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LAMD-278

FAMILY COMMITTEE MEETING
March 30, 1950
Fourth Meeting

This document consists of 7 pages
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GMX-420

The fourth meeting of the Family Committee was held Thursday, March 30, 1950 at 1:15 p.m. in Room A-204.

Present:

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Edward Teller, Chairman
J. C. Clark
D. K. Froman
R. W. Goranson
M. G. Holloway
D. P. MacDougall
J. C. Mark
R. F. Taschek

Teller brought up the subject of distribution of the minutes in connection with the request of J-7 for several sets, one of which was supposed to be earmarked for Berkeley. Clark and Goranson were delegated to ascertain their actual needs. It was agreed that copies of the minutes were not to be sent out of Los Alamos to scientific contractors. (Note added April 1: Reines agreed that three copies would suffice. These will be routed to him).

Froman requested clarification of the graph in the minutes of the previous meeting.

DOE b(3)

Teller pointed out that calculations by Longmire should be available in one or two weeks and therefore this discussion should not be made a part of the record. This figure may have to be changed and could become much larger. Final results depend on IBM calculations planned for June.)

DOE b(3)

IBM SITUATION

DOE b(3)

Goranson explained that this was being held up because it will be possible soon to obtain an

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estimate of the effect of varying H.E. to metal mass ratio.

[redacted] DOE b(3)

The machine work has not been started but it will not compete with anything else except the time of one person. The two machines needed for this problem will be run in off hours.

[redacted] DO b(3)

[redacted] This will be completed about the end of April. The nuclear part of the calculation, which will be similar in nature to Longmire's curves, could then be in [redacted]

[redacted]

If one had to recalculate for another mass this would take an additional two weeks. July 1 is therefore not a promise but a date to shoot for. Teller remarked that if for any reason the date has to be postponed beyond July 1 the Committee should be advised about such postponement at the earliest possible time because this will mean a delay in fabrication dates.

Mark added that it would be possible to accelerate dates for problems of this kind by running two shifts. At present there is not enough personnel to handle two shifts except as an emergency operation. The requirements would be one Ph D mathematician and three or four computers.

In reply to a query on other possible Monte Carlo runs, Mark replied that it will be of great interest to find out if we have a technique which will turn out to be as good as expected. [redacted] One could also consider the use of other IBM equipment such as Rand.

[redacted] DO b(3)

Three different Ov geometries have been tried.

DOE b(3)

These three geometries are as shown in Figure 1.

DOE b(3)

No. 2 is difficult because of higher predetonation probability; No. 3 is preferable.

DOE b(3)

Further discussion disclosed that predetonation probability is not likely to be the limit on mass.

PROBABLE YIELDS OF PROPOSED TESTS

DOE b(3)

DOE b(3)

The following compromise suggestion was made:

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Final decision on this point was to be left to J-Division and they would keep the Committee informed.

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PRELIMINARY DISCUSSION OF SCHEDULE PROGRAMING

Teller proposed that, as a preliminary to discussions two and three weeks hence, some thought might now be taken on this subject.

[redacted]

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Some notion of what the parts are to be is needed in order to determine how well things are going to hold

DOE b(3)

together.

DOE b(3)

Teller sketched a design which would require additional tritium.

DOE b(3)

In reply to Holloway, Goranson stated that a standard initiator was contemplated.

Meeting of April 6 will be held in room B-117. Topics are

Cryogenics DOE b(3)

R. W. Goranson
Acting Secretary

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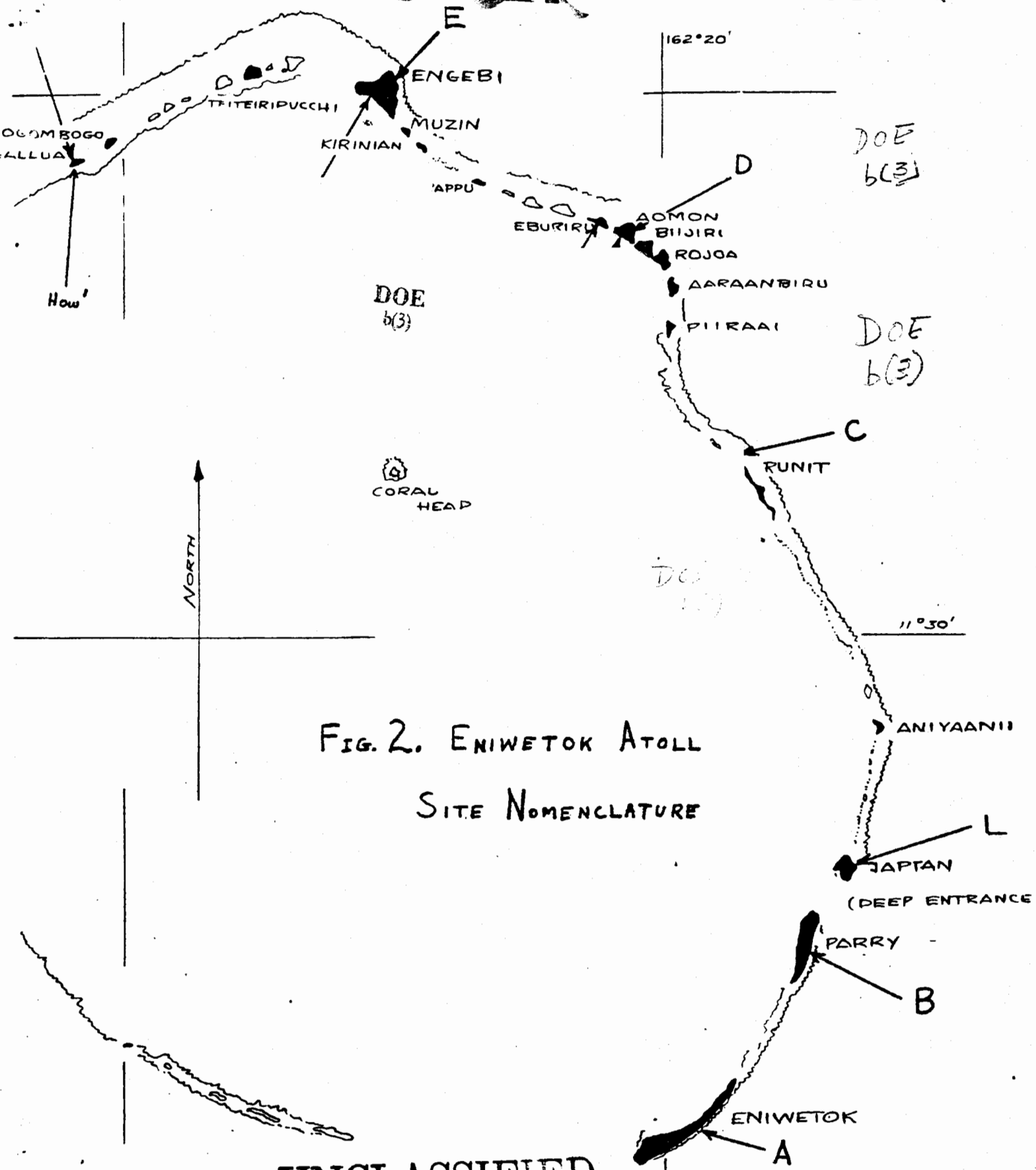

FIG. 2. ENIWETOK ATOLL

SITE NOMENCLATURE