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ASSISTANT DIRECTOR

UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY

September 6, 1989

MEMORANDUM FOR THE CHAIRMAN OF THE ARMS CONTROL PCC

**Subject: ACDA Position on the September 1, 1989 Issue Paper
Nuclear Testing Talks**

SEISMIC

ACDA notes that as previously proposed, the Soviet seismic component to the TTBT offered little, if any, technical merit. Furthermore, as it called for the exchange of data that could not be validated by the Verifying Party, the proposal offered little value as a serious tool for verification of compliance. These factors are independent of the question of the optimum accuracy achievable by the seismological method in other hands. In addition to the concerns described in the September 1 Issue Paper, ACDA is concerned about the precedent associated with accepting the Soviet seismic proposal having questionable technical or verification value.

ACDA supports Option 1, offering a counterproposal. In light of the concerns expressed above, ACDA believes that any such US counterproposal should not include the exchange of data which cannot be validated by the Verifying Party. (S)

ACDA does not support Option 2. ACDA believes that the US should come to terms with the question of a seismic component to the TTBT in principle now, and that Option 2 introduces an unnecessary delay in the process of US decision making required prior to completion of the TTBT and PNET Protocols. (S)

ACDA opposes Option 3. We believe that to reject the Soviet proposal out-of-hand would jeopardize the negotiations, and with them, the possibility for the US to achieve effective verification of the PNET and TTBT by routine use of direct yield measurement. (S)

TRIGGER LEVEL AND OSI

OPTIONS: ACDA supports Option 1, with OSI notification at 35 kt, CORTEX and seismic at 50 kt. ACDA notes however,

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that OSI should include the right to observe emplacement of the test device as well as the right to be present at the time of the explosion, in addition to the right to collect geological and geophysical data described elsewhere in the September 1 paper. ACDA believes that Option 1, most consistent with the provisions of the PNET, would best deter cheating if the US is unable to measure directly the yield of any test which it is entitled to measure and would deter exploitation of decoupling test environments to conduct tests with yields in excess of the 150 kt threshold. Alternatively, ACDA finds option 2 acceptable, but less preferable, with all notification levels at 50 kt.

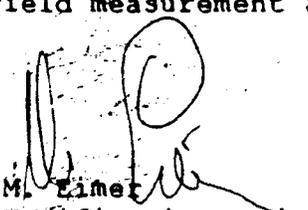
Also acceptable, but less favorable still are Options 1b, 1a, and 3. ACDA notes that US acceptance of a CORTEX notification level as high as 75 kt would increase the likelihood that the Soviets could successfully conduct tests with yields in excess of 150 kt, and make more difficult US achievement of necessary improvements in the accuracy of test yield measurement and estimation.

ACDA believes that having the right to carry out OSI is necessary to ensure effective verification of the TTBT, particularly when we may not be able to carry out direct yield measurement, and therefore ACDA opposes Options 4 and 5.

CORTEX AT TESTS BELOW THE TRIGGER LEVEL

ACDA supports the current US position, that is, Option 2 which calls for the US to continue to press for a minimum of two CORTEX measurements per year, regardless of the number of tests that exceed the notification level. ACDA believes that, without such a provision, the Soviets could elect not to declare any tests in excess of the notification level, at some or all test sites, particularly if that level were to be raised in response to agencies views on the preceding issues, and successfully conduct tests in excess of the 150 kt threshold. In this event, the US would have failed in its objective to achieve improved verification of the PNET and TTBT over current reliance on highly uncertain and contentious teleseismic means of yield estimation. A minimum guaranteed number of CORTEX measurements would help to deter such scenarios. A lower minimum number might be acceptable, if we secured the right to conduct direct yield measurement at all Soviet test sites.


D. Clinard, Acting
Multilateral Affairs


M. Timet
Verification and
Intelligence

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