

ADWD-160

FAMILY COMMITTEE  
Minutes of Sixteenth Meeting  
July 13, 1950.

LAMD-352

Redacted  
VERSION

54470006937000

A. Attendance.

The sixteenth meeting of the Family Committee was held Thursday, July 13, 1950 at 1:15 PM in Room B-117. Those present were:

- |                  |                     |
|------------------|---------------------|
| N. E. Bradbury   | J. C. Mark          |
| J. C. Clark      | R. E. Schreiber     |
| F. de Hoffmann   | L. B. Seely         |
| A. C. Graves     | R. F. Taschek       |
| E. F. Hammel     | E. Teller, Chairman |
| E. R. Jette      | J. von Neumann      |
| E. Konopinski    | H. F. York          |
| D. P. MacDougall |                     |

B. Minutes of the Fifteenth Meeting.

The Committee unanimously adopted the minutes of the Fifteenth Meeting, reported in ADWD-157, with the following correction:

On Page 1 under attendance, J. P. MacDougall should read  
D. P. MacDougall.

C. Aberdeen Calculations.

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1ST REVIEW DATE: 03/22/96	2. CLASSIFICATION CHANGED TO:
AUTHORITY: AD	3. CONTAINS NO DOE CLASSIFIED INFO
2ND REVIEW DATE: 7-27-97	4. COORDINATE WITH:
NAME: Bradbury	5. CLASSIFICATION CANCELLED
	6. CLASSIFIED INFO BRACKETED
	7. OTHER (SPECIFY):

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It was reported that it is hoped that the Princeton MANIAC may be ready in October or November and this would tend to cut the present time of

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Correction Made on Page 4.

7-17-50 V. Kamez

File 14

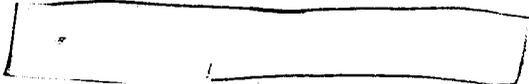
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RESTRICTED DATA  
This document contains restricted data as defined in the Atomic Energy Act of 1946.

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one month required to do a problem on the ENIAC to about one to three days on the MANIAC.

D.



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It will be recalled that at the last meeting the question of the mockup spot was left open. The following possibilities were considered with respect to the second spot and the X-ray experiment:

(1) Mockup spot identical or similar to the one shown in Figure 2 of the Fifteenth Minutes.

(2)

(3)

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(4) Eliminating the second spot for the X-ray experiment entirely.

Results of a discussion on Thursday morning, July 13, 1950 (de Hoffmann, Fermi, Konopinski, Seely, Sternheimer, Teller and York participating) led to the following picture:

It was agreed that possibility (4) should only be a last resort because people responsible for the X-ray experiment would like to make measurements on more than one spot if possible. This leads to a choice between possibilities (2) and (3).

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It is difficult to calculate the effect of these Taylor instabilities.

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The question was answered in the negative. Possibility (2) would give slightly more information on this point.

A more detailed description of possibility (3) was given.

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The Committee decided that an attempt should be made at possibility (3) but that if this proved infeasible either for reasons connected with the X-ray experiment itself or for reasons such as those mentioned by Schreiber, the second spot would be abandoned.

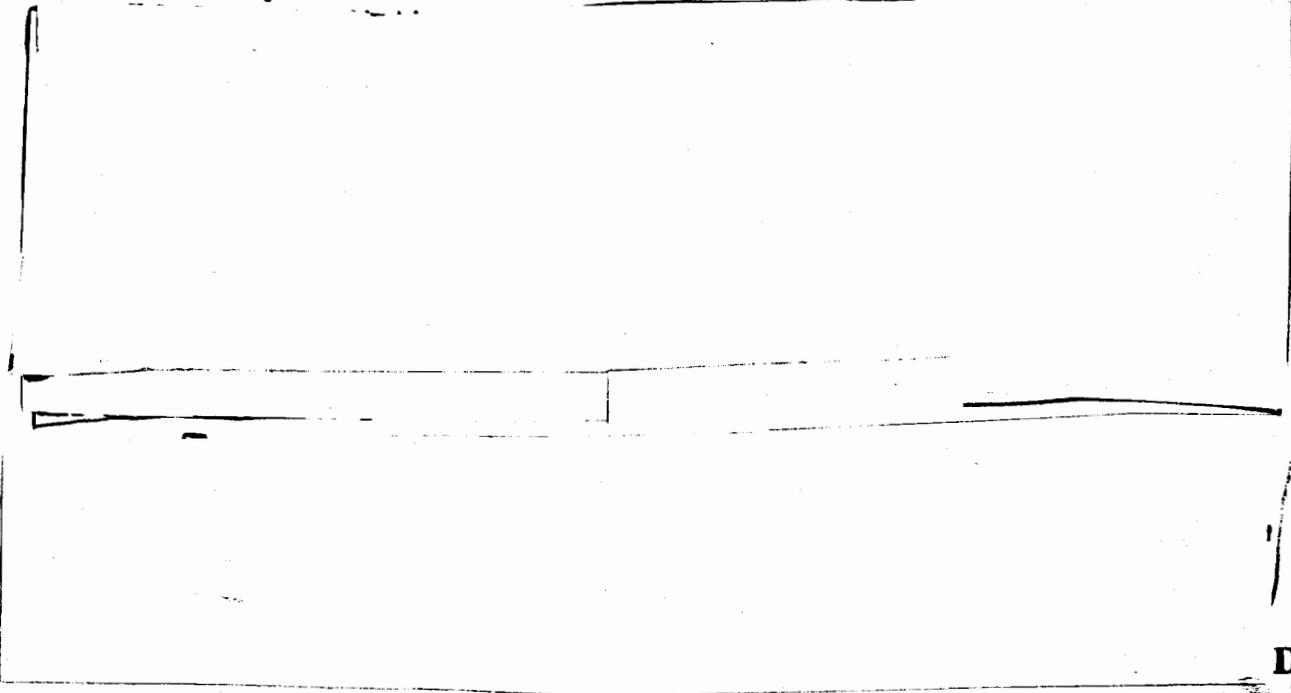
It was noted parenthetically that such a decision would probably allow one to revert to possibility (2) if it should appear very desirable.

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York reported that Fermi had raised objections to the previous estimates of the temperature at which the diaphragm in the X-ray tube would be heated by radiation. Fermi pointed out that the previous calculations had been performed as if the vertical wall of the tube were essentially non-existent.

In addition, at such a high temperature the walls would radiate and influence the surface temperature of the spot which is to be measured. Various schemes for eliminating this difficulty have been examined in a preliminary manner.

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A fit of approximately 10 m11 was considered as probably both sufficient and feasible.

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*Therese de Hoffmann*  
Executive Secretary.

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Distribution:

- |     |                  |     |                |
|-----|------------------|-----|----------------|
| 1A  | N. E. Bradbury   | 25A | E. Teller      |
| 2A  | W. C. Bright     | 26A | " "            |
| 3A  | S. W. Burriss    | 27A | " "            |
| 4A  | J. C. Clark      | 28A | " "            |
| 5A  | D. K. Froman     | 29A | " "            |
| 6A  | R. W. Goranson   | 30A | J. von Neumann |
| 7A  | A. C. Graves     | 31A | J. A. Wheeler  |
| 8A  | G. K. Hess       | 32A | Document Room  |
| 9A  | M. G. Holloway   | 33A | " "            |
| 10A | E. R. Jette      | 34A | " "            |
| 11A | " " "            | 35A | " "            |
| 12A | J. M. B. Kellogg | 36A | " "            |
| 13A | E. Konopinski    | 37A | " "            |
| 14A | D. P. MacDougall | 38A | " "            |
| 15A | " " "            | 39A | J. M. Keller   |
| 16A | D. P. MacMillan  | 40A | R. W. Spence   |
| 17A | J. H. Manley     | 41A | A. C. Graves   |
| 18A | J. C. Mark       | 42A | R. C. Smith    |
| 19A | H. C. Paxton     | 43A | W. E. Ogle     |
| 20A | F. Reines        | 44A | E. Teller      |
| 21A | " "              | 45A | " "            |
| 22A | " "              | 46A | " "            |
| 23A | A. R. Sayer      | 47A | " "            |
| 24A | R. F. Taschek    | 48A | " "            |

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