THE JOINT CHIEFS OF STAFF WASHINGTON 28, D. C.

JS MARKINGS D

CJCS 381 (Net Evaluation) (1 Nov 56)

MEMORANDUM FOR ADMIRAL RADFORD

1 November 1956

- 1. The Chairman's Staff Group has reviewed the 1956 Report of the Net Evaluation Subcommittee. We consider it to be responsive to the directive and guidance contained in NSC 5605. The report itself contains four major parts: Introduction, Summary, Conclusions and Discussion. In addition, there are a number of annexes which contain detailed information and analyses which have been used in formulating the report.
- 2. The Chairman's Staff Group recommends that you read the Introduction, Summary and Conclusions (pages 1 through 10). In noting these conclusions, we are again impressed with the urgency of major technological improvement in air defense. In addition to the Summary and Conclusions, there are certain items of interest contained in the Discussion which we have highlighted for you in an Appendix hereto.
- 3. The Chairman's Staff Group recommends that you approve the report as written for distribution to members of the Net Evaluation Subcommittee for their concurrence and comments.

Very respectfully, CHAIRMAN'S STAFF GROUP Attachment I con in the ister recommendation, and feating recommend that you and to so distribit in to were trades me have impossed there it have engreed that The JOAG report will not be do to ten to the maning.

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APPENDIX

ACTIONS AND RESULTS UNDER CONDITIONS OF "STRATEGIC SURPRISE"

- 1. The total time involved for this nuclear exchange was 14 hours.
- 2. Under conditions of "strategic surprise", the Soviet forces had as an objective the security of the USSR and the neutralization of U.S. nuclear capability to prevent devastating nuclear counter attack. The Soviet concept also provided for the launching of strong land offensive forces in Europe and the Middle East with an objective of seizing key bases, industrial areas and communication centers. Also under the Soviet concept, the Red naval forces were to find and to destroy if possible U.S. and Allied carrier attack forces.
- 3. In addition to the objective of destroying the U.S. nuclear retaliatory capability, the Red forces also had as an objective destruction of industrial and population type targets which would destroy the U.S. economic, political and social structure. Soviet air tactics were designed to penetrate simultaneously U.S. and Allied early warning nets at H-hour during the hours of darkness. Their tactics also provided for the use of aircraft in one-way missions.
 - 4. The Soviet attacks produced the following general results:
 - a. They were able to launch some 1706 aircraft against the United States and Allies. This operation resulted in placing some 6600 megatons on the U.S. and its Allies.
 - <u>b</u>. The losses from those attacks were very high; in the neighborhood of 1300 aircraft. A high percentage of those losses resulted from the use of one-way strikes.
 - c. The Soviet clandestine attack provided for the detonation of one 10 megaton weapon in the Soviet Embassy in Washington and one 10 megaton weapon in the Soviet UN offices in New York.
 - d. The Soviets also launched missiles from submarines against some of our coastal bases and facilities.

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Aupendix

- e. The general results from this nuclear attack were high losses across the board in our civilian population and also in our military personnel. As an example, SAC personnel losses were about 66%; 68% of CONAD personnel were casualties; Army forces in the United States had about 65% casualties; the Navy suffered lower losses with some 42% casualties world wide.
- 5. The FCDA estimated that the results of this "surprise" attack would find:
 - a. The national Government virtually wiped out.
 - b. Transportation severely damaged.
 - c. Energy and power severely damaged.
 - d. Manufacturing capability severely crippled.
 - e. Labor forces almost non-existent.
 - <u>f</u>. Financial structure almost completely paralyzed and, as previously stated, over-all personnel casualties in excess of 50%.
- 6. The U.S. concept for reacting to the "surprise" attack was as follows:
 - a. The United States had as objectives the defense of CONUS with forces available to CINCONAD, and the launching of nuclear strikes against the USSP designed to destroy its military capability and will to resist.
 - b. Allied and U.S. forces throughout the world were to participate in defensive operations within their capability.
 - <u>c</u>. Tactical forces in Europe and other areas were to undertake offensive operations.
 - d. Strikes by naval carrier type aircraft, missiles and seaplanes to support the above operations; and in addition, naval forces were to protect sea communications and secure the sea lones.
- 7. The tectics of the Strategic Air Command in this operation is to allocate multiple reasons as req inec to inside destruction of primate targets. SAC bombers were to reactive along course router engloying acturation to stemilize enemy defenses.

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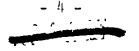
Low level delivery tactics were to be used where possible, employing ECM decoys and radar busters to the maximum capability.

- 8. The readiness of U.S. strike forces was as follows:
- a. SAC expected to have 50% of their overseas forces on alert and 1/3 of their forces in the ZI on alert. The first aircraft were to be launched in five to seven minutes after warning.
- b. TAC and Navy had 25% forces on alert and their first strikes were launched in 25 to 35 minutes.
- <u>c</u>. U.S. surface-to-surface missiles were launched 15 minutes after the execution order.
- d. CONAD had four aircraft squadrons on runway alert and could man the rest during the period enemy aircraft crossed from the DEW Line to the GCI Line.
- 9. In carrying out its quick strike, SAC was able to launch 642 bomb carriers, with 740 bomb carriers on a follow-up. It also launched 40 SNARK nuclear surface-to-surface missiles. The SAC combat losses in these two strikes were 610 aircraft. The Navy launched on quick strike 65 aircraft in the Mediterranean and 46 in the Pacific, with over 100 follow-up strikes in those two areas. The results of these strikes was a delivery of some on the Sino Soviet Bloc.

GROUND ACTIONS

- 10. The U.S. and Allied armies had a total of 72 divisions deployed. Since the over-all military operation totaled only 14 hours, no decisive results could be determined as far as ground warfare is concerned. The report does indicate that all Soviet army actions in Europe would be at a virtual halt due to fall-out after H/14 hours.
- 11. The report provides some information as to what the U.S. attacks would do to the USSR. The Soviet long-range air force lost almost 2/3 of its personnel as well as substantial numbers of aircraft and base facilities. However, the main factor which limited its continued combat capability was expenditure of the USSR atomic stockpile. The report estimates that over 50% of the LRAF air facilities and personnel were lost.

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- 12. It is interesting to note that of 114 divisions in Western Europe
- 13. The Soviet naval forces did not sustain heavy losses and were estimated to continue as an effective force at sea for 15 to 45 days.

The report indicates that the Soviet Bloc was effectively damaged; exercising would therefore be a difficult problem. The report also estimates that U.S. strikes on the USSR

17. Since the Allies still possessed 80% of their original warhead stockpiles and adequate delivery means, whereas the USSR retained only 10% of its weapons (26), it is considered that the U.S. forces could effectively terminate any further resistance on the part of Soviet forces.

ACTIONS AND RESULTS UNDER CONDITIONS OF 'FULL ALERT"

18. Under this condition, the Soviets had the same general concept of operations, i.e., security of the USSR and neutralization of U.S. nuclear capability. To attain those objectives, they planned air attacks, land campaigns and naval campaigns. Their tactic was to deliver their air strikes against the U.S. Inder cover of darkness, Fgain immediately following a holidar period.

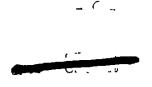
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- 19. Under the term "full alert" the U.S. was to be in a period of international tension for 20 days prior to the Soviet Bloc attack. This alert period enabled some force augmentation and redeployments, particularly in the Air Force. Also, the early warning lines were extended and augmented to obtain earlier warning of attack. The early warning line provided for some two to six hours warning for U.S. strike forces, both in "surprise" and under condition of "full alert".
- 20. The Soviet attacked with 965 bombers against the United States. Low altitudes, ECM decoys and air-to-surface missiles were employed. 674 weapons were detonated with the yield of 5047 megatons against the United States. Against this attack, the U.S. employed 3650 all-weather fighter sorties and 180 of 304 NIKE batteries. U.S. air defense kills totaled 367 flying objects (218 bombers and 189 decoys).
- 21. The Soviets also launched attacks in other areas of Europe and the Far East, delivering an additional 2000 megatons against targets in those areas.
- 22. In addition to their air attacks, Soviet naval forces -- particularly submarines -- participated actively in missile attacks against U.S. bases and installations.
- 23. War gaming was not accomplished on a ground phase nor a naval phase of attack under conditions of "full alert".
- 2h. The results of the Soviet attack on the U.S. were in most respects the same as for the condition of "strategic surprise". The forces they dispatched against the U.S. were slightly larger, and they were able to put down some 500 more megatons. However, due to the tactics used in the selection of their targets, the over-all results were not as great as under surprise attack. There were fewer personnel killed in this "full alert" than under the surprise type of attack.
- 25. In general, it is northy of note that under the condition of "full alert", the possibility of continuation of government would be increased. Otherwise, FCDA estimates of damage show the same general order of magnitude as under "surprise". Military losses are also of approximately the same general order.

 The United States reacted to attack under "full alert" as follows:

Appendix



- a. SAC was able to launch its "quick strike" at H/10 minutes and to dispatch in the first wave 2051 bombers. This is a substantial increase over their "quick strike" under "strategic surprise" (in that "quick strike" they were able to launch only 642 bombers). This force was able to deliver over against the USSR
 - b. SAC combat losses were estimated as 478 bomber aircraft.
- c. The naval capability under "full alert" was substantially increased. 550 carrier based attack aircraft were available on 18 carriers deployed to the forward areas. In addition, they had REGULUS equipped cruisers and guided missile submarines.
- d. Allied ground forces under "full alert" were the same as for "strategic surprise". However, the ground action was not assessed in this report.
- 26. The general order of magnitude of damage inflicted by the U.S. on the USSR is approximately as outlined under the conditions of "strategic surprise".
- 27. Under "full alert" it is concluded that the U.S. would still possess a high portion of its nuclear stockpile and a delivery capability, while the USSR would have expended practically its entire stockpile.
- 28. The general ineffectiveness of our air defense forces to prevent devastation of the U.S., even under conditions of "full alert" when they have been augmented by additional forces, is a significant product of the report.
- 29. The clandestine threat covers in general terms the Soviet capability to introduce clandestine weapons into the U.S. and to detonate them under certain conditions.
- 30. The report also mentions other variable critical factors which substantially affect this evaluation:
 - a. The first deals with the size and composition of the Soviet atomic stockpile, together with the size and composition of the Soviet long-range air forces. This year's report, based on the National Intelligence Estimate, uses a Soviet stockpile figure that is approximately four times greater than the figure used last year. In the 1935 report the Soviets were given a capability of delivering 700 megatons on the U.S. as compared its the 5000 megatons in the 1935 version.

Appendix

- b. The second is the progress of the Soviet guided missile program.
- c. Third is the composition of U.S. forces in 1959, and whether or not programmed equipment will attain the expected capability.
- 31. Certain aspects of special analysis are treated as follows:
- a. Areas of special interest requiring concentration of intelligence effort are:
 - (1) Soviet nuclear weapons stockpiles.
 - (2) Soviet long-range air force.

- (3) Soviet guided missile program.
- (4) Soviet electronic countermeasures.
- b. The alert requirement for U.S. nuclear military forces. For SAC to achieve the reaction time of from five to seven minutes to launch B-47 and B-52 aircraft will require augmentation of SAC forces and increase in SAC facilities.
- 32. The report concludes by discussing the ICBM problem, particularly the problem of defense against ballistic missiles. There is also a discussion of the psychological effect of a nuclear attack. It is pointed out that the people will not be prepared for an attack of this type. With respect to chemical warfare, the report concludes that the total havoc of nuclear war offers a more profitable course of action for the Soviets than chemical warfare.
- 33. In a comparison of the 1955 and 1956 reports, it is concluded that in 1959 the U.S. would be in a period characterized by either side having a capability to launch an attack which would result in mutual destruction (same as Period $\#^{\perp}$ of the Killian Report).

Appendix