ADWD-187

Redacted VERSION

LAMD-408
c. 34A

SAA 200069870000

FAMILY COMMITTEE
Minutes of Twenty-Second Meeting
September 7, 1950

A. Attendance.

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

J. C. Clark	C. L. Longmire
F. de Hoffmann	D. P. MacDougall
D. T. Doll	J. C. Potts
R. Garwin	R. D. Richtmyer
R. W. Goranson	M. Rosenbluth
D. B. Hall	R. H. Stark
M. G. Holloway	E. Teller, Chairman
	F. M. Walters

B. Minutes of the Twenty-First Meeting.

The Committee unanimously adopted the minutes of the Twenty-first meeting reported in ADWD-180 with the following correction:

> On page 3, second paragraph, replace the remarks attributed to Holloway by the following: "Holloway went on record as objecting strongly to the consideration of performing both GANEX and DINEX at the spring tests. He feels that this places too great a burden on NRL and the Laboratory at too late a date."

C. [redacted] The group agreed to these specifications.

DOE b(3)

D. Booster.

Longmire, Rosenbluth and Teller reported on the present status of the Booster calculations. [redacted]

DOE b(3)

[redacted]

Fifty cycles were needed to complete this new problem. Of these, 20 cycles have been completed to date. This is largely due to failure of the CPEC IBM machine, since under favorable conditions as many as 10 cycles a day could be completed.

The group agreed that it would be of utmost value if the IBM problems could be completed at the earliest possible date, as will become more evident from the discussion of specific points and scheduling below. In view of this, Stark was requested to join the meeting and the group discussed with him possible means of accelerating the IBM work. As a result of these discussions, the Committee recommended that (a) the IBM group explore the possibility of working on a two-shift schedule on the Booster, starting on or about September 11th when a second IBM repairman will join the group, and (b) Holloway and Stark explore the possibility of getting another CPEC machine added to the IBM facilities here at the earliest possible date.

The practical conclusions which could be drawn at the present time about specific parts of the Booster program were then taken up and are reported on below.

[redacted]

2. Strength of Initiator

[redacted] It was pointed out, however, that changing the strength by such factors would not

involve a redesign of the initiator and that, moreover, the final initiators could not yet be fabricated because they would decay before the test date so that there is no particular advantage in freezing initiator strength at this time.

DOE b(3)

DOE b(3)

DOE b(3)

TOP b(3)

4. (n,2n) Experiment)*

Due to the Taylor instability described earlier, one must now be prepared for two contingencies.

DOE b(3)

Thus the interpretation of the experiment is somewhat ambiguous.

DOE b(3)

DOE b(3)

DOE b(3)

DOE b(3)

*See minutes of 20th meeting, item E.

[redacted] It was agreed that this might be a useful method of calibrating the amount of attenuation of the 14-mev neutrons through the HE and Garwin agreed to give this matter further thought.

[redacted]

5. Scheduling

In order to see what the latest date for the final design of the Booster was, the group examined a schedule based on the assumption that the test date would be the 15th of April, 1951, and that air shipment of the gadget to Eniwetok was possible. It was recognized that the much slower means of surface transportation would be preferable and that if possible one should attempt to meet a completion date compatible with surface shipping.

Test date: April 15, 1951

↕ 14 days

Arrive Eniwetok

↕ 2 days

Leave Los Alamos Scientific Laboratory

↕ 28 days (if lucky, maybe only 18 days)

Received by Potts

↕ 84 days (if lucky, 28 days)

Design to CMR

↕ 4 days

Design frozen (i.e. mass specified)

In view of the above schedule and the necessity of some flexibility it was agreed that the latest date for the completion of the design of the Booster should be November 1, 1950. As indicated above, any earlier completion of the design would be most useful.

E

[redacted] DOE (b)(3)

J [redacted] Doll, Garwin, Hall and Goranson were requested to investigate this matter in detail and report to the Family Committee on September 21.

F. Future Meetings.

There will be no meeting next week. There will be a meeting on September 21.

Frederic de Hoffmann
Executive Secretary

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1A	N. E. Bradbury	25A	E. Teller
2A	W. C. Bright	26A	" "
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