

Text of McNamara's Statement on the B-70 Bombers

WASHINGTON, March 15—
Following is the text of Secretary of Defense Robert S. McNamara's statement today on the controversial RS-70 program:

Because of the great Congressional and public interest in the B-70 bomber and RS-70 reconnaissance-strike programs, I have within the last week furnished to interested members of the Congress our latest analyses of these two aircraft. In line with our policy to keep our citizens informed on major defense issues, I believe as much of this information as security considerations permit should also be made available to the general public.

The B-70, in its long-range bomber configuration, has been a matter of intense controversy for a number of years. In reviewing the history of this project, I was impressed by the fact that the B-70 never enjoyed the full support of the President and his Scientific Advisory Committee, the Secretary of Defense and his principal civilian advisers, or the Joint Chiefs of Staff as a corporate body. In fact, the only consistent supporter of this program was the Air Force itself. The secretaries and chiefs of the other services, whether under this Administration or the previous Administration, never supported the B-70 for full weapon-system development or procurement and, indeed, many vigorously opposed it. So it is a matter of record that the B-70 has long been considered a very doubtful proposition, with the weight of competent scientific, technical and military opinion against it for many years.

Nevertheless, I approached the B-70 problem with a completely open mind and without any preconceptions one way or the other. I carefully studied not only all the arguments pro and con but also the specific facts and figures upon which these arguments were based. I was particularly concerned, for example, with the cost and effectiveness of other ways of doing the job proposed for the B-70. And, I would like to emphasize at this point that, in se-

lecting a weapon system to accomplish a particular military task, we are dealing not with absolutes but with comparatives. We must always take into account not only the planned capabilities of the proposed weapon system but also its full cost in comparison to the cost and effectiveness of other weapon systems which can do the same job, perhaps in somewhat different ways. I believe we can all agree that the common objective of both the legislative and the executive branches of our Government is to provide all of the forces we need for our security at the lowest possible over-all cost.

Only a Manned Missile

A careful study of the earlier B-70 proposal led to the conclusion that it was really no more than a manned missile. Indeed, a book about it was published under just such a title. The old B-70 system offered none of the advantages of flexibility generally attributed to manned bombers. It could not look for new targets nor find and attack mobile targets or targets of uncertain location. It offered no option but preplanned attack against previously known targets—a mission that can be effectively performed by missiles.

Moreover, the B-70 had important disadvantages when compared with ballistic missiles. It would have been vulnerable on the ground to surprise missile attack. It would not have been hardened and dispersed like Minuteman, or continuously mobile and concealed like Polaris. Rather, it would have had to depend on warning and ground alert response—a method of production far less reliable, in an era where large numbers of missiles exist, than hardening and dispersal or continuous peacetime mobility.

In answer to this it was argued that the B-70, like other manned bombers, could be launched subject to positive control on the basis of ambiguous warning—a property not possessed by missiles. But the important point here is not that bomb-

ers can be launched under positive control in response to warning; rather it is that they have to be launched under positive control in response to warning; rather it is that they have to be launched on the basis of warning because they are vulnerable and cannot ride out an attack. We don't care whether or not Polaris missiles, for example, can be launched subject to positive control because we are under no great compulsion to launch them until we are ready to make the final decision to destroy their targets.

Further, the B-70 is far less suitable than the B-52 for air-borne alert measures. And attempts to maintain it on the ground in a widely dispersed posture and at a very high level of alert would have entailed all kinds of difficult and costly operating problems, problems that have effectively prevented the Air Force from operating any other of its bombers in this way.

Called Poorly Designed

Moreover, the B-70 was poorly designed from the point of view of penetration of enemy defenses. The B-70 would present a very large radar cross-section and the higher it flew the earlier it could be picked up by radar.

Furthermore, the B-70 had not been designed for the use of air-to-surface missiles such as Hound Dog or Skybolt,

and therefore could not attack while standing off several hundred miles, but would actually have had to fly into the target area to drop its bombs. Finally, the B-70 would have been an extremely expensive aircraft, particularly so in relation to its capability in the straight bomber version.

So, it is not surprising that previous Secretaries of Defense and the previous President have had very grave doubts as to the desirability of this particular weapon system. Even the Air Force is now no longer proposing the B-70 in a bomber configuration, implicitly admitting the correctness of many of these reasons.

What the Air Force is currently proposing, and has presented to the Congressional committees, is a new and quite different version of the B-70; namely, a reconnaissance-strike aircraft involving novel components and equipment. While this RS-70, if feasible, would be of considerably greater value to our over-all strategic power than the B-70, it would still suffer from some of the same shortcomings, including very high costs; and, in addition, would introduce entirely new problems which we have yet to explore fully.

The B-70, as it was formerly envisaged, was already a more technically complex vehicle than any of the ICBM's we are now developing. Because of its great speed, it required a mass of electronic components for bombing-navigation, for communications and for controlling the environment within the aircraft. In contrast to an ICBM, these subsystems must operate with very high levels of reliability for periods of hours rather than minutes.

System Is Complicated

The RS-70 would introduce, in addition, another new set of subsystems, including reconnaissance sensors, processing systems, display systems, communication systems, all requiring human interpretation and decision within very short times, and air-to-surface missiles. Many of these new subsystems, it should be recognized, have yet to be developed. Indeed, our technical review of this proposal, to date, indicates that some of the key elements may well lie beyond what can be done on the basis of present scientific knowledge.

The most attractive aspect of the RS-70 is its proposed reconnaissance-strike capability in a post-attack environment. This capability would require, first, the development of an extremely high resolution radar system—a system which, in combination with an operator, could "recognize" targets from an altitude of 70,000 feet and out to a considerable distance. To appreciate what this involves, consider the fact that to separate visually two points in an area as large as this radar is supposed to observe would require a screen 15 feet by 15 feet to present a television-quality picture. This example is given only to illustrate the problem of display and is not, of course, a solution which anyone would consider.

At the present time we do not know how to specify a system which can gather, process and display the data at the rates and with the resolution necessary for the RS-70 mission, which involves firing a missile from an aircraft flying at thirty miles a minute before it moves out of missile range. To achieve the capability which would be required to "recognize" or to analyze damage on some important types of targets is beyond any known technique.

Let me try to illustrate the severity of this problem. Picture the RS-70 flying at 70,000 feet and moving at 2,000 miles per hour. The proposed mission would require the gathering of radar reconnaissance data on the presence of new targets—or known targets which may not have been destroyed or neutralized, and the prompt processing and analysis of these data in flight. The proposed radar, moving with the aircraft at 2,000 miles per hour, would be seeing new area at the rate of 100,000 square miles per hour or 750 million square feet per second. We cannot state today with any assurance that satisfactory equipment to perform this processing and display function in an RS-70 can be made operational by 1970, let alone by 1967, on the basis of any known technology, or whether the human interpretation job required of the operator can ever be done.

Technical Problems

Thus, it is clear that there are many very difficult technical problems yet to be solved—and, indeed, yet to be fully understood—before we can have any reasonable expectation that the reconnaissance capability required by the RS-70 can actually be developed and produced within the 1967-70 time period. We have started work on these problems and over \$50,000,000 has been separately provided for this purpose in the 1963 budget, but we are two or more years away from even a flight test of the reconnaissance subsystems in a form from which operational specifications can be drawn, let alone blueprints for the production of hardware.

The RS-70, as proposed by the Air Force, is also to have the capability of transmitting to home base, processed radar data on important target areas. This capability, if obtainable, would be useful in retargeting follow-up strikes by other manned bombers or by ICBM's. However, the assured rate of transmission

over intercontinental ranges in a wartime environment would be only a minute fraction of the rate at which the data are being acquired and processed by the RS-70 radar.

The Air Force proposal would also require the development of new air-launched strike missiles. For use against hard targets, these missiles, because of their limited size and warhead yields, would have to be far more accurate than any strategic air-launched missile now in production or development. This requirement would entail yet another set of problems.

Finally, the deployment of the RS-70 will involve operating problems far more difficult than that of the B-52.

Although the Air Force has not yet stated the ultimate size of the RS-70 force, a force of about 200 B-70's was proposed at one time. Considering the capabilities the Air Force specifies for this aircraft, we can assume that a smaller number, say 150, would suffice. The Air Force estimates that the first wing of forty-five RS-70 aircraft would cost \$5,000,000,000. A force of about 150 would probably cost in excess of \$10,000,000,000—excluding the cost of the tankers and the annual operating costs.

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I think it is going that:

The RS-70, as proposed by the Air Force, is very far from being ready for production or even full weapon-system development. The new subsystems which could provide the RS-70 with its damage assessment capability have been started in development, but we are not sure now that we know how to develop successfully the extremely high data rate, sharp resolution radar system required. Our best estimates now are that we could not have such a system early enough to produce an operational RS-70 force capable of useful reconnaissance strike before 1970.

2. The RS-70, without these subsystems, would be nothing more than a B-70, the production of which it is now agreed would not be warranted.

3. Until we know much more about the proposed system—its technical feasibility,

its military effectiveness and its cost—we have no rational basis for committing this aircraft to weapon-system development or production.

But regardless of whether or not the RS-70 will be ready for production or can be produced substantially as the Air Force describes it, the question still remains: would the program be worth its cost? This question can be answered only in terms of the total job to be done and the various alternative ways of doing it in relation to their respective costs.

The 1963 and prior year budgets provide for over 1,000 Atlas, Titan and Minuteman intercontinental ballistic missiles, plus forty-one submarines with over 650 Polaris missiles, plus more than 700 B-52 and B-58 bombers. By 1967 the alert portion of the force alone will have three times the destruction capability of the alert force we had last June.

Destruction Capability

Now, how large a part of the enemy target system could this force be expected to destroy after absorbing an enemy surprise attack? As I pointed out in my statements to the Congress in January, this calculation involves a number of factors of which the following are the most important:

1. The number of warhead that each type of vehicle can deliver.
2. The proportion of each weapon system expected to survive the initial all-out nuclear attack—the survival rate.
3. The degree of reliability of each system, i. e., the proportion of the ready operational inventory that we can count on getting off successfully within the prescribed time—the reliability rate.

4. The ability of each type of vehicle to penetrate the enemy's defenses—the penetration rate.

5. The warhead yield and degree of accuracy that can be expected of each weapon system.

Utilizing these factors and applying to them values which, on the whole, are

thought to be quite conservative, we calculate that the strategic retaliatory forces programmed through 1967 could achieve practically complete destruction of the enemy target system—even after absorbing an initial nuclear attack. The addition of a force of either 200 B-70's, which was proposed last year by the Air Force, or the 150 RS-70's now being considered, either of which would cost about \$10,000,000,000, would not appreciably change this result.

While calculations of this sort are useful for estimating the adequacy of our programmed forces under extreme conditions, it should be pointed out that these forces may not necessarily be used in this manner. Indeed, we are implementing command and control processes at all levels of authority to insure that our response can be graded by degree, by geographical and political area and by target type as would be appropriate to the type and extent of an enemy attack.

With regard to the wartime reconnaissance capabilities of the RS-70, we have other means of performing that function and with any adequate high-processing-rate radar system which may be developed, the B-52's and B-58's could have a considerable reconnaissance and bomb damage assessment capability incident to their principal mission. We think that the B-52's and B-58's, arriving after our missiles have suppressed the enemy's air defense, could penetrate as well or almost as well, as the RS-70.

A decision by the Soviet Union to produce and deploy an anti-ICBM system could not significantly change this over-all picture, and in any event would be no less effective against the RS-70 and its missiles. To ensure that our missiles can reach their targets even then, we have included a substantial sum in the 1963 budget for a "penetration aids program." We also have the option of increasing the Minuteman program for which extra production capacity has already been provided.

It is clear, therefore, that the RS-70 program, as we see it now, would not add significantly to our strategic retaliatory capability in the period after 1967. Interestingly enough, at the very time the Air Force is urging the production of another aircraft system on the grounds that nuclear-armed missiles are not dependable, one theatre command is requesting the production of a new nuclear-armed missile to replace his aircraft which he says are too vulnerable in a nuclear war environment. And, while the Air Force, in pressing its case for a new bomber, has questioned the dependability of nuclear-armed missiles, it is at the same time urging an aircraft (the RS-70) which itself depends for its strike capability on highly sophisticated nuclear-armed missiles.

While I am fully convinced that it is entirely premature to make any kind of commitment to weapon-system development or production of the RS-70 in fiscal year 1963, I am not prepared to preclude such a commitment at a later date. By continuing our XB-70 program of three prototype aircraft at the cost of \$1,300,000,000 and by proceeding with the exploratory development of the key subsystems of the proposed RS-70 for which funds have been included in the 1963 budget, we will have open to us the option of producing and deploying an RS-70 system at a later time if the need for such a system should become apparent. Since the key subsystems have yet to be developed, delaying the decision for one year would not postpone the real operational readiness of the first wing at all.

I have just recently reviewed this entire problem with the Joint Chiefs of Staff and again, except for the Chief of Staff of the Air Force, they all support the B-70 development program recommended by President Kennedy.