[redacted]

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SANDIA SYSTEMATIC DECLASSIFICATION REVIEW
Review Date 6/17/98
Reviewer ADD
Review Date 6-18-98
Reviewer ADD WC Layne
Determination (Circle Number)
1 Classification Retained
2 Classification Changed to: UNCC
3 Contains No DOE Classified Information
4 Coordinate With:
5 Contains UCNI?
6 Comments:

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AUG 12 1964
CENTRAL TECH FILE

August 10, 1964

File No. TX 54, 3-2
T-10424
Completed: 6-23-64

CENTRAL TECHNICAL FILE
FILE NO. 54/Sadm 3-2

To: W. E. Treibel - 1523 (3 copies)

Attn: J. A. Anderson

J. M. Carmichael

From: J. M. Carmichael - 7331-1

PROGRAM 05447
CATEGORY 30519
ORG. 210
DATE 6458

Re: Dynamic Drop Tests of Units No. 11, 12, 13 and 14 of the B54-0 (SADM) Confirmation Test Program (CTP)

Test Summary

Four B54-0 (SADM's) in H912 containers were alternately dropped onto horizontal concrete targets, with impact velocity components of approximately 25 fps vertical and 14 fps horizontal. The longitudinal axis of the H912 at impact was inclined at angles varying between 53 degrees and 82 degrees with a horizontal plane.

Only slight deformation of the H912 in the impact area was experienced during each test. No damage to the SADM's was observed after any of the tests.

Test Setup and Procedure

The B54-0 was rigged to the tower carriage with wire rope supports as shown in Figure 1. Test methods and procedures were conducted according to the Drop Tower Operating Manual which is on file at the Drop Tower Control Bldg. 6505.

There was no instrumentation on any of these tests. Division 7226 personnel provided high speed camera coverage of all the tests.

Test Results

The H912's after the test are shown in Figures 2 through 9. The impact orientations and velocity components as determined from the high speed movie film for each drop are described in Table I.

CGCoalson:7325-2:hb

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW
DOWNGRADING OR DECLASSIFICATION STAMP
CLASSIFICATION CHANGED TO: U
Emelda Selph 6/24/98
PERSON CHANGING MARKING & DATE
WC Layne 6/24/98
PERSON VERIFYING MARKING & DATE
AUTHORITY: W. C. Layne
RECORD ID: 98SN2541
DATED: 6/18/98

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0924

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Approved: E. White
E. White - 7331-1

Enc: Figs. 1-9

Copy to:
J. P. Ford, 1321
C. S. Williams, 1442
R. T. Othmer, 1541
D. M. Bruce, 1542
L. A. Dunn, 1543
C. L. Johnson, 2123
D. S. Bliss, 2344
E. H. Copeland, 7331
Central Technical File, 3428-1

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FIG. 1 TYPICAL RIGGING SET FOR THE TEST SERIES.
DYNAMIC DROP TESTS OF FOUR BL-0 S.A.D.M.'s.

T-10-2-

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[redacted]

(UNIT NO. 10) AFTER THE TEST. DYNAMIC DROP TESTS OF FOUR B54-C S.A.L.M.'s.

T-[illegible]

[redacted]

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[redacted]

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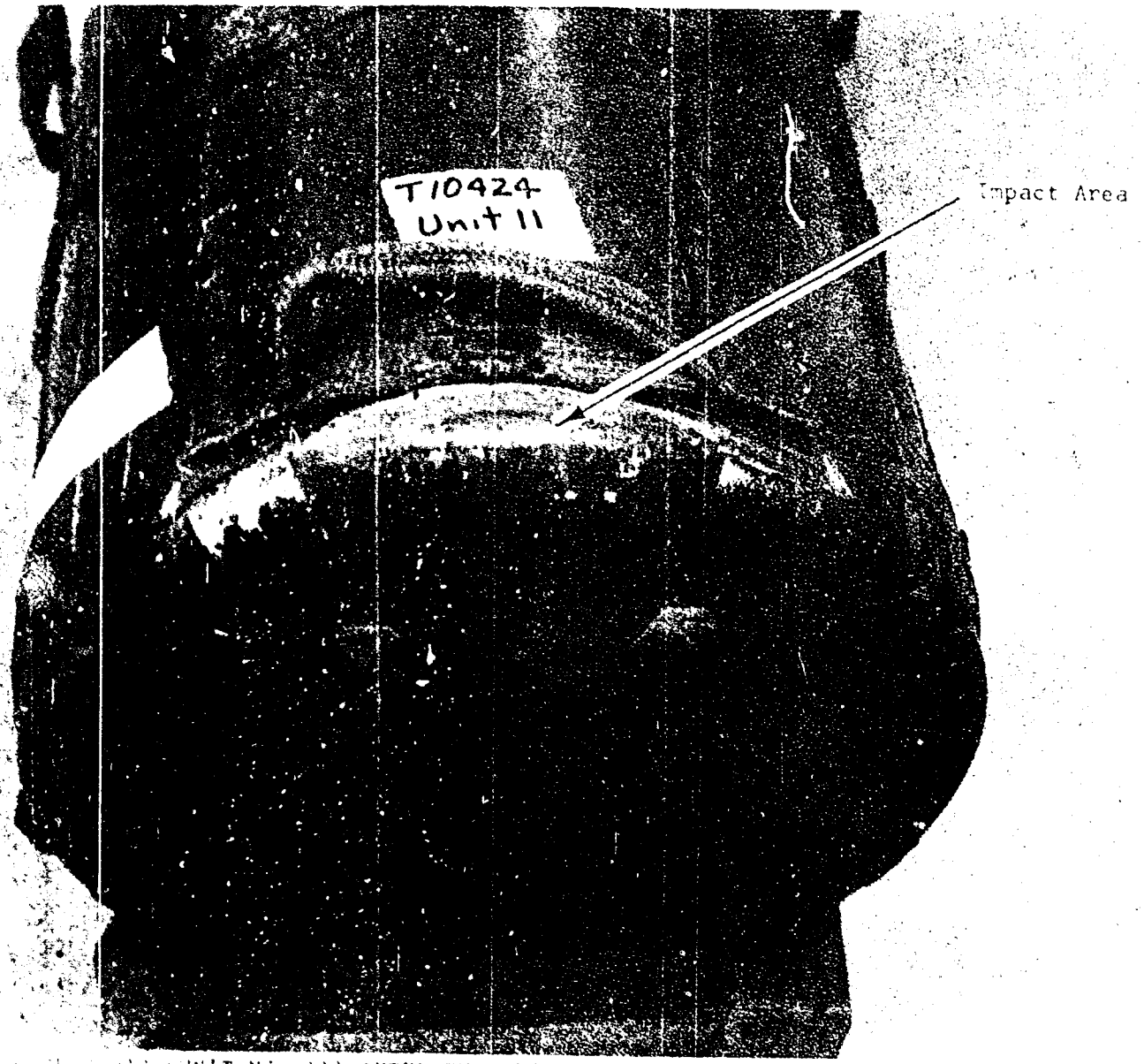
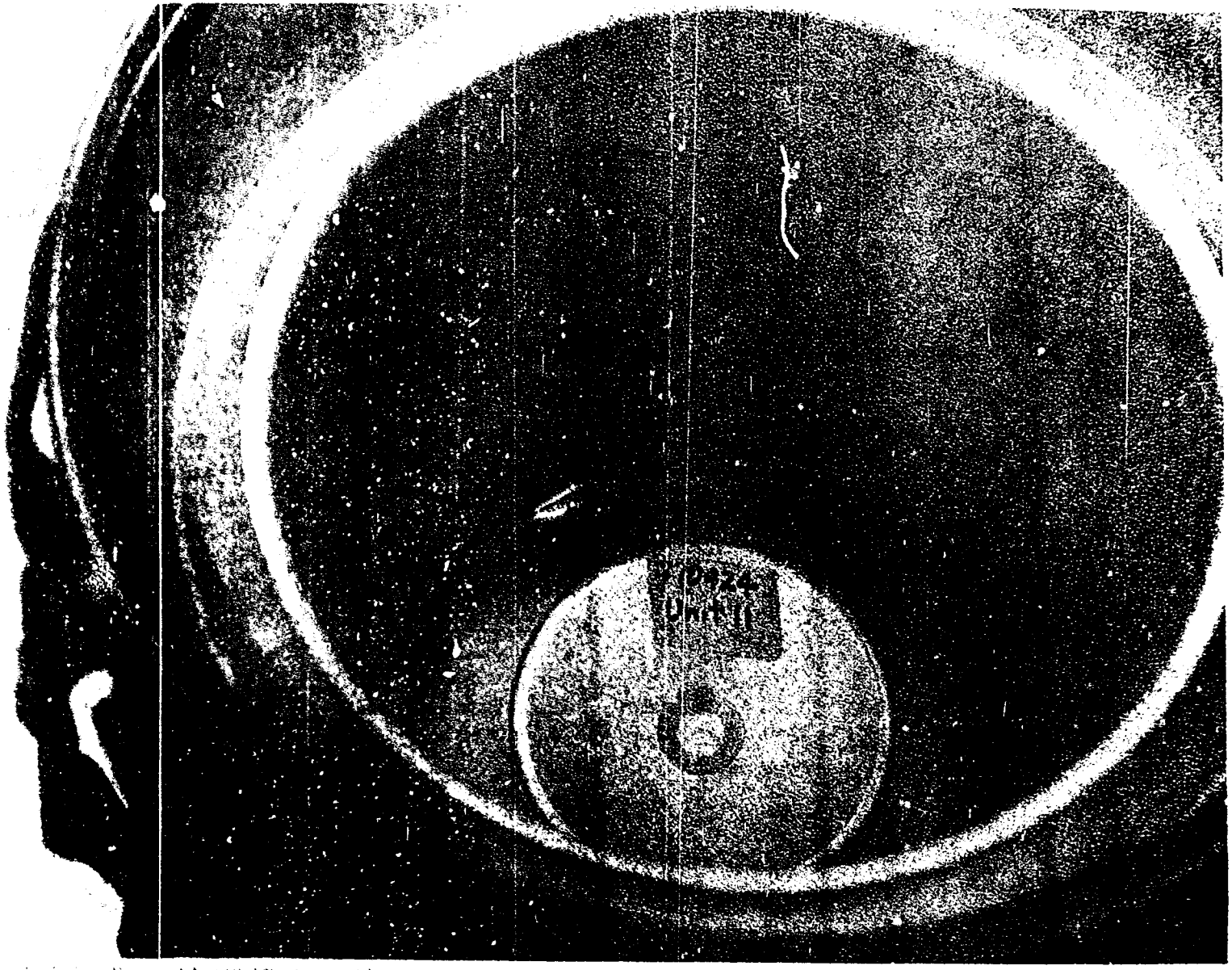


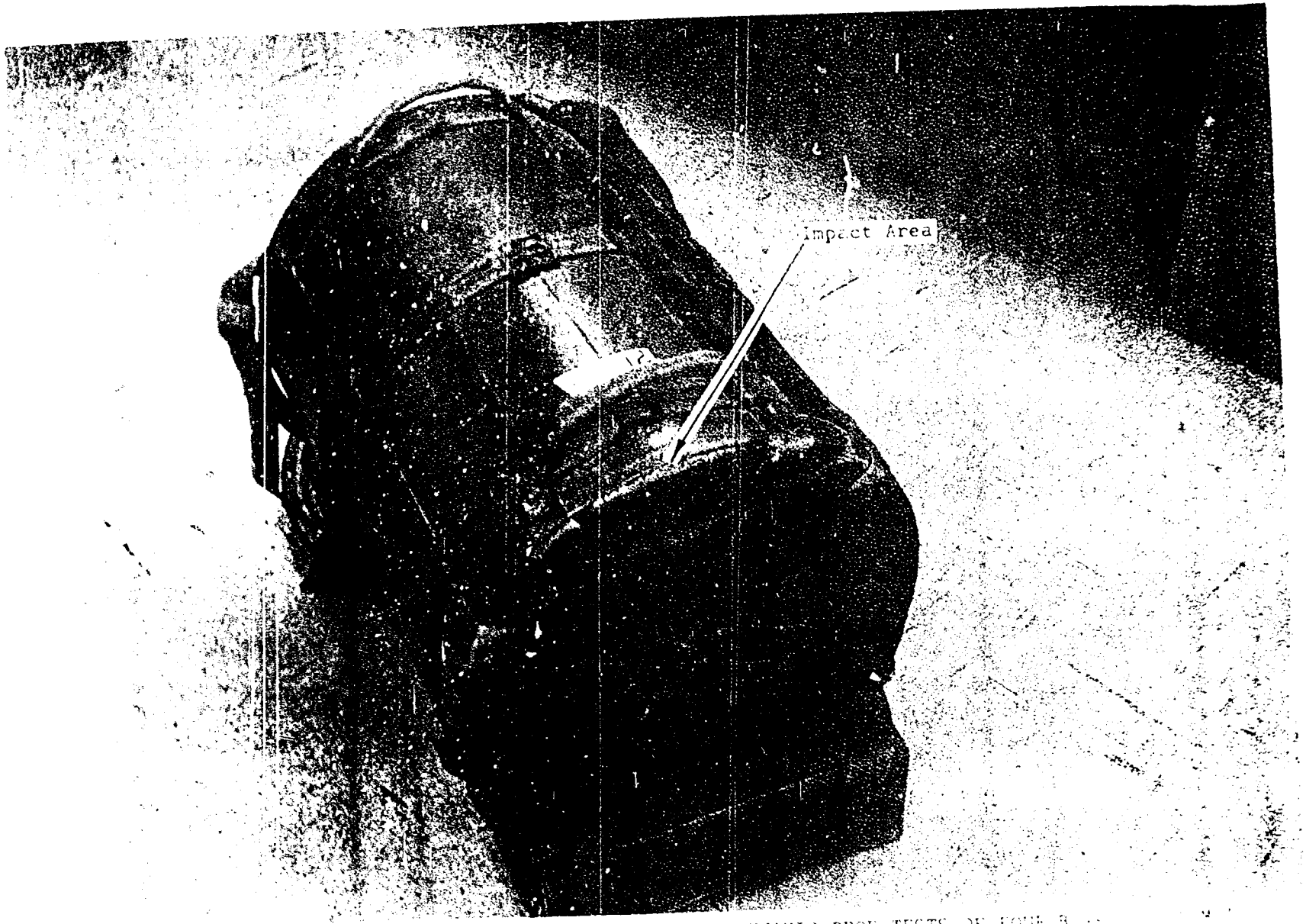
[illegible] (UNIT NO. 11) AFTER THE TEST. DYNAMIC DROP TESTS OF FOUR B54-0 S.A.[illegible].M.'s.

T-10424



[illegible] (UNIT NO. 11) SHOWING DEFORMATION IN IMPACT AREA.
[illegible] TESTS OF FOUR 554-2 S.A.S.M.'s.

T-10424



(UNIT NO. 12) AFTER THE TEST. DYNAMIC DROP TESTS OF FOUR B

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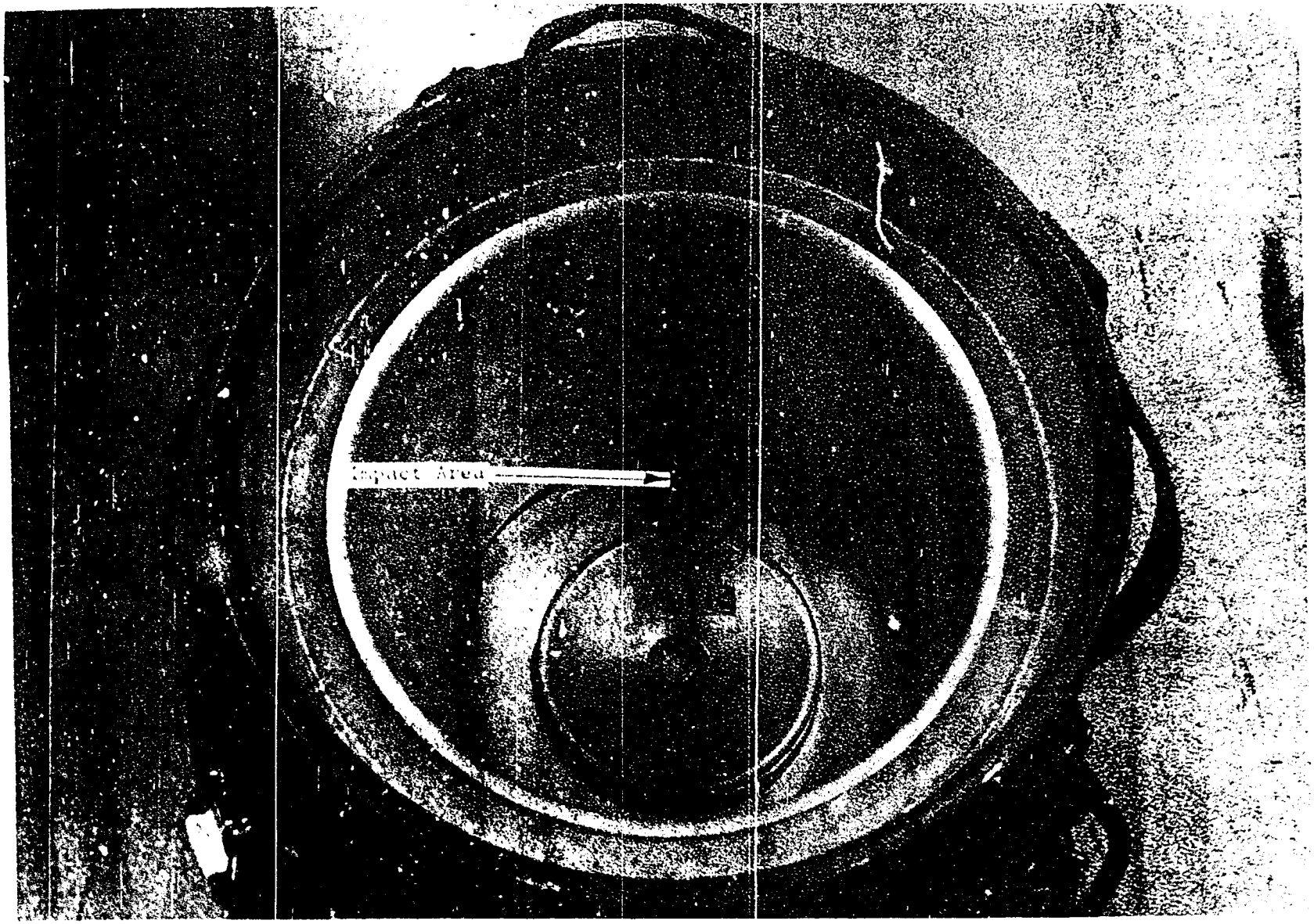
[redacted]



[illegible] H-112 (UNIT NO. 12) AFTER THE TEST. DYNAMIC DROP TESTS OF FOUR B54-0 S.A.[illegible]

[redacted]

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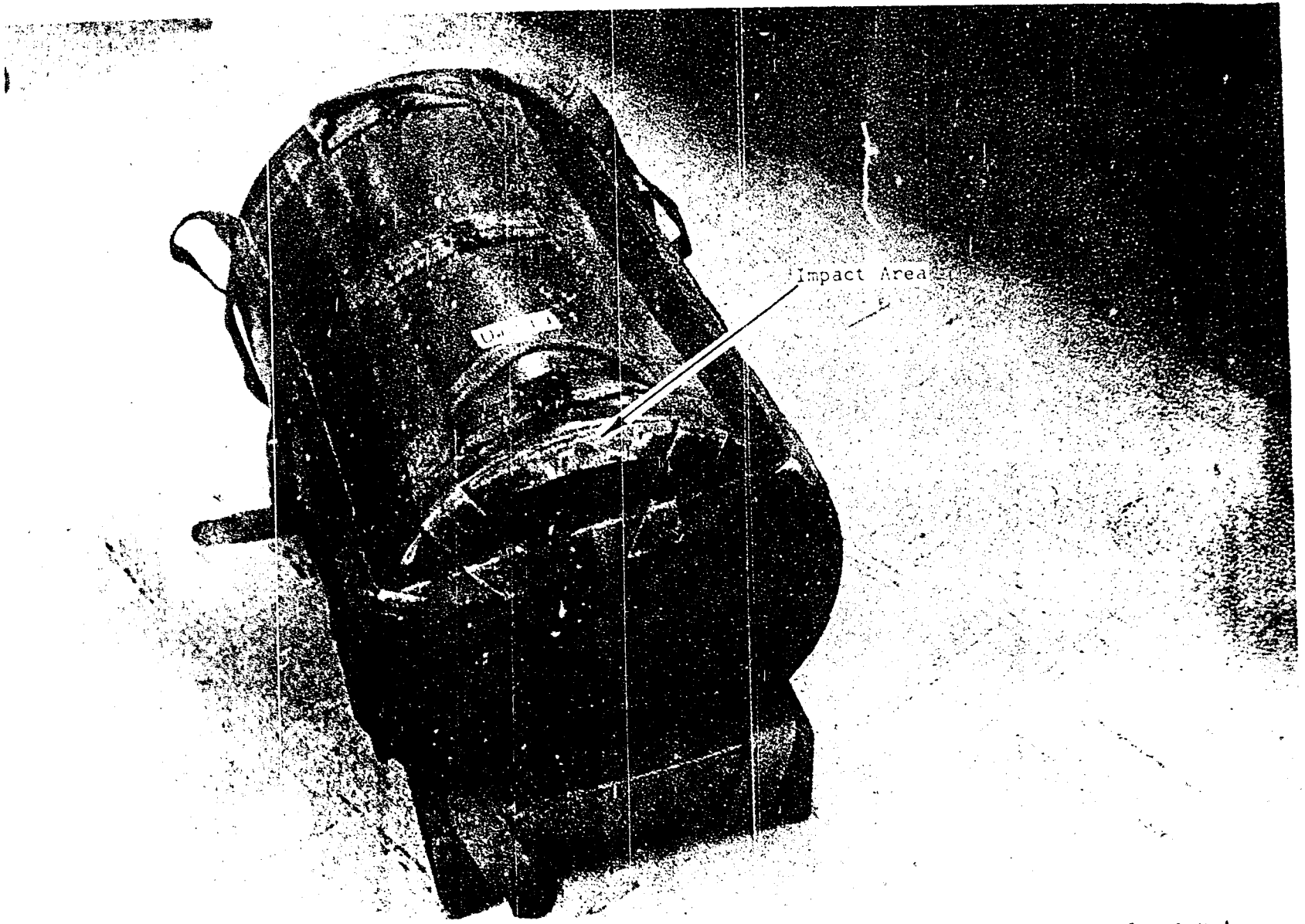

[illegible] (UNIT NO. 13) AFTER THE TEST. DYNAMIC DROP TESTS OF FOUR B54-[illegible]

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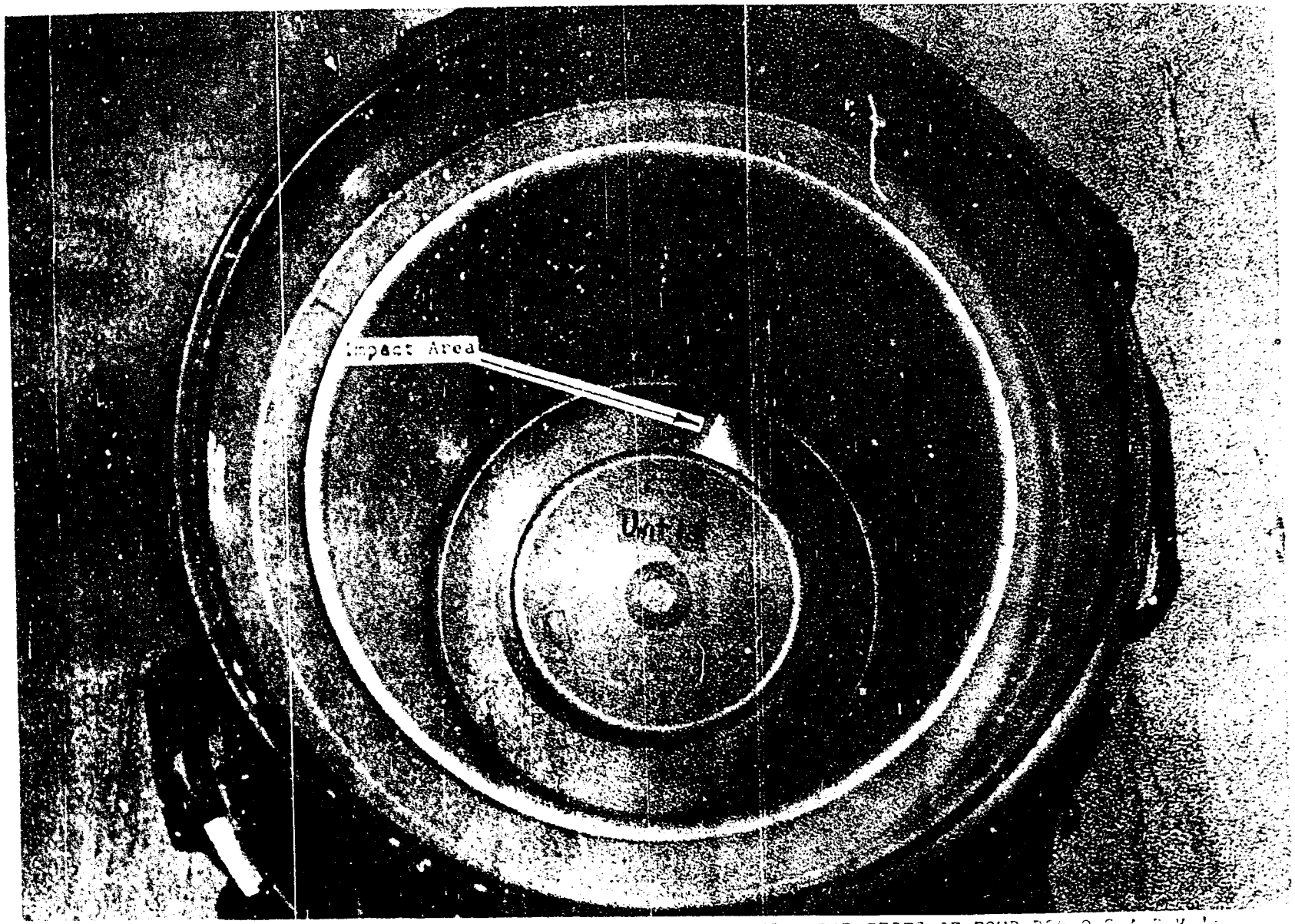
[redacted]



[illegible] (UNIT NO. 13) AFTER THE TEST. DYNAMIC DROP TESTS OF FOUR B84-0 S.A.F.M.'s.

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TABLE I

IMPACT CONDITIONS
DYNAMIC DROP TESTS OF FOUR B54-0 S.A.D.M.'s

UNIT NO.	IMPACT CONDITIONS
10	V_V = 24 fps; V_H = 18 fps; 53°; Concrete Target
11	V_V = 27 fps; V_H = 16 fps; 60°
12	V_V = 22 fps; V_H = 24 fps; 82°
13	V_V = 22 fps; V_H = 14 fps; 75°

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