

QUESTION: Do we have "overkill" in our strategic forces?

ANSWER: The concept of "overkill" is a gross overmagnification of the problem we face. The proponents of the "overkill" theory argue that the United States already has enough nuclear weapons to destroy all of the major cities of the Soviet Union several times over, and that, therefore, no further investments in the Strategic Nuclear Forces are required or can be justified. They would, in effect, restrict our strategic forces solely to those required for retaliation against cities and under the most optimistic conditions. They argue that there is nothing to be gained by attacking military targets - first, because in an all-out nuclear war the U.S. would have already been gravely damaged by the initial attack, and, second, that it would be very difficult to destroy the enemy's uncommitted or residual force and therefore is not worth even attempting.

Not even an assured and convincing "cities only" capability would require forces much larger than those implied by the "overkill" theory. The allegation that we could kill every Soviet citizen 1,250 times is based on a grossly overmagnified calculation that runs as follows: Roughly 70 million people live in about 140 Soviet cities with a population of 100,000 or more. Since a 20 kiloton explosion killed about 100,000 people at Hiroshima, it would take 10 megatons to kill the 70 million people in these 140 cities. Thus, "overkill" is calculated simply by dividing their estimates of our total deliverable megatons by 10 megatons (the total needed to "kill" the 140 cities), which works

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out to an "overkill" potential of 1,250. This idea, carried to an extreme, would indicate a requirement for only one bomber carrying a 10 megaton weapon.

Obviously, this calculation assumes a U.S. "first strike" in which every weapon functions perfectly and in which there are no losses from Soviet defenses. This ignores the far more likely contingencies:



Thus, the question of what is adequate is not simply the number of delivery vehicles in our inventory but rather the number we can count on reaching their targets. Moreover, "overkill" theorists assume that the sole purpose of a retaliatory strike on our part would be to kill Soviet people i.e. strike their cities. This is just not so. In addition to serving as a deterrent by being visibly capable of destroying Soviet society under all conditions, our strategic forces should, if war is forced upon us, also be able to limit the destruction of our own cities and population to the maximum extent possible.

Over the last few years many comprehensive studies have been made of alternative U.S. strategic force structures employed in a nuclear

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contingency with a wide range of possible Soviet forces and under a wide variety of assumptions as to the outbreak of war and U.S. and Soviet operational factors. In every pertinent case we found that forces in excess of those needed simply to destroy Soviet cities would significantly reduce damage to the U.S. and Western Europe. And the extent to which damage to ourselves can be reduced depends importantly on the size and character of our own forces, particularly the surface-to-surface missiles such as MINUTEMAN that can reach their targets quickly.

Thus, a "damage-limiting" strategy appears to be the most practical and effective course for us to follow. As has been pointed out, such a strategy requires forces considerably larger than would be needed for [REDACTED]

While there are still some differences of judgment on just how large such a force should be, there is general agreement [REDACTED]

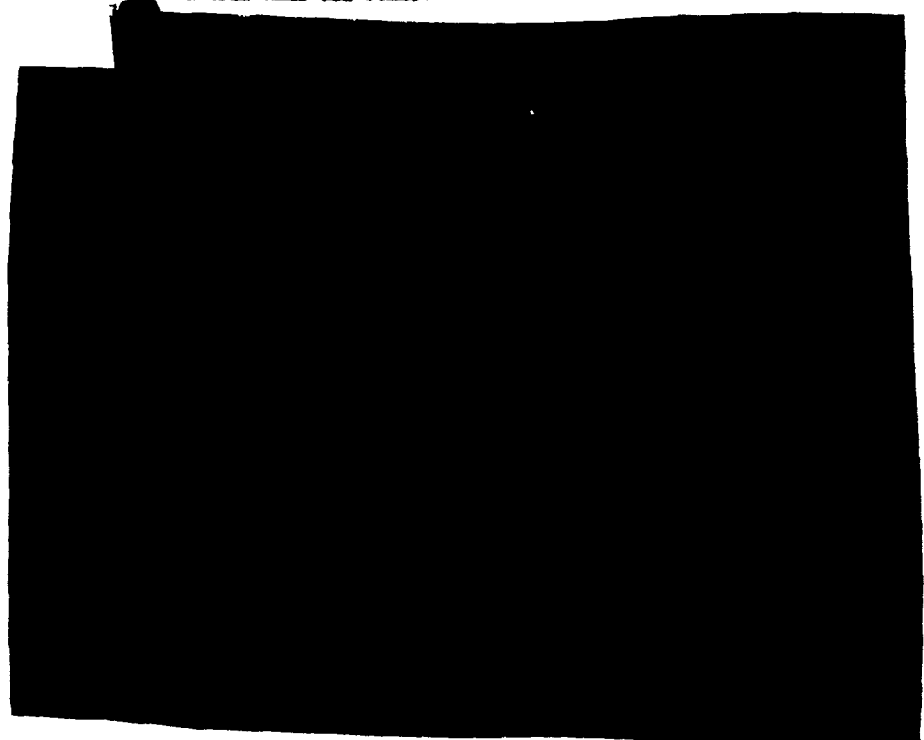
[REDACTED] under the worst possible circumstances of war outbreak that can reasonably be postulated, and, in addition, [REDACTED] as to limit, to the extent practicable, damage to this country and to our Allies.

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QUESTION: Is there a "negotiation gap" between the U.S. and the U.S.S.R?

ANSWER: This question actually has three aspects:

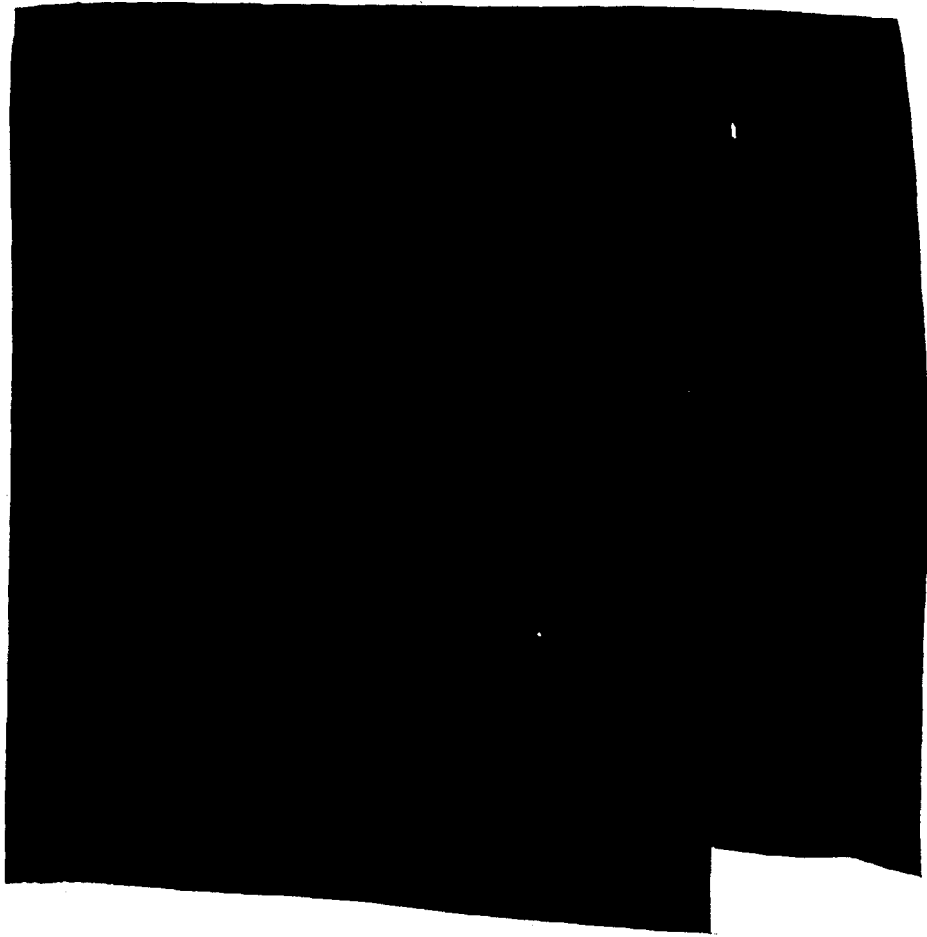
1. How much destructive power could each side actually launch against the other? This depends in great part, of course, on the number of delivery vehicles each side has.
2. How much destructive power does each side have in its stock pile, i.e. ignoring the fact of whether delivery vehicles are available or not?
3. Does one side have a larger (higher-yield) individual warhead than the other?



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QUESTION: Are you planning to phase out the manned bombers and rely exclusively on strategic missiles?

ANSWER: The future of the manned bomber has been a problem for some years. Procurement of the B-51 and B-58 was terminated with the FY 1961 buy. President Eisenhower's last budget, for FY 1960, did not recommend any further procurement of manned bombers. He pointed out in his Budget Message:

Up to the present time our strategic striking forces have relied in large measure on manned bombers. Manned bombers - both land-based and carrier-based - will continue to be required. However, with the advent of operational missile systems, more and more of the strategic forces in the years ahead will be composed of fixed-base and mobile ballistic missiles - both land - and sea-based. The recommendations in this budget reflect this change.

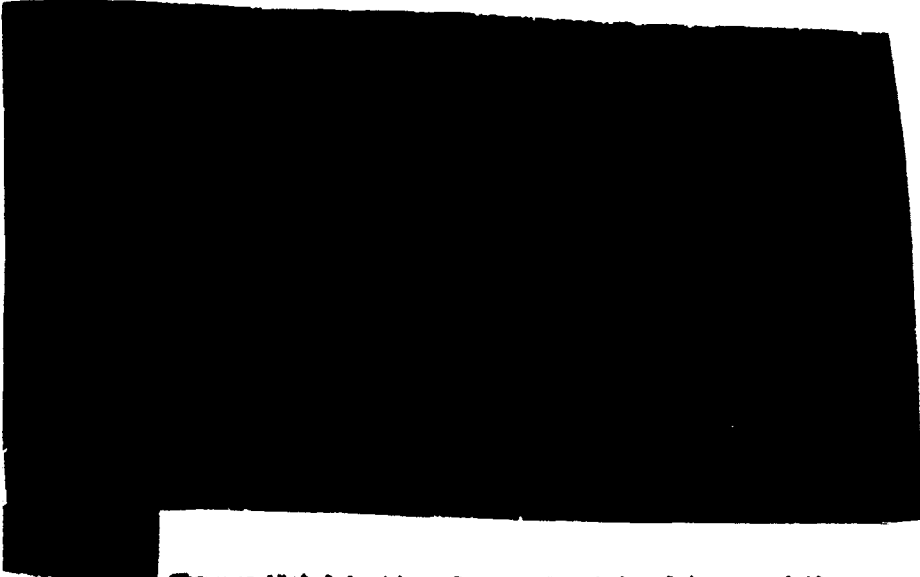
President Eisenhower's FY 1960 budget, however, did contain funds for the continued development of the B-70, a new Mach 3 long-range bomber.

When the Kennedy Administration assumed office in January 1961, the manned bomber problem was re-examined. In view of the fact that we already had a force of 1,500 heavy and medium bombers, plus some additional B-51's and B-58's still being produced, and in view of the fact that the threat was rapidly shifting from bombers to ICBM's, it was concluded that the number of bombers which could be launched quickly was more important than the total number in the inventory.

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The new Administration also accelerated and increased the development and production of the MINUTEMAN ICBM which is deployed in well-dispersed and hardened underground sites. The B-70 development program was also continued, but as a prototype program rather than a full-scale weapons system development. The B-70 was originally conceived in 1953, before the important place the ICBM would have in our strategic arsenal could be fully foreseen. Furthermore, in the light of the increasing Soviet ground-to-air missile capabilities, the high speed and high altitude of the B-70 in themselves would no longer have offered significant protection from enemy defenses - and the B-70 had not been designed to carry air-to-surface missiles for defense suppression or to penetrate the defensive screen at low altitudes. Finally, in contrast to the B-52, the B-70 would not have had itself to air-borne alert measures.

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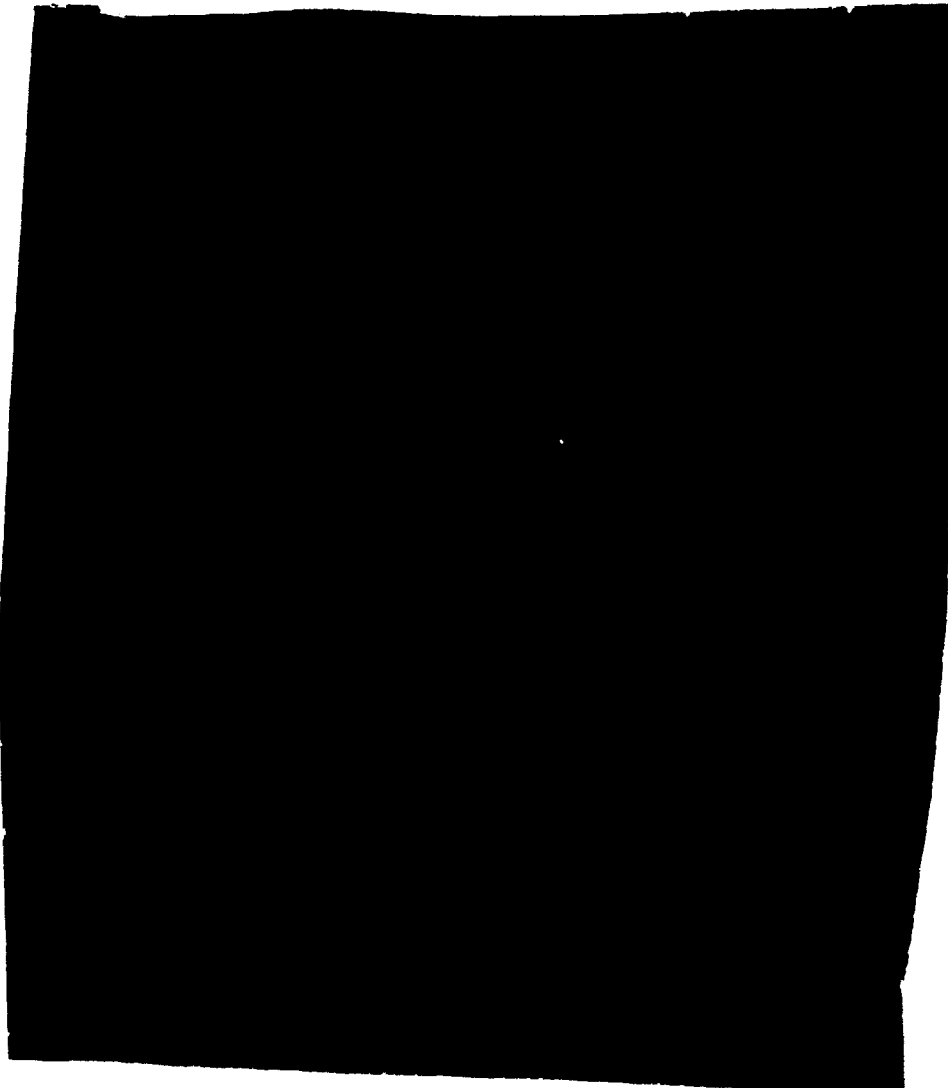
In matters turned out, the development of the B-70 proved to be much more difficult than anyone had anticipated, even in 1960. Various difficulties in the fabrication and assembly of the aircraft have caused the program to slip well over one year. We believe these difficulties have finally been solved. However, the critical situation of "zero-flight runway" remains to be completed. The first flight of a B-70 test vehicle, originally scheduled for December 1968, has yet to be accomplished. As a result of all of these difficulties, the cost of the planned three-aircraft program grew to more than \$1.5 billion and the Air Force has recently recommended that the program be reduced to two aircraft.

In the light of more recent technical knowledge and changes in the overall military situation - particularly the large increase in Soviet ground-to-air missile capability - the B-70 type of strategic bomber is no longer favored by the Air Force. Instead, a much more versatile aircraft which can fly efficiently both at high and low altitudes is being proposed. Five million dollars had been included in the FY 1969 budget for the initial work on this concept. The Congress, in its action this year on the budget request, has increased this sum by \$20 million, and we are now awaiting a proposal from the Air Force on the further development of this aircraft.

Meanwhile, we shall continue to have a very powerful second bomber force at least through the early 1970's. We are now spending about \$300 million a year on modifications and improvements to the B-52 fleet in order to keep it effective through that period. The B-71's together with the B-52's, will give us a force of about 700 strategic bombers through 1970.

QUESTION: How reliable are our strategic missions?

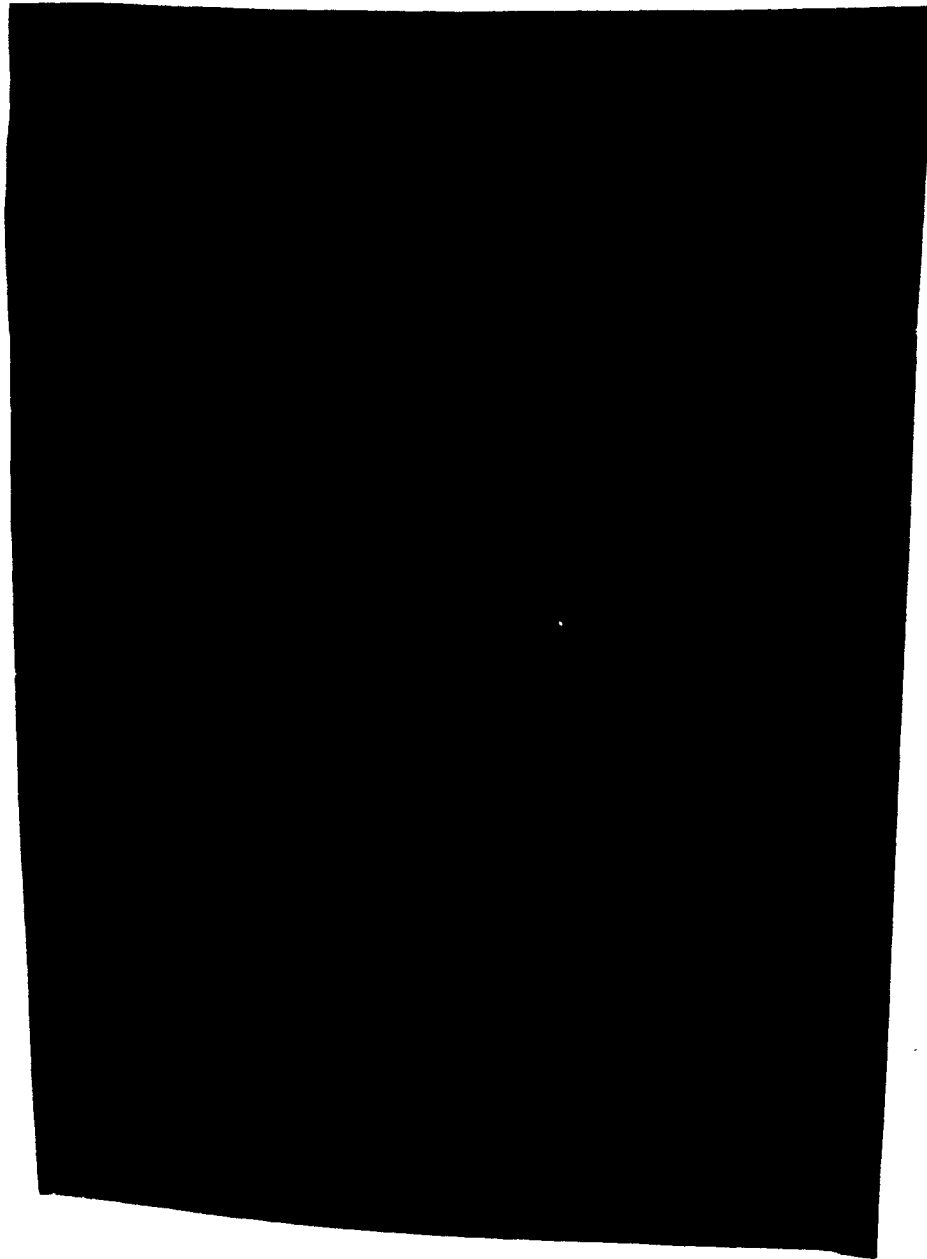
ANSWER: Reliability in the sense of the incidence of mechanical mal-



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atmosphere with its attendant generation of great heat, and its nuclear warhead detonated in proper fashion. This was the Polaris missile which was tested out in the Pacific.

The Committee during its hearings this year went into the matter of reliability of missiles in great detail. I believe I can say without any hesitation whatsoever that every member of the Committee is of the view that I am expressing.

Although I am unable, for security reasons, to go into any detail with respect to the supposed disagreement between General LeMay and the Secretary of Defense with respect to the reliability of our missiles, I will say this: any difference of view between the two gentlemen was in the area of more detail and did not go to the real question of reliability itself. They both agree that our missiles are reliable.

It can certainly be said that every single one of our missiles would lift from its pad on site, travel unerringly to its target, and detonate. This would probably be similarly true of a similar number of aircraft, there would be malfunctions in any mechanical device. This is inevitable.

But a sufficiently large number of our very accurate missiles would lift off, would take the proper trajectory, and would hit the selected target.

One final point: We should not expect and, indeed, we should not attempt to achieve 100 percent mechanical reliability in our strategic missiles or, for that matter, in any other weapons system. The cost of doing so, if it could be done at all, would be prohibitive, and beyond a certain point not worth the cost in view of the other important factors affecting overall system dependability. Instead, we simply buy more missiles and thus provide a combat reserve, just as we do in the case of aircraft, to cover the targets of those vehicles which fail to destroy their targets for any reason whatsoever. In this respect, the NEPTUNE II with its multiple target capability will contribute greatly to the overall combat effectiveness of the force.

QUESTION: Why was the SKYBOLT air-to-surface missile development cancelled?

ANSWER: SKYBOLT, a missile designed to be launched from an air-borne aircraft, was begun in 1959 to meet a very specific need - to clear a path for our attacking strategic bombers by knocking out the enemy's air defenses. This "defense suppression" role is vital: unless it is performed, the bombers cannot get through to their targets.

Two important things happened to influence the SKYBOLT decision. First, the development itself fell far short of its goals: SKYBOLT turned out to be much more expensive than had been anticipated (Estimated at \$500 million in 1960, upwards of \$3 billion at cancellation in late 1968); it would have been considerably less accurate than originally planned; and it would have taken longer than expected to achieve acceptable levels of reliability. Second, by late 1968 we had been successful in developing other weapons which were still on the drawing board when SKYBOLT was undertaken and which made the availability of SKYBOLT considerably less than vital. What all this added up to was that while the "defense suppression" task remained vital, SKYBOLT was no longer vital. In fact, it became clear that a force consisting of the already developed air-to-surface missile BOMBERS, plus some additional AIRBORNE ICBM's already developed was fully adequate to the "defense suppression" mission, and at a saving of about \$2 billion. Therefore, SKYBOLT was cancelled.

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