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Freedom of Information Appeal

17 February 2016

Mr. Poli A. Marmolejos
Director, Office of Hearings and Appeals
Department of Energy
1000 Independence Avenue, SW
Washington, D.C. 20585

Dear Mr. Marmolejos:

This is an administrative appeal under the Freedom of Information Act. Through a letter dated 5 February 2016, the National Nuclear Security Administration denied in full my request for a letter from Harold Agnew to Frank Press, dated 17 March 1978, concerning the comprehensive test ban treaty (CTBT). The letter cited two FOIA exemptions: (b) (1), national security, and (b) (5), “deliberative process,” as the basis for the denial. Nevertheless, previously declassified information, published in the State Department historical series, *Foreign Relations of the United States (FRUS)* should enable the Department of Energy to declassify some information from the Agnew letter. With this, I enclose three documents published in the *FRUS* that provide detailed information about internal U.S. government discussions of the CTBT during the spring of 1978 (see enclosures 1, 2, and 3). Plainly, information about nuclear testing has been withheld from the documents; nevertheless, some information was declassified and I suspect that the Department’s reviewers will be able to release some meaningful text from Agnew’s letter.

With respect to the (b) (5) exemption, the NNSA’s denial letter claims that releasing Agnew’s letter “could confuse the public about the Government’s later policy decisions and could harm future LANL input on important national policy matters.” This does not sound plausible. First, Agnew’s general views about the CTBT are already in the public record, in the *FRUS*. It appears that his thinking on the CTBT were at odds with the Carter White House—indeed, according to enclosure 1, a memo from national security adviser Zbigniew Brzezinski to President Carter, something which Agnew had written (perhaps the letter to Frank Press) was “polemical in nature and negative towards your CTBT objective.” Moreover, Agnew presented his views on the test ban at length during a meeting on 13 June 1978 and also published in the *FRUS* (see enclosure 2). Agnew’s thinking is also briefly cited in a third item (see enclosure 3). Second, Agnew’s views on the CTBT were expounded nearly forty years ago. NNSA security reviewers may be uncomfortable about Agnew’s thinking as expressed in the letter to Press, but no one could reasonably hold his views from 1978 against the present Los Alamos leadership or confuse his views with theirs. To deny the Agnew letter on the basis of (b) (5) is an abuse of that exemption, which was not designed to withhold inconvenient or embarrassing information decades after the fact.

Sincerely,



William Burr



Department of Energy
National Nuclear Security Administration
Office of the General Counsel
P. O. Box 5400
Albuquerque, NM 87185



FEB 05 2016

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. William Burr
The National Security Archive
The George Washington University
Gelman Library, Suite 701
2130 H Street, NW
Washington, DC 20037

Dear Mr. Burr:

This letter is the final response to your July 11, 2012 Freedom of Information Act (FOIA) request for a copy of any records relating to the White House Office of Science and Technology Comprehensive Test Ban review panel's findings on seismic monitoring, stockpile reliability and permitted experiments under CTB, circa March-April 1978.

Your request was initially sent to the Department of Energy Headquarters Office (DOE HQ). DOE HQ transferred the request to this office and it was received on July 19, 2013.

We contacted the Los Alamos Field Office (LAFO), which has oversight responsibility for Los Alamos National Laboratory (LANL), about your request. LAFO and LANL searched and located two documents responsive to your request. Document 1, Memorandum and Options Paper, originated with the National Security Council and was transferred to their office and they will respond directly to you. The Office of Classification, Office of Environment, Health, Safety and Security has completed a review of Document 2, Letter dated March 17, 1978 from H.M. Agnew, Director, to Dr. Frank Press. The document is being withheld in its entirety pursuant to 5 USC § 552(b)(1) and (b)(5) (Exemptions 1 and 5 of the FOIA). Those few portions of the document that are not exempt are so inextricably intertwined with the exempted information that removal of the exempted information would result in the release of no meaningful information. Therefore, this document is being withheld in its entirety.

Title 5, United States Code, section 552(b)(1) (5 USC § 552(b)(1)) (Exemption 1), provides that an agency may exempt from disclosure matters that are (A) specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and (B) are in fact properly classified pursuant to such Executive order. The portions deleted from the subject document pursuant to Exemption 1 contain information about vulnerabilities or capabilities of systems, installations, projects or plans relating to the national security and are classified under section 1.4 (g) of Executive Order

13526 (EO 13526). It has been determined that release of the information could reasonably be expected to cause damage to the national security.

To the extent permitted by law, the DOE, pursuant to 10 CFR § 1004.1, will make available records it is authorized to withhold under the Freedom of Information Act (FOIA) whenever it determines that such disclosure is in the public interest. With respect to the information withheld from disclosure pursuant to Exemption 1, the DOE has no further discretion under the FOIA or DOE regulations to release information currently and properly classified pursuant to the EO 13526.

Exemption 5 exempts from mandatory disclosure inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency. Exemption 5 incorporates the attorney-client privilege, attorney work-product privilege, and deliberative process (or pre-decisional) privilege. The general purpose of the deliberative process privilege is to prevent injury to the quality of agency decisions, and provides protection for the decision making processes of government agencies, where the exposure of that process would result in harm. Information is pre-decisional if it was prepared to assist an agency decision-maker to arrive at a decision. Pre-decisional information that is exempt from mandatory disclosure is distinct from post-decisional information that sets forth the reason for an agency decision that has been made. Pre-decisional information is exempt from disclosure to protect against premature disclosure of information that could cause confusion that might result from disclosure of information that would not in fact be the agency's final decision. Exemption 5 is being used to withhold pre-decisional deliberative opinions on national nuclear policy and treaty issues. Release could confuse the public about the Government's later policy decisions and could harm future LANL input on important national policy matters.

Pursuant to 10 CFR § 1004.6(d), Dr. Andrew P. Weston-Dawkes, Director, Office of Classification, Office of Environment, Health, Safety and Security, is the official responsible for the denial of the DOE classified information pursuant to Exemption 1.

Pursuant to 10 CFR § 1004.7(b) (2), I am the individual responsible for the withholding of the information mentioned above pursuant to Exemption 5 of the FOIA.

Pursuant to 10 CFR § 1004.8, you may appeal our withholding of information, in writing, within 30 calendar days after receipt of this letter, to the Director, Office of Hearings and Appeals, Department of Energy, L'Enfant Building, 1000 Independence Avenue, SW, Washington, DC 20585, or you may also submit your appeal by email to OHA.filings@hq.doe.gov, including the phrase "Freedom of Information Appeal" in the subject line. The written appeal, including envelope, must clearly indicate that a Freedom of Information Act appeal is being made, and the appeal must contain all other elements required by 10 CFR § 1004.8. Judicial review will thereafter be available to you in the District of Columbia or in the district where: (1) you reside, (2) you have your principal place of business, or (3) the Department's records are situated.


Mr. William Burr

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There are no charges to you for processing your FOIA request.

If you have questions, please contact Ms. Sandra Lewandowski by e-mail at Sandra.lewandowski@nnsa.doe.gov, or write to the address above. Please reference Control Number FOIA 13-00217-E

Sincerely,



Jane Summerson
Authorizing and Denying Official



U.S. DEPARTMENT OF STATE
OFFICE of the HISTORIAN

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Foreign Relations of the United States 1977-1980
Volume XXVI, Arms Control and Nonproliferation , Document 198

198. Memorandum From the President's Assistant for National Security Affairs (Brzezinski) to President Carter¹ (efn1)

Washington, May 10, 1978

- SUBJECT
- CTB

In an SCC meeting last week all of your advisers, except for the JCS, agreed to support a fixed, five-year duration treaty as proposed to you by Jim Callaghan,² (efn2) subject to your support for a strong safeguards plan, Senate ratification of any extension of the treaty, and your assurance that any necessary testing would be carried out after five years. (Summary of Conclusions is attached.)³ (efn3) This memorandum includes a brief discussion of the JCS views and of the substantive issues which you may want to decide following your luncheon discussion with the Chiefs today.

In explaining the Chiefs' opposition, Dave Jones stated that in addition to concerns about verification, the Chiefs relied heavily on technical judgment of the laboratories that they could not adequately maintain the reliability of our weapons without testing at 3 to 5 KT. He acknowledged that the laboratory directors had commented only on an indefinite duration treaty, and it was agreed that we would ask for their views on a fixed duration treaty before proceeding further.

We subsequently obtained their comments—Harold Agnew's is polemical in nature and negative towards your CTB objective; Roger Batzel's is more responsive and acknowledges that a fixed duration approach would help in meeting his concerns, but maintains that testing at 3 to 5 KT would be needed eventually. Taken together, these comments do not provide much flexibility for the Chiefs, and they are likely to continue to oppose the fixed duration approach during your luncheon discussion tomorrow.

As a result, we will need your guidance on several issues in the near future. The most important issue is whether we should seek a 3 to 5 KT threshold treaty, as the Chiefs prefer, or a fixed duration CTB. If you prefer the latter,⁴ (efn4) you will also need to decide whether the duration should be 3 or 5 years, the level of experiments that would be permitted, and whether your assurance regarding resumption of testing should constitute a *plan* to resume testing after five years, or just the *option* to do so. You may want to make these decisions following your luncheon with the Chiefs. However, if you decide to overrule them, I recommend that you defer decision until after an NSC meeting, to ensure for the record that they have had an opportunity to formally present their views.

_____ Schedule NSC Meeting.

_____ Make decision after luncheon.⁵ (efn5)

Fixed Duration vs. 3 to 5 KT Threshold

A 3 to 5 KT threshold would be more consistent with verification capabilities and stockpile reliability needs, but eliminating risks in these areas would seriously erode potential benefits of a CTB to non-proliferation and our relations with the Soviets, and would be viewed as a significant departure from your public commitment to halting testing. The threshold treaty would have smoother sailing during ratification hearings, and the Chiefs' views would carry a lot of weight, but with Harold's and Jim Schlesinger's support, a fixed duration treaty would probably be ratified after a difficult struggle. I believe that the fixed duration approach is adequately protective of our security interests and more consistent with your political objectives, and recommend that you authorize us to propose it in the negotiations.⁶ (efn6)

3 vs. 5 Year Duration

Harold and Kerr (speaking for DOE) have specifically agreed that they could live with a five-year duration, but both would prefer three years, arguing that this would make it easier to keep the laboratories together. They recognize, however, that the shorter duration might be criticized by non-nuclear weapons states as an insufficient commitment, and could jeopardize prospects for installing an effective network of internal seismic stations. In addition, the preponderant technical judgment is that we can maintain reliability without testing for at least five years. We may have to consider a 3-year duration eventually since the Soviets may see this as a means of exerting more pressure on China; however, I recommend that you authorize the five-year duration as our initial position.⁷ (efn7)

Permitted Experiments/Safeguards

An important issue in developing a safeguards plan under the fixed duration approach is whether low-level experiments should be permitted in addition to related work in laser fusion and other areas. From a technical standpoint, tests at a few pounds or tons of yield are unlikely to help much with reliability problems, but can be useful for safety and weapons effect purposes, and would definitely assist in maintaining the laboratory infrastructure. [4 lines not

declassified] However, low-level testing (a few pounds to a few tons) can be defended on safety and safeguards grounds, and I recommend that you authorize us to include such experiments in the safeguards plan which we are developing for your review.¹ (e) (u)

Plan or Option to Resume Testing

Harold and Jim would prefer that you announce that you plan to resume testing after five years for reliability purposes. This would make the opportunity to resume more credible on the Hill and shift the burden of proof to those favoring extension of the test ban from those favoring resumption of testing. Cy and Paul prefer a weaker assurance that you would carry out any test that might be necessary, but agree that with careful wording the stronger form might be acceptable. For example, you could state your intention to resume testing unless a vigorous safeguards program and studies in the interim indicated that this was not necessary. I recognize that this could undercut potential non-proliferation benefits, particularly in India, but a strong assurance from you would reassure the Chiefs and make it considerably easier for Harold and Jim to defend the treaty. Therefore, I recommend that you authorize us to use the strong form of the assurance as worded above.² (e) (u)

¹ (e) (u) Source: Carter Library, National Security Council, Institutional Files, Box 93, SCC 071, CTB, Permitted Experiments/Reliability: 5/2/78. Secret. Sent for action. Carter initialed the memorandum.

² (e) (u) See Document 191 (/historicaldocuments/frus1977-80v26/d191).

³ (e) (u) See Document 197 (/historicaldocuments/frus1977-80v26/d197).

⁴ (e) (u) Carter underlined the words "a fixed duration CTB."

⁵ (e) (u) Carter checked the "Make decision after luncheon" option.

⁶ (e) (u) Carter checked the "Approve" option.

⁷ (e) (u) Carter underlined the words "five-year duration" and checked the "Approve" option.

⁸ (e) (u) Carter checked the "Approve" option, wrote "minimal," and wrote "?" in the right-hand margin.

⁹ (e) (u) Carter checked the "Approve" option.

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U.S. DEPARTMENT OF STATE

OFFICE of the HISTORIAN

Foreign Relations of the United States 1977-1980

Volume XXVI, Arms Control and Nonproliferation , Document 206

206. Memorandum of Conversation¹ (EFOI)

Washington, June 13, 1978, 2:05-3:30 p.m.

- SUBJECT
- Summary of Meeting with the President on CTB Issues

- PARTICIPANTS
- President Jimmy Carter
- Harold Brown, Secretary of Defense
- James Schlesinger, Secretary of Energy
- David Aaron, Deputy Assistant to the President for National Security Affairs
- Stuart Eisenstat, Assistant to the President for Domestic Affairs (first 10 minutes)
- Dr. Frank Press, Director of the Office of Science and Technology Policy
- John Marcum, Senior Adviser, Office of Science and Technology Policy
- Harold Agnew, Director, Los Alamos Nuclear Laboratory
- Roger Batzel, Director, Livermore Nuclear Laboratory

Harold Agnew began by saying that he understood that it might be good if he or Roger Batzel ran through a brief explanation of how nuclear weapons actually worked. *The President* agreed saying he had read some simple text books but wanted a more complete understanding.

Harold Agnew presented a chart² (EFOI) of a simple two-stage device to the President and explained its design features. He noted that we had made tremendous progress in nuclear weapons technology and illustrated this by pointing out that the current Trident warhead had a yield [less than 1 line not declassified] with a weight [less than 1 line not declassified] compared to a yield [less than 1 line not declassified] of the Hiroshima device with a weight of [less than 1 line not declassified] He said this represented a factor of more [less than 1 line not declassified] in yield to weight ratio. He observed that this tremendous gain was made through very sophisticated technology. One major step was that instead of using a solid glob of plutonium, we now use a [less than 1 line not declassified] With this design we can get [less than 1 line not declassified] in the primary or first stage, but an even more significant step was in using tritium gas for "boosting" the primary. This boosting process produces [less than 1 line not declassified] than the [less than 1 line not declassified] and increases the primary yield [less than 1 line not declassified] causes the secondary stage of the weapon to ignite.

Harold Agnew noted that over the years nuclear weapon designers had been under considerable pressure to develop designs that would use less fissionable material, which could be in short supply for civil purposes, and that would be smaller, lighter and safer. In explaining what the two-stage primary act really does, he said that the Trident primary has a yield [less than 1 line not declassified] the secondary [less than 1 line not declassified]. The important consideration is that the primary must produce [less than 1 line not declassified] there would be no ignition from the secondary.

He then showed a picture of the Sprint ABM warhead³ (EFOI) noting that this was the first neutron bomb that had been developed. He described its features as [2½ lines not declassified] This device was tested and achieved [less than 1 line not declassified] He then explained that at a later point because of fratricide concerns—e.g., concern that the warhead might be disabled [less than 1 line not declassified] another Sprint warhead that had been detonated earlier, it had been decided to add a hardened layer [3 lines not declassified] He noted that this wasn't a complete fizzle but was less [less than 1 line not declassified] necessary to ignite the secondary stage. He asserted that if we had stockpiled the modified device without testing we wouldn't have known about the problem; stockpile surveillance was essential but could not determine the yield of the device.

The President asked what kind of stockpile surveillance method was used. *Agnew* responded that all kinds of statistical sampling techniques were employed, weapons were disassembled occasionally, and the components were examined. He noted that the weapons were designed to last 20 years, but that any time the materials used in manufacturing components are changed one can get problems. He pointed out that the devices we had developed were very delicate and that in his view it would not be prudent to consider maintaining the stockpile indefinitely without testing.

The President asked what *Agnew* meant by indefinitely. *Agnew* responded that in an example which Roger Batzel would describe, a problem had been experienced within four years. *Roger Batzel* explained that [3½ lines not declassified]

The President asked whether the problem had occurred after development of the warhead. *Batzel* replied that it had actually been after deployment of the warhead and had been discovered through surveillance of warheads deployed in the fleet. The problem had been a mechanical safety device which was intended to insure that the weapon would not produce a significant nuclear yield if the high explosive (HE) was detonated accidentally.

The President said that he understood that the problem was not identified in an explosion but in an inspection of the safety device. Batzel agreed and stated that we had subsequently replaced the primary on that device. He pointed out that we have a similar problem now with the primary of the Poseidon warhead. He pointed out that the Poseidon produced a nuclear yield [less than 1 line not declassified] packaged in a re-entry vehicle weighing [less than 1 line not declassified]. He explained that although primaries used to have hundreds of detonators distributed over the surface of the HE in order to generate a spherical implosion wave, [1 line not declassified] In the Poseidon primary a new HE material had been used which exuded a liquid which corroded [less than 1 line not declassified] that with time, no yield would have resulted. Fortunately, during the process of development, an alternative design using different HE material had been fully tested and we were able to simply substitute this primary for the defective one. Otherwise further nuclear testing would have been required.

Roger Batzel also argued that US designers in responding to military requirements had made remarkable achievements in minimizing weight and maximizing yield of warheads. [3 lines not declassified] Agnew interjected that without the one-point safety requirement we would not be so close to the edge. Batzel agreed, adding that a factor of two increase in weight would also avoid some problems. He also remarked that while these were remarkable accomplishments we might have pushed the technology too hard and created problems for ourselves in the current context.

Harold Agnew said that people could say that we haven't been testing stockpiled weapons for reliability for years, why now? He said that they didn't realize the benefits to stockpile maintenance that are achieved from testing new weapons and continuing to produce nuclear weapon materials and components. He observed that many devices which are being tested in new warhead development programs use the same primaries which are in the old stockpiled weapons.

The President asked whether the Soviets had more reliable warheads than the US. Harold Brown answered that in general their warheads were believed to be heavier, somewhat more roughly constructed and less sensitive to deterioration. Roger Batzel agreed and pointed out that they had not had the same constraints on weight and size, and appeared to have developed less sensitive warheads.

The President asked how long we have had small primaries. Roger Batzel responded nearly 20 years and after thinking about Polaris and Poseidon, said it was really about 10 years. Harold Agnew pointed out that development of smaller primaries had really been a result of the pressure of MIRVing of ICBMs and SLBMs.

The President asked what had been our experience with regard to correcting problems in inventory. Roger Batzel replied that in the early 1960s a vulnerability test of one of our ICBM RVs had been carried out. The President asked if this was for fratricide purposes. Batzel said yes but added that it was primarily to check for vulnerability to Soviet ABMs. [3 lines not declassified] Harold Brown pointed out that [2 lines not declassified]

Harold Agnew stated that another example was with our B-25 air-to-air warhead which consisted of [less than 1 line not declassified] The plutonium at that time was manufactured in Hanford and Rocky Flats—one making [less than 1 line not declassified]. After the weapons were stockpiled, people began to notice [less than 1 line not declassified] After disassembling them it was discovered [less than 1 line not declassified] This was due to very slight differences in the manufacturing processes at Hanford and Rocky Flats so that the plutonium [less than 1 line not declassified] might shrink slightly while that [less than 1 line not declassified] expanded.

Agnew said that another example where the warhead did not perform as expected was the Talos/Terrier as mentioned earlier, [less than 1 line not declassified] As a result of these problems he felt that we wouldn't be able to certify warheads if the materials were changed in any way without testing.

Frank Press commented out that he had brought a panel of experts together to look into this issue. His panel had included the current laboratory directors, former laboratory directors, such as Herbert York, and other nuclear weapons experts. He pointed out that the laboratory directors concerns were as they had been stated today but the other members had a different view and felt that reliability could be maintained for at least five years without testing, and that this had been our basis in recommending the five year duration approach to the President.

The President commented to the laboratory directors that one concern he had is whether they were able to maintain their objectivity on this issue in view of their desire for preservation of the laboratories. He said he was trying to put a lid on production and development of all new nuclear weapons and that an important element of this is to put a cap on testing. He stated that we must maintain reliability of our nuclear weapons but that he would need as much flexibility from the laboratory directors as possible to accomplish his overall objectives. He pointed out that without their support a test ban would experience serious difficulties with Congress. He noted that his own advice on the issue was conflicting in that he had decided to ban testing for five years while preserving the right to resume testing. He continued that in his view a threshold test ban would circumvent the basic purpose of the treaty. He wanted to make clear he was not referring to a few pounds but to hundreds of pounds or a kiloton. He pointed out that had discussed this issue earlier in the day with Prime Minister Desai of India, ⁴(*efna*) and Desai had said that a 5KT level would open the flood gates to proliferation. He said he was eager to learn from the laboratory directors but expected them to support his objectives as much as possible.

Roger Batzel said that they were trying to be responsive but the problem was that they didn't know what problems would arise in 2, 3, 4, or 5 years.

The President then asked what the yield range was for our present primaries. Harold Agnew replied that they ranged [less than 1 line not declassified] the Titan down to [less than 1 line not declassified] some of our other nuclear systems. Harold Brown pointed out that the Soviets are believed to have larger primaries involving heavier, more rugged designs which are probably less sensitive to deterioration. Roger Batzel said that although some of our primaries had higher yields, testing [less than 1 line not declassified] enable us to recertify these primaries when problems arose. He said the laboratories have tried to be responsive to the President's objectives by holding the yield as low as possible, [less than 1 line not declassified] reproducibility is a real problem that there was serious doubt that testing [less than 1 line not declassified] be useful. The difficulty was that it is necessary to get significant boosting in order to insure the primary worked properly. He said that to date we haven't resolved that testing [less than 1 line not declassified] was useful.

Harold Agnew elaborated on this point, explaining that we have tested [less than 1 line not declassified] adding small amounts of boosting gas but the yield varied widely and was unpredictable as the boosting gas was added. There is no consistency in the results until the yield gets [less than 1 line not declassified]

The President asked whether there was any statistical evidence on the difference in warheads between 3, 4, and 5 years, noting that he gathered there was a difference in view here. Harold Agnew responded that we expected all our weapons to last 20 years but as noted earlier in some cases, such as Polaris, problems

had been discovered in just four years. *The President* pointed out they had not discovered it through testing. *Harold Agnew* agreed and said they had discovered it by surveillance.

The President asked whether they had ever discovered in a stockpile warhead any physical deterioration by nuclear testing. *Agnew* replied that the [less than 1 line not declassified] when taken from the stockpile and tested had produced an [less than 1 line not declassified] However, it had never been tested before since it had been developed and stockpiled while the moratorium was in effect. *Harold Brown* pointed out that was a result of not testing the warhead rather than of deterioration after the warhead had been properly tested and stockpiled.

Frank Press, asking that the laboratory directors correct him if he were wrong, pointed out that it was his understanding that most of our warheads had worked properly the first time they were tested. *Harold Agnew* responded [3 lines not declassified] *Frank Press* agreed that such problems had occurred but stressed that most of the time the devices had performed well the first time they were tested. *Harold Agnew* acknowledged that this was true and said that was an argument frequently used by some of *Frank Press*' colleagues. In fact, 80% or so did work the first time but the problem was that this might not include Minuteman or Trident or some other important warheads.

David Aaron asked whether there hadn't been enough testing of enough designs over the years to get a good basis to predict how the weapons would perform. *The President* asked whether he was referring to new designs. *Harold Brown* said that that was not the issue. The question was whether there would be deterioration in the stockpiled weapons within five years. If so, then in his view, *Frank Press*' point was right—we could redesign and rebuild the weapon and have confidence that it would probably work.

David Aaron asked *Frank Press* whether his panel had looked into the previous record on the problems that had arisen in the stockpile. *Frank Press* responded that his group had reviewed the record and it was essentially just as the laboratory directors had said today. In his view, the important point was that if the weapons were rebuilt the same way as originally, they would have high confidence in their performance.

The President asked whether stockpiled warheads were routinely tested. *Roger Batzel* replied they were not and *Harold Agnew* noted that we do have proof tests of each type of warhead before it is stockpiled which certifies performance of all warheads of a type before they are put into a stockpile. *The President* said this was good, otherwise we would have to test every weapon. *Harold Agnew* returning to the question, said that the primaries of old warheads were sometimes tested in development of new weapons and sometimes the entire stockpiled warhead would be tested for other reasons, such as vulnerability, but not routinely.

Harold Brown offered to more clearly explain the issue, he said that once the final proof test is completed, the weapons would be stockpiled and subjected to surveillance procedures, but would probably not be tested again unless for some other purpose such as *Harold Agnew* had mentioned. *Roger Batzel* pointed out that some very peculiar problems had arisen over the years even in the nuclear components themselves. [2½ lines not declassified]

The President asked *Jim Schlesinger* whether he had any thing he wanted to mention in this discussion. *Schlesinger* responded that there were two points he wanted to raise. The first was that this was not a typical statistical problem and that we are trying to determine the probability of a unique unpredictable event and we don't have any idea when or whether it will occur. In discussing his second point he presented a chart showing the utility of testing at various yield levels—from a few pounds to ten tons would be useful for one point safety and hydronuclear testing, from ten tons to 10 KT for reliability testing, and from 10 KT to 150 KT for development of new weapons.

Schlesinger explained that the main point was that [less than 1 line not declassified] we could meet our needs but that lower yield levels did not give us the confidence that the primary will drive the secondary. He said that left to their own devices the laboratories would prefer to go on designing new nuclear weapons. In accomodating the *President*'s desires they had given up on that but they still had the responsibility of certifying stockpiled warheads. As he pointed out this would require testing [less than 1 line not declassified]

The President noted they didn't routinely test stockpile weapons. He then asked for the typical reliability of the launchers for these warheads. *John Marcum* replied they were about 80%, *Harold Brown* said yes, 75–80% but pointed out the real difference was that for the launchers they didn't have to worry, there was a 25% chance that none of them would work.

The President said it was his understanding that there would be a provision that if he or *Brezhnev* had a pressing national need they would be able to withdraw from the treaty. *Harold Brown* agreed, saying there would be a "supreme national interest" withdrawal clause, but it would be very difficult politically to exercise that clause since it would abrogate the treaty. Further, there would be undoubtedly fierce interagency fights over whether the particular problem was serious enough to justify withdrawal.

David Aaron pointed out that it might be possible to define a flexible "supreme interest" clause that would let either side resume testing for national security reasons without collapse of the treaty. *The President* agreed that this might be possible.

Jim Schlesinger interjected that an alternative would be to have a small quota of tests below 5 KT and that this would minimize the difficulty associated with the threshold. *The President* noted that from what *Harold Brown* said we would be able to test if really necessary and asked how long it would take us to do so if a problem arose.

Roger Batzel replied that this would take from 6 to 9 months depending on the level of readiness provided for in the Safeguards Plan. *The President* asked how long the moratorium had lasted. *Harold Brown* said it lasted about 2½ years from the summer of 1958 to early 1961. *Harold Agnew* said that a lot of people thought he was paranoid but that he had never gotten over this. He presented a chart⁵ showing that the Soviets have resumed testing immediately with a massive and well prepared program, whereas it had taken us an extended period to carry out the first test. *Frank Press* told *Harold Agnew* that we really needed his and *Roger Batzel*'s help in designing a Safeguard Plan which would provide the right level of readiness and help keep our weapons group together.

Harold Agnew said that he understood there could be concern as the *President* mentioned with regard to whether the laboratories have a vested interest in testing. He assured the *President* that their only concern was to maintain our nuclear deterrent. He said that the laboratories constitute a valuable resource and they happen to think they are smarter than anyone else and could do a better job in solving most new problems. He commented that their staff spent 40% of their time on weapons and 60% on energy activities and they would supply the technical effort wherever the *President* wanted it.

The President asked what else they would do in maintaining the stockpile. *Harold Agnew* said they had been examining this question and, in his view, their present surveillance procedures were adequate, although they could, of course, increase this program if it made anyone feel better. He pointed out they used to test one out of fifty weapons each year, but now did much less of this sort of testing.

Frank Press asked the lab directors whether they saw any real hope for reliability testing at the 100 KT level. Both replied they didn't think this was likely. *Harold Agnew* pointed out that [2½ lines not declassified] *Harold Brown* asked [2½ lines not declassified] *Harold Agnew* concluded that [1 line not declassified]

The President, noting the particular names of some of the tests, asked *Agnew* for the origin of those names. *Harold Agnew* responded that many of them were place names from New Mexico. *James Schlesinger* pointed out that there was a great deal of empiricism in nuclear weapons, that in theory, it always appeared they would work well.

The President said his only remaining concern after this discussion was the need to consider the relative effect of no testing on the Soviets. As he understood there was no real effect, except for the massive weight of their warheads. *Harold Agnew* said there was another point in that Soviet missiles have much greater throw weight, which meant that if a problem arose they could simply put another warhead on, which might be less optimal in terms of weight or size, more easily than we could. *Harold Brown* pointed out that since the size of their warheads were larger, they might have to test at a higher yield than 3-5 KT. On the other hand, since their warheads were less sensitive, they might not have to test at all.

James Schlesinger [3 lines not declassified] *Harold Brown* [2 lines not declassified] *John Marcum* [1 line not declassified]

Roger Batzel [5 lines not declassified]

The President asked *Batzel* [1½ lines not declassified] *Batzel* [1½ lines not declassified] *Harold Brown* [1½ lines not declassified]

The President said he had a question for *Frank Press*, that he had just heard we didn't have sensing devices monitoring the treaty. *Frank Press* assured him that we did have these devices for use in internal seismic stations and they had been installed in bore holes in New Mexico for testing. Although we had not completed packaging of these sensors, we should be ready to begin installation in the Soviet Union as soon as the treaty entered into force. He estimated it might take two years to install a complete network of single stations and perhaps three years for arrays.

The President asked how many seismic stations we were talking about proposing in the negotiations. *Frank Press* replied that our analysis indicated that a network of about 17 single stations would be roughly comparable to about five arrays. *James Schlesinger* responded we were thinking of proposing 12-15 single stations and this would get us down to a threshold of about [less than 1 line not declassified]

Harold Brown and *Frank Press* objected noting that the real threshold would be lower when other national means were taken into account. *Frank Press* said we should be precise on this issue, that with that kind of network we would detect down to 2/10 of a KT in many cases. He noted that in seismic regions detection would be equivalent to identification of the event and that in seismic regions, we were looking at very remote locations so that any suspicious activity from satellite photos would help identify the event. Other national means could also help identify problems, and in general the identification threshold should not be more than two times the detection threshold, or about 4/10 of a KT in rock. He said this should be increased by a factor of five in looser material and conceivably by a factor of 10, which would get to the level *James Schlesinger* had mentioned, with dry alluvium. [7 lines not declassified] *Harold Agnew* inserted that the Soviets were doing this right now. *Frank Press* noted that we had also conducted tests in cavities.

The President [1 line not declassified] *Harold Agnew* [1 line not declassified] *John Marcum* [4½ lines not declassified]

James Schlesinger showed the President another chart⁶ illustrating the problem of unidentified events and said that even with the seismic network we had in mind there could be 38 or so unidentified events annually. He said we would be pretty comfortable in verifying at the 5 KT level. He noted that seismic arrays were very expensive and that it was probably not worth driving this down to 4 KT, although it might give us more support on the Hill. He asserted that it was the combination of our inability to verify or certify that would give rise to serious domestic political problems.

Harold Brown said these were unrelated problems and that as noted earlier the Soviets might not need to test at all. He felt the verification problem was a consequence of our previous statements that any agreement we negotiated must be highly verifiable. He felt the Soviets were unlikely to cheat under the five year approach, but said that *James Schlesinger* was right in that verification would be a political problem. There was no doubt that a 5 KT threshold or a small quota would be better in terms of a Senate ratification effort.

The President asked if we had a real low threshold for a short period, he emphasized that he meant very short, of perhaps six months, what would the lab directors want to test? *Harold Agnew* responded that if other needs had been met they would want to use their quota to test stockpiled warheads for reliability purposes. The President asked how they would view three years, maybe with a small quota. *Roger Batzel* replied that a duration of three years would be much easier than five years in maintaining laboratory capabilities. *Harold Brown* noted we had gotten through 2½ years during the moratorium. *Roger Batzel* agreed but said it was starting to hurt and that more than three years would be particularly tough.

Frank Press commented that offering opportunities to work in laser fusion and other related areas could be helpful in retaining scientists. *Harold Agnew* agreed but argued that the best people would switch into other areas on a permanent basis. In time we would lose our good people and have little confidence in our stockpile, but he guessed that presumably this was consistent with our long range objective.

David Aaron said in his view it wouldn't help to have a short period of testing unless a problem had been identified which needed to be corrected. *Harold Agnew* agreed and pointed out that what was really needed was a 3-5 KT threshold to cover any problems that would arise and that this would be a major step forward in restraining testing.

The President asked what the effect of a CTB would be on SALT. *Harold Brown* responded that SALT constraints were not applicable to warheads. *Roger Batzel* commented there was a relationship in that the CTB would constrain our ability to provide warheads for new missile systems.

Harold Brown said that if we don't test for three years and that, in that time, deterioration had not occurred, then the same problems would be experienced after three years as now. *The President* said we could build all new warheads at that time for critical systems. He asked if SALT II permitted new missiles what would be the effect of a CTB? *Harold Brown* said there would be little effect, since if we were going to resume testing after 3–5 years we would just design new warheads and test them at that time.

John Marcum pointed out that it was his understanding that prior to the threshold test ban we had fully tested new warheads which were intended to meet the future needs of the M–X, TRIDENT II and cruise missile systems. *Harold Agnew* agreed that this was the case and said we had a family of tested warheads for use and planned to use these in developing new systems, since we would be unable to develop new strategic warheads even at 3–5 KT. *The President* commented then the 5 KT threshold would not really help in this regard. *Harold Brown* said probably not although new tactical warheads might be developed. *Roger Batzel* commented that in testing these new warhead designs the laboratories had tried to anticipate future strategic needs.

The President asked what the yield was on the largest device we had tested. *Harold Brown* replied [less than 1 line not declassified] *Harold Agnew* said it was more [less than 1 line not declassified] and for a very dirty device (lots of fissionable material) the yield could have been as high [less than 1 line not declassified]

David Aaron asked whether from the laboratory perspective it would be better to have a small quota for reliability testing each year or to have unlimited testing after five years. After having the question repeated, *Roger Batzel* responded that they would probably prefer a small number of tests each year.

The President told *David Aaron* that with either a quota or threshold he thought we would lose our non-proliferation impact and the other political benefits we were seeking. In his view, a 5 KT level would be high enough to permit further proliferation in other countries and might be just fine for India. *Harold Brown* said he agreed completely.

Harold Agnew asked whether 2 KT would matter. *The President* said he thought so, that the essence of our position is that for a period of time we would not test at all and then could resume testing.

The President said he wanted to make clear that he did not share all the laboratory director's concerns. He said he wasn't sure at all that he shared their concerns about problems arising within five years, but said he might not be qualified to judge. *Harold Brown* said this was a judgmental issue and the President's opinion was as good as anyone's.

The President asked whether there was any way to make the warheads less sensitive, possibly by adding more tritium. *Harold Brown* responded that we might make them less sensitive by relaxing the one-point safety criteria, explaining that this requirement meant that an accidental detonation of the HE at one point should not result in a significant nuclear yield and that this requirement had required us to minimize the plutonium in the warhead.

Roger Batzel said they had examined all these ideas, that to redesign the stockpile would take a lot of time and could have some disadvantages, and wouldn't really help much. He said that at the expense of more weight we could double the HE. *Harold Agnew* noted we could also add plutonium to make the primary hotter so it would be more likely to achieve an effective tritium burn.

The President said he had to leave for another appointment and that the meeting was very useful. The meeting adjourned at 3:30 p.m.

¹ (e)ref(1) Source: Carter Library, National Security Council, Institutional Files, Box 95, SCC 084, CTB Verification, Seismic Station Network: 6/12/78. Secret. The meeting took place in the White House Cabinet Room.

² (e)ref(2) Attached but not printed.

³ (e)ref(3) Not attached.

⁴ (e)ref(4) According to the President's Daily Diary, Carter met with Desai in the Oval Office from 11:01 to 11:26 a.m. (Carter Library, Presidential Materials) A record of their meeting is scheduled for publication in *Foreign Relations, 1977–1980, vol. XIX, South Asia* ([historicaldocuments/frus1977-80v19](https://history.state.gov/historicaldocuments/frus1977-80v19)).

⁵ (e)ref(5) Attached but not printed.

⁶ (e)ref(6) Attached but not printed.



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Foreign Relations of the United States 1977-1980
Volume XXVI, Arms Control and Nonproliferation , Document 210

210. Minutes of a Special Coordination Committee Meeting¹ (SFCM)

Washington, July 6, 1978

- SUBJECT
- Comprehensive Test Ban (CTB)
- PARTICIPANTS
- *State*
- Secretary Cyrus Vance
- Jerome Kahan Dep Director, Bureau of Politico-Military Affairs
- *Defense*
- Secretary Harold Brown
- Dep Secretary Charles Duncan
- David McGiffert Asst Secretary for International Security Affairs
- *Energy*
- Donald Kerr Acting Asst Secretary for Defense Programs
- *JCS*
- General David Jones
- Lt General William Y. Smith
- *ACDA*
- Paul Warnke
- Spurgeon Keeny, Deputy Director
- Admiral Thomas Davies Asst Director for Multilateral Affairs
- *White House*
- Zbigniew Brzezinski
- Hamilton Jordan
- *NSC*
- Reginald Bartholomew
- *OSTP*
- John Marcum
- *CIA*
- Sayre Stevens Dep Director, National Foreign Assessment Center
- [name not declassified] Chief, Nuclear Energy Division

MINUTES OF MEETING

The purpose of the meeting was to continue discussion of the three year approach on CTB, in light of comments received from the Chiefs² (SFCM) and Laboratory Directors.³ (SFCM)

In beginning the meeting, Dr. Brzezinski stated that we want to pull together differing agency positions on this issue and noted that the JCS position was less forthcoming than he had understood. He had expected that the three year approach would provide the basis for JCS support from the national security perspective and the other agencies had agreed on the three vs. five year approach on that basis. In his view, if the three year approach did not generate more support we might as well have the same fight over the five year proposal. Harold Brown pointed out, however, that we wouldn't get the same letter from the Chiefs on the five year proposal.

Paul Warnke stated that if the Chiefs still felt that serious risks remained he would recommend staying with the five year duration since it is better from a non-proliferation standpoint. In his view, the very limited support from the Chiefs and the Laboratory Directors was not a good enough basis to change this position. Cy Vance agreed noting that we are weakening the treaty from a non-proliferation standpoint by agreeing to the three year approach and should go back to five years.

Dr. Brzezinski noted that Roger Batzel's comments were fairly supportive, and that Harold Agnew's, while linking CTB to SALT, also had some support. Harold Brown stated that his attitude differed from the Chiefs and he has transmitted these views to the President.⁴ (SFCM) He agreed that three years would not be as good

for non-proliferation but noted the non-proliferation arguments had not been fully analyzed and he did not place as high an emphasis on them. On balance, however, he felt the three year approach was better and more acceptable to most policy officials than five.

Donald Kerr, speaking for Jim Schlesinger, stated that three years was a better way to reduce risks. In his view, while they could only certify continuing reliability with testing at 3-5 KT, three years represented a good compromise for national security and retention of laboratory personnel. He noted with regard to verification that a shorter duration would weaken our bargaining position and that what we could install would be less than what we hoped for.

(Hamilton Jordan entered at this point.)

Don Kerr continued that we could accomplish planned improvements in our Atomic Energy Detection System earlier and could also propose that the US and Soviets do some calibration testing taking advantage of the precedents of the Peaceful Nuclear Explosive Treaty. Spurgeon Keeny commented that this wouldn't help much since calibration shots would be at test sites and would tell us very little about evasion concerns.

Dr. Brzezinski summarized the three year approach saying that we are trying to balance five elements—duration, level of testing, Safeguards Plan, verification, and commitment to resume testing, in striving for a package which meets our national security needs and permits us to go ahead with our foreign policy objectives. He then read a draft Presidential Directive.⁵ (efns) In reviewing the verification portion of the directive, Dr. Brzezinski suggested that maybe we should go to 10 internal seismic stations, rather than 7. Harold Brown and Paul Warnke supported this suggestion and after a brief discussion, it was agreed that the directive should be modified to include seeking 10 simple stations instead of 7.

David Jones indicated that there was no subject on which the Chiefs had been more consistent. He acknowledged that three years with resumption of testing was far better than five, but to conclude that the problems would go away would be erroneous. He said that the JCS memorandum had been based on a thorough review of each element of the package and left the final judgement to the individual Chiefs. In response to Dr. Brzezinski's question, he agreed that the elements of the draft Presidential Directive were responsive to the Chiefs' concerns but stated that their basic feeling was that there is no way to maintain reliability without testing at 3-5 KT—an indefinite duration would be catastrophic, five years would be very very serious, three years would be less serious but would still be a problem.

Harold Brown commented that instead of leaving the final judgment to the individual Chiefs, he felt the memo expressed judgment at the end that a 3-5 KT threshold would be better. Bill Smith interjected that in the best of worlds, we would have both the non-proliferation benefits and continue to test at the 3-5 KT level. Dr. Brzezinski noted that with a longer duration there could be a higher test level, and with the shorter duration a lower test level. Bill Smith stated that a more accurate non-proliferation assessment was needed to clarify the benefits of the treaty since the military risks were quite real to the Chiefs.

Paul Warnke offered to provide as much detail as needed, noting that this factor had been taken into account fully in the President's February 1976 decision.⁴ (efn6) Cy Vance stated that it was pretty clear that India and possibly Brazil would go along with the CTB. Paul Warnke agreed and said that the CTB might lead India to accept full scope safeguards as well. David Jones acknowledged that military risks had to be balanced against these possible gains for non-proliferation but noted that the Chiefs would be more negative on the prospect of such gains.

Dr. Brzezinski stated that he wanted to go through the draft Presidential Directive paragraph by paragraph and have each participant register dissent or consent. On duration, Cy Vance said he preferred five years but would go to three if the other provisions were satisfactory. David Jones said it was clear to him that three was very much preferable than five, but that he had to represent all the Chiefs' views and would have to fall back on the judgment in paragraph 8 of the memorandum on the entirety of the package rather than item by item. Jones said that as Roger Batzel had noted, testing at 3-5 KT was a fundamental requirement in the long term. Harold Brown observed that this referred to concern about a continuation of the treaty after three years, and Dr. Brzezinski noted that the burden of proof would be on those who wanted to continue the treaty. David Jones disagreed asserting that the burden of proof would fall programatically on the tester. Dr. Brzezinski pointed out that the treaty would terminate after three years and David Jones said that he thought the burden of proof would fall equally on those parties.

Harold Brown said that the real question would be verification and not reliability with regard to the burden of proof. David Jones agreed stating that the Chiefs are convinced that without much difficulty the Soviets can test at 3, 5, 10 KT at low risk and this drives the conclusion that we would have to stop and they would continue by cheating. In his view, we couldn't do that but the Soviets could in their closed society.

At Harold Brown's suggestion, Dr. Brzezinski then asked for and received confirmation that all agencies including Energy would support this approach except the Chiefs. Donald Kerr stated that three years was definitely better than five years. Harold Brown said that in his view this approach was consistent with national security and that Jim Schlesinger should clarify his position on that issue. Dr. Brzezinski read the final paragraph from Jim Schlesinger's transmittal of the Laboratory Directors' views.⁷ (efn7) and said he took that as an endorsement of the three year approach. Harold Brown agreed that this meant he (Jim Schlesinger) was on board. Donald Kerr also agreed.

David Jones, supported by Harold Brown, indicated that if the Chiefs were pressed again on this approach it would probably be counter-productive and we would get more no's than yes's. He indicated that in time as the provisions of the treaty become clearer and with a better understanding of the non-proliferation benefits of a CTB they might be more supportive of this approach. There was agreement that State and ACDA would prepare a non-proliferation assessment for this purpose. David Jones asserted however, that if the paper were sent now the Chiefs would still say that it (the three year approach) doesn't meet their concerns.

Bill Smith observed that the "unless" clause in the commitment to resume testing had not been included in the Chiefs' assumptions, in other words their view was based on unconditional commitment to resume testing after three years. Harold Brown said that if this was true the paper was internally inconsistent. He recognized the problem that having a group of people with different concerns reduced the consistency of conclusions. In his view the Chiefs may have assumed that testing would resume but didn't really believe it. David Jones, said that paragraph 8 of the JCS memorandum was based on the most favorable assumptions.

Dr. Brzezinski suggested that we should go back to the President and tell him that all agencies were prepared to sign on for the three year approach, and that JCS was standing by its concern but were also more satisfied with the three year than five year proposal. Donald Kerr indicated that in his view the Safeguards Plan should not be mentioned in the intent to resume testing clause, since there was nothing in the plan that would be relevant to the decision of whether to seek a

replacement treaty. Harold Brown said there was some relationship but suggested that the Safeguards Plan could be included in a separate sentence. John Marcum disagreed with Kerr pointing out that the Safeguards Plan would provide the essential data base for deciding whether to negotiate a replacement treaty.

Paul Warnke stated that in his view, the non-proliferation benefits were marginal as is and that he felt we should stick to the five year position unless a general consensus developed in favor of the three year approach.

Harold Brown disagreed stating that the three year approach would be an improvement in the ratification context in demonstrating that risks had been limited.

Paul Warnke asked how we would deal with permitted experiments. He thought that since testing would be limited to less than 100 pounds we would not need to seek an understanding with the Russians, but in any case we could proceed to table language for Article I of the treaty and reserve our position on whether an understanding would be needed.

Dr. Brzezinski asked the working group to examine this issue and adjourned the meeting stating that we would report to the President and that State and ACDA would send a non-proliferation assessment to the JCS.

¹ (e/fnref1) Source: Carter Library, National Security Council, Institutional Files, Box 96, SCC 093, CTB, Test Ban Options and Issues: 7/6/78. Secret. The meeting took place in the White House Situation Room. Brzezinski summarized the meeting in a memorandum to Carter, July 7; Ibid.

² (e/fnref2) The JCS remained opposed to a CTB. See Memorandum From the Joint Chiefs of Staff to Brown, June 29, 1978; Library of Congress, Manuscript Division, Harold Brown Papers, Box 82, Comprehensive Test Ban Treaty #2.

³ (e/fnref3) See footnote 4, Document 204 (/historicaldocuments/frus1977-80v26/d204.e/fn4).

⁴ (e/fnref4) Brown sent a memorandum to Carter on June 30 which transmitted the views of the JCS on a CTB. He noted that his "views on this subject differ from theirs, as I have previously indicated to you." (Memorandum from Brown to Carter, June 30, Library of Congress, Manuscript Division, Harold Brown Papers, Box 82, Comprehensive Test Ban Treaty #2)

⁵ (e/fnref5) See Document 208 (/historicaldocuments/frus1977-80v26/d208).

⁶ (e/fnref6) Not found.

⁷ (e/fnref7) See Document 209 (/historicaldocuments/frus1977-80v26/d209).