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The Pogo Staff

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J Division

LOS ALAMOS SCIENTIFIC LABORATORY

of the

UNIVERSITY OF CALIFORNIA

Los Alamos, New Mexico

1 January 1954

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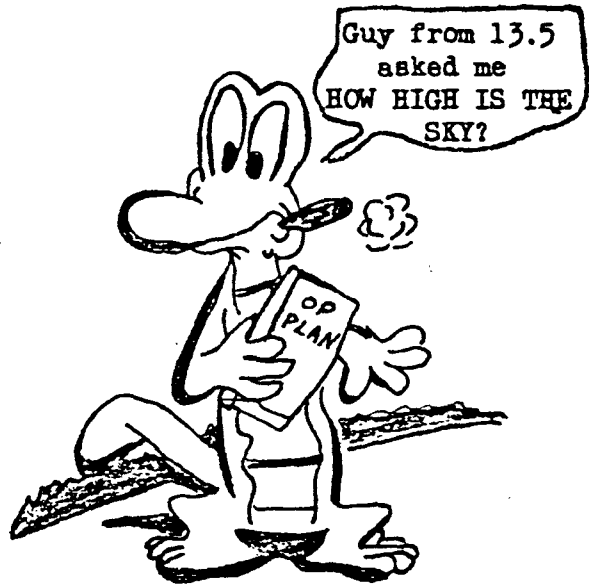
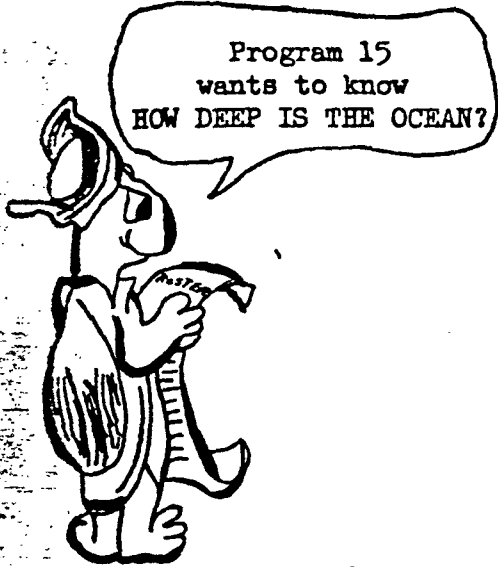
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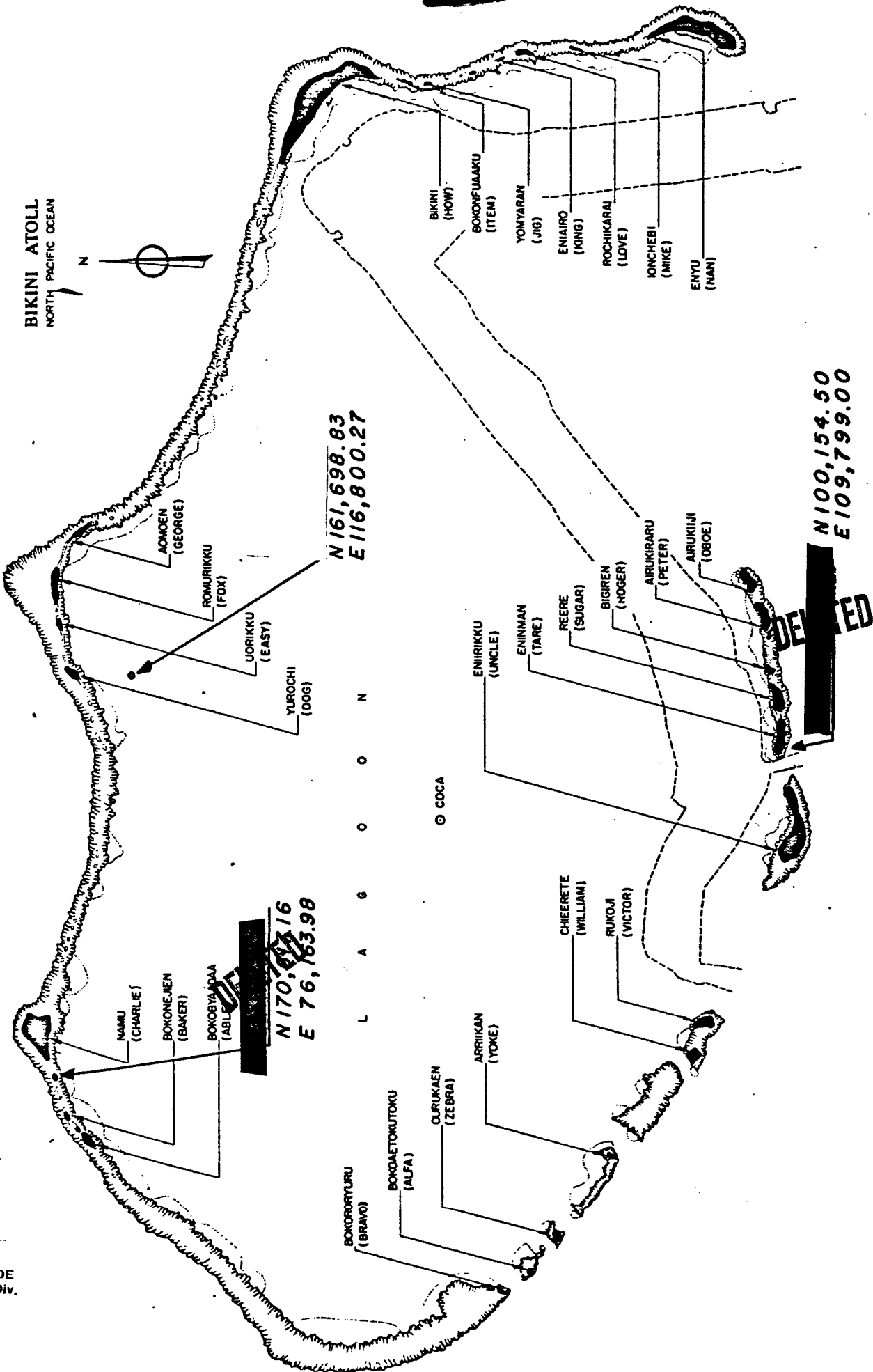
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CHAPTER 3

MISCELLANEOUS DATA

This chapter is simply a collection of random information that may be of use and not otherwise easily obtainable in the field. No effort has been made to achieve the optimum organization.



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Fig. 3.1 - Sketch of Bikini Atoll,
Showing Zero Points

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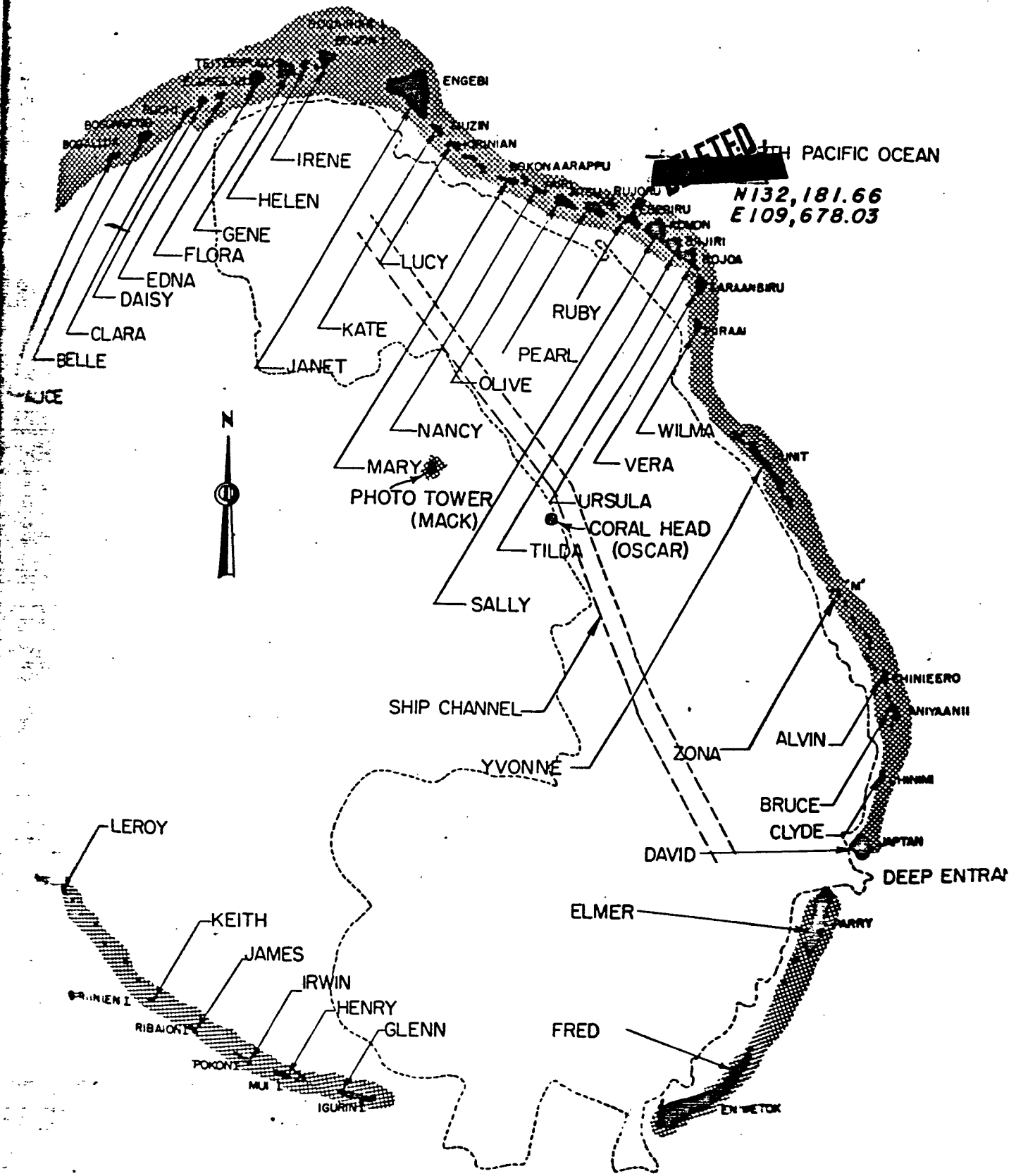


Fig. 3.2 - Sketch of Eniwetok Atoll, Showing Zero Point

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TIME IN SERVICE

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3-4

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2.2 2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0 -0.1 -0.2
21 (1. HS) σ 3-5 2 4 6 8 10 12 14 16 18

TIME IN SHAKES (ARBITRARY ORIGIN)

ROENTGENS /SRCOND

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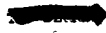
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ROBERTS/SECOND

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TIME - SECONDS

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ROENTGENS/SECOND
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8-3-8
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DISTANCE - METERS

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TIME - SECONDS

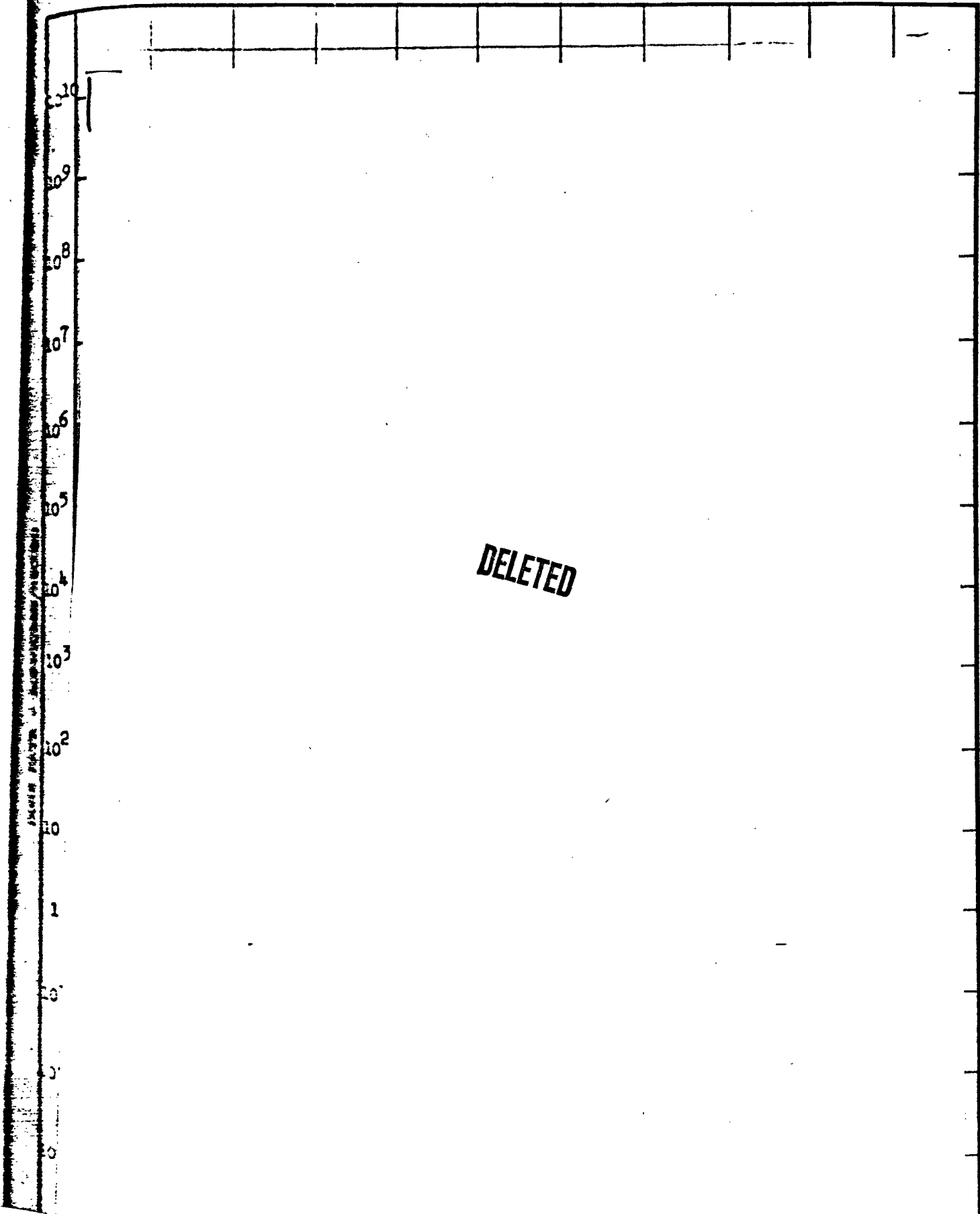
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TIME - SECONDS

TABLE 3.1
IVY MIKE PEAK FALL-OUT INTENSITY
(M. Klein)

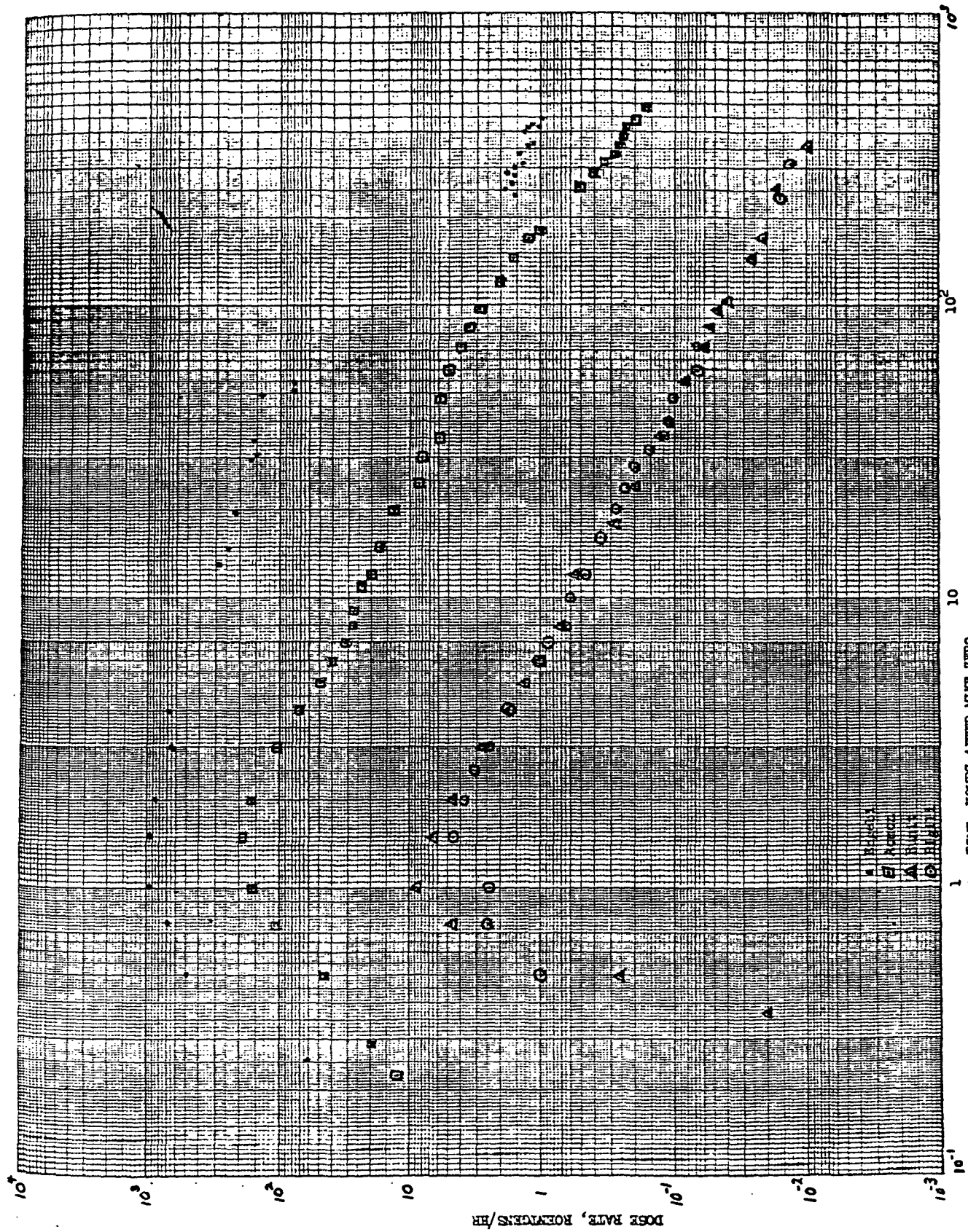
Location	Intensity
Engibi	10^3 R/hr
Aomon	190 R/hr
Runit	9 R/hr
Rigili	.5 R/hr
Aniyaanii	150 mR/hr
Eniwetok	1 mR/hr*

*Questionable

2

2

2



* F-105
 * F-106
 * F-107
 * F-108
 * F-109

Fig. 3.11 - Mike Fall-out Intensity vs Time (M. Klein)

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⊙ 150'

⊙ 500'

⊙ 1500'

⊙ 1500'

⊙ 1500'

X (120 MIN)

Fig. 3.12

CONTAMINATION FROM MIKE SHOT
M-Day

- X Ground readings--East Side Islands
- ⊠ Ground readings--West Side Islands
- ⊙ Air Readings--25 ft--East Side Islands
- ⊠ Air Readings--25 ft--West Side Islands
- ⊙ Air Readings Altitude as Shown

NOTE: Figs. 3.12 thru 3.25 are from
RadSafe Data

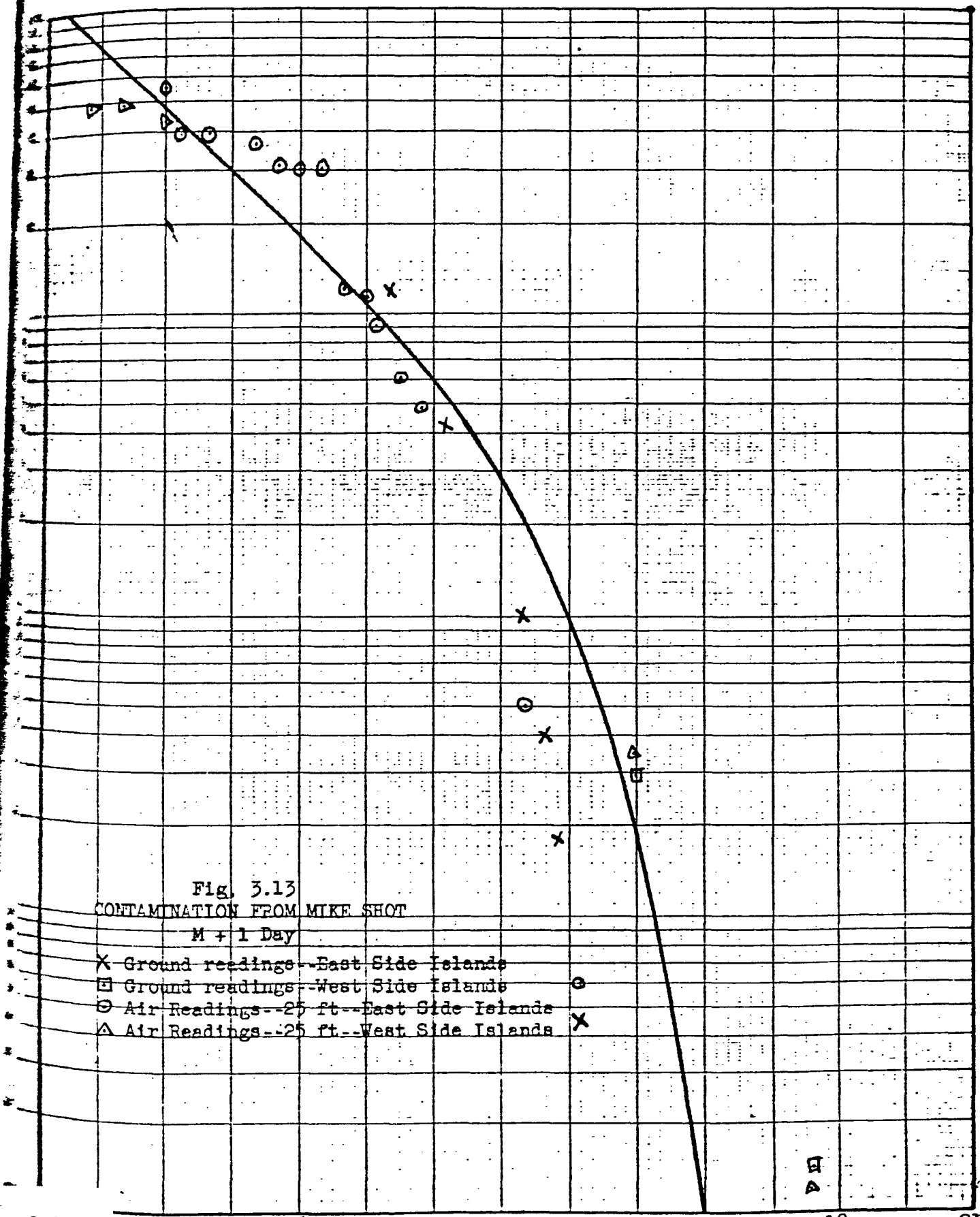


Fig. 3.13
 CONTAMINATION FROM MIKE SHOT
 M + 1 Day

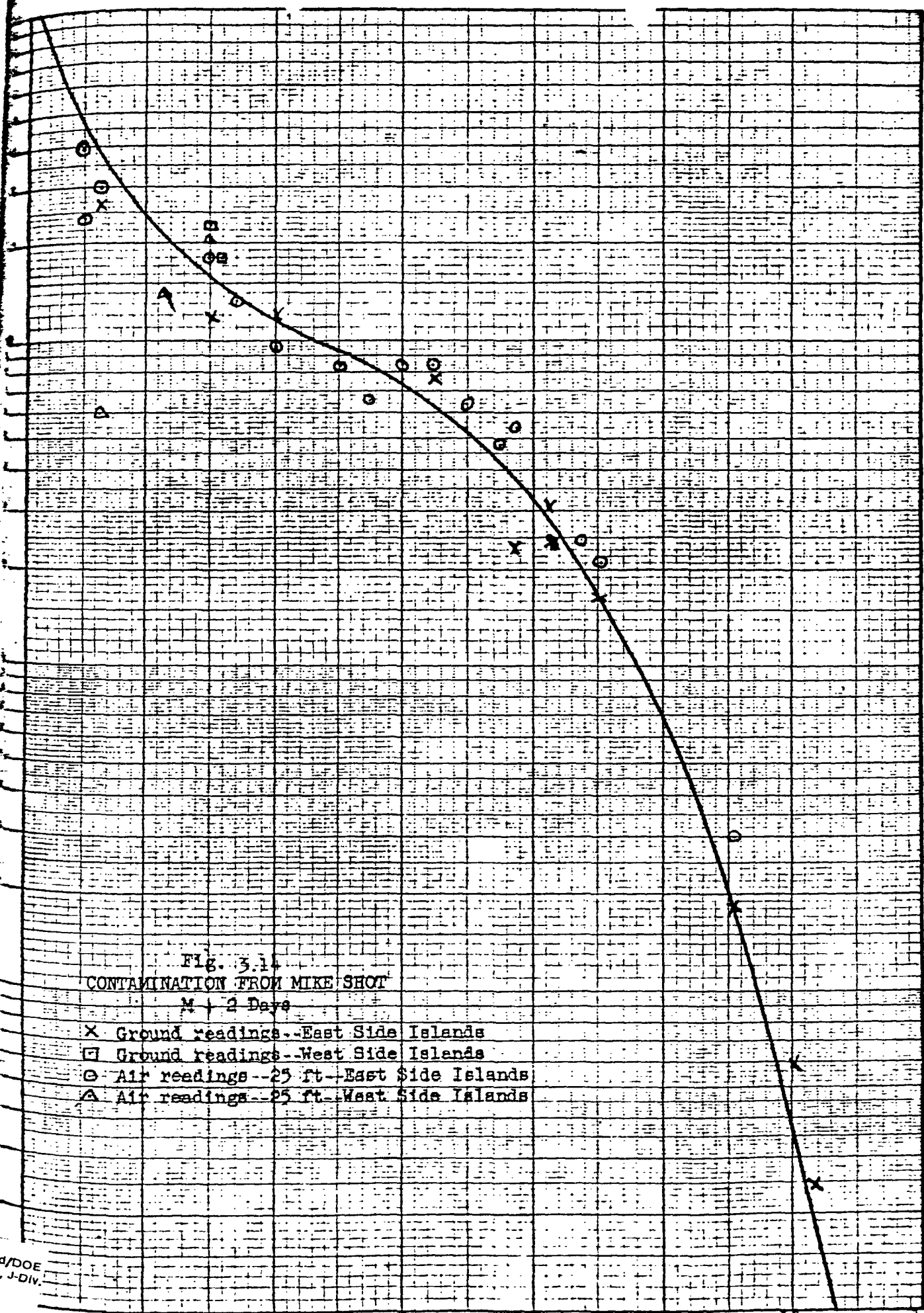
- x Ground readings--East Side Islands
- Ground readings--West Side Islands
- Air Readings--25 ft--East Side Islands
- △ Air Readings--25 ft--West Side Islands

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3 6 9 12 15 18 21
 DISTANCE - NAUTICAL MILES FROM MIKE ZERO

Fig. 3.14
 CONTAMINATION FROM MIKE SHOT
 M + 2 Days

- X Ground readings--East Side Islands
- Ground readings--West Side Islands
- ⊙ Air readings--25 ft--East Side Islands
- △ Air readings--25 ft--West Side Islands



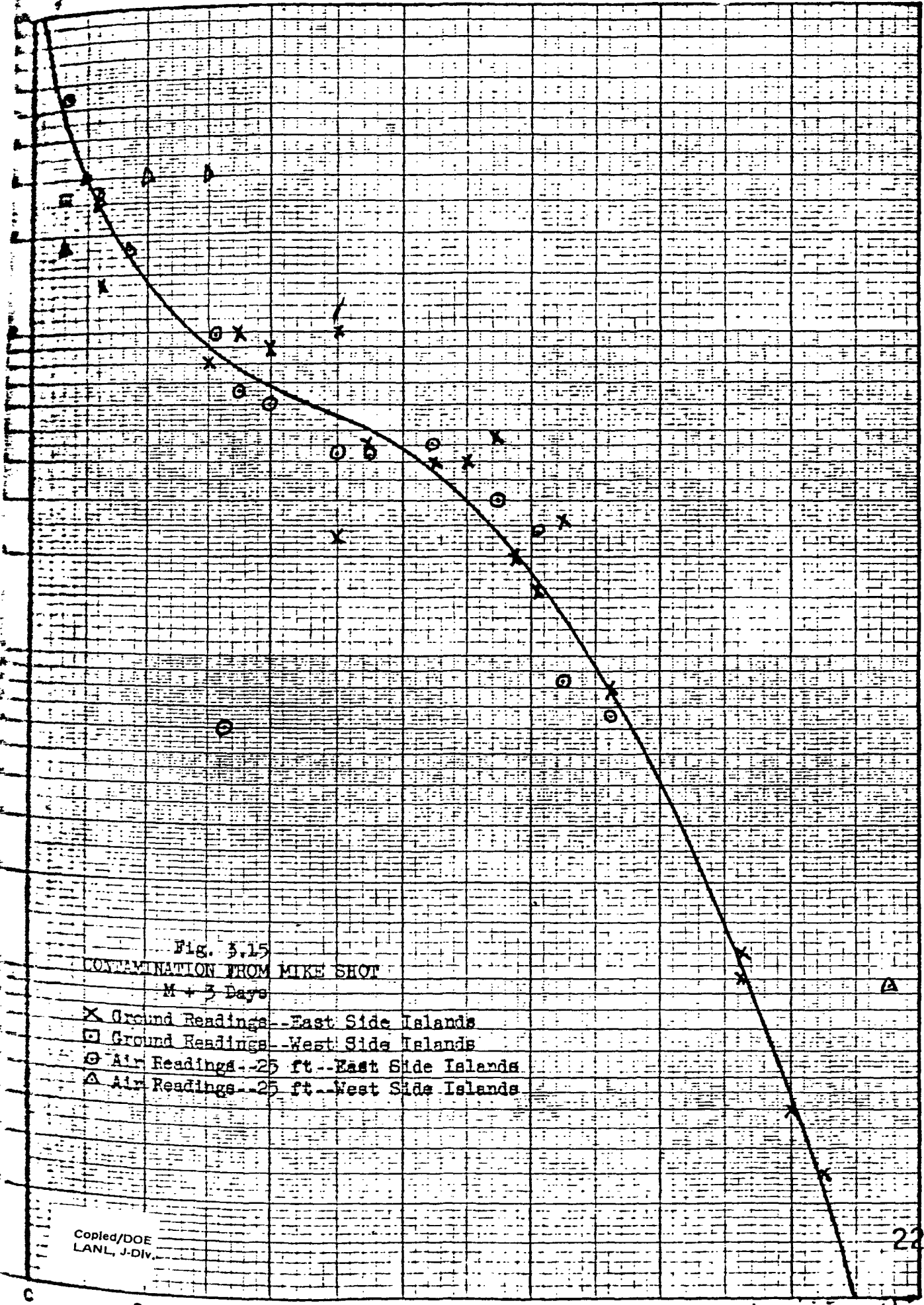


Fig. 3.15

CONTAMINATION FROM MIKE SHOT

M + 3 Days

- X Ground Readings--East Side Islands
- Ground Readings--West Side Islands
- ⊙ Air Readings--25 ft--East Side Islands
- △ Air Readings--25 ft--West Side Islands

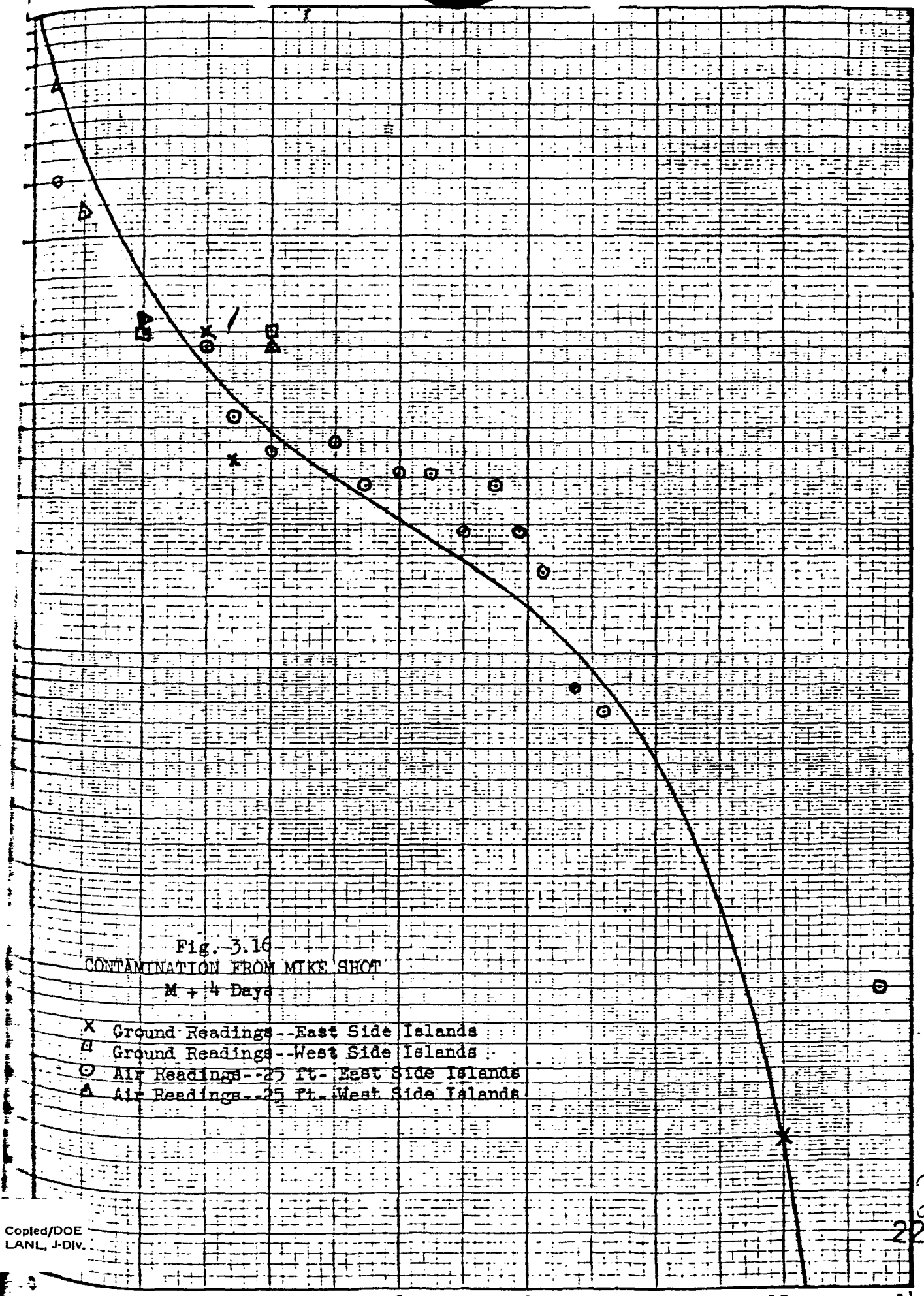


Fig. 3.16
 CONTAMINATION FROM MIKE SHOT
 M + 4 Days

- X Ground Readings -- East Side Islands
- B Ground Readings -- West Side Islands
- O Air Readings -- 25 Ft. East Side Islands
- A Air Readings -- 25 Ft. West Side Islands

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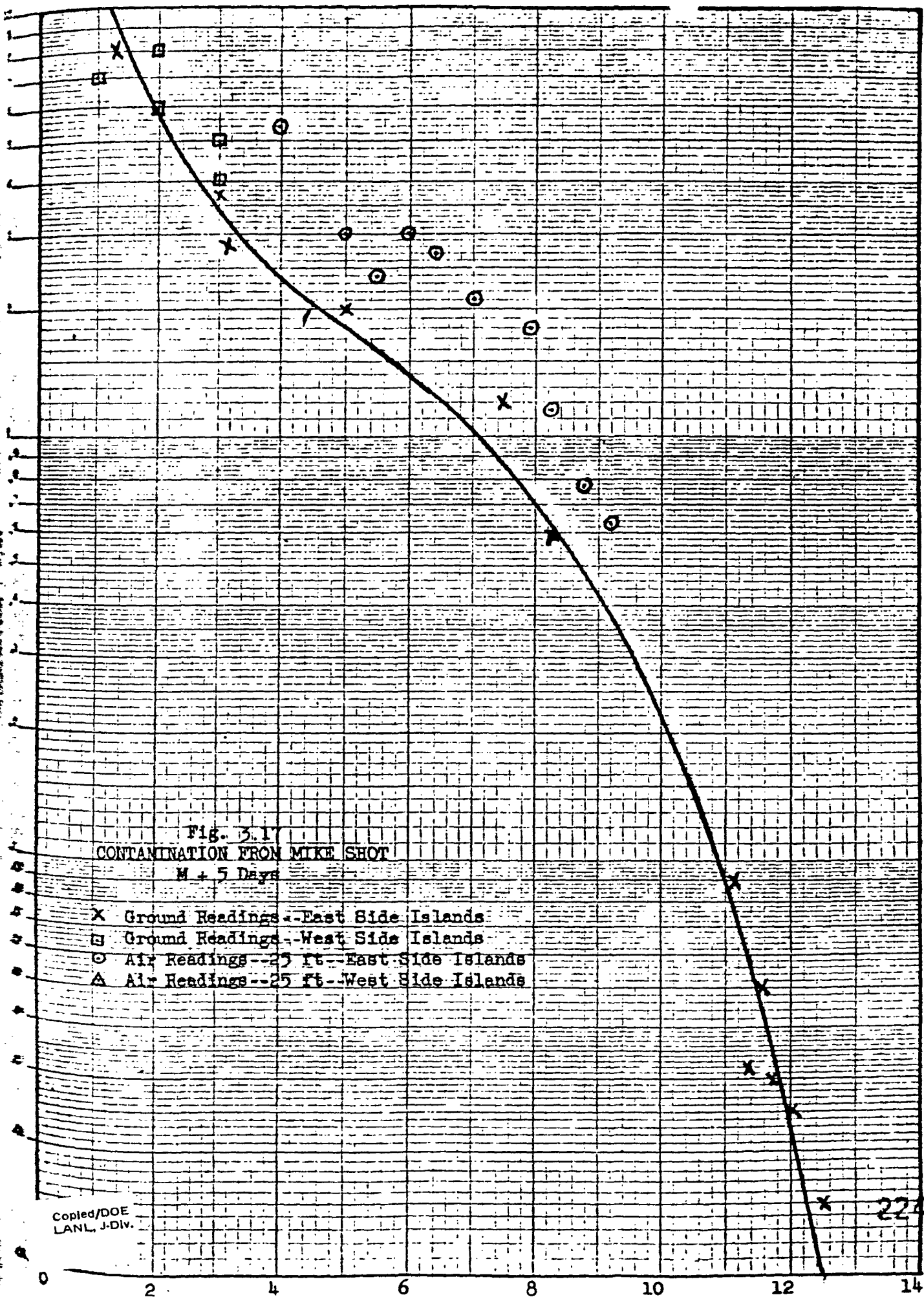


Fig. 3.1
CONTAMINATION FROM MIKE SHOT
M + 5 Days

- X Ground Readings - East Side Islands
- Ground Readings - West Side Islands
- Air Readings - 25 ft - East Side Islands
- △ Air Readings - 25 ft - West Side Islands

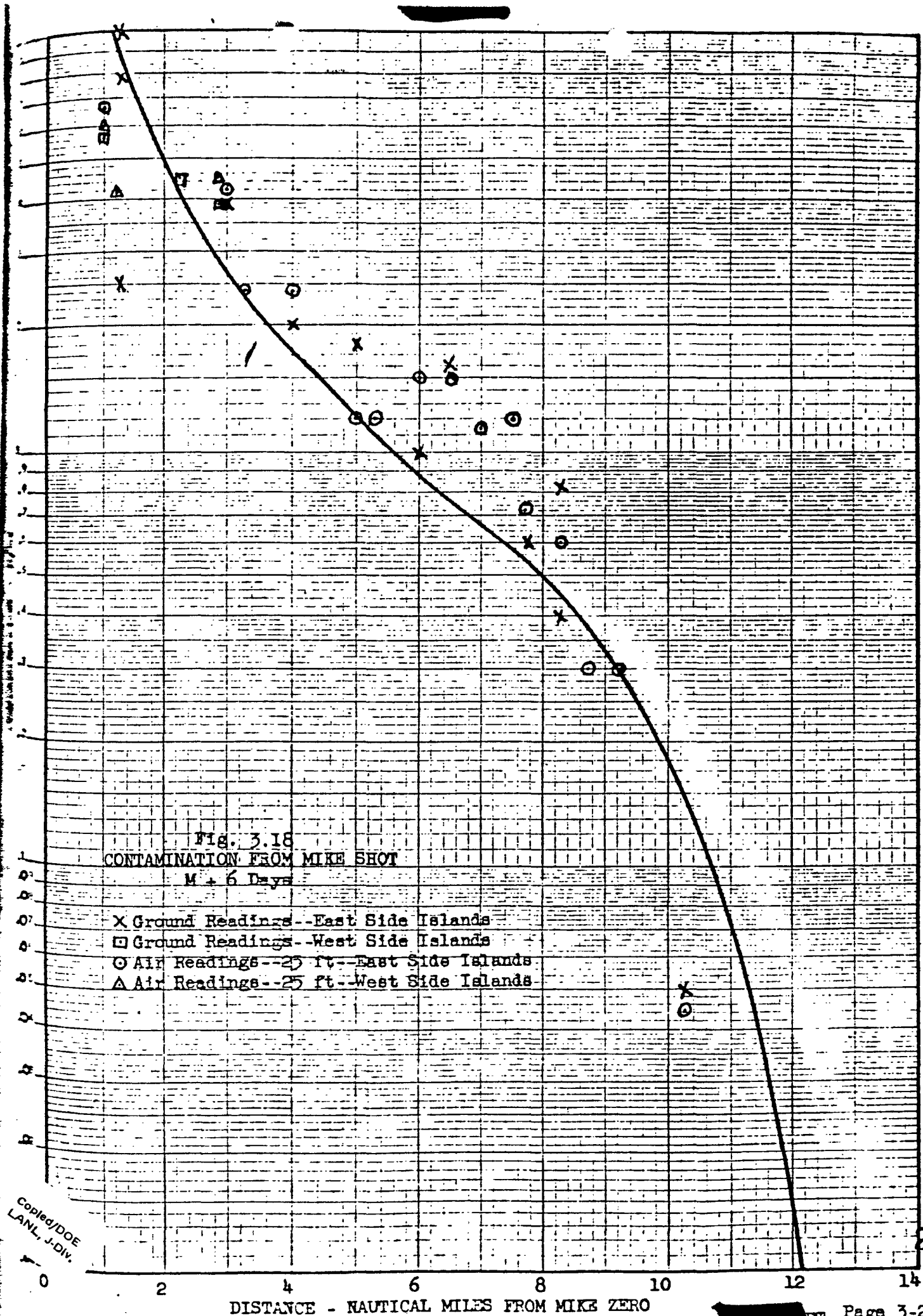


Fig. 3.18
CONTAMINATION FROM MIKE SHOT
M + 6 Days

- X Ground Readings--East Side Islands
- Ground Readings--West Side Islands
- Air Readings--25 ft--East Side Islands
- △ Air Readings--25 ft--West Side Islands

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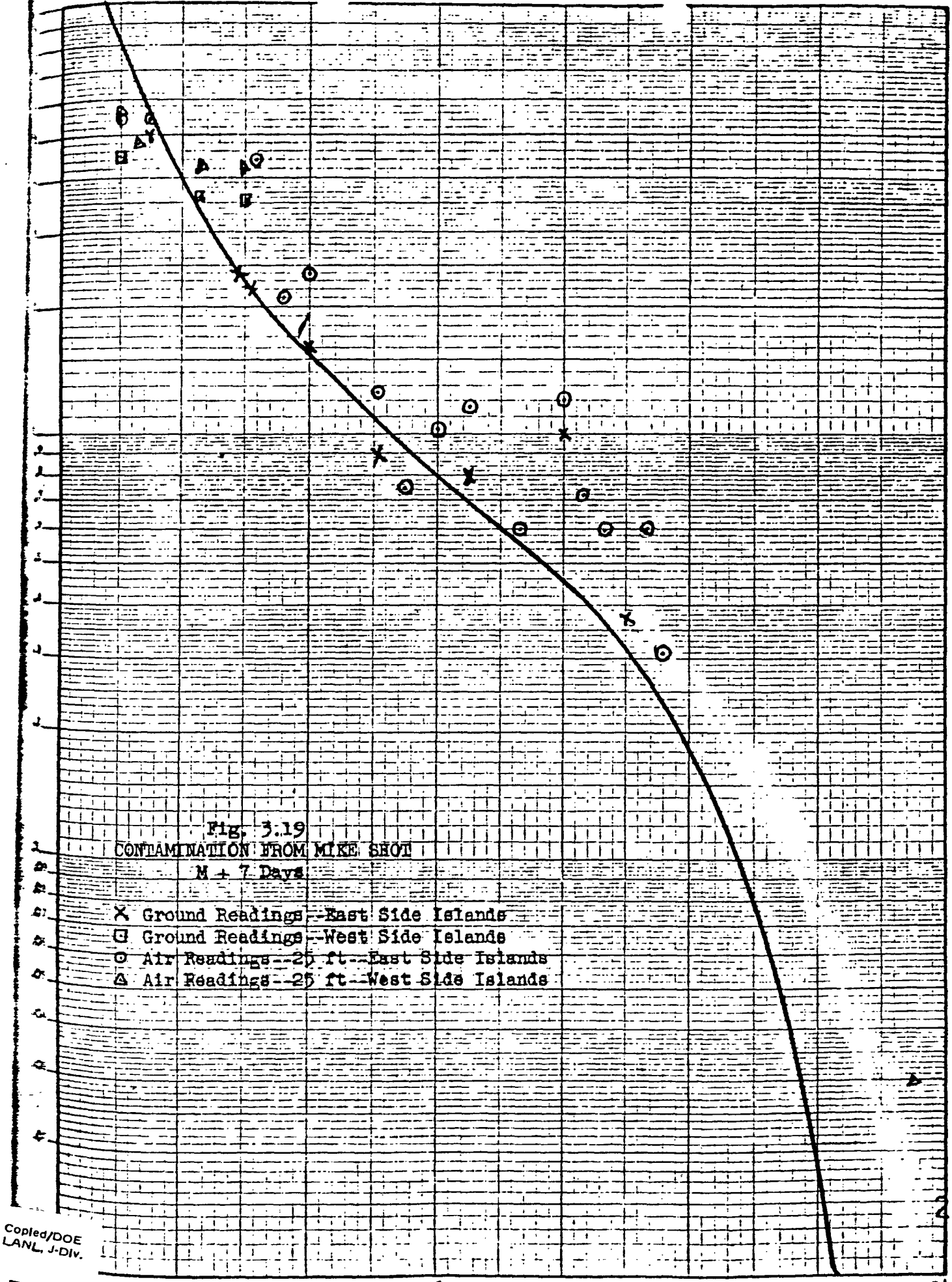


Fig. 3.19
 CONTAMINATION FROM MIKE SHOT
 M + 7 Days
 X Ground Readings - East Side Islands
 □ Ground Readings - West Side Islands
 ○ Air Readings - 25 ft - East Side Islands
 △ Air Readings - 25 ft - West Side Islands

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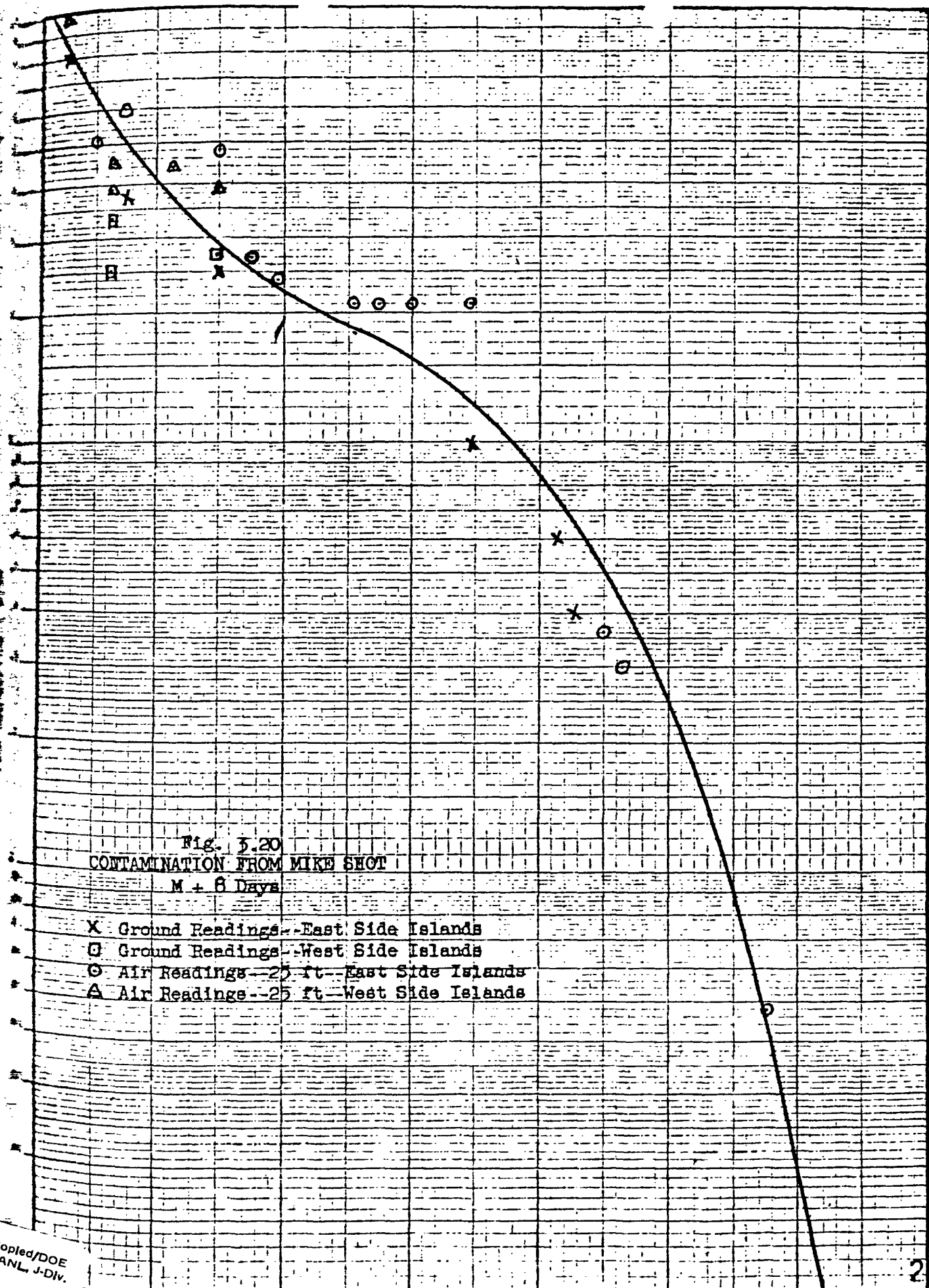


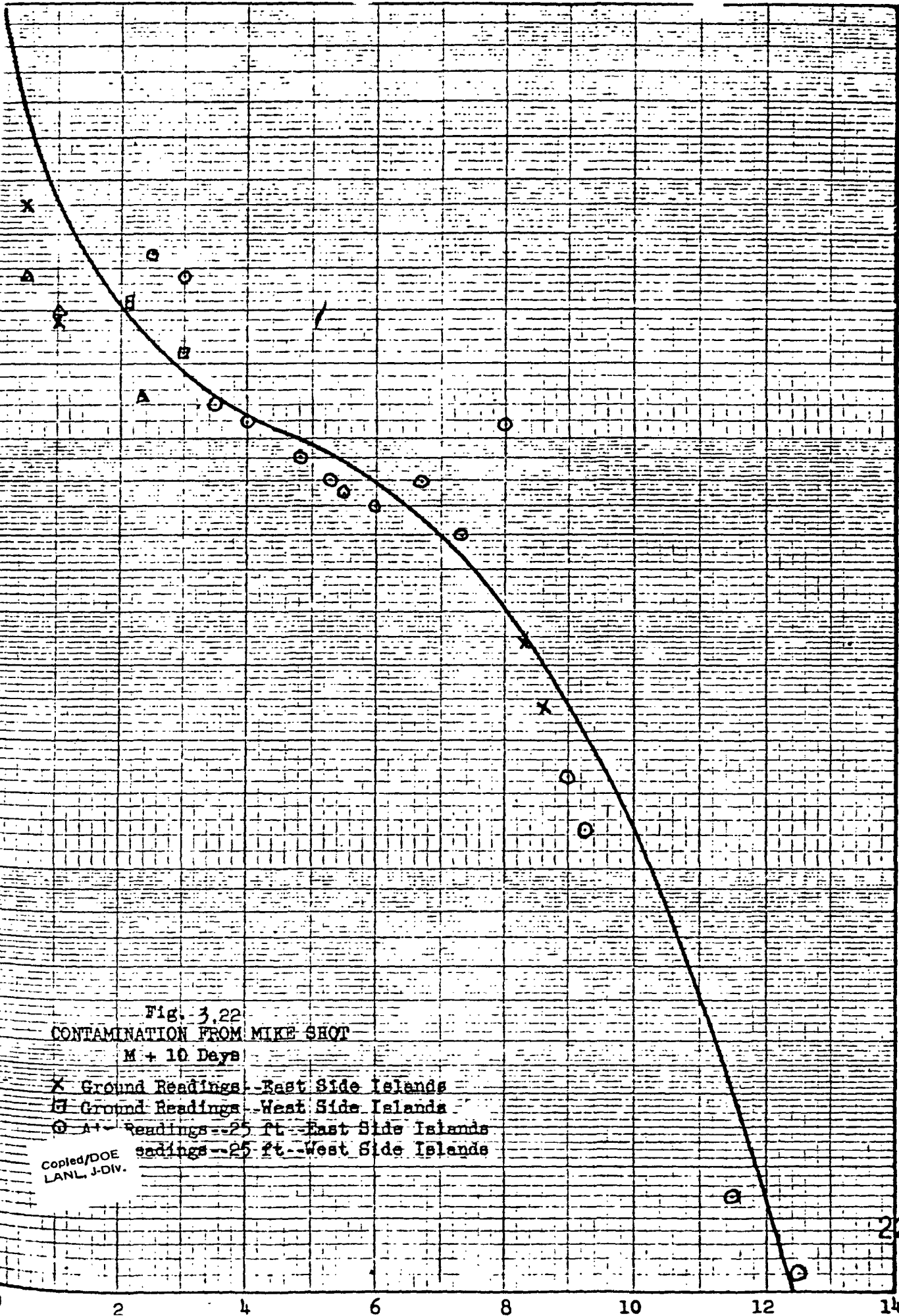
Fig. 3.20
CONTAMINATION FROM MIKE SHOT
M + 8 Days

- X Ground Readings - East Side Islands
- O Ground Readings - West Side Islands
- C Air Readings - 25 ft - East Side Islands
- A Air Readings - 25 ft - West Side Islands

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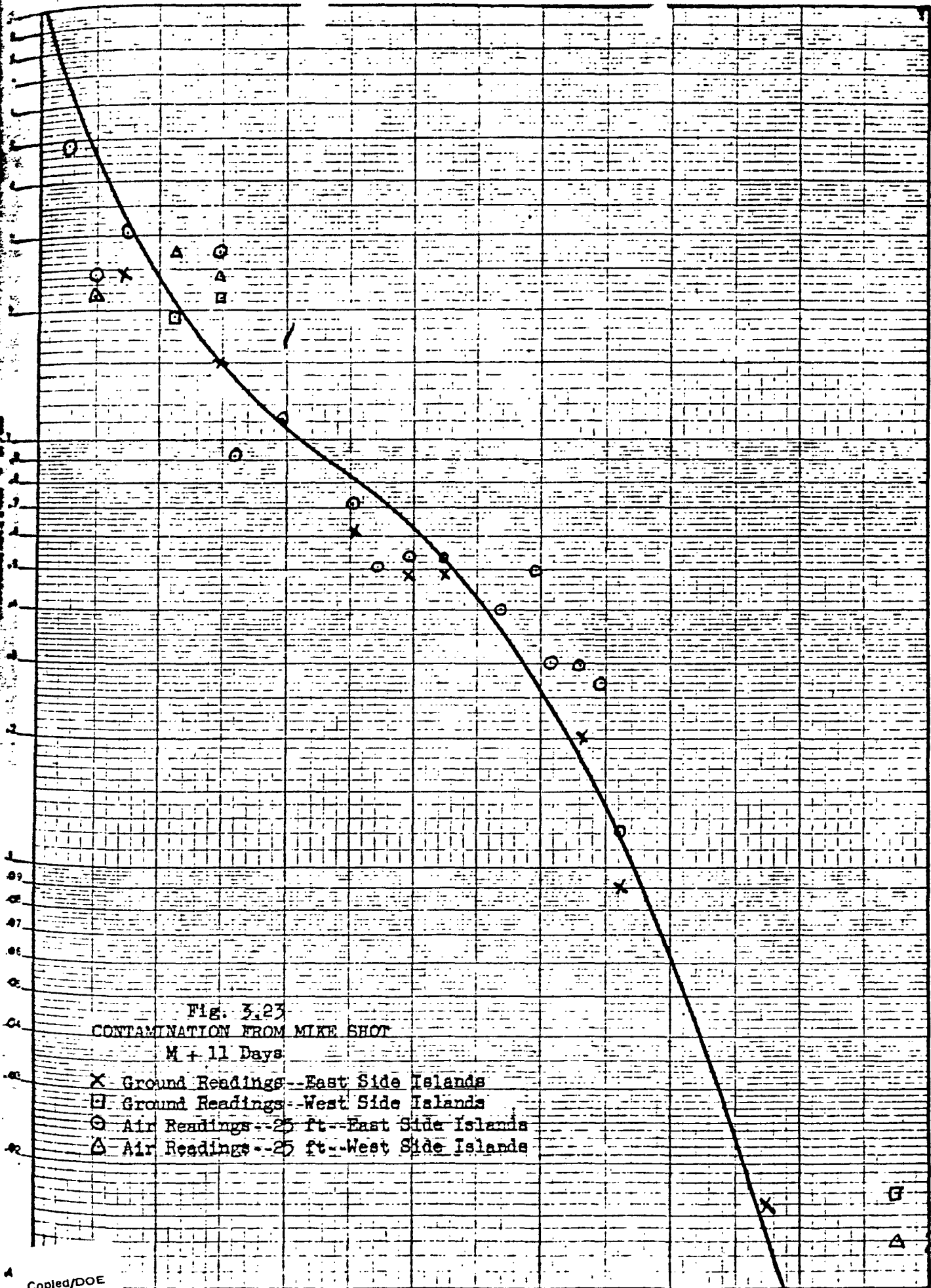


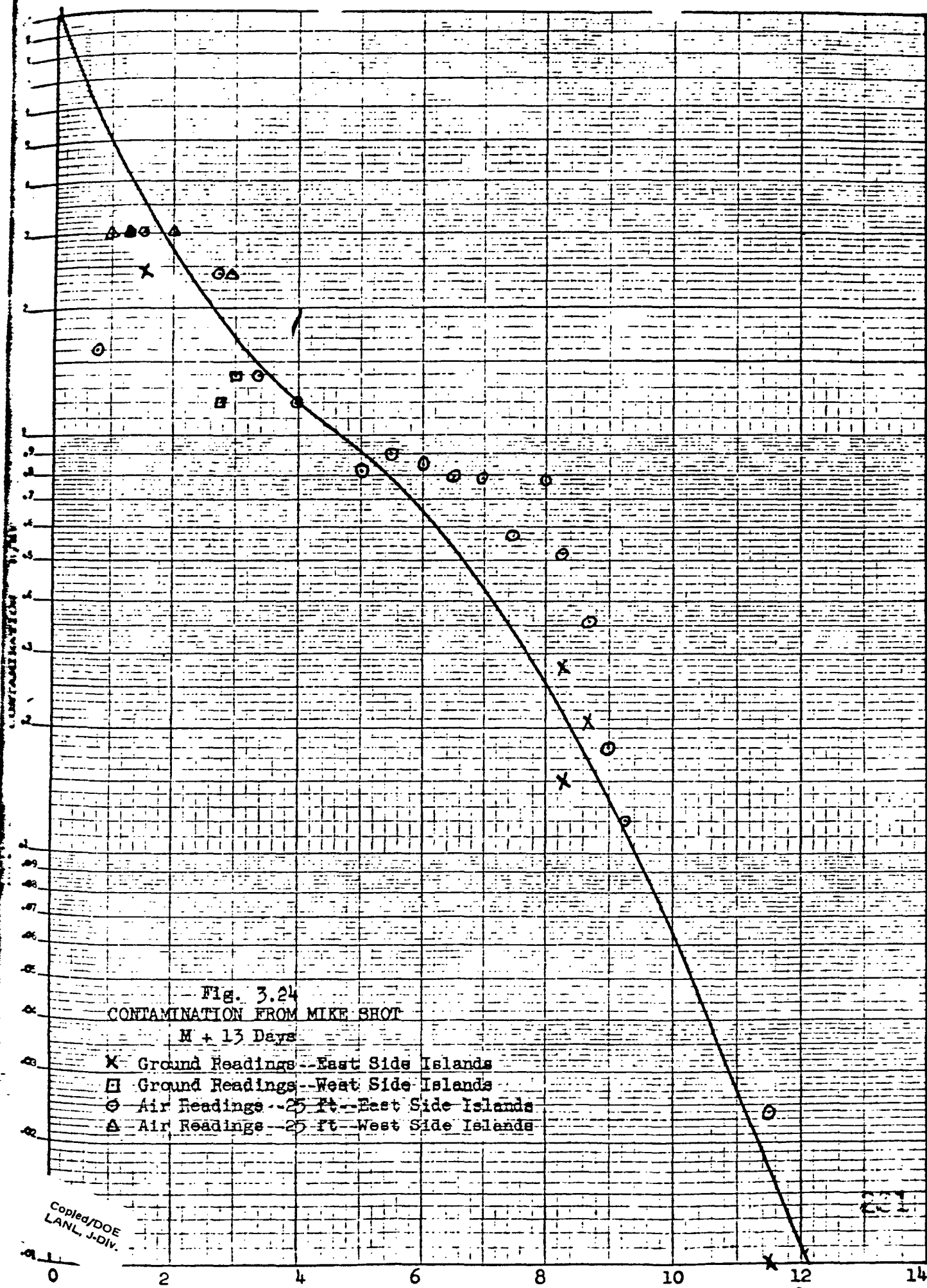
Fig. 3.23
CONTAMINATION FROM MIKE SHOT
M + 11 Days

- X Ground Readings - East Side Islands
- E Ground Readings - West Side Islands
- O Air Readings - 25 ft - East Side Islands
- A Air Readings - 25 ft - West Side Islands

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DISTANCE - NAUTICAL MILES FROM MIKE ZERO

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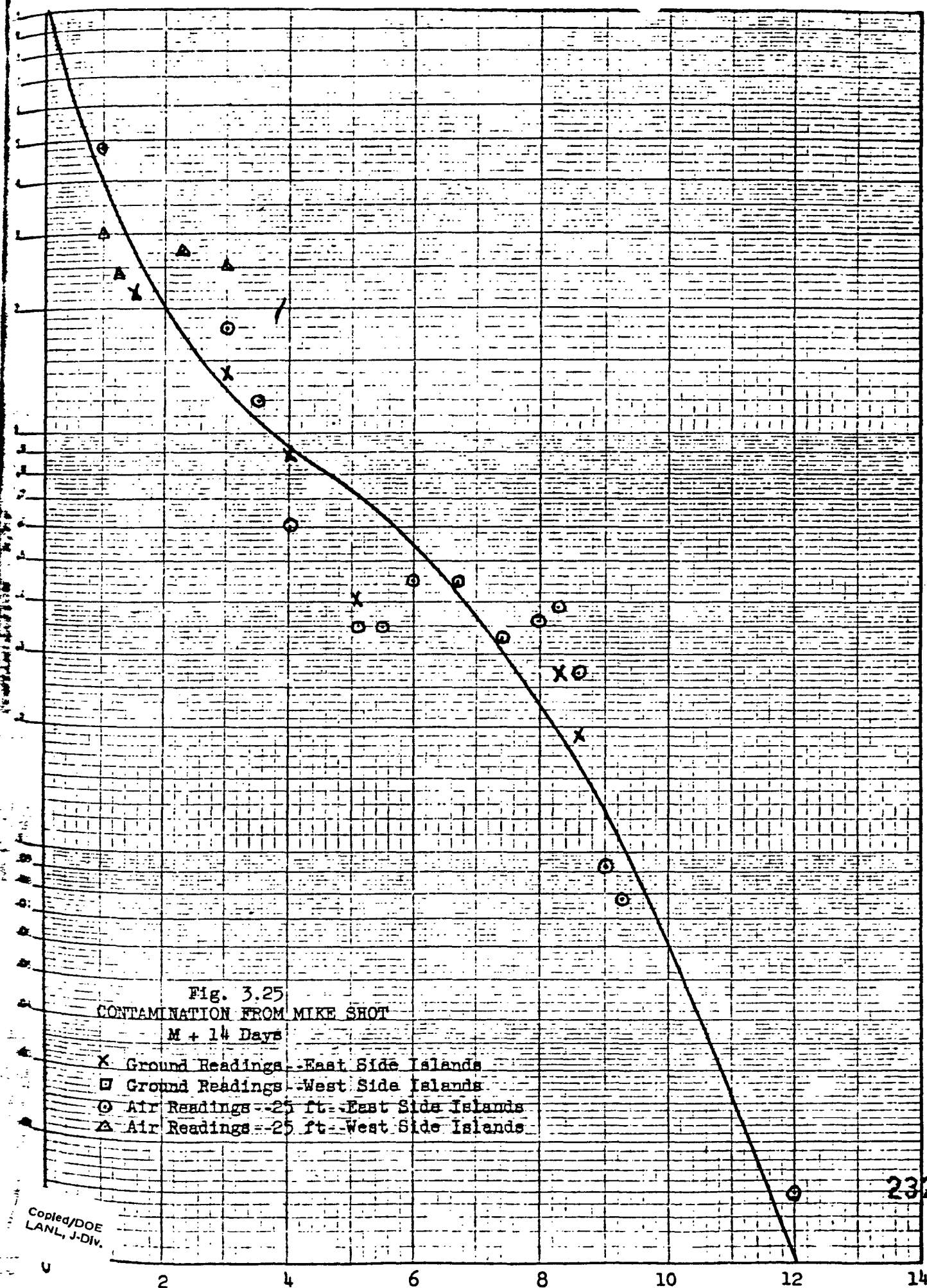


Fig. 3.25
CONTAMINATION FROM MIKE SHOT
M + 14 Days

- X Ground Readings - East Side Islands
- Ground Readings - West Side Islands
- Air Readings - 25 ft. - East Side Islands
- △ Air Readings - 25 ft. - West Side Islands

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Radioactivity From Crossroads Baker Shot

The curves of Figs. 3.26, 3.27, and 3.28 show the radioactivity in the surface waters of Bikini Lagoon on the first three days after Crossroads Baker Shot. The values shown are in mR/hr. Since this shot was in late July, wind and current conditions were somewhat different than those to be expected in March and April, when the trade winds are blowing. The prevailing trade winds are from east-northeast, averaging 15 to 20 knots, while on B day there were light breezes estimated at less than 5 knots from south-southeast. On B + 1 the light breezes alternated with periods of calm, and on B + 2 and B + 3 the wind increased somewhat and hauled to the southeast.

(The figures shown are from an article, "Diffusion in Bikini Lagoon", by W. H. Munk, G. C. Ewing, and R. R. Revelle, of the Scripps Institution of Oceanography; Transactions of the American Geophysical Union, v. 30, pp. 59-66, 1949. The following note accompanies the figures: "Qualitative description of the diffusion of contaminated water--In examining the distribution shown . . . one should hold in mind that they are based on measurements extending over many hours, rather than on simultaneous measurements.")

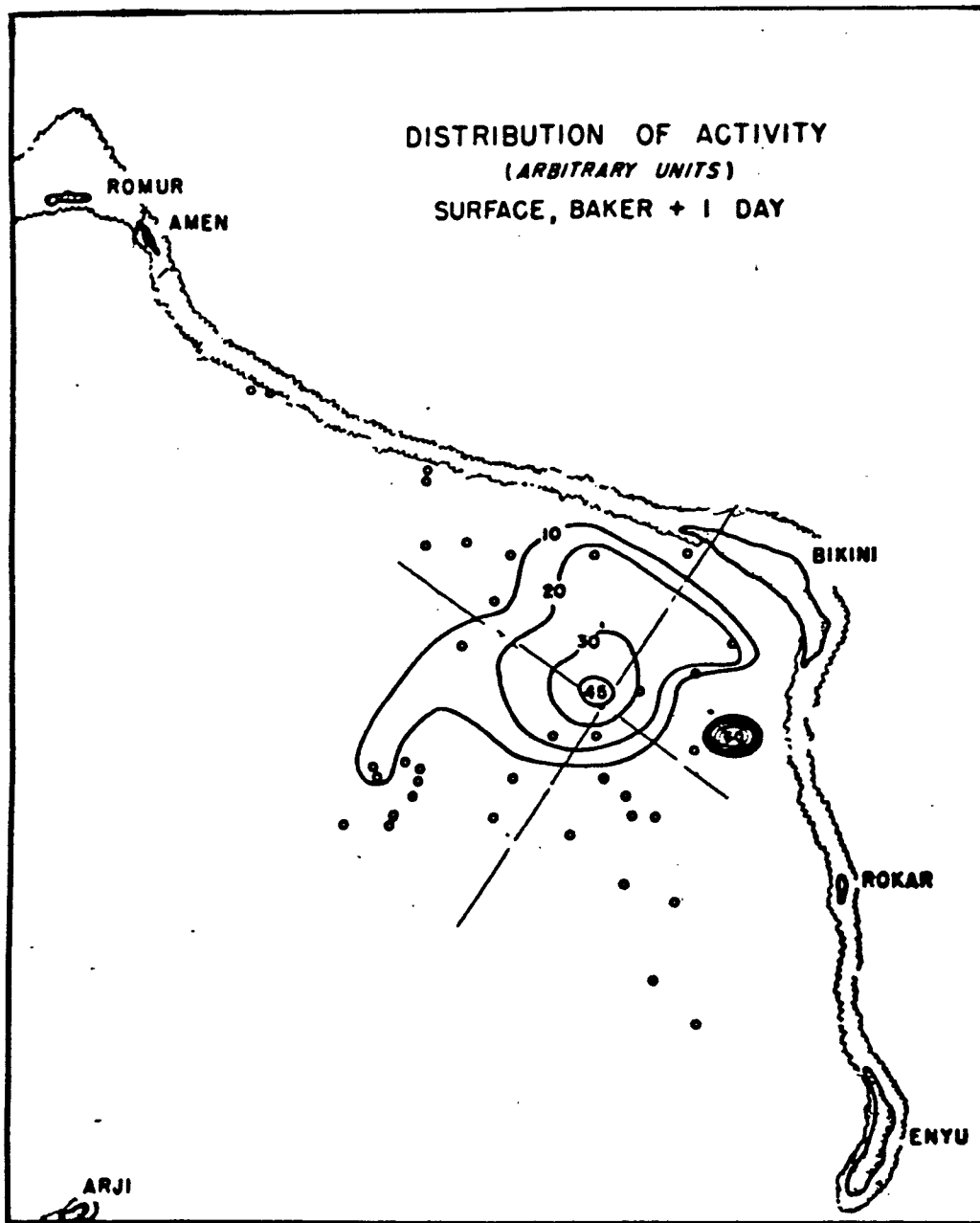


Fig. 3.26 - Distribution of Radioactivity in Surface Waters of Bikini Lagoon; Baker + 1 Day

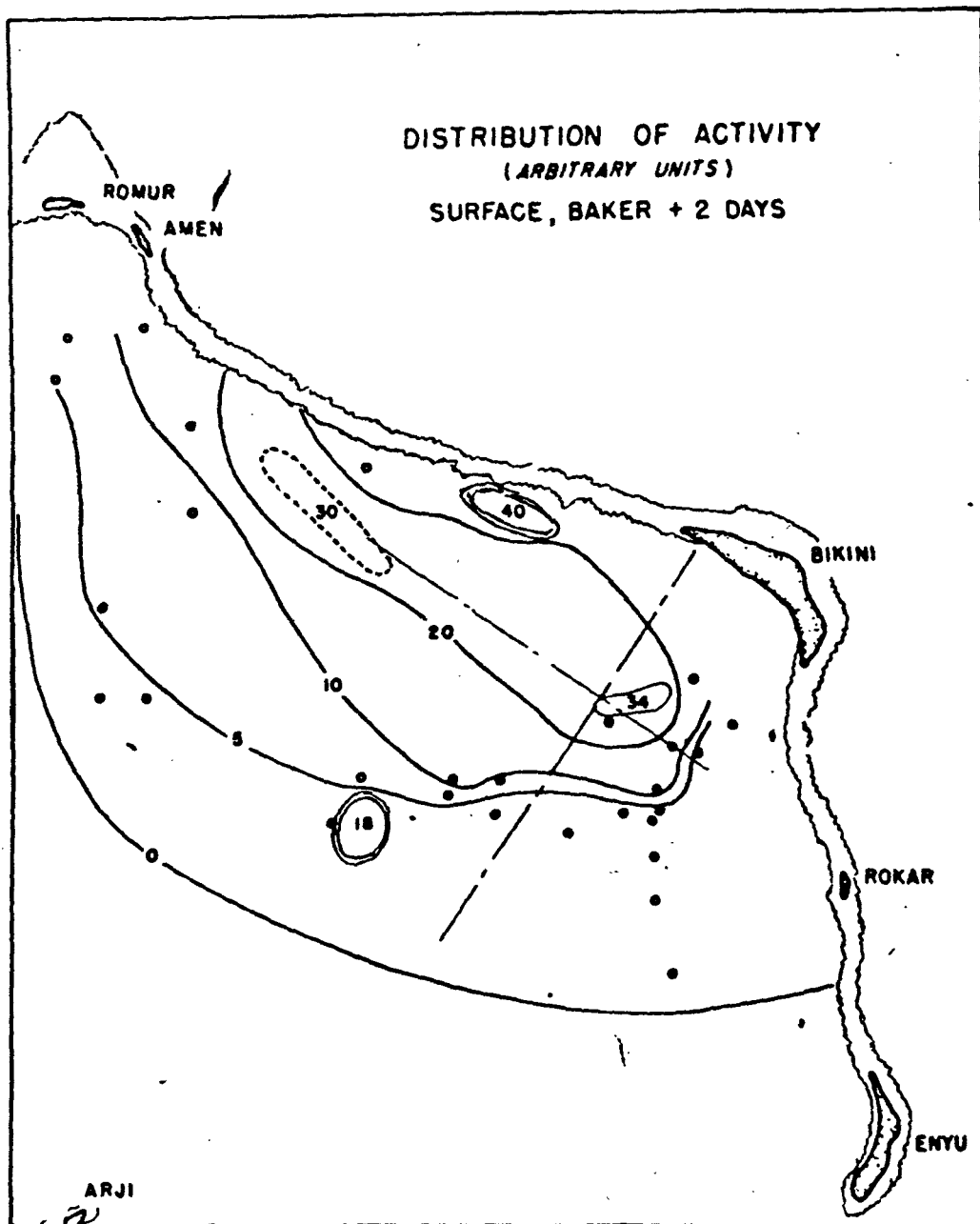


Fig. 3.27 - Distribution of Radioactivity in Surface Waters of Bikini Lagoon, Baker + 2 Days

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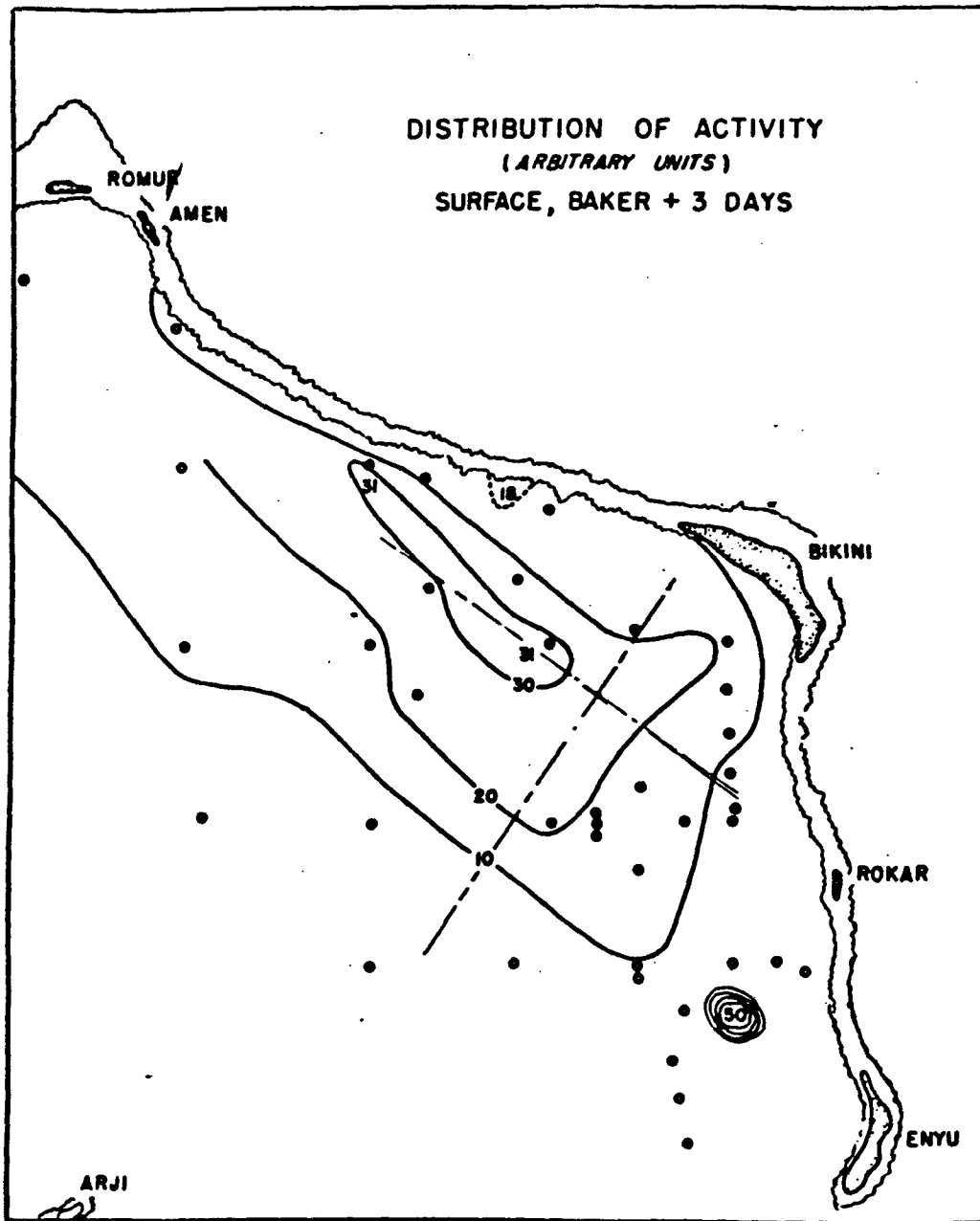


Fig. 3.28 - Distribution of Radioactivity in Surface Waters of Bikini Lagoon; Baker + 3 Days

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