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S/AE: V. BAKER
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DEPARTMENT OF STATE

MEMORANDUM OF CONVERSATION

August 13, 1958

7021

Subject: U.S. Policy on Nuclear Tests.

700.5611/8-1358

Participants: State

XR 600.0012

The Under Secretary
Mr. Philip J. Farley, S/AE
Mr. Fisher Howe, S/S
Mr. Vincent Baker, S/AE

SEP 3 1958

Defense

Mr. Donald A. Quarles
Lt. General Clovis E. Byers
Captain Clifford S. Foster

AEC

Mr. John A. McCone
General Alfred D. Starbird

CIA

Mr. Allen Dulles

White House

Mr. Gordon Gray
Dr. James R. Killian, Jr.
Mr. Spurgeon Keeny
Mr. Bromley Smith

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Mr. Herter outlined the procedures anticipated in connection with the conclusion of the Geneva technical talks. He said that the conference might agree on a report as early as August 15, and the United States should in any case be prepared no later than August 22 to make an announcement on the change in policy now under consideration. The Secretary, he said, was considering the possibility of a unilateral announcement on nuclear tests in which the UK would join. The Secretary was inclined to feel that the French would not join in the policy announcement.

Mr. Quarles asked what areas of agreement had been developed thus far in Geneva. Mr. Keeny said he had just returned from Geneva and there was substantial agreement on the number of posts, the nature of inspection and the technical requirements of an

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organization to conduct the inspection. As to control posts, he said that agreement seemed likely on 160-170 posts as the total number on a global basis. The conference had defined the kind of equipment they would have, the method of their operation, including their requirements for monitoring aircraft flights under certain conditions. As to inspection, he thought the conference would probably agree on mandatory on-the-spot inspection of unresolved events of either a seismic or acoustic nature. The Soviets were now sticking on the word "suspicion" as a requirement for on-the-spot investigation, and the West was insisting on the right of immediate, unimpeded investigation of any "unresolved" events. As to the control organization, the U.S. draft dealt in simple terms on essential rights of the control organ and provided that a technical organization would decide upon inspection of individual events on the basis of pre-agreed criteria. The Soviets, he said, continued to raise matters that would involve political decisions, i.e., the relationship of the control organ to the UN and whether there should be national or international staffs for observation. The Western delegation believed, however, that the Soviets would withdraw the political parts of their proposals in order to achieve agreement. The conference had agreed on a system which would detect with an 80%-90% level of confidence explosions of 1-2 kilotons in the atmosphere, and, with a similar degree of reliability, underground tests of 5 kilotons. The system would have some capability in the 1-5 kiloton range. The conference had not agreed on a system for detection of high altitude tests, although various possibilities had been discussed.

Mr. Quarles asked for clarification of the 80%-90% probability figure. Mr. Keeny said that it meant two quite different things as applied to above ground and underground explosions respectively. In the case of explosions in the atmosphere, the system provided 80%-90% probability of detection and identification. In the case of underground tests, 90% of events with an energy of 5 kiloton explosions would be identified as earthquakes. 10% would require inspection to be identified, but 100% would be detected. Since identification of 10% of such events would require evidence beyond that of the instrumentation provided in the system, the criterion of "suspicion" might not be adequate as a basis for on-the-spot investigation. It was the unanimous view of the delegation, however, that agreement on these matters will be achieved. The Soviets had made important concessions already and it seemed improbable that they would not go on at this stage to reach agreement.

Mr. Gray said we must also consider the possibility that the Soviets might walk out of the conference, even at this stage. Mr. Dulles agreed, commenting that Khrushchev had been known to change his mind quite suddenly, as in the case of the recent summit negotiations.

Mr. Herter

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Mr. Herter asked whether political or technical matters might serve as the basis for such a break in the conference. Dr. Killian said the Soviets could denounce the whole system as being too complex and say it was designed for espionage. Mr. Quarles said that would be the easiest kind of propaganda for the West to counter. Dr. Killian agreed, saying that the record of the conference would be made public and would support the Western position. Mr. Keeny observed that if the Soviets walked out now the Western case would be well documented. Dr. Killian agreed that this would be true, at least if sophisticated people looked at the report. Mr. Farley added it would be hard for the Soviets, even to an unsophisticated audience, to deny their own acceptance of on-the-spot investigation or to deny the flexibility in the Western position in moving from a 650-to a 170-station system.

Mr. Herter observed that we should begin studying the verbatim records to prepare our defense on points of disagreement in case the Soviets should break up the conference. He asked whether the 170 posts were to be spaced by agreed criteria. Dr. Killian said they were.

Mr. Gray asked whether Communist China would be included in the system. Mr. Keeny said the disposition of posts had been decided merely on a global basis sub-divided by continents and that specific countries in which posts would be placed had not been discussed. It would be possible to avoid putting posts in Communist China if we were willing to degrade the capabilities of the system, but we would have to have inspection rights to investigate unresolved events in China, whether or not there were posts there, if the system was to have any meaning.

Mr. Quarles said he believed the kind of question most likely to cause a break in negotiations would come after the technical phase. Such questions as location of the control posts and the nationality of inspectors could lead to protracted propaganda operations of the kind we witnessed at Panmunjom.

Mr. McCone asked whether we could counter or avoid that kind of situation by a unilateral declaration on test limitation for a period. We could, for example, call off all tests which create off-site effects and say that underground tests, being an internal matter of no direct international concern, would continue. We could point out with satisfaction what the technical people had agreed on certain technical aspects of the system and that accordingly, we would now take this step to further the prospects of agreement. Mr. Quarles said he could not agree that a unilateral declaration of this kind would be in our interest, since it would reduce our bargaining power in negotiation of the political aspects of a control system.

Mr. Herter commented that Dr. Fisk had submitted some comments on the possibility of excepting underground explosions. Mr. Farley read Dr. Fisk's comments as summarized in Denuc 157.

Mr. Quarles said he thought we would be vulnerable if we put forward an exception for peaceful uses as a part of our proposal, since the whole thing is just a proposal on nuclear weapons tests and has no direct bearing on peaceful uses.

Mr. McCone raised the question of detectability of underground tests, saying that Dr. Teller believes they could be dampened, but added that Dr. Mark does not.

Dr. Killian said that dampening looks increasingly difficult from a technical point of view. Mr. Keeny said the delegation became much less concerned about this problem as it studied the question, and that dampening effects, say on the order of 10, were not a practical possibility in the view of the delegation.

Mr. Herter asked the difference in value from a military standpoint between tests underground and those above ground. General Starbird said that confining tests to underground explosions would rule out systems tests of a kind which are especially important for systems operating at high altitude or under water. We can, however, test individual components of these systems underground, and that is far better than no testing.

Mr. Herter asked if we would want from a military standpoint the unlimited right to a test above ground. Mr. Quarles said if we had an unlimited freedom of choice we would.

Dr. Killian mentioned that there is uncertainty regarding the hazards of such testing but there is no scientific finding of fact of any definite ill effects from such tests.

Mr. McCone said that if tests were continued above ground we would limit such tests to a point that they produced no increase in the level of radioactivity now in the atmosphere. Dr. Killian mentioned that any test limitation of this kind would not follow in logic from the Geneva talks. Mr. Quarles said it was hard to see such a limitation as productive in the cold war was against the Soviet position that there should be no tests at all. He would not think it desirable, even as an internal measure during negotiations, because we would be doing less than the Soviets have done. Mr. Quarles would prefer the posture of favoring further negotiations, this time on the political side of the control problem, but again without commitment as to the relationship of test cessation to other measures of disarmament.

Dr. Killian said he believed we should either do as Mr. Quarles suggested or say that we were willing to proceed with a complete test suspension rather than a limitation of tests.

Mr. Herter

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Mr. Herter commented that underground testing was quite different in its implications from a political standpoint from testing above ground. Mr. Quarles said he believed the logic of the Geneva procedure would be to seek first technical agreement on controls, secondly, agreement on the political phases of controls, and thirdly, agreement to stop tests possibly within the broader context of agreed disarmament steps. He would not favor a unilateral declaration, even of a partial suspension, since this would not show up well against the moves the Soviets have already made. Mr. Herter said that Mr. Quarles' analysis did not deal fully with what we would do if we get agreement on the political phases of control. He asked whether we would still test without limitation up until the time the agreement is ratified.

Mr. McCone said that negotiations would be likely to go on indefinitely, and that we should not stop tests indefinitely while waiting. Dr. Killian commented that the talks at Geneva had accomplished something never achieved before in the way of serious discussions of disarmament controls. Mr. Quarles said he agreed, and welcomed this development, but thought we should not commit ourselves in advance on our position with respect to continuation of testing.

Mr. Gray said the distinction between technical and political aspects of control seemed undesirable from a public relations standpoint. If we planned to discuss the distinction, probably instead of calling it "technical vs. political" we should perhaps call it "technical vs. practical" aspects of control. Mr. Farley stated that in a political negotiation it would be difficult to avoid dealing with the political question of conditions under which we would suspend tests.

Mr. Gray said that the President must decide if we are to break a test suspension away from the cut-off in the present package. Mr. Farley said we would need agreement on conditions under which tests would be suspended in a political negotiation in order both (a) to break the disarmament impasse and (b) to take advantage of the inspection to which the Soviets had agreed at Geneva.

Dr. Killian mentioned some of the policy decisions which would be required if such agreement were to be sought. Should we depart from present NSC policy by separating testing from the cut-off? Should we include Red China? Should we define safeguards as being less than 100% certainty? Should we continue to seek cessation of production of fissionable materials for weapons purposes? Is it in the U.S. interest to hold stocks of fissionable materials at present levels? Is it our policy to seek further refinements in our defensive capabilities? Would we reassure the world about the problem of fallout by our proposal? Would it benefit us from an intelligence and political standpoint to penetrate the Iron Curtain? Do we want to avoid a resumption of tests by the USSR? What would be the relative effects on the US and USSR of test cessation now?

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Mr. McCone

Mr. McCone, referring to the final question, said that we are ahead in nuclear weapons development but since the USSR reserves the privilege of a first strike, they may have what they feel they need for this purpose, while we have a greater need for the more complex defensive weapons.

Mr. Quarles said he believed we were all agreed on the relative capabilities of the two countries; the difference is in our assessment of how much a cessation would hurt each. The USSR has certain geographical advantages. Defense and AEC think that a test cessation would hurt the US more than the USSR. The Bethe Panel, on the other hand, believes a test cessation would be to our advantage, since the problems of defensive weapons at this stage are not so much in the nuclear as in the electronic field. Defense would like to go back to the President recommending continued endorsement of the August 29 disarmament proposals, and supplementing these proposals with a recommendation that we move rapidly toward negotiation of the political aspects of control. The real question is whether we recede from the London package proposal and if so, what kind of suspension would be in our interest.

Dr. Killian asked whether Mr. Quarles still held to the idea of exceptions for underground tests in the lower ranges. Mr. Quarles said that he held the U.S. should have the right to test below the threshold of capability of the inspection system, but that whether or not we exercise that right should be a national policy decision rather than a matter for international agreement.

It was decided that discussions of these matters would be continued at a further meeting on Friday.

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