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Redacted
VERSION

FAMILY COMMITTEE
Minutes of Twenty-Eighth Meeting
December 7, 1950

ADWD-223

SARZUC 1950

A. Attendance.

The twenty-eighth meeting of the Family Committee was held Thursday, December 7, 1950 at 1:15 PM in Room B-117. Those present were:

- | | |
|----------------|---------------------|
| N. E. Bradbury | E. R. Jette |
| J. C. Clark | D. P. MacDougall |
| F. de Hoffmann | J. C. Mark |
| D. K. Froman | R. F. Taschek |
| R. W. Goranson | E. Teller, Chairman |
| M. G. Holloway | |

B. Minutes of Twenty-Seventh Meeting.

The Committee unanimously adopted the minutes of the 27th meeting as reported in ADWD-217 with the following correction:

On page 4 under Item 4 in the 8th line, the word "stability" should read "instability".

C. 1. Initiator.

The Family Committee examined memorandum GMX-491 (Appendix A) from Goranson to MacDougall about the initiator.

[Redacted]

[Redacted] Holloway agreed to examine the situation in detail and to inform MacDougall and Teller of his decision, which is to be reported to the Family Committee.

2. [Redacted]

Teller reported on his meetings at Berkeley on the X-ray experiment. It is preferable that the top of the X-ray tube be made of iron instead of aluminum since this will make the interpretation of the experiment easier. There was no objection to this change.

| |
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| DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW |
| 1ST REVIEW DATE: 8-30-97 |
| 2ND REVIEW DATE: 7/18/97 |
| 3RD REVIEW DATE: 7/18/97 |
| 4TH REVIEW DATE: 7/18/97 |
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| 99TH REVIEW DATE: 7/18/97 |
| 100TH REVIEW DATE: 7/18/97 |

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DOE b(3)

[Redacted]

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In this connection, the Committee examined memorandum SD-4506 by Seely (Appendix B).

In consequence, the following specifications were adopted:

[Redacted]

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Jette suggested that there might be some difficulty concerning the purity of the Fe with respect to manganese. It was agreed if there were any difficulty in achieving such purity Jette would inform Teller. In this case it will be attempted to change the specification.

3. (n,2n) Experiment.

[Redacted]

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4. Boron Plug.

The Committee took note of the fact that difficulties had been encountered in pressing boron carbide to its theoretical density.

DOE
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D. Longer Range Problems.

In line with Teller's report at the last meeting (see 27th Meeting, Item E), he mentioned the following idea concerning the deuterium reaction rate. Consider a slab of deuterium.

[Redacted]

DOE
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[Redacted]

DOE
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The multiplication of radiation by inverse Compton effect is not affected in first approximation.

It was noted that this idea might bring up again the need for light materials as containers.

E. Test Following Greenhouse.

[Redacted] Teller suggested that there were the following five major lines of attack:

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(a) [Redacted]

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(b) [Redacted]

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In a way, this test would include the kind of testing to be done under (a).

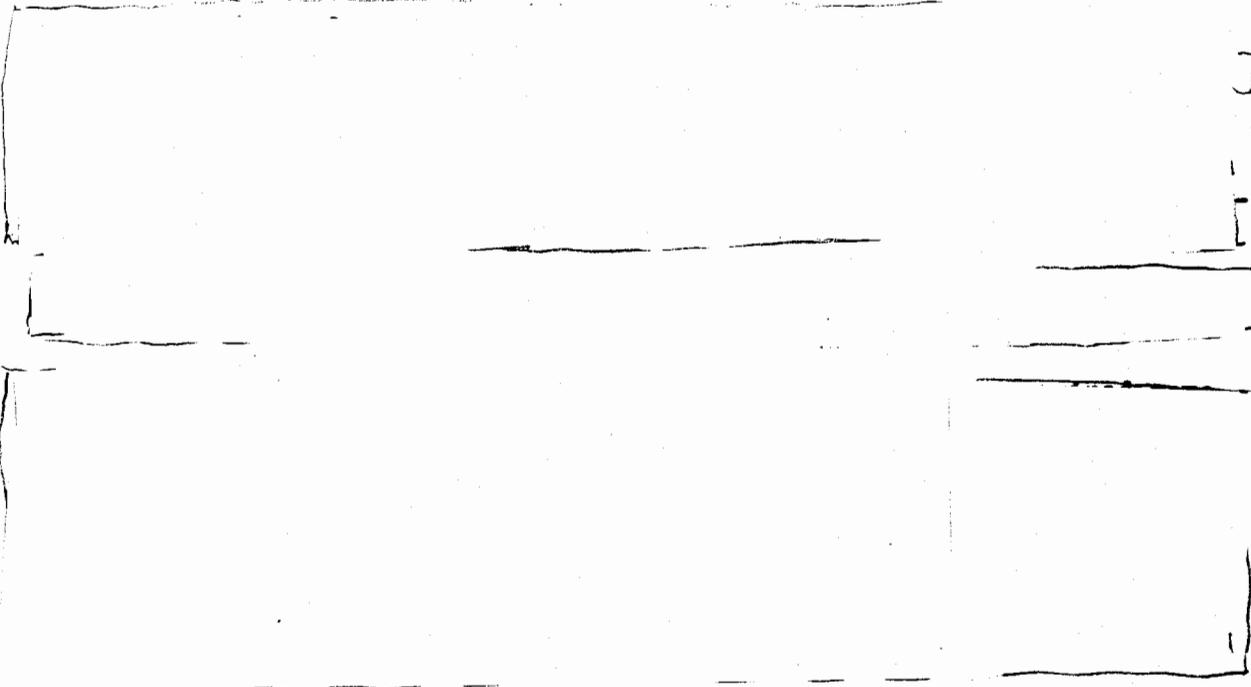
(c) One might attempt to test some kind of a "model" of a super. One would not expect to get a very large energy release but rather one would hope to try out principles involved in the super design such as perhaps the use of magnetic fields on walls.

[Redacted]

(d) One might make a test in the direction of the alarm clock by trying to set off a micro-alarm clock. A micro-alarm clock would be engineered to die out but one examines how it dies out.

[Redacted]

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F. Next Meeting.

The next meeting of the Committee is to take place on Thursday, December 21st. The main item on the agenda is to begin the final evaluation of the cylinder.

Frederic de Hoffmann
Executive Secretary.

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APPENDIX A

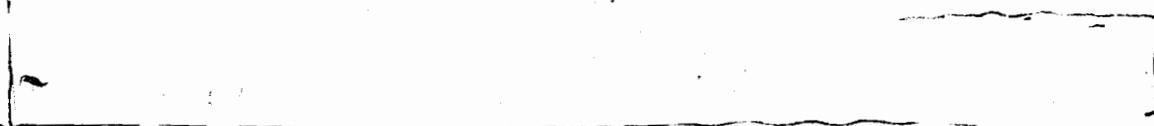
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D. P. MacDougall

1 December 1950

R. W. Goranson

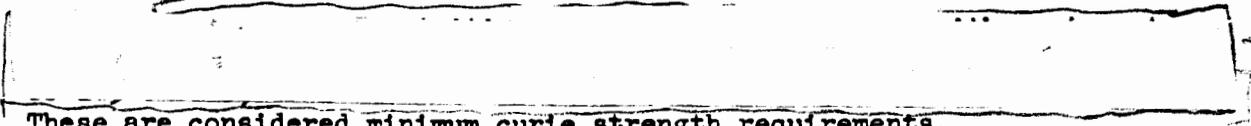
GMX-491



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DOE
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Specifications for this item "C" are proposed as follows (see drawing SK-W-1-216 D1):



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These are considered minimum curie strength requirements.



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R. W. Goranson

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MEMORANDUM FOR: Edward Teller

5 December 1950

FROM: Leslie B. Seely

SUBJECT:

DOE
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REFERENCE: SD-4506

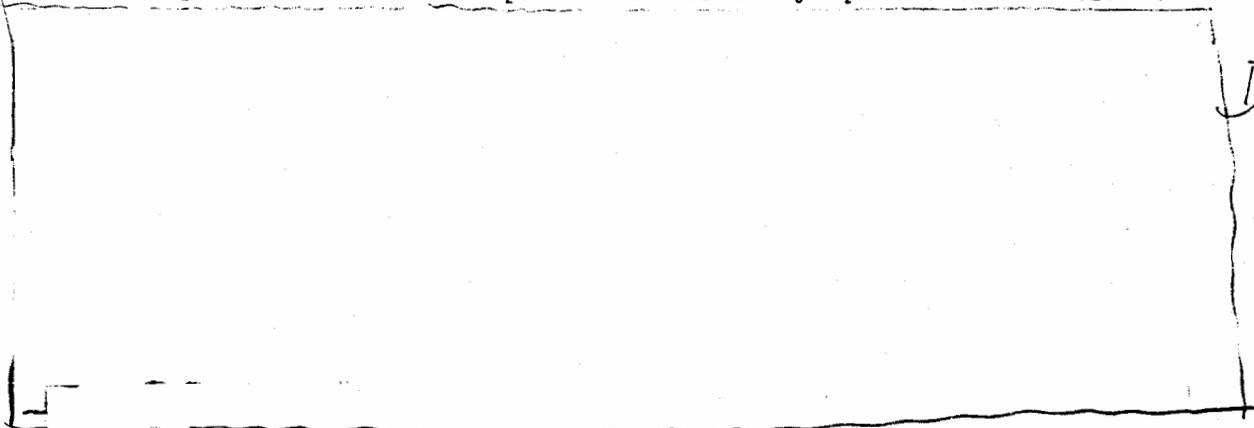
DOE
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The specifications to be placed on the X-Ray spots are as follows:



These changes have been discussed with various people, but no formal action for constructing the changed pieces has been initiated. I am forwarding a copy of this memorandum to Mr. MacDougall and I trust that the Family Committee will authorize these changes on 7 December.

Leslie B. Seely

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APPENDIX C

T-278

8

From: Conrad Longmire

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Memorandum to the Family Committee

December 4, 1950

Subject: [redacted]

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DOE
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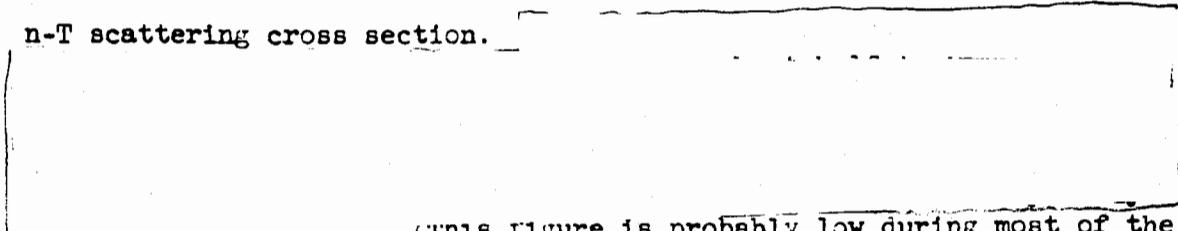
The calculation of the neutron heating is straight-forward, although uncertain as usual because of lack of knowledge of the

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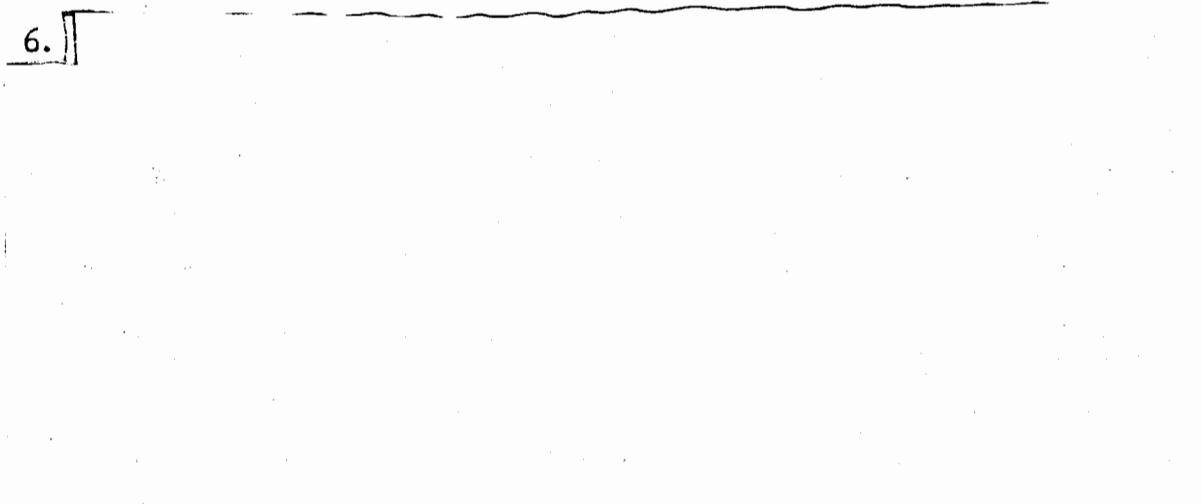
n-T scattering cross section.



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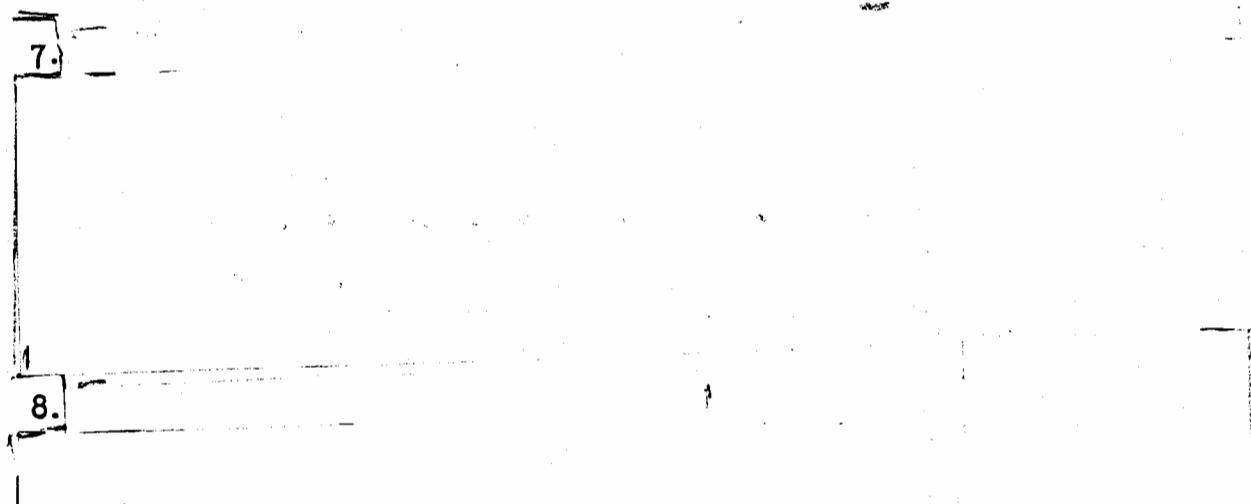
This figure is probably low during most of the first stage. Thus the interface will not run in quite as rapidly as our calculation indicates.

6.



DOE
b(2)

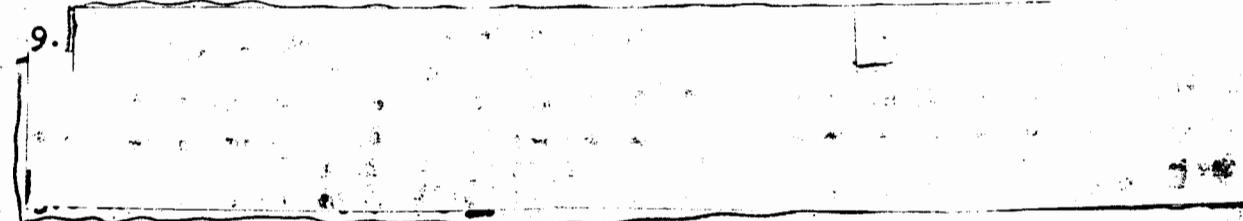
7.



8.

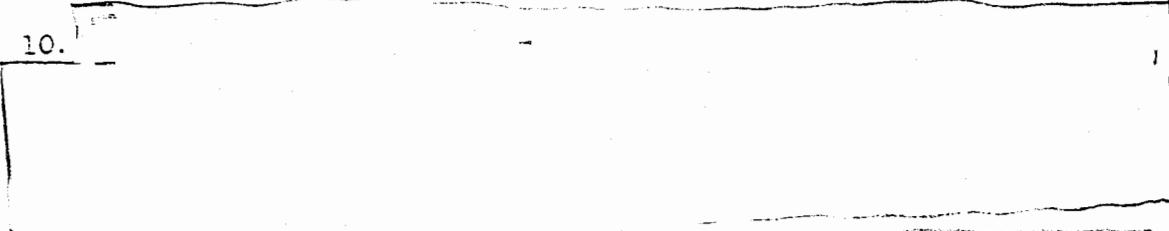
calculations are needed here; they required more time than has been available.) (*Further

9.



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10. 

DOE
b(3)

11. 

DOE
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Respectfully yours,

C. Longmire

Conrad Longmire

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