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 W. Keye

Classification: U
 Authority: [unclear]
 Date: [unclear]

MAY 12 1961

File: P-6.0
T-17307
13.858.00

MAY 12 1961

TCG-NNT-1

TO: DISTRIBUTION

Re: Explosive Test on Chute Compartment and Support Rings (U)

Object of Test

The object of this test was to verify cutting action of MDF on parachute compartment and support rings for the TX-53.

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Authorisation for Test

This test was requested in a Work Order Authorisation to B. N. Cooper, 7321-5, from B. S. Hill, 7117-1.

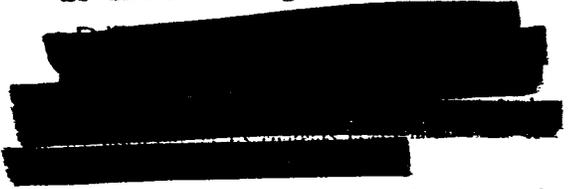
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TX-53
3-2

Procedure and Results

Four aluminum parachute compartment samples were tested using different sizes of MDF. All the samples were of the same configuration and a sample is shown in Figure 1. Two aluminum rings were tested using 15 grain/ft MDF and are shown in Figures 2 and 3. The first parachute compartment sample was loaded with 10 grain/ft MDF. Separation was satisfactory and the results are shown in Figure 4. The second sample was loaded with shaped 10 grain/ft MDF. Separation was satisfactory and the results of the second test are shown in Figure 5. The third sample was loaded with 15 grain/ft MDF. Separation was satisfactory and the results of Test No. 3 are shown in Figure 6. The fourth sample was loaded with shaped 15 grain/ft MDF. The results of Test No. 4 are shown in Figure 7; separation occurred but the backup plate shattered.

The results of the explosion of 15 grain/ft MDF on the first support ring is shown in Figure 8. The ring failure is shown in Figure 9. The results of the explosion of 15 grain/ft MDF on the second support ring is shown in Figure 10. A closeup of the ring failure is shown in Figure 11.



L. Hitchcock 7323-1
 L. HITCHCOCK - 7323-1
 Bill Johnson
 Test Project Engineer: BILL JOHNSON 7321-5

Approved by: R. S. HOOVER - 7321-5

LH:7323-1:dc

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Encs: Figs. 1-11

Copy to:

E. I. Bruce, 7117

Attn: B. S. Kill

J. M. Wlesen, 1442

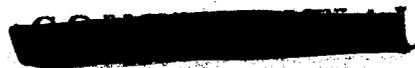
E. H. Copeland, 7321

J. R. Harrison, 7523

R. K. Smeltzer, 3421-3



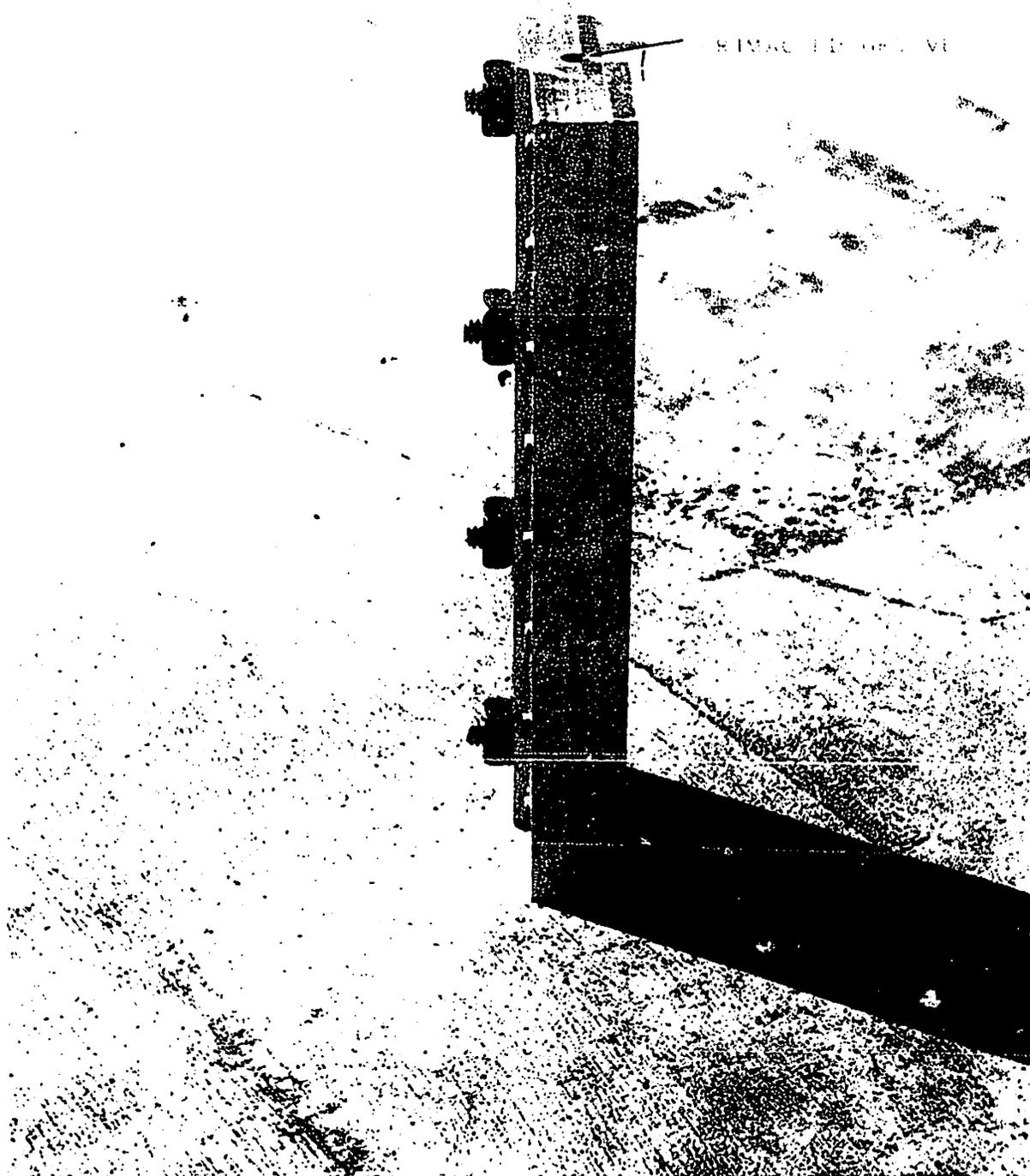
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EXPLOSIVE TEST

FIGURE 1 - TEST SAMPLE -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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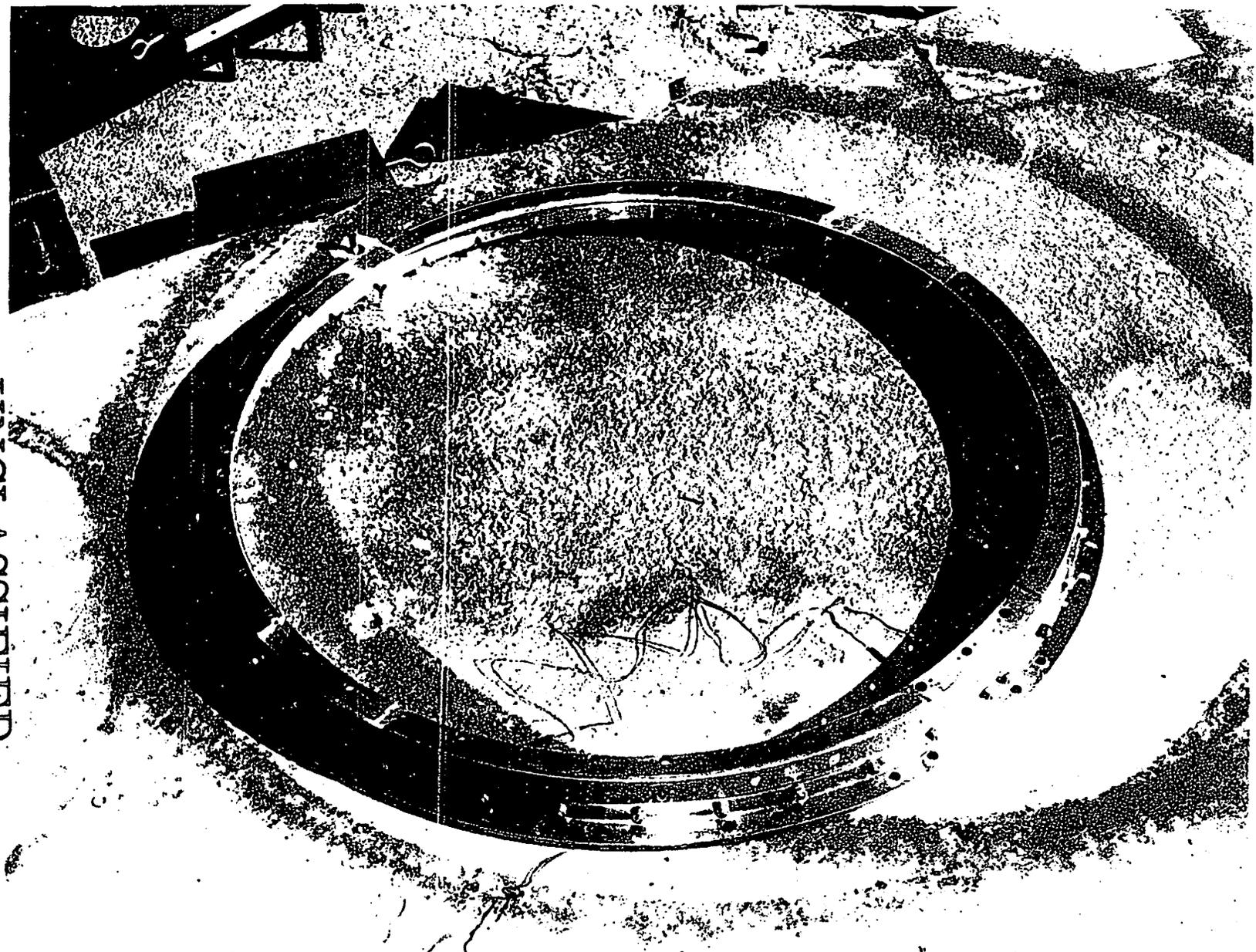


FIGURE 2 - RING NO. 1 SETUP FOR TEST -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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FIGURE 3 - RING NO. 2 SETUP FOR TEST -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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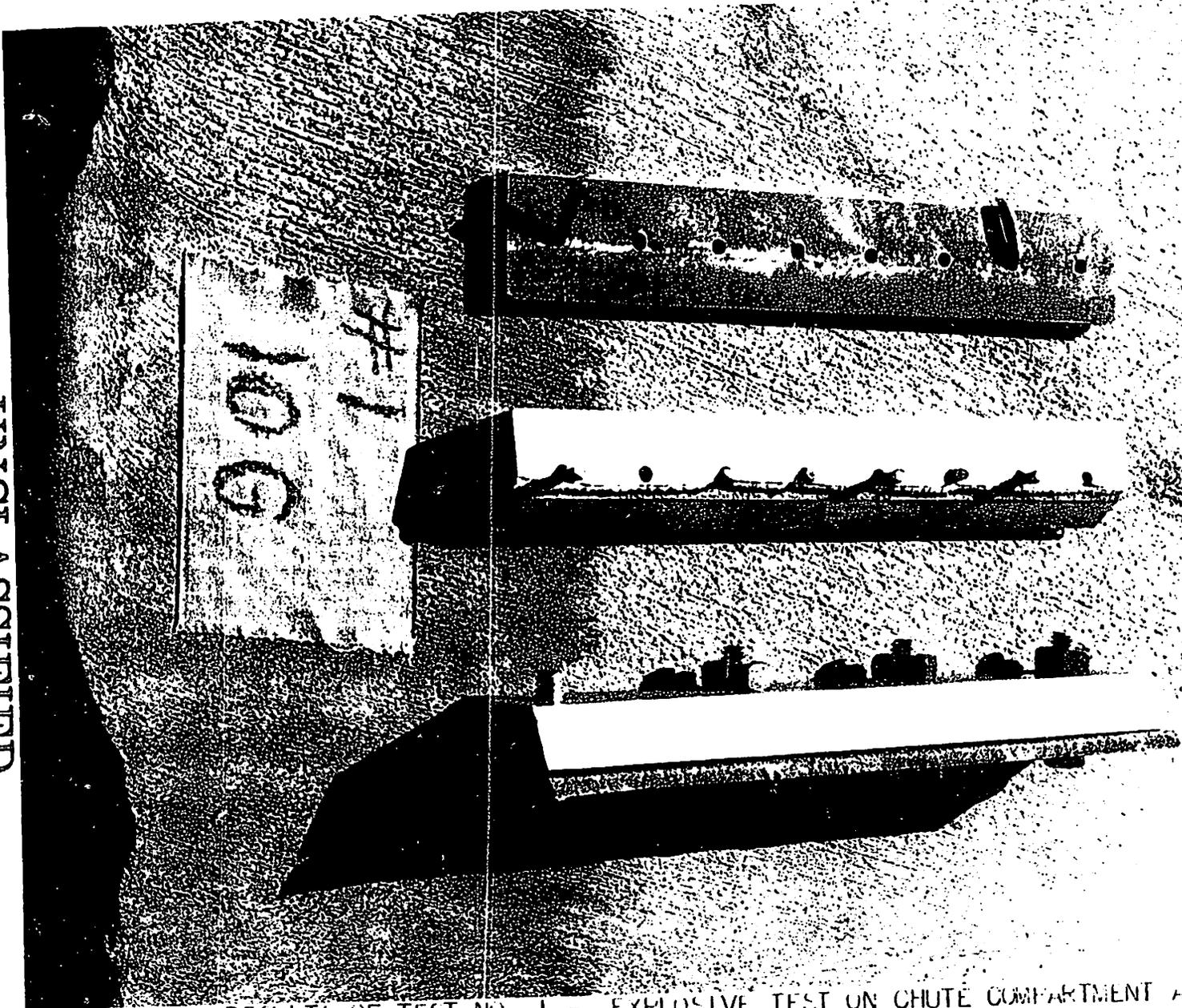
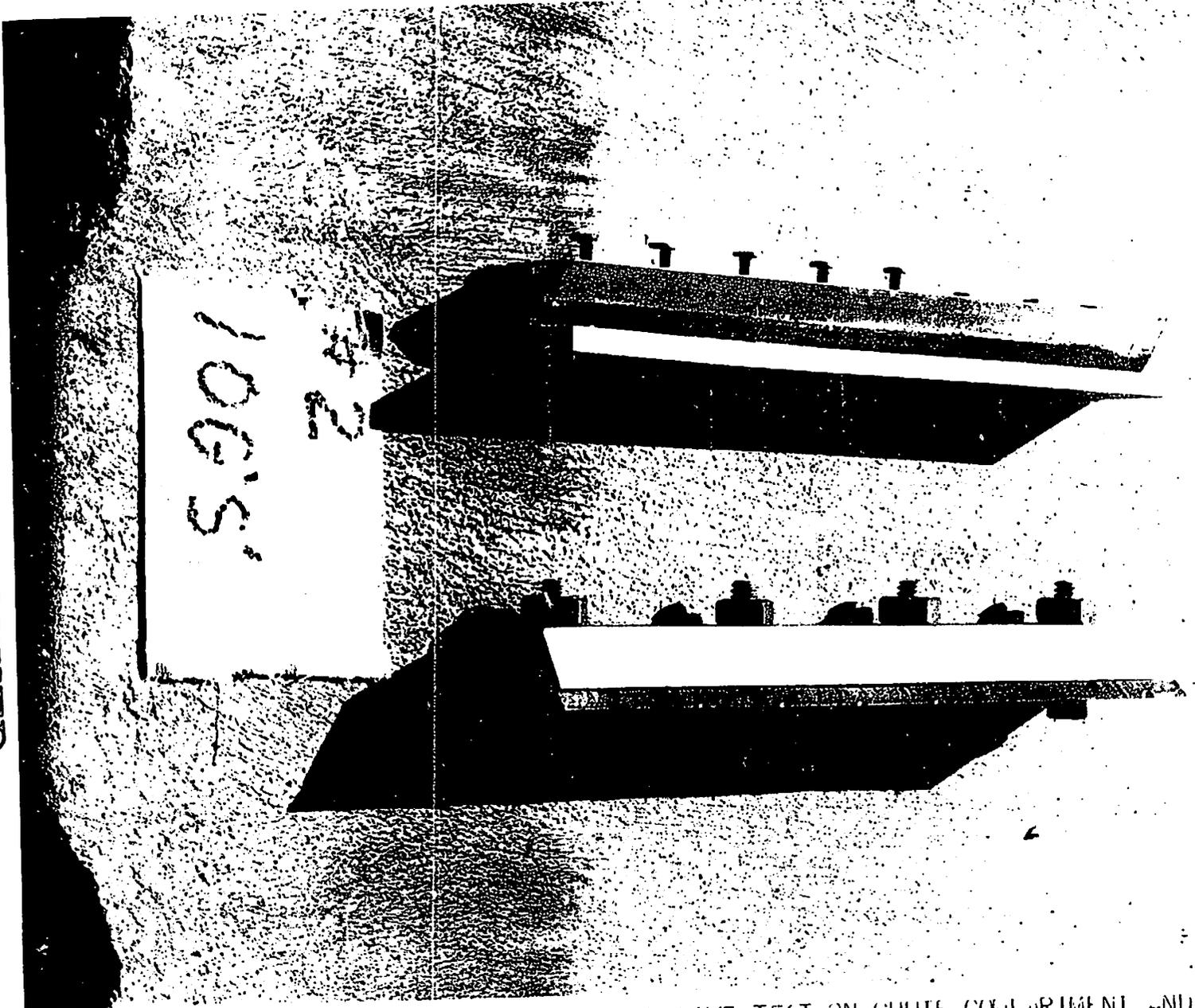


FIGURE 4 - RESULTS OF TEST NO. 1 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS
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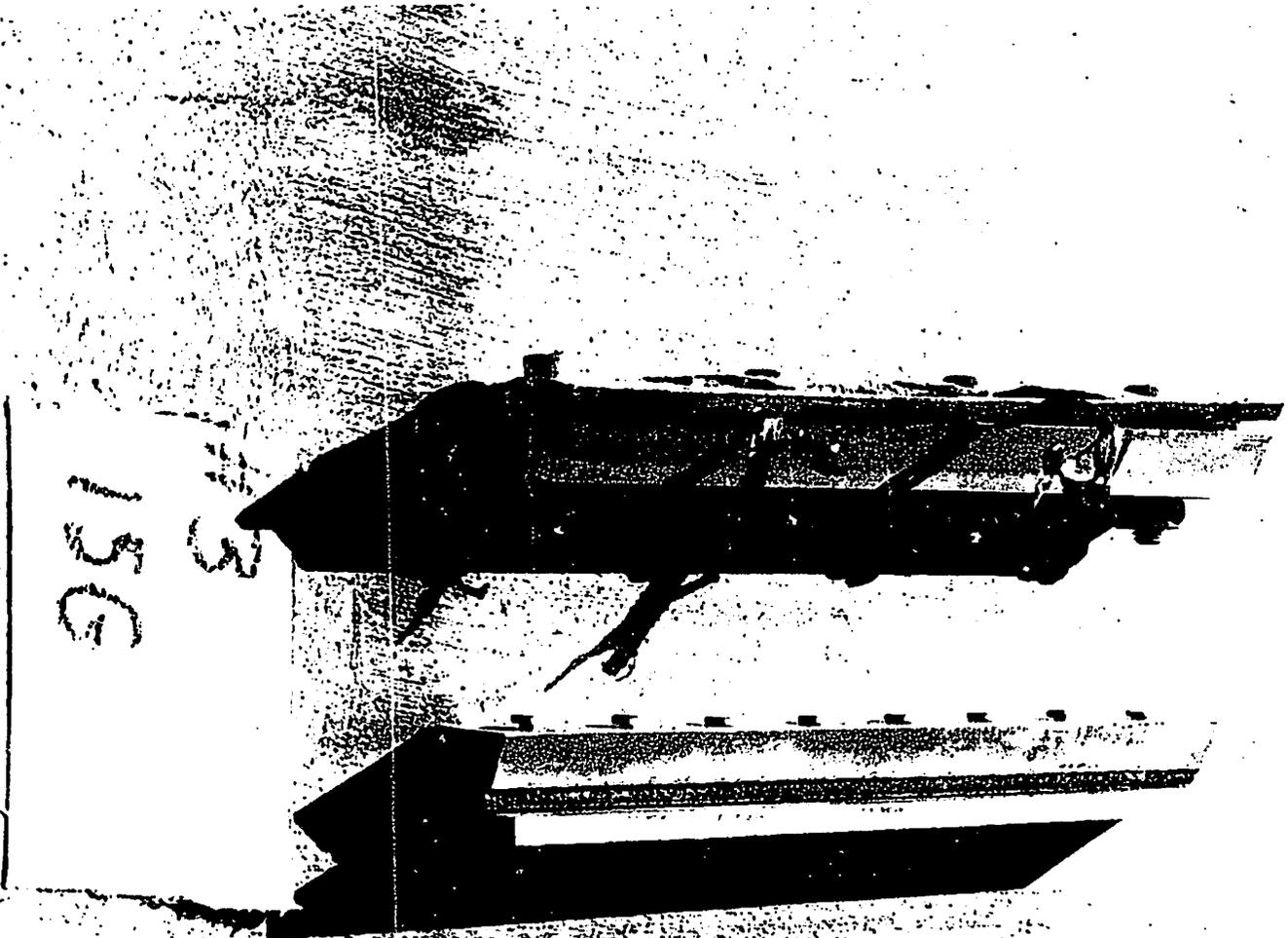
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FIGURE 5 - RESULTS OF TEST NO. 2 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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FIGURE 6 - RESULTS OF TEST NO. 3 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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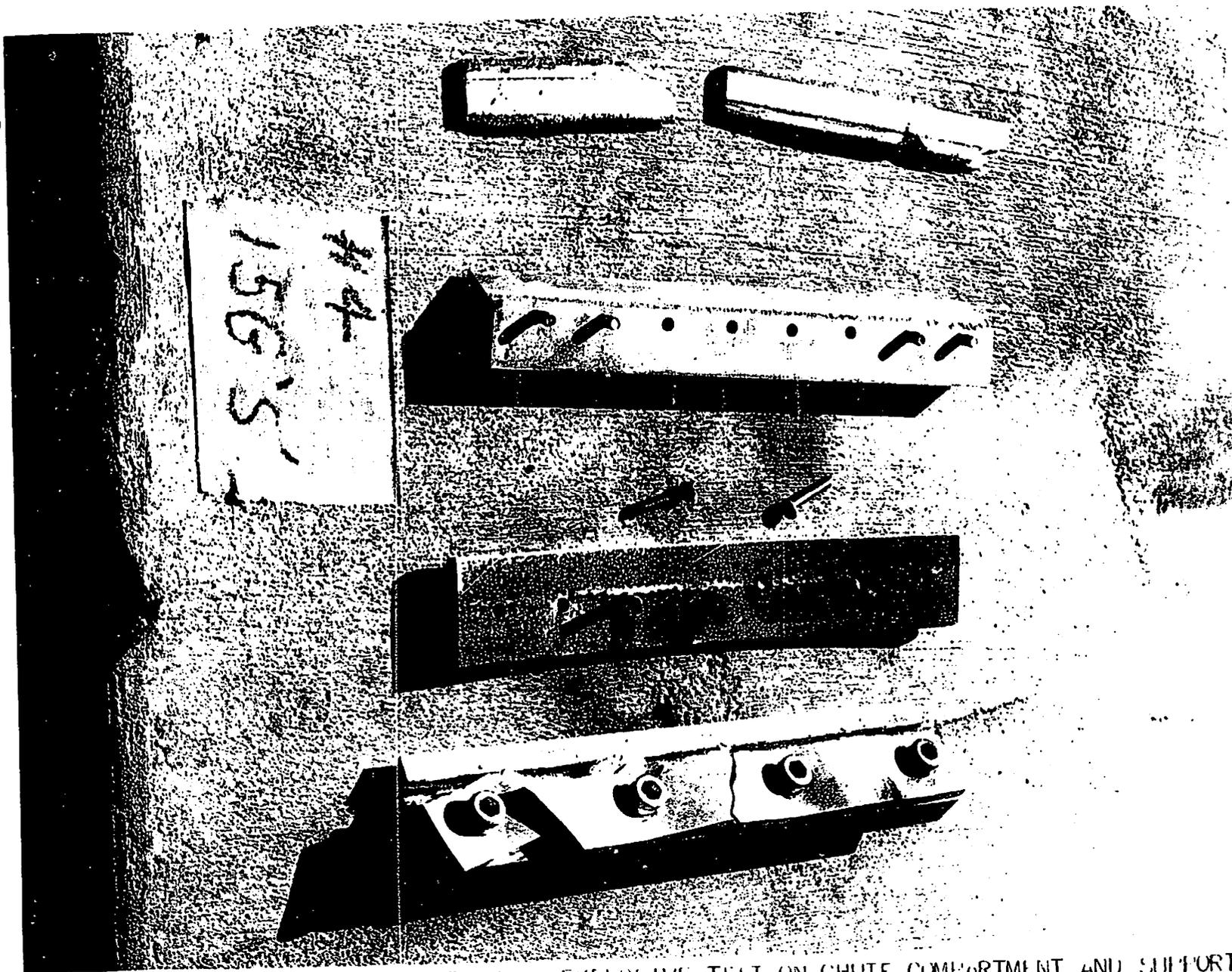


FIGURE 7 - RESULTS OF TEST NO. 4 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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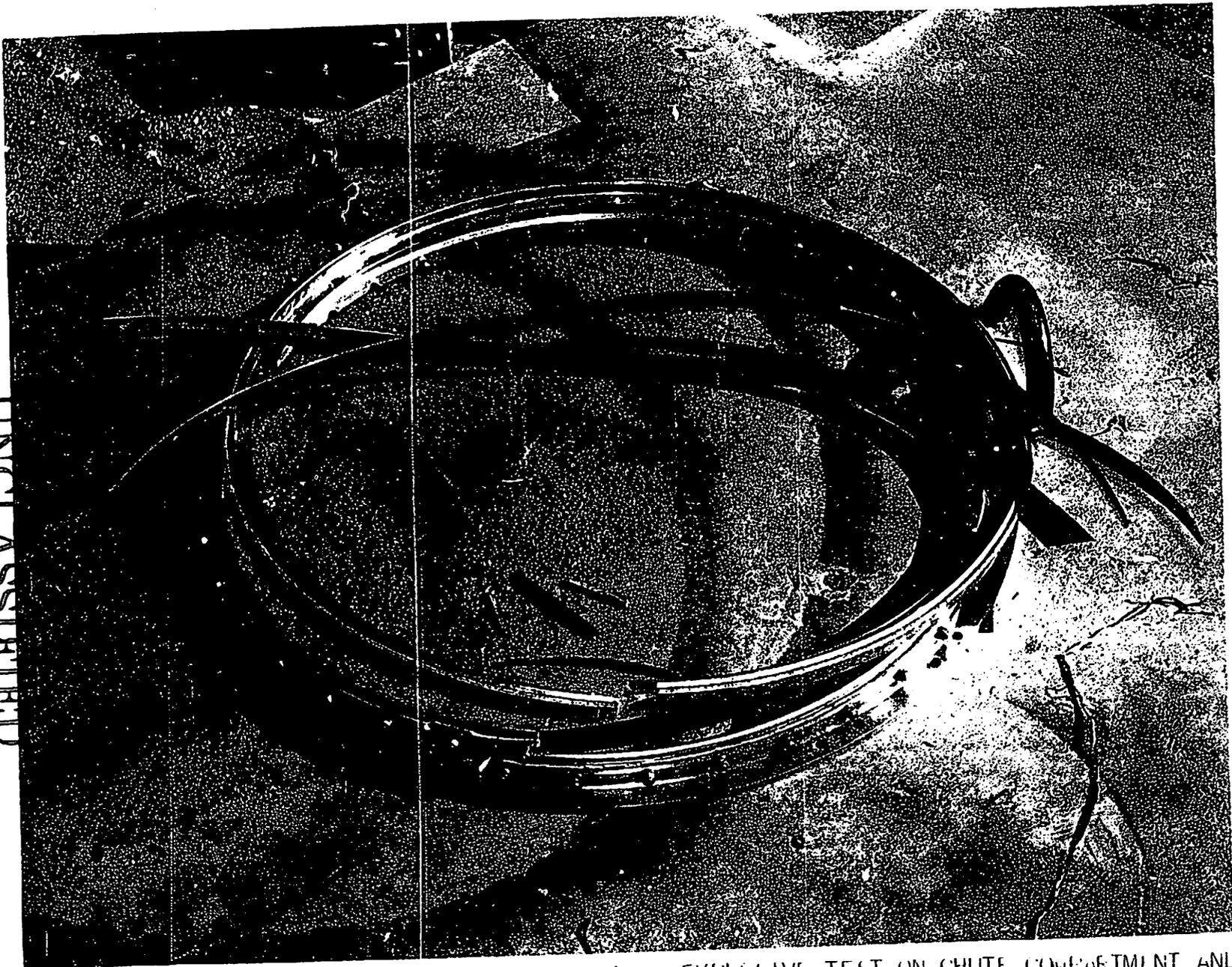


FIGURE 8 - RESULTS OF TEST ON RING NO. 1 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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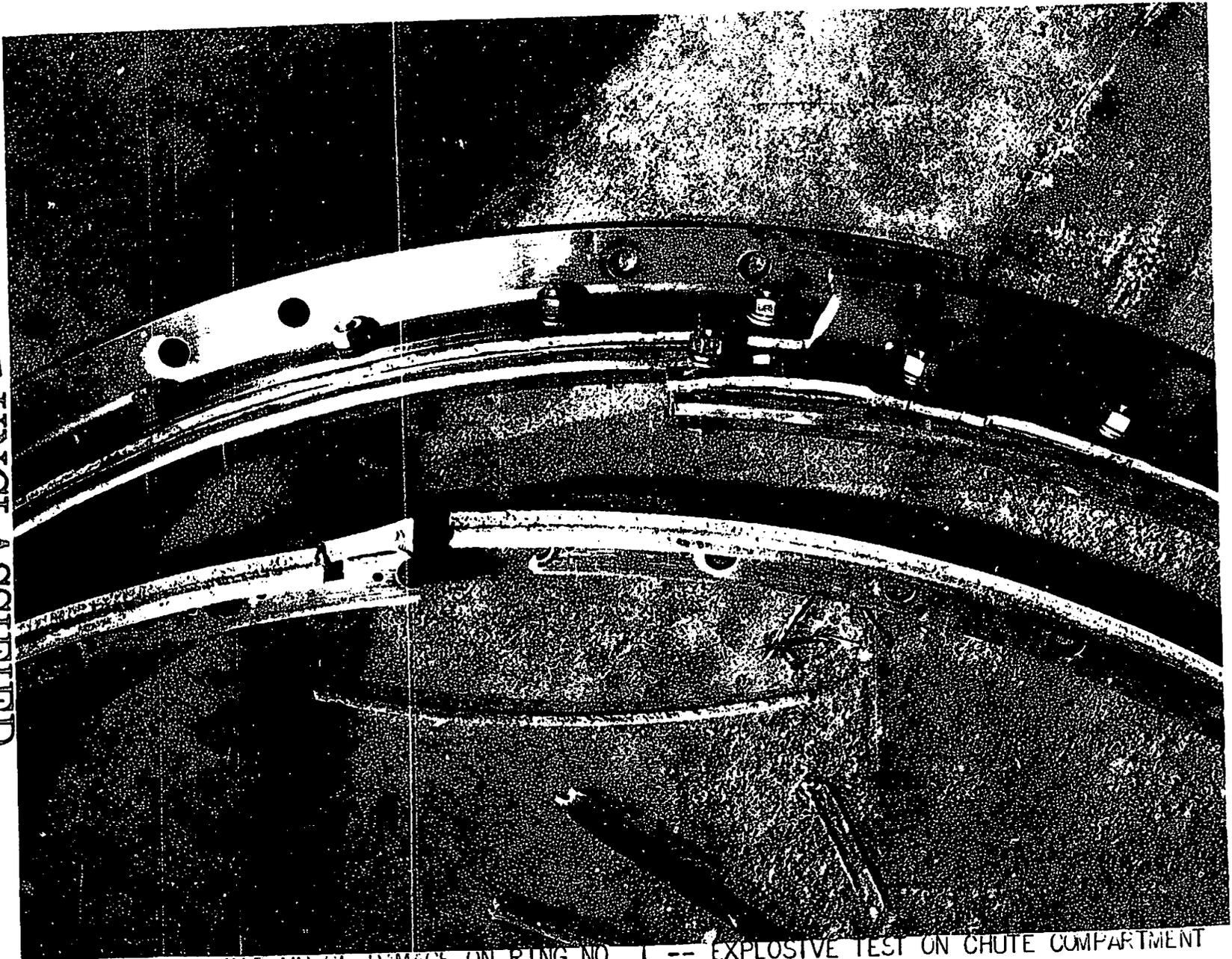


FIGURE 9 - CLOSE UP OF DAMAGE ON RING NO. 1 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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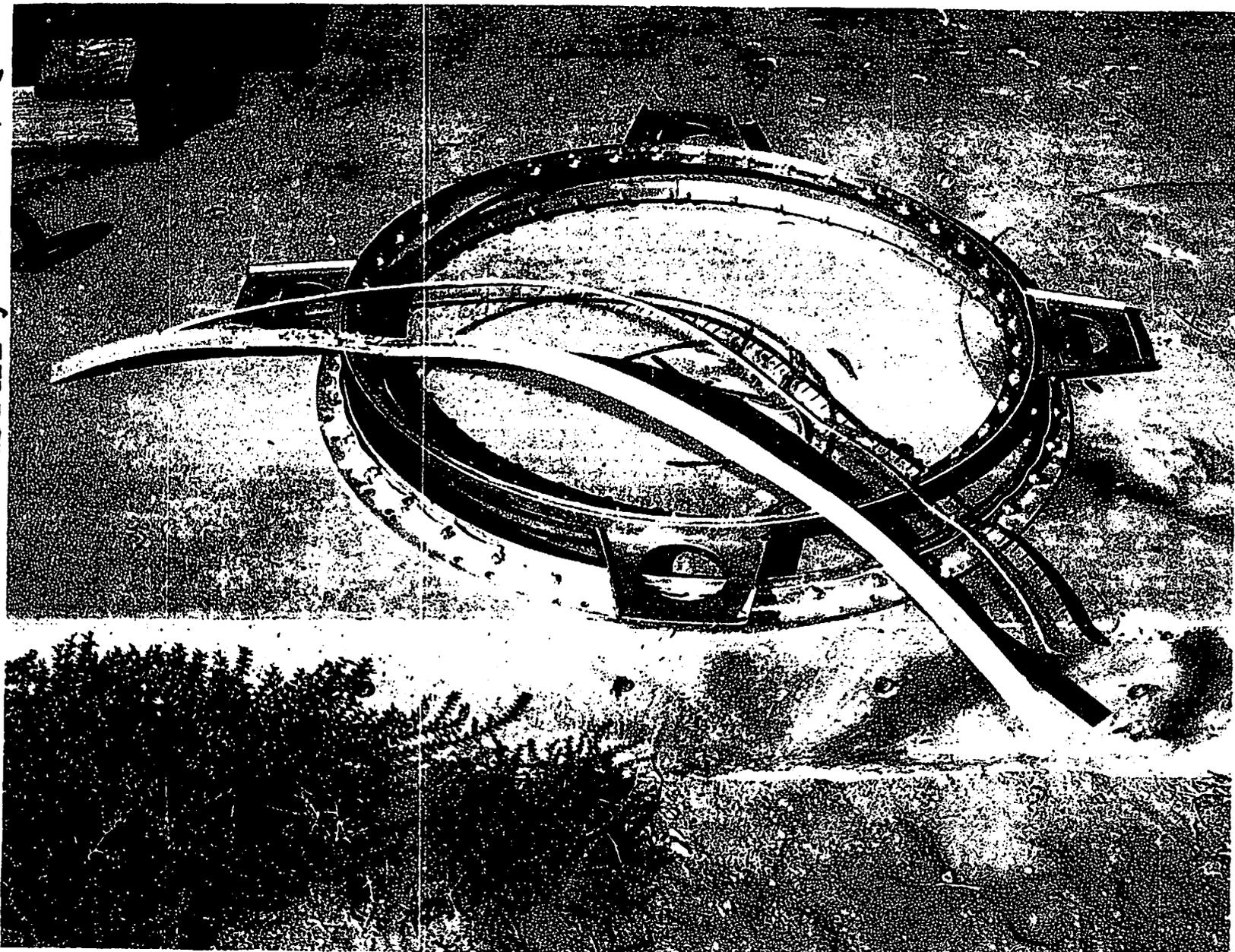


FIGURE 10 - RESULTS OF TEST ON RING NO. 2 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

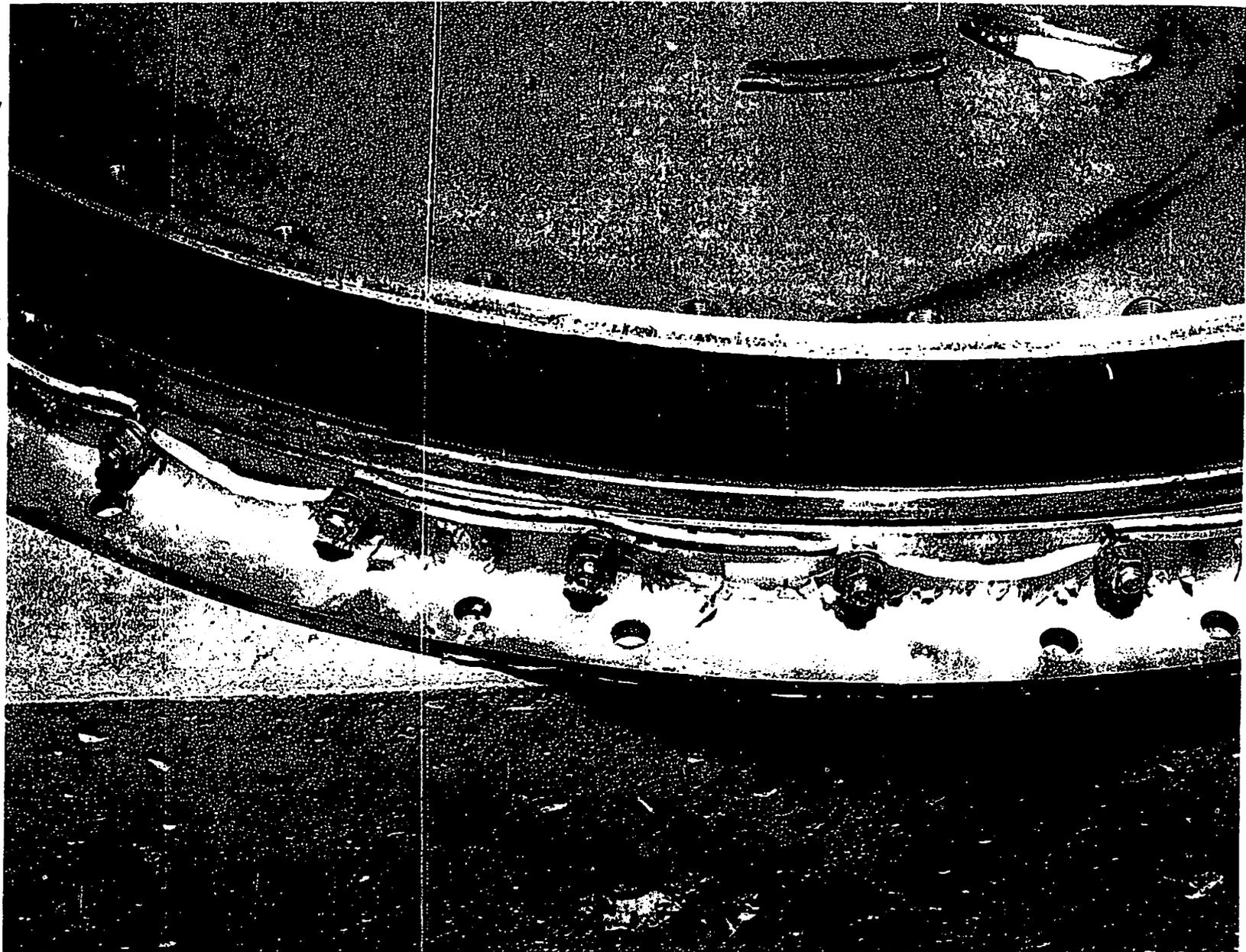
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FIGURE 11 - CLOSE UP OF DAMAGE ON RING NO. 2 -- EXPLOSIVE TEST ON CHUTE COMPARTMENT AND SUPPORT RINGS

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