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LAMD-445 -1-

FAMILY COMMITTEE
Minutes of Twenty-Fourth Meeting
October 5, 1950

ADWD-197

SAA 2000 G 190000
Unique Document #

A. Attendance.

The twenty-fourth meeting of the Family Committee was held Thursday, October 5, 1950 at 1:15 PM in Room B-117 and Friday, October 6, 1950 at 9:00 A.M. in Room G-246. Those present were

G. H. Best	J. H. Manley
N. E. Bradbury	D. P. MacDougall
J. C. Clark	J. C. Mark
F. de Hoffmann	L. B. Seely
D. K. Froman	R. F. Taschek
R. W. Goranson	E. Teller, Chairman
A. C. Graves	J. L. Tuck
G. K. Hess	H. F. York
M. G. Holloway	

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW
1ST REVIEW-DATE: 8-19-97
AUTHORITY: ☐ADC ☐ADC ☒ADD
NAME: [illegible]
2ND REVIEW-DATE: 9/5/97
AUTHORITY: ADD
NAME: [illegible]
DETERMINATION [CIRCLE NUMBER(S)]
1. CLASSIFICATION RETAINED
2. CLASSIFICATION CHANGED TO:
3. CONTAINS NO DOE CLASSIFIED INFO
4. COORDINATE WITH:
5. CLASSIFICATION CANCELLED
6. CLASSIFIED INFO BRACKETED
7. OTHER (SPECIFY):

B. Minutes of the Previous Meeting.

The Committee unanimously adopted the minutes of the twenty-third meeting reported in ADWD-194.

C. Booster.

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Correction made on Page 3. 10-11-50 V.H.

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This RESTRICTED DATA
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Table I shows the main items considered in this discussion and the relative weights assigned in favor or disfavor of the particular gadget. There follows below an elaboration on some of these points:

[redacted]

DOE b(3)

2. This item concerns itself solely with the possibility that the assembly which is shot fails to operate; it does not concern itself with the question whether or not the observations have succeeded, the latter being treated under 3.

3. In assigning weights to this item, the discussion was influenced largely by the possibility that new experimental techniques might fail. However, the entire list of important experiments was considered. As a result, Table II was drawn up. [redacted]

DOE b(3)

DOE b(3)

5. While the Committee did not feel that this was an important item in the comparison, a small weight was assigned in favor of the booster because of such possibilities as boosting of small implosion gadgets by DT for use as a weapon. [redacted]

DOE b(3)

6. The Committee believed that the thermonuclear test program is likely to be a continuing one and that the development of observational techniques is an important item. [redacted] The Committee

DOE b(3)

then examined whether dropping the booster at this moment would substantially decrease the work of any one division. It was agreed that this would not be the case.

It is recognized that the design of the booster will be frozen by November 1, 1950.

DOE b(3)

Holloway reported that in view of this, he would order the active material through the Director's Office and this was unanimously agreed to.

DOE b(3)

DOE b(3)

It was agreed that only the pin studies could satisfactorily resolve this question.

3. Detonation Time.

DOE b(3)

d. GMX and J Divisions will have the joint responsibility concerning the rigidity of the entire structure.

[redacted] The rough estimates show that this is not likely to give trouble but it is believed that this point should be examined more carefully. [redacted] The resultant increase in volume is quite small. It was agreed that T Division would inform the members of the Family Committee by Monday whether or not it would be advisable to move the bottom down by the one-half centimeter.

[redacted]

I. X-Ray Experiment.

York reported that it was presently planned to close off the top of the vacuum tube by a 1/4 inch thick beryllium plate. If calculations and experiment prove that a thinner alluminum or magnesium plate will serve the same purpose, this may replace the beryllium. [redacted]

DOE b(3)

It was agreed that there was no objection to such a scheme.

DOE b(3)

ork and Teller agreed to provide CMR with a detailed design of the bottom plate by Monday, October 9th.

DOE b(3)

J. Scheduling.

DOE b(3)

K. Next Meeting.

There will be no meeting on October 12th. There will be a meeting on October 19th.

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TABLE I

ITEM	
1. Cheapness in terms of active materials only.	(a) Spring Tests Only (b) Test Program within Foreseeable Future
2. Likelihood of unexpected phenomona causing failure of DT to detonate.	
3. Possibility that experimental techniques fail and overall results are not obtained.	
4. Comparison of Experimental results (assuming these are O.K.) with theory and their influence on future calculations and predictions.	
5. Weapon interest per se other than eventual design of super.	
6. Test of experimental techniques of observations on thermonuclear reactions.	
7. Application of data from shot to future thermonuclear development.	
TOTAL	

DOE b(6)

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[redacted]

FIG. 1

DOE
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DOE
b(3)

FIG 21

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DOE b(3)

FIG 3

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[redacted]

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DOE
b(3)

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