

~~SECRET~~HEADQUARTERS STRATEGIC AIR COMMAND
Offutt Air Force Base
NebraskaGeneral Thomas D White
Chief of Staff, Hq USAF
Washington 25, D. C.

11 AUG 1959

Dear Tommy,

Our strong requirement for the B-70 is based on these simple facts:

- a. No single weapon system possesses all of the characteristics essential to strategic air warfare. (S)
- b. A multi-threat offensive force, composed of ballistic missiles, high altitude penetrators, and low altitude penetrators, will be essential to maintain our deterrent capability in the post-1965 time period.(S)
- c. For the foreseeable future, a manned penetration system will be an essential element of a strategic air campaign. (S)
- d. The B-70 is the only manned penetrator available in its time period, and the extent of its superiority as a penetrator is far more than sufficient to justify the cost of its development and production. (S)

Presently, a large proportion of the total Soviet military effort and manpower is devoted to their air defense. The great effort that the Soviets are putting into SAM's, supersonic fighters, radar sites, and semi-automatic controls, is in direct response to our current strategic threat. This effort cannot fail to result in a decrease in their own strategic offensive capability. In the future, our possession of a multi-threat force will compel the Soviets to expand this defensive effort tremendously. The Soviets must be capable of defense against low level attack, supersonic high altitude attack, and against attack by ballistic missiles. The fact that each of these three threats will require a separate and distinct defensive system, with negligible fall-out benefit from any one to either of the other two, is generally recognized by our own defensive system experts and technicians. Specifically, the B-70 will force the Soviets to replace nearly all elements of their existing air defenses, and to design, develop, and produce in large quantity a new and more complex system for the high altitude threat alone. However, if the Soviets should fail to take adequate measures against each of our threats, then they must accept the fact that they have been deterred - unless they believe that they can destroy our offensive force with their initial attack. (S)

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By <i>mg</i>	Date <i>12/10/80</i>

ASMC Control No. 762

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In considering our deterrent posture, we must recognize that the missile force must ride out the initial Soviet attack. It is difficult to imagine a set of circumstances wherein we could receive an irrevocable decision to engage in a retaliatory war before enemy weapons actually impact on this country. Today we can protect our missile force by hardening and mobility. Hardening will be effective against Soviet missile attacks so long as their missile accuracies are not substantially better than our own projected accuracies. If, in the future, Soviet missiles attain accuracies of one-half mile, as appears entirely feasible, hardening will become a relatively ineffective measure. Mobility will still be an effective means of securing the missile force, but mobility has its limitations in that, once a certain level of mobile missiles has been achieved, they can still be targeted by area saturation. Today, we are unable to assess correctly the true effectiveness our hardening will have in the post-1965 time period because of our inability to determine the accuracy, yield, and reliability characteristics of the Soviet missile force of that time. Yet we must always have guaranteed survivability from initial attack if we are to deter. (S)

Regardless of the accuracy of the Soviet missile force, manned bombers can maintain their security by air alert if our warning systems are not dependable, or by ground alert if, and when, our warning systems become dependable. The future capabilities of our warning systems are currently open to question, but the absolute necessity for the development of an adequate warning system to fulfill both military and civil requirements cannot be denied. The B-70 is the only strategic system under development which is being specifically designed to capitalize on such warning as we may receive during this time period. Specifically, the air vehicle and all of its sub-systems are designed to permit the B-70 to be airborne within three minutes after receiving the alert signal. The B-70 will be utilized on ground alert during those periods when the warning system is completely dependable. Whenever the warning system becomes undependable due to malfunction or false alarm, the B-70 can be placed on temporary air alert. (S)

Another major requirement for manned penetrators lies in the fact that you cannot put eyeballs on a missile warhead. Only manned penetrators can bomb poorly located and ill-defined targets. A large percentage of the 1965 targets will be located in areas where we will need a better geodetic datum plane tie-in than we have today in order to utilize ICBM's against them with maximum effectiveness. A comparison of presently projected CEP/yields for our manned bombers and our missiles shows that, while missiles are ideally suited to many types of the softer targets, the manned bomber is a more effective and efficient vehicle for destroying hardened targets. For example, a VN-12 target, which is not particularly hard, with a radius of five (5) miles, would require twelve (12) Minute-man missiles or two (2) Class B gravity bombs to achieve a 90% probability of target destruction. (S)

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Accepting the fact that a manned penetrator is essential, our requirement for the B-70, as a follow-on to the B-52 and the B-58, lies in its ability to penetrate in the time period involved. As time passes and the Soviet defenses toughen, the B-52 will be used more and more in the role(s) of a low altitude bomber, or possibly as a peripheral missile-launcher, penetrating only after considerable softening of the enemy defenses. The B-70 will then become the primary penetration aircraft of the strategic force. In this time period, the B-70, as a high level penetrator, will be able to perform many tasks essential to the waging of a strategic air campaign which cannot be performed by a pure missile force and cannot be performed with comparable quality by a low altitude penetrator. These functions include the ability to deliver very high yield weapons with great accuracy, to change targets at any time prior to bomb release, to perform direct damage assessment, to conduct armed reconnaissance, to assess what is seen immediately, and, above all, to use man's judgment in the myriads of unforeseen circumstances which cannot be planned in advance. The fact that these capabilities have been defined many times previously in no way detracts from their validity or urgency. (S)

Every attrition study that I have seen has validated the penetration capability of the B-70. In fact, the last, very detailed study by IAWR shows that the B-70 will have an excellent penetration capability, even when flying unsupported through unrealistically tough Soviet defenses. These war games, however, serve only as indications of probable attrition. The exact effect of speed on penetration capability cannot be stated with assurance by anyone. This is a matter of judgment, best determined by those who have the most experience and knowledge of strategic air warfare, and will always be open to question. However, there can be no question that exposure time in combat is proportional to speed, and that the attrition of a maneuverable vehicle is, to a large degree, dependent on how much time the enemy has to shoot at it. On the basis of reduced exposure time alone, we owe a Mach 3 bomber to our crews. I believe that the B-70 will have an excellent penetration capability and is necessary to insure that we can perform a manned penetration in the post-1965 time period. (S)

Additionally, B-70 development will provide insurance against the following possibilities: (a) that the missile program may not realize its projected goals in accuracy, yield, and reliability; and (b) that the Soviets may develop an effective anti-ballistic missile defense which would seriously affect the deterrent capability of our missile force. (S)

Another important consideration is the value to our nation of the advanced technology which can be derived from B-70 development. Military achievements in the aeronautical field have always provided civil aviation with the advancements necessary for the development of useful civil aircraft. The predicted efficiency of operation at Mach 3 is arousing a wide interest in the commercial transport industry. For example, five aircraft manufacturers concluded from recent studies that, considering direct operating costs per passenger mile, the knee of the cost-speed curve for future air transports occurs at Mach 3, indicating that

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this is the speed to which the next generation of air transports should be designed rather than some intermediate speed. The knowledge and skills required to develop these transports can best be obtained as a direct by-product of the development of the B-70 and not of the F-108, because of similarities in size, configuration, sortie length, and optimized Mach 3 performance. However, if the B-70 is not developed, the civil air transport industry will undoubtedly demand substantial governmental financial support and get it. (S)

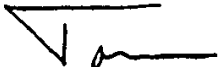
I understand that there are factions within the Air Force that are proposing that a modified F-108 could fill the strategic role of, and thereby obviate the need for, the B-70. I do not concur that such a proposal is practical or operationally feasible. Certainly, a comparison of maximum ranges (B-70: 6520 nm/F-108: 2100 nm) and maximum payloads (B-70: 36000#/F-108: 4000#) is sufficient alone to illustrate that an F-108 should never be considered as a substitute for the B-70. (S)

In summary, in any post-1965 strategic air campaign, no single weapon system will be adequate. A multi-threat force will be absolutely essential. As far as I can project my tactical knowledge and judgment into the future, a manned penetrator will be required. The B-70 will be the only manned penetrator in its time period. (S)

I recommend, therefore, that the B-70 program be continued with a high priority to insure that the B-70 is available to SAC units in wing strength no later than 1965. (S)

Classified SECRET because it relates to the capabilities of future strategic weapon systems. (U)

Sincerely,



THOMAS S. POWER
General, USAF
Commander in Chief

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