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2-9372

TS Cont #  
IX - Hq USAF

## Implications of Soviet Atomic Explosion

Director of Intelligence, DCS/O

5 OCT 1949

Director, Plans and Operations, DCS/O

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Col Dean/gr/72445

1. As a result of the recent Soviet atomic explosions (and other developments), the USAF is reviewing its current war plans. It is requested an estimate on the following be furnished not later than noon Thursday, October 6:

a. Number of atomic bombs possessed by the Soviets, if any. If none, time first one is expected.

b. Build-up and/or stockpile of atomic bombs by the Soviets through 1957.

c. Capability of Soviets to deliver atomic bombs by any means on the U.S. and Allied countries (correlated to b above).

d. Implications of the Soviets having the atomic bomb in significant quantities (10 to 100) of the nature indicated below:

- (1) Methods of delivery and targets on which the Soviets would deliver atom bombs in the intermediate range period (1952-5).
- (2) General psychological reaction as it affects military operations in this country when one or more atom bombs are exploded in this country. For instance, will public opinion demand that practically all USAF defense forces remain in this country until the threat of additional atomic explosions is apparently eliminated?
- (3) General catastrophies (if any) that could be caused by successful explosion of atom bombs estimated to be available in the intermediate range period. For instance, could the U.K. be "starved" by the total destruction of six or more ports in the U.K.; are vital installations or resources so concentrated that the planned allied strategic air offensive could not be successfully delivered? Etc.

2. Request you indicate whether any of the above is or could be affirmed by other than USAF sources.

C. K. RICH  
Colonel, USAF  
Executive, D/P&O

S. L. ...  
Major General, USAF  
Director, Plans & Operations

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Director, Plans and Operations, DCS/O

Director of Intelligence, DCS/O

LtCol Ryes/1a/6043

AFDAI-AE  
w/6 Oct 1949

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1. The following D/I, USAF estimate is furnished in response to Comment No. 1:

a. Atomic Stockpile: It is estimated that the Soviets at present have a stockpile of not less than two to three bombs. Based on current estimates of the maximum amount of uranium available, on the assumption that the first bomb assembled was tested immediately and on the assumption that Soviet plants will operate at high efficiency, it is estimated that the Soviet stockpile will be as follows:

10 by the end of 1949  
25 by mid-1950  
50 by mid-1951  
75 by mid-1952  
110 by mid 1953  
150 by mid-1954  
190 by mid-1955  
230 by mid-1956  
290 by the end of 1957

b. Soviet Capability to Deliver Atomic Bombs: It is considered that the Soviet TU-4 aircraft (B-29 type) is the only aircraft the Soviets possess that is suitable for carrying atomic bombs. It is estimated that the Soviets now have 150 TU-4s in operational units and possibly an additional 80 TU-4s in the pipeline, depots, or in use for training purposes. The TU-4 is estimated to have performance characteristics comparable to the USAF B-29. Employing TU-4s, the Soviets have the capability to attack targets in the Northwest United States on a two-way mission basis. This capability can be increased materially by the employment of aerial refueling. Most important industrial, urban, and governmental centers in the United States can be reached by TU-4s on a one-way mission basis. It is considered that the Soviets would be willing to expend airplanes and crews to deliver atomic bombs to selected targets. Current production of the TU-4 is estimated to be at least 15 aircraft per month, and this production rate can be increased substantially. It is considered that the production of TU-4s or other aircraft of improved performance suitable for carrying the atomic bomb will keep pace with the production and stockpiling of the bombs. In addition to having the capability to bomb any target in the United States and Canada, the Soviets can deliver the atomic bombs to any base area employed by the Allies in their war effort.

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Director of Intelligence, ICS/O

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LtColKyes/1a/6043  
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c. Delivery of Atomic Bombs by Unorthodox Methods: It is possible that the Soviets could introduce atomic bombs into the United States or Allied Nations by subterfuge. It appears that a means of conducting such an operation might be to bring the bomb into allied ports in merchant ships.

d. Implications of Soviet Possession of the Atomic Bomb: There are many factors which would affect the Soviets decision as to how to expend their atomic bombs. It is possible that overall strategic considerations might induce the Soviets to expend the major portion of their effort against the United Kingdom in the hope of forcing her withdrawal from active participation in the war. They might expend the bulk of their capability in one-way attacks against Urban, industrial, and governmental centers in the United States. The devastation expected from U.S. strategic air attack might induce them to expend the bulk of their effort against U.S. strategic air force bases. As long as the Soviets have a limited number of Atomic Bombs compared with the number in possession of the Allies, the prime objective of the Soviets probably will be to prevent the delivery of the U.S. atomic offensive.

e. A single USAF strategic bomber group would appear to be the smallest unit against which the Soviets would expend an Atomic Bomb. However, as the Soviet stockpile increases the possibility of atomic attack on even smaller units must be considered. The Soviets will, undoubtedly, expend at least a part of the atomic stockpile on targets in the United States. Such targets seem certain to be our major population centers. There is also a possibility that the Soviets might attempt to bomb our atomic production facilities.

f. The Soviets probably will expend at least a part of their stockpile of bombs on targets in the United Kingdom. A prime consideration will probably be to deny the United Kingdom as a base for Allied operations. As the Soviet stockpile of bombs increases it appears to be highly probable that the Soviets would make an all-out effort to force the capitulation of the United Kingdom.

g. Psychological Reaction of the U.S. Public to Atomic Bombing: The psychological reaction to atomic bombing of targets in the United States will unite the U.S. public behind an all-out war effort. However, the public will demand that a major effort be devoted to the air defense of the United States. This effort may divert some U.S. war-making capacity.

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Lt Col Kyes / 1a / 6043  
AFOAI-AE

h. General Catastrophes: The following possibilities might be classed in the category of general catastrophes:

(1) The loss of the United Kingdom as a major ally as the result of atomic attack against that country.

(2) The destruction of our strategic bomber groups on the ground.

(3) It would certainly be a major catastrophe if U.S. urban, governmental, and industrial areas were subjected to successful atomic attacks.

(4) Reference specific question in Par. 1.d.(3), Comment No. 1: The destruction of six major British ports, or any proximate number, would not result in the British Isles being starved. Except for a possible concentration of strategic aircraft, there are no vital installations or resources so concentrated that the planned allied strategic air offensive could not be successfully delivered.

i. The Intermediate Period: In the intermediate period, 1952 - 1955, there will be an appreciable increase in Soviet atomic offensive capabilities. The stockpiling of bombs will increase substantially and aircraft capable of delivering the bomb will have improved performance characteristics. The TU-4 will have an increased radius and aerial refueling techniques could be well developed by this time. The selection of targets by the Soviets probably would not change materially from that outlined above. However, Soviet capability to force the surrender of the United Kingdom will increase considerably during this period. Likewise the Soviet capability against the United States will also be increased very decidedly.

2. The information in Par. 1.a., above, concerning the atomic stockpile is based upon the estimate of the Joint Nuclear Energy Intelligence Committee. The remainder of the estimate is the unilateral view of the D/I, USAF, although a large part of the material covered is in accord with the views expressed in the draft report of the American-British-Canadian Intelligence Conference (Part I - ABCI-15) which is currently being considered by the Joint Intelligence Committees of the three countries.

1/3/54  
Chief, USAF  
Director of Intelligence

OFFICE SYMBOL	1. AFOAI-AE	2. AFOAI-SV	3. AFOAI	4. PHOENIX	5.
GRADE AND SURNAME OF COORDINATING OFFICERS	Col Kyes		M R Steward	Maj Gen. [Signature]	

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6 Oct 49

AFOAI-AE  
LtColMichaelis/hp/75717  
6 October 1949MEMORANDUM FOR RECORDPROBLEM

1. To estimate briefly for D/P&O, factors which will tend to change existing war plans and future planning as a result of the acquisition by the Soviets of an atomic weapon capability.

FACTS AND DISCUSSION

2. Lt. Col. Emmens and Lt. Col. Michaelis, Planning Estimates Section, AFOAI-AE, were designated project officers to prepare an estimate as requested by D/P&O, R&R dated 5 October 1949, on questions covering:

- a. The number of atomic bombs possessed by the Soviets.
- b. Build-up and stockpile of atomic bombs by the Soviets through 1957.
- c. Capability of the Soviets to deliver atomic bombs by any means to the US and Allies.
- d. Implications of Soviet possession of the atomic bomb in significant quantities (10 to 100) as concerns:
  - (1) Methods of delivery and targets in the intermediate range period (1952-55).
  - (2) General psychological reaction as it affects military operations in the U.S.
  - (3) General catastrophies that could be caused by successful explosion of atom bombs available in the intermediate range period.

ACTION

3. Recommend approval of Comment #2, attached R&R, and transmittal to D/P&O.

Coordination

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