

Copy ~~...~~ of 6 copies each
of 8 pages series A

~~TOP SECRET~~

DEPARTMENT OF DEFENSE
MILITARY LIAISON COMMITTEE
P. O. Box 1814
Washington 13, D. C.

TOP SECRET
AUTHORIZATION
Name *[Signature]*

Date 11/26/58

MONTHLY REPORT NO. 91

of the

CHAIRMAN, MILITARY LIAISON COMMITTEE

to the

SECRETARY OF DEFENSE

for the period

1 October - 30 October 1958

Encl. to 12-8-58

26 November 1958

Reproduction of this document
in whole or in part is prohibited
except with permission of the
issuing office.

*EXCLUDED FROM
AUTOMATIC DOWNGRADING SCHEDULE*

XPJ - 4643 - 59

11-26-58

~~TOP SECRET~~

27 Nov 4 22 56

~~RESTRICTED DATA~~ 841030-17
~~ATOMIC ENERGY ACT 1954~~ 1344

GROUP 1 EXCLUDED

2

~~TOP SECRET~~

MONTHLY REPORT NO. 91
of the
CHAIRMAN, MILITARY LIAISON COMMITTEE
to the
SECRETARY OF DEFENSE
for the period
1 October - 30 October 1958

	<u>Copy No.</u>
The Secretary of defense	1
Assistant Secretary of Defense (Research and Engineering)	2
Chairman, Joint Chiefs of Staff	3
Chief, Armed Forces Special Weapons Project	4&5
Files - Military Liaison Committee	6

941030-18

ii

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~ATOMIC ENERGY ACT 1954~~

3

~~TOP SECRET~~

TABLE OF CONTENTS

	<u>Page No.</u>
I. PRODUCTION	1
1. General	1
2. Reactor Schedules and Operations	1
II. NUCLEAR POWER	2
1. Natural Circulation Water Reactor	2
2. Navy Aircraft Nuclear Propulsion Program	2
III. WEAPONS	3
1. TX-43 Yield Versus Weight	3
2. Zipper Production	3
3. TX-41 Weapon Design	3
IV. SPECIAL PROJECTS	4
1. Transmission of Intelligence Information to the United Kingdom, 23-25 October 1958	4
2. The Classification Guide for Geneva Conference on Nuclear Test Cessation	4

iii

041050-19

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~ATOMIC ENERGY ACT 1954~~

4

~~TOP SECRET~~

I. PRODUCTION

1. General

An index of the current production rate of oralloy, plutonium, tritium and lithium-6 is given below. The first column of this index is obtained by comparing the actual production in September with the average monthly rate during Fiscal Year 1959 as forecast by the Atomic Energy Commission's May 1958 Planning Estimates. The second column indicates the percentages of the forecast quantities of Fiscal Year 1959 production that actually were produced thru the month of September (i.e., through three-twelfths or 25% of FY 1959.)

	<u>Percentage of Predicted Average Monthly Rate Produced During Sept '58</u>	<u>Percentage of Predicted Annual Production Pro- duced as of 30 Sept '58</u>
Oralloy (93.2% U-235)	103.9%	25.8%
Plutonium (Pu)	130.8%	26.8%
Tritium (T ³)	107.8%	19.6%
Lithium (95% Li-6)	106.9%	27.5%

2. Reactor Schedules and Operations

A. Hanford

The on-stream-efficiency for all the reactors was 81.2% with an average-while-operating power level of 13,383 MW. There were eleven normal uranium and four enriched uranium slug failures. The slug failures caused a total lost time in the reactors of ten days.

B. Savannah River

Production output of Plutonium was approximately one-third less than for the month of September. This reduction in output was

1

941030-20

~~TOP SECRET~~

~~RESTRICTED DATA~~

~~ATOMIC ENERGY ACT 1954~~

~~TOP SECRET~~

caused by an unsuccessful attempt to separate Neptunium and does not present a problem since the facility is only being operated at 50% capacity. The on-stream-efficiency was 86.5% and the average-while-operating power level was 8,652 MW. This power level is 600 MW's higher than the previous month due to use of the new cooling water pond. There were four slug failures which caused a total lost time in the reactors of five days.

II. NUCLEAR POWER

1. Natural Circulation Water Reactor

In September 1958 the Assistant to the Secretary of Defense (Atomic Energy) wrote the Chairman of the Atomic Energy Commission requesting early development and test of a natural circulation pressurized water reactor plant (b)(1),(b)(3):42 USC § 2162 (a) (RD) for submarine application. The request was based upon recent studies that indicated substantial potential gains in simplicity, reliability and safety of Naval pressurized water plants through the employment of natural convection. Such a system would eliminate the need for large coolant pumps and associated electrical power equipment.

2. Navy Aircraft Nuclear Propulsion Program

The Assistant to the Secretary of Defense (Atomic Energy) informed the Secretary of the Navy by memorandum on 22 September 1958 that the Deputy Secretary of Defense had authorized release of the remaining 3.5 million dollars of impounded Navy ANP funds. These funds are for continuation of a program authorized in 1957 for analyses and studies. Approval for continuation of this program and release of

~~TOP SECRET~~

RESTRICTED DATA
ATOMIC ENERGY ACT 1954

CONFIDENTIAL - 21

6

~~TOP SECRET~~

funds was given without commitment to a future overall Navy ANP Program.

III. WEAPONS

1. TX-43 Yield Versus Weight

The Chairman, Military Liaison Committee transmitted to the Chairman, Atomic Energy Commission a letter stating that the Department of Defense accepts weights of 1,930 pounds for the TX-43 and 2,000 pounds for the TX-43-X1. These weights were accepted in order to provide a yield of (b)(1),(b)(3):42 USC § 2162 (a) for these weapons.

2. Zipper Production

The Director of Military Application, Atomic Energy Commission advised the Chairman, Military Liaison Committee that the production of acceptable zippers (neutron generators) continues to be a serious problem. Current productivity forecasts for the Pinellas plant, despite vigorous and continuing action to improve current production yields, provide somewhat less than half the number of zippers required to support FY 1959 weapon delivery schedules. As a result, the Atomic Energy Commission has altered their production plans to (b)(1),(b)(3):42 USC § 2162 (a) (RD) Mark-28 bombs delivered this fiscal year.

3. TX-41 Weapon Design

The Director of Military Application, Atomic Energy Commission advised the Chairman, Military Liaison Committee that they are proceeding with weaponization of (b)(1),(b)(3):42 USC § 2162 (a) (RD) to meet the Department of Defense requirement for the TX-41 bomb. The

3

~~TOP SECRET~~

941030-22
~~RESTRICTED DATA~~
~~ATOMIC ENERGY ACT 1954~~

7

IV. SPECIAL PROJECTS

1. Transmission of Intelligence Information to the United Kingdom, 23-25 October 1958

In mid-October, the Director of Central Intelligence requested a Department of Defense-Atomic Energy Commission review for transmissibility of certain intelligence information to the United Kingdom at a meeting in Washington on the above dates. Certain categories of information proposed for such release had not previously been determined transmissible and therefore required a Presidential determination on this matter. Subsequent to Military Liaison Committee and Atomic Energy Commission findings as to transmissibility, the President on 22 October 1958 made the necessary determination.

2. The Classification Guide for Geneva Conference on Nuclear Test Cessation

In late October, the Military Liaison Committee received the subject Guide for the necessary declassification action prior to release of approved categories of information at the Geneva Technical Conference. The Committee determined that the information covered by the Guide, subject to certain recommended changes, might be published without prejudice to the defense interests of the Nation, provided the Chairman of the United States Delegation to this Conference determined publication

~~TOP SECRET~~

4

44-030-23
~~RESTRICTED DATA~~
~~ATOMIC ENERGY ACT 1954~~

4

~~TOP SECRET~~

~~TOP SECRET~~

of such information to be necessary to accomplish the mission assigned the United States Delegation. On 27 October 1958 a memorandum which outlined the Military Liaison Committee action noted above and inclosed a recommended list of changes to the subject Guide was forwarded to the Secretary of Defense.

941090-24

~~TOP SECRET~~

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~ATOMIC ENERGY ACT 1954~~

9