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CDL No.
ACCOUNTABILITY CARD
FILE H-350 3-2
H-480 3-2

H-350/480, 3-2
Case No. 433.00
Ref. Symb. 1611 (343)
Project No.ET-3667
Completed 10/31/56

TCG-NNT-1

TO: DISTRIBUTION

Re: Shipment Vibration Test of H-350/480 Container with K679-2 Robinson Mounts

INVENTORIED
MAR 2 1959
BY ORG. 4043

Object of Test

The object of this test was to determine the vibration isolation qualities of the Robinson K679-2 mounts when installed on the H-350/480 container.

Authorization for Test

This test was requested by Division 1284 in a Work Order Authorization dated September 27, 1956. Mr. G. Neun was the consultant.

RECEIVED
NOV 28 1956
R & D FILES

INVENTORIED
AUG 6 1964
3427-4

Procedure and Results

The complete container was mounted on the vibration table using 1/4 inch fir plywood as a base. Four turnbuckles were attached to hold down clevises on the container and were bolted to the vibration table top. Six Endevco pickups were installed as shown in Figs. 1 and 2. The output of these pickups was connected to a Ballantine voltmeter through a cathode follower. The container was vibrated in three planes, one parallel to skid channels of the container, one perpendicular to the skid channels, and one through the vertical axis of the container. The container was cycled for 45 minutes in each plane with a double amplitude of 0.006-inch input to the vibration table in 10-minute cycles.

INVENTORIED
1 1957
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Conclusion

In the two horizontal planes perpendicular and parallel to skid channels, the largest amplification occurred in the lower cycles with the curve increasing at 8 cycles. The region below 8 cycles could not be explored due to the limitations of the vibration table. In the vertical plane the largest amplification occurred at 15 cycles. These results are indicated in Table I.

Visual inspection of the units isolated by the mounts indicated no apparent physical damage to the units. No electrical checks were made as none were required.

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THIS DOCUMENT CONSISTS OF 6 PAGE(S)

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DATED 11/9/98

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CENTRAL M & R CONTROL NO. Q 62698

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To: Distribution

Ref. Sym: 1611 (343)
Project No. ET-3667

Test Conducted by J. ARNOLD - 1611-1

Approved by D. WILLIAMS, JR. - 1611

JA:1611-1:dr

DISTRIBUTION:
1/7 A - L. A. Dunn, 1284
Attn: G. Neun
2/7 A - W. A. Gardner, 1610
3/7 A - G. C. McDonald, 2530
4/7 A - D. Williams, Jr., 1611
5/7 A - G. J. Hildebrandt, 2552
6/7 A - C. L. Gomel, 5523
7/7 A - R. K. Smeltzer, 7221-3

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Ref. Sym: 1611 (343)
Project No. ET-3667

TABLE I

Vibration of H-350/480 Container

Plane Perpendicular to Skid Channels

Freq. (cps)	Input (g)	Pickup No. 1 (g)	Pickup No. 2 (g)	Pickup No. 3 (g)	Amplification* Mount	Amplification* Baro	Amplification* J Box
8	.278	.69	1.42	1.00	2.48	5.08	3.59
10	.304	.138	.757	.42	.45	2.49	1.38
15	.810	.689	.505	.17	.85	.62	0.21
20	1.19	1.09	.757	.32	.915	.64	0.27
21	1.16	1.38	.960	.40	1.18	.82	0.34
22	1.45	1.62	.910	.56	1.11	.62	0.38
23	1.57	1.73	.94	.68	1.10	.60	0.43
24	1.77	2.07	1.01	.95	1.17	.57	0.54
25	1.90	2.3	1.11	1.18	1.21	.58	0.62
26	2.02	2.41	1.14	1.20	1.19	.56	.59
27	2.28	2.53	1.32	1.15	1.11	.58	.50
28	2.34	2.65	1.62	1.15	1.13	.69	.49
29	2.53	2.65	1.82	1.13	1.05	.72	.45
30	2.78	2.53	1.87	1.12	.91	.67	.40
35	3.80	2.64	2.02	1.00	.69	.53	.26
40	5.32	3.34	1.62	1.10	.63	.304	.21
45	8.10	3.10	1.01	1.2	.38	.125	.15
50	11.15	2.99	0.68	1.3	.27	.06	.12
55	13.90	4.49	.64	1.2	.32	.05	.09

* Amplification factor is calculated from table input located on lower mount clip to pickups located on various units.

Plane Parallel to Skid Channels

8	.25	.46	1.32	.80	1.81	5.19	3.15
10	.30	.17	.81	.35	.57	2.66	1.15
15	.72	.12	.81	.48	.16	1.12	.67
20	1.27	1.49	1.11	.58	1.18	.87	.46
21	1.39	1.96	1.62	.98	1.41	1.17	.70
22	1.52	2.76	2.63	1.50	1.82	1.73	.99
23	2.02	2.88	2.94	1.70	1.43	1.45	.84
24	2.02	2.65	2.82	1.60	1.31	1.40	.74
25	1.90	2.53	2.43	1.40	1.33	1.28	.74
28	2.66	2.88	1.31	1.30	1.08	.49	.49
30	2.66	2.74	.87	1.30	1.03	.33	.49
35	3.80	2.07	.37	1.10	.54	.098	.29
40	4.93	1.73	.27	1.00	.35	.055	.20
45	6.33	1.50	.25	1.00	.24	.04	.16
50	7.73	1.50	.25	1.00	.19	.033	.13
55	10.60	1.50	.57	.90	.14	.053	.085

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Ref. Sym: 1611 (343)
Project No. ET-3667

TABLE I (Cont'd)

Plane Vertical Axis of Container

Freq. (cps)	Input (g)	Pickup No. 1 (g)	Pickup No. 2 (g)	Pickup No. 3 (g)	Amplification* Mount	Amplification* Baro	Amplification* J Box
10	.23	.31	.39	.34	1.36	1.72	1.49
13	.39	.67	.77	.78	1.73	1.96	1.99
15	.58	2.18	3.54	2.30	3.75	6.08	3.96
17	1.05	.91	1.82	.95	.87	1.73	.91
20	1.04	.97	1.92	.93	.93	1.85	.89
25	1.52	.63	1.42	1.70	.42	.93	1.12
30	2.28	.76	1.82	1.60	.33	.80	.70
35	3.42	.87	1.82	1.40	.26	.53	.41
40	4.43	1.61	2.12	1.40	.36	.48	.32
45	5.57	1.96	2.12	1.40	.35	.38	.25
50	9.37	1.96	1.82	1.40	.21	.19	.15
55	10.80	1.73	1.42	1.30	.16	.13	.12

* Amplification factor is calculated from table input located on lower mount clip to pickups located on various units.

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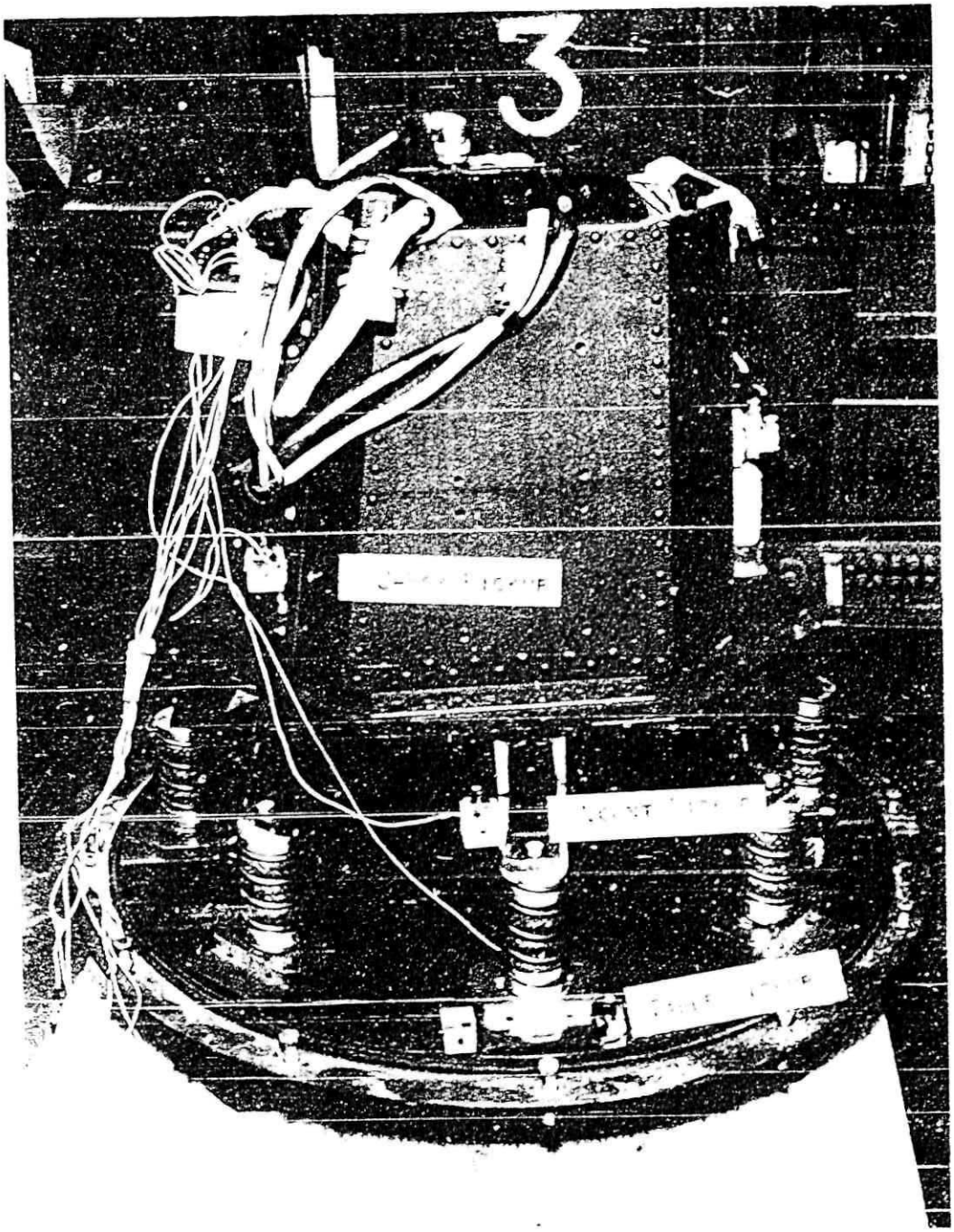
Ref Sym: 1911 (3431)
ET-3467



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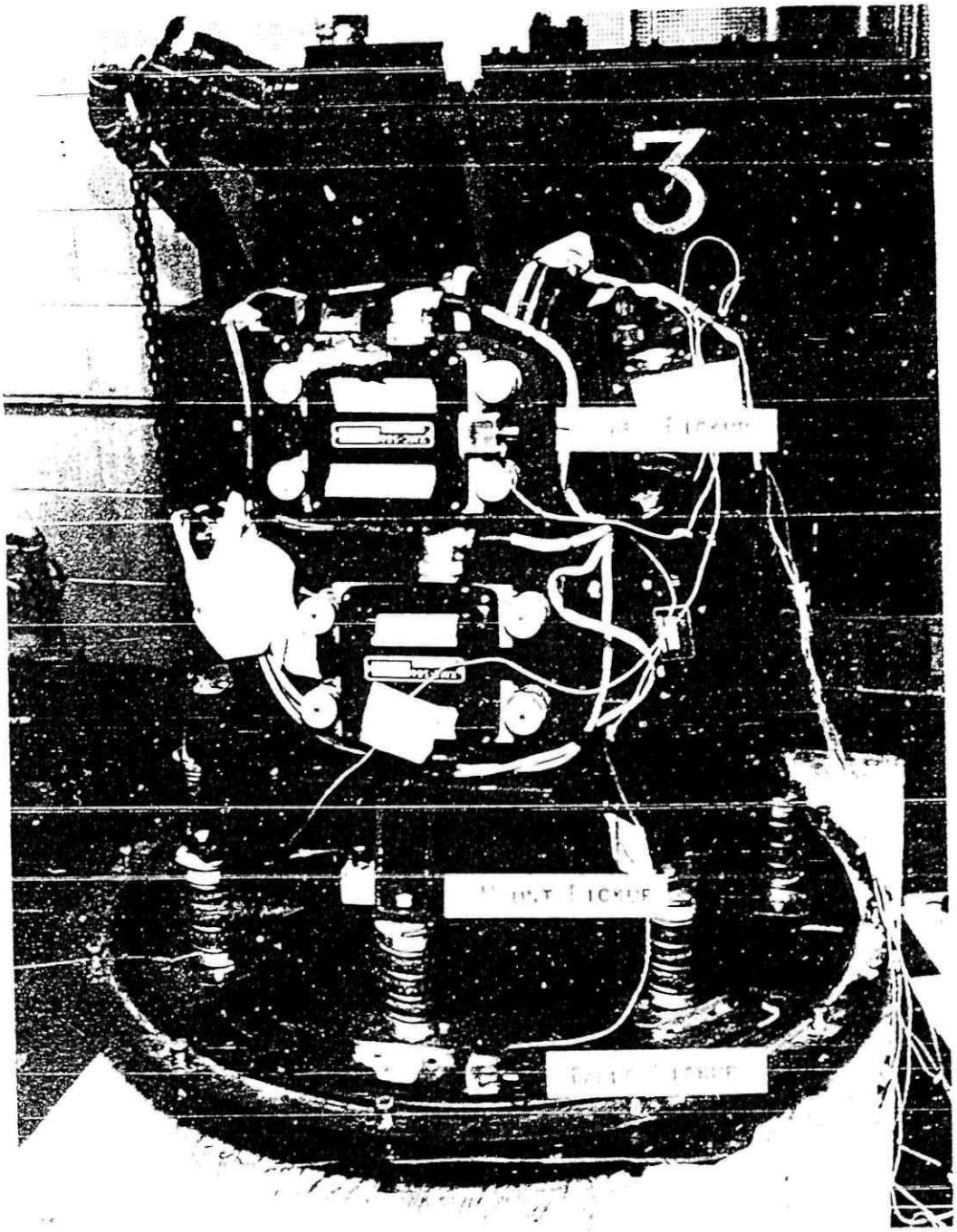

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