip. 3. Thin pay, low k _v . 4. C ₂ rich fluid for low pressure reservoir.	Same as above.
CO ₂ (miscible) ¹ (water or gas driven).	>30	(*) >1,100	<3	(*) <5	<5	(*)	do.	>25	(*)	(*)	(*)	(*)	(*)	1. CO ₂ available. 2. High dip. 3. Thin pay, low k _v .	Items 1-5 same as above. 6. CO ₂ supply and transportation requires high initial investment.
Micellar ¹ flooding	(*) ≤220	(*) <10	>20-50 in contacted portion of reservoir.	<5	(*)	High best.	>25	(*)	(*)	(*)	(*)	(*)	(*)	1. It is essential that good water be available (<5,000 ppm total dissolved solids; <500 ppm CA ⁺⁺ and mg ⁺⁺). 2. Waterflood sweep >50 percent.	1. Extensive fractures. 2. Strong water drive. 3. Gas cap. 4. High permeability contrast. 5. Highly saline (>30,000 ppm. TDS) connate or flood match.
Steam drive	>10	(*) <2,500	(*)	(*)	>20	>20	do.	<0.10 (>780 B/AF)	<4,000	≤10	1. Existing wells adaptable to steam injection. 2. Available gas supply for steam generation. 3. Available water which is cheap, slightly alkaline, free of H ₂ S, oil, dissolved iron, and turbidity.	1. Strong water drive. 2. Gas cap. 3. Low net to gross pay fraction. 4. Extensive fractures (not as serious as in other injection methods).			
CO ₂ CAW	<45	(*) >250	(*)	<5	>10	>100	do.	>0.05 (>390 B/AF)	<500	≤40	1. Formation temperature >150°F. 2. Low vertical permeability. 3. Available water which is cheap and won't precipitate solids in presence of air. 4. Existing wells in condition to withstand high pressure. 5. Cheap gas supply for compressors.	1. Extensive fractures. 2. Gas cap. 3. Strong water drive. 4. Low net to gross pay fraction. 5. Serious preexisting emulsion problems.			

¹ Requires laboratory test to confirm suitability.

* Not critical.

SECONDARY VERSUS TERTIARY RECOVERY

Table 2 compares some tertiary with secondary methods. Figures, except for waterflooding, are based on judgment since insufficient data are available on tertiary field projects to generate statistical values. Also, figures represent expectations for carefully selected, well-designed, good-performing operations.

In addition to Big Four, figures are shown for three tertiary methods not as effective in displacement efficiency as are miscible or thermal types.

Recovery improvement values in Table 2 are presented in the form from the value of recovery obtained by previous operations to the value after conducting the referenced method. For example, where a miscible hydrocarbon tertiary project might be conducted, oil recovery by preceding primary and waterflooding would be around 45%. After tertiary operation, total recovery would be about 75%, or an incremental increase of 30% OOIP.

Incremental costs, above normal well operating expense, are shown as a range in terms of dollars per barrel of incremental oil. These values include both investment and added operating costs. For tertiary methods, 50-80% of this cost is for front-load items such

as facilities and flooding fluids. Total cost for production would require (in addition to normal well operating costs for the field involved) cost to lift and dispose of water injected during preceding waterflood operations, and time value of investment money due to time delay in income.

Three methods, not included in Big Four, are expected to reach nominal increase in recovery for modest increase in cost. Of the Big Four, CO₂ miscible flooding appears to have the edge in costs. Unfortunately, cheap naturally occurring supplies of CO₂ near suitable fields are limited. Big Four are thought to have potential of providing additional recovery from some reservoirs amounting to 30-35% of OOIP. Incremental cost is estimated to be in the range of \$0.75 to \$1.50 per barrel for ideal applications.

Not all tertiary field projects will be successful. During pioneer applications, there will be a higher than normal number of marginal performers and failures. So real average cost to industry could be more until advancement up the "learning curve" minimizes risk. To put a sizable part of potential tertiary oil into the category of U.S. reserves, risks will have to be taken. There is an urgency for doing this before irrevocable losses of oil occur because of abandonment of wells.

TABLE 2.—COMPARISON OF CONVENTIONAL SECONDARY AND TERTIARY RECOVERY

	Normal range of recovery improvement percent OOIP		Approximate range incremental cost above well operating expense dollars per barrel of added oil
	From	To	
Secondary:			
Waterflood	10-20	30-50	0.35-0.50
Steam (heavy oil)	10	60	.75-1.25
Tertiary (after watered-out):			
Alternate gas-water	30	40	.25-.35
Thickened water (polymer)	30	40	.60-.80
Wettability reversal	45	55	.50-.75
Miscible-hydrocarbon	45	75	.75-1.00
Miscible-CO ₂	45	70	.60-.85
Miscible-micellar water	45	80	1.00-1.50
IFT (micellar) water	45	75	.75-1.25
Thermal (CO ₂ CAW)	40	70	1.25-1.50

TERTIARY RECOVERY'S FUTURE

In December 1972, the National Petroleum Council published a report, "U.S. Energy Outlook." An extensive study was made (start-

ing in 1956) of sources which make up domestic production. Also, projections were made as to future (1970-1985) sources considering future economic climate changes. Several sets of assumptions were used.

One of these projections indicates that the proportion of total reserves to be added, attributed to tertiary operations, rises gradually starting in 1975, to 25% by 1985. Also by 1985, tertiary production will, after an inherent time delay, amount to about 20% of domestic total.

It appears from this forecast that there is likely to be an accelerated effort by industry on conducting tertiary operations. Continued frequent publication of results will help in development of viable methods in the time available. Delays could result in some extra oil being lost due to abandonment of uneconomic wells.

This article is taken from the paper "Improved Oil Recovery Expectations When Applying Available Technology" presented at the Third Annual Meeting, Division of Production, API, held in Denver, Colo., 1973.

Mr. HANSEN. Mr. President, this article tends to underscore the points made by the Senator from Arizona. Again, I think it points out how the laws of supply and demand work in a country that believes in free enterprise, as the United States does.

I know we do not have much time left between now and tomorrow at 4 p.m., at which time a final vote will be taken, but I hope very much that before that hour arrives most of us will have taken the time to consider what the facts are to try to make up our minds as to what will be best for America in the long run, and not try to demagog an issue that already has had too much of that done. It is easy to get up and inveigh against high prices for gas and oil. We tend to forget that in the United States we have had bargain basement prices for oil and gas for many years. This was mostly because we have had an industry that was active and alert to the problems in this country. It has been true also that through the tax treatment, through the depletion allowance, and other publicly passed laws we have subsidized the consumer in America. By not taking as much as we have from the oil companies we have had lower prices than anywhere else in the world.

I have seen a comparison for 1973 with respect to the price of gasoline in the United States. It was roughly half of what it was in England, one-third of what it was in Germany, and it was exceeded by nearly six times when customers in Spain bought gas and oil. There is not a place in the world that approximates our price. We have had dramatic increases in price and I know how concerned everyone is. But when we take cognizance of the fact that we are talking in this bill only about the domestic production in the United States and think we are going to bring prosperity and happiness to all the people by trying to roll back domestic prices, we fail to recognize that we are playing into the hands of exporting nations around the world who find it incredible that the United States in a time of stress, and this is a time of stress, would take steps to curtail its own production so as to make us even more dependent on foreign sources.

We complain already about the big stick the Arabs have been using through the boycott, and bend our policy with regard to the Middle East. If we want to make certain that that club becomes larger than it is now, all we have to do is pass this bill because if we decrease our domestic production we will increase our dependence on foreign sources of supply. This is not the time to demagog an issue as vital as this.

Nearly 80 percent of all the energy we use in this country comes from oil and gas. I know the distinguished chairman of the Committee on Interior and Insular Affairs spoke about the 250,000 people who were out of jobs. I am as concerned as he is. He proposes in his bill to roll back prices and by Federal participation in unemployment compensation benefits to help people out for a longer period of time after the State unemployment rights have expired.

I think a far better and more realistic position to take is to recognize that ours is an energy-intensive country. We do depend on jobs in this country. For every man-hour that is discharged in raising the food and fiber that makes Americans the best fed and the best clothed of all the people in the world, for each hour we work on our farms we bought 1.2 gallons of diesel fuel or gasoline.

Mr. President, if you want to bring about poverty in rural America you do not have to do anything more about farm production; just shut off the petroleum.

I was in California at Christmastime. At that time the State Unemployment Compensation Board of California estimated that there were then 32,000 people out of jobs in California alone because of the fuel shortage. If we are concerned about the 250,000 people out of jobs now I can assure Senators that if this bill passes, then before this year is up we will be concerned about several times that many people out of jobs, because this country runs on energy. There is no substitute for it in the short run. We have great reserves in this country and we have other alternatives of energy that can be put to use. We talk about coal gasification and liquefaction. It is estimated we have recoverable oil shale deposits in the tri-State area of Utah, Colorado, and Wyoming for 1.8 trillion barrels of oil.

Mr. GRAVEL. Mr. President, will the Senator yield for a question?

Mr. HANSEN. I yield.

Mr. GRAVEL. How can we develop that oil shale or bring about the gasification of coal if we are limited by the price of oil? Oil shale cannot be developed for \$7 a barrel, I do not care what they are saying. Some were saying that figures last year showed an 8.8 percent increase in inflation. How can we pass a law saying the price shall be no more than \$8 barrel?

Mr. HANSEN. In response to the Senator's question, there is no way. If we want to make certain that we do nothing about developing these other important sources of energy, which include uranium and geothermal steam, all we have to do is pass this bill, because it works this way.

Mr. GRAVEL. And solar.

Mr. HANSEN. And solar. These alternative sources of energy become feasible. A lot of the technology has been done. The University of Wyoming has been doing a lot of work on oil shale technology. They have retorted it. When the temperature is raised to 900 degrees the kerosene in the oil shale turns into shale oil. A few years ago it cost about \$7 a barrel before that operation would become operable. Now, as the Senator from Alaska has pointed out, with inflation, the cost is above that.

So none of these things are going to happen until they become economically possible. People will put money into programs that have a reasonable expectation of being profitable. We know that even though we are short of energy, there are not many people trying to dig a coal mine or oil well by themselves unless they have a fair prospect of getting a fair return on their investment. That is precisely the point made by the distinguished Senator from Alaska. That point has been eloquently made by the Senator from Arizona. It is a fact that the American people ought to keep in mind.

Unless we decide, as some would have us believe, that socialism and the Federal Government's entry into private business is a better way to operate than the way we have historically operated in the United States, I say there is no place for this bill. If we want to do what England has done, if we are satisfied to have miners work a couple of days a week, or none at all, in order to prove their point with the Government, where the coal industry is nationalized, if we are willing to put up with cold houses, very little energy, with people out of work, which brings us to a situation as desperate as it was in early World War II days, that should be our choice.

But I hope we do not get into this legislation tomorrow. I hope we do not proceed to a final vote on that issue, under any illusions as to what the facts are. They are clear. They have been spelled out by people in Government. They have been spelled out by people in industry. They have been spelled out by the academic community. The record is replete with testimony that these decisions are made on the basis of return on investment, and the record of the industry itself has disclosed that same thing.

It was reported earlier today that drilling activity in 1957 was double what it was in 1972. There were more than 20,000 independent oilmen working in this country in 1957. By 1972 there were about half that many. The reason for that was that there were better ways of making money than to go out and invest money in the increasingly costly search for oil. It costs more money to drill wells than previously. Wells have to be dug deeper than before.

The thing that has turned the situation about and made our production start to climb, though it be ever so slightly, has been the fact that the prospect for a profit has encouraged people to invest their money into this business. We need more oil, not less, in America, in order that Americans may work tomorrow.

Mr. GRAVEL. Mr. President, I want to underscore one point that my colleague made, and that is the item of inflation. I am terribly chagrined to see good friends of mine make the argument that we cannot do what we are doing, that we have to roll back the price of oil, because the present price is so hard on poor people. Let me say that everything is hard on poor people, because they are poor. We cannot solve the problems of poor people by this energy bill. If we do, we are going to spew more problems on our society. What we are going to do is cause a flight of capital, which means productive capacity, which means jobs. That is the tragedy behind the legislation. There are a lot of well-meaning and sincere people who support this effort, who think that they are doing the right thing. But, in point of fact, they are doing exactly the opposite of what they think they are doing.

(Mr. HUDDLESTON assumed the chair as Presiding Officer.)

Mr. HANSEN. Mr. President, if the Senator from Alaska will yield, I want to say that I agree with his comments. A poor person with a job is better off than a poor person out of work, who does not have to buy gas, because he has nowhere to go. If he is out of work, he is not going anywhere. So the one thing that is worse than having a high price on gasoline is having no gasoline. If we want to bring about real trouble, all we have to do, being as gas oriented as we are, is simply decrease that supply. If we do that, I can assure Senators we will have trouble, as the Senator from Alaska knows so well.

Mr. GRAVEL. I thank my colleague.

One point made by the Senator from Washington was that production in 1973 was constant, or that there was no appreciable increase in production as a result of increased prices. Prices did not begin to move substantially until September of this last year, so obviously, with the lead time in question, there is no question that the marketplace could not act sufficiently rapidly to bring about a substantial increase in productivity. But what productivity did take place was offset by the fact that a number of wells were expiring, wells that were no longer able to produce.

Let me in closing, before I address a few questions to my friend from Arizona, say what I think is the fundamental argument of the whole energy crisis. It is: First, that the need for oil, oil and gas, is only the short-run part of the problem. We are talking about our ability to do something about the next 10 to 15 years. After that will come a more serious problem. Then, by the year 2000, if we as a society have not made a breakthrough on new energy sources, we will see the planet disintegrate from the effects of pollution.

The reason why we are responding in oil today is in recognition of the fact that it is a technology readily at hand, and it is something our society is geared to. It is something we can do something about and show results in 4 months, 12 months, 18 months, 2 years, 5 years. In fact, in 5 years we could be out of the

woods. I do not say we will be self-sufficient, but we would be out of the woods. But there would have to be an alternate source of energy, whether it be nuclear energy, solar energy, you name it. That is where the real problem lies. But in the short run, if we do not address this problem, we are going to make severe mistakes. One is the simple problem that we are not putting moneys from the Government's side in the responsible area, be it R. & D. or prototypes. We are not nearly addressing ourselves to the problem.

In the private sector, the problem is one of capital. We can cut out the depletion allowance, we can cut out all of the taxes; we will have nobody drilling for oil; we are going to be out of all the incentives. It works out that way. Incentives depress price and bring about production. Essentially, that is the situation we have in this country with depletion allowance and others. But if we go to taxation, we depress consumption, but we also do nothing at all about increasing production, which is the way to solve the problem.

Then when we go to rationing, we make it worse. What we do is apportion the burden, but provide no solution to the problem of what has caused the burden. In other words, we are treating only the symptoms; we are not treating the illness.

If we go to a free market, that is, if we deregulate gas, deregulate oil, what we do is permit oil to rise to a level where it clears itself on the market and we move from a period of scarcity which increased prices. That is what we have in this country, scarcity occasioned by the lack of capital over the last 10 or 15 years to do the job domestically.

So if we do away with scarcity, in point of fact what happens is that we turn around and actually decrease price. We decrease price through abundance.

I will read from a statement which I think touches exactly upon what we are doing today. I will read from the statement of Prof. Edward J. Mitchell, professor of the University of Michigan. Here is an oil expert, a person who is not in the pay of the oil companies. Here is a person who does not even live in an oil State. This is what he has to say:

To create a shortage, you simply depress the market price below the level that equates supply and demand; to eliminate the shortage, you free the price and allow it to rise to equate supply and demand once more. To create a surplus, you raise the price above the market-clearing level; and to eliminate the surplus, you let it fall back. We always have three options: a market-clearing price; a price that gives us shortages; a price that gives us surpluses. Our representatives in Washington are presently opting for energy shortages. If we are all decided in retrospect that this was a bad choice, we have the means to change it.

That is exactly what this legislation will do. It will create a shortage and will increase the inflation in this country and bring about an increase in price.

We need to increase the price at the well so the people will be able to buy wells and pay the price for gas stations and everything else.

We have two ways of doing this. We can get it from price, and that is pay as you go, which is the least inflationary approach. Then the consumer pays.

And if we do not want to do it that way, we can get it in the same way that the Soviet Union and other countries do. We can get it from taxation. We can tax the people and pay for the refineries with the money. The taxpayer pays it, because he is also the consumer. All we have to do is to pick the system that we want to solve the problem with.

In closing, I would briefly like to ask my friend, the Senator from Arizona, something that is very important to me and something that I have been laboring to have changed.

I notice that in the energy bill that we are dealing with, there is a section entitled "Federal Actions To Increase Available Domestic Petroleum Supply."

I do not have any knowledge of this. However, I do know where we can double in 1 day's time, if Congress were to act intelligently on this subject, the reserves of this country. And I am not talking about Elk Hills and I am not talking about the sands of Colorado. I am talking about Pet 4, which is in Alaska.

The military tells us this, and not the oil companies. I have talked with the oil companies, and they are fairly pessimistic about it. However, the Navy tells us that there is somewhere between 33 billion barrels of oil and 100 billion barrels of oil, to say nothing about gas. With the Alaskan pipeline we could begin in 3 years to bring that oil to our country.

I would like to know what debate ensued in the conference that caused this title, the Federal actions to increase available domestic petroleum supplies, to be added, to the categorical exclusion of these petroleum reserves.

There is a dichotomy that I cannot reconcile with the public interest. I would like to know why that is not released to the American people.

Mr. FANNIN. Mr. President, I would like to say to the Senator from Alaska that it was stated that this would be handled separately. However, I do not anticipate that action, since it was, as the Senator knows, removed from the legislation. At one time it was included, but disposition of petroleum reserves 1, 2, 3, or 4 was removed from consideration with the understanding that it would be taken up at another time.

Mr. GRAVEL. It is my understanding, based on an authorization by Congress to fund the Navy for \$150 million over the next 10 years to do oil exploration at Pet 4, that we have already made a decision to do that.

Mr. FANNIN. I understand that the cost of these measures is continuing. I cannot give the Senator complete information, because I think the Armed Services Committee and other committees are involved in addition to the Department of the Interior.

Mr. GRAVEL. Mr. President, I testified before the Armed Services Committee to try to get them away from what I think is folly. I understand the Department of Defense has now changed its position and is prepared to turn this over to

the Department of the Interior. I hope that my friend would use his influence to investigate that matter and maybe inform the American people in that regard.

This is what is at stake. The argument is used that the Navy needs Pet 4 in the event of emergency. I cannot conceive of any emergency more serious than we have today, the embargo on any shipments or sales of oil to the American Government. It is an emergency in NATO, our tanks in NATO and our fleet in the Mediterranean. They cannot buy Arabian oil. That means that if France or Germany makes a deal with the Arabs, as long as King Faisal says that they cannot sell it to the Navy, they cannot sell it.

We have seen Aramco placed in that situation. Members of this body charged that these companies were lacking in patriotism. If I had been a stockholder and holding any stock in a company having control of Aramco, I would have said that it was impossible for the president of Aramco to stand up to King Faisal, because he could have thrown him out the next day. It would have been false patriotism to my mind.

The point I am making is what would the Air Force or the Navy have done since last October with the embargo? What have the armed services of this country done? We have taken oil from the west coast, from the civilians. We have taken oil from the east coast and taken it away from civilians. And they have used it to man the vessels and the planes.

We have done this under the name of the National Defense Act. That is not bad, because they do have to have first priority.

What I cannot understand is that in a time of emergency, the Navy and the Air Force take it away from the total inventory. Where do they get the notion that they have to hang on to the petroleum reserves in Alaska and in other parts of the country when it is not usable by them? They should let it go to inventory and then let them take it off the top if they need it.

If they do not need the Pet 4 or the reserves elsewhere, they could then be sold to the oil companies. They could then turn around and buy refined products.

It is ridiculous that people talk about conspiracies to hold back large quantities of oil.

The only place that I know that that occurs is in Pet 4 in Alaska, where I know that there are large quantities of oil. That oil belongs to the American people. And the American people cannot get it, because of the myopic vision of some leaders in the Department of Defense, in the Navy. And incidentally that is also true with respect to some Members of the Congress, who sustain the hoarding of oil and keeping it from the people.

I do not think this is in the national interest. And I hope that with that realization by the American people that some people are hoarding oil, something will be done about it.

I do not buy the argument made about Teapot Dome and all of that. We have had scandals in our history: Teapot Dome was one of them. But turning the oil over to the Navy, because of Teapot Dome does not make any more sense to me than asking an admiral to be Vice President of the United States, because we had a bit of a scandal in the Vice Presidency. It does not make any sense there, and it does not make any sense with respect to Pet 4.

We have a department of the Government that leases billions of acres of ground, and has for the last 50 years, and there is no reason to be depriving our industry of power, because we are afraid to do what is right and what is in the public interest. We have billions of barrels of American oil that our people could use today if they could get the Government to stop hoarding it. Mr. President, the conspiracy, if there is one, lies within the bowels of the Government.

Mr. President, I do not seek comment on the part of my colleague from Arizona. I hope, however, that the American public will demand that something be done in the near future.

I ask unanimous consent to have printed in the Record at this point a paper I have written on the profits of oil companies, together with an article published in Human Events of January 5, 1974, written by M. Stanton Evans, entitled "Why Oil Companies Need Higher Profits."

There being no objection, the articles were ordered to be printed in the Record, as follows:

PERSPECTIVE ON OIL PROFITS

Our current energy crisis has sparked a new public awareness of oil company profits. As oil prices continue to rise, Americans are understandably concerned that their increased costs of oil will result in windfall profits for the petroleum industry.

As the policing arm of the people, the government is called upon to insure that the prices charged for petroleum products and the profits made by oil companies are not exorbitant. This means that Congress must accept the responsibility for determining what are the most socially beneficial and proper price structures and what should be the accepted level of profitability.

Much of the decision making will be based on the financial figures now being released by the oil companies. I think that it is imperative, therefore, that everyone understand the framework within which decisions must be made and the true import of the information now being made available.

In determining the optimal profit rate of the petroleum industry, we are faced with two competing objectives. To keep prices as low as possible, profits should not be excessive. However, as we have a significant energy shortfall, profits must be high enough that energy companies can acquire the capital they need to expand production facilities. To finance this massive expansion, which will require \$1 trillion by 1985 to meet world oil demands, petroleum companies will need to make sufficient profits to partially finance large reinvestment programs and to maintain a profit ratio sufficient to attract outside capital to finance the rest.

It is estimated that the industry's profit margin will have to rise to nearly 16% if we are to meet the objective of supplying all of our energy needs. Raising profits to this level will necessitate price increases. If al-

lowed to function freely, our market structure would increase the price automatically, thus insuring that oil companies will have the capital needed to finance the investment program our country needs.

In our free enterprise system, we have only three alternative pricing strategies. We can allow the price to move to the equilibrium point that equates supply and demand; we can set the price below the equilibrium price and have shortages; or we can set the price above the equilibrium price and have surpluses. Our policy so far has been a policy of shortages.

Through strict price controls and an excess profits tax, we can keep oil profits low, but at a cost committing ourselves to a continued policy of shortages. It is a simple fact that in a free enterprise system, we cannot have both.

Some say there are two other alternatives if we decide to move away from the free enterprise system, government regulation or government ownership.

Government regulation of energy has already been tried with natural gas and has failed. Price regulation has succeeded in keeping prices low, but at a cost of not permitting expansion to increase supplies. Natural gas shortages experienced in the last two years are a direct result of the mismanagement of the private sector by government. The result of this policy is that we are forcing consumers to buy imported gas at a cost of over one dollar per mcf, which is over five times greater than the domestic price for interstate gas and far above the cost consumers could be paying for increased domestic supplies if a reasonable price increase were allowed. Thus government regulation is not really an alternative, but a policy of shortage under the free enterprise analytical framework.

Neither is government ownership, that is nationalizing the oil companies, a true alternative. The government could charge abnormally low prices and expand production. However, the capital required to expand production and subsidize prices would still be paid by Americans through taxes.

There is no way to escape the additional charge for increased supplies, only to hide it. We can pay it through prices and allow private industry to continue managing oil operations, or we can pay it through taxes and allow government to manage operations.

Frankly, I see no reason to put government in the oil business. This distorts our whole free market system and runs counter to our American philosophy of free enterprise.

Furthermore, while a free market policy aimed at overcoming shortages rather than maintaining artificially low profits and prices will result in price increases, I do not believe that these will be exorbitant.

A rise in prices is a normal market adjustment procedure. We have a shortage of oil and must finance increased exploration and development which will increase supplies. Price increases are the cost of expanding domestic production to eliminate our dependence on foreign oil.

With foreign oil selling at prices of \$10 to \$12 per barrel on contract oil and some spot sales going as high as \$20 per barrel, normal economic market operation would increase domestic production even if we were guaranteed a continuous supply of foreign oil. The increased prices that would result will still be cheap in comparison to world prices and will allow oil companies to increase domestic operations in those areas that cannot be developed at current domestic prices, but which would bring forth additional supplies at prices much lower than world oil prices. Thus, keeping prices too low to finance increased domestic exploration results in our being forced to purchase foreign oil at much higher prices.

Some individuals would have us believe that current prices have led to profits that already are too high and claim that recent profit increases prove this point. But what is their standard for excessive profits?

It seems to me that industry profits must be viewed either relative to their historical rates or relative to the profits of other industries. A historic determination, however, cannot be based merely on the rates set in one particular year because of the cyclical nature of our economic system. The profits in one or several years could be abnormally low, and it is unfair to analyze one's profit only with respect to a low period. Industry shifts and changes occur over a decade or longer, and it is within this time-frame that we should look at profits.

Information and tables prepared by the Congressional Research Service and some supplementary data I have compiled from the Fortune 500 listing and Business Week supply the information for this more equitable analysis.

The profitability of the major oil companies has been steadily declining during the twenty years prior to 1973 as shown in Table I. The declining profit margin indicates that costs of oil production have increased significantly faster than oil revenues. The declining return on net investment shows that earnings have been squeezed.

CRS-17

TABLE I.—SELECTED FINANCIAL DATA FOR 30 OIL COMPANIES

[Dollars in millions]

Year	Revenues	Net income after tax	Percent profit margin	Percent return on net worth
1952	19,458	2,020	10.4	13.4
1957	31,162	3,100	10.0	12.4
1962	37,473	3,344	8.9	10.0
1967	55,921	5,402	9.7	11.9
1972	106,278	6,860	6.5	9.6

Source: Chase Manhattan Bank: Financial analysis of a group of petroleum companies, 1953, 1958, 1963, 1968, 1973.

This same information on profitability is shown for several major oil companies in Table II. Fluctuations in profitability are normal occurrences in the oil industry. For instance, for Gulf to bring its 1972 percent return on net worth up to its previous level for 1967, a 264% increase would be required. A 264% increase sounds phenomenal and excessive, but is a 13.1% return on net worth really that high? I do not believe so in comparing it with the historical patterns of the oil industry and previous rates of up to 16.6%.

CRS-20

TABLE II.—SELECTED FINANCIAL DATA FOR 8 MAJOR OIL COMPANIES

[In millions of dollars]

	Revenues	Net income after tax	Percent profit margin	Percent return on net worth
Exxon:				
1952	4,050.8	520.0	12.8	16.6
1957	7,830.3	805.2	10.3	14.0
1962	9,536.9	840.9	8.8	11.1
1967	13,266.0	1,232.3	9.3	13.0
1972	20,309.8	1,531.8	7.5	12.5
Mobil:				
1952	1,560.6	171.1	11.0	11.3
1957	2,976.1	220.4	7.4	9.3
1962	3,933.3	242.3	6.2	8.2
1967	5,771.8	385.4	6.7	10.0
1972	9,166.3	574.2	6.3	11.2
Texas:				
1952	1,510.1	181.2	12.0	13.7
1957	2,344.2	332.3	14.2	16.2
1962	3,272.1	481.7	14.7	14.8
1967	5,121.4	754.4	14.7	15.3
1972	8,692.9	889.0	10.2	12.4

	Revenues	Net income after tax	Percent profit margin	Percent return on net worth
Gulf:				
1952	1,528.8	141.8	9.3	13.0
1957	2,730.1	354.3	13.0	16.2
1962	2,836.3	340.1	12.0	10.6
1967	4,202.1	578.3	13.8	13.1
1972	6,243.0	197.0	3.2	3.6
Shell:				
1952	1,142.6	90.9	8.0	15.2
1957	1,764.6	135.1	7.7	13.8
1962	1,960.7	157.7	8.0	11.2
1967	3,073.2	284.8	9.3	13.8
1972	4,075.9	260.5	6.4	8.9
Standard of Indiana:				
1952	1,592.1	119.9	7.5	8.8
1957	2,010.1	151.5	7.5	7.5
1962	2,147.8	162.4	7.6	6.6
1967	2,918.1	282.3	9.7	9.5
1972	4,503.4	374.7	8.3	9.9
Arco:				
1952	602.8	40.5	6.7	10.7
1957	565.9	25.3	4.5	7.4
1962	580.7	46.3	8.0	7.7
1967	1,270.8	130.0	10.2	10.2
1972	3,320.7	195.6	5.9	6.6
Socal:				
1952	1,015.3	174.9	17.1	15.0
1957	1,650.8	288.2	17.5	15.9
1962	2,150.9	313.8	14.6	11.6
1967	3,297.8	421.7	12.8	10.8
1972	5,829.5	547.1	9.4	10.5

Source: Moody's industrial manuals and annual Fortune 500 listings.

Since 1968, the petroleum industry has been near or below the average for return on investment for all manufacturing industries, as shown in Table III.

CRS-21

TABLE III.—PERCENT RETURN ON NET WORTH FOR SELECTED U.S. INDUSTRIES

Industry	1972	1971	1970	1969	1968
Soft drinks	22.4	23.1	22.7	22.5	22.7
Soap, cosmetics	20.4	19.3	18.7	18.6	18.9
Drugs and medicines	19.7	19.0	18.8	17.0	19.8
Autos and trucks	17.2	15.0	5.8	13.8	16.6
Instruments, photo goods	16.8	15.4	15.8	18.7	19.2
Tobacco products	16.2	16.6	16.4	14.6	14.6
Hardware and tools	15.9	12.5	12.5	16.5	16.7
Household appliances	15.4	12.1	11.9	13.5	14.0
Brewing	14.7	15.8	16.0	13.2	13.2
Lumber and wood	13.9	11.2	10.2	15.2	14.1
Furniture	11.6	11.9	8.4	12.4	11.3
Chemical products	11.3	9.7	9.7	11.4	11.7
Petroleum production and refining	10.8	11.2	11.0	11.9	13.1
Cement	8.8	7.6	6.1	7.1	7.5
Aerospace	8.8	6.3	6.7	11.4	13.9
Textile products	7.8	6.6	6.4	8.8	9.8
Metallurgy	7.1	7.7	6.6	9.4	8.3
Iron and steel	6.2	4.6	4.6	7.4	8.5
Total, manufacturing	12.1	10.8	10.1	12.4	13.3

Source: First National City Bank: Net income of leading corporations, 1968-72.

Furthermore, there is a wide dispersion in rates of return among the various industries. There is no one set rate without deviation. The free market "assigns" rates based on risk and other factors. When these factors change, the rate must be allowed to fluctuate if we are to keep a dynamic market structure.

Many recent comments on petroleum profits have focused on the increase in total profits. While complete figures on 1973 profits for all firms and industries are not available, Table IV shows how 1972 profits compared with 1971. Some industries like the oil industry experienced only modest profit increases, while others increased by as much as seven times the oil industry rate, or 47%. These are natural and healthy adjustments which help allocate capital to those firms that generally can make the best use of the additional funds and to those firms which must finance expansion.

TABLE IV.—CHANGES IN PROFIT, 1971 TO 1972

Industry	Increases (percent)
Paper and wood products	47.5
Broadcasting and motion pictures	40.3
Shipbuilding, railroad equipment, mobile homes	37.2
Metal manufacturing	33.4
Motor vehicles and parts	33.2
Textiles	29.8
Appliances, electronics	29.3
Glass, cement, gypsum, concrete	28.6
Chemicals	27.8
Measuring, scientific, and photographic equipment	21.9
Farm and industrial machinery	20.7
Office machinery (includes computers)	18.8
Leather and leather products	18.6
Apparel	18.4
Metal products	18.4
Publishing and printing	17.8
Pharmaceuticals	16.0
Soaps, cosmetics	14.9
Rubber	13.5
Aircraft and parts	13.0
Food	9.8
Petroleum refining	8.8
Beverages	6.5
Tobacco	6.2
Mining	3.8

Source: Fortune 500 listing.

Thus far the focus has been on industry data, as indeed it should be. However, as most individuals are more acquainted with companies rather than industries and it is companies not industries which receive profits, it may be helpful to look at data on some well-known corporations. Consequently, Table V shows profitability data on several corporations. The oil industry figure is included as a comparison, and one can refer to Table II for the same information on major oil companies. Many companies in various industries have much higher profit margins and returns on investment than the oil companies.

TABLE V.—PERCENT RETURN ON NET WORTH AND PROFIT MARGINS OF SELECTED COMPANIES, 1972

Company	Percent return on net worth	Percent profit margin
Gillette	22.0	8.6
Eastman Kodak	19.8	15.7
General Motors	18.5	7.1
Minnesota Mining & Manufacturing	18.1	11.6
Columbia Broadcasting	17.5	5.9
General Electric	17.2	5.2
IBM	16.9	13.4
Ford Motor Co.	14.6	4.3
American Broadcasting	13.5	4.1
General Mills	12.4	3.4
The Washington Post	12.3	4.5
The New York Times	11.5	4.1
Pillsbury	10.1	2.4
Honeywell	9.7	3.9
Oil companies	9.6	6.5

Source: Fortune 500 listing and Business Week Quarterly Report on profits.

Data for 1972 has been used thus far because data for the year 1973 is not yet available. However, it is important to analyze the changes that have occurred during 1973 as much as possible because of the major impact the petroleum shortage has had on the industry and its financial posture relative to other industries. Tables VI and VII therefore compared third quarter figures for 1973 and 1972, Table VI by industry and Table VII by company.

Industries other than oil have also experienced accelerated profit growth. The leader, the steel industry, experienced a profit growth 60% greater than the petroleum industry.

TABLE VI.—3D QUARTER 1973 PROFIT FIGURES FOR SELECTED INDUSTRIES

Industry	Profit percent change from 1972	Percent profit margin
Steel	101	4.3
Metals and mining	82	6.3
Paper	74	6.4
Oil	63	8.3
Chemicals	51	7.2
Building materials	38	5.9
Automotive	34	2.7
Textiles and apparel	33	3.2
Aerospace	25	1.3
Office equipment, computers	23	10.3
Instruments	22	11.7
Drugs	18	10.2
Utilities	17	13.0

Source: Business Week Quarterly Report on Profits.

TABLE VII.—3D QUARTER 1973 PROFIT FIGURES FOR SELECTED COMPANIES

Company	Profit percent changes from 1972	Percent profit margin
The Washington Post	249	3.3
General Motors	118	3.5
The New York Times	113	4.8
Ford	95	1.9
Pillsbury	73	2.3
Oil companies	63	8.3
Honeywell	46	3.7
American Broadcasting	37	4.8
IBM	28	14.9
Eastman Kodak	23	18.0
Minnesota Mining & Manufacturing	20	11.5
General Mills	17	4.1
Columbia Broadcasting System	13	6.3
General Electric	11	4.9
Gillette	3	8.3

Source: Business Week Quarterly Report on Profits.

One argument for paying particular attention to the price and profit increases in the petroleum industry is the major impact increases have on individual budgets. However, the steel, metals and mining, chemicals and building materials industries also have a significant impact because of their price effect on other manufactured goods and household budgets.

In the selected companies table, we again see many firms with profit increases greatly exceeding the oil company average. One, The Washington Post, is almost four times the oil average.

The information supplied above shows the wide dispersion in profit margins and rates of return, both between industries and companies. With so many variations, how do we determine excess profits?

Let us consider the term. "Excess profits" is not an economic term. It is a vague and nebulous term to which it is hard to give an objective definition that can be used as a standard to determine when they occur. Free market forces objectively allocate funds to their most useful end and set prices based on similar objective forces. Supernormal profits may occur, but this is the principal phenomenon forcing supply adjustments to increase production. Supernormal profits occur during shortages, such as we have today, and are needed to finance the hefty production increases warranted by the same market situation that permits supernormal profits in the first place.

"Excess profits" is a social term, but a meaningless one if free market forces are allowed to function. Profits are "excessive" if they are not in the best interests of society. However, as the "invisible hand" in the market place makes proper adjustments, market adjustments are in the best interests of society. In the case of the petroleum industry, it is in the best interests of society that there be supernormal profits to finance supernormal production increases and elim-

inate our dependence on the unstable supply of higher-priced foreign oil.

Another term frequently used is "windfall profits"; meaning those profits that accrue from a short-run price which is higher than what is expected to be the long-run price. Under normal growth patterns, the short-run price will move with the long-run price, and there will be no exorbitant price increases and no windfall profits. These only occur when there is an abrupt dislocation in markets.

However, it must be realized that these abrupt market aberrations mean that adjustments must be made in the market place if we are to move to the new point of optimal resource utilization and pricing structures. The slower we move to this point and the longer it takes, the more time we spend at a less than optimal position. Thus there is a true economic cost of not moving immediately to the optimal point, an economic cost which is larger the greater the adjustment necessary and the longer it takes to adjust.

Windfall profit is the market mechanism for speeding up this adjustment. Windfall profits are naturally larger when the economic costs are greater. If we remove the windfall profits by taxation, price controls, or other means, we only delay adjustment and increase total economic costs. Windfall profits, therefore, benefit society. Through government interference with the free market, consumers can escape from paying the windfall profits but cannot escape from paying the then greater economic cost.

It is thus an inescapable economic fact that Americans, in one form or another, will bear the costs of increasing domestic energy production. I share the concern of all Americans for the problems this will place on individual citizens and the poor in particular. I caution, however, that there are no panaceas, no way that the government can remove this burden from the people. Even in a totally controlled economy, citizens would bear the cost as government shifts capital from other activities to petroleum production. They would then get less output from the other activities to continue consuming petroleum at the old levels.

We can, however, shift the burden of cost increases from the poor if that is what we want to do. It cannot be shifted by stringent controls on prices and profits, as some argue, because the economic costs will still be levied on the poor consumer as it will on the rest. This just hides the costs and distorts market operations. But it can be shifted, and can only be shifted, by direct income redistribution. If this is what we want to do, we must provide tax relief for the poor.

An income tax credit, tax deduction, or increase in the low income allowance is the only effective tool we have for changing the incidence or burden of petroleum price increases. Such a tax adjustment would not decrease the total cost of price increases, as nothing can, but could shift a greater burden on the wealthy.

This is the real decision facing Congress. Talk of price controls and excess profits taxes are discussions of a policy of shortages and hiding costs. We must allow the free market to operate and provide tax relief if we are not satisfied with the effect of free market operations on the less wealthy.

[From Human Events, Jan. 5, 1974]

WHY OIL COMPANIES NEED HIGHER PROFITS
(By M. Stanton Evans)

Some months ago a witness before a Senate committee in Washington discoursed on an unusual but highly effective propaganda technique called disinformation—which consists of spreading spurious "facts" as a method of confusing public opinion and disorienting unfriendly governments.

We have been witnessing a choice example of this tactic in the current dispute about the energy crisis and profits earned by Amer-

ican oil companies. Much is being made of the asserted fact that petroleum profits are up by 63 per cent, or 79 per cent, or some other enormous figure, over the corresponding period a year ago. The impression conveyed is that the oil companies are gouging the public and that their behavior is the source of the discomfort experienced by everyone else.

Newsweek magazine, for instance, tells us that oil profits "are at record levels this year, and many consumers are concluding that the industry is profiteering from the shortages." *Newsweek* finds industry complaints of insufficient earnings "astounding in light of oil profits this year: Up a total of 79 per cent in the third quarter over last year and an average of 59 per cent for the first 11 months," according to the researches of the Chase Manhattan Bank. The magazine concludes that if the shortages are drawn out, "some kind of legislation directed against the industry—perhaps a lower depletion allowance, or even a specific antitrust law mandating breakup—seems all but inevitable."

All of which is "disinformation," pure and simple.

Fact "A" in such discussion is that oil profits, far from being enormous, are and have been comparatively modest. In the third quarter of '72, for example, oil industry profits on sales amounted to 6.7 per cent—compared to 9.7 for the office equipment industry, 8.5 for chemicals, 11.1 for instruments, and so on.

In the third quarter of '73, in the face of surging demand, oil's percentage margin improved to 8.3 per cent. It is this rather moderate improvement which gets translated into the 63 and/or 79 per cent increase in profits which scandalizes critics of the industry.

Such percentage games can of course be played by anyone, depending on what it is you want to prove. If a firm had a profit of only \$1 last year, and raises that to \$2 this year, then it is possible to say it has experienced a "100 per cent increase" in profits—statistically accurate but substantively misleading. By the same standard it applies to oil, the profit hike enjoyed by *Newsweek's* own parent company, the Washington Post, is a cool 249 per cent—far greater than the profit increase accruing to petroleum. Should consumers therefore be clamoring for punitive legislation against the Post?

To this it may be added that oil profits for the past 10 years have lagged behind profits for manufacturing in general (11.8 as opposed to 12.2 per cent). Petroleum's 6.5 per cent of revenues retained as net earnings in '72 was down from 7.4 per cent a year before and 9.5 per cent four years earlier. By way of contrast, 14.5 per cent of oil's gross revenues were taken by government as taxes.

Indeed, for those who like exploding statistics, it is noteworthy that taxes on the oil industry have increased by more than 100 per cent in four years' time, while dividends fell to 3.5 per cent of revenues, an all-time low.

Result of these contrasting trends is that oil companies have less capital for exploration and potential investors can do better by putting their money elsewhere. And since *Newsweek* quotes Chase Manhattan as an authority on the subject, it may be well to see what this authority has to say about the profitability of oil investments.

"Even in the face of a progressively worsening shortage of petroleum," says Chase, "government continues to exhibit little understanding of the industry's essential need for financial resources. . . . The lack of concern is made abundantly clear when government prevents the generation of the capital funds needed to provide additional petroleum supplies by imposing artificial restraints on petroleum prices."

"Over the past four years the taxes paid by [the major petroleum companies] in-

creased by as much as 112 per cent. But the combined net earnings of the companies increased by only 2.9 per cent—an average growth of not even 1 per cent a year. . . . Over the four-year period capital expenditures rose by no more than 16.6 per cent—far less than the amount necessary to keep pace with the expanding need for petroleum. No wonder petroleum is in short supply."

The Chase Manhattan analysis says the problem confronting the petroleum industry and the nation at large is a lack of public awareness concerning the need for earnings sufficient to attract capital. When we read articles in *Newsweek* quoting selectively from Chase itself to argue for still more punitive treatment of the industry, there is nothing very mysterious about the confusion of the public.

Quite obviously, on these data, the need of the hour is improvement of the oil profits picture rather than demagogic assertions that profits are too high.

Mr. GRAVEL. I also ask unanimous consent to have printed in the RECORD another statement I made before the democratic conference on January 24, 1974. That statement includes a quotation from Prof. Edward Mitchell, and also a chart showing the decline in price and the decline in dollars and investment in oil and gas in this country.

There being no objection, the statement was ordered to be printed in the RECORD, as follows:

STATEMENT BY SENATOR MIKE GRAVEL

JANUARY 24, 1974.

Forcing back prices of crude oil to the November 1973 level, as proposed by the Mondale resolution, is directly contrary to the development of our domestic energy resources.

In 1974, our consumption of liquid petroleum fuels will approximate 18 million barrels daily. Our production of petroleum liquids is currently only 10.6 million barrels a day. Our dependence on foreign supplies, therefore, exceeds 7 million barrels daily.

If we are to reduce our dependence on imports we have to develop greater domestic supplies. The relationship between price and the exploration and development of domestic energy resources is shown dramatically on the attached chart. As can be seen, if the inflationary factor is removed, the price per barrel in 1970 dollars declined from approximately \$2.80 in 1957 to a little over \$2.00 in 1971. During that period of declining real prices, exploration and development efforts fell at the same rate.

We are suffering from an energy crisis today, because our nation has lacked a coherent energy policy. Government and industry have made energy decisions based only on the consideration of the moment.

Those decisions were based on three things: To keep the cost of energy low, to encourage its consumption, and not to worry about where it would come from.

Now, we must rectify those mistaken decisions. We should do so within a coherent policy that is aimed at achieving the goal of energy self-sufficiency. Rolling back prices, while attractive politically and socially, will in the long run accomplish nothing.

To be sure, our pocketbooks will have momentary respite. But, there is no ignoring the fact that we will pay even more in the end. And we will pay not only in higher prices, but also in unemployment, in acute shortages of many commodities and in economic dislocation.

The American people recognize that anything valuable cannot be cheap. I think they are willing to pay what their energy is worth to them. I also think they will eventually lose trust in those who say we could have it both ways. They will lose trust in leaders who say we can have energy and it will be cheap. The American people are sick of false

promises, sick of deception and sick of demagoguery. Let's be honest. If we are going to have enough energy, we will have to pay what it costs.

The price of energy must be set at a level that increases our domestic supplies and at the same time avoids excess profits.

The effect of price controls on oil and natural gas was summarized sufficiently by Professor Edward J. Mitchell of the University of Michigan as follows:

"To create a shortage, you simply depress the market price below the level that equates supply and demand; to eliminate the shortage, you free the price and allow it to rise to equate supply and demand once more. To create a surplus, you raise the price above the market-clearing level; and to eliminate the surplus, you let it fall back. We always have three options: A market-clearing price; a price that gives us shortages; a price that gives us surpluses. Our representatives in Washington are presently opting for energy shortages. If we are all decided in retrospect that this was a bad choice, we have the means to change it."

That is a clear expression of the laws of economics which even the Democratic Party can't change.

In the hysteria over the energy crisis, Congress should not rush into hasty actions which would only serve to make the problem worse. Price controls are one of the major reasons why we have the problem.

If we have learned anything in the last two years, it is the folly of price controls. The Senator from Minnesota well remembers when we had price controls on chickens and not on feed—farmers drowned their baby chicks. If we impose price controls now, the energy producers will not produce. Instead, they will invest their capital in other areas where there is a better return. We will only further harm the consumers in Minnesota, Connecticut, Massachusetts and throughout the United States. If you think you can rely on "cheap foreign oil" just take note of the fact that even a friendly country like Canada has imposed a \$6.50 per barrel "export tax", bringing the price of Canadian crude to well over \$12 a barrel. The people in Minnesota will not benefit from price controls that drive out domestic production and leave the State dependent upon Canadian crude oil. And, while the Senator from Massachusetts may not realize it, his State is becoming heavily dependent upon Algerian gas to heat his constituents' homes, a direct result of price controls on domestic natural gas.

If price controls are not the answer, how are we to assure that price increases will not be unwarranted? In my view, a free and unfettered market will produce a fair price, so long as there is protection against excessive profits.

Let us take a look at the profits in the energy industry compared to those in other industries to see just how great its profits are:

Percent return on net worth for selected U.S. industries

Petroleum production and refining	10.8
Autos and trucks	17.2
Soft drinks	22.4
Soap and cosmetics	20.4
Drugs and medicines	19.7
Household appliances	15.4
Lumber and wood	13.9
Hardware and tools	15.9

Thus, the petroleum industry is gaining less of a return than these other major industries, some of whose commodities are not nearly so vital to the American people.

If we want the energy industry to invest its capital in the search for new and increased supplies of domestic energy, then we have to allow that effort to be profitable. If we refuse, the industry will go where the profits are. We will encourage a flight of capital from production of domestic energy to foreign energy and from energy to real estate.

Rigid price controls are not in our Nation's interest. Emphatically, they are not in the best interest of the American consumer.

ORDER FOR RECOGNITION OF SENATORS CHILES, WEICKER, TAFT, ROBERT C. BYRD, AND GRIFFIN TOMORROW

Mr. FANNIN. Mr. President, I ask unanimous consent that following the remarks of the Senator from New Mexico (Mr. MONTOYA) tomorrow, which I ask to be changed from 15 minutes to 10 minutes, the following Senators be recognized for not to exceed 15 minutes each, and in the order stated: Mr. CHILES, Mr. WEICKER, Mr. TAFT, Mr. ROBERT C. BYRD, and Mr. GRIFFIN.

The PRESIDING OFFICER. Without objection, it is so ordered.

ADJOURNMENT

Mr. FANNIN. Mr. President, if there be no further business to come before the Senate, I move, in accordance with the previous order, that the Senate stand in adjournment until the hour of 12 o'clock noon tomorrow.

The motion was agreed to; and at 5:53 p.m. the Senate adjourned until tomorrow, Tuesday, February 19, 1974, at 12 noon.

NOMINATIONS

Executive nominations received by the Senate February 18, 1974:

Executive nominations received by the Senate February 18, 1974:

DEPARTMENT OF JUSTICE

Carla Anderson Hills, of California, to be an Assistant Attorney General vice Harlington Wood, Jr., resigned.

W. Vincent Rakestraw, of Ohio, to be Assistant Attorney General vice James D. McKevitt, resigned.

THE JUDICIARY

Thomas E. Stagg, Jr., of Louisiana, to be U.S. district judge for the western district of Louisiana vice Benjamin C. Dawkins, retired.

DEPARTMENT OF STATE

Sumner Gerard, of New Jersey, to be Ambassador Extraordinary and Plenipotentiary of the United States of America to Jamaica.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Subject to qualifications provided by law, the following for permanent appointment to the grades indicated in the National Oceanic and Atmospheric Administration:

To be lieutenants (junior grade)

Daniel S. Eilers.
David W. Yeager.
Robert K. Norris.

To be ensigns

Mark W. Allen
Kathryn A. Andreen
Peter W. deWitt
Donald A. Dreves
Carl W. Johnson
Roger A. Morris
James W. O'Clock
Stephen A. Reynolds
Thomas J. Rice

IN THE NAVY

Rear Adm. Emmett H. Tidd, U.S. Navy, having been designated for commands and other duties determined by the President to be within the contemplation of title 10, United States Code, section 5231, for appoint-

ment to the grade of vice admiral while so serving.

IN THE MARINE CORPS

The following-named (Navy enlisted scientific education program) for permanent appointment to the grade of second lieutenant

in the Marine Corps, subject to the qualifications therefor as provided by law:

Spinks, Grafton.

The following-named (Naval Reserve Officer Training Corps) graduates for perma-

nent appointment to the grade of second lieutenant in the Marine Corps, subject to the qualifications therefor as provided by law:

Gallegos, Joey R.
Roten, Richard C.

EXTENSIONS OF REMARKS

SOVEREIGNTY OF UNITED STATES OVER PANAMA CANAL

HON. HARRY F. BYRD, JR.

OF VIRGINIA

IN THE SENATE OF THE UNITED STATES
Monday, February 18, 1974

Mr. HARRY F. BYRD, JR. Mr. President, on February 13 the Honorable George F. Barnes, a member of the Senate of Virginia, introduced a resolution in that body calling upon the U.S. Senate to reject any encroachment upon the sovereignty of the United States over the Panama Canal.

I applaud this action on the part of Senator Barnes.

I was discouraged to learn of the recent action of Secretary of State Kissinger in signing an agreement which seeks to commit the United States to a surrender of its sovereignty in the Canal Zone.

The sovereignty of the United States is guaranteed by a treaty of 1903 and cannot be abrogated without a two-thirds vote of the U.S. Senate. If an agreement surrendering U.S. sovereignty is negotiated by the administration, I hope that it will be rejected by the Senate.

I ask unanimous consent that the text of the resolution introduced in the General Assembly of Virginia by Senator Barnes be printed in the Extensions of Remarks.

There being no objection, the resolution was ordered to be printed in the RECORD, as follows:

SENATE JOINT RESOLUTION NO.—

Expressing the sense of the General Assembly of Virginia relative to the Hay-Bunau-Varilla Treaty of 1903

Whereas, in nineteen hundred and three, the United States of America was granted sovereignty over the Panama Canal Zone in perpetuity; and

Whereas, the Panama Canal is essential to the defense and national security of the United States of America; and

Whereas, the Panama Canal is a vital importance to the economy and interoceanic commerce of the United States of America and the remainder of the free world; and

Whereas, valuable exports from Virginia go through the Panama Canal to distant reaches of the globe; and

Whereas, under the sovereign control of the United States of America, the Panama Canal has provided uninterrupted peacetime transit to all nations; and

Whereas, the traditionally unstable nature of Panamanian politics and government poses an implicit threat to the security of the interests of the United States of America served by the Panama Canal; and

Whereas, the Republic of Panama possesses neither the technical and managerial expertise to effectively operate and maintain the Canal nor the capability to meet the growing demands placed upon the Canal; and

Whereas, the Canal represents a five billion dollar investment on the part of the people

of the United States of America; now, therefore, be it

Resolved by the Senate of Virginia, the House of Delegates concurring, That the General Assembly of Virginia requests that the Congress of the United States reject any encroachment upon the sovereignty of the United States of America over the Panama Canal and insist that the terms of the Hay-Bunau-Varilla Treaty of 1903 as subsequently amended be adhered to and retained; be it further

Resolved, That the Clerk of the Senate send copies of this resolution to Richard M. Nixon, President of the United States; Gerald R. Ford, Vice President of the United States; Henry A. Kissinger, Secretary of State; Carl Albert, Speaker of the House; J. William Fulbright, Chairman, Senate Foreign Relations Committee; and to each member of the Virginia Delegation to the Congress of the United States.

IF ROLLBACK OF OIL PRICES—LESS GASOLINE

HON. JAMES M. COLLINS

OF TEXAS

IN THE HOUSE OF REPRESENTATIVES
Monday, February 18, 1974

Mr. COLLINS of Texas. Mr. Speaker, the name of the political game today appears to be "take a shot at the major oil companies." They are a great target because they do not vote, and everyone wants cheap gasoline.

For years under price control pressure, new oil well drilling has been declining. Domestic new discoveries are down. The only way to encourage more drilling is to provide a profit margin. Costs are up from \$56,000 to \$94,000 in drilling a new oil well and only one of nine holes drilled will be a producer. We can also increase secondary recoveries of stripper wells if we realistically pay the costs of these inflationary times.

I saw a recent editorial from the Dallas Times Herald. Both Texas Senators are quoted. But remember the major oil companies are owned by the stockholders who live in New York City, Chicago, Boston, Los Angeles. The need is for the major oil companies to start speaking out and stop whispering. Here is the Dallas Times Herald editorial:

ROLLBACK WON'T WORK

Congressional conferees, acting in political fever, could prolong the fuel shortage rather than easing it if the proposal to roll back oil prices is passed by both houses.

In making political passes at a critical issue, the joint Senate-House committee is running counter to federal energy chief William E. Simon's position. It could put a burden on oil producers that would be too heavy to carry.

The amendment which they propose to tack on to the emergency energy act would automatically turn back domestic crude oil to \$5.25 per barrel and prohibit that price from rising above a ceiling of \$7.09 per barrel.

That, says Mr. Simon, would be totally restrictive and make continued production unprofitable for many oil companies. He is correct.

Further, it would place President Nixon in the tight position of considering a veto for the entire emergency act. Or, if he leaves the amendment in the act, he would be the scapegoat later if price increases were granted.

Briefly, and simply, the cost of the oil product today is at a higher level than the conferees proposed—\$5.25. Mr. Simon argues that the closest price he "could live with" would be a price ceiling of \$7.88 per barrel if there is to be continuing oil production in the critical period of shortage.

It is odd, indeed, that politically ambitious men such as Sen. Henry Jackson—architect of the idea—oppose the thinking of Simon and his knowledgeable staff just to give the consuming public the idea that they are getting a price cut.

It won't work.

Sen. Lloyd Bentsen and Sen. John Tower immediately saw the holes in the plan and asked that it be considered. Bentsen made the point that stripper wells, now an important part of the accelerated energy plan, would have to be exempt or there simply wouldn't be enough oil production.

The public is getting weary of grandstand plays on their energy shortage. They want studied action and results—preferably from a man like Simon rather than ambitious vote seekers.

DR. MALCOLM R. CURRIE

HON. STROM THURMOND

OF SOUTH CAROLINA

IN THE SENATE OF THE UNITED STATES
Monday, February 18, 1974

Mr. THURMOND. Mr. President, Dr. Malcolm Currie, the new Director of Defense Research and Engineering, was the subject of a short article in the January 1974 issue of Government Executive.

Because of the importance of Dr. Currie's post, and the fact that this article was one of the first which tells us something about Dr. Currie, I ask unanimous consent that the article "Decision Maker" by printed in the Extensions of Remarks.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

DECISION MAKER—DOD'S MALCOLM CURRIE: FOCUSING ON THE FISCAL YEAR 1975 BUDGET

Last June, Dr. Malcolm R. Currie took on the job of Defense Research and Engineering, filling a post Dr. John Foster filled for the previous seven years. Hierarchically, Currie has the number three post in the Pentagon. He had been vice president for R&D at Beckman Instruments, Inc., of Fullerton, Calif.

Currie's modus operandi differs from Foster's though it is not to say he criticizes the Foster style.

"I'm forming an extremely close working team with the three R&D assistant secre-