

WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

104

FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
#5 memo	to Chairman, AEC from W. W. Rostow confidential <i>open 11-13-17</i>	1 p 12/29/66	A
#5b report	re: Alaska secret <i>open 8-11-09 NLJ/RAC 08-52</i>	1 p undated	A
#5c letter	to President from Glenn Seaborg secret <i>sanitized 10-15-08 NLJ 08-203</i>	2 p 12/23/66	A
#5d report	re: test sites secret <i>sanitized 10-15-08 NLJ 08-203</i>	9 p 12/22/66	A
#6 letter	to Bill Moyers from John A. Harris secret <i>open 9/2/17 per RAC</i>	2 p 08/19/66	A
#7 memo	to Chairman, AEC from W. W. Rostow secret	1 p 08/08/66	A
#8 memo	to President from W. W. Rostow secret	2 p 08/05/66	A
#9a memo	to President from Charles Schultze Secret	3 p 07/28/66	A
#10a letter	to President from Glenn Seaborg secret	3 p 07/29/66	A
#10b report	re: test sites secret	4 p undated	A
#10c letter	to Gen. Crowson from Herbert Scoville secret	2 p 07/13/66	A
#10d letter	to Glenn Seaborg from Cy secret	2 p 06/21/66	A

FILE LOCATION NATIONAL SECURITY FILE, Subject File
Nuclear Testing -- General, vol. I
Box 27

RESTRICTION CODES

- (A) Closed by Executive Order 12356 governing access to national security information.
- (B) Closed by statute or by the agency which originated the document.
- (C) Closed in accordance with restrictions contained in the donor's deed of gift.

WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

284

FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
#10e letter	to Gen. Crowson from U. Alexis Johnson secret <i>open 11-13-07</i>	1 p 07/25/66	A
#12a memo	to Mr. Rostow from Spurgeon Keeny Secret	2 p 08/04/66	A
#13 letter	to Glenn T. Seaborg from McGeorge Bundy confidential	1 p 02/28/66	A
#15 memo	to Mr. Bundy from Spurgeon Keeny secret	2 p 02/24/66	A
#17 letter	to McGeorge Bundy from Glenn Seaborg secret <i>open 9/2/17 per RAC</i>	2 p 02/16/66	A
#18 report	re: nuclear testing secret <i>open 9/2/17 per RAC</i>	34 p undated	A
#20 letter	to McGeorge Bundy from Glenn T. Seaborg confidential <i>open 9/2/17 per RAC</i>	2 p 11/26/66	A
#22 letter	to Glenn Seaborg from McGeorge Bundy confidential <i>open 4.1.10 NLW/RAC 08.53</i>	1 p 12/10/65	A
#26 memo	NSAM 282 to SecState & Chairman, AEC from McG. Bundy secret <i>open 11-13-07</i>	1 p 02/11/64	A
#27 memo	to McGeorge Bundy from U. Alexis Johnson secret <i>open RAC 4/03</i>	4 p 05/07/64	A
#28 memo	to holders of NSAM No. 282 secret <i>open 4.1.10 NLW/RAC 08.53</i>	1 p 07/20/64	A
#30 letter	to Dean Rusk from Glenn Seaborg secret <i>open 8.4.09 NLW/RAC 08.52</i>	4 p 04/07/65	A

FILE LOCATION
 NATIONAL SECURITY FILE, Subject File
 Nuclear Testing -- General, Vol. I
 Box 27

RESTRICTION CODES

- (A) Closed by Executive Order 12356 governing access to national security information.
- (B) Closed by statute or by the agency which originated the document.
- (C) Closed in accordance with restrictions contained in the donor's deed of gift.

WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

374

FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
#34 letter	to Glenn Seaborg from secret open 9/21/17 per RAC	1 p undated	A
#36 cable	Moscow 2531 <i>open 11-13-07</i> confidential	1 p 02/16/66	A
#38a letter	to Charles Schultze from Glenn Seaborg confidential open 9/21/17 per RAC	2 p 12/22/65	A
#39 letter	to Glenn Seaborg from McG. Bundy confidential open 4-1-10 NW/RAC 08-53	1 p 12/10/65	A
#39c memo	to Mr. Bundy from Spurgeon M. Keeny confidential open 4-1-10 NW/RAC 08-53	1 p 12/3/65	A
#39e letter	to McGeorge Bundy from Glenn Seaborg confidential <i>open 8-11-09</i>	2 p 11/26/65	A
#40 memo	to McGB from R. W. Komer secret	1 p 01/14/65	A
#40a cable	A-650 from New Delhi secret	2 p 12/30/64	A
#40b report	attachment to A-650 New Delhi secret	11 p 11/25/64	A
#42a letter	to Mac Bundy from Glenn Seaborg confidential open 9/21/17 per RAC	2 p 11/16/64	A
#43 letter	to President from Glenn Seaborg secret	2 p 10/29/64	A
#44 memo	to Mr. Bundy from Charles Johnson confidential	2 p 10/05/64	A

FILE LOCATION

NATIONAL SECURITY FILE, Subject File
Nuclear Testing -- General, vol. I
Box 27

RESTRICTION CODES

- (A) Closed by Executive Order 12358 governing access to national security information.
- (B) Closed by statute or by the agency which originated the document.
- (C) Closed in accordance with restrictions contained in the donor's deed of gift.

WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

4 of 4

FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
#47a memo	TO Secretary from U. Alexis Johnson confidential	6 p 2/8/64	A
#48b report	re: test ban treaty secret	8 p undated	A
#50a memo	to Special Assistant to the President for National Security Affairs from Paul M. Kearney secret	1 p 12/10/63	A

FILE LOCATION
 NATIONAL SECURITY FILE, Subject File
 Nuclear Testing -- General, vol. I
 Box 27

RESTRICTION CODES
 (A) Closed by Executive Order 12356 governing access to national security information.
 (B) Closed by statute or by the agency which originated the document.
 (C) Closed in accordance with restrictions contained in the donor's deed of gift.

1

1967

Bromley -

3 AEC kg

There's some kind of wry
observation to be drawn from
this article, but I'm not
sure how to put it.

Congratulations on your
treatment by Lost magazine.

Alan Saffery

12/2/67

2a

ATOM ARMS GAINS DESPITE TEST BAN ACHIEVED BY U.S.

Jackson Tells of Advances Formerly Held Impossible Under Treaty Restrictions

Special to The New York Times

WASHINGTON, Nov. 30—The Atomic Energy Commission was reported today to be making unexpectedly rapid progress in developing radically new atomic weapons in underground testing in Nevada.

The report was given by Senator Henry M. Jackson, Democrat of Washington, who is chairman of the Military Applications subcommittee of the Joint Congressional Committee on Atomic Energy.

In a Senate speech on implementation of United States "safeguards" under the limited test ban treaty of 1963, Mr. Jackson said that results were being obtained in underground tests "that were previously thought impossible under the treaty restrictions."

The treaty precludes all atomic tests except those conducted underground.

The Atomic Energy Commission, Mr. Jackson said, has been "somewhat handicapped" in the last year in its underground nuclear testing.

Labor Troubles Cited

It has been handicapped first, by labor difficulties at the national nuclear test site in Nevada from early July through early November and, second, by the lack of a suitable test site for detonation of high-yield explosions, the Senator said.

"However, in spite of these problems," he said, "a large number of underground tests were conducted and very significant advances made in the area of weapons technology development, new and radically different weapon design concepts, and in the science of peaceful uses for nuclear explosives."

Mr. Jackson disclosed that in the next 18 months an "accelerated underground test program" is planned, with a "relatively large number of tests" on new re-entry vehicles for intercontinental missiles, on missile guidance systems and on warheads for an anti-ballistic missile system.

The Senator alluded to the still secret development of an X-ray type warhead for an anti-ballistic missile by noting that increased emphasis would be placed on obtaining information about the "high altitude phenomenology" of atomic explosions.

One of the principal objectives in the underground testing is to develop a relatively large thermonuclear warhead that would destroy incoming missiles with tremendous bursts of X-rays.

The Jackson speech provided a tipoff to the changing thrust in the Joint Congressional Committee's interest in the future development of atomic weapons systems. Under Senator Jackson's direction, the committee has been conducting an inquiry into the anti-ballistic missile issue — an inquiry that the Administration had expected would lead to greater Congressional pressure to deploy a "heavy" defense system against the Soviet Union.

Accepts Argument

Senator Jackson, however, accepted the Administration's argument that at present it was technically impossible to deploy an effective defense against a large-scale attack, such as the Soviet Union would be capable of launching. Instead of deployment of such a system, he urged a "high priority" research and development program to attempt to develop an effective defense.

But where the Senator departed from Administration thinking was in urging deployment of a new generation of offensive missiles with larger, more sophisticated warheads.

Senator Jackson contended that the Soviet Union, in the buildup of both its offensive and defensive strength, was presenting "a serious challenge" to United States strategic superiority.

If the United States is to retain its strategic offensive capability, he said, "we will need another generation" of land-based intercontinental missiles with larger payloads and using "multiple independently-targetable re-entry vehicles," or missile warheads capable of hitting several different targets.

In addition, he said, "we will need another generation of nuclear submarines with more and larger missiles," also armed with multiple warheads.

Return to
WWR files

no answer
over required

Recd 11/6/68

ry



~~CONFIDENTIAL~~

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

30

2058

Johnson
2-Rec'd 11/6/68

MAY 26 1967

Honorable Walt W. Rostow
Special Assistant to the President for
National Security Affairs
The White House

Dear Mr. Rostow:

Enclosed for your review and approval are the Standing Operating Procedures for the Test Operations Center (TOC SOP). These procedures have evolved from the operating practices within the Test Operations Center over the past two years. Several after-test conditions are defined, and the special actions associated with each are delineated. The TOC SOP includes certain preapproved public announcements and responses to inquiries and proposes others which would be subject to specific approval by pertinent government agencies before use.

These procedures were developed in coordination with the Departments of State and Defense, the Joint Chiefs of Staff, the Arms Control and Disarmament Agency, the Central Intelligence Agency, and the Defense Atomic Support Agency. They were approved by the Atomic Energy Commission on May 19, 1967.

It is proposed that the TOC SOP be adopted for use immediately following concurrence by member agencies of the President's Review Committee on Underground Nuclear Tests, of which you are Chairman. These procedures will replace those similarly titled but of a more general nature, which were distributed on February 4, 1966.

Sincerely yours,

Delmar L. Crowson

Delmar L. Crowson
Brigadier General, USAF
Director of Military Application

Enclosure:
TOC SOP

When separated from enclosures, handle this document
OFFICIAL USE ONLY
(Insert proper classification)

DOCUMENT TRANSMITTED
HEREWITH CONTAINS CLASSIFIED
DEFENSE INFORMATION

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

DETECTIVE OFFICE

DEFENSE INFORMATION
SYSTEMS CENTER
CIVILIAN PERSONNEL

RECEIVED
MOSCOW'S OFFICE

REF NO:
DATE:

1967 MAY 29 PM 5 19

DIRECTOR OF NATIONAL DEFENSE
INTELLIGENCE CENTER
WASHINGTON, D. C.

URGENT

URGENT 5/29/67
MOSCOW TO WASHINGTON
MOSCOW 0100Z
FM 0100Z
TO DIRECTOR
INFO WASHINGTON
SUBJECT: [Illegible]

[Illegible text block]

[Illegible text block]

END

[Illegible text block]

MAY 29 1967



ATOMIC ENERGY COMMISSION
UNITED STATES

~~CONFIDENTIAL~~

[Handwritten signature]

[Handwritten number]

CONFIDENTIAL

3-b

CONCURRENCE COPY

U. S. ATOMIC ENERGY COMMISSION HEADQUARTERS

TEST OPERATIONS CENTER

STANDING OPERATING PROCEDURES

Prepared by

Division of Military Application

May 19, 1967

DECLASSIFIED

Authority Group 4

By AKA, NARA, Date 11-4-89

GROUP 4
Downgraded at 3 year
intervals; declassified
after 12 years.

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

CONFIDENTIAL

FOREWORD

Certain procedures within this document were established at the request of the Review Committee on Underground Nuclear Tests so that a responsible officer in the appropriate agencies could be notified on a timely basis in the event that a test designed to be contained should produce unexpected results which might require prompt Governmental action. It should be noted that some of these procedures are not applicable to an event in which it has been predicted that a radioactive release will occur, such as a Plowshare cratering experiment. The Review Committee on Underground Nuclear Tests would have been briefed in advance of this type of experiment, including the public information plan, during the normal approval procedures. The cognizant program division may, prior to such an event, publish special Commission-approved policy instructions which will be supplementary to this document.

CONTENTS

	<u>Page</u>
Objectives of TOC SOP	1
Definitions	1
Responsibilities	4
Condition I Procedures	8
Functions of the Chief	8
Condition I Situation Report	8
Functions of the DPI Representative	10
Condition I Announcements	10
Condition II Procedures	13
Functions of the Chief	13
Condition II Situation Report	13
Functions of the DPI Representative	14
Condition II Announcements	15
Condition II Responses to Inquiry	16
Condition III Procedures	18
Functions of the Chief	18
Condition III Situation Report	19
Functions of the DPI Representative	20
Condition III Announcements	21
Condition III Responses to Inquiry	23
Condition IV Procedures	24
Functions of the Chief	24
Condition IV Situation Report	26
Functions of the DPI Representative	28
Condition IV Announcements	29
Condition IV Responses to Inquiry	32
Condition V Procedures	33
Functions of the Chief	33
Condition V Situation Report	34
Functions of the DPI Representative	37
Condition V Announcements	37
Condition V Responses to Inquiry	41

CONTENTS (continued)

	<u>Page</u>
Supplementary Procedures	43
Functions of the Chief	43
Public Information	43
Appendix A - Advisory List	49
Appendix B - Notification List	50
Appendix C - Classification Guidance	53

A. OBJECTIVES

The objectives of this Test Operations Center Standing Operating Procedures (TOC SOP) are to establish centralized communications from the test control point to Headquarters AEC and between Headquarters AEC and other appropriate government agencies, to delineate and assign responsibilities, and to specify procedures for implementing the actions required herein.

B. DEFINITIONS

1. Test Manager: The term "Test Manager" refers to the AEC individual who has been delegated the authority to conduct the test by the Manager, Nevada Operations Office.
2. Control Point: The "control point" (CP) is that location from which the Test Manager controls and coordinates operations pertaining to the specific nuclear event.
3. Aerial Surveillance Coordination Center: The "Aerial Surveillance Coordination Center" (ASCC) is that location within the control point which serves as the central agency for prompt receipt of information concerning ground and aerial surveillance activities and provides for exchange of pertinent information among the participating agencies to permit effective operations in sampling and tracking. It is from this central point that communications between the CP and TOC are maintained, as required, during the operational period.

4. Test Operations Center: The "Test Operations Center" (TOC) is that area of Headquarters, AEC, designated for receipt and processing of communications between the Test Manager and the representatives of the appropriate Headquarters programmatic division, other concerned Headquarters divisions, and other appropriate government agencies during the operational period.
5. Operational Center Chief: The "Operational Center Chief" (Chief) will be the representative designated by the division having primary programmatic responsibility (DMA or DPNE) to have operational control of the TOC.
6. Operational Period: The "operational period" extends from the period 5 minutes just preceding, during, and an undetermined time following a nuclear detonation. The period will terminate upon agreement of all members of the TOC when the operation has been routine, i.e., CONDITION I, or when the detonation has resulted in CONDITION II or III. When CONDITION IV (or higher) has occurred, the operational period will be extended as required to keep the division director(s) and the General Manager apprised of the situation.
7. CONDITION I: CONDITION I is defined as that condition existing after a nuclear detonation in which there has been no release of radioactivity (either particulate or gaseous) into the atmosphere.

8. CONDITION II: CONDITION II is defined as that condition existing after a nuclear detonation in which there has been a small radioactive release which appears to be confined within the immediate area of the event (encompassing the RAMS unit coverage for the test). The radiation levels as registered by this remote area monitoring system must show signs of decrease within 30 minutes after the detonation; otherwise the event will be handled as a CONDITION III.

9. CONDITION III: CONDITION III is defined as that condition existing after a nuclear detonation in which there has been a small radioactive release which is not expected to be detected beyond the perimeter of the Nevada Test Site, including the Nellis Air Force Range.

10. CONDITION IV: CONDITION IV is defined as that condition existing after a nuclear detonation in which there has been a radioactive release which is expected to be detected off site.

11. CONDITION V: CONDITION V is defined as that condition existing after a nuclear detonation in which the radioactive release has been detected off site, but which is not predicted to cross the national border in detectable amounts.

C. RESPONSIBILITIES

1. NTS or Other AEC Test Locations:

- a. The Test Manager will insure that, during the operational period, neither AEC nor contractor personnel will transmit any communication or immediate postshot information (other than that required for immediate operations which includes communication between laboratory or user personnel at NTS and their home laboratories or offices) to persons outside the NTS (or test CP's) other than to the TOC at AEC Headquarters.

- b. The Test Manager will establish telephone contact with the TOC at Headquarters, AEC, at the appropriate time (ordinarily, from 3 to 5 minutes before the shot) and will maintain this contact through detonation time and postshot time until the Chief, TOC has made the determination (for CONDITION IV or higher--through his division director and the General Manager, as appropriate) that the need for uninterrupted communication no longer exists. The Test Manager will insure that prompt notification concerning postshot radioactivity data or other significant information is furnished to the Chief, TOC. (For DOD-sponsored events, a conference

call will be placed through the AEC Headquarters switchboard to include the DASA Test Center, telephone number 11-55548.)

- c. In the event of radioactive release, the Test Manager will provide the TOC with continuing information relative to air mass trajectories, forecasts, and available radiological data. Designated public officials of Nevada and Utah and of any state adjacent thereto which might be affected will be notified by the Manager, Nevada Operations Office of any significant release of radioactivity at the Nevada Test Site.

2. AEC Headquarters TOC:

- a. The Test Operations Center will be activated prior to all nuclear explosive events.
- b. The division having primary programmatic responsibility (DMA or DPNE) will designate a division representative to have operational control of the TOC to be called the Operational Center Chief (Chief).
- c. The TOC will consist of appropriate staff members of DMA, DPNE, DOS, DPI and C. Members of other divisions may be present as appropriate. Either DMA or DPNE representatives

and the DPI, C and DOS representatives will be present for all nuclear explosive events. DASA will provide a representative for DOD-sponsored events.

- (1) The Chief will be responsible for all programmatic aspects of the event.
- (2) The DOS representative will be responsible for (1) providing technical assistance to the Chief for the health and safety aspects of the event and (2) documenting data related thereto.
- (3) The DPI representative will be responsible for all public information aspects of the event.
- (4) The Division of Classification representative will be responsible for assisting the Chief concerning classification aspects of the event.

- d. The Chief will notify the TOC members and the Supervisor of the AEC Headquarters Telephone Switchboard before the event and establish a time when the operations center will be activated, and will further notify all TOC members of any delays or postponements.
- e. The Chief will be responsible for the keeping of a log of all significant information received in and transmitted from the TOC. Information from the log will be reported to the program division director as appropriate and to others as may be directed.

f. When CONDITION IV (or higher) has occurred, which situation requires manning the TOC for an extended period, the Chief will retain operational control of the TOC while the ASCC is in operation and for such period thereafter as required to resolve those matters arising from the constraints of the limited test ban treaty. After such treaty considerations are resolved, primary interest then relates to off-site radiological data documentation in conjunction with PHS activities. Consequently, in line with their responsibility for documentation of the health and safety aspects of the event, DOS will, in coordination with the programmatic division director, continue the collecting of information on the event situation by communicating directly with the Assistant Manager for Operations at the Nevada Operations Office. The DOS representative shall keep a running log of all significant information received or transmitted by him. The representatives of the programmatic division and DPI (if appropriate) shall be promptly advised of any non-routine developments in the situation. (It should be noted that forthcoming information from NV may be of sufficient import that a conference call to include programmatic division representation is deemed advisable.)

Any periodic reports by DOS to the General Manager informing him of the situation shall be coordinated with the programmatic division and DPI.

- g. For those events which are conducted at locations other than the Nevada Test Site, the programmatic division may, prior to the event, publish special Commission-approved policy instructions which will be supplementary to this TOC SOP.

D. PROCEDURES

- 1. CONDITION I - No release of radioactivity; i.e., perimeter RAMS units read background. (Note: Surface zero (SZ) probes sometimes have readings due to radiation not free in the atmosphere, e.g., confined to pipes or cables.)

- a. Chief: After the passage of the minimum time required to assess the circumstances (usually after the H plus 3 minute RAMS readings have been reported from the CP, and after at least one aircraft monitoring flight report), the Chief will inform the program division director that the event has taken place and will relay a verbal situation report (see (1) below) to the designated personnel (see (2) below).

- (1) Situation Report: "The event scheduled for today took place at (time). Performance was (about as),

(below), (above) expected. CONDITION ONE.

Everything OK."

(2) Individuals/offices to be given situation report*:

Special Assistant to Chairman (Report to be made
by Chief)**

General Manager (Report to be made by Chief)

(Note: Until the Chief has notified the (office of)
Special Assistant to the Chairman and General
Manager, no other calls from the TOC are authorized.)

All Commissioners

Assistant General Manager***

Assistant General Manager for Operations***

Director and Deputy Director, DOS***

Special Assistant for Disarmament

Director, DPNE

Director, DI

Assistant Executive Secretary, MLC

Assistant Director, R&D, DMA

Director, Office of Congressional Relations

Designated Representative, JCAE

Deputy or Assistant Director, DMA

Designated Representative, DASA

*Specific titles, names and telephone numbers of the
individuals to be advised of the event are provided
in Appendix A, Page 49.

**If circumstances permit, the Chief and the DPI representative will complete the action set forth in b(2) below concurrently with this notification.

***These calls will be made by the DOS representative.

b. Public Information (DPI) Representative:

- (1) After detonation, determine in cooperation with Chief whether previous recommendation as to announcing the test is still valid.
- (2) If the TOC recommendation is to announce, even if this is in consonance with the previous decision, confirm permission to announce with the Office of the Special Assistant to the Chairman (Extension 3438, "H" Street Extension 5667). If the test was preannounced, omit this step.
- (3) CONDITION I announcement will be automatically released without prior approval of other agencies required.
- (4) Except for DPNE experiments, the following postshot announcement will be used for CONDITION I: "A nuclear test of (low, low-intermediate, or intermediate)* yield was conducted underground today by the Atomic Energy Commission at its Nevada Test Site."

*low - less than 20 KT
low-intermediate - 20 to 200 KT
intermediate - 200 KT to 1 MT

(5) For DPNE contained experiments, the following postshot announcements will be used for CONDITION I:

(a) For excavation-device and emplacement-technique development experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives.

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare experiment was one in a series to develop nuclear explosives and techniques for possible use in later excavation experiments."

(b) For heavy element experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives.

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare test was part of an experimental effort to develop a special nuclear

*low, low-intermediate, or intermediate

explosive capable of producing, in the nuclear explosion, neutron-rich isotopes of the known transplutonium elements and, possibly, of new, heavier elements."

- (6) The following obvious response to inquiry related to release of radioactivity will be issued for

CONDITION I:

"There was no release of radioactivity."

- (7) Arrange with NV Public Information a time for issuance.

This time of issuance shall be set at least 15 minutes ahead to permit the following notifications to be made that a test will be announced at a given time.

- (a) Office of the Press Secretary to the President, the White House.
- (b) Office of the General Manager (Extension 6666). (Omit this step after 5 p.m., and on weekends.)
- (c) Office of the Assistant General Manager (Extension 5053).
- (d) TOC Chief and TOC representatives of other divisions or their offices (DMA Extension 4007, DPNE Extension 5495, DOS Extension 4281, Classification Extension 3292.)

(e) Office of Congressional Relations

(Extension 3627).

- (8) Call USIA (Telephone 182-5151) and Department of State, Bureau of Public Affairs (182-2011) giving the text of announcement and time of issuance. Remind the person receiving the call that the announcement is not to be released until it is seen on the wires.
- (9) Make conference call to the four wire services (AP, UPI, French, and Reuters) and read the announcement. Use responses and provide background information only in response to inquiry.

2. CONDITION II - Minor Release of Radioactivity Which is Confined to Immediate Area.

a. Chief: After the passage of the minimum time required to assess the circumstances (usually after the H plus 3 minute RAMS readings have been reported from the CP, and after at least one aircraft monitoring flight report), the Chief will inform the program division director that the event has taken place and will relay a verbal situation report (see (1) below) to the designated personnel (see (2) below).

(1) Situation Report: "The event scheduled for today took place at (time). Performance was (about as), (below), (above) expected. A minor release of radioactivity

has occurred. All indications are that it is confined to the immediate area. We are watching it very closely and will inform you if the situation worsens. CONDITION II.

- (2) Relay a CONDITION II situation report (see above) to the designated personnel (same as for CONDITION I, i.e., individuals/offices listed in Appendix A, Page 49), after notifying the Director, DMA, the General Manager and the Special Assistant to the Chairman (if circumstances permit, the DPI representative will discuss the public information aspects of the event concurrently with this notification by the Chief).

b. Public Information (DPI) Representative:

- (1) After detonation, determine in cooperation with Chief whether previous recommendation as to announcing the test is still valid.
- (2) If the TOC recommendation is to announce, even if this is in consonance with the previous decision, confirm permission to announce with the Office of the Special Assistant to the Chairman (Extension 3438, "H" Street Extension 5667). If the test was preannounced, omit this step.

- (3) CONDITION II announcement will be automatically released without prior approval of other agencies required.
- (4) Except for DPNE experiments, the following postshot announcement will be used for CONDITION II: "A nuclear test of (low, low-intermediate, or intermediate) yield was conducted underground today by the Atomic Energy Commission at its Nevada Test Site."
- (5) For DPNE contained experiments, the following postshot announcements will be used for CONDITION II:
- (a) For excavation-device and emplacement-technique development experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives.

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare experiment was one in a series to develop nuclear explosives and techniques for possible use in later excavation experiments."

*low, low-intermediate, or intermediate

- (b) For heavy element experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives. The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare test was part of an experimental effort to develop a special nuclear explosive capable of producing, in the nuclear explosion, neutron-rich isotopes of the known transplutonium elements and, possibly, of new, heavier elements."

- (6) The following responses to inquiry will be used for
CONDITION II:

- (a) "There was a minor release of radioactivity which is confined to the immediate area of the detonation. It is not expected that any radioactivity will be detected beyond this immediate area."
- (b) "The small amount of radioactivity released does not constitute a health hazard to workers at the test site."

*low, low-intermediate, or intermediate

- (7) Arrange with NV Public Information a time for issuance. This time of issuance shall be set at least 15 minutes ahead to permit the following notifications to be made that a test will be announced at a given time.
- (a) Office of the Press Secretary to the President, the White House.
 - (b) Office of the General Manager (Extension 6666). (Omit this step after 5 p.m., and on weekends.)
 - (c) Office of the Assistant General Manager (Extension 5053).
 - (d) TOC Chief and TOC representatives of other divisions or their offices. (DMA Extension 4007, DPNE Extension 5495, DOS Extension 4281, Classification Extension 3292.)
 - (e) Office of Congressional Relations (Extension 3627).
- (8) Call USIA (Telephone 182-5151) and Department of State, Bureau of Public Affairs (182-5011) giving the text of announcement and time of issuance. Remind the person receiving the call that the announcement is not to be released until it is seen on the wires.
- (9) Make conference call to the four wire services (AP, UPI, French, and Reuters) and read the

announcement. Use responses and provide background information only in response to inquiry.

3. CONDITION III - Some Release of Radioactivity But Not Expected To Go Off Site

- a. Chief: After the passage of the minimum time required to assess the circumstances, the Chief will notify the program division director and the Special Assistant for Disarmament that the event has taken place and that there has been some release of radioactivity, but that it is not expected to go off site; i.e., apparently a CONDITION III situation exists (the program division director will be advised if this evaluation is not unanimously subscribed to by the TOC representatives). (Note: Appropriate discussion will take place between the Test Manager and the Chief to reach this determination.) If the program division director concurs that the CONDITION III procedures will be followed, the Chief shall relay the situation report (see below) to the designated individuals/offices listed in Appendix A, Page 49. If the division director does not concur, he shall inform the Chief as to the numbered-condition procedures that will be used. (For DOD-sponsored events, the Director of Military Application shall contact the Director, DASA, to apprise him of the situation and any further action contemplated.)

After the permission to follow the CONDITION III procedures has been obtained (and after notification of the Director, DMA; the General Manager; and the Special Assistant to the Chairman), the DPI representative shall take the actions listed in 3b below.

Situation Report. "The event scheduled for today took place at (time). Performance was (about), (below), (above) that anticipated. There has been a release of radioactivity which appears to be restricted to the test site. This release is not expected to be detected beyond the perimeter of the site. CONDITION III. You shall be promptly informed if this evaluation changes."

The Chief will notify the designated representatives of the appropriate agencies listed below (1) that there has been a release of radioactivity from the event, (2) whether it is gaseous effluent only, (3) that the radioactivity appears to be restricted to the test site and is not expected to be detected beyond the perimeter of the site, (4) that they shall be promptly informed if the situation worsens, and (5) that a CONDITION III public announcement is being made by the AEC.

Agencies to be notified in the event that a CONDITION III exists:*

White House	State Department
DDR&E	JCS
ACDA	CIA
BOB	DASA
FRC**	USPHS**
ESSA**	FDA***

*A list of the designated representatives of the agencies to be notified in the event that a test produced unexpected results which might require prompt governmental action is provided in Appendix B on Page 50.

**Notification of the U. S. Public Health Service, ESSA, and FRC representatives will normally be made by the DOS-TOC representative when the situation warrants.

***To be notified by the DOS-TOC representative only in the event that a potential health hazard is predicted.

b. Public Information Representative:

- (1) After detonation, determine in cooperation with Chief whether previous recommendation as to announcing the test is still valid.
- (2) If the TOC recommendation is to announce, even if this is in consonance with the previous decision, confirm

permission to announce with the Office of the Special Assistant to the Chairman (Extension 6111). If the test was preannounced, omit this step.

- (3) CONDITION III announcement will be automatically released without prior approval of other agencies required.
- (4) Except for DPNE experiments, the following postshot announcement will be used for CONDITION III: "A nuclear test of (low, low-intermediate, or intermediate) yield was conducted underground today by the Atomic Energy Commission at its Nevada Test Site. (Shortly) (___ minutes) after the detonation, our instruments near ground zero showed some radiation readings slightly above background. (The readings dropped to background within ___ minutes.) It is not expected that any radioactivity will be detected off site."
- (5) For DPNE contained experiments, the following postshot announcements will be used for CONDITION III:
- (a) For excavation-device and emplacement-technique development experiments:
- "A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program
- *low, low-intermediate, or intermediate

to study and develop civilian and industrial applications for nuclear explosives. (Shortly) (___ minutes) after the detonation, our instruments near ground zero showed some radiation readings slightly above background. (The readings dropped to background within ___ minutes.) It is not expected that any radioactivity will be detected off site."

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare experiment was one in a series to develop nuclear explosives and techniques for possible use in later excavation experiments."

(b) For heavy element experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives. (Shortly) (___ minutes) after the detonation, our instruments near ground zero showed some radiation readings slightly above background. (The readings

*low, low-intermediate, or intermediate

dropped to background within ____ minutes.)

It is not expected that any radioactivity will be detected off site."

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare test was part of an experimental effort to develop a special nuclear explosive capable of producing, in the nuclear explosion, neutron-rich isotopes of the known transplutonium elements and, possibly, of new, heavier elements."

- (6) The following response to inquiry related to release of radioactivity will be used for CONDITION III:

"The small amount of radioactivity released does not constitute a health hazard to workers at the test site."

Note: If there is any query regarding possible violation of the limited test ban treaty, the questioner should be told that the AEC is not in a position to comment and that the query should be referred to the Department of State.

- (7) Arrange with NV Public Information a time for issuance. This time of issuance shall be set at least 15 minutes ahead to permit the following notifications to be made that a test will be announced at a given time.

- (a) Office of the Press Secretary to the President,
the White House.
 - (b) Office of the General Manager (Extension 6666).
(Omit this step after 5 p.m., and on weekends.)
 - (c) Office of the Assistant General Manager
(Extension 5053).
 - (d) TOC Chief and TOC representatives of other
divisions or their offices. (DMA Extension
4007, DPNE Extension 5495, DOS Extension 4281,
Classification Extension 3292.)
 - (e) Office of Congressional Relations (Extension
3627).
- (8) Call USIA (Telephone 182-5151) and Department of State,
Bureau of Public Affairs (182-2011) giving the text of
announcement and time of issuance. Remind the person
receiving the call that the announcement is not to be
released until it is seen on the wires.
- (9) Make conference call to the four wire services (AP, UPI,
French, and Reuters) and read the announcement. Use
responses and provide background information only in
response to inquiry.
4. CONDITION IV - Some Release of Radioactivity Expected To Go Off Site
- a. Chief: After the passage of the minimum time required to
assess the circumstances, the Chief will, after appropriate

discussion with the Test Manager, decide whether a CONDITION IV exists. The Chief will notify the program division director and Special Assistant for Disarmament that the event has taken place, that there has been a release of radioactivity, and that it appears some radioactivity will be detected off site; i.e., apparently a CONDITION IV situation exists (the program division director will be advised if this evaluation is not unanimously subscribed to by the TOC representatives). If the division director does not concur that CONDITION IV procedures will be used, he shall inform the Chief as to the numbered-condition procedures that will be followed. (For DOD-sponsored events, the Director of Military Application shall contact the Director, DASA to apprise him of the situation and any further action contemplated.) Under CONDITION IV procedures, the Chief shall take the following actions:

- (1) Relay a CONDITION IV situation report (see below) to the designated individuals/offices listed in Appendix A, Page 49, after notifying the Director, DMA, the General Manager and the Special Assistant to the Chairman (if circumstances permit, the DPI representative will discuss the public information aspects of the event concurrently with this notification by the Chief).

Situation Report. "The event scheduled for today took place at (time). Performance was (about as), (below), (above) expected. There was (seepage), (a very minor), (a small), (a large) release /for gaseous effluent/ or There was a (small), (large), (as expected) release of radioactivity. CONDITION IV. The release is expected to go off site."

- (2) Notify the designated representatives of the appropriate agencies (same as for CONDITION III, i.e., the listing provided in Appendix B, Page 50) (1) that the radioactive release is expected to go off site, (2) whether it is gaseous effluent only, (3) that the agency will be kept informed of any significant change in the situation, (4) that it is the intent of the AEC to make a CONDITION IV public announcement (see 4b(4) below) as soon as possible, and (5) that if the agency has any objection to the proposed CONDITION IV announcement, this should be made known promptly so that appropriate coordination channels may be followed and approval for a public release expeditiously obtained. (The objective here is to issue the announcement before radioactivity has gone off site in the hope that such action will in effect buy time to handle subsequent public information

activities after the radioactivity is detected off site.)

- (3) The Chief shall continue the operation of the TOC and provide the Test Manager with AEC policy guidance.
- (4) The Chief shall (after appropriate coordination with other TOC representatives) inform the General Manager, the programmatic division director, and the Special Assistant for Disarmament at such time as the release actually does go off site and whenever any significant information is received on cloud trajectories, ground, or aircraft monitoring, preventative health and safety procedures, suggested press releases, and so forth.
- (5) The Chief shall prepare and keep current a forecast of the probabilities of a border crossing by the radioactive release, the weather for the next periods of hours and days, and so forth. When and if the release goes off site, he shall (in coordination with other TOC representatives, as appropriate) determine whether a CONDITION V situation exists.
- (6) The Chief shall (after suitable coordination with other TOC representatives) suggest to the General Manager, the programmatic division director, and the Special Assistant for Disarmament the text of further advisories to the designated representatives of the other

appropriate agencies and should attempt to receive approval for such advisories to be made whenever there is a major change in the current situation, or at least once a day until the operational period has terminated.

- (7) The Chief, after receiving the approval of the General Manager, the programmatic division director, and the Special Assistant for Disarmament, and as soon as the release has passed off site, shall (in coordination with other TOC representatives, as appropriate), on the basis of the probabilities that can be ascertained based on current information, declare that a CONDITION V situation exists. With the permission of these same officials, he shall make a CONDITION V notification to the designated representatives of the appropriate agencies that:

"The radioactive release has gone off site, and we are handling it now as a CONDITION V. The present situation with regard to a possible border crossing is as follows: _____."

b. Public Information Representative:

- (1) If CONDITION IV is reached before a CONDITION I, CONDITION II, or CONDITION III postshot announcement has been issued, the announcement under Paragraph (4),

below, will be issued as soon as approval from coordinating agencies is obtained.

- (2) Under 4a(1), above, the Chief will have informed the necessary offices within the AEC, including the Office of the Special Assistant to the Chairman. The Chief will have told these offices that having reached **CONDITION IV**, the appropriate announcement will be issued as soon as approval from coordinating agencies is obtained.
- (3) CONDITION IV announcement will not be released until approval from coordinating agencies is obtained. (The reason for this action is that there may be times when the international climate or negotiating processes require a tailored approach modifying the **CONDITION IV-V** statements conditionally agreed upon in advance.)
- (4) Except for **DPNE** experiments, the following postshot announcement will be used for **CONDITION IV**. (If a postshot announcement already has been issued under **CONDITION I**, **CONDITION II**, or **CONDITION III** before the situation reached **CONDITION IV**, this announcement may be reworded to show that it is not the first announcement on the test, or it may be omitted in favor of waiting to see whether radioactivity is detected off site.

CONDITION IV may arise quickly; therefore, the following CONDITION IV announcement could be the first announcement of the test.):

"A nuclear test of (low, low-intermediate, or intermediate) yield was conducted underground today by the Atomic Energy Commission at its Nevada Test Site. There was some release of radioactivity, but additional information must await the analysis of data collected by our monitoring network. No radioactivity has been detected off site. We are watching this very closely, and we shall inform you of any significant developments in this regard."

- (5) For DPNE contained experiments, the following postshot announcement will be used for CONDITION IV. (If a postshot announcement already has been issued under CONDITION I, CONDITION II, or CONDITION III before the situation reached CONDITION IV, this announcement may be reworded to show that it is not the first announcement of the test, or it may be omitted in favor of waiting to see whether radioactivity is detected off site. CONDITION IV may arise quickly; therefore, the following CONDITION IV announcement could be the first announcement of the test.):

- (a) For excavation-device and emplacement-technique development experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives. There was some release of radioactivity, but additional information must await the analysis of data collected by our monitoring network. No radioactivity has been detected off site. We are watching this very closely, and we shall inform you of any significant developments in this regard."

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare experiment was one in a series to develop nuclear explosives and techniques for possible use in later excavation experiments."

- (b) For heavy element experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives. There was

*low, low-intermediate, or intermediate

some release of radioactivity, but additional information must await the analysis of data collected by our monitoring network. No radioactivity has been detected off site. We are watching this very closely, and we shall inform you of any significant developments in this regard."

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare test was part of an experimental effort to develop a special nuclear explosive capable of producing, in the nuclear explosion, neutron-rich isotopes of the known transplutonium elements and, possibly, of new, heavier elements."

- (6) Inquiries may be forthcoming relative to possible violation of the limited test ban treaty. If there is any such query, the questioner should be told that the AEC is not in a position to comment and that the query should be referred to the Department of State.
- (7) Arrange with NV Public Information a time for issuance of the approved announcement. This time of issuance shall be set at least 15 minutes ahead to permit the following notifications to be made that a test will be announced at a given time.

- (a) Office of the Press Secretary to the President, the White House.
 - (b) Office of the General Manager (Extension 6666). (Omit this step after 5 p.m., and on weekends.)
 - (c) Office of the Assistant General Manager (Extension 5053).
 - (d) TOC Chief and TOC representatives of other divisions or their offices. (DMA Extension 4007, DPNE Extension 5495, DOS Extension 4281, Classification Extension 3292.)
 - (e) Office of Congressional Relations (Extension 3627).
- (8) Call USIA (Telephone 182-5151) and Department of State, Bureau of Public Affairs (182-2011) giving the text of announcement and time of issuance. Remind the person receiving the call that the announcement is not to be released until it is seen on the wires.
- (9) Make conference call to the four wire services (AP, UPI, French, and Reuters) and read the announcement. Provide background information only in response to inquiry.
5. CONDITION V - Some Radioactivity Detected Off Site But Not Predicted to Cross U. S. Border in Detectable Amounts
- a. The Chief shall have made every effort to assure that all proper actions were taken under either CONDITION III or

CONDITION IV and that all information and notification procedures were made by means of the situation report and the notifications to the designated representatives of the appropriate agencies. If he has not already taken the necessary actions, the Chief shall secure permission from the General Manager through his division director to do the following:

- (1) Relay a situation report (see below) to the individuals/offices listed in Appendix A, Page 49. (Determine whether any modification to this advisory list is desired by the General Manager.)

Situation Report. "The event scheduled for today took place at (time). Performance was (about as), (below), (above) expected. There was (seepage), (a very minor), (a small), (a large) release /for gaseous effluent/ or There was a (small), (large), (as expected) release of radioactivity. CONDITION FIVE. The release went off site."

- (2) Make a CONDITION V report to the designated representatives (Appendix B, Page 50) that a radioactive release has gone off site (see (2) (a) and (2) (b) below), that it is the intent of the AEC to make a public statement as soon as possible, and that if the agency has any objection to the proposed CONDITION V announcement, this

should be made known promptly so that appropriate coordination channels may be followed and approval for a public release expeditiously obtained. (In view of the probability that the news media will obtain information from outside sources of a radioactive release soon after off-site detection, it is imperative that a public announcement be made as expeditiously as possible to avoid a probable non-factual report and its blown-out-of-proportion sequel.)

- (a) Those provided a CONDITION V notification who received a CONDITION IV notification will be told (1) that radioactivity has gone off site, (2) that the AEC believes that there is not now a reasonable probability of the radioactivity being detected at the U. S. borders, with the reasons for this belief, and (3) that they will be informed of any significant change in the situation or at least on a daily basis.
- (b) Those notified by a CONDITION V notification who did not receive a CONDITION IV notification shall be told (1) that radioactivity has gone off site, (2) whether it is gaseous effluent only, (3) a short explanation as to why CONDITION IV notification was not given, (4) that the AEC

believes that there is not now a reasonable probability of the radioactivity being detected at the U. S. borders, with the reasons for this belief, and (5) that they will be informed of any significant change in the situation or at least on a daily basis.

- (3) Ascertain from the program division director or the General Manager, as appropriate, whether there are any special reporting procedures to be followed; e.g., whether or not any individuals/offices not included on the Advisory or Notification Lists are to be provided situation reports.
- (4) The Chief shall continue the operation of the TOC and provide the Test Manager with AEC policy guidance.
- (5) The Chief shall (after appropriate coordination with other TOC representatives) inform the General Manager, the programmatic division director, and the Special Assistant for Disarmament of any further significant information on cloud trajectories, ground or aircraft monitoring, preventative health and safety procedures, suggested press releases, and so forth.
- (6) The Chief shall prepare (in coordination with other TOC representatives) a report on the current status

of the situation for his division director to transmit to the Commission at least daily.

b. Public Information Representative:

- (1) Ordinarily, the test will have been announced at no later than CONDITION IV. Therefore, in most instances, the public announcement under b(4), below, will be a follow-on statement.
- (2) Under 5a, above, the Chief will have informed the necessary offices within the AEC and other agencies of the situation. The Chief will have told those offices that having reached CONDITION V, the appropriate announcement will be issued as soon as approval from coordinating agencies is obtained.
- (3) CONDITION V announcement will not be released until approval from coordinating agencies is obtained.
- (4) Except for DPNE experiments, the following postshot announcement will be used for CONDITION V:

"A * yield nuclear test conducted underground at the Atomic Energy Commission's Nevada Test Site (or other location on (date) accidentally released (a small amount of) (some) radioactivity. While most of this radioactivity was deposited within the Test Site, (some low levels of radioactivity have) (some

*low, low-intermediate, or intermediate

radioactivity has) been detected on the ground (direction) of the Site. The highest of these was _____ (mR) (R) per hour at _____, which is about _____ miles from the boundary of the government-controlled reservation. This reading dropped to _____ per hour in about _____ minutes. The farthest such reading at ground level was _____ at _____, which is about _____ miles from the government-controlled reservation."

- (5) For DPNE contained experiments, the following postshot announcement or statement will be used for CONDITION V:
- (a) For excavation-device and emplacement-technique development experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives. This test accidentally released (a small amount of) (some) radioactivity. While most of this radioactivity was deposited within the Test Site, (some low levels of radioactivity have) (some radioactivity has) been detected on the ground (direction) of the Site. The highest of these was _____ (mR) (R) per hour at _____, which is about _____ miles from the boundary of the government-controlled reservation. This reading dropped to

*low, low-intermediate, or intermediate

~~CONFIDENTIAL~~

- 39 -

_____ per hour in _____ minutes. The farthest such reading at ground level was _____ at _____, which is about _____ miles from the government-controlled reservation."

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare experiment was one in a series to develop nuclear explosives and techniques for possible use in later excavation experiments."

(b) For heavy element experiments:

"A nuclear test of (*) yield was conducted today by the Atomic Energy Commission at its Nevada Test Site as part of the Plowshare Program to study and develop civilian and industrial applications for nuclear explosives. This test accidentally released (a small amount of) (some) radioactivity. While most of this radioactivity was deposited within the Test Site, (some low levels of radioactivity have) (some radioactivity has) been detected on the ground (direction) of the Site. The highest of these was _____ (mR) (R) per hour at _____, which is about _____ miles from the boundary of the government-controlled reservation. This reading dropped to

*low, low-intermediate, or intermediate

~~CONFIDENTIAL~~

_____ per hour in about _____ minutes. The farthest such reading at ground level was _____ at _____, which is about _____ miles from the government-controlled reservation."

The following may be included in the announcement if consistent with National Security considerations:

"Today's Plowshare test was part of an experimental effort to develop a special nuclear explosive capable of producing, in the nuclear explosion, neutron-rich isotopes of the known transplutonium elements and, possibly, of new, heavier elements."

(6) Add any of the following, if applicable:

- (a) "These levels of radioactivity present no health hazard."
- (b) "Some radioiodine has been found in some milk samples collected by the Public Health Service in the _____ area(s) of (state) (states). The highest level reported to date in milk was _____ in the _____ area."
- (c) "As a precautionary measure to avoid any unnecessary exposures, the Public Health Service and the Atomic Energy Commission are recommending (have recommended) to dairy (dairies) in the _____ area(s) that milk cows be put on dry feed."

- (d) "The Public Health Service does not plan at this time to use (plans to use) (is using) its thyroid scanning equipment to determine the uptake, if any, of radioiodine in the thyroid glands of residents of the _____ area(s). /Add projected dose readings, and number of children and adults examined, if applicable./
- (e) "By the use of very sensitive instruments aircraft monitors have been able to detect some (traces of) radioactivity in the air over (state) (states) (where contacts were sporadic). This radioactivity was detected in the air, not on the ground. The farthest point at which radioactivity was detected at ground level was _____."
- (7) CONDITION V Responses to Inquiry:
- (a) Additional information about radioactivity readings at ground level or in the air may be given in response to inquiry, provided the readings were obtained at places which are no closer to U. S. borders than places named in the statement issued under 5b(4), above.
- (b) "Since the signing of the limited test ban treaty on August 5, 1963, _____ nuclear tests designed to be contained underground have accidentally released small amounts of radioactivity which were detected

off site by sensitive instruments. As expected, small amounts of off-site radioactivity also were produced by _____ cratering experiments."

- (c) Inquiries may be forthcoming relative to possible violation of the limited test ban treaty. If there is any such query, the questioner should be told that the AEC is not in a position to comment and that the query should be referred to the Department of State.
- (8) After blanks in CONDITION V statement (5b(4), above), have been filled in (based on data received at the Test Operations Center from the CP) and required approvals have been obtained, arrange with NV Public Information a time for issuance.
- (9) Call USIA (Telephone 182-5151) and Department of State, Bureau of Public Affairs (182-2011), giving the text of announcement and time of issuance. Remind the person receiving the call that the announcement is not to be used until it is seen on the wires.
- (10) Make conference call to the four wire services (AP, UPI, French, and Reuters) and read the announcement. Use approved responses and provide background information only in response to inquiry.

6. Supplementary Procedures - For a Situation Not Covered by the Foregoing Procedures

a. The Chief will:

- (1) Keep the representatives listed in Appendix B, Page 50, informed as appropriate and as directed; e.g., certain agency representatives may wish to be provided a summary twice daily; whereas other representatives may wish to be apprised of every effluent tracking report received by the TOC.
- (2) Keep individuals/offices listed in Appendix A, Page 49, informed as directed by the General Manager.
- (3) Continue operations of the TOC as directed or as otherwise appropriate.

b. Public Information

CAUTION: The following possible questions and answers are listed only to facilitate development of a U. S. Government position on what, if anything, to say under certain assumptions. Some of the proposed answers involve possible interpretations of the limited test ban treaty. Their appearance in this document in no way constitutes any approval of such interpretations. All proposed answers appearing below are subject to specific advance approval by AEC Headquarters, Departments of State and Defense, Arms Control and Disarmament Agency, and the White House.

(1) Assuming radioactivity is detected near and/or is expected to cross U. S. Canadian or Mexican border:

(a) Question: Do you have any more information on how far the radioactivity went?

Answer: We have detected traces of (some) radioactivity at ground level (and/or in samples of milk produced) in the (for instance, Yuma) area.

(b) Question: How far have you detected radioactivity in the air?

Answer: Aircraft monitors using very sensitive equipment have detected traces of (some) radioactivity in the air over (state) (states) (for instance, southern New Mexico).

(c) Question: Do you expect any of this radioactivity to cross the U. S. border?

Answer: We can only talk in terms of the evidence we have. We have no evidence that radioactivity crossed the border.

(d) Question: Well, if radioactivity was detected at (for instance, Yuma), isn't it logical to assume that some radioactivity must have crossed or will cross the border?

Answer: As I said before, we have no evidence that radioactivity crossed the border -- meaning,

of course, radioactivity in any amount
that could be detected by sensitive instruments.

(e) Question: Did you or will you try to detect
it across the border?

Answer: No.

(f) Question: If you didn't try to measure across
a border, how can you tell whether the test
violated the treaty by causing radioactive
debris to be present outside U. S. territory?

Answer: This query should be referred to the
Department of State.

(2) Assuming radioactivity is detected near and/or is
expected to cross U. S. coastal border off seacoast
in detectable amounts:

(a) Question: Do you have any more information on
how far the radioactivity went?

Answer: We have detected traces of (some)
radioactivity at ground level and/or in samples
of milk produced in the (for instance, Galveston)
area.

(b) Question: How far have you detected radio-
activity in the air?

Answer: Aircraft monitors using very sensitive
equipment have detected traces of (some)

radioactivity in the air over (state) (states)
(for instance, southeastern Texas).

(c) Question: Do you expect any of this radio-
activity to cross the U. S. coastal border?

Answer: We can only talk in terms of the
evidence we have. We have no evidence that
radioactivity crossed the U. S. coastal border.

(d) Question: Well, if radioactivity was detected
at (for instance, Galveston), isn't it logical
to assume that some radioactivity must have
crossed or will cross the U. S. coastal border?

Answer: As I said before, we have no evidence
that radioactivity crossed the U. S. coastal
border -- meaning, of course, radioactivity in
any amount that could be detected by sensitive
instruments.

(e) Question: Did you or will you try to detect it
across the U. S. coastal border?

Answer: We have no report that our aircraft
monitors have tried to detect it across the U. S.
coastal border. We assume that they will try if
circumstances permit.

(f) Question: If you detect radioactivity across the U. S. coastal border, that will mean the test violated the test ban treaty, won't it?

Answer: This query should be referred to the Department of State.

(3) Assuming publicly reported readings of radioactivity from Canada or Mexico:

(a) Question: Do you have any comment on the report that radioactivity from one of your nuclear tests was detected across the U. S. border in (Mexico) (Canada)?

Answer: Naturally, we are concerned about the report and we are looking into the matter. (Add following, if applicable) In terms of health, reported readings are insignificant.

(b) Question: If the readings are correct, doesn't that mean that the U. S. has violated the limited test ban treaty?

Answer: This query should be referred to the Department of State.

(4) Assuming U. S. has detected radioactivity beyond a coastal border and there is a reasonable probability that another country will also detect it:

(a) Question: Have you detected radioactivity beyond the border off the coast?

Answer: Yes, (but not in any significant amount.) The reading was (only) _____ at _____.

(b) Question: Isn't this a violation of the limited test ban treaty?

Answer: This query should be referred to the Department of State.

APPENDIX "A"

INDIVIDUALS/OFFICES TO BE ADVISED OF ALL NUCLEAR DETONATIONS

The Chief will insure that the individuals listed below are informed in person or by telephone.

	<u>GERMANTOWN</u>	<u>H STREET</u>
Director of Military Application	4221	5692
General Manager	6666	6666
Assistant General Manager (Mr. Brown or the Management Assistant, Mr. King, at 3276 or 5733)	5053	5727
Special Assistant to the Chairman (Dr. Fritsch)	3438	5667
*Director, Division of Peaceful Nuclear Explosives	3705	5855
Commissioner Ramey	6222	6222
Commissioner Tape	6333	6333
Commissioner Nabrit	6444	6444
Commissioner Johnson	6555	6555
Special Assistant for Disarmament	3417	5744
Director, Division of Intelligence	3355	5748
Staff Representative, Defense Atomic Support Agency (CDR Albert Stell)	11-78098 or 11-77686	
Assistant Executive Secretary, MLC	3345	
Assistant Director for Research and Development, DMA	5491	
Director, Office of Congressional Relations	3627	5611
Staff Consultant, JCAE (Lt. Col. Rosen)	180 X 6171	
Deputy Director or Assistant Director, Division of Military Application	5518/5523	5692

*For events not associated with DPNE, call Mr. Hamburger (5495).

Responsibility may be delegated to the secretarial staff of DMA or DPNE for informing the listed people. Normally this job will be done by the staff of the Assistant Director for Tests, DMA. FOR EVENTS WHICH RESULT IN CONDITION IV (OR HIGHER), the above list may be modified by the General Manager or the director of the program division. Messages may be given to secretaries in lieu of principals, if appropriate. In any case, the recipient and time of notification will be recorded by the caller.

APPENDIX "B"

AGENCIES TO BE NOTIFIED IF A TEST PRODUCES UNEXPECTED
RESULTS WHICH MIGHT REQUIRE PROMPT GOVERNMENTAL ACTION

DEPARTMENT OF STATE

Honorable Foy D. Kohler
Deputy Under Secretary of State for Political Affairs
Telephone: 182-2232

Alternate - Mr. Scott George
Telephone: 182-6066

DEPARTMENT OF DEFENSE

Honorable John S. Foster, Jr.
Director of Defense Research and Engineering
Telephone: 11-79111

Alternate - Honorable Carl Walske
Assistant to the Secretary of Defense (Atomic Energy)
Telephone: 11-75161

CHAIRMAN, JOINT CHIEFS OF STAFF

Rear Admiral F. A. Bardshar, USN
Telephone: 11-55204, 11-52062

Alternate - Colonel J. A. Griffin, USAF
Telephone: 11-53511

ARMS CONTROL AND DISARMAMENT AGENCY

Dr. Herbert Scoville, Jr.
Telephone: 182-3138

Alternate - Paul J. Long, Colonel USAF (Ret.)
Telephone: 182-3138

CENTRAL INTELLIGENCE AGENCY

Dr. Donald F. Chamberlain
Telephone: 143-7113

Alternate - Mr. Wallace F. Howard
Telephone: 143-6707

SPECIAL ASSISTANT TO THE PRESIDENT FOR NATIONAL SECURITY AFFAIRS

Honorable Walt W. Rostow
Telephone: 145-2235

Alternate - Mr. Charles E. Johnson
Telephone: 103-4985

SPECIAL ASSISTANT TO THE PRESIDENT FOR SCIENCE AND TECHNOLOGY

Dr. Donald F. Hornig
Telephone: 103-3530

Alternate - Mr. Spurgeon M. Keeny, Jr.
Telephone: 103-3537

BUREAU OF THE BUDGET

Mr. Frederick C. Schuldt
Assistant Chief for Atomic Energy, Military Division
Telephone: 103-3964

Alternate - Mr. Daniel H. Taft
Budget Examiner
Telephone: 103-4706

DIRECTOR, DEFENSE ATOMIC SUPPORT AGENCY

Lt. General H. C. Donnelly, USAF
Telephone: 11-56375

Alternate - CDR Albert Stell
Chief, Test Division
Analysis and Program Directorate
Telephone: 11-78098, 11-77686

*U. S. PUBLIC HEALTH SERVICE

Mr. James G. Terrill, Jr.
Director, National Center for Radiological Health
Telephone: 154-7066

Alternate - Dr. Robert J. Augustine
Chief, Environmental Radioactivity Section
Environmental Surveillance and Control Program
Telephone: 154-7028

Mr. Charles L. Weaver, Chief
Environmental Surveillance and Control Program
Telephone: 154-7004

*FEDERAL RADIATION COUNCIL

Dr. Paul C. Tompkins
Telephone: 382-2505

Alternate - Mr. Claire C. Palmiter
Telephone: 382-2489

*ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

Mr. Robert J. List
Telephone: 179-2203

**FOOD AND DRUG ADMINISTRATION

Mr. J. Kenneth Kirk
Assistant Commissioner for Operations
Telephone: 161-2811

Alternate - Mr. Frederick M. Garfield
Special Assistant to the Commissioner for
Drug Abuse Control
Telephone: 161-2506

*Notification of the U. S. Public Health Service, ESSA, and FRC representatives will normally be made by the Division of Operational Safety TOC representative when the situation warrants.

**To be notified by the DOS-TOC representative only in the event that a potential health hazard is predicted.

	<u>Class.</u>	<u>Cat.</u>	<u>Remarks</u>
5.2 When related to a specific future event and indicating authorization to fire or planned date of detonation, prior to official announcement.	C-S-DI	3	
6. Locations, tracks and trajectories of radioactive material which are within the conditions under which the event was authorized for execution.	U		
7. Locations, tracks and trajectories of radioactive material which are not within the conditions under which the event was authorized for execution.	OUO)	Protect as OUO) unless otherwise) directed by the) General Manager.)
8. The fact that U. S. authorities believe that an actual or potential violation of the limited test ban treaty has been made by the U. S.	C-DI	3	This information would be unclassified after official announcement.

4

1966

~~CONFIDENTIAL~~

**MEMORANDUM FOR THE CHAIRMAN,
U. S. ATOMIC ENERGY COMMISSION**

In view of the fact that the President yesterday concurred in the joint AEC-Bureau of the Budget recommendation with respect to the inclusion of funds in the 1968 Budget for the development of supplemental weapons test sites in Alaska, it would appear that your letter to the President of December 23, 1966, has already been overtaken by the President's action and does not require further Presidential action.

You may, therefore, consider that for the time being at least the substantive issues involved in the development and use of the supplemental test sites have been settled.

(signed) W. W. Rostow

W. W. Rostow

~~CONFIDENTIAL~~

DECLASSIFIED
E.O. 13292, Sec. 3.4
By *reg/jc* NARA, Date 11-13-07

Dispatched 12/29 *rept # 356*

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

1/K
S
5a
-

~~SECRET~~
~~RESTRICTED DATA~~

December 28, 1966

MEMORANDUM FOR MR. W. W. ROSTOW ←

SUBJECT: Supplemental Underground Weapons Test Site

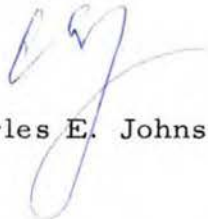
Walt --

The attached memorandum for the President from AEC has been overtaken by the decision the President made yesterday in approving the Bureau of the Budget (concurring in by AEC) recommendation concerning the FY 1968 Budget presented by Charlie Schultze at the Ranch. The paragraph placed before the President is the paragraph #2 attached herewith.

In view of the fact that there is basically nothing different except in the back-up detail between the AEC letter and BOB statement, I suggest that you may wish to sign an acknowledgement note to Seaborg indicating that in view of the previous Presidential action there is no need for sending the longer statement to the Ranch. I am sure that Seaborg is quite happy over the outcome on this particular issue.

If you have the time you may be interested in reviewing the longer statement in order to position yourself on this matter but it is low priority as compared with other demands on your time.

Spurgeon concurs in this recommended handling.


Charles E. Johnson

~~SECRET-RESTRICTED DATA~~

This document is
regraded UNCLASSIFIED
when separated from
attachments.

2. Development of a supplemental weapons test site in Alaska. In order to provide a capability for underground testing of larger nuclear weapons (up to 6 megatons, specifically to develop an anti-ballistic missile warhead) than is now possible at the test site near Las Vegas, Nevada, AEC is already proceeding with the development of an additional site in Central Nevada and wishes to move as soon as possible to develop and use a second additional site on the Island of Amchitka, off the coast of Alaska. (AEC also wishes in FY 1967 to do minimum exploratory work in Northern Alaska for possible use in the event that Amchitka proves not to be feasible.) AEC has available in 1967 \$27 million of NOA for these purposes, subject to your approval of development and use of the Amchitka site. It is estimated that the operations in Amchitka will cost approximately \$280 million over a period of several years. BoB agrees with the agency head's view that this expansion of testing capability is necessary for the national defense. Defense agrees, and State and ACDA have no objection notwithstanding the danger that development of an Alaskan test site might appear to other nations to constitute some escalation in the "arms race." If it later proves possible to meet the weapons design needs without completing the program now planned for Alaska, BoB will take steps to reconsider this possibility.

1967 base (costs)	22.0
1968 agency request	+44.1
1968 BoB recommendation	+44.1

~~SECRET~~

DECLASSIFIED
 E.O. 13292, Sec. 3.5
 NLJ/RAC 08-52
 By id, NARA, Date 7-10-09



~~SECRET~~

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

This document consists of 2 pages
No. 1 of 42 copies, Series A

5-347
5-c

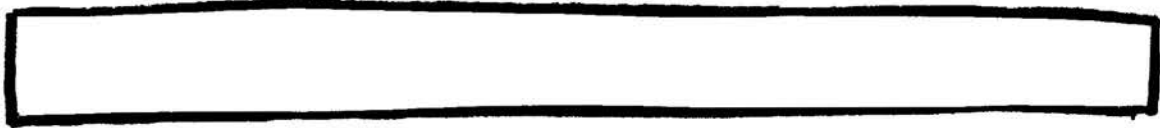
DEC 23 1966

Dear Mr. President:

By my letter to you of July 29, 1966, a plan for the development of supplemental underground weapons test sites for a NIKE ZEUS capability was forwarded for your approval. Mr. Rostow's letter dated August 8, 1966, responded to this request and approved the reprogramming of \$25 million of available funds for use in Fiscal Year 1967 for the initial development of the proposed Nevada site and initial survey of possible sites in Alaska.

Since the approval referenced in Mr. Rostow's letter, a survey of Amchitka Island is proceeding. We have now developed a new plan that goes beyond this survey. This revised plan is based on a comprehensive review of the needs in this program, and several significant changes from the initial plan are desirable. The purpose of this letter is to inform you of these changes and to request your review and approval of the revised plan in order that funds now held in reserve by the Bureau of the Budget for Fiscal Year 1967 can expeditiously be applied to this program. The more significant changes and their consequences are:

1. The location of the intermediate yield site will be in Central Nevada instead of on the Air Force Bombing and Gunnery Range.



6.2
(a)

3. The above changes result in a reduction in the estimated new obligational authority for Fiscal Year 1968 of \$138.4 million. A net reduction of \$84.3 million in the total estimated cost of this program also results from these changes.
4. The establishment of two contingency plans is necessary if the basic plan proves to be unacceptable. The first contingency would be to establish the higher yield site at the Brooks Range if Amchitka Island proves unacceptable. This contingency would result in increased cost. The second

GROUP 1
Excluded from automatic
downgrading and
declassification

~~RESTRICTED DATA~~

This document contains restricted data as defined in the Atomic Energy Act of 1954. Its transmittal or the disclosure of its contents in any manner to an unauthorized person is prohibited.

~~SECRET~~

SANITIZED
E.O. 13292, Sec. 3.5
NIJ 08-203
By isl, NARA, Date 10-7-08

Handwritten note: ... by ... 4-2-68 J. Hansen

contingency would be to conduct a technically restricted program at the Central Nevada site if Amchitka Island and Brooks Range are unacceptable.

[Redacted]

b.2
(a)

5. Reconnaissance and exploratory work at the Brooks Range will be conducted concurrently with work at Amchitka Island to preclude the possibility of extended delays if Amchitka Island is unacceptable.

The enclosed revised plan presents a summary of the Atomic Energy Commission's study. The plan has been reviewed and concurred in by the Department of Defense and the Department of State.

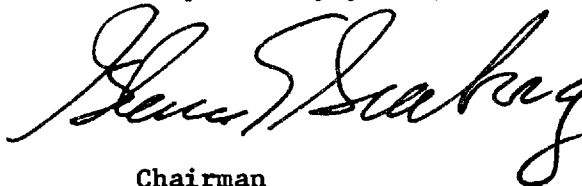
[Redacted]

b.2
(a)

On the first point, all tests are designed to be fully contained. As in the conduct of nuclear detonations at the Nevada Test Site, we will systematically approach the conduct of high yield events through conservative extrapolation based upon containment and shock propagation experience at lower yields. On the second point, at this stage in the development of the ZEUS warhead, we do not believe it is technically feasible to extrapolate from lower yield tests to the higher yield tests with the confidence compatible with the needs of the ZEUS system.

We believe that the enclosed plan represents the most desirable way to proceed toward fulfilling the needs of the ZEUS program within the constraints of budget limitations and sites on United States territory alone. Despite our best efforts to meet the indicated time schedules, we may run into unexpected difficulties. We will keep you advised.

Respectfully yours,



Chairman

The President
The White House

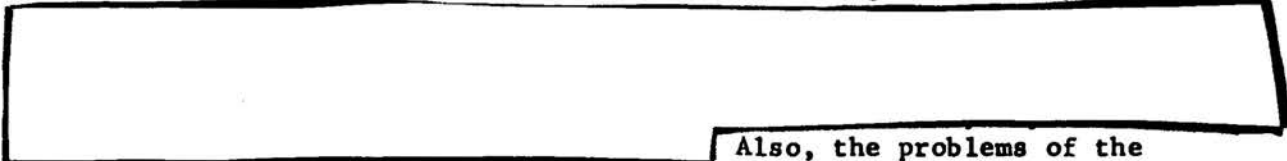
Enclosure:
Cys 1A & 2A - Revised Plan for
Development of Supplemental
Underground Weapons Test Sites

5-d

REVISED PLAN FOR DEVELOPMENT OF
SUPPLEMENTAL UNDERGROUND WEAPONS TEST SITES

A more comprehensive review of the requirements for a supplemental test site has been conducted by the Division of Military Application, the three Atomic Energy Commission weapons laboratories, and the Nevada Operations Office. This review has resulted in several significant changes from the preliminary program plans.

The original plan provided for development of a site on the north slopes of the Brooks Range in Alaska, some consideration of Amchitka Island, and a site within the existing confines of the Air Force Bombing and Gunnery Range.



6.2
(a)

Also, the problems of the nomadic Eskimos and the caribou do not exist at Amchitka. However, on the outside chance that these sites are unsatisfactory, alternatives should be considered such as Australia to stay even close to the demand schedules for information. A review of the potential test areas on the Gunnery Range revealed that only a small increase, perhaps 20%, in yield could be anticipated over that available at the Nevada Test Site on Pahute Mesa. The limitation results from the proximity to Las Vegas and the related seismic problems. It was also determined that for a proportionately small increase in estimated cost, an increase in yield by a factor of two or more could be obtained by using the area in Central Nevada.

If Amchitka Island proves unacceptable for a high yield site, then a contingency site would be developed in Alaska north of the Brooks Range. If the Amchitka Island and the Brooks Range sites are unacceptable, then a technically restricted program would be conducted at the Central Nevada site at the highest possible yields. On the other hand, some other location such as Christmas Island or Australia might permit the entire program to be conducted.

The following is a comparison of the previously planned events with those currently planned:

<u>Category and Yield</u>	<u>Previous Plan</u>		<u>Current Plan</u>	
	<u>Nevada</u>	<u>Alaska</u>	<u>Nevada</u>	<u>Amchitka</u>
Development/Calibration 0.5 - 1.5 MT	2	2	2	1
Development 2 - 3 MT	2	1	2	-
3 - 6 MT	=	<u>2</u>	=	<u>4</u>
Total	4	5	4	5
	9		9	

~~RESTRICTED DATA~~

This document contains restricted data as defined in the Atomic Energy Act of 1954. Its transmittal or the disclosure of its contents in any manner to an unauthorized person is prohibited.

GROUP 1
Excluded from automatic
downgrading and
declassification

~~SECRET~~

-2-

The reduction of one development/calibration event is possible because extensive data on the geology at Amchitka is already in hand from previous USGS surveys and a significant amount of seismic data is available from the DoD-ARPA experiment, Long Shot, conducted for the Vela detection program. The addition of one development test at Amchitka is required as a contingency in the event of failure where sufficient time would not be available to recover the schedule for deployment if emplacement holes were not drilled in advance.

The revised total estimated cost of the current plan is considerably below the total estimated cost previously presented to the President and the previous estimates for the FY 1968 budget. The previous FY 1968 estimate for the Alaskan area was \$163.5 million for weapons operating cost with additional obligational authority estimated at \$33.0 million. The current estimate is \$41.1 million for weapons operating cost and additional obligational authority of \$17.0 million, or a total decrease from the previous estimate of \$138.4 million in new obligational authority (NOA). The principal reasons for the reduction are that the previous estimate was based on a site at Brooks Range (as the most costly of the locations under consideration) and the depth of emplacement holes has been decreased. The laboratories now believe that the higher yield tests can be accomplished in 54" diameter, 6,000' deep emplacement holes with 20' x 30' rooms at the bottom of the holes as opposed to the previous plan to use 48" x 8,000' deep emplacement holes without rooms. Based on a scaled test depth formula of $300W^{1/3}$ for high yield events, derived from revised calculations and Pahute Mesa experience, the laboratories have concluded that the shallower depth holes are sufficient for containment.

It should be noted that because of the time required to construct the emplacement facilities, the test dates are more compatible with a FY 1972 or later deployment date. The design freeze for a weapon should occur at least a year prior to the deployment of the system. Should a FY 1971 deployment date with a FY 1971 FPU for the Zeus be required, initial deployment would be an interim warhead with the final design being implemented by an in-process change after full scale proof testing.

Offsetting the decreases in the Alaskan estimates is an increase of \$26.8 million for the Central Nevada Test Site location. The original estimate (\$53.0 million) was based on an expansion northward from the present Nevada Test Site within the Air Force Bombing and Gunnery Range. The increase in the total estimated costs results from increased size of test emplacement holes and additional costs in technical support, logistics, maintenance and operation, and temporary camp construction because the existing facilities and resources at NTS cannot now provide the support at the new location.

~~SECRET~~

REVISED ESTIMATES FOR SUPPLEMENTAL TEST SITES
(In Thousands)

	<u>FY 1967</u>	<u>FY 1968</u>	<u>FY 1969</u>	<u>FY 1970</u>	<u>FY 1971</u>	<u>Total</u>
<u>Central Nevada</u>						
Field Construction.	\$ 4,139	\$18,005	\$ 24,905	\$ 5,320	\$ -0-	\$ 52,369
Technical Support .	2,524	3,851	5,334	2,780	-0-	14,489
Logistical Support.	-0-	490	1,560	1,150	-0-	3,200
M&O	100	2,610	3,500	3,500	-0-	9,710
Total	6,763	24,956	35,299	12,750	-0-	79,768
<u>Amchitka Island</u>						
Field Construction.	5,158	15,640	33,210	26,490	10,440	90,938
Technical Support .	931	2,246	4,955	3,859	1,869	13,860
Logistical Support.	1,800	4,290	3,580	3,900	2,320	15,890
M&O	3,000	7,710	10,030	10,570	7,320	38,630
Total	10,889	29,886	51,775	44,819	21,949	159,318
<u>Brooks Range</u>						
Reconnaissance and Studies	2,888	-0-	-0-	-0-	-0-	2,888
<u>General Support</u>						
Technical Support .	830	4,968	3,471	3,021	1,271	13,561
Logistical Support.	380	740	1,140	1,210	590	4,060
M&O	250	510	540	990	290	2,580
Laboratories	-0-	5,000	5,000	5,000	2,500	17,500
Total	1,460	11,218	10,151	10,221	4,651	37,701
Total Costs	22,000	66,060	97,225	67,790	26,600	279,675
Change in Goods and Services on Order for Commitments ...	5,000	17,000	10,400	-9,800	-22,600	-0-
Total New Obligational Authority	<u>\$27,000</u>	<u>\$83,060</u>	<u>\$107,625</u>	<u>\$57,990</u>	<u>\$ 4,000</u>	<u>\$279,675</u>

Field Construction includes costs associated with exploratory drilling, construction of instrument and emplacement holes, device emplacement, reentry and recovery of diagnostic samples, and construction of the minimal support facilities including roads, communications, air strip, water supply and camps.

Technical Support includes preliminary engineering studies, reconnaissance, device timing and firing, radiological safety, and the services of outside agencies such as the Weather Bureau, USGS, and C&GS, in support of the over-all safety program.

Logistical Support includes costs associated with transportation, communications, warehousing, office services, procurement assistance, and vehicle usage. This also includes cost of operation of sampler and support aircraft.

Maintenance and Operation is comprised of costs associated with housing, feeding, industrial safety, and equipment and facility maintenance and operations.

The General Support costs include those costs related to the STS program which will be incurred irrespective of site location. They include such things as development of downhole hardware, development and engineering for deep hole drilling and mining, development of timing and firing diagnostics, and project management by Holmes and Narver and Fenix and Scisson. (These costs were included as a part of the initial site estimates, but are now identified separately since they cannot reasonably or equitably be distributed to either area.)

For comparison purposes, the totals of the previously submitted estimates are listed below:

	<u>FY 1967</u>	<u>FY 1968</u>	<u>FY 1969</u>	<u>FY 1970</u>	<u>FY 1971</u>	<u>Total</u>
	(In Millions)					
Nevada	\$17.0	\$ 25.0	\$ 11.0	\$ -0-	\$ -0-	\$ 53.0
Alaska	<u>5.0</u>	<u>163.5</u>	<u>103.0</u>	<u>39.5</u>	<u>-0-</u>	<u>311.0</u>
Total	22.0	188.5	114.0	39.5	-0-	364.0
Change in Obligational Authority	<u>+ 5.0</u>	<u>+33.0</u>	<u>*</u>	<u>*</u>	<u>-0-</u>	<u>-0-</u>
Total NOA	27.0	221.5	NA	NA		364.0

* Estimates not made for FY 1969 and FY 1970.

The change in estimates has resulted in proposed reprogramming of costs authorized for FY 1967 as follows:

SUMMARY OF REPROGRAMMING FOR FY 1967
(In Millions)

	<u>Common</u>	<u>Central Nevada</u>	<u>Alaska</u>	<u>Total</u>
Previous Estimate	-0-	\$17.0	\$ 5.0	\$22.0
Current Estimate	\$ 1.5	6.8	13.7	22.0
Change	+1.5	-10.2	+ 8.7	-0-

[Redacted]

6.2
(a)

Under this contingency, it would be necessary to increase the number of event tests at the Central Nevada site from two to four. The additional tests would be conducted at the maximum possible yield to minimize the degree of scaling necessary to certify an interim weaponized version. The Brooks Range would be used to conduct the necessary proof testing to confirm or modify the results derived from the Nevada tests, or it would be necessary to delay the program by about two years. Under this contingency, the total estimate for Central Nevada through FY 1971 is expected to increase by 40 to 45%. The total cost of Alaska is expected to remain essentially the same.

If for other than technical reasons it is decided to withhold approval to proceed in the Alaskan area beyond January 1, 1967, it would be necessary to accelerate the activity in Central Nevada to provide the laboratories with as much technical information as possible during the design and development phase. Under this contingency, it would be necessary to reprogram some of the funds from the Alaskan area to the Central Nevada site. The extent of the reprogramming would be dependent upon when approval to proceed in Alaska could be anticipated. If it is determined that the Alaskan sites cannot be used, it would then be necessary to depend entirely upon the Central Nevada location.

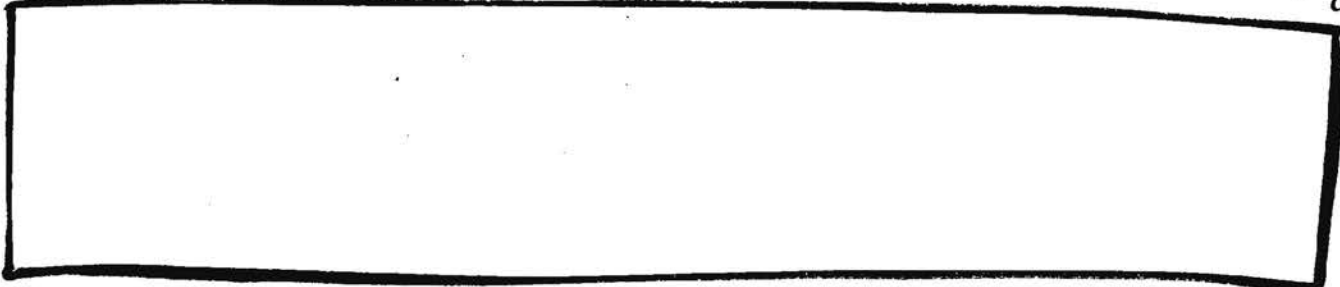
[Redacted]

6.2
(a)

Under this approach, the estimated costs at Central Nevada would approximately double.

It is recognized that there are other locations which have the potential capability to accommodate the required tests. However, it would take time to locate them and acquire necessary approval to proceed.

6.2
(a)



The time scales in the basic plan are dictated by the amount of time required to accomplish the various construction tasks as outlined below:

	<u>Approximate Number of Months</u>
Mobilization and Site Preparation	4
Drilling and Casing 54" ID, 6,000'	17-18
Mining Chamber 20' ϕ by 30' high	11-12
User Occupancy (laboratories)	<u>3</u>
	35-37

The following charts show the field activities which would occur under the basic plan and the two contingencies discussed above.

STS SCHEDULES - BASIC PLAN

~~CONFIDENTIAL~~

	<u>FY 1967</u>	<u>FY 1968</u>	<u>FY 1969</u>	<u>FY 1970</u>	<u>FY 1971</u>
<u>Central Nevada</u>					
Reconnaissance	—				
Exploratory					
Calibration		* 0.5	* 1.5		
Emplacement				* 2-3 * 2-3	
<u>Amchitka Island</u>					
Reconnaissance	—				
Exploratory					
Calibration			* 1.5		
Emplacement				* 6.0 * a/	* 6.0 * a/
<u>Brooks Range</u>					
Reconnaissance	—				

* Denotes detonation and yield.

a/ Contingency event.

~~CONFIDENTIAL~~

STS SCHEDULES - CONTINGENCY NO. 1

~~CONFIDENTIAL~~

	<u>FY 1967</u>	<u>FY 1968</u>	<u>FY 1969</u>	<u>FY 1970</u>	<u>FY 1971</u>
<u>Central Nevada</u>					
Reconnaissance	—				
Exploratory	—				
Calibration		* 0.5	* 1.5	2-3	(Max.)
Emplacement				* *	* * a/
 <u>Amchitka Island</u>					
Reconnaissance	—				
Exploratory	—				
Emplacement	—				
 <u>Brooks Range</u>					
Reconnaissance	—				
Exploratory	—				
Emplacement					* 6.0 * a/

* Denotes detonation and yield.

a/ Contingency event.

~~CONFIDENTIAL~~

STS SCHEDULES - CONTINGENCY NO. 2

~~CONFIDENTIAL~~

	<u>FY 1967</u>	<u>FY 1968</u>	<u>FY 1969</u>	<u>FY 1970</u>	<u>FY 1971</u>
<u>Central Nevada</u>					
Reconnaissance	—				
Exploratory					
Calibration		* 0.5	* 1.5		
Emplacement			* 2-3	* (Max.)	*
<u>Anchitka Island</u>					
Reconnaissance	—				
Exploratory					
<u>Brooks Range</u>					
Reconnaissance	—				

* Denotes detonation and yield.

a/ Contingency event.

~~CONFIDENTIAL~~

5
NATIONAL SECURITY COUNCIL

December 12, 1966

NOTE FOR MR. ROSTOW

Walt --

Attached for your information is a note from AEC indicating the timing and scale of the activity projected by the AEC for the Amchitka exploratory work beginning immediately.

cej
CEJohnson

~~CONFIDENTIAL~~ Attachment

~~CONFIDENTIAL~~

5-8



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

DEC 9 1966

Mr. Charles Johnson
National Security Council
Staff Member
The White House

DECLASSIFIED
Authority Group 4
By JCS, **NARA, Date** 11-4-89

Dear Mr. Johnson:

You will recall that the approval for the exploration in Alaska was restricted by reducing the visibility of the operation to a minimum. By this action, we postponed the recruitment of labor forces, the movement of equipment, and the large procurements or rentals of drilling rigs that would be used during the subsequent exploration. We expected that these actions could proceed after a period of three or four weeks from about November 1.

Late on December 5, we were informed by the Department of State that the actions by the United Nations which had led to the minimum visibility restrictions had now been concluded. We are, therefore, planning to allow the Nevada Operations Office to take the above actions necessary to continue their exploration and their planning for further drilling and emplacement operations.

Specifically these actions will include public contacts by Holmes and Narver personnel to determine the availability of services and equipment for the operational phase. These contacts would include drilling contractors for exploratory and emplacement holes (Kerr-McGee, Loffland Bros., and Parker Drilling Co.) and for airlift of personnel and priority equipment (Alaska Airlines, Flying Tigers) in January 1967. Contacts will also be made with barge lines for sealift of drilling rigs and support equipment in March 1967, and with general contractors for construction of camp and support facilities.

We would expect that within ten days from the date of the release of the restrictions, negotiations for the above-listed drilling and transport contractors will be formalized and contracts awarded. On or about January 5, 1967, following award of contracts, there will be considerable activity in the ports of Seattle, Washington, and Anchorage, Alaska, as the construction equipment and the personnel proceed to Amchitka. The number of personnel involved for the early January period will be about 100.

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

GROUP 4

Downgraded at 3 year intervals; declassified after 12 years

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Mr. Charles Johnson

- 2 -

We will continue to keep you informed of all major developments concerning the supplemental test site development.

Sincerely yours,



Delmar L. Crowson
Brigadier General, USAF
Director of Military Application

~~CONFIDENTIAL~~



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

OK
AM
119
4537
560
2994

AUG 19 1966

This document consists of 1 pages
No. 1 of 9 Copies, Series A

~~SECRET~~

told
11:41 P

Mr. Bill D. Moyers
Press Secretary to the President
The White House

Dear Mr. Moyers:

Enclosed for your approval is a proposed response to inquiry on studies to find a supplemental site or sites for higher yield underground tests around the present Nevada Test Site. The response has the approval of the office of our General Manager.

The response would be used piecemeal as may be necessary in response to specific inquiries. It would not be handed out.

Although the response does not name any specific locations, we anticipate that if questions arise at all, these questions will concern a specific location where exploratory work is planned or in progress. These questions also may include a request for all specific locations around the present Nevada Test Site which are being considered. We would plan to answer such questions on these specific locations in accordance with the facts at the time.

We are coordinating the response and method of handling with the Departments of Defense and State. The response will become unclassified when all approvals have been obtained. This letter, however, will remain classified because of the reference to higher yield underground tests.

Sincerely,

John A. Harris
John A. Harris, Director
Division of Public Information

DECLASSIFIED
Authority RAC 007-27-2-1-5
By JOL **ARA** Date 9-21-07

Enclosure

cc: Mr. Charles Johnson
National Security Council

GROUP 3
Downgraded at 12 year
intervals; not
automatically declassified

~~SECRET~~

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

~~CONFIDENTIAL~~

RESPONSE TO INQUIRIES

The following information is approved for piecemeal use as may be necessary in response to inquiries:

The U. S. Atomic Energy Commission through its Nevada Operations Office is investigating locations around the present Nevada Test Site so that the combined facilities available for underground nuclear testing would be more flexible and suitable.

In any area selected for further study, a program of exploration will be begun to determine surface and underground characteristics. Other studies will also be made on weather, population, labor, transportation, and other aspects.

The site investigation program is not related to industrial relations or other operational problems associated with the present Nevada Test Site. Operations at the present Nevada Test Site will continue.

#

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

GROUP 1
Excluded from automatic
downgrading and
declassification

~~CONFIDENTIAL~~

U. S. ATOMIC ENERGY COMMISSION
CLASSIFIED MATERIAL RECEIPT

DATE MAILED

TO

Mr. Bill D. Moyers
Press Secretary to the President
The White House

FROM

Mr. John A. Harris, Director
Div. of Pub. Information
U. S. AEC
Washington, D. C.

INSTRUCTIONS:

1. Original of this receipt to be signed personally by recipient and returned to ↑
2. Duplicate to be retained by recipient.
3. Triplicate to be retained by sender in suspense file.
4. Avoid Identifying Material Below in Any Manner Which Might Necessitate Classification of This Receipt.

DESCRIPTION (CHECK OR INDICATE)	DATE OF DOCUMENT LETTER OF TRANSMITTAL	FROM--	REFERENCE OR FILE NO.	ADDRESSED TO--
Ltr. <u>XX</u> Rpt. _____ Dwg. _____ Other _____ Nature of copy: SO _____ CC _____ TC _____ PC _____ Other _____ Number of enclosures and attachments: <u>1 (Confidential)</u>	8/19/66 Secret/DI Group 3 Copy 1A	John A. Harris, Dir. Div. of Pub. Info. U. S. AEC Washington, D. C.		Mr. Bill D. Moyers Press Sec. to the President The White House

CERTIFICATE

I have personally received from the sender the material, including enclosures and attachments, as identified above. I assume full responsibility for the safe handling, storage, and transmittal elsewhere of this material in full accordance with existing regulations.

DISPATCHED

8/19/66

SIGNATURE OF COURIER

SIGNATURE OF RECIPIENT

DATE RECEIVED

DATE RECEIVED

U. S. ATOMIC ENERGY COMMISSION
CLASSIFIED MATERIAL RECEIPT

DATE MAILED

TO
**Mr. Bill D. Moyers
Press Secretary to the President
The White House**

FROM
**Mr. John A. Harris, Director
Div. of Pub. Information
U. S. AEC
Washington, D. C.**

INSTRUCTIONS:

1. Original of this receipt to be signed personally by recipient and returned to ↑
2. Duplicate to be retained by recipient.
3. Triplicate to be retained by sender in suspense file.
4. Avoid Identifying Material Below in Any Manner Which Might Necessitate Classification of This Receipt.

DESCRIPTION (CHECK OR INDICATE)	DATE OF DOCUMENT LETTER OF TRANSMITTAL	FROM—	REFERENCE OR FILE NO.	ADDRESSED TO—
Ltr. XX Rpt. _____ Dwg. _____ Other _____ Nature of copy: SO _____ CC _____ TC _____ PC _____ Other _____ Number of enclosures and attachments: <u>1 (Confidential)</u>	8/19/66 Secret/DI Group 3 Copy 1A	John A. Harris, Dir. Div. of Pub. Info. U. S. AEC Washington, D. C.		Mr. Bill D. Moyers Press Sec. to the President The White House

CERTIFICATE

I have personally received from the sender the material, including enclosures and attachments, as identified above. I assume full responsibility for the safe handling, storage, and transmittal elsewhere of this material in full accordance with existing regulations.

DISPATCHED

8/19/66

SIGNATURE OF COURIER

SIGNATURE OF RECIPIENT

DATE RECEIVED

DATE RECEIVED

9

TAB

"A"

TAB

"B"

~~SECRET~~

This document consists of 1 pages
No. 1 of 27 Copies, Series DMA-B

DEPUTY UNDER SECRETARY OF STATE
WASHINGTON

July 25, 1966

10-2

~~SECRET~~

Delmar L. Crowson
Brigadier General, USAF
Director of Military Application
U.S. Atomic Energy Commission
Washington, D. C.

Dear General Crowson:

I refer to your letter of July 11, 1966, requesting comments on a draft letter to the President concerning supplemental sites for high-yield underground nuclear testing. Secretary Rusk has been made aware of the plans set forth in the draft letter and has no objection to their being put before the President for decision at an early date. I suggest that the draft letter be altered slightly to indicate this as being the Secretary's position. Otherwise, I have no changes to propose.

If the President approves going ahead with the program, we would like to work very closely with the AEC as it is implemented, particularly with respect to the timing and wording of any public announcements. I would therefore appreciate it if you could see that my staff is kept current as plans progress, so that we can give maximum help in coping early with any international problems or misunderstandings that might arise.

Sincerely,

U. Alexis Johnson
U. Alexis Johnson

DECLASSIFIED
E.O. 13292, Sec. 3.4
By *h/j*, NARA, Date 11-13-07

GROUP 1
Excluded from automatic
downgrading and
declassification

~~SECRET~~

~~SECRET~~

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

11
—

TAB

"C"

12

NATIONAL SECURITY COUNCIL

August 4, 1966

NOTE FOR MR. ROSTOW

Walt--

Some urgency attaches to action on the attached memo since it involves reprogramming of \$25 million of available funds that are presently surplus to AEC needs, and it is expected that this amount will be deducted by the House Appropriations Committee early next week when it marks up the AEC appropriation for FY-1967 unless a reason can be shown for leaving the funds with the AEC. Reprogramming of funds for this program would be much more satisfactory than a subsequent supplemental which would draw attention to it.

Spurgeon
Spurgeon

TAB
I



~~SECRET~~

UNITED STATES
ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

RECEIVED
McGEORGE BUNDY'S OFFICE

424
17

FEB 16 1966

1966 FEB 16 PM 4 23

Dear Mac:

This is in regard to your letter of December 10, 1965, concerning a visit of Plowshare experts to the UAR. As you requested, we arranged a preliminary meeting of responsible staff officers in various agencies to define the issues that might be involved in our proposal to have Plowshare experts visit the UAR. In connection with that meeting, we prepared a discussion paper containing AEC's views on the implications of the visit in the political, economic, technical, and arms control areas. A copy of the discussion paper, revised to reflect suggestions and additional implications brought out by the meeting of the staff officers, is enclosed for your use. Each of the staff officers has a copy of the revised discussion paper which he is forwarding to his principal.

I really doubt that the visit has all these implications; for, as I mentioned when we first discussed the possibility of this visit on November 16, 1965, I regard it simply as a continuation of the discussions that were initiated with me when I was in the UAR. Primarily, its purpose is to respond to a request by way of fostering good technical relations. It is quite possible the visit may serve only to indicate that the Qattara project is not really technically sound; however, it is impossible to determine this with the information presently available.

Nevertheless, if, as your letter suggested, you still want to discuss this matter with Alexis Johnson, Bill Foster, Charlie Schultze, Dave Bell, and me, I believe adequate preparation has been made. I also believe it is important that this matter be cleared up before you leave your present position in order to avoid further delay in responding to the UAR request and continuing uncertainty about international activity in Plowshare.

When separated from this document

~~SECRET~~

DOCUMENT CONTAINED

(Insert proper classification)

DECLASSIFIED

Authority 007-27-224

By JON vARA Dmc 9/21/7

~~SECRET~~

~~SECRET~~

Honorable McGeorge Bundy

-2-

Should you wish to arrange such a discussion, I believe, that in addition to the agencies reflected by the principals named in your letter, the Department of Defense and the Atlantic-Pacific Inter-oceanic Canal Study Commission should be asked to participate. Staff officers from these agencies participated in the preliminary meeting, and we have benefited from their views and from the interests represented by their agencies. In this connection, Chairman Anderson of the Canal Commission indicated that he would like Dr. Milton Eisenhower to participate in any such discussion.

Cordially,



Chairman

Enclosure:

"Implications of Cooperation with the
UAR in Plowshare" Cy 31A, S/DI

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

~~SECRET~~

SECRET

424
18

This document consists of 52 pages
No. 31 of 40 Copies, Series A

IMPLICATIONS OF COOPERATION WITH THE UAR IN PLOWSHARE

Report to the Principals of
Interdepartmental Staff Officers

DECLASSIFIED
Authority RAc 007-27-2-33
By JDL vARA Date 9.21.77

I. Purpose

To assess the political, arms control, technical, and economic implications of a visit to the United Arab Republic (UAR) by Plowshare experts and to define the issues arising from such a visit and from possible, subsequent international cooperation in Plowshare.

II. Background

One of the first suggestions for a foreign Plowshare application was in connection with a very old idea to connect the Mediterranean Sea by a canal to the Qattara Depression in the UAR. With conventional excavation this project has always been considered economically infeasible.

From time to time various officials and others in the UAR have suggested that the use of nuclear explosives for the Qattara project receive more formal and detailed consideration. Specifically, at the 1964 Atoms for Peace Conference in Geneva, the subject was raised by officials of UAR's Atomic Energy Commission (UAR-AEC) with officials of the U. S. Atomic Energy Commission (USAEC). Subsequently, in 1964, at the General Conference of the International Atomic Energy Agency (IAEA), officials of the UAR were told, upon the Department of State's instructions, that the US would be willing to send a team to the UAR for general, preliminary discussions. However, no formal request for such a visit was received until Chairman Seaborg visited the UAR after the IAEA General Conference

Excluded from automatic
downgrading and
declassification

This material
contains information
the disclosure of which in any manner
to an unauthorized person
is prohibited by law.

SECRET

2617

195

~~SECRET~~

-2-

in Tokyo in the fall of 1965. At that time, the Chairman of the UAR-AEC formally asked Dr. Seaborg to send a technical team to the UAR to discuss Plowshare technology and the Qattara project. After his return to the US, Dr. Seaborg wrote to Mr. Bundy to determine whether he had any objection to such a visit in view of past indications from Mr. Bundy's office that cooperative steps in Plowshare with certain countries had implications in the proliferation and arms control area. (See Tab A for Chairman Seaborg's letter to Mr. Bundy.) Mr. Bundy responded that before a team was dispatched, he wished to discuss the problem with the representatives of several agencies with a view to "really [thinking] through all of the political, economic, and arms control implications involved in either encouraging or undertaking this project." He requested AEC to "arrange a preliminary meeting of the responsible staff officers... to define the issues" in this matter. (See Tab B.)

The preliminary meeting of staff officers took place on February 1, 1966. The discussion was based on a first draft of this paper, which was prepared by AEC, and resulted in this revised paper, which incorporates many of the suggestions made by the staff officers of other agencies. Each of the staff officers has agreed he would forward this revised paper to his principal, together with his separate views on the matters raised in it, as a common basis for the subsequent discussion with Mr. Bundy.

III. Introduction

Inasmuch as it is not proposed either to encourage or undertake the Qattara project, it is considered more appropriate to examine the implications of the proposed visit and of international cooperation which might follow from it.

~~SECRET~~

~~SECRET~~

-3-

If the visit ultimately led to a proposal from the UAR to undertake the Qattara project, there would be many specific implications which would have to be considered before doing so. However, in view of (1) the present state of technical development of nuclear excavation, (2) the length of time it takes to develop such projects, (3) the inevitable stages of step-by-step consideration involved, (4) the inevitable and unforeseeable changes in circumstances that will occur during such a period of time, and (5) the possibility that Qattara will not be a feasible or desirable project, there would be many years and occasions to consider the specific implications of undertaking the Qattara project.

With regard to implications of the proposed visit and possible subsequent international cooperation, it seems profitable to examine such implications as: What effect knowledge that the US had made the visit could have on the present US posture in Plowshare with other countries and on US arms control and disarmament objectives. Also, the question whether this visit is approved has implications for the previously approved US approach to the possibility of nuclear excavation under the limited test ban treaty. Therefore, this paper seeks to define such implications to provide a basis for the discussion with Mr. Bundy.

IV. Nature of the Visit

The purpose of sending a team, or even a single Plowshare expert, to the UAR would be to discuss generally the peaceful application of nuclear explosions, both cratering and contained. The discussions would include Qattara, as well as other projects, and would provide a basis for assessing the technical value of further cooperation. The expert(s) would not be in a position to make any commitments about further

~~SECRET~~

~~SECRET~~

-4-

cooperation or the possibility that the US would support the Qattara project. It would also be understood that discussion of the limited nuclear test ban treaty would be confined to previous public statements and would not enter speculative areas regarding interpretation of the treaty. Discussions, of course, would be confined to unclassified information.

The visit is contemplated to be somewhat similar in purpose to the visit by Dr. Gary Higgins, of AEC's Lawrence Radiation Laboratory, to Australia in March 1962. Dr. Higgins' visit led to the visit to the US of an Australian technical team during September and October 1963. So far, cooperation with Australia has not proceeded from these visits and general discussions to formal consideration of the feasibility of any specific project.

Such visits are the ordinary and routine course for preliminary consideration of new technical areas and of engineering projects, and seldom attract much attention unless publicity is sought for them.

Among the alternatives to a single, nonpublicized visit to the UAR would be: (a) to arrange to include other countries on the itinerary of the expert(s) or, (b) to request the UAR or other countries to publicize the visit. Although both alternatives might have some political advantages in connection with the objective of achieving international cooperation in Plowshare (see Section V.B.2.), AEC would prefer to keep the visit in a more routine, low-key character. However, even in keeping with a low-key visit, consideration might be given to making arrangements to stop in other countries for the political advantages of international cooperation or to avoid the appearance of a specific purpose in visiting the UAR.

~~SECRET~~

~~SECRET~~

-5-

In this connection, AEC believes consideration should be given to a high-level, technical official from AID participating in the visit, if possible. Qattara is only one among a number of possible AID projects in the UAR, and the UAR has already informally requested discussions about several of these possible projects. Thus, including an AID official in the visit would provide additional opportunity to discuss other projects and the relevance of Plowshare to them.

V. Political Implications

A. Introduction

The political implications and issues involved in a visit to the UAR and subsequent cooperation depend almost entirely upon the nature of additional Plowshare cooperation with the UAR or other nations. There appear to be minimal political implications to a single, limited-in-scope, nonpublicized, general Plowshare visit, especially if Israel were informed in advance about the visit.

In this respect, it is necessary to bear in mind that most information on Plowshare is unclassified and available in published reports and that there is no bar to a nation, group, firm, or individual discussing Plowshare in this country or abroad. For example, Dr. Edward Teller visited Israel, during the period November 24 to December 9, 1965, at the invitation of Dr. Yuval Ne'eman, Tel Aviv University, during which time he had extensive discussions about Plowshare and gave several lectures. Also, a number of visits by foreigners to the US have involved Plowshare discussions.

~~SECRET~~

~~SECRET~~

-6-

Thus, it could be assumed that political implications arise when visits appear to be focused on excavation projects, such as Qattara, which involve nuclear cratering. If this is the case, it would appear desirable to make such visits clearly general or focused on contained Plowshare projects. However, it should still be recognized that it would be very awkward to avoid general technical discussions about the feasibility of specific excavation projects. It would also appear desirable to use inquiries about specific excavation projects to discuss Plowshare generally and to seek out suitable contained projects. However, there would still seem to be political advantages, as discussed in the following sections, to proceeding in some specific situations with feasibility studies of excavation projects in other countries after careful consideration of the political implications on a case-by-case basis.

B. The Limited Nuclear Test Ban Treaty and International Cooperation

1. General

Signatories to the Treaty Banning Nuclear Weapons Tests in the Atmosphere, Outer Space, and Under Water, are prohibited from undertaking underground nuclear explosions causing radioactive debris to be present outside their territorial limits. Thus, projects in which the radioactive debris is essentially completely contained underground can be undertaken within the scope of the limited nuclear test ban treaty. Presumably, projects situated so that radioactive debris would not be present beyond territorial limits can also be undertaken within

~~SECRET~~

~~SECRET~~

-7-

the terms of the treaty. There are projects, however, where it is clear that radioactive debris would be present beyond territorial limits, and for which an amendment to, or some type of agreement under, the treaty would be necessary.

2. Effect of the Treaty and Plowshare Cooperation on the Trans-isthmian Canal Problem and the Possibility of Nuclear Excavation
Generally

Since the spring of 1964, it has been recognized that the construction of a sea-level transisthmian canal with nuclear explosives falls into this latter category. Whether nuclear excavation of such a canal is eventually undertaken or not, it is clearly in the national interest that the possibility of this means of excavation be maintained, particularly for the assistance such a position provides in the difficult negotiations with Panama for a treaty to replace the 1903 treaty. Also, it may eventually be in the national interest to construct such a canal using nuclear excavation.

For these reasons, a solution has been sought to the political problem of making it possible, or making it appear possible, that the canal project can be undertaken without abrogating the limited nuclear test ban treaty. The solution, which has been previously approved by the White House is to develop enough international interest in nuclear excavation so that an amendment to, or other arrangements under, the limited nuclear test ban treaty can be obtained to permit such a project. Specifically, Dr. Seaborg's testimony on March 4, 1964, using this rationale'

~~SECRET~~

~~SECRET~~

-8-

was approved by the White House and was used in obtaining passage of Public Law 88-609 providing for the current study of a sea-level canal. (See Tab C.) Also, "a program of Soviet and international participation and cooperation in the US nuclear excavation development program" was endorsed on July 20, 1964, by the Underground Review Committee on behalf of the President. (See Tab D.)

For various reasons, it has been difficult to implement this program of cooperation. Most recently, in view of current relations, it has been decided that it is not timely to approach the Soviet Union. Therefore, in order to increase international interest in Plowshare, it would appear all the more desirable to cooperate with other nations in order to: (a) permit possible future arrangements under the treaty for a needed project, (b) make it possible to approach the Soviet Union indirectly through other countries with whom they desire good relations, and (c) stimulate the Soviet Union to acknowledge its interest in Plowshare.

Undertaking a visit, and possibly further cooperation, with the UAR at the present time would also have the advantage of promoting international cooperation in parallel with the development of the technical feasibility of nuclear excavation. Since the feasibility of using nuclear methods to build a sea-level canal is dependent on the international climate, as well as the status of the technology, the parallel approach between international cooperation and technical development seems all the more necessary if the Canal Commission is to determine, by its statutory deadline, whether nuclear excavation is politically, as well as technically, feasible.

~~SECRET~~

~~SECRET~~

-9-

3. Other Interrelationships of the Treaty and International Cooperation

It is conceivable that a visit or preliminary feasibility study in connection with a specific project in a foreign country which might, if carried out, be regarded as a possible violation of the treaty would arouse concern about future US intentions toward the treaty or its obligations under it. Although such concern is possible, it seems unlikely to be substantial in view of the extensive public discussions and attention nuclear excavation has received since the treaty became effective.

This substantial public record exists in: (a) congressional testimony, (b) past official reports, and (c) extensive discussions with foreign nationals, such as those held in connection with the Plowshare participation in the Geneva Conference of 1964. In addition, testimony during Senate ratification of the treaty indicated that the US would proceed with cratering experiments to develop nuclear excavation technology under the treaty. Testimony regarding the Canal Commission Bill and extensive public discussion of nuclear excavation of a sea-level canal have also occurred. Also, a number of other nuclear excavation projects have been discussed.

~~SECRET~~

~~SECRET~~

-10-

It has even been publicly explained that the US anticipates that international cooperation in Flowshare will make it possible in the future to obtain an amendment or other arrangement under the limited nuclear test ban treaty to permit a needed project to be undertaken without violating the treaty. Consequently, the lack of progress in international cooperation may equally well arouse concern about our intentions regarding the treaty, especially in view of the fact that we are publicly studying and spending large sums of money to consider the feasibility of the sea-level canal project which, it has been acknowledged, could probably not be undertaken under the treaty. Failure to respond to a legitimate specific request, such as the UAR's, would only seem to reinforce this concern.

In addition, if the lack of an agreed understanding within the Government regarding our obligations under the limited nuclear

~~SECRET~~

~~SECRET~~

-11-

test ban treaty causes hesitation or refusal to respond to legitimate requests for cooperation regarding excavation projects, this will indicate uncertainty about the future of nuclear excavation under the treaty and may affect: (a) our ability to carry out needed cratering experiments to develop nuclear excavation technology, (b) the credibility of locations other than the existing Canal Zone for a sea-level transisthmian canal, and (c) other nation's interpretations of their own and others' obligations under the test ban treaty.

4. Specific Effect of Treaty on Cooperation with the UAR

Since the UAR and the US are signatories to the limited nuclear test ban treaty, we would be prohibited, under existing conditions, from undertaking any nuclear excavation projects that would cause radioactive debris to be present outside the territorial limits of the UAR. However, many cooperative steps, such as visits by UAR technical personnel to the US for orientation or to witness Plowshare experiments, and feasibility studies of excavation or other projects, could be undertaken without violating the treaty. Excavation projects which would not cause radioactive debris to be present outside UAR boundaries could also presumably be undertaken. In addition, projects involving underground nuclear explosions, which did not release radioactive debris, could be undertaken without violating the limited nuclear test ban treaty.

~~SECRET~~

~~SECRET~~

-12-

C. Effect of Cooperation on US Foreign Relations

1. With the United Arab Republic

Over the past several months there has been a marked improvement in US-UAR relations. In particular, the UAR has recently been helpful in achieving US foreign policy objectives regarding Viet Nam. Thus, simply within the framework of relations between the two countries, it seems to the US advantage to respond favorably to the UAR requests for the visit of Plowshare experts.

It may even be that some needed and favorable project will be developed in the UAR which can be done within existing constraints and which will achieve long-range US objectives in the UAR in terms of economic development, increased political stability, and closer ties with the US. In this sense, an engineering project involving the collaboration of technical personnel from the two countries would be advantageous in terms of continuing the movement of the UAR away from Communist influence and toward the US.

In a broader sense, a favorable attitude toward the US on the part of UAR can help in our relations with other Arab states and the Afro-Asian bloc.

2. With Israel

A straightforward technical visit to the UAR is not likely to arouse Israeli concern, especially if they have been informed in advance that the visit will be made and of its purpose and scope. This seems especially true in the light of Dr. Teller's

~~SECRET~~

~~SECRET~~

-13-

recent visit, as a private citizen, to Israel, on the same subject. It will, of course, be necessary that the US be prepared to respond favorably to any Israeli request for further cooperation in Plowshare in order to maintain a parity, insofar as available projects indicate its desirability, of evolving technical relationships.

The closest existing parallel to this situation seems to be the early stages of our cooperation with the UAR and Israel in nuclear desalination in which no adverse reaction was encountered.

3. With the Soviet Union

Cooperation with the UAR in Plowshare is unlikely to provoke a challenge from the Soviet Union, although this is difficult to predict. However, it seems perfectly possible to counter any Soviet challenge with a reasonable explanation of the visit. Beyond this straightforward political aspect, it is even more difficult to predict what, if any, counter steps the USSR may take.

It is possible to conceive of two extreme types of counter moves: (a) a reversion by the Soviet Union to their former political hostility toward Plowshare, or (b) an offer by the Soviet Union to cooperate with the UAR in Plowshare.

In the latter case, it would be to the US advantage that any interest the Soviet Union has in Plowshare be brought out into the open so that discussions on the entire subject of nuclear excavation under the limited test ban treaty can be

~~SECRET~~

~~SECRET~~

-14-

undertaken in a technical rather than a political environment. In the former case, it seems unlikely there will be any further politically motivated USSR hostility toward Plowshare in view of increasing and substantial evidence that the USSR has a genuine technical interest in using Plowshare. For example, the USSR's Professor Emelyanov discussed specific Plowshare-type projects in the USSR at the September 1964 Geneva Atoms for Peace Conference, a Soviet official has acknowledged the existence of a Plowshare technical organization in the USSR, and there have been the January 15, 1965, and subsequent nuclear explosions in the USSR which may have been cratering events.

In the final analysis, however, it seems desirable that the US cooperate with the UAR in Plowshare rather than leaving open the possibility that the Soviet Union may offer to do so first.

4. With Other Countries

Cooperation with the UAR in Plowshare will undoubtedly make it more difficult to refuse to cooperate with other countries, such as India. However, if there is good political reason in the arms control area to continue to refuse or defer doing so, the US can presumably manage such refusals on a case-by-case basis. There are obviously countries, such as France, where careful consideration needs to be given to the political consequences of Plowshare cooperation.

As a general rule, it would appear that the earlier stages of cooperation, such as visits, should present few, if any, obstacles

~~SECRET~~

~~SECRET~~

-15-

since information on Plowshare is unclassified and available to anyone. Broader cooperation, which might give the appearance of general assistance or of permitting access by other nations to weapon related programs or weapon related sites, would present a somewhat more difficult problem in certain cases. However, cooperation regarding a specific, defined project would, paradoxically, present less substantive difficulty since information and assistance can be more closely defined and focused. In general, there would seem to be little, adverse effect on US relations with other countries resulting from Plowshare cooperation with the UAR.

D. Effect of Plowshare Cooperation on Arms Control Objectives

1. General

Plowshare seems to be related only to two main arms control objectives: (a) the prevention of nuclear weapon proliferation, and (b) the achievement of a comprehensive test ban treaty. AEC has assessed Plowshare's relation to these two objectives several times and has repeatedly concluded that its efforts in Plowshare are not fundamentally incompatible with either objective. In general, Plowshare's relevance to either objective is governed by the specific arrangements involved. These arrangements are discussed below.

To understand some of the interrelationships properly, it is first necessary to appreciate that utilizing Plowshare in foreign countries is basically concerned with the peaceful use of one or more of the effects of the energy released in a nuclear explosion and not with the nuclear explosives themselves. In

~~SECRET~~

~~SECRET~~

-16-

other words, Plowshare is really concerned with making some engineering or scientific use of the results of an explosion -- a crater, a fractured area underground, or a beam of neutrons.

Secondly, it is necessary to appreciate that there is an interrelationship for Plowshare between US policies and actions in these two arms control areas. For example, if the US indicates, for a specific political purpose in connection with proliferation, that Plowshare is always indistinguishable from nuclear weapon development, it will create extreme difficulties in any future negotiation of a comprehensive nuclear test ban treaty in which we wish to make provisions on the basis that a distinction between Plowshare explosions and nuclear weapon development tests can be made. In addition, a US position on the relationship of Plowshare and nuclear weapon development should take account of the following distinctions which would actually exist between Plowshare detonations and nuclear weapon development tests: (a) the nature of explosives required to accomplish a specific engineering project; (b) the nature of, and techniques involved in, weapon development tests; and (c) the relatively different stages of weapon technology in advanced nuclear nations, incipient nuclear nations, and nonnuclear nations and the type of testing required by each for its different purposes.

Finally, it should be pointed out that some aspects of actual cooperation in Plowshare projects such as mutual observation, inspection, and safeguards, can, if they are implemented, have a very salutary effect on future arms control possibilities by providing

~~SECRET~~

~~SECRET~~

-17-

concrete examples of realistic and practical control procedures which could be extended to the weapon area. Such a positive approach to Plowshare possibilities and other creative utilizations of the relationship between Plowshare and weapons programs would offer many advantages as long as the US considers the possession of nuclear weapons in its national interest.

2. Possible Comprehensive Test Ban Treaties

Plowshare's role in a possible comprehensive nuclear test ban treaty is simply that it is one of a number of issues on which agreement must be sought if negotiations are undertaken. Presently, though the US is willing to undertake negotiations to reach a comprehensive test ban treaty, none is underway.

If negotiations on a comprehensive nuclear test ban treaty were resumed, the US position on a number of substantive issues would have to be decided upon and negotiated, including: the number of on-site inspections; criteria for on-site inspections; location, records, and analysis of measurements by seismic stations; composition and authority of a control commission; composition and rights of inspection teams; etc. In addition, it would be necessary to reach an agreement within the US Government on a provision for Plowshare in such a treaty and to table and negotiate it. There is presently agreement between ACDA and AEC at the staff level on such a Plowshare provision. This provision was circulated to the Deputies to the Committee of the Committee of Principals by memorandum dated August 18, 1965, and was recommended by the Director, ACDA, on December 17, 1965, for inclusion in the US position on a threshold

~~SECRET~~

~~SECRET~~

-18-

nuclear test ban treaty. Presumably, the agreement of other agencies and the Committee of Principals could be obtained on this provision, with or without revisions, if the situation required it.

Therefore, it would not appear that Plowshare, or more specifically, Plowshare cooperation with the UAR, has a direct bearing at this time on a comprehensive nuclear test ban treaty. To the contrary, it would appear that the present AEC-ACDA agreement would provide for Plowshare under a comprehensive nuclear test ban treaty and that any project developed in the UAR could be carried out under such a provision.

It would seem to be advantageous to cooperate with the UAR on Plowshare in order to assist in obtaining the UAR agreement to a comprehensive nuclear test ban treaty and to a Plowshare provision in it, if such a treaty could otherwise be agreed upon.

In summary, Plowshare has not been an obstacle to a comprehensive nuclear test ban treaty and appears unlikely to become one. On balance, it appears that cooperation with the UAR in Plowshare would improve the prospects for obtaining UAR adherence to such a treaty. Certainly, it would make the inclusion of a provision for Plowshare easier. It can also be said that including a meaningful provision for Plowshare in a comprehensive nuclear test ban treaty is likely to make:

(a) approval of such a treaty by the Senate easier, (b) adherence to the treaty more acceptable to certain nations, and (c) accom-

~~SECRET~~

~~SECRET~~

-19-

plishment of other US foreign policy objectives, such as those in Panama, more possible.

3. Proliferation

Plowshare cannot make a direct contribution to the proliferation of nuclear weapons since the Atomic Energy Act forbids furnishing nuclear explosives to other countries. What is visualized for foreign projects is that the US would furnish the service of emplacing and firing the explosive which would remain in US custody and control. In essence, the US would be supplying the service of providing a controlled, underground explosion, not a nuclear explosive. Such arrangements have been discussed with some foreign countries and appear acceptable to them.

Since only unclassified information on the utilization of nuclear explosives would be made available to other nations, Plowshare would not contribute any materials, information, or technology useful in another nation's nuclear weapon program nor would Plowshare develop talents useful in nuclear weapon design. To the contrary, if Plowshare realizes its goals, it may become an important consumer of potential weapon materials. Also, if an explosion service were available from the US at a reasonable price, it would serve to divert another nation's interest and technical talent toward a peaceful end use of explosions rather than leaving such interest and talent to focus on development of the explosives themselves. Thus, with appropriate policies, it appears that Plowshare could become a useful anti-proliferation tool.

~~SECRET~~

~~SECRET~~

-20-

US willingness to furnish such an explosion service would certainly remove a reason or an excuse for another nation to embark on an independent nuclear explosive development program. However, US unwillingness to cooperate might influence a nation to seek a possible alternative, e.g., assistance from another nuclear country, or to attempt to develop an independent nuclear capability. At least, unwillingness to cooperate would strengthen the hand of those in other countries who are advocating an independent course of action.

With respect to the UAR, the current intelligence estimate is that the UAR will not even be technically, materially, or industrially ready to embark on a nuclear weapon development program for a number of years. Certainly, a visit would not change this basic situation nor is it expected that even more extensive cooperation would directly assist them in developing or producing nuclear weapons.

The argument has sometimes been made that the connection between Plowshare and proliferation is more indirect and consists of whetting appetites for nuclear weapons or eroding a distinction between nuclear and conventional warfare. Faced with the reality that other nations will decide to undertake or not to undertake a nuclear weapons program on the basis of their own national self-interest, primarily national defense, the role of Plowshare in such decisions is likely to be very limited, or even nonexistent. In this area, it is very important not to confuse public rationalizations which may accompany such decision-making with the actual basis for such decisions.

~~SECRET~~

~~SECRET~~

-21-

It should be emphasized that a successful weapon program would require many hard choices for another country in terms of the diversions of limited capital and technical manpower to a relatively massive undertaking. In attempting to influence another nation's decision in this matter, it would appear possible, as indicated above: (a) to offer counterarguments to possible public rationalizations; (b) to emphasize, perhaps using Plowshare as a wedge, the nature of the choices being made; and (c) to meet any real needs another country may have for Plowshare projects by offering US explosion services.

The argument that appetites for nuclear weapons would be whetted by Plowshare seems superficial; those appetites already exist or would not be created solely by the possibility of a Plowshare program. However, refusal to cooperate in Plowshare may have the result of increasing the pressure for embarking on an independent explosive development program, or of suggesting that the country turn to another nuclear power for assistance. At the very least, if another country plans to use Plowshare as an excuse for an explosive development program, the refusal to cooperate would make the excuse that much better.

It is difficult to conceive that the use of nuclear explosives for peaceful purposes will erode the distinction between peaceful uses and nuclear warfare. There is a vast difference between using controlled, underground nuclear explosions to fracture gas-bearing rocks (which would probably not be noticed by anyone) or to dig a canal in a remote desert (which would be noticed by

~~SECRET~~

~~SECRET~~

-22-

relatively few people), and using the air burst of a nuclear weapon in warfare to obliterate a major city. To conceive that Plowshare would erode this distinction is somewhat analogous to conceiving that the use of the automobile erodes the distinction between the use of gasoline for the propulsion of cars and its use as napalm.

To the extent that there is vague concern about the relationship between Plowshare and nuclear weapons, there are several reasons why it would be in the US interest to promote an affirmative point of view toward Plowshare. Historically, it is abundantly clear that once man discovers a new source of energy, he inevitably finds a constructive use for it. In developing these constructive uses, it would seem desirable for the US to take the lead, especially in view of the influence this lead would give the US with other countries. Furthermore, in many cases, such as the present transisthmian canal situation, it can be expected that it will be to the US advantage to have developed a positive attitude on the part of other countries toward using nuclear explosives for peaceful purposes. Moreover, as long as the possession of nuclear weapons by the US is considered to be in the national interest, it should be clear that we are also interested in making maximum constructive use of nuclear energy. However, the US should emphasize that our policy toward using nuclear explosives for peaceful purposes does not change our attitude toward the undesirability of nuclear weapon proliferation. Therefore, AEC believes that it would be to the US

~~SECRET~~

~~SECRET~~

-23-

advantage to dispel any vague concern that there is a connection between Plowshare and proliferation.

On balance, then, it seems quite possible that Plowshare may offer a way to counter proliferation pressures in other countries with positive and creative policies designed to contain other countries' aspirations for independent explosive capabilities and, at the same time, allow them to make use of the beneficial aspects of the effects of nuclear explosions.

E. Interrelationships of Certain Political Implications

1. Introduction

Discussion of political implications separately fails to take into account some implications that arise from the interrelationship of various elements. This section deals with some of these interrelationships and their implications.

2. Timing and Pacing of International Cooperation in Plowshare

During the discussion with Mr. Bundy, the possibility of expanding international cooperation even beyond the UAR and the question of how fast it should be carried out may arise. If so, it should be recognized that a number of other countries have indicated an interest in Plowshare and could be included on the itinerary of the expert(s) or visited in the near future after suitable political arrangements had been made. It should also be recognized that visits could be confined to general Plowshare discussions, focused on contained projects, or limited only to general discussion of the feasibility of excavation projects.

~~SECRET~~

~~SECRET~~

-24-

Among the countries which have expressed interest in Plowshare is India. Although it was concluded above that the US could continue to refuse or defer Plowshare cooperation with India even in the face of a visit to the UAR, the case of India apparently brings into specific consideration the question whether Plowshare cooperation increases appetites for nuclear weapons or makes a weapon program easier for India to undertake. AEC continues to believe that Plowshare cooperation with India would do neither. On the contrary, it is believed that the general rationale in Section V.D.3. can be applied to India and that Plowshare cooperation might actually deter India from a nuclear weapon program or, at least, serve to remove an excuse India has for undertaking one. With the recent deaths of Prime Minister Shastri and atomic energy director Homi Bhabha, the question of Plowshare cooperation with India need not be reopened until another request for such cooperation is received or until it becomes clear that the question of an Indian nuclear weapon program is being raised again in the Indian government.

As discussed earlier, it now appears timely to continue, and perhaps expand, existing international cooperation in Plowshare. Specifically, AEC believes that this general visit to the UAR should be made and that, after consideration on a case-by-case basis, as requests are received Plowshare cooperation should be extended to other nations. Extraordinary considerations do not arise until feasibility studies of nuclear excavation projects, including technical consideration of the limited nuclear test ban treaty, have been completed and there are proposals to actually

~~SECRET~~

~~SECRET~~

-25-

undertake such projects. By that time, even in the most optimistic situation, circumstances and considerations will be different than they are today.

In the meantime, general technical discussions on Plowshare cooperation, studies of both contained and cratering projects in other countries, and possibly carrying out suitable projects, such as contained explosions to stimulate natural gas production, could all have a number of salutary political effects and minimal adverse political consequences.

3. Political Implications in Other Countries of USSR Position in Plowshare

From time to time, concern has been expressed over the prospect that the USSR, with its closed society and ability to focus resources on selected technical developments, could be the first to develop Plowshare technology and offer to other countries assistance with Plowshare projects. Opinion about the political consequences of the USSR being able to do so varies. On the one hand, it is thought that the US being first with such developments may no longer have the importance that it once did. On the other hand, Plowshare does appear to offer the potential of making certain large-scale development projects in transportation, water resources, and similarly critical areas for developing nations much cheaper and therefore much more practical for consideration. In view of the political importance such projects assume in relations with developing nations, there might be serious political consequences to the USSR either offering to assist, or actually assisting, other nations with key development projects which are of paramount

~~SECRET~~

~~SECRET~~

-26-

importance to the foreign country involved.

Regardless of one's opinion of the political consequences of the USSR being first in Plowshare, for the discussion with Mr. Bundy the interrelationship of the following implications which were discussed in preceding sections should be borne in mind: (1) the present USSR position in Plowshare, (2) the undesirability of leaving open the possibility of the USSR cooperating with the UAR (or other countries) first, and (3) the prospect that international cooperation may make it easier for the US to carry out the cratering experiments needed to develop nuclear excavation technology first.

4. Political Implications of Certain Aspects of Plowshare Cooperation with Other Countries

In the past, question has been raised as to how to assure other countries that the US is not testing nuclear weapons while it is carrying out Plowshare projects. Of course, as long as it is possible to carry out underground nuclear weapon tests, there are no advantages and many disadvantages to using Plowshare projects to do so; for it is far easier and cheaper to carry out a completely contained weapon test at the Nevada Test Site.

Plowshare experiments or projects involve site development costs, precautions due to the venting, or the possibility of venting, a small amount of radioactivity, and possibly technical obstacles to subsequent diagnosis of device performance from radioactive debris. Also, in a Plowshare project, it would be essential to accomplish the engineering purpose with the economic

~~SECRET~~

~~SECRET~~

-27-

savings that made the project desirable in the first place.

Thus, an explosive of proven performance, and not a developmental device, would have to be used.

Finally, it would be possible to arrange to carry the project out to confirm further to unbiased observers that the objective of the explosion was peaceful and not a developmental test of a weapon. This subject was dealt with in April 1965, during an exchange of correspondence between the AEC and Department of State about proceeding then with the program of international cooperation. A copy of Dr. Seaborg's April 7, 1965, letter to Secretary Rusk is attached as Tab E.

In addition, the April 7, 1965, letter discussed the question of the availability of the unclassified information which would be made available to other countries.

AEC has also considered the legal aspects of carrying out Plowshare projects in other countries and has concluded that this is possible under the Atomic Energy Act.

VI. Technical

Nuclear explosives can be used for peaceful purposes in two basic ways: (1) by burying the explosive at a depth sufficient to contain radioactive debris and to fracture rock for underground engineering purposes, such as the recovery or storage of natural gas; or (2) by burying the explosive at a lesser depth to contain most of the radioactive debris and to make a crater or ditch for some engineering purpose, such as a harbor or canal. In principle, there is no question that the release of energy underground will have these effects and little question that such effects can be put to some beneficial use.

~~SECRET~~

~~SECRET~~

-28-

It remains to be demonstrated that in either case such uses will be more economic than presently available techniques. There also remains the development of sufficient engineering experience and related technology to permit the precise calculation of the effects needed to determine exactly whether a given project is feasible. On the basis of work done to date it seems clear that the use of nuclear explosives to stimulate the production of natural gas and to provide storage space for gas, fluids, or wastes is technically and, in some cases, economically feasible. Other underground engineering uses such as mining, production of aggregate, and so forth, are somewhat less certain but are currently receiving more detailed study. In excavation, a few more years of development work are necessary before sufficient technology will be in hand to engineer precisely excavations for large construction projects. However, there appear to be a number of simple applications, such as craters for water storage or other purposes, within the capability of the present technology. It would be possible to study any of these projects with the information presently in hand and to undertake many of them at an early date.

One of the purposes of a visit to the UAR would be to acquaint the technical people in the UAR with these possibilities and the current status of the technology to determine what kinds of projects are possible within the UAR. More detailed cooperation, such as feasibility studies of a given project, would have to be considered at a later time.

~~SECRET~~

~~SECRET~~

-29-

In addition, it is clearly desirable for the US to become more aware, from the technical standpoint, of potential projects in the UAR and other nations and to study such projects. Such studies will have a beneficial effect on the US development program in terms of learning more about the problems which may be encountered in actual projects so that research and development can be directed toward the solution of these problems.

The specific UAR project, which has been mentioned previously is the construction of a 50-mile canal from the Mediterranean Sea to the Qattara Depression which is several hundred feet below sea level. The UAR concept for the project apparently involves using the flow of water into the Depression to generate hydroelectric power. The project may also involve using the canal for transportation access to the region and, perhaps, in UAR opinion, some beneficial modification of the local climate. A summary of information presently available in the US on the project is contained in Tab F. However, the principal purpose of the visit to UAR would not be to examine the Qattara project in great detail but to discuss Flowshare generally and to obtain information on the Qattara or other possible projects for later and more detailed study if that should prove desirable.

With respect to IAEA participation, it seems premature for the UAR to request the IAEA to provide an expert to participate in the proposed visit to the UAR in view of the Agency's present lack of expertise in Flowshare. In addition, the US should be hesitant to suggest Agency participation at this time in view of our lack of knowledge as to the possible Soviet reaction. After a visit

~~SECRET~~

~~SECRET~~

-30-

had been made and some understanding developed in what is involved, we should then consider Agency involvement especially if a feasibility study of a specific project were to be undertaken. In the long-term, IAEA's expertise should be developed in Plowshare through their participation in studies and by other means.

VII. Economic

A. General

It is very difficult to generalize adequately about the economic implications of Plowshare. As indicated in the preceding section, the economic implications are closely related to the status of technical development. Once it is technically feasible to accomplish a particular project or application, it now seems clear that several of them will be economic.

In particular, excavation projects require careful, detailed examination before deciding either technical or economic feasibility. Often, it has been found that using nuclear excavation makes it possible to accomplish a project in an entirely different way than if conventional excavation techniques were used, thus offering even larger savings.

Despite the fact that the general economic basis of Plowshare has been questioned by some people, many detailed evaluations have been made involving highly competent people from outside the program and the AEC. Some major examples are: (1) the evaluation of the stimulation of natural gas production involving technical personnel from the El Paso Natural Gas Co., the U. S. Bureau of Mines, and the Continental

~~SECRET~~

~~SECRET~~

-31-

Oil Co., (2) preliminary evaluation of natural gas storage involving the Columbia Gas Service System Corp, and U. S. Bureau of Mines, (3) the feasibility study of Project Carryall, a proposal for nuclear excavation of a railroad and highway pass, involving the Santa Fe Railroad Co. and the California Department of Highways, and (4) the 1960, 1964, and current studies of a sea-level transisthmian canal project, involving the Corps of Engineers and the Panama Canal Company, and others. Perhaps, the most independent, outside scrutiny of the Plowshare program was by the Australian technical team which visited the US and concluded with regard to this aspect of the program that:

"...it would appear that these techniques may, in due course, compete with conventional techniques for the excavation and rock breaking components of projects towards the upper end of the size range of current Australian large-scale developmental works."

Fundamentally, it must be appreciated that advanced thermo-nuclear explosives, which are the result of an extraordinarily complex series of technological and manufacturing processes and developments, release a vast amount of energy at a relatively low cost. In nuclear excavation, this energy is used to both break and move rock. By comparison, in conventional excavation the energy of the explosion is only a part of the total energy expended, large-scale earth-moving equipment also being required to make the desired excavation, usually a relatively small amount at a time in large projects. Similarly, in most contained applications the energy of the nuclear explosive breaks a quantity of rock which cannot be economically broken by any other means.

~~SECRET~~

~~SECRET~~

-32-

B. Qattara or Other Projects in the UAR

As indicated above, the specific economic implications of Qattara or other projects in the UAR would have to be developed as part of any feasibility studies undertaken. At the present stage of technical development, AEC can only project charges which might be made for the nuclear explosives used in such projects. However, these projected charges would be adequate for use in a feasibility study.

Subsequently, if a project in the UAR were actually proposed, more detailed consideration would have to be given to the actual charge to be made for the explosives and related services.

If a project were proposed early enough in the US Plowshare development program, consideration could be given to basing the charge on the value of the project to the US.

After the technology is developed, it is contemplated that such projects will be examined on the same basis as any other construction project. Thus, if AID support is requested for a project, it will have to be developed and justified within the Executive Branch and to Congress in the normal manner for AID projects.

There may be some question whether participation by AID in the visit will imply the possibility of AID support for a Plowshare project in the UAR. Since the UAR does not presently have any projects on the list of capital projects for support

~~SECRET~~

~~SECRET~~

-33-

by the AID program, such an implication should be avoided. In the normal context of visits by AID personnel to other countries and US willingness to consider further projects, it appears that the long-range perspective of AID participation, if it is otherwise approved, would be made clear to the UAR.

VIII. Conclusion

AEC does not believe that a visit by Plowshare and other experts to the UAR would focus considerable attention on the Qattara project or encourage the belief that the US is prepared to support it. To the contrary, it appears quite possible to control both the degree of attention and encouragement, provided by the visit, to the project and to keep the purpose of the visit in perspective. It also appears possible to use the occasion of a general visit to determine whether further cooperation in appropriate ways may be to the US advantage.

Thus, after carefully reviewing all of the political, technical, economic and arms control implications of the situation, it appears on balance to be in the US interest, from the standpoint of these factors, to make such a visit. In addition, these implications have been examined with a view to further cooperation, beyond this visit, and there would appear to continue to be a net US advantage from the standpoint of these factors to such further cooperation. It is not expected that our general appraisal of these factors would change even if a specific project were proposed for study. Inevitably, in the normal course of review, such a project would receive whatever

~~SECRET~~

~~SECRET~~

-34-

detailed scrutiny it required from technical, economic and political standpoints. If an excavation project were later proposed for execution, very careful attention would have to be given during the course of such a review to the manner in which the situation could be handled politically to achieve US objectives.

Attachments:

- Tab A - Ltr. to Mr. Bundy fr. Chairman Seaborg
dtd. Nov. 26, 1965
- Tab B - Ltr. to Chairman Seaborg fr. Mr. Bundy
dtd. Dec. 10, 1965
- Tab C - Excerpts Related to Nuclear Excavation
and International Cooperation
- Tab D - (1) NSAM 282
(2) Memo fr. State Department to Mr. Bundy
dtd. May 7, 1964
(3) Memo to Holders of NSAM 282
- Tab E - Ltr. to Secretary Rusk fr. Chairman Seaborg
dtd. April 7, 1965
- Tab F - Possible Utilization of the Qattara Depression,
Western Egypt, for Hydro-Electric Power Generation

~~SECRET~~

19

A

~~CONFIDENTIAL~~
UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

W. Oakley

20

OFFICE OF THE CHAIRMAN

NOV 26 1965

Dear Mac:

During the course of my recent visit to the United Arab Republic in late September, the subject of a possible Plowshare application to the Qattara Depression Project was raised by officials of the UAR Atomic Energy Establishment. The Qattara Project envisages the excavation of a 50 mile canal or tunnel from the Mediterranean Sea to the Depression, a drop of 50 meters, with a 105 MWe generating station to be constructed at the Depression end of the canal or tunnel.

You may recall that this subject was broached by the UAR during the 1964 Geneva Conference on the Peaceful Applications of Atomic Energy and further discussed at the September 1964 General Conference of the International Atomic Energy Agency in Vienna. At that time, the Department of State advised Commissioners Palfrey and Ramey at the IAEA General Conference that, in principle, the U. S. Government is very interested in developing international programs in this field and that this interest could be mentioned to nations which inquired about cooperation in this field. This advice was given in the context of the then recent endorsement on behalf of the President by the Review Committee on Underground Nuclear Tests of the courses of action proposed in the May 7, 1964, memorandum, "International Approval of Nuclear Explosives for Peaceful Applications."

Following the 1964 IAEA General Conference, Commissioner Palfrey also visited the UAR where the possibility of Plowshare experts visiting the UAR to discuss the Qattara Project in more detail was mentioned. The Commission, as you know, believes that nuclear excavation holds great promise and we are convinced that our efforts in this field are not fundamentally incompatible either with the concept of a comprehensive test ban treaty or our broader efforts to minimize the problem of nuclear weapons proliferation.

GROUP 3
Downgraded at 12 year
intervals; not
automatically declassified

~~CONFIDENTIAL~~

DECLASSIFIED
Authority AA 007-27-2-42
By JON VARA Date 9-21-17

15-2C

~~CONFIDENTIAL~~

-2-

During my discussions in Cairo, UAR officials suggested that U.S. Plowshare experts visit the UAR to survey generally the situation there. We have concluded that it would be desirable at this time to arrange such a visit as a means of determining whether further cooperation with the UAR on a Plowshare Project would be feasible. However, before doing so, I would like to know whether you have any comments on a possible visit of AEC Plowshare experts to the UAR in the near future.

Cordially,

Glenn T. Seaborg

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

~~CONFIDENTIAL~~

21

B

THE WHITE HOUSE
WASHINGTON.

December 10, 1965

~~CONFIDENTIAL~~

Dear Glenn:

I have reviewed your letter of November 26, requesting my views on a possible visit by AEC Plowshare experts to the UAR in the near future, and have concluded that we should defer action on this proposal until the matter has been given further consideration within the Government.

Although I recognize that the AEC team would not be in a position to make any formal commitments, I think it is clear that such a visit at this time would inevitably focus considerable attention on the project and encourage the belief that the U. S. was prepared to support it. I do not believe that we have yet really thought through all of the political, economic, and arms control implications that would be involved in either encouraging or undertaking this project.

Therefore, before you go any further with the plans for the visit, I would like to discuss the problem with you, Alexis Johnson, Bill Foster, Charlie Schultze, and Dave Bell. I believe that our meeting would be most effective if you would arrange a preliminary meeting of the responsible staff officers in the various interested agencies to define the issues.

Sincerely,

Mac

McGeorge Bundy

The Honorable Glenn T. Seaborg
Chairman, Atomic Energy Commission
Washington, D. C. 20545

DECLASSIFIED
E.O. 13292, Sec. 3.5
NLJ/RAC 08-53
By *nl*, NARA, Date 3-17-10

~~CONFIDENTIAL~~

23
/



EXCERPTS RELATED TO NUCLEAR EXCAVATION AND
INTERNATIONAL COOPERATION

I. Excerpted from "Second Transisthmian Canal", Hearings before the
Committee on Commerce - United States Senate.

1. "Dr. Seaborg. 'In addition, through carrying out such experiments as can be done within the limitations of the Treaty and allowing international observation of them, as we did with Project Gnome, we believe that other nations may be able to observe for themselves the practicability, safety, and feasibility of using nuclear explosives for the peaceful purpose of large-scale excavation.

'Other countries would also be able to assure themselves that nuclear excavation does not provide us an opportunity to obtain weapons information that cannot already be obtained by underground weapons tests. (See p. 28, Hearings)

2. "Chairman Magnuson. 'I don't want to necessarily go into the Treaty, because I think we are going to have to look at that legally and get more interpretations of it.

"Dr. Seaborg. 'Yes.

'Chairman Magnuson. 'If we can show the kind of use for nuclear power that we are thinking of here, the possibilities for the future, it would seem to me that many of these countries would say: "Go ahead, this is worthwhile. We will agree to any legal modification if that seems necessary." (See p. 30, Hearings)

3. "Chairman Magnuson. 'We will have that explored. Surely the countries involved in the area would be concerned, and they are parties, as I understand it, to the Treaty.

"Dr. Seaborg. 'Yes.

'Chairman Magnuson. 'I think there would be very little problem in a modification for this purpose if we can justify what we have been talking about here for a long time. (See p. 31, Hearings)

4. "Senator Thurmond. 'Do you expect to encounter any difficulties with other countries if an effort were made to obtain their approval in building this canal?

"Dr. Seaborg. 'Encounter any difficulties?

"Senator Thurmond. 'With the other countries to the Nuclear Test Ban Treaty.

"Dr. Seaborg. 'We don't know at this stage. We don't know what their attitudes would be. As I indicated, I would hope that after they see the value of this and after it becomes clear to them that this doesn't offer a way for us to surreptitiously further develop nuclear weapons--because, after all, we can do that by testing underground, which is permitted under the treaty,-- after the representatives of the other countries see this, it would be our hope that we wouldn't encounter any difficulty."
(See p. 33, Hearings)

II. Excerpted from "Peaceful Applications of Nuclear Explosives--FLOWSHARE", Hearing before the Joint Committee on Atomic Energy - Congress of the United States.

1. "Dr. Seaborg. 'In addition, through carrying out such experiments as can be done within the limitations of the treaty, and allowing international observation of the principal ones, as we did with Project Gnome, we believe that other nations may be able to observe for themselves the practicability, safety, and feasibility of using nuclear explosives for large excavation projects.

"Our opinion that there is international interest in Flowshare was strengthened by the discussions on Flowshare and international cooperation in Flowshare which occurred in Geneva during the Third International Conference on the Peaceful Uses of Atomic Energy.

"We probably should begin to give serious consideration to some form of international cooperation in Flowshare. This could either be in connection with the IAEA or other appropriate international groups." (See p. 13, Hearing)

25

D

26
/

THE WHITE HOUSE
Washington

February 11, 1964

~~SECRET~~

NATIONAL SECURITY ACTION MEMORANDUM NO. 282

MEMORANDUM FOR: The Secretary of State
The Chairman, Atomic Energy Commission

SUBJECT: Project SULKY

In view of the delicacy of the balance of US-USSR relationship in other major areas plus the tight schedule for conducting SULKY at this time, the President has decided to defer further consideration of SULKY without prejudice until next winter in the expectation that the intervening time could be profitably used for a review of possibilities for improving nondetection and to give a longer period in which to select the most favorable wind and weather conditions.

In addition, the President requests the Secretary of State, in consultation with other responsible officers of the Government as appropriate, to give immediate consideration to the probabilities and problems involved in obtaining from the nations signatory to the Test Ban Treaty approval for the utilization of nuclear energy for peaceful explosions under adequate international controls. The President requests that a first report on this matter be available to him by the end of March.

McGeorge Bundy

~~SECRET~~

DECLASSIFIED
Authority NSC memo 8/30/95
By NARA, Date 11-13-07

~~SECRET~~

27
May 7, 1964

MEMORANDUM FOR MR. McGEORGE BUNDY
THE WHITE HOUSE

SUBJECT: International Approval of Nuclear Explosions for
Peaceful Applications

National Security Action Memorandum No. 282 requested a first report by the end of March on "the probabilities and problems involved in obtaining from the nations signatory to the Test Ban Treaty approval for the utilization of nuclear energy for peaceful explosions under adequate international controls." This is a response to that request. The problem posed is one which necessarily must be reviewed periodically in the light both of the international situation and the state of our technical development.

There are two ways that international agreement to the conduct of Plowshare excavation projects might be obtained. One would be the amendment of the Test Ban Treaty to exclude peaceful uses applications of nuclear explosives from the restraints of the Treaty. The other method would be the approval of specific described projects through the voting procedures prescribed for amendment of the Treaty. Our view, at the present time, is that the second method would be the more likely of success.

There appears to be little likelihood, however, that the Soviets would be receptive at this time to any proposal to exempt Plowshare excavation experiments or applications from the Treaty restraints. We have very little evidence of active Soviet interest in the application of nuclear excavation techniques (See Tabs A and B), although the USSR leads the world in large-scale excavation with conventional explosives. Clearly, at the time of the Test Ban Treaty negotiations, Khrushchev did not envisage early amendment of the Treaty, and his statements about the use of nuclear detonations for peaceful purposes were set in a vague and indefinite future. Perhaps encouraging is Khrushchev's April 20 statement about allocating "...more fissionable materials for peaceful uses - in atomic power stations, in industry, agriculture, in medicine, in the implementation of major scientific, technical projects, including the distillation of sea water." We note, however, that nuclear excavation was not included specifically in the enumerated activities.

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Sec. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

GROUP 1
Excluded from automatic
downgrading and
declassification

~~SECRET~~

DECLASSIFIED
Authority NWJ RAC 007-027-2-5
By [Signature] NARA, Date 4/15/83

~~SECRET~~

~~SECRET~~

We understand that four or five years will be required to develop the devices and cratering technology which would be required in large-scale excavation projects, such as a new trans-Isthmian canal. During this period it would seem important to stimulate international interest and cooperation in the nuclear excavation program to the maximum extent possible. By international participation in Plowshare symposia, observation of cratering shots or experiments and perhaps exchange of test data, it should be possible to demonstrate the economic development potential of nuclear excavation, the absence of hazard to human life and the safeguards that could be provided to prevent evasion of the Treaty for weapons development purposes. Development of international acceptance or even of cooperative effort by Treaty signatories would obviously provide the most favorable atmosphere in which to seek and gain support for international agreement, under the voting procedures of the Treaty, for approval of specific excavation projects.

ACDA has suggested that the most likely opportunity for raising the question of a treaty amendment for the conduct of nuclear excavation projects probably will be in the context of future international discussion of a comprehensive test ban. In the context of such discussions it might be possible to obtain some easing of the restraints on the conduct of nuclear explosions for peaceful purposes. It is difficult to predict, however, when such discussions might be reopened and it is possible that discussions in this context might lead to more rather than less restrictive conditions on Plowshare. (See Tab C)

While development of the nuclear devices can proceed within the Treaty limits, there are some uncertainties as to the limitations placed on the development of the necessary cratering technology by the Treaty language. The committee established by NSAM 269 is charged with reviewing the facts relating to any prospective nuclear test "which might violate or be regarded as violating the Nuclear Test Ban Treaty." The discussions to date by that committee seem to indicate that the Treaty restraints may well inhibit the development of cratering technology and become a limiting factor earlier than the estimated first large-scale excavation project some four or five years hence. (In presenting the Treaty to the Senate, Administration witnesses, while acknowledging that large-scale applications such as a trans-Isthmian canal could not be carried out under the Treaty, clearly expressed the view that properly devised experiments for developing the excavation technology could be conducted, see Tab D. Similar testimony was given as recently as 4 March 1964 before the Senate Committee on Commerce.) Certain of the tests designed to develop the necessary cratering technology raise concerns of Treaty violations with some of the committee members. The concern is with the definition of "radioactive debris...present outside the territorial limits" of the United States. While it seems useful to identify the conflicting views on this problem (as is done below), it is not our purpose here to address ourselves to its solution, which is the proper concern of the NSAM 269 committee. The concerns expressed in that forum, however, underline the urgency of establishing an atmosphere of international acceptance of and cooperation on peaceful excavation activities.

~~SECRET~~

~~SECRET~~

~~SECRET~~

The AEC believes that the review committee established by NSAM 269 can adopt policies of appraisal which would allow many of the required cratering experiments to be carried out. If so, the need for a Treaty amendment would be obviated for some years. Furthermore, if cratering experiments are carried out with international observation, an atmosphere can be created in which an amendment could be obtained more easily.

In AEC's opinion a particularly appropriate consideration in appraising cratering experiments, in view of the Treaty limitation on causing debris "to be present" beyond territorial boundaries, is the internationally accepted technical definition of when radionuclides are considered "not present". Such a definition is found in the health protection guides of both the USSR and the US (10 CFR 20) as well as in the guides of the International Commission on Radiation Protection and the International Atomic Energy Agency. In addition a precedent for the use of this definition in interpreting an international treaty is found in the operation of the McMurdo nuclear reactor and the very slight attendant release of radioactivity within the limits of 10 CFR 20. This procedure is considered by the US to be consistent with the prohibition in the Antarctica Treaty of 1961, to which the USSR is a party, against "disposal there of radioactive waste material". Soviet representatives have visited this facility.

AEC points out that the legal basis for such policies of appraisal is the principle of "de minimis" or the application of a "rule of reason" to interpret otherwise imprecise provisions of law. Since the Test Ban Treaty does not contain precise technical criteria, it becomes necessary for the NSAM 269 committee to decide when debris might be considered "present". Among other relevant material to be considered in deciding this question is the understanding of the Senate in advising and consenting to the Treaty. In this connection, the Foreign Relations Committee reported, after hearing all the testimony on this and other questions, its understanding that "the Plowshare program will not be seriously inhibited by the Treaty".

It should also be noted that, since the technical definition of when radionuclides are "not present" is when their concentration is small compared to maximum permissible concentrations under health protection guides, the levels of radiation involved in this definition are internationally accepted as being far below the point where there might begin to be a health hazard. Thus, this definition would be consistent with a stated objective of the Treaty "to put an end to the contamination of man's environment by radioactive substances."

ACDA is concerned about the international repercussions if debris attributable to U.S. underground nuclear explosions should be picked up outside our territorial limits (Tab E). The Tass press release and related cable from Moscow commenting on the accidental venting of one of our recent Nevada tests (Tab F) show that the Soviets are fully alert to this possibility. In these circumstances, ACDA is concerned that the good faith of the United States in seeking arms control agreements could be thrown into doubt by possible charges of violation, and that our reputation as a country which takes its treaty obligations seriously could be prejudiced. As to the

~~SECRET~~

~~SECRET~~

~~SECRET~~

consideration suggested by the AEC for appraising what is acceptable under the Test Ban Treaty, ACDA believes that its application would result in a substantial risk of incurring the international consequences described above. The Treaty speaks simply of causing "radioactive debris" to be "present" outside territorial limits and there is nothing in the text itself to indicate that the presence of small amounts of debris should be accepted. Finally, ACDA calls attention to arguments that could be made against the suggested policy of appraisal on the basis of official U.S. records published in connection with the Treaty. (Tab E)

Whether or not the AEC interpretation is accepted by the review committee as a standard of appraisal, it can be borne in mind as possible rebuttal should any nuclear test accident, either weapons or Plowshare, bring forth Soviet charges of Treaty violations.

In summary, we urge

- a) the question of amending the Treaty be kept under continuing surveillance,
- b) a program of Soviet and international participation and cooperation in the U.S. nuclear excavation development program be devised and carried out, and
- c) the acquisition of intelligence on Soviet interest and planning in this area be intensified.

/s/ U. Alexis Johnson

U. Alexis Johnson

~~SECRET~~

THE WHITE HOUSE

Washington

28

~~SECRET~~

July 20, 1964

MEMORANDUM FOR HOLDERS OF NSAM NO. 282

SUBJECT: Project SULKY

1. The Review Committee on Underground Nuclear Tests, on behalf of the President, reviewed the memorandum dated May 7, 1964, "International Approval of Nuclear Explosions for Peaceful Applications," prepared by the Secretary of State in response to NSAM No. 282 and endorsed the three general courses of action proposed in that regard.
2. In addition to the courses of action proposed by the Secretary of State, the Review Committee also concurred in the desirability of continuing the study of the proposal of the Atomic Energy Commission that some objective standard be used to establish a technically defined dividing line between when radioactive debris is "present" and when it is "not present" within the meaning of the Limited Test Ban Treaty.
3. The Review Committee noted and generally endorsed the desirability of taking action along the lines of the proposals contained in Section II of the comments contained in the AEC memorandum dated June 26, 1964.
4. The Review Committee noted that the general coordinating responsibility for the implementation of the above actions is the responsibility of the Secretary of State with the active operating support of the other responsible agencies, particularly, the Atomic Energy Commission, Department of Defense and the Arms Control and Disarmament Agency.
5. The Review Committee also concurred in principle with the desirability of conducting Project SULKY sometime in December. It was agreed that the AEC would include Project SULKY in its regular authorization request for WHETSTONE II and that final approval would be given at that time after the Review Committee had an opportunity to consider the final analysis of the predicted fallout associated with the test.

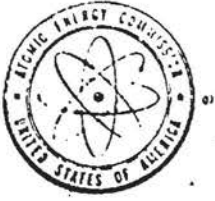
McGeorge Bundy

DECLASSIFIED
E.O. 13292, Sec. 3.5
NLJ/RAC 08-53
By isl, NARA, Date 3-17-10

~~SECRET~~

29

E



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

30

APR 7 1965

Dear Dean:

I was very pleased to receive your letter of March 19, and to learn of your views concerning the development and implementation of a program of international cooperation in nuclear excavation. The Commission is in general agreement with the ideas you have expressed on this matter and we are pleased that the Department of State is giving priority attention to this matter. Further, we are in agreement with you concerning the general desirability of having foreign observers witness the excavation experiments which can be conducted within the limits of the present Treaty and in a fashion that will engender a favorable international climate. We also recognize that an amendment will presumably be necessary to permit large-scale projects such as a Trans-Isthmian Canal and we agree with the evolutionary approach you have advocated for laying the basis for this action. We believe that proposed experiments falling within the limits of the existing Treaty should continue to be assessed on a case-by-case basis by an interagency committee that will carefully review the merits of each proposal under the circumstances then prevailing.

Regarding the implementation of the international program there is, as I understand it, general agreement between our staffs that as a first step we should initiate discussions with the USSR in order to assess the degree of their technical interest in Plowshare and their current receptivity to developing a bilateral exchange with the U.S. We also might determine their views on some broader possibilities for international cooperation involving the IAEA. I believe this first step is important to a further definition of the program of international cooperation. As you point out, such a program of cooperation must be evolutionary in nature, depending as it does on our ability to carry out nuclear excavation experiments within the constraints of the Limited Nuclear Test Ban Treaty. Likewise, I believe the attitude of the USSR will have an important bearing on the evolution of the program.

DECLASSIFIED
E.O. 13292, Sec. 3.5

NLJ/RAC 08-52

By NARA, Date 7-10-09

GROUP 1
Excluded from automatic
downgrading and
declassification

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

~~SECRET~~

In order that this important first step can be taken soon, I would like to outline for you the general way in which we would propose to carry out our program to assure foreign participants that the experiments are in fact for peaceful purposes.

1. I believe you know that we are planning to propose a major nuclear excavation experiment to be carried out this coming winter in Idaho. We believe that this experiment will be possible within the Limited Nuclear Test Ban Treaty. This experiment would be the first major nuclear cratering project outside our Nevada Test Site. We, thus, regard it as a logical occasion on which to initiate international observation and participation in nuclear excavation experiments. This proposal is also consistent with the long-standing commitment of the U.S. to make the results of Plowshare available to the world, a goal which has led us to plan on having international observation for all Plowshare experiments outside the Nevada Test Site.

In this experiment, we would be prepared to forego any diagnostic instrumentation of device performance. In addition, to the extent appropriate and within then existing classification constraints, we would be prepared informally and on an evolutionary basis to conduct future experiments along the general lines suggested in our latest proposal to ACDA for safeguards on Plowshare projects under a comprehensive Test Ban Treaty. Presumably, the degree of foreign interest and participation in experiments will evolve to the point where many of these measures would be in effect for the last experiments in the nuclear excavation development program. I believe the foregoing procedure would provide quite satisfactory assurance to any objective foreign participant that the experiments were designed for peaceful and not weapons development. In this connection, it is worth recalling that, without any such procedures, the foreign nationals who participated in the very extensive observer program for Project Gnome in December 1961, seemed satisfied that the objectives of the experiment were peaceful.

~~SECRET~~

2. For other reasons than international cooperation, we have made a diligent effort to declassify information concerning the Plowshare program. This effort culminated over one year ago in a new Classification Guide for the Plowshare program, which essentially provides that all information concerning the effects of nuclear explosions for peaceful purposes is unclassified. This, of course, is the essential information to anyone interested in using nuclear explosives for peaceful purposes.

On the other hand, the design of the nuclear explosive will, of course, continue to be protected. It has been our position from the beginning in suggesting international cooperation, that when the time comes for foreign applications we would supply the nuclear explosive and arm and fire it under U.S. custody and security. Satisfactory intergovernmental arrangements specifying our rights and covering such matters as U.S. control, indemnification, etc., would, of course, have to be developed before any foreign projects could proceed. We believe in this regard that arrangements could be worked out with the other country to allow it to share in the control of the timing of the detonation to insure the safety of its public.

As you may be aware, in 1963 we assisted the Government of Australia to perform an evaluation in depth of the role Plowshare could play in Australia's development. We believe this study has provided one of the best assurances yet that meaningful and extensive foreign participation in the Plowshare program is possible and that a very substantial amount of unclassified technical information is available. In the course of this study, a three man Australian technical team usefully spent about two months in this country discussing this subject in detail with AEC staff and with our laboratory and field personnel. Even so, they covered only two possible applications--nuclear excavation and mining--and did not analyze any specific Australian projects in detail.

I hope that with these comments it will now be possible for us to consider specifically the timing and manner of an approach to the Soviet Union to determine the degree of their technical interest in Plowshare and their attitude toward international cooperation. We will, of course, be pleased to cooperate in whatever arrangements you make for technical discussions of Plowshare with the Soviet Union.

~~CONFIDENTIAL~~

~~SECRET~~

- 4 -

In closing, I would like to reiterate the view expressed in my letter of February 12, 1965, that I am convinced we should initiate the proposed cooperative program very soon if we are to derive the maximum benefit from the favorable foreign attitudes that have been expressed as of late towards this technology.

Cordially,

Chairman

The Honorable Dean Rusk
Secretary of State

~~SECRET~~

31

MF

POSSIBLE UTILIZATION OF THE QATTARA DEPRESSION,
WESTERN EGYPT, FOR HYDRO-ELECTRIC POWER GENERATION

The Qattara Depression, shown on the attached map, is in the Western Desert of Egypt, southwest of Alexandria. It has an area of about 4,800 square miles. The floor of the Depression averages about 200 feet below sea level, and its deepest point is about 445 feet below sea level. The Depression is separated from the Mediterranean by ground ranging up to 500 feet above sea level.

It has been proposed that a conveyance channel be built to carry Mediterranean water into the Depression, for the purpose of power generation, at a rate of flow that would be equal to the rate of evaporation. Under desert climatic conditions, the evaporation would be at least 60 inches a year, over the area of 4,800 square miles, this corresponds to 21,000 cubic feet per second. This is 14.5 million acre feet per year, about equal to the low-water flow of the Nile at Aswan Dam. With a head of 200 feet and 75 per cent generating efficiency, the average electric power production could be about 270 megawatts, nearly a quarter of that from the Aswan High Dam. If the project costs \$100 million, the installed capacity would cost about \$350 a kilowatt. This is not much higher than the per kilowatt cost of the power capacity at the High Dam.

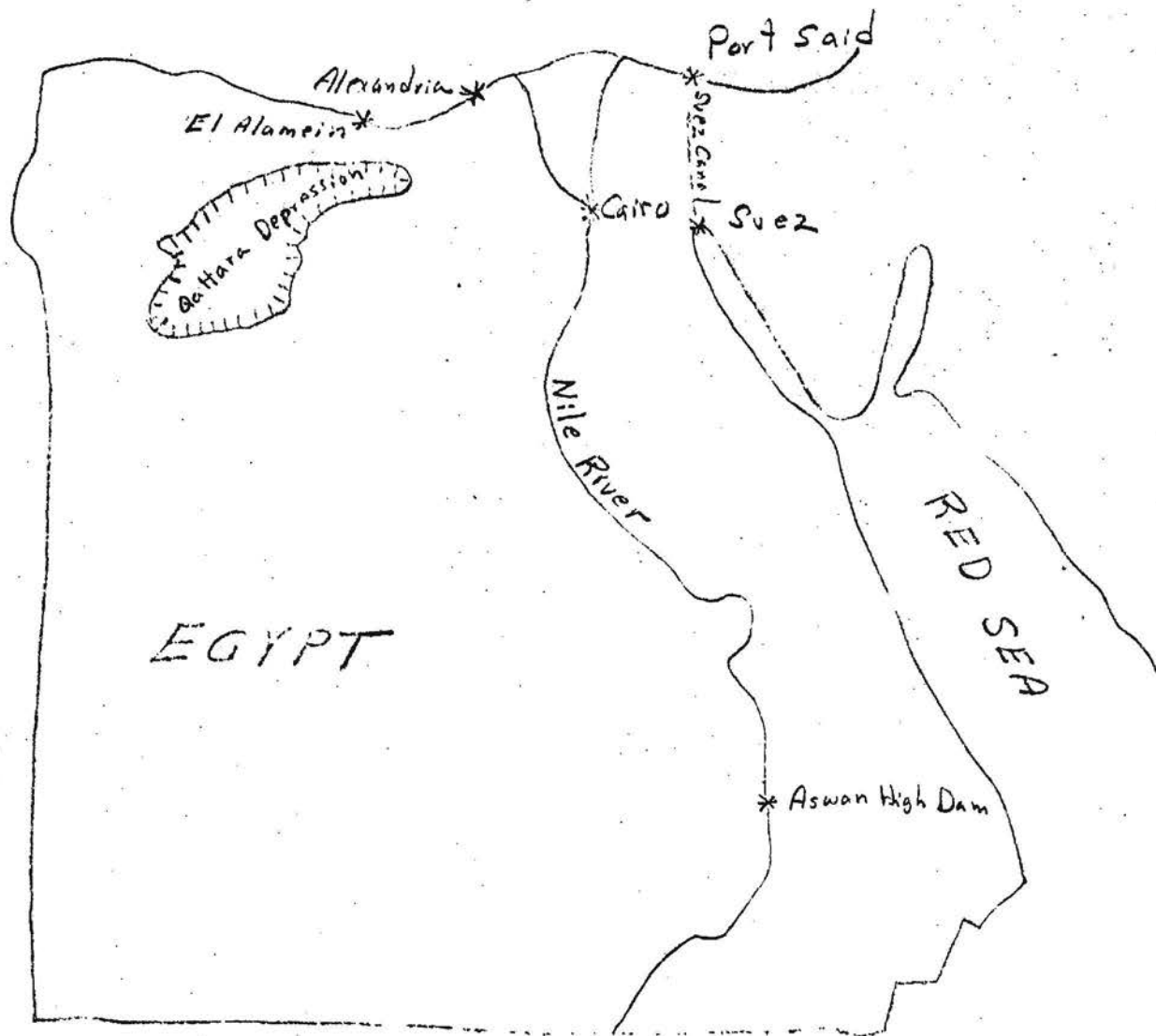
The principal cost might be the conveyance channel, which would be somewhere around 45 miles long, and, if it were a pipe or tunnel, would have a diameter of about 60 feet. Various proposals have been made involving a combination of open channels over part of the distance from the sea and

tunnels over the rest. The length of tunnels in different proposals apparently varies from 2.5 miles to 37 miles. A West German group has investigated the surface and sub-surface geology, and has made an aerial survey. Cost estimates for several alternative routes should be completed by February 1966.

The suggestion has been made by Egyptian nationals from time to time that the cheapest and best way to build a conveyance channel might be with a series of underground nuclear explosions.

Several preliminary studies based on sketchy information have been made for using nuclear explosives to excavate a conveyance channel through the higher ground that separates the Depression from the sea. At present, there is not sufficient information to evaluate the technical and economic feasibility of this proposal. The studies indicate, however, that this solution has merit and warrants additional investigation.

MEDITERRANEAN SEA



IAR

II

~~SECRET~~

34

DRAFT LETTER - Not Sent

Honorable Glenn T. Seaborg
Chairman, Atomic Energy Commission
Washington, D.C. 20545

Dear Glenn:

The report "Implications of Cooperation with the UAR in PLANSIDE" has been brought to my attention. In view of the major implications that such discussions would have for the UAR, Israel, India, and other potential nuclear nations, I believe this question should be thoroughly reviewed before any discussions are initiated with foreign governments. I understand that after a discussion at Principals concerning the proposal to approach India on Project PLANSIDE, there was agreement that any approach would be carefully reviewed by all interested agencies. The study which you forwarded to RSC Bundy had not been cleared by the DoD.

I suggest that your recommendations on this matter be circulated to Principals for appropriate review.

Sincerely,

cc: Mr. McGeorge Bundy

DISTRIBUTION

Orig & cc -- addressee
cc: McGeorge Bundy, WH cc: SecDef
OSD Files cc: DepSecDef
RSC Files cc: Mr. Yarmolinsky
RSC Rdg
Dir/AC
DASD(AC)
Prepd by: Arthur Barber/75146/4E832

DECLASSIFIED

Authority: RHC 007-27-2-7-9
By: JOL vARA Date: 9/2/07

REF SOURCE No. 11432

~~SECRET~~

DOWNGRADED AT 12 YEAR
INTERVALS: NOT AUTOMATICALLY
DECLASSIFIED. DOD DIR 5800.10

205

I-21229/66

TAD

III

2531

36

INCOMING TELEGRAM Department of State

FILE COPY

~~CONFIDENTIAL~~

85
Action

013521

EUR
Info

SS
G
SP
SAH
L
H
SAL
P
USIA
NSC
INR
CIA
NSA
DOD
NIC
ACDA
SCI
AEC
WHB
RSR

CONTROL: 13521
REC'D: FEBRUARY 16, 1966 5:10 PM
FROM: MOSCOW
ACTION: SECSTATE 2531

- BUNDY-SMITH
- BATOR
- BOWDLER
- BOWMAN
- CHASE
- COOPER
- JESSUP
- JOHNSON
- KEENE
- KOWER
- MOODY

~~CONFIDENTIAL~~ FEB 16

1. AT END MY MEETING WITH GROMYKO ON FLIGHTS BY AIRCRAFT CARRYING NUCLEAR WEAPONS (EMTEL 2529), GROMYKO SAID SOME OF MY REMARKS HAD REMINDED HIM OF ANOTHER AND UNRELATED MATTER. RECALLING QUESTION OF NUCLEAR EXPLOSIONS FOR PEACEFUL PURPOSES HAD BEEN RAISED BY SECRETARY IN CONVERSATION WITH HIM ABOUT YEAR AGO, SAID DOBRYNIN HAD SOME TIME AGO DISCUSSED THIS QUESTION IN WASHINGTON AND EXPRESSED SOVIET READINESS EXCHANGE VIEWS ON IT. HE WISHED NOTE THAT EVEN THOUGH US HAD BEEN FIRST TO RAISE MATTER, THERE HAD BEEN NO REACTION BY US AND BALL NOW IN OUR COURT. I AGREED THIS QUESTION HAD BEEN DISCUSSED BETWEEN US FROM TIME TO TIME AND SAID I WOULD INFORM DEPT OF HIS REFERENCE TO IT.

GP-3.

DECLASSIFIED
E.O. 13292, Sec. 3.4
By 110 NARA, Date 11-13-07

~~CONFIDENTIAL~~

37

1965

THE WHITE HOUSE
WASHINGTON

December 23, 1965

MEMORANDUM FOR MR. BUNDY

Mac --

Following up your suggestion, the BOB obtained the attached letter from Seaborg stating that the reduced weapons program proposed by the AEC as part of the budget cut "would not be inconsistent with our commitments under the safeguards announced in connection with the signing of the limited test ban treaty. . . . and will permit a reasonable underground test effort for the fiscal year 1967."

I think the letter is adequate and have told the BOB that we do not propose to pursue the matter any further.

Spurgeon
Spurgeon

Att. :

Cy ltr 12/22
Seaborg to
Schultze

✓
38



~~CONFIDENTIAL~~
UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

DO-1/65-9/183
C1

386

DEC 22 1961

Dear Charlie:

I understand you would like a statement of the Commission's position regarding the reduction in the 1967 budget estimate for on-continent weapons testing.

You will recall that in September the Commission proposed a budget of \$2.667 billion for FY 1967. During the course of your review, our budget was reduced to about \$2.4 billion - \$10 million of the reduction being against on-continent testing. We were then required to identify additional reductions of \$134 million. This resulted in a Commission budget of \$2.267 billion, or a reduction of \$400 million from our original request.

In order to meet the further budget reduction of \$134 million, we had concluded it was necessary to effect a reduction of \$20 million in the weapons program of which \$15 million was in the on-continent testing program and \$5 million in weapons production activities. This was a most difficult decision. It was made only after detailed consideration of the impact of other alternatives in relation to the Commission's total program responsibilities.

Under the reduced level, we will as a matter of priority undertake those events which are necessary to proof test development devices scheduled for early weaponization and entry into stockpile and those events necessary to insure the reliability of the stockpile. We do not believe that our efforts in these areas will be adversely affected under the proposed budget level. The effects of eliminations and deferrals will be most pronounced on our planned accomplishments under our long-range weapons research and development program, and will perhaps restrict the level of our support to the DOD weapons effects test program.

Nevertheless on balance, we believe the program we would conduct in fiscal year 1967 would not be inconsistent with our commitments under the safeguards announced in connection with the signing of the limited test ban treaty. Therefore, while the testing we can conduct will be

DECLASSIFIED
Authority 007-27-2-9-8
By JDC WARA Date 9-21-17

GROUP 3
Downgraded at 12 year
interval if not
previously declassified

~~CONFIDENTIAL~~

ing the
in the
S.C.,
ation
person

~~CONFIDENTIAL~~

-2-

less than the program we had requested, the funds approved for inclusion in the budget will permit a reasonable underground test effort for the fiscal year 1967.

We realize that conclusions in this area represent matters of judgment and we would be pleased to discuss this further with you and Mr. Bundy if you should so desire.

Cordially,

(Signed) Glenn T. Seaborg

Chairman

**Honorable Charles L. Schultze
Director, Bureau of the Budget**

~~CONFIDENTIAL~~

Mr. Bundy's Files (2)
Handwritten material for
his files

DECLASSIFIED
E.O. 13292, Sec. 3.6
NLJ/RAE 08-53 (122)
By id, NARA, Date 3-17-70

39

December 10, 1965

~~CONFIDENTIAL~~

Dear Glenn:

I have reviewed your letter of November 26, requesting my views on a possible visit by AEC Plowshare experts to the UAR in the near future, and have concluded that we should defer action on this proposal until the matter has been given further consideration within the Government.

Although I recognize that the AEC team would not be in a position to make any formal commitments, I think it is clear that such a visit at this time would inevitably focus considerable attention on the project and encourage the belief that the U. S. was prepared to support it. I do not believe that we have yet really thought through all of the political, economic, and arms control implications that would be involved in either encouraging or undertaking this project.

Therefore, before you go any further with the plans for the visit, I would like to discuss the problem with you, Alexis Johnson, Bill Foster, Charlie Schultze, and Dave Bell. I believe that our meeting would be most effective if you would arrange a preliminary meeting of the responsible staff officers in the various interested agencies to define the issues.

Sincerely,

15/

McGeorge Bundy

The Honorable Glenn T. Seaborg
Chairman, Atomic Energy Commission
Washington, D. C. 20545

SMKeeny:jb:12-10-65
bcc: Mr. Komer
Mr. Johnson
→ Mr. Bundy's files (2)
SMK file and chron
SMK come-back copy

~~CONFIDENTIAL~~

THE WHITE HOUSE
WASHINGTON

39a

12/10/65

NOTE TO MR. BUNDY

Mac --

Following up our conversation yesterday, I have prepared for your signature the attached letter to Glenn Seaborg concerning the possible visit of AEC Plowshare experts to the UAR.

Spurgeon
Spurgeon Keeny

Att.

12/4/65

39-b

Spurge:

Coordinate a view with Komer.

McG B

MEMORANDUM

39-C
—

THE WHITE HOUSE

WASHINGTON

~~CONFIDENTIAL~~

December 3, 1965

DECLASSIFIED
E.O. 13292, Sec. 3.5
NLJ/RAC 08-53
By ial, NARA, Date 3-17-10

MEMORANDUM FOR MR. BUNDY

Subject: Proposed Visit of AEC Plowshare Experts to the UAR

In the attached correspondence, Glenn Seaborg is seeking your final approval of a proposal to send AEC Plowshare experts to the UAR to study the possible application of nuclear explosives to build a 50-mile canal from the Mediteranean Sea to the Qattara Depression.

Although Seaborg states that you have already implied your approval of this project, I think it is a very poor idea politically and technically. You will recall that we turned off the earlier AEC proposal to send the same experts to India to drum up enthusiasm for Plowshare projects there. If we go ahead with the UAR on this one, I can see little basis for refusing similar assistance to India, Israel (a sea-level canal to bypass the Suez), or any other country that is interested. This may be a good idea eventually, but I wonder whether now is the time to begin.

If we do go ahead with this proposal, I question whether it makes good technical sense to turn it over to the AEC Plowshare experts. These individuals are experts in the problems of nuclear excavation and device design, but they don't necessarily know very much about the practical aspects of large-scale engineering projects. I would suggest, therefore, that if we are serious about this matter, the study should be headed up by practical engineers, with appropriate advice from Plowshare experts and economists familiar with the problems of the area.

Finally, I do not think we should launch this project in any form without careful coordination at the top level of the State Department and AID.

*Spurgeon
Coordinates
& views
with Rosen*

Att.: 5138/470 (copy)

Spurgeon
Spurgeon M. Keeny, Jr.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

UNITED STATES
ATOMIC ENERGY COMMISSION

WASHINGTON 25, D. C.

RECEIVED
McGEORGE BUNDY'S OFFICE

39-d

1965 NOV 29 PM 4 07

NOV 26 1965

OFFICE OF THE CHAIRMAN

Dear Mac:

Attached is a letter on the possible application of Plowshare to the Qattara Depression Project in the UAR. You will recall our discussing this Project briefly in our meeting of November 15. You indicated at that time that a visit to the UAR and discussion of the Project by Plowshare technical experts would seem to be acceptable providing no political commitment were made. This in essence is what is proposed in the attached letter.

If you have any further questions, kindly let me know.

Cordially,



Glenn T. Seaborg

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

When separated from enclosures, handle this document

as **UNCLASSIFIED**
(Insert proper classification)

DOCUMENT TRANSMITTED
HEREWITH CONTAINS CLASSIFIED
DEFENSE INFORMATION

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

RECEIVED
MCGEORGE BONDY'S OFF

39-2

1965 NOV 29 PM 4 07

NOV 26 1965

OFFICE OF THE CHAIRMAN

DECLASSIFIED
E.O. 13292, Sec. 3.5
NLJ/RAC 08-52
By il, NARA, Date 7-10-09

Dear Mac:

During the course of my recent visit to the United Arab Republic in late September, the subject of a possible Plowshare application to the Qattara Depression Project was raised by officials of the UAR Atomic Energy Establishment. The Qattara Project envisages the excavation of a 50 mile canal or tunnel from the Mediterranean Sea to the Depression, a drop of 50 meters, with a 165 MWe generating station to be constructed at the Depression end of the canal or tunnel.

You may recall that this subject was broached by the UAR during the 1964 Geneva Conference on the Peaceful Applications of Atomic Energy and further discussed at the September 1964 General Conference of the International Atomic Energy Agency in Vienna. At that time, the Department of State advised Commissioners Palfrey and Ramey at the IAEA General Conference that, in principle, the U. S. Government is very interested in developing international programs in this field and that this interest could be mentioned to nations which inquired about cooperation in this field. This advice was given in the context of the then recent endorsement on behalf of the President by the Review Committee on Underground Nuclear Tests of the courses of action proposed in the May 7, 1964, memorandum, "International Approval of Nuclear Explosives for Peaceful Applications."

Following the 1964 IAEA General Conference, Commissioner Palfrey also visited the UAR where the possibility of Plowshare experts visiting the UAR to discuss the Qattara Project in more detail was mentioned. The Commission, as you know, believes that nuclear excavation holds great promise and we are convinced that our efforts in this field are not fundamentally incompatible either with the concept of a comprehensive test ban treaty or our broader efforts to minimize the problem of nuclear weapons proliferation.

GROUP 3
Downgraded at 12 year
intervals; not
automatically declassified

~~CONFIDENTIAL~~

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

~~CONFIDENTIAL~~

-2-

During my discussions in Cairo, UAR officials suggested that U.S. Plowshare experts visit the UAR to survey generally the situation there. We have concluded that it would be desirable at this time to arrange such a visit as a means of determining whether further cooperation with the UAR on a Plowshare Project would be feasible. However, before doing so, I would like to know whether you have any comments on a possible visit of AEC Plowshare experts to the UAR in the near future.

Cordially,



Glenn T. Seaborg

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

~~CONFIDENTIAL~~

41

1964

Nuc. Testing Gen. ✓

NATIONAL SECURITY COUNCIL

42

November 16, 1964

MEMORANDUM FOR MR. BUNDY

Mac --

In your absence I sent word to Seaborg that I was certain you would agree with his view that we should be in no hurry to settle the strike of Radiation Monitors if, by holding out, we could achieve a sounder labor policy at the test site. I also said that I felt that you would have no objection to minor delays in the testing program as long as such delays did not become too long, and that we would appreciate being kept informed of progress on this matter.

Correct

*Hold Horace
KL 11/19*

Charles E. Johnson



~~CONFIDENTIAL~~

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

42a

NOV 16 1964

Dear Mac:

On November 6 we advised Mr. Charles Johnson that a strike of Radiation Monitors at the Atomic Energy Commission's Nevada Test Site had resulted in a site-wide shutdown and that the events scheduled for November 12 and 13 would be delayed on a day to day basis, depending on the duration of the strike. As of this time, this strike is still in progress and we are unable to predict when a settlement will be reached.

This strike, one of several at the Nevada Test Site over the last few years, occurs at a time when we are endeavoring to negotiate new labor agreements to eliminate uneconomical labor practices at the Nevada Test Site and the Nuclear Rocket Development Station. We believe that these new agreements will conform more equitably to the steady, year-round operations prevailing in Nevada since September 1961. Injudicious settlement of the current Monitors' strike might jeopardize our general negotiating objectives.

The immediate underground nuclear test programs at the Nevada Test Site which include preparation for SULKY, a PNE cratering shot, several advanced weapon development experiments, and preparation for several Department of Defense experiments will be delayed by the strike on a day for day basis. These important programs cannot be delayed indefinitely. However, on balance we do not consider it necessary to settle this particular strike immediately to insure that particular test events are executed on the previously set schedule. Rather, we believe that in the long run, the interests of the nation's nuclear test program will be better served by adhering consistently to the sounder labor policy now being implemented and

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

GROUP 3
Downgraded at 12 year intervals; not automatically declassified

DECLASSIFIED

Authority RAC 007-27-2-10.5
By JOL vARA Date 9-24-17

~~CONFIDENTIAL~~

2173

~~CONFIDENTIAL~~

- 2 -

contemplated for completion in mid-1965. If the strike continues for an appreciable time, we will re-evaluate our position and possible courses of action.

If you wish to discuss this matter in greater detail or if we can provide any additional information, please let us know.

Sincerely yours,



Chairman

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

~~CONFIDENTIAL~~

~~DECLASSIFIED~~

THE WHITE HOUSE
WASHINGTON

Authority NSC 79F00059

By DCA/LB, NARA, Date 11-4-89

June 19, 1964

~~SECRET~~

NATIONAL SECURITY ACTION MEMORANDUM NO. 307

TO: The Secretary of State
 The Secretary of Defense
 The Chairman of the Atomic Energy Commission
 The Director of Central Intelligence
 The Chairman of the Joint Chiefs of Staff
 The Director of Arms Control and Disarmament Agency
 The Director of the Bureau of the Budget
 The Special Assistant to the President on Science and Technology

SUBJECT: Review of Underground Nuclear Tests

The President has reconstituted the Review Committee on Underground Nuclear Tests. The Review Committee, under the chairmanship of the Special Assistant to the President for National Security Affairs, will be composed of the Secretaries of State and Defense, the Chairman of the Atomic Energy Commission, the Director of Central Intelligence, the Chairman of the Joint Chiefs of Staff, the Director of the Arms Control and Disarmament Agency, the Director of the Bureau of the Budget, and the Special Assistant for Science and Technology, or their designated representatives.

The Review Committee will review the annual underground nuclear test programs and the quarterly requests for authorization of specific scheduled tests. The Review Committee will consider the policy and technical justifications for the proposed tests to determine if they are consistent with the requirements of national security and foreign policy.

The results of the Committee's review and its recommendations should be transmitted to the President in time to allow him to give full consideration thereto before the scheduled events are to take place.

The Review Committee is also directed to perform the functions specified in NSAM No. 269.

Distribution:
 1 cy - C. Johnson
 1 cy - NSC Files

McGeorge Bundy
 McGeorge Bundy

~~SECRET~~

INCOMING TELEGRAM *Department of State*

W. J. ...
Mr. Jesting Gen.

53

LIMITED OFFICIAL USE

Action
FE

Control:
Rec'd:

13194
MAY 16, 1964
8:37 AM

46

Info
SS
G
SP
H
SAL
EUR
IO
DAC
SCI
UFW
E
P
CU
USIA
NSC
INR
CIA
NSA
OSD
ARMY
NAVY
AIR
NIC
AEC
WHB
RMR

FROM: TOKYO

ACTION: SECSTATE 3396

INFO: MOSCOW 54
LONDON 136
PARIS 184
CINCPAC 617

DATE: MAY 16, 5 PM (SECTION TWO OF TWO)

CINCPAC FOR POLAD

WE ARE THINKING THAT IT WOULD BE USEFUL IN INTERESTS OF STRENGTHENING UNIVERSAL PEACE AND GOOD NEIGHBORLY RELATIONS BETWEEN OUR TWO COUNTRIES, OR SOVIET UNION AND JAPAN JOINTLY OR SIMULTANEOUSLY CAME FORWARD WITH STATEMENT WHICH WOULD EXPRESS THEIR GENERAL STRIVING FOR PEACE AND WOULD SUPPORT CALL TO GOVTS OF NUCLEAR POWERS CONCERNING IMMEDIATE CESSATION OF UNDERGROUND NUCLEAR TESTS. SUCH STEP BY GOVTS OF OUR COUNTRIES COULD SERVE TO SETTLE QUESTION OF FINAL CESSATION OF ALL TYPES NUCLEAR TESTS. HAVING STUDIED STATEMENTS OF JAPAN'S GOVT LEADERS, WHO IN CONNECTION WITH SIGNING OF MOSCOW TREATY SPOKE ABOUT STRIVING TO APPLY EFFORTS TOWARD ATTAINMENT OF FULL PROHIBITION TESTS OF NUCLEAR WEAPONS, WE HOPE THIS PROPOSAL OF OURS WILL MEET UNDERSTANDING ON YOUR SIDE.

SOVIET GOVT, IT IS UNDERSTOOD, IS READY EXAMINE ANY PROPOSALS OF JAPANESE GOVT, DIRECTED TOWARD STRENGTHENING OF PEACE AND GUARANTEEING SECURITY, ABOVE ALL IN REGION OF FAR EAST.

I HOPE, MR. PRIME MINISTER YOU WILL AGREE WITH ME THAT IT WORTH CONSIDERING SERIOUSLY HOW IT MAY BE POSSIBLE TO NORMALIZE COMPLETELY RELATIONS BETWEEN SOVIET UNION AND JAPAN, HOW TO MAKE THEM REALLY GOOD-NEIGHBORLY. WE, AS BEFORE, SUPPORT POINT OF VIEW THAT THIS AIM WOULD BE SERVED BEST BY PEACE TREATY, IN

LIMITED OFFICIAL USE

REPRODUCTION FROM THIS COPY IS PROHIBITED UNLESS "UNCLASSIFIED"

LIMITED OFFICIAL USE

-2- 3396, MAY 16, 5 PM (SECTION TWO OF TWO), FROM TOKYO

CONCLUSION OF WHICH BOTH SOVIET AND JAPANESE PEOPLES ARE, IN OUR OPINION, INTERESTED IN EQUAL MEASURE.

IN MY VIEW, RELATIONS BETWEEN SOVIET UNION AND JAPAN ARE DEVELOPING IN RECENT YEARS IN FAVORABLE DIRECTION. TRADE IS GROWING, USEFUL CULTURAL AND SCIENTIFIC EXCHANGE IS BEING REALIZED.

FROM YEAR TO YEAR WE CONCLUDE FISHING NEGOTIATIONS SUCCESSFULLY. RECENTLY AGREEMENT WAS RENEWED CONCERNING FISHING BY JAPANESE FISHERMEN FOR SEA WEEK IN SOVIET TERRITORIAL WATERS IN REGION OF SIGNALING ISLAND (TN: PROBABLY RUSSIAN NAME FOR KAIGARA ISLAND).

THIS IS, OF COURSE, GOOD. HOWEVER, IT IS NECESSARY TO GO FURTHER IN DEVELOPMENT OF SOVIET-JAPANESE RELATIONS. FOR THIS PURPOSE, IN OUR OPINION, POSSIBILITIES ARE FAR FROM EXHAUSTED.

FURTHER DEVELOPMENT OF TRADE RELATIONS, OF CULTURAL AND SCIENTIFIC CONNECTIONS, EXPANSION OF CONTACTS BETWEEN GOVERNMENTAL AND OTHER LEADERS OF SOVIET UNION AND JAPAN, CERTAINLY WOULD HELP SIGNIFICANTLY TO ADVANCE STRENGTHENING TRUST AND MUTUAL UNDERSTANDING BETWEEN OUR COUNTRIES.

WE WOULD BE PLEASED IF YOU, MR. PRIME MINISTER, COULD VISIT SOVIET UNION ON AN OFFICIAL VISIT OR FOR VACATION AT ANY TIME CONVENIENT TO YOU.

THE STAY IN JAPAN OF DELEGATION OF SUPREME SOVIET OF USSR IS SUITABLE OPPORTUNITY FOR USEFUL EXCHANGE OF VIEWS ON QUESTIONS REPRESENTING OUR MUTUAL INTEREST.

ALLOW ME TO EXPRESS ASSUREDNESS THAT STRENGTHENING OF CONTACTS BETWEEN HIGHEST LEGISLATIVE ORGANS OF OUR COUNTRIES AND EXCHANGE OF PARLIAMENTARIAN DELEGATIONS WILL SERVE IMPORTANT MATTER OF FURTHER IMPROVING SOVIET-JAPANESE RELATIONS.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

-3- 3396, MAY 16, 5 PM (SECTION TWO OF TWO), FROM TOKYO.

WITH ESTEEM, (SIGNATURE)

6 MAY 1964 UNQUOTE.

EMMERSON

BAP

LIMITED OFFICIAL USE

Pluc Dist. General

Leating
Staff
Wes
File
47

February 11, 1964

MEMORANDUM FOR MR. BUNDY

Mac --

Alexis Johnson is sending this memorandum to the Secretary today and wanted you to know about it. He did not supply me a copy of Butch's memorandum (referred to on page 3) and I am obtaining a copy separately.

Alex had a question as to whether there should be an NSAM to the Secretary of Commerce on the new procedure. I suggested that they consider giving Commerce a copy of the aide memoire covered by a memorandum from the Secretary of State containing a foreign policy guidance to Commerce applicable to exports of items covered by the aide memoire.

You should notice that the United States will not attempt to judge whether an item of equipment will be for use in connection with an underground test or a test in a prohibited environment. The United States will ban the export of items to be used for any type of test.

The ACDA reservation would appear to be impracticable and would place the Munitions Committee and the Department of Commerce in an untenable situation.

I have raised a question with Alex's staff concerning the extent to which the other signatories, particularly the UK, are following a similar procedure. There has been an informal discussion with the UK and the matter will be discussed again following the Secretary's approval of the new procedure. There has not been any consultation with other signatories who have specialized capabilities for the design or manufacture of equipment that the French may want. I believe that my questioning may prompt a review of this matter in the Alex Johnson office.


Charles E. Johnson

Nuc Sect. Gen. ✓

THE WHITE HOUSE
WASHINGTON

48

Mac

The Mantel statement
is based on his analysis
of 1962 May tests.

The AEC effort to
minimize fallout is
described in the attached
statement of current
post Treaty procedures.
dy



~~SECRET~~
UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

138
Testing 48a
C Johnson

JAN 9 1964

Dear Mac:

As you requested, I am providing as an enclosure a summary of the actions being taken by the Atomic Energy Commission to assure, within reasonable bounds, that future underground tests do not violate the terms of the partial Test Ban Treaty, and to also insure that the Government is aware of any possible measurable amounts of radioactive debris from nuclear tests being placed beyond the national boundaries.

Some of these actions are extensions of procedures in effect for many years to insure the well-being of persons in the vicinity of the Nevada Test Site. Others are those now necessary to cope with the additional restrictions imposed by the treaty.

Please let me know if further information is desired.

Sincerely yours,

Chairman

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

Enclosure:

Cys 1A,2A AEC Actions Being Taken
to Insure that Weapons Tests
Will be Conducted Within the
Terms of the Partial Test Ban
Treaty

When separated from enclosure, handle this document

~~SECRET~~
UNCLASSIFIED

(insert proper classification)

~~SECRET~~

DO NOT
REPLY
RES

1430

46

1963

CHAIRMAN

50

THE JOINT CHIEFS OF STAFF

Special Assistant to the President
for National Security Affairs

1. ~~C. Johnson~~ ~~Markas for~~
2. ~~Keeney~~ ~~Markas for~~
3. Peter to BKS