

Gen McCorkle/78675

2 Aug 57

Attn: Cont. #

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AUG 6 1957

MEMORANDUM FOR THE SECRETARY OF THE AIR FORCE

SUBJECT: (CONF) Defense Against Possible Guided Missiles
Program Reduction

1. During the month of June, the Air Staff prepared guided missiles program information to be used by Mr. Holaday, the Special Assistant to the Secretary of Defense for Guided Missiles. This was combined with similar information on the missiles programs of the Army and Navy. The entire package was presented by Mr. Holaday in a briefing before the National Security Council, on 3 July 1957. The usual optimism of long range program objectives, combined with the high cost of these programs through 1963, showed steeply rising curves of expenditures which are reported to have been unacceptable in light of the requirements for our many other programs which must also be funded.

2. Informal discussions between Mr. Holaday and Brigadier General McCorkle, of my staff, have revealed that the Secretary of Defense intends to examine ways and means of drastically reducing strategic missiles programs. Mr. Holaday is now in the process of recommending to the Secretary of Defense certain reductions which could be proposed. His recommendations are generally as follows:

a. Reduce the total ballistic missiles cost to about one billion dollars in 1958, and design similar reductions for the ensuing years. Missiles included in this group are: ATLAS, TITAN, and THOR of the Air Force, and JUPITER and POLARIS of the other services.

b. Remove all of the above, except ATLAS, from the national priority which they now enjoy.

c. Procure 2 squadrons of SNARK (20 missiles) by 1960, rather than the presently planned 4 squadrons (80 missiles), or, alternatively, achieve roughly this same effect by a limitation of the production rate to 3 missiles per month.

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- d. Eliminate the RASCAL program.
- e. Examine the decoy programs (GOOSE and QUAIL), and make reductions in this area.
- f. Give careful scrutiny to any B-52 ASM program.

3. Following the NSC briefing, the NAVAHO program was cancelled. In the light of probable Soviet missile developments, we cannot afford to compromise our future in the strategic missiles field. Following the recent NAVAHO cancellation, I feel that further reductions in this area are unwise.

4. However, if reductions in expenditure are forced upon us, I believe that the designation by higher authority of specific actions to effect these reductions is objectionable in principle. These are force structure changes which have serious military implications that should be given the benefit of careful strategic analysis. In particular, I feel that the cancellation of the RASCAL program would be a mistake. Not only will this project give the Air Force valuable training for future air-to-surface missile work, but it also is the only system of its kind in existence. It creates a threat against which no known air defense system is effective, and it can have a significant effect upon Soviet air defense planning. (Inclosure No. 3)

5. Mr. Holaday indicated that you might be asked in the near future to give your arguments against the above reductions. To enable you to have the benefit of Air Staff thinking to assist you in these discussions, I am attaching answers which have been prepared by the Air Staff, and which represent our current thinking in these matters.

- 5 Incls:
- 1-Atlas, Titan, Thor
 - 2-Snark
 - 3-Rascal
 - 4-Decoys
 - 5-B-52 ASM

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ATLAS, TITAN, AND THOR

1. The latest USAF plans for the deployment of ATLAS, TITAN and THOR ballistic missile units require that the monthly production of these missiles be: 6 ATLAS; 7 TITAN; and 6 THOR. This production rate is necessary if the Air Force is to deploy 4 squadrons of ATLAS (40 missiles), 4 squadrons of TITAN (40 missiles), by March of 1961, and 4 squadrons of THOR (60 missiles) by July 1962. The cost of the above program was programmed at \$1.315 billion.

2. In order to reduce FY 1958 expenditures, the Air Force could limit production of these missiles to approximately 4 ATLAS, 4 TITAN, and 4 THOR missiles per month. This limitation would reduce the FY 1958 requirement to less than \$1.100 billion. The effect of this limited production would be to delay the attainment of the first increment of the operational capability and to stretch out the final attainment of the completed initial operational capability. This would change considerably the numbers and dates of the Initial Operational Capability schedule which was approved by the NSC on 28 March 1957.

3. Meanwhile, the Soviet Union is known to have an extensive ballistic missile program. Test firing of various ballistic missiles up to ranges of about 700 N.M. has been underway during the last several years. Most of these missiles have been short range types, but recently the range of test firings has been somewhat extended. The large number of these ballistic missiles test fired by the USSR indicates a high priority comprehensive program, which is expected to produce both ICBMs and IRBMS in numbers by the early 1960s.

4. In its report to the House of Representatives on the FY 1958 Military Budget, the House Committee on Appropriations specifically identified the ballistic missile program as excluded from consideration in the recommended reductions. Any major reduction would have to be reported to the Committee. Additionally, any reduction, such as that described in paragraph 2 above, will require NSC clearance.

5. Current NSC direction requires top priority prosecution of the ballistic missile program with the objective of earliest practicable attainment of the operational objectives. Contractors have been so energized and are enthusiastically pursuing their tasks. A drastic fund curtailment would create consternation among the contractors

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and undoubtedly reduce the degree of emphasis that top level management is accorded this effort. Any such action would have a retarding effect of such magnitude as to place the United States in a dangerously weak position vis-a-vis the Soviet Union in the ICBM/IRBM field.

6. In light of the Soviet threat and the firm guidance from the National Security Council and Congress, it is recommended that the Air Force ballistic missile program not be reduced below its present status. If, on the other hand, it is necessary to reduce the program to approximately \$1.100 billion for FY 1958, it is recommended that this be the absolute minimum figure.

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SHARK

1. Cancellation of the NAVABO program leaves SM-62 (SHARK) as our only intercontinental missile system until such time as the ballistic missile systems become operational. SHARK carries a much larger warhead much more accurately than can ballistic missiles. The ballistic programs are just now entering initial flight test stage and may experience serious delays; SHARK has demonstrated all objectives except full intercontinental flight.

2. To date 43 flights have been made to demonstrate separately zero length launch, aerodynamic capability, and terminal dive warhead delivery technique, including the arming and fusing function. The guidance system has demonstrated better than 2 N.M. accuracy at test ranges of over 900 N.M. and should produce better accuracies at longer ranges due to the damping features incorporated in the stellar-monitored inertial system. Full flight demonstration will occur during this calendar year.

3. The Air Force plans an 8 squadron SM-62 program, 4 squadrons to become operational by end FY 1960. This presents the smallest operational program which can contribute meaningfully to the strategic offensive in this time period.

4. The 8 squadron program requires a peak production rate of 7 missiles per month. A 4 squadron program could be attained on a 3 per month production rate but the program would then be stretched into the middle 1960s, and would lose much of its validity. Any reduced production rate will not produce proportionate dollar savings.

5. Cancellation or reduction of the SM-62 SHARK program for budgetary considerations, considered in light of the NAVABO program cancellation, would leave an unacceptable gap in our strategic offensive capability.

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RASCAL

1. As long as the Air Force has a well publicized air-to-surface missile program, it can be assumed that the USSR will be devoting some degree of effort to defense against this type of weapon. Our own people view the problem of defense against the ASM with considerable concern. The cost of our maintaining the ASM threat should always be less than the cost to the USSR to defend against it.

2. The RASCAL program of one DB-47 squadron augmentation is considered the irreducible minimum which will provide training and experience in the employment of air-to-surface missiles and at the same time provide a limited operational capability to SAC in case of an emergency.

3. The Air Force has already spent some \$492,000,000 on the RASCAL program. The system can be made operational in the next calendar year for about 20 million dollars more. Total annual operating costs for the year FY 59 thru 61 will cost about \$6 million. In other words, 88% of a one half billion program has already been paid for and the system will be operational within a year.

4. The NAVARO program cancellation, even though occurring early in the development phases with obviously large savings, evoked critical comments from many directions. RASCAL cancellation, with the program so close to operational status, and with such a small percentage of savings, may arouse even more critical comment. The cancellation of what the public considers to be another major missile program may seriously weaken labor force morale, undermine industry confidence and achieve for the Air Force an undeserved reputation for program inconsistency.

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DECOYS

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1. By 1961, the Soviet defenses are expected to be such that manned bombers cannot fight and survive unless augmented by both ECM and decoys in proper proportions.
2. The objective of the decoy program is to present large numbers of false but realistic targets to all elements of the enemy's detection, control and counter weapon capabilities. These realistic targets cause the enemy to expend his defensive weapons and saturate his defense systems, thereby, increasing the strike and survival probability of manned bombers.
3. The Goose and Quail decoys are operationally complementary to each other and must be used in proper combination with the manned bomber force to insure the best overall effectiveness.
4. The Air Force originally stated a requirement for 8000 decoy missiles. This was reduced to a figure of 2000 as an absolute minimum.
5. Our war gaming exercises with decoy systems have produced some striking conclusions. One of the best and easiest is that an increase of ten (10) B-52's, at a penetration cost of \$23,000,000 each, will increase total strike effectiveness by about 1% from 10 to 11, at one particularly heavy defense level. This amount of money can buy a program of about 2000 decoys the use of which will increase strike effectiveness to about 70% at that same level.
6. The Goose program is well advanced in R&D; designs have been finalized, airframe fabrication has already been completed on several test missiles. Two dynamic Gummy missiles have been fired providing data to launch the first live missile. On 27 June the first Goose missile was launched and successfully flown for one and a half hours.
7. The Quail program is likewise well advanced in R&D; designs have been finalized and three missiles have been fabricated for flight test from B-47 aircraft. Prototype launch gear has been manufactured for the B-47 and the B-52 gear is under design.

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B-52 ASM

1. The B-52 aircraft will constitute a major part of our strategic striking force for the next 10 years or more. In order for it to fight and survive in the defensive environment forecast during this period it is essential that it operate with ECM, decoys, and air-to-surface missiles.

2. By 1981, the Soviet defensive system for primary strategic targets will include surface-to-air missiles of 100 N.M range, speeds of M 2.5 to 3.0, altitudes to 70 to 80 thousand feet with active radar seeker guidance systems. Without protective systems attrition of B-52's would be unacceptable. It is, therefore, essential that we meet our stated operational date of 1982 for the B-52 ASM.

3. While unlimited funding would not guarantee achieving the desired operational capability appreciably earlier, any curtailment of presently projected funding would seriously affect the program.

4. This program has been thoroughly reviewed by the Air Staff and was approved by the Secretary of the Air Force, 1 April 1957. Its continuance is vital to the USAF.

5. Contractor proposals are currently being evaluated by source selection board at ABDC. Recommendations should be in this Headquarters not later than 15 August for USAF approval. Subsequent plans are to select a contractor and initiate immediate development of the ASM.

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PARTIAL TRANSCRIPTION FOLLOWS

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