

# UNCLASSIFIED

JUN 13 1957  
 Case No. 771  
 Ref. Sym: 1612 (519)  
 Project No. TM-577  
 File: TX-28,3-2

TO: MR. S. A. MOORE - 1224  
 Attn: Mr. H. Mullin - 1224-2  
 Re: Static Test of TX-28 Parachute Lug

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
Review Date: <u>8/13/98</u> Authority: <u>W.C. Lays</u> Reviewer: <u>W.C. Lays</u>	Classification (Code): <u>U</u> Classification Changed to: <u>U</u> Contains No. DOE Classified Information: <u>NO</u> Coordinates With: <u>NO</u> Contains UCAP: <u>NO</u> Comments: <u>DECLASSIFIED</u>

### Summary of Results

Two TX-28 lug and clevis assemblies were tested to destruction. In the first test the clevis failed in tension at the pin hole when subjected to a load of 137.5 per cent limit load (13,750 pounds). A heavier clevis was substituted for the second test and the lug failed in tension at the pin hole at a load of 159 per cent limit load (15,900 pounds).

### Object of Test

The object of this test was to determine the ultimate load carrying capacity of the TX-28 parachute lug and clevis assembly.

### Reason for Test

The test was performed in accordance with a Work Order Authorization from Mr. J. H. Davis, 1224-2, to Mr. P. H. Adams, 1612, dated April 10, 1957.

### Function of Object Tested

The TX-28 parachute lug attaches the parachute to the rear case in retarded fall.

### Summary of Past Tests

No previous tests have been performed on this object by Division 1612.

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW DOWNGRADING OR DECLASSIFICATION STAMP	
CLASSIFICATION CHANGED TO: <u>U</u>	AUTHORITY: <u>W.C. Lays</u>
PERSON CHANGING MARKING & DATE: <u>Emelda Selph 8/25/98</u>	RECORD ID: <u>98SA3758</u>
PERSON VERIFYING MARKING & DATE: <u>W.C. Lays 8/25/98</u>	DATED: <u>8/19/98</u>

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Setup for Test

1. Figures 1 and 2 are photographs depicting the general test setup.
2. The following components were tested:  
  
Two Tx-28 lug and clevis assemblies  
Dwg. No. (DS 1326 - 51217).
3. The following equipment was used in the test:
  - a. One Simplex pump and ram assembly - capacity 60 tons.
  - b. Load link No. 8, sensitivity 0.1 micro-inch per inch per pound at a gage factor setting of 2.04.
  - c. Baldwin SR-4 strain indicator, Serial No. J-59191.

Procedure

The lug was mounted as shown in Figures 1 and 2 with the lug at an angle of 10.67 degrees with the direction of load. The load was applied in one increment to failure.

In the second test the lug was mounted as before on the angled mounting plate. The load was applied in one increment to failure.

Results

In the first test the clevis failed in tension at the pin hole at 137.5 design limit load (13,750 pounds). Figure 3 is a photograph depicting the above failure.

In the second test a heavier clevis was substituted. The lug failed in tension at the pin hole at 159 per cent limit load (15,900 pounds) as shown in Figures 4 and 5.

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Mr. S. A. Moore

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Conclusion:

The assembly using the heavier clevis is capable of sustaining loads in excess of design ultimate load.

*R. I. Butler*

R. I. BUTLER - 1612-2

Approved by:

*Paul H. Adams*

PAUL H. ADAMS - 1612

RBB:1612-2:abp

- Copy to: W. A. Gardner, 1610
- D. M. Bruce, 1282
- C. L. Gomel, 5523
- R. K. Smeltzer, 7221-3
- Tech. Ref. File, Bldg. 880, 7221-3



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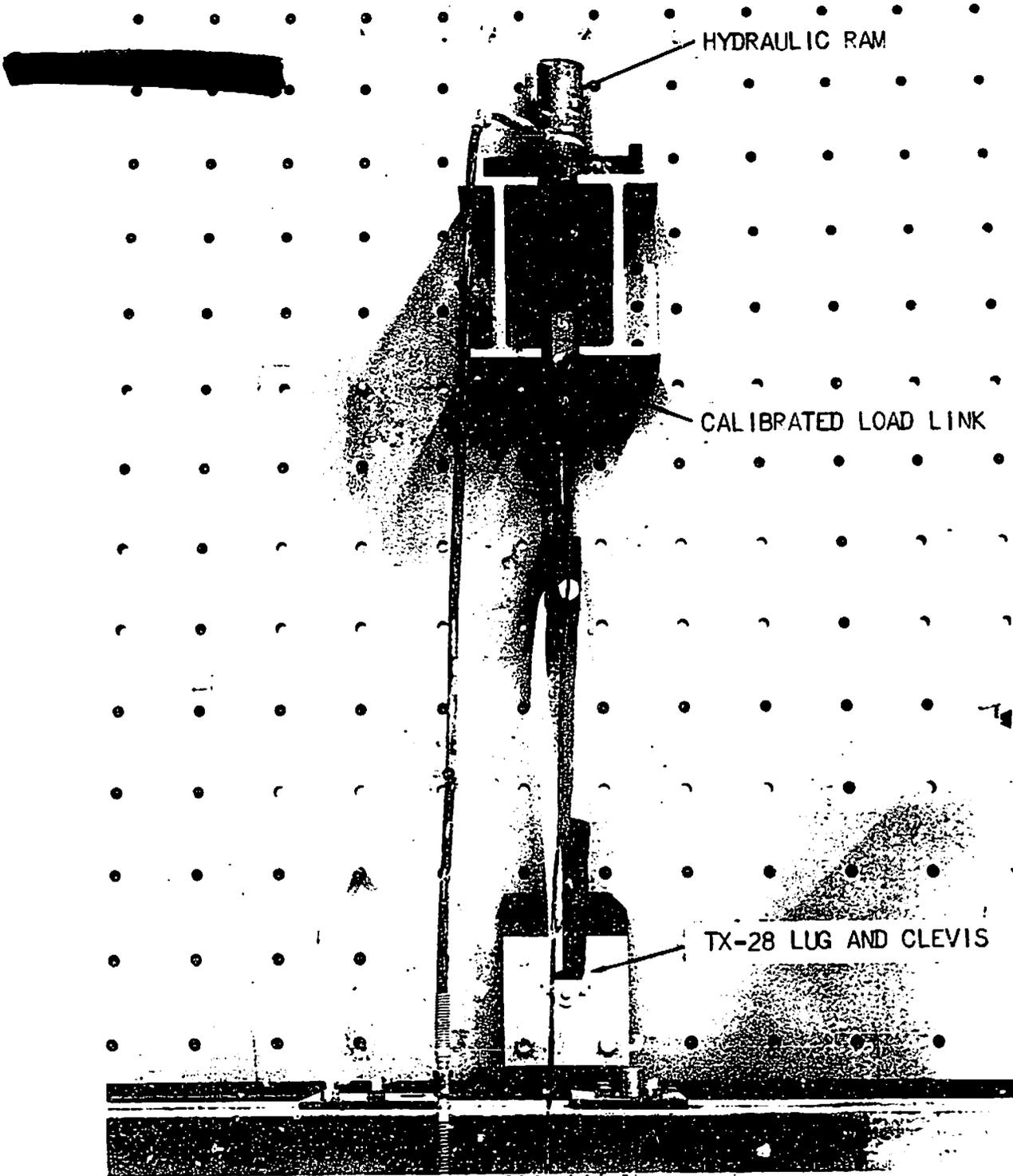
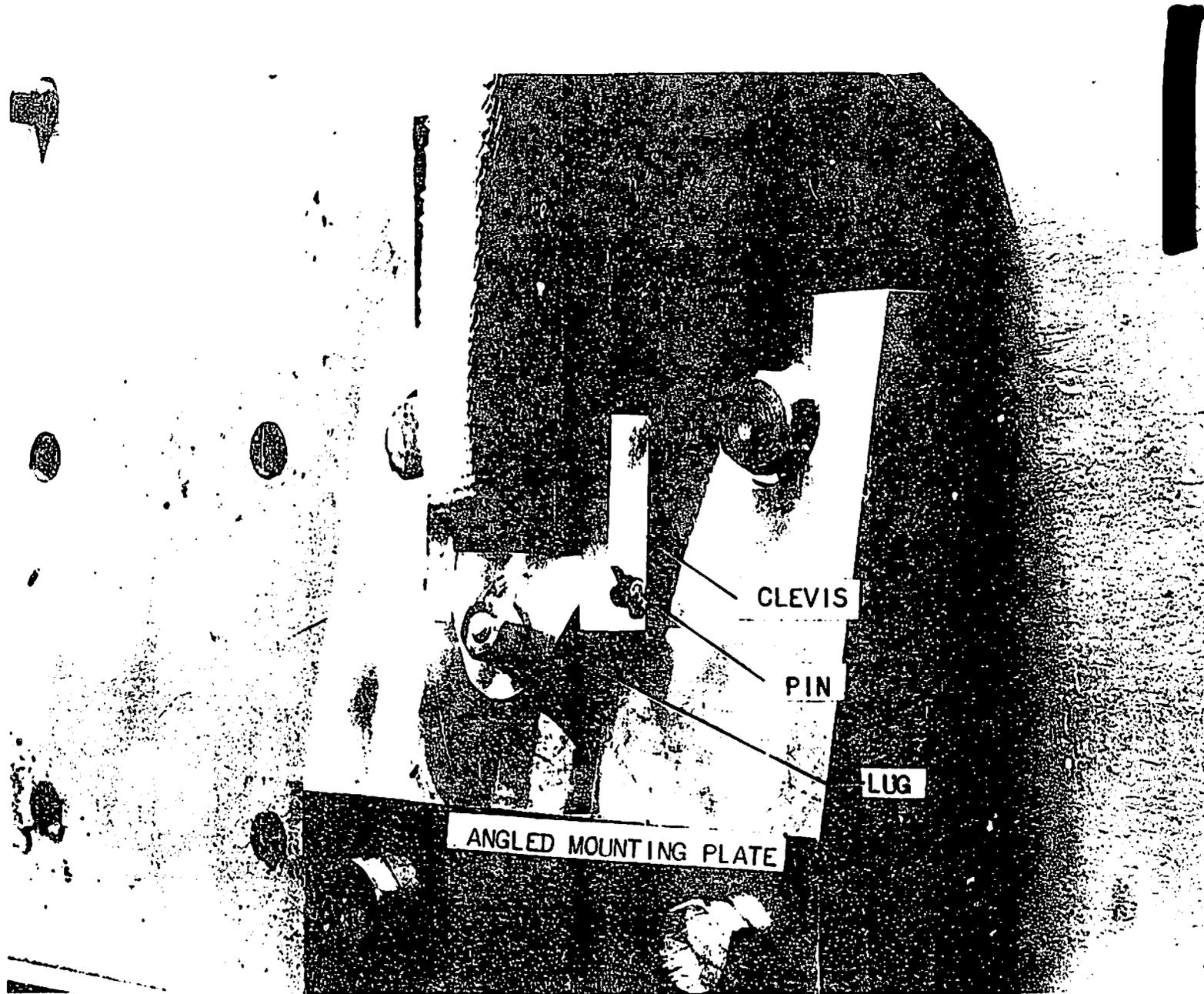


FIG. 1--TEST SETUP FOR STATIC TEST OF TX-28 PARACHUTE LUG  
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D# 90286

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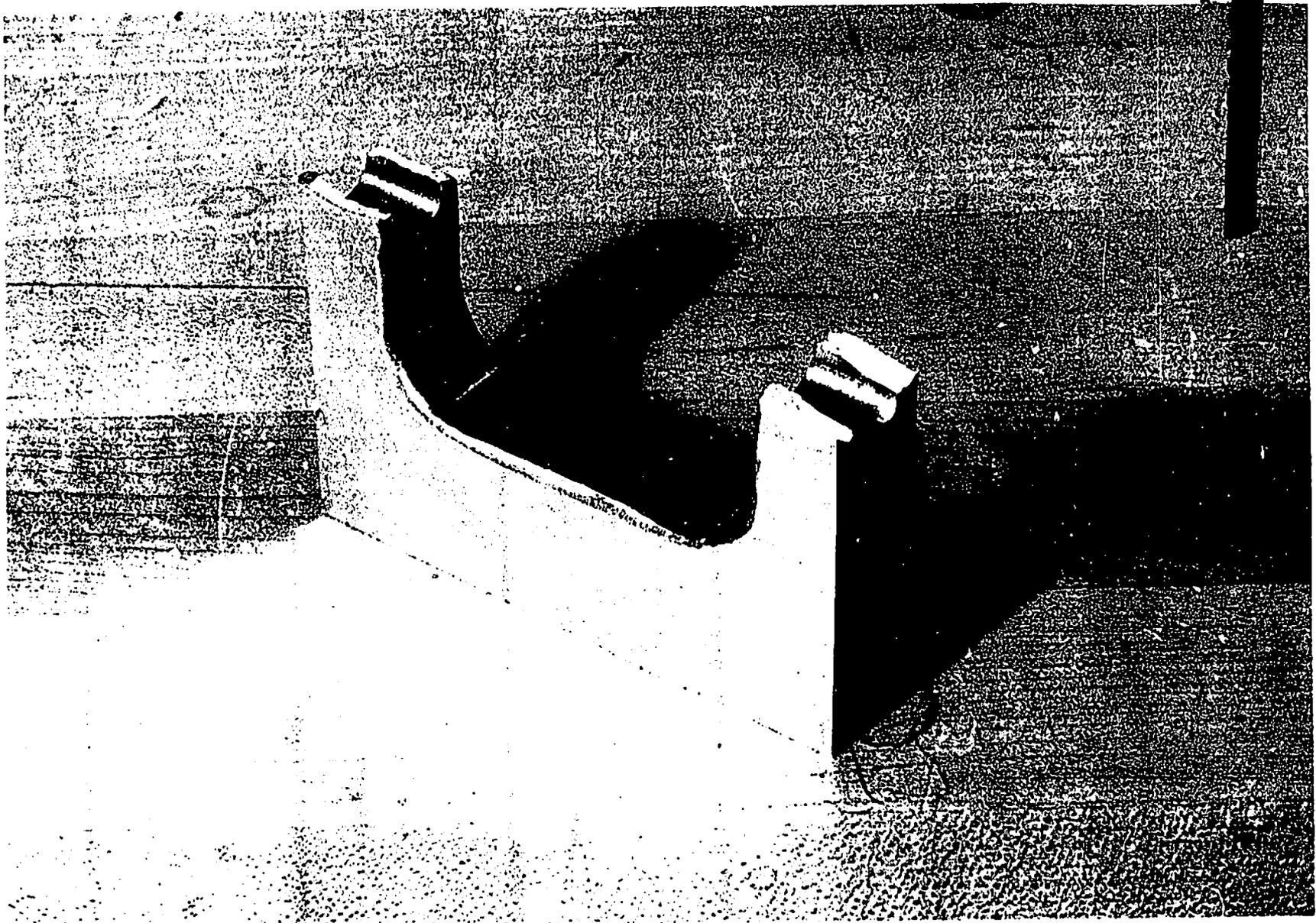
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FIG. 2--TEST SETUP FOR STATIC TEST OF TX-28 PARACHUTE LUG

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FIG. 3--FAILURE OF CLEVIS--STATIC TEST OF TX-28 PARACHUTE LUG

D-4 87968

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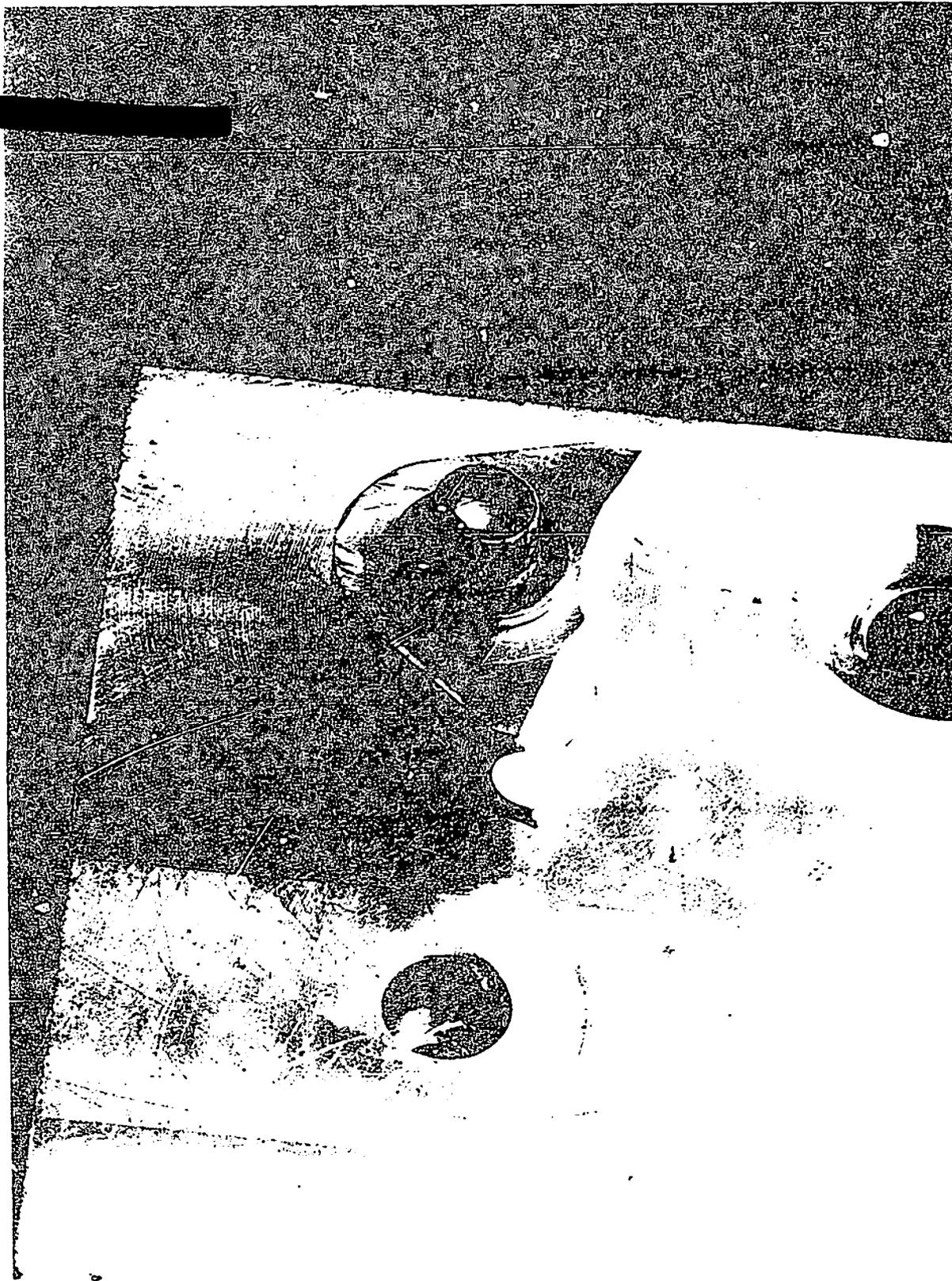


FIG. 4--FAILURE OF LUG--STATIC TEST OF TX-28 PARACHUTE LUG

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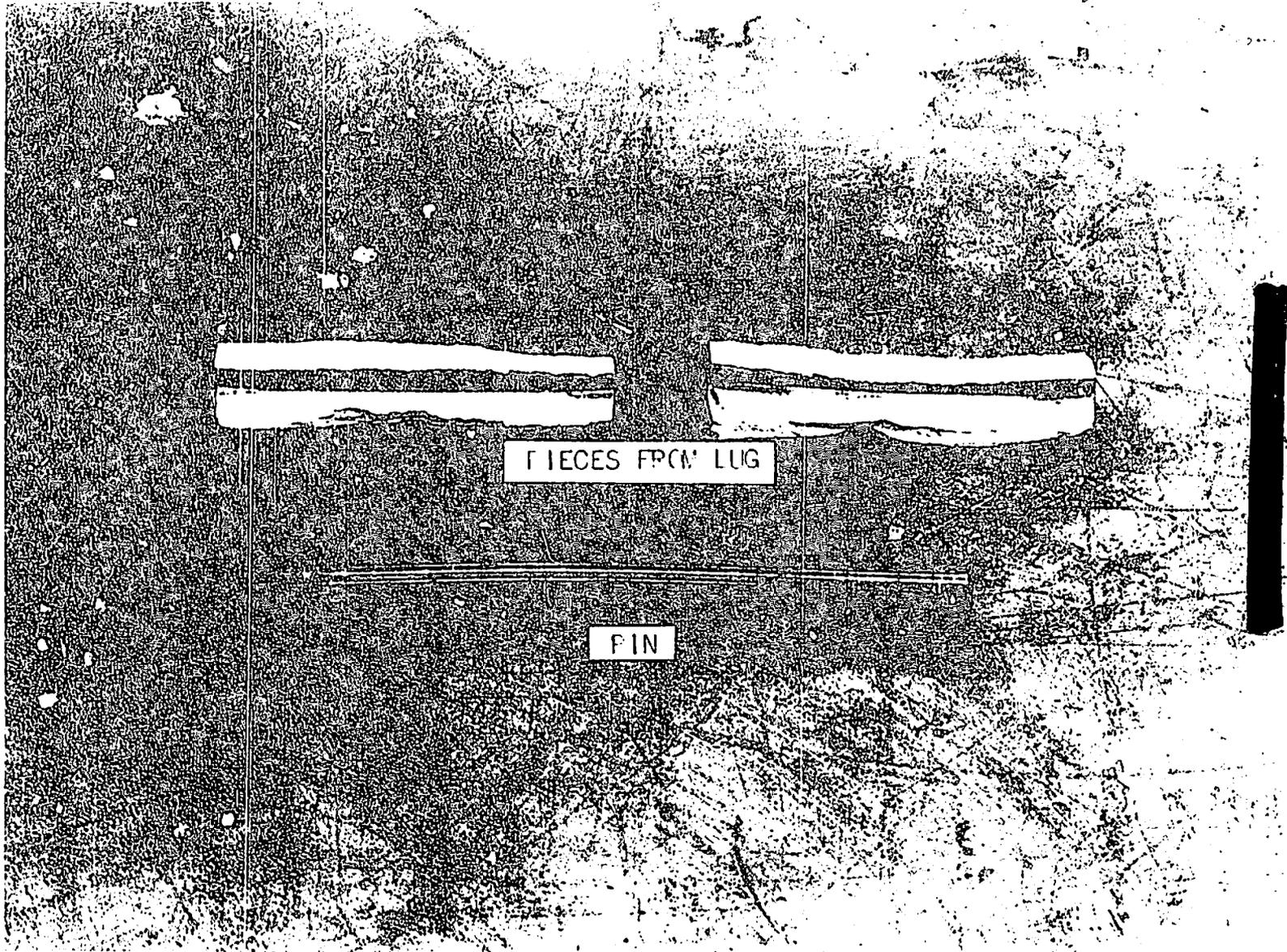


FIG. 5--FAILURE OF LUG--STATIC TEST OF TX-2<sup>nd</sup> PARACHUTE LUG

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REF. SN: 1612 (191)  
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