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app. II

File No. ST-L698

Report No. NA-54-83

NORTH AMERICAN AVIATION, INC.

INTERNATIONAL AIRPORT
LOS ANGELES 45, CALIFORNIA

ENGINEERING DEPARTMENT

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
DOWNGRADING OR DECLASSIFICATION STAMP	
CLASSIFICATION CHANGED TO: <u>U</u>	AUTHORITY: <u>W.C. Layne</u>
DATE: <u>1/27/97</u>	RECORD ID: <u>975N1466</u>
BY: <u>W.C. Layne</u>	DATE: <u>1-7-97</u>
VERIFYING MARKING & DATE	

DATED: STATIC TEST FOR 9641-31250 INTERMEDIATE ASSEMBLY

FOR

SANDIA CORPORATION P.G. NO. 1144

(N.A.A. G.O. NO. 9641)

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
1. Review Date: <u>5-18-80</u>	2. Declassification (Class Number):
3. Authority: <u>CRP-RR</u>	3. Classification Reasoned:
4. Review Date: <u>1-17-97</u>	4. Classification Changed to: <u>U</u>
5. Authority: <u>W. Layne</u>	5. Contains RDT/CI/Information:
	6. Contains UCAF:
	6. Comments: <u>unclassified</u>

PREPARED BY

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No. of Pages 26

REVISIONS

Date 2-11-54

DATE	REV. BY	PAGES AFFECTED	REMARKS

EO-337, REV. 1-52.

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DATE: 2-1-54	STATIC TEST OF 9641-31250 INTERMEDIATE ASSEMBLY	MODEL NO. G.O. 9641

Witnesses for all or part of the static test were as follows:

CUSTOMER

Sandia Corporation

John McKiernan

U.S. Navy

Commander J. Garret

Bendix

Frank Taylor

NORTH AMERICAN AVIATION, INC.

- | | | |
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| 5. J. W. Gaines |) | |
| 6. C. M. Grace |) | - Engineering Structures Laboratory |
| 7. C. A. Moore |) | |

PLACE AND DATE OF TESTS

The tests were conducted in the Engineering Structures Laboratory of North American Aviation, Inc., Los Angeles 45, California, from January 18 to January 22, 1954.

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TEST SPECIMEN:

The test specimen consisted of a complete 9641-31250 (Body Assembly - Intermediate) minus the 9641-31274 tube. For purposes of applying loads, a dummy forward section (TT-8317) and a dummy aft section (TT-8320) were attached to the test specimen. The dummy forward section was bolted to the frame at station "0" by nine NAS 145 bolts. Station "0" was considered to be the forward end of the 9641-31250 assembly.

The splice at station 55-11/32 was considered to be critical and therefore was tested. The production splice at the joint was duplicated. The dummy aft section was then fastened to the test specimen at station 58 and station 59 by two rows of AN 3 bolts. Refer to photograph 9641-90-5B on page 23.

TEST SETUP:

The test setup was made by supporting the specimen on a simulated rack assembly (TT-8315) on 9621-31276 support lugs. Sway bracing was accomplished by round four square inch pads of a ball and socket type contoured to fit the specimen. The sway brace pads were located 40 degrees from the vertical. The above setup was typical for all body tests except Test Number 4. Test Number 4 was a test of the specimen supported on 20 inch center lugs, 9621-31378, with no sway bracing required.

For the ejection and chock load tests the specimen was supported on five equally spaced cradles lined with one inch of hard sponge rubber. Refer to photograph 9641-90-2 on page 17.

TEST PROCEDURE:

All loads were applied by means of straps in conjunction with hydraulic struts. An Edison hydraulic pressure control unit was used to control loads on the specimen. Loads were applied in increments of ten percent limit load from zero to 80 percent limit load and in increments of five percent from 80 percent to 150 percent or failure. Permanent set readings were recorded for each test after 100 percent (design limit load), 115 percent (design yield load) and 150 percent (design ultimate load). The difference between the original zero percent reading and the zero percent after loading was considered to be permanent set.

The test specimen was preloaded to 3400 pounds at each support lug before each test except Number 4.

Drag loads were applied 60 percent on the forward dummy section and 40 percent on the aft dummy section for all body tests. Deflection gages were located as follows for all body tests:

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TEST PROCEDURE: (Continued)

Gage No.	Station	Type Deflection
1	0	Vertical
2	27	Vertical
3	54	Vertical
4	0	Side
5	27	Side
6	54	Side

For all body tests deflections aft, down or outboard were considered positive.

Deflection gages were located as follows for ejection and chocking tests. Gages were dial indicators located internally on rings at the stations noted.

Test No.	Gage No.	Station	Type Defl.
6A	1	2-3/8	Vertical
	2	2-3/8	Side
	3	11-1/8	Vertical
	4	11-1/8	Side
6B	1	43-1/4	Vertical
	2	43-1/4	Side
	3	11-1/8	Vertical
	4	11-1/8	Side
6C	3	11-1/8	Vertical
	4	11-1/8	Side
7	1	19-3/4	Vertical

Note: For Test Number 7 chocking load test the deflection gage was located on the 9641-31260 beam and indexed to read deflection of the bottom of the specimen at station 19-3/4.

The following abbreviations will be used throughout this report:

100% = design limit load = D.L.L.
 115% D.L.L. = design yield load = D.Y.L.
 150% D.L.L. = design ultimate load = D.U.L.

All loads used for the static test were taken from North American Aviation, Inc. report number NA-52-981

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TEST SUMMARYTest Number 1 - Condition F-5-b

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station .625 and 39.625. The specimen was tested to 150 percent limit load (design ultimate load).

Test Number 2 - Condition L-10

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station 9.375 and 29.375. The specimen was tested to 150 percent limit load (design ultimate load).

Test Number 3 - Condition 9-2'

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station 9.375 and 29.375. The specimen was loaded to 150 percent limit load (design ultimate load).

Test Number 4 - Condition 9-2'

The specimen was supported on 20 inch lugs with no sway bracing required. The specimen was tested to 150 percent limit load (design ultimate load).

Test Number 5 - Condition 6

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station 9.375 and 29.375. The specimen was loaded to 150 percent limit load (design ultimate load) and then to a failure.

Test Number 6 - Ejection Tests

- A. A load of 22,500 pounds ultimate was applied to the test specimen at station 19-1/8 on the top centerline with a ten square inch pad.
- B. A load of 22,500 pounds ultimate was applied to the specimen at station 43-1/8 on the top centerline with a ten square inch pad.
- C. A load of 22,500 pounds ultimate was applied to the specimen at station 22.625 on the top centerline with an ejection pad supplied by Sandia Corporation.
- D. A load of 22,500 pounds ultimate was applied to the specimen at station 28.625 on the top centerline with an ejection pad supplied by Sandia Corporation.
- E. A load of 22,500 pounds ultimate was applied to the specimen at station 30.875 on the top centerline with an ejection pad supplied by Sandia Corporation.

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TEST SUMMARY (Continued)Test Number 7

A chocking load of 2820 pounds ultimate was applied to the bottom centerline of the specimen at station 7.75 simultaneously with an ultimate load of 3780 pounds at station 19.75. A pad of three square inches was used to apply each load.

Test Number 8 - Handling Lugs

- A. The following ultimate loads were applied simultaneously to handling lug 9641-31320 at station 28.8, left hand: 790 pounds up, 870 pounds outboard and 3560 pounds aft.
- B. The following ultimate loads were applied simultaneously to handling lug 9641-31320 at station 28.8, left hand: 790 pounds up, 870 pounds outboard and 3560 pounds forward. The specimen was then loaded to a failure.

Test Number 9 - Lug Test

- A. 9621-31277 (Lug - Universal) was tested statically to a failure in a test machine.
- B. 9621-31276 (Lug - Support), by analysis, is stronger than 9621-31277 and did not need to be tested, since 9621-31277 failed at 133 percent of ultimate load or 80,000 pounds.

TEST OBSERVATIONS AND RESULTS:Test Number 1 - Condition F-5-b

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station .625 and 39.625.

- 50% D.L.L. - The right hand forward sway brace pad was separated from the specimen by 1/32 inch.
- 75% D.L.L. - Both right hand sway brace pads were separated from the specimen.
- 100% D.L.L. - The right hand forward sway brace pad was separated from the specimen by 1/16 inch and the right hand aft sway brace pad was off by 1/32 inch. There were no visible indications of buckling or failure.
- 115% D.L.L. (D.Y.L.) - No change over 100 % D.L.L.
- 0% After 115% D.L.L. (D.Y.L.) - Refer to Table I for permanent set data.

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TEST OBSERVATIONS AND RESULTS:

Test Number 1 - Condition F-5-b (Continued)

150% D.L.L. (D.U.L.) - The specimen held 150 percent for two minutes with no indication of yielding or excessive deflection. Refer to Table I for deflection and permanent set data.

TABLE I

Condition F-5-b - Net Deflection and Permanent Set (Inches) Corrected for Jig Deflection

Gage No. % LL	1	2	3	4	5	6
0	0	0	0	0	0	0
25	.03	.01	0	.01	0	0
50	.04	.01	0	.04	0	0
75	.04	.01	0	.08	.05	.01
100	.04	.02	0	.10	.06	.04
P.S.	.01	0	.02	0	0	0
100	.05	.02	0	.09	.04	.04
115	.04	.01	0	.12	.08	.04
P.S.	.01	.01	0	0	0	0
115	.04	.01	0	.12	.08	.05
130	.05	.01	0	.14	.09	.05
140	.05	.01	0	.15	.09	.06
150	.05	.01	0	.17	.10	.06
P.S.	.02	.01	0	0	0	0

Test Number 2 - Condition L-10

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station 9.375 and 29.375.

50% D.L.L. - The right hand aft sway brace pad was separated from the specimen by an estimated 1/32 inch.

100% D.L.L. - The right hand aft sway brace pad was separated by 1/16 inch.

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TEST OBSERVATIONS AND RESULTS:Test Number 2 - Condition L-10 (Continued)

115% D.L.L. (D.Y.L.) - The right hand aft sway brace pad was free by 1/16 inch. There were no visible indications of yielding or failure.

0% After 115% D.L.L. (D.Y.L.) - Refer to Table II for permanent set data.

150% D.L.L. (D.U.L.) - The specimen held 150 percent for two minutes with no indication of yielding or failure. Refer to Table II for deflection and permanent set data.

TABLE II

Condition L-10 - Net Deflection and Permanent Set (Inches) Corrected for Jig Deflection

Gage No. % LL	1	2	3	4	5	6
0	0	0	0	0	0	0
25	-.01	0	.03	.01	0	.03
50	-.02	0	.06	0	.02	.04
75	-.02	.01	.10	.02	.02	.06
100	-.02	.01	.13	.02	.05	.06
P.S.	0	0	.02	0	0	0
100	-.02	.01	.12	.01	.05	.07
115	-.04	0	.15	.02	.05	.08
P.S.	0	.01	.03	0	0	0
115	-.03	.01	.15	.01	.03	.07
130	-.03	.01	.17	.02	.05	.07
140	-.04	.02	.19	0	.06	.07
150	-.03	.02	.20	.01	.05	.08
P.S.	-.01	0	.03	0	0	.02

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TEST OBSERVATIONS AND RESULTS: (Continued)

Test Number 3 - Condition 9-2'

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station 9.375 and 29.375.

50% D.L.L. - The right hand aft sway brace pad was separated from the specimen by an estimated 1/64 inch.

100% D.L.L. - The right hand aft sway brace pad was free by 1/32 inch.

115% D.L.L. (D.Y.L.) - There was negligible change over 100 percent. There was no visible indication of yielding or failure.

0% After 115% D.L.L. (D.Y.L.) - Refer to Table III for permanent set data.

150% D.L.L. (D.U.L.) - The specimen held 150 percent for two minutes with no indication of yielding or failure. Refer to Table III for deflection and permanent set data.

TABLE III

Condition 9-2' Net Deflection and Permanent Set (Inches) Corrected for Jig Deflection

Gage No. % LL	1	2	3	4	5	6
0	0	0	0	0	0	0
25	0	0	0	.09	.07	0
50	.01	0	0	.02	.05	0
75	.02	0	-.15	.02	.20	0
100	.04	0	-.19	.04	.19	0
P.S.	0	.02	-.02	0	.16	.05
100	.04	0	-.19	.04	.21	0
115	.04	0	-.22	.08	.24	.02
P.S.	0	0	-.02	0	.15	.07
115	.06	0	-.20	.06	.23	.01
130	.07	0	-.26	.07	.24	.02

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TEST OBSERVATIONS AND RESULTS:

Test Number 3 - Condition 9-2'

TABLE III (Cont'd)

Condition 9-2' Net Deflection and Permanent Set (Inches) Corrected for Jig Deflection

Gage No. % LL	1	2	3	4	5	6
140	.08	0	-.28	.09	.23	.02
150	.08	0	-.30	.12	.17	.03
P.S.	0	0	-.02	.01	.11	.01

Test Number 4 - Condition 9-2' - The specimen was supported on 20 inch lugs with no sway bracing required.

50% D.L.L. - No visible change over zero percent.

115% D.L.L. (D.Y.L.) - No indication of yielding or failure.

0% After 115% D.L.L. (D.Y.L.) - Refer to Table IV for permanent set data.

150% D.L.L. (D.U.L.) - The specimen held 150 percent for two minutes with no indications of yielding or failure. Refer to Table IV for deflection and permanent set data.

TABLE IV

Condition 9-2' Net Deflection and Permanent Set (Inches) Corrected for Jig Deflection

Gage No. % LL	1	2	3	4	5	6
0	0	0	0	0	0	0
25	.13	0	-.14	.05	.11	.12
50	.21	0	-.24	.14	.15	.19
75	.28	0	-.38	.16	.18	.24

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TEST OBSERVATIONS AND RESULTS:

Test Number 4

TABLE IV (Cont'd)

Condition 9-2' Net Deflection and Permanent Set (Inches) Corrected for Jig Deflection

Gage No. Z LL	1	2	3	4	5	6
100	.33	0	-.51	.23	.24	.28
P.S.	.09	0	-.03	.03	.04	.04
100	.34	0	-.49	.24	.28	.28
115	.39	0	-.57	.28	.27	.29
P.S.	.09	0	-.02	0	.03	.04
115	.40	0	-.57	.25	.26	.26
130	.43	0	-.66	.16	.28	.27
140	.48	0	-.71	.21	.29	.30
150	.49	0	-.75	.25	.32	.31
P.S.	.12	0	.06	0	.04	0

Test Number 5 - Condition 6

The specimen was supported on 30 inch lugs with 40 degree sway bracing at station 9.375 and 29.375.

50% D.L.L. - No visible change over zero percent.

100% D.L.L. - The left hand forward sway brace pad was separated from the specimen by 1/16 inch.

115% D.L.L. (D.Y.L.) - Negligible change over 100 percent.

0% After 115% D.L.L. (D.Y.L.) - Refer to Table V for permanent set.

150% D.L.L. (D.U.L.) - The specimen held 150 percent for two minutes with no indication of yielding or failure.

307% D.L.L. - The specimen failed around the splice at station 43-1/4 by shearing most of the DD6 rivets that attach 9641-31311 and -31312 skins to 9641-31308 ring assembly. Refer to photographs 9641-90-5A, -5B and -5C on pages 22 through 24.

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TEST OBSERVATIONS AND RESULTS:

Test Number 5 - Condition 6 (Continued)

TABLE V

Condition 6 Net Deflection and Permanent Set (Inches) Corrected for Jig Deflection

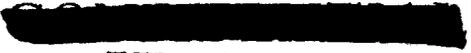
Gage No. % LL	1	2	3	4	5	6
0	0	0	0	0	0	0
25	-.04	0	0	0	.04	.04
50	0	-.01	0	0	.04	.10
75	0	0	0	-.06	.03	.17
100	0	0	0	-.02	0	.21
P.S.	.05	-.02	0	-.07	.03	.14
100	.01	0	-.01	0	0	.21
115	0	0	-.04	0	0	.23
P.S.	.05	-.02	0	-.08	.03	.04
115	.01	0	-.03	0	0	.24
130	0	0	-.04	0	0	.28
140	.01	0	-.04	0	0	.28
150	.01	0	-.04	0	0	.30
P.S.	.05	-.03	0	.08	.06	.07

Test Number 6 - Ejection Tests

The specimen was supported as shown in photograph 9641-90-2 on page 17.

- A. A load of 22,500 pounds was applied to the specimen in increments by a ten square inch pad at station 19-1/8 on the top centerline. There were no indications of yielding or permanent set.
- B. A load of 22,500 pounds was applied to the specimen in increments by a ten square inch pad at station 43-1/8 on the top centerline. There were no indications of yielding or failure.

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TEST OBSERVATIONS AND RESULTS:

Test Number 6 - Ejection Tests (Continued)

- C. A load of 22,500 pounds was applied to the specimen in increments at station 22,625 on the top centerline. The load applying pad was supplied by the Sandia Corporation. There were no indications of yielding or failure.
- D. A load of 22,500 pounds was applied to the specimen in increments at station 28,625 on the top centerline. The load applying pad was supplied by the Sandia Corporation. There were no indications of yielding or failure.
- E. A load of 22,500 pounds was applied to the specimen in increments at station 30,875 on the top centerline. The load applying pad was supplied by the Sandia Corporation. There were no indications of yielding or failure.

Refer to Table VI for deflection and permanent set data.

TABLE VI

Ejection Test - Net Deflection and Permanent Set (Inches)

Test No.	A				B			C		
	Gage No.	1	2	3	4	1	3	4	3	4
0	0	0	0	0	0	0	0	0	0	0
25	.015	.005	.019	.010	.032	0	.001	.008	.007	
50	.034	.011	.040	.020	.071	0	.001	.023	.013	
75	.057	.016	.064	.032	.110	0	.003	.040	.022	
100	.079	.021	.089	.043	.148	0	.005	.058	.030	
115	.094	.024	.107	.050	.173	.003	.006	.070	.035	
P.S.	.004	.005	.009	.001	.010	.005	.001	.002	.001	
115	.105	.023	.106	.051	.174	.005	.001	.070	.035	
150	.127	.030	.140	.069	.220	.005	.001	.096	.046	
P.S.	.007	.008	.013	.000	.005	.000	.001	.002	.002	

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<small>DATE:</small> 2-1-54	<small>STATIC TEST OF</small> 9641-31250 INTERMEDIATE ASSEMBLY	<small>MODEL NO.</small> G.O. 9641

TEST OBSERVATIONS AND RESULTS: (Continued)

Test Number 7

A simulated chocking load of 2820 pounds ultimate was applied to the bottom centerline of the specimen on station 7-3/4 simultaneously with 3780 pounds ultimate at station 19-3/4. A pad of three square inches was used to apply the loads. There were no indications of yielding or failure.

Refer to Table VII for deflection and permanent set data.

TABLE VII

Net Deflection and Permanent Set (Inches)

Percent Limit Load	Deflection
0	0
25	.022
50	.048
75	.071
100	.107
115	.126
P.S.	.008
115	.122
130	.148
140	.154
150	.171
P.S.	.018

The deflections were measured by a dial indicator mounted to the top beam, 9641-31260, and indexed on the bottom centerline at station 19-3/4 to read vertical deflection.

Test Number 8 - Handling Lug 9641-31320

A. The following design ultimate loads were applied simultaneously to the lug at station 28.8 left hand: 790 pounds up, 870 pounds out-board and 3560 pounds aft. The load was held five minutes with no indications of yielding or failure. At 150 percent design limit load (design ultimate load) it should be noted that the forward edge of the lug was separated from the specimen by 1/16 inch.

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TEST OBSERVATIONS AND RESULTS:Test Number 8 - Handling Lug 9641-31320 (Continued)

- B. The following design ultimate loads were applied simultaneously to the lug at station 28.8 left hand: 790 pounds up, 870 pounds outboard and 3560 pounds forward. The load was held three minutes with no indications of yielding or failure. The specimen was then loaded in increments until a failure occurred. At 153 percent of design ultimate load the specimen failed by stripping the threads from the aft attaching nut plate.

Test Number 9 - Support Lugs

- A. 9621-31277 (Lug - Universal) was tested statically in tension to failure in a test machine. At 80,000 pounds or 133 percent design ultimate load the lug failed in bending across the support beam. Refer to photograph 9641-90-1 on page 16.
- B. By analysis, 9621-31276 support lug is stronger than 9621-31277 lug and on the basis of the test results of 9621-31277, Test Number 9B was cancelled.

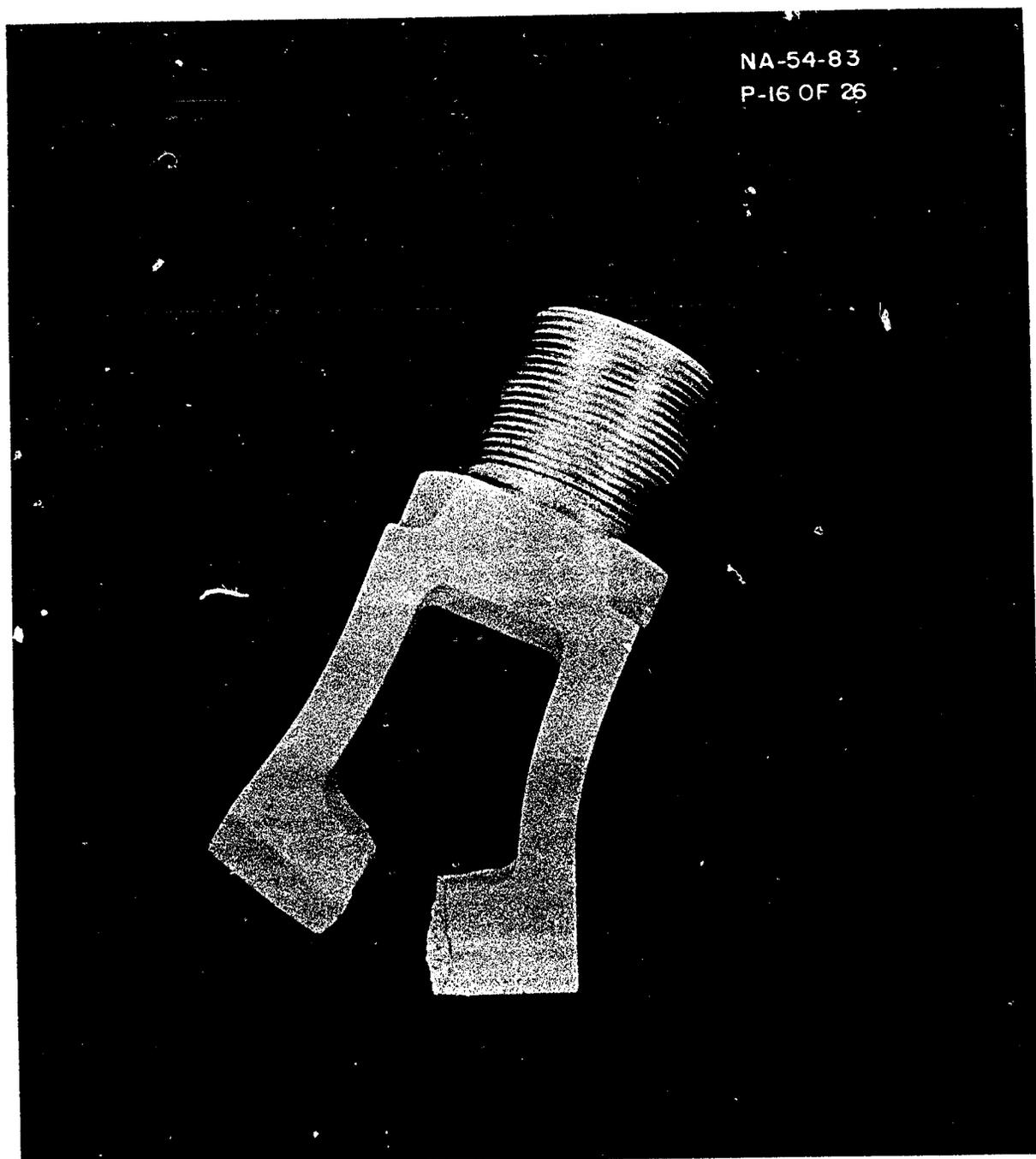
The following jigs were used in the test of 9641-31250 intermediate assembly:

TT-7840 - Jig Assembly
 TT-8315 - Dummy Rack Assembly
 TT-8317 - Jig Assembly - Forward Welded
 TT-8320 - Body Assembly - Aft Complete

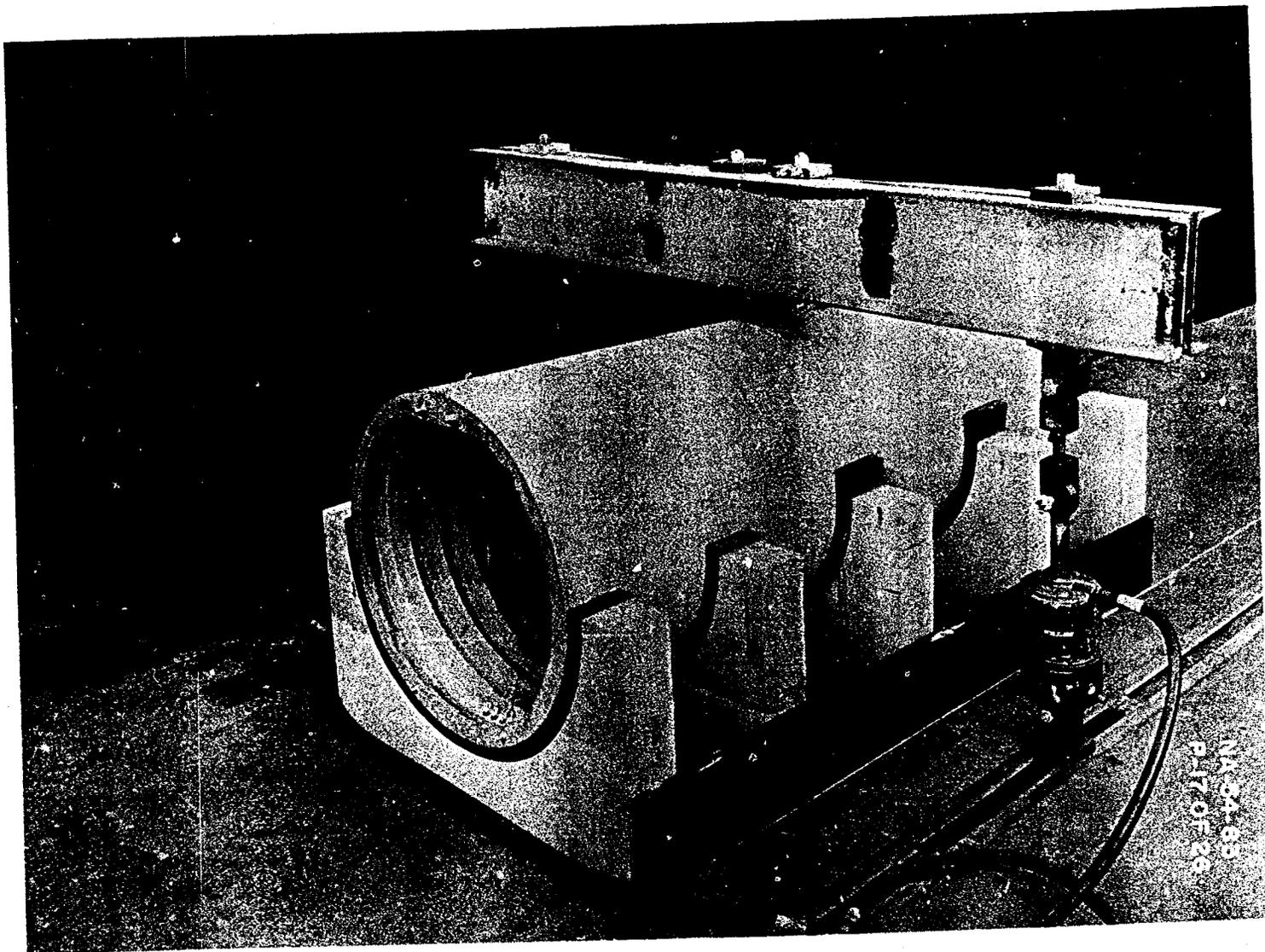
PREPARED BY: C. Moore	NORTH AMERICAN AVIATION, INC. INTERNATIONAL AIRPORT LOS ANGELES 45, CALIFORNIA	PAGE NO. 15 OF 26
CHECKED BY: <i>CMA</i>		REPORT NO. NA-54-83
DATE: 2-1-54	STATIC TEST OF 9641-31250 INTERMEDIATE ASSEMBLY	MODEL NO. G.O. 9641

PHOTOGRAPHS:

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9641-90-3B	Static Test - 9641-31250 Assembly - Condition 9-2' - S-h Lugs - 115% L.L.	19
9641-90-4A	Static Test of 9641-31250 Assembly - Condition 9-2' On 20 In. 3 Lug Support - 115% L.L.	20
9641-90-4B	Static Test of 9641-31250 Assembly - Condition 9-2' On 20 In. 3 Lug Support - 115% L.L.	21
9641-90-5A	Failure - 9641-31250 Assembly At 307% L.L. Condition 6 - 30 In. Lugs	22
9641-90-5B	Failure - 9641-31250 Assembly At 307% L.L. Condition 6 - 30 In. Lugs	23
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9641-90-6A	Static Test - 9641-31250 Assembly - 30 In. Lugs - Condition 6 - 115% L.L.	25
9641-90-6B	Static Test - 9641-31250 Assembly - 30 In. Lugs - Condition 6 - 115% L.L.	26



FAILURE OF 9621 - 31277 UNIV. LUG AT 80,000 # TENSION LOAD (TEST MACH)
ST-4698 1-13-54 9641-90-1



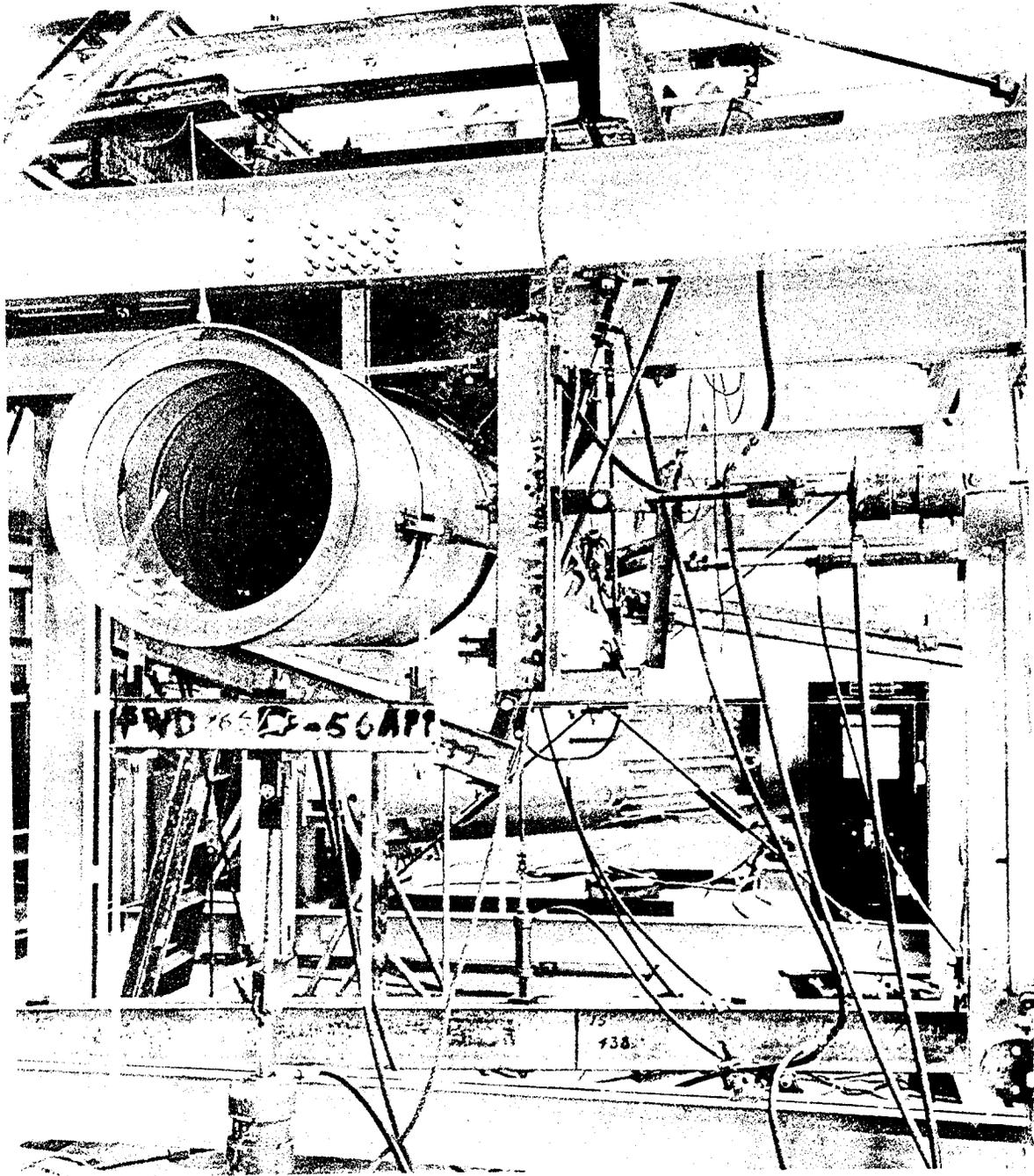
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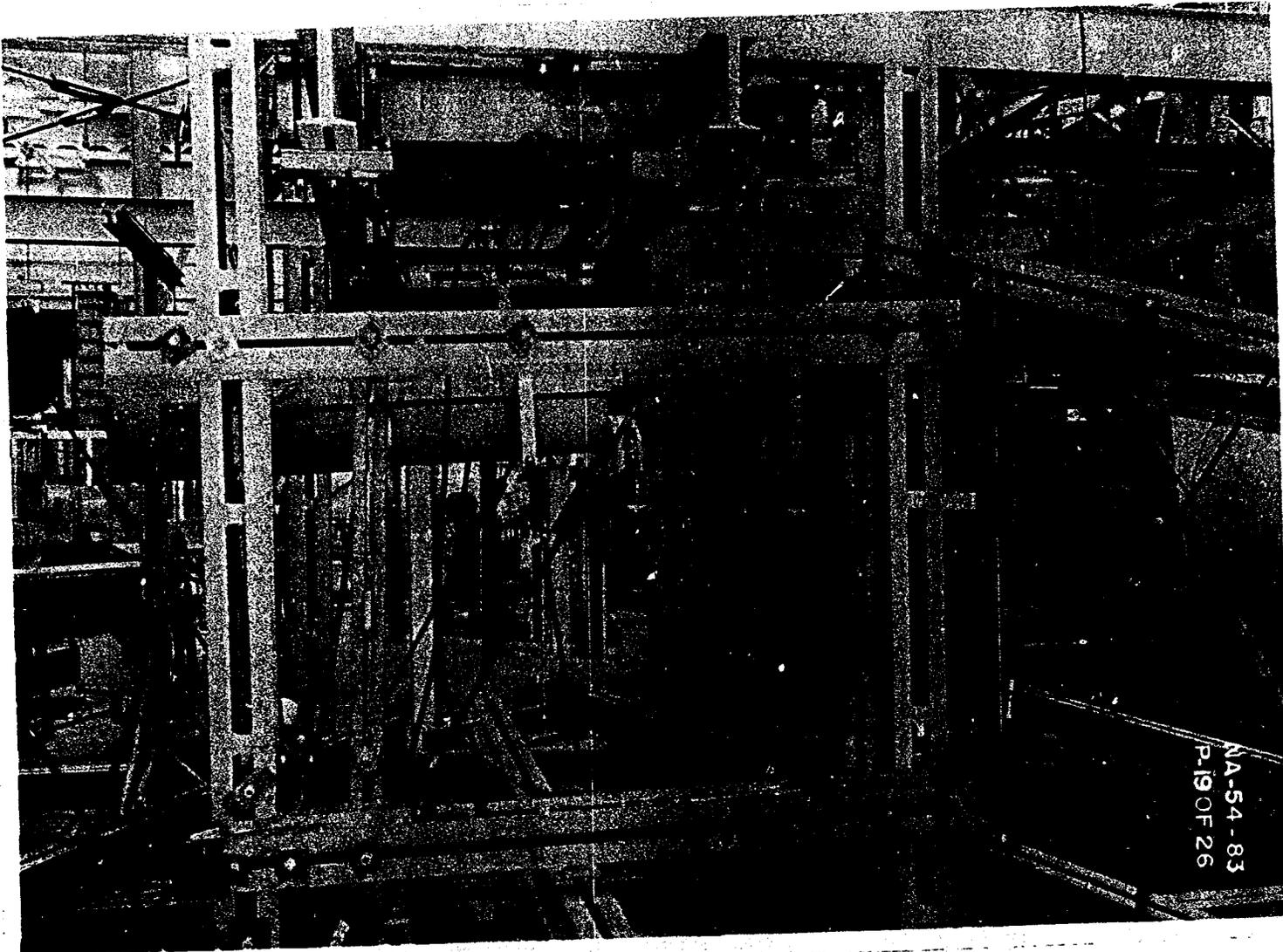
1101

TEST SETUP - EJECTION TEST OF 9641 - 31250 ASSY
ST-4698 1-18-54 G.O. 9641-90-2

UNCLASSIFIED



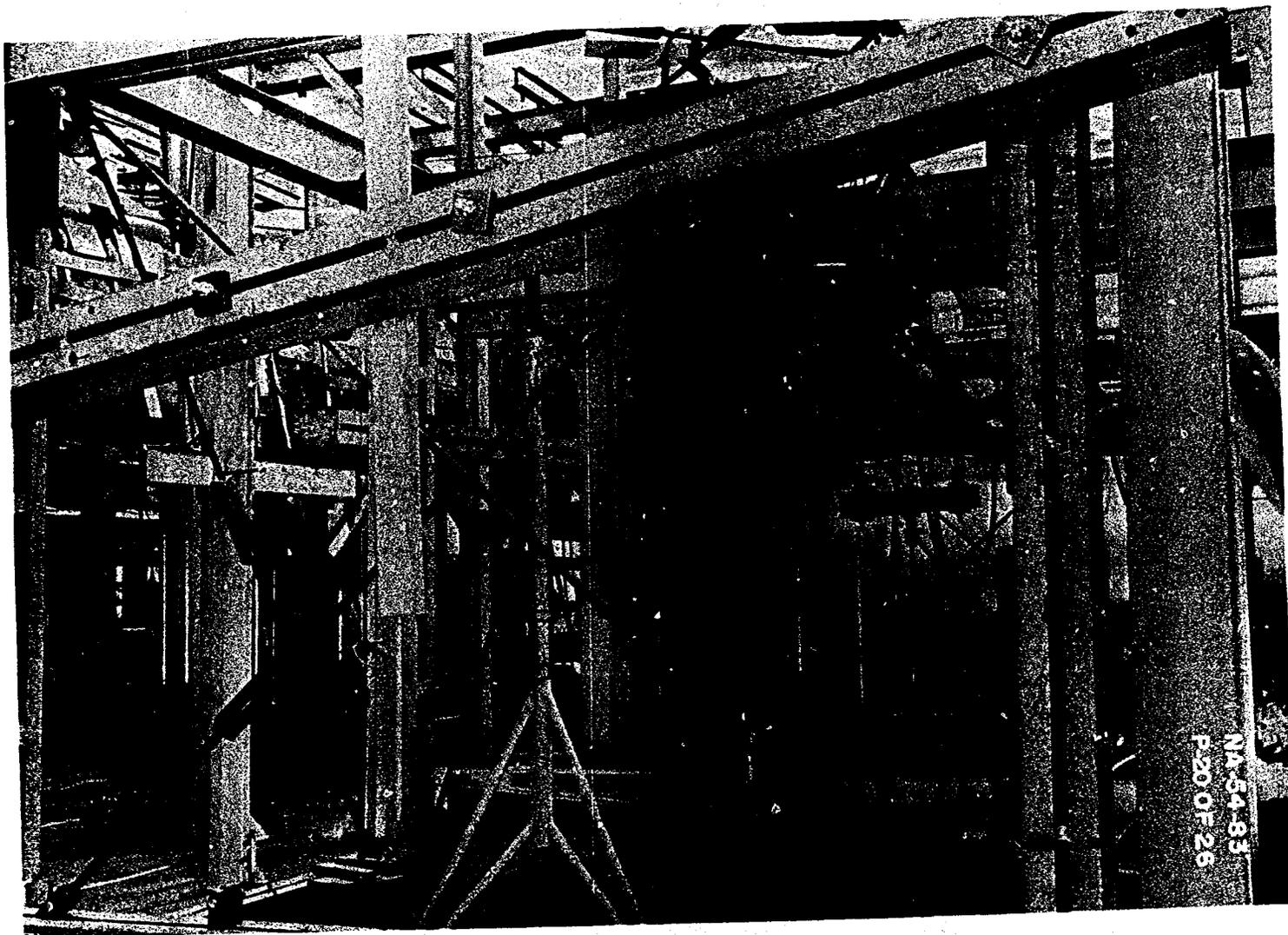
STATIC TEST 9641 - 31250 ASSY. COND. 9 - 2' -S4 LUGS - 115% L. L.
 ST-4698 1-20-54 G. O. 9641-90-3A



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STATIC TEST 9641 - 31250 ASSY. COND. 9-2' -S4 LUGS - 115% L. L.
ST-4698 1-20-54 G.O. 9641-90-3B

1103



STATIC TEST 9641 - 31250 ASSY. COND. 9-2' ON 20 INCH - 3 LUG SUPPORT 115% L. L. ON.
 ST-4698 1-21-54 G. O. 9641-90-4A

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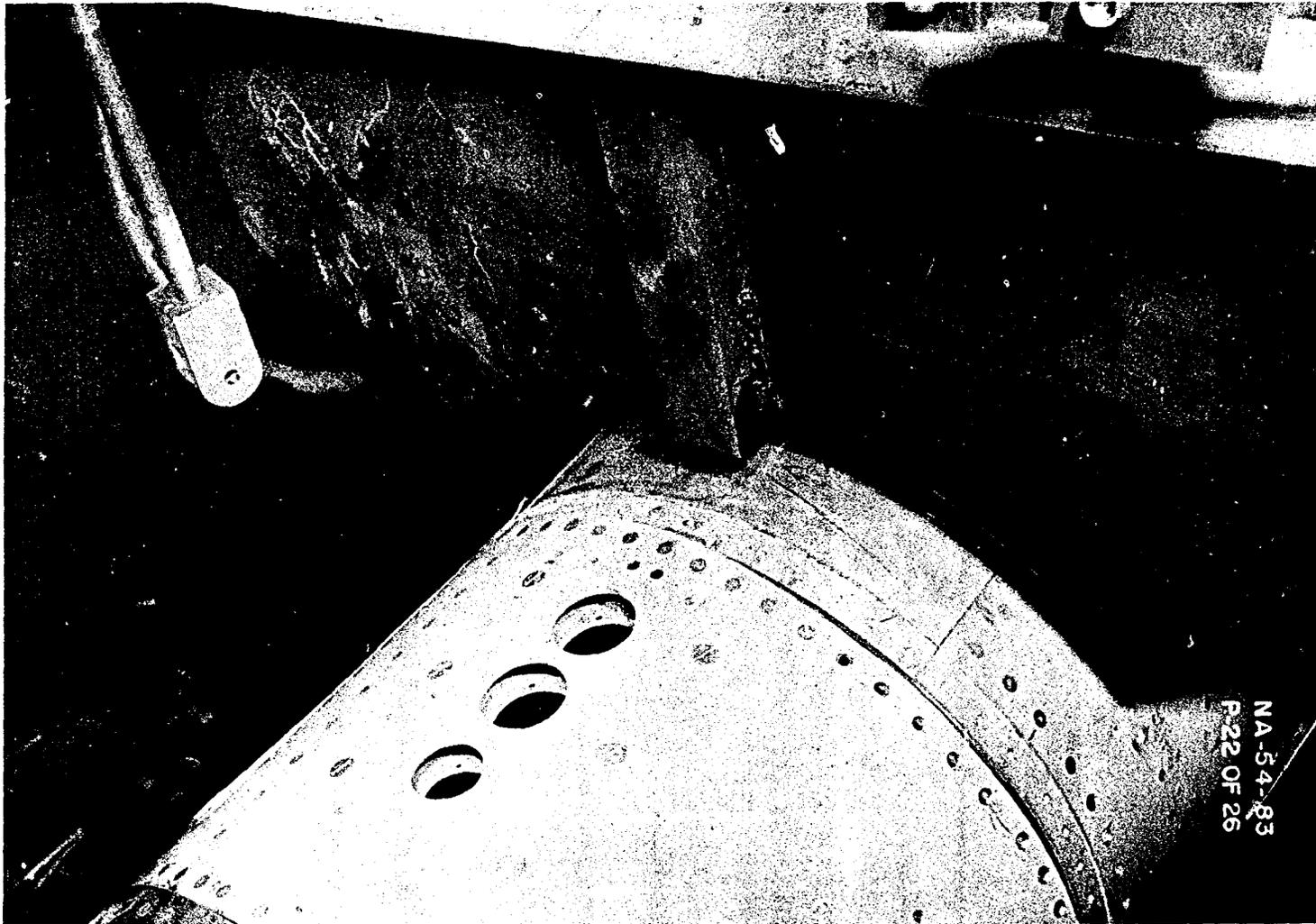
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NA-54-83
P-2105/26

STATIC TEST 9641 - 31250 ASSY. COND. 9-2' ON 20 INCH -3 LUG SUPPORT 115% L. L. ON.
ST-4698 1-21-54 G.O. 9641-90-4B

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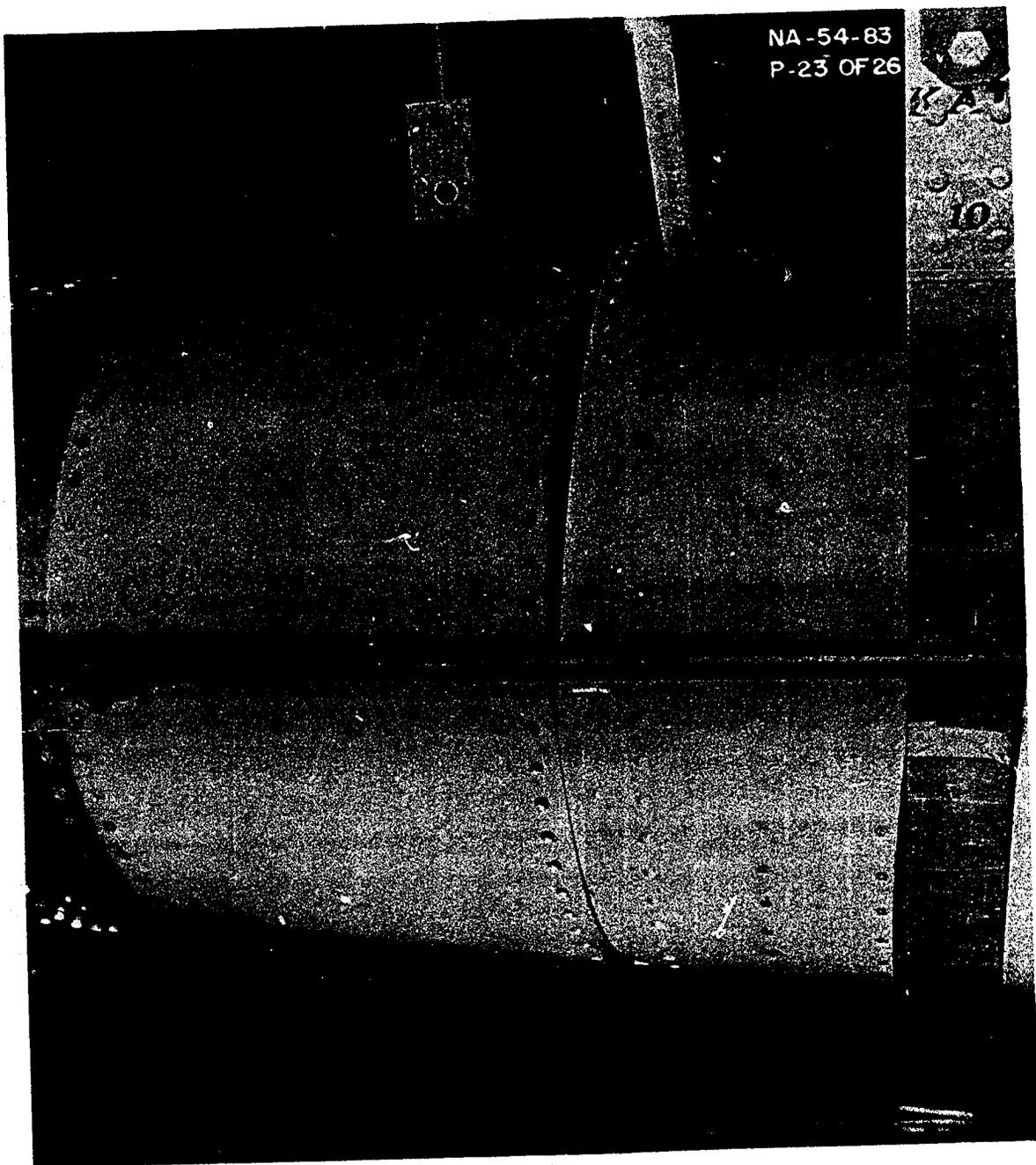


NA-54-83
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FAILURE 9641 - 31250 ASSY. AT 307% L. L. COND. 6 30 IN LUGS
 ST-4698 1-22-54 G.O. 9641-90-5A

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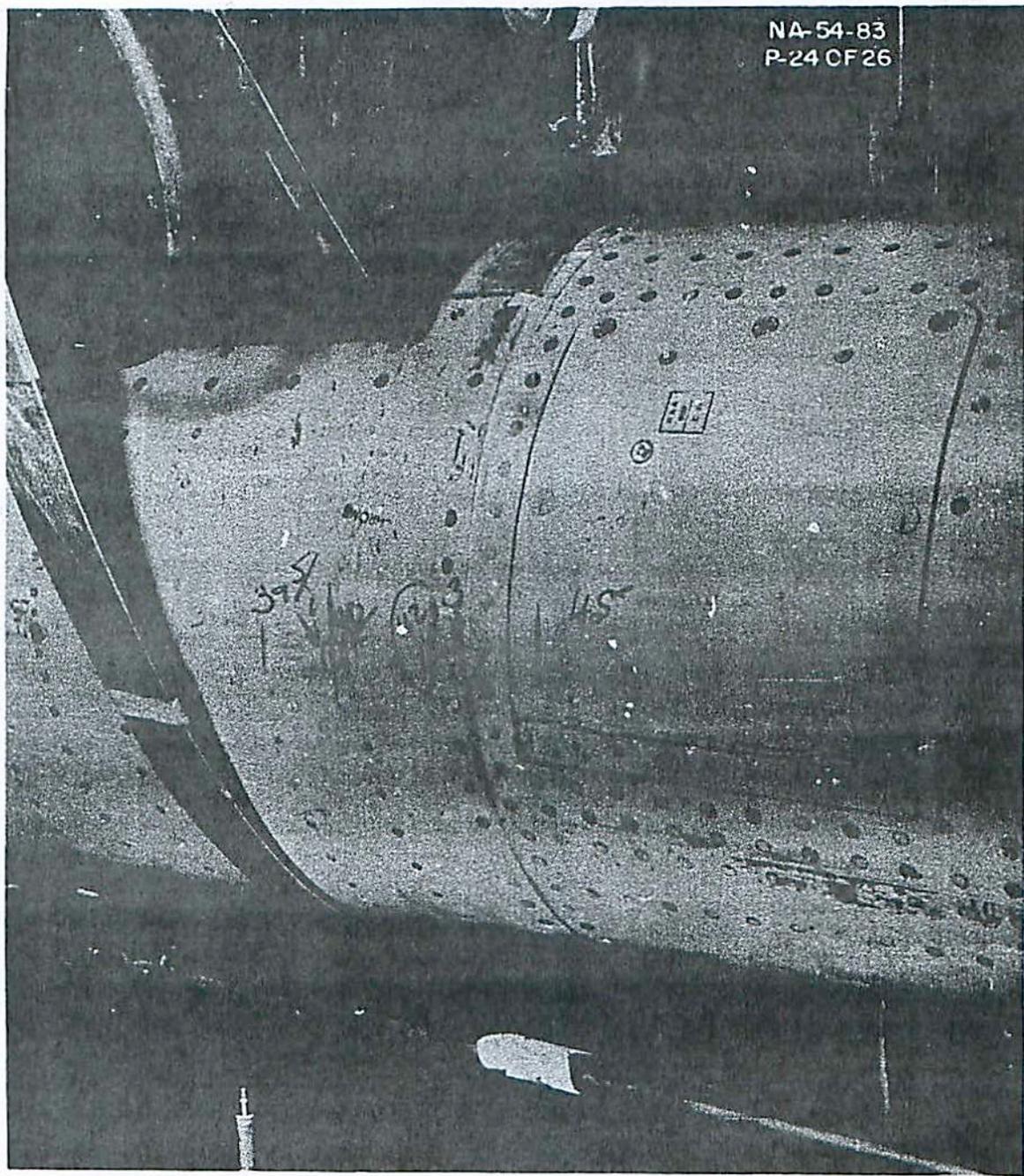
FAILURE 9641 - 31250 ASSY. AT 307% L. L. COND. 6
30 IN LUG.
ST-4698 1-22-54 G.O. 9641-90-5B

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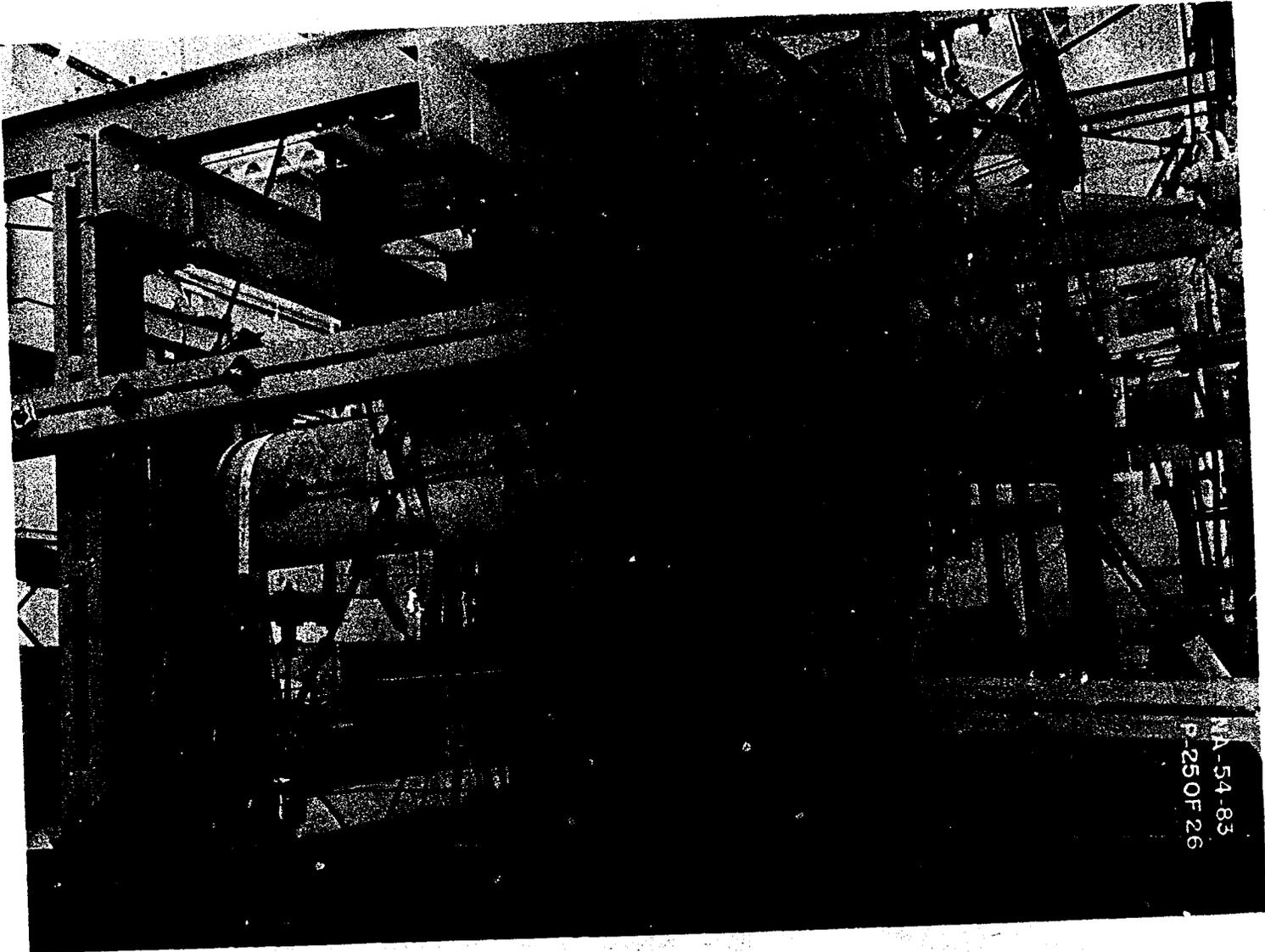
UNCLASSIFIED



FAILURE 9641 - 31250 ASSY. AT 307 L. L. COND. 6 30 IN.
LUGS.
ST-4698 1-22-54 G.O. 9641-90-5C

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~~CONFIDENTIAL~~



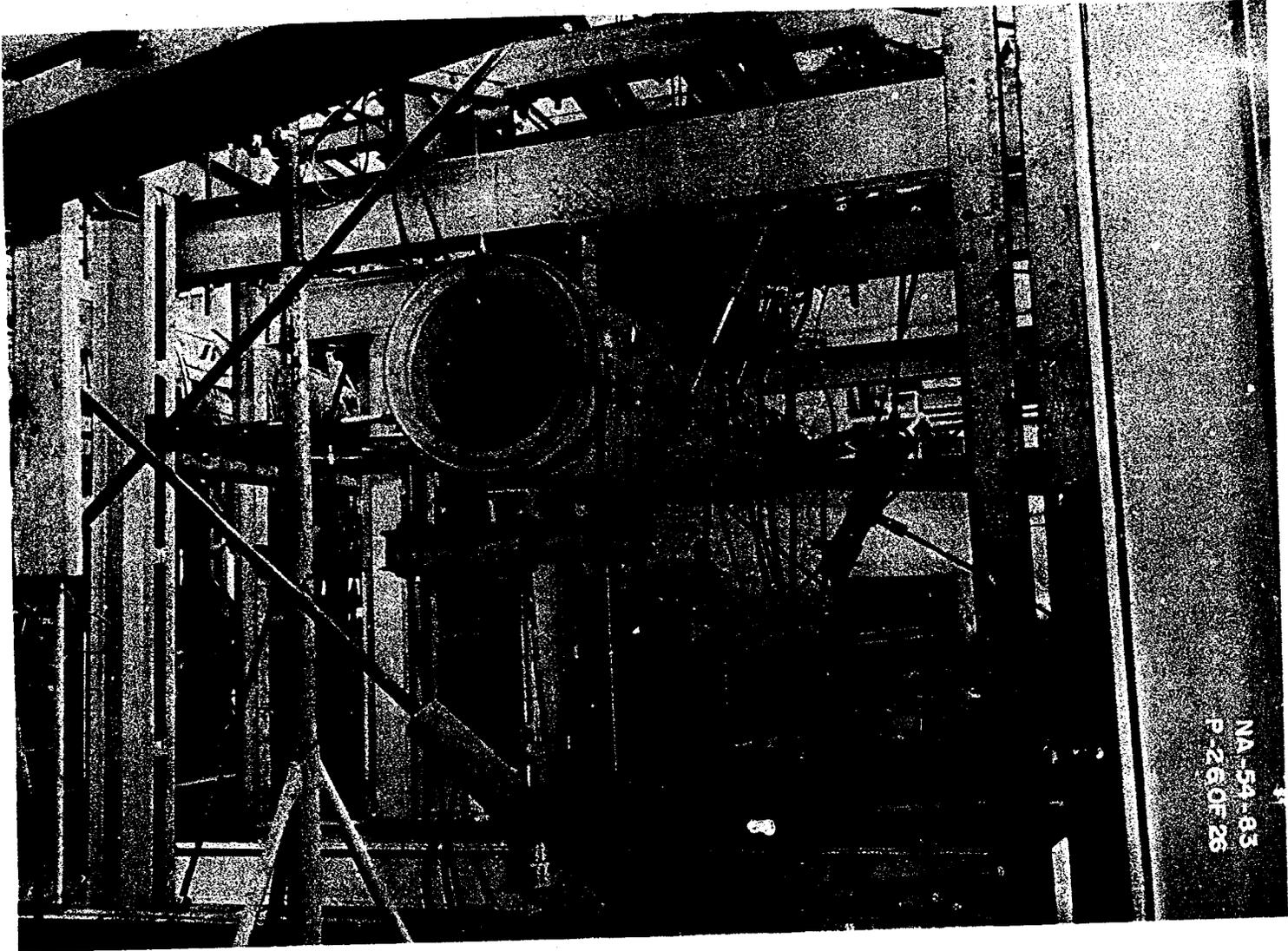
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NA-54-83
P-250F26

STATIC TEST 9641 - 31250 ASSY. 30 IN. LUGS CONDS. 6-115% L. L.
ST-4698 1-22-54 G. O. 9641-90-6A

1109



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NA-54-85
P-260F 26

STATIC TEST 9641 - 31250 ASSY. 30 IN. LUGS COND. 6 115% L. L.
ST-4698 1-22-54 G.O. 9641-90-6B