

Since 1956 we have developed nuclear explosives with radioactive fall-out of less than 4 percent of the fall-out of previous large weapons. This has obvious importance in developing nuclear defenses for use over our own territory.

In numbers, our stock of ^{ready} nuclear weapons is so large and so rapidly growing that we are able to disperse it to positions assuring its instant availability against attack, and still keep strong reserves. Our scientists assure me that we are well ahead of the Soviets in the nuclear field, both in quantity and in quality. We intend to stay ahead.

We have already shown that we can, with the precision to make it a useful military weapon, fire a large ballistic missile well over a thousand miles. Our ballistic test missiles have had successful flights to as much as 3,500 miles. An intercontinental missile is required, and we have some of them in an advanced state of development. But, because of our many forward positions, for us an intermediate range missile is for some purposes as good as an intercontinental one.

A different kind of missile, the air-breathing *Scorch*, recently travelled over a guided course for 5,000 miles and was accurately placed on target.

We have fired three rockets to heights between 2,000 and 4,000 miles, and have received back much valuable information about outer space.

One difficult obstacle on the way to producing a useful long-range weapon is that of bringing a missile back from outer space without its burning up like a meteor, because of friction with the earth's atmosphere.

Our scientists and engineers have solved that problem. This object here in my office is an experimental missile -- a nose cone. It has been hundreds of miles to outer space and back. Here it is, completely intact.



These illustrations -- which are of course only a small sample of our scientists' accomplishments -- I give you merely to show that our strength is not static but is constantly moving forward with technological improvement.

Long range ballistic missiles, as they exist today, do not cancel the destructive and deterrent power of our Strategic Air Force.

The Soviet launching of earth satellites is an achievement of the first importance, and the scientists who brought it about deserve full credit and recognition. Already, useful new facts on outer space have been produced, and more are on the way, as new satellites with added instruments are launched.

Earth satellites, in themselves, have no direct present effect upon the nation's security. However, there is real military significance to these launchings, which I have previously mentioned publicly. Their current military significance lies in the advanced techniques and the competence in military technology they imply, evidenced, for example, by the powerful propulsion equipment necessarily used,