

### Dwight D. Eisenhower

Address to the Nation on the Future of U.S. Security

delivered 13 November 1957, Oklahoma City, Oklahoma



[AUTHENTICITY CERTIFIED: Text version below transcribed directly from audio]

Governor Gary, Mayor Street, distinguished guests, and my fellow Americans:

First, I should like to extend my grateful thanks to the people of Oklahoma for this chance to share in celebrating the 50th anniversary of Oklahoma's statehood. Born in the Lone Star State just to your south, and reared in the Sunflower State just to the north, I have tonight a fine feeling of coming home again. So, your generous welcome has a special significance for me tonight. Frankly, I wish I could stay until Saturday. From all my friends this afternoon I have heard you have a pretty fair sort of a football team. And -- And of course, I should very much like to see it play.



Now, I'm going to let you in on a secret: No matter how good it was before, since this afternoon, when they made my grandson sort of an honorary member, it's a much better team. He is now the proud possessor of a white football signed by Bud Wilkinson and all his players, and my "son" is the best 90-pound tackle in the whole country.

Last week I spoke of science in security; this evening I speak of security in a somewhat wider context. We live in one of the great ages in the story of mankind. For millions of people science has removed the burden of backbreaking toil. For other millions the hope of a good life is being translated into definite promise.

In this wonderful age, we Americans have a special responsibility. We were given a fresh continent and an opportunity to work out a modern dream of how men should work together, live together, and govern themselves. Drawing on all the cultures of the past, and on the rapid growth of science, we worked out a way in which every person can be his own competitive self, and at the same time be a dedicated member of a harmonious community.

Now this week the Soviets are celebrating the 40th anniversary of their revolution. These four decades have seen them change from an agricultural to an industrial nation. We know of their rigorous educational system and their technological achievements. But we see all this happening under a political philosophy that postpones again and again the promise to each man that he will be allowed to be himself, and to enjoy, according to his own desires, the fruit of his own labor.

We have long had evidence, recently very dramatic evidence, that even under such a system it is possible to produce some remarkable material achievements. When such competence in things material is at the service of leaders who have so little regard for things human, and who command the power of an empire, there is danger ahead for free men everywhere. That, my friends, is the reason why the American people have been so aroused about the earth satellites. Of course, free men are meeting and will meet this challenge. Up to a point, this must be done on the Communists' own terms -- outmatching them in military power, general technological advance, and specialized education and research.



But this is not all the story. The real strength with which the self-governing democracies have met the tests of history is something denied to dictatorships. It is found in the quality of our life, and the vigor of our ideals. It manifests itself in the ever-astonishing capacity of free men for voluntary heroism, sacrifice, and accomplishment when the chips are down. This is the weapon which has meant eventual downfall for every dictator who has made the familiar mistake of thinking all democracies "soft."

Now, once again, we hear an expansionist regime declaring, "We will bury you." In a bit of American vernacular, "Oh, yeah?" Seriously, it would be a grave error not to take this kind of threat literally. This theme has been a Communist doctrine for a hundred years. But you may recall that there was once a dictator named Hitler who also said he would bury us. He wrote a long, dull book telling precisely how he was going to do it. Not enough people took him at his word. We shall not make that mistake again.

International communism has demonstrated repeatedly that its leaders are quite willing to launch aggression by violence upon other countries. They are even more ready to expand by propaganda and subversion, economic penetration and exploitation. Mostly they use a combination of all three methods. The free world must therefore be alert to all.

Our military defenses have been largely reshaped over the years since World War II. I assure you, as I did last week, that for the conditions existing today they are both efficient and adequate. But if they are to remain so for the future, their design and power must keep pace with the increasing capabilities that science gives both to the aggressor and the defender. They must continue to perform four main tasks:

First, as a primary deterrent to war, maintain a strong nuclear retaliatory power. The Soviets must be convinced that any attack on us and our Allies would result, regardless of damage to [us], in their own national destruction.

Two, in cooperation with our Allies, provide a force structure so flexible that it can cope quickly with any form of aggression against the free world.

Three, keep our home defenses in a high state of efficiency.

And four, have the reserve strength to meet unforeseen emergency demands.



To provide this kind of defense requires tax money -- lots of it. During the last five fiscal years we have spent 211 billion dollars on our security -- an average of over 42 billion dollars a year. This includes our own Armed Services, Mutual Military Aid, and the Atomic Energy Commission. In my judgment, the Armed Forces and their scientific associates have, on the whole, used this money wisely and well.

Much of it has gone, and is going, into better and more powerful weapons. A single B-52 bomber costs 8 million dollars. The B-52 wing costs four times as much as the B-36 wing it replaces. The NIKE missile, which has largely replaced anti-aircraft artillery, cost three times as much per battalion. A new submarine costs 47 and one-half million<sup>1</sup> -- ten times the cost of a World War II submarine. And so on, for our entire arsenal of equipment.

Now, for some years increasing attention has been focused on the invention, development, and testing of even more advanced weapons for future use. The Defense Department has been spending in the aggregate over five billion dollars a year on this kind of research and development.

There has been much discussion lately about whether Soviet technological break-throughs in particular areas may have suddenly exposed us to immediately increased danger, in spite of the strength of our defenses. As I pointed out last week, this is not the case. But these -- But these scientific accomplishments of theirs have provided -- provided us all with renewed evidence of Soviet competence in science and techniques important to modern warfare. We must, and do, regard this as a time for another critical reexamination of our entire defense position. The sputniks have inspired a wide variety of suggestions. These range from acceleration of missile programs, to shooting a rocket around the moon, to an indiscriminate increase in every kind of military and scientific adventure [expenditure].

Now, my friends, common sense demands that we put first things first. And the first of all firsts is the essentials of our nation's security. Over the next three weeks I shall be personally making our annual review with military and civilian authorities of our national security activities for the coming year. Then, I shall meet with the legislative leaders of Congress, from both Houses and both parties, for conferences on policies, actions. and expenditures. In the meantime, I ask your sober consideration of some of the actions to which we must give our most urgent attention.



Today, as I have said, a principal deterrent to war is the retaliatory nuclear power of our Strategic Air Command and our Navy. We are adding missile power to these arms and to the Army as rapidly as possible. But it will be some time before either we or the Soviet forces will have long-range missile capacity equal to even a small fraction of the total destructive power of our present bomber force.

To -- To continue over the years just ahead to maintain the Strategic Air Command in a state of maximum safety, strength, and alert, as new kinds of threats develop, will entail additional costs. This means accelerating the dispersal of Strategic Air Command to additional bases. This work, which has been going forward for some years, ought now to be speeded up. Also, with missiles and faster bombers, warning times will grow shorter. Therefore, we have been providing facilities for quicker response to emergency alarm. This, too, should be speeded up - through standby combat crews, more runways, more fueling stations, and more housing.

Next, to achieve maximum -- maximum possible warning of any future attack, we must carry on additional improvements throughout our warning line that are now scientifically feasible.

Another need is to develop an active missile defense against missiles. This item is undergoing intensive research and development within the Defense Department now. The technicians tell me that development of the long-range ballistic missile cannot be markedly accelerated by expenditure of more money.<sup>2</sup> We are now spending more than one billion dollars a year on their research and testing. But of course, where needed, additional sums will be provided. Moreover, it is clear that production, deployment, and installation of missiles over the period ahead, when they become available, will be costly.

Next, the military services are underpaid. We must be fair with them. Justice demands this, but also compelling is the factor of efficiency in our defense forces. We cannot obtain and retain the necessary level of technical proficiency unless officers and men, in sufficient numbers, will make the armed services their careers.

Now, let us turn briefly to our satellite projects. Confronted with the essential requirements I have indicated for defense, we must adopt a sensible formula to guide us in deciding what satellite and outer space activity to undertake. Certainly there should be two tests in this formula.



If the project is designed solely for scientific purposes, its size and its cost must be tailored to the scientific job it is going to do. That is the case in the present Vanguard project now under way.

If the project has some ultimate defense value, its urgency for this purpose is to be judged in comparison with the probable value of competing defense projects.

Now, all these new costs, which in the aggregate will reach a very considerable figure, must be added to our current annual expenditures for security. There is no immediate prospect of any marked reduction in these recurring costs. Consequently, the first thing is to search for other places to cut expenditures. We must once more go over all other military expenditures with redoubled -- redoubled determination to save every possible dime. We must make sure that we have no needless duplication or obsolete programs or facilities.

The answer does not lie in any misguided attempt to eliminate conventional forces and rely solely upon retaliation. Such a course would be completely self-defeating. And, most emphatically, the answer does not lie in cutting mutual defense funds overseas -- another important part of our own nation's security. We are linked with 42 countries by military assistan[ce] agreements. We could not possibly station our troops all over the world to prevent the overflow of Communism. It is much more economical and vastly more effective to follow and strengthen our system of collective security.

The same applies to economic aid. This kind of assistance helps others keep free of dependence upon the Soviet help, which too often is the prelude to Soviet domination. It shows the free world's ability to develop its resources and to increase its living standards. It helps allied economies support needed military units and remain sturdy partners of ours in this world-wide struggle.

Now, in the Federal government's civilian activities, we shall have to make some tough choices. Some programs, while desirable, are not absolutely essential. In this I have reached a clear conclusion. Some savings may still be squeezed out through the wringer method. But savings of the kind we need will come about only through cutting out or deferring entire categories of activity. This will be one of the hardest and most distasteful tasks that the coming session of Congress must face. And pressure groups will wail in anguish.



By what -- Now, by whatever amount savings fail to equal the additional costs of security, our total expenditures will go up. Our people will rightly demand it. They will not sacrifice security to worship a balanced budget. But we do not forget, either, that over the long term a balanced budget is one indispensable aid in keeping our economy, and therefore our total security, strong and sound.

Now, there is much more to the matter of security than the mere spending of money. There are also such things as the professional competence of our military leaders -- and there are none better; the soundness and productive -- productivity of our economy -- and there is none to equal it; and above all, the spiritual strength of our nation -- which has seen us through every crisis of the past.

And one thing that money cannot buy is time. Frequently, time is a more valuable coin than is money. It takes time for a tree to grow, for an idea to become an accomplishment, for a student to become a scientist.

Time is a big factor in two longer-term problems: strengthening our scientific education and our basic research. The Soviet Union now has -- in the combined category of scientists and engineers -- a greater number than the United States. And it is producing graduates in these fields at a much faster rate. Recent studies of the educational standards of the Soviet Union show that this gain in quantity can no longer be considered offset by lack of quality.

This trend is disturbing. Indeed, according to my scientific advisers, this is for the American people the most critical problem of all. My scientific advisers place this problem above all other immediate tasks of producing missiles, of developing new techniques in the Armed Services. We need scientists in the 10 years ahead. They say we need them by thousands more than we're now presently planning to have.

The Federal government can deal with only part of this difficulty, but it must and will do its part. The task is a cooperative one. Federal, state, and local governments, and our entire citizenry must all do their share. We should, among other things, have a system of nation-wide testing of high school students; a system of incentives for high aptitude students to pursue scientific or professional studies; a program to stimulate good-quality teaching of mathematics and science; provision of more laboratory facilities; and measures, including fellowships, to increase the output of qualified teachers.



The biggest part of the task is in the hands of you, as citizens. This is National Education Week. It should be National Education Year. No matter how good your school is -- and we have many excellent ones -- I wish that every school board and every PTA would this week and this year make one single project their special order of business. This is to scrutinize your school's curriculum and standards. Then decide for yourselves whether they meet the stern demands of the era we are entering.

Now, as you do -- As you do this, my friends, remember that when a Russian graduates from high school he has had five years of physics, four years of chemistry, one year of astronomy, five years of biology, ten years of mathematics through trigonometry, and five years of a foreign language.

Young people now in college must be equipped to live in the age of intercontinental ballistic missiles. However, what will then be needed is not just engineers and scientists -- even though these will be of vital importance. We must also have a people who will keep their heads and, in every field, leaders who can meet intricate human problems with wisdom and with courage. In -- In short, we will need not only Einsteins and Steinmetzes, but Washingtons, and Emersons.

Another long -- Another long-term concern is for even greater concentration on basic research -- that is, the kind that unlocks the secrets of nature and prepares the way for such great break-throughs as atomic fission, electronics, and antibiotics. At present, our basic research, compared with any other country's, is considerably greater in quantity and certainly equal in quality. The warning lies in the fast rate of increase of the Soviet effort, and their obvious determination to concentrate heavily on basic research.

The world will witness future discoveries even more startling than that of nuclear fission. The question is: Will we be the ones to make them? Here again money cannot do everything. You cannot say to a research worker, "Your salary is tripled; get busy now and produce three times as many basic discoveries." But wise investment in such facilities as laboratories and high-energy accelerators can great -- greatly increase the efficiency of our scientists.



The government is stepping up its basic research programs. But, with 70 percent of research expenditure[s], the biggest share of the job is in the hands of industry and private organizations. Right here in Oklahoma City you have established a superb mechanism for the mobilization of needed resources to strengthen our pursuit of scientific knowledge. It is the Frontiers of Science Foundation. Today I had the great privilege of a few minutes' visit with Dr. Harlow and with about half a dozen of his bright youngsters. I congratulate you on them and on the institution. You have every reason to be proud of both and I hope other States will follow your example.

And now one final word. The goal we seek is peace with justice. This can come to our nation only as it comes to all nations. The world's hope is that the Soviets will cooperate with all the rest of us in achieving this goal. Our defense effort, large as it is, goes only far enough to deter and defeat attack. We will never be an aggressor. We -- We want adequate security. We want no more than adequacy. But we will accept nothing less.

It is -- My friends, it has always been my faith that the eventual triumph of decency and freedom and right in this world is inevitable. But, as a wise American once observed, it takes a lot of hard work and sacrifice by a lot of people to bring about the inevitable.

Thank you very much and good night.

<sup>&</sup>lt;sup>1</sup> Original transcript had it at 475 million dollars

<sup>&</sup>lt;sup>2</sup> Immediately preceding this line, the official transcript records the following: "Now, to increase retaliatory power, we shall be adding long-range missiles, both land and ship-based, to our security forces."