Volume III

Final Report

November 1975

Test Data

Titan IIIC Transtage/Stage II Separation Shock Bench Test

ADA024562

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REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER: MCR-75-425 – Vol-3
2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle): Titan IIIC Transtage/Stage II Separation Shock Bench Test. Volume III.
5. TYPE OF REPORT & PERIOD COVERED: Final Test Rept. Jun-Nov 1975
6. PERFORMING ORG. REPORT NUMBER: SAMSO-TR-76-107, Vol III
7. AUTHOR(s): G. E. Reed
8. CONTRACT OR GRANT NUMBER(s): F04701-75-C-0166
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Martin Marietta Corporation, P.O. Box 179, Denver, Colo. 80201
10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS: SAMSO/LVXTE, Titan III Engineering Branch, Expendable Launch Vehicles SPO
12. REPORT DATE: NOV 75
13. NUMBER OF PAGES: 816
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office): SAMSO/LVCA, PO BOX 92960, Worldway Postal Center, Los Angeles CA 90009 — 819p.
15. SECURITY CLASS. (of this report): UNCLAS
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)

Distribution Statement A

Approved for Public Release. Distribution Unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report): SAMSO
18. SUPPLEMENTARY NOTES
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Pyrotechnic Shock Tests,
Shock Attenuation

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

A series of pyrotechnic shock tests were conducted to evaluate several concepts of attenuating the shock generated by the pyrotechnically actuated nuts during Transtage separation on the Titan IIIC launch vehicle. An orifice installed between the pyrotechnic device and the separation mechanism piston reduced shock levels by approximately 40%. (cont on pii)

403 225

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MCR-75-125

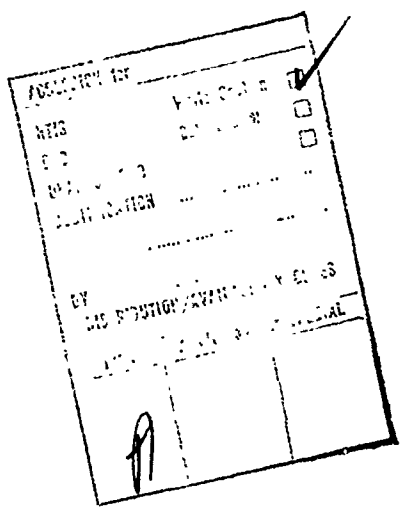
Volume III

Final Report

November 1975

TEST DATA

TITAN IIIC TRANSTAGE/STAGE II SEPARATION-SHOCK BENCH TEST



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FOREWORD

This report is submitted by the Martin Marietta Corporation, Denver Division, in accordance with Contract F04701-75-C-0166, CDRL Sequence Number A049. The document consists of three volumes:

Volume I - Test Report

Volume II - Analyses

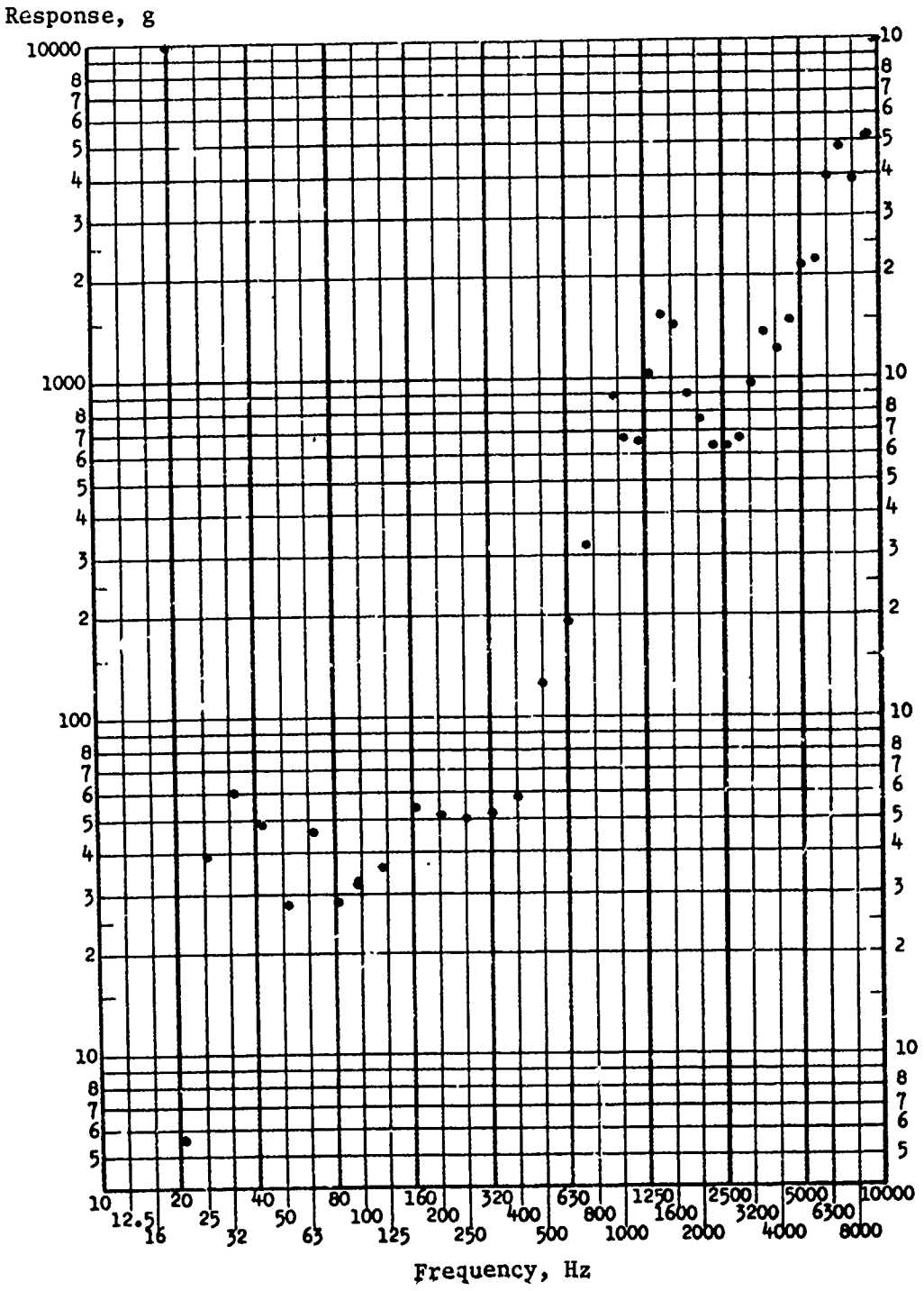
Volume III - Test Data

(cont'd on 1473A)

This volume contains the shock response spectra from each of the 15 accelerometers for all 51 test runs. The runs are summarized on the next page.

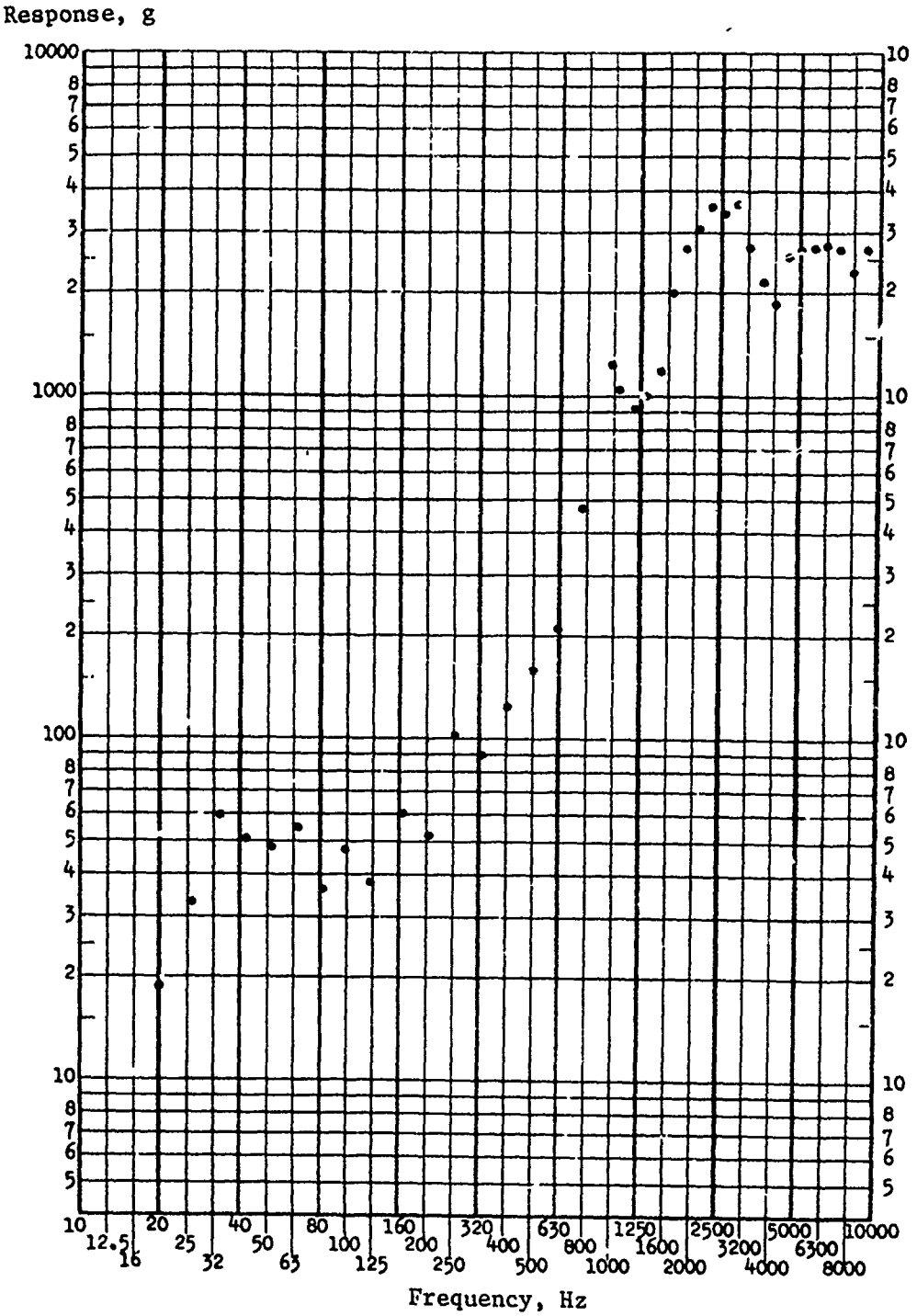
Bench Shock Test Summary

Run	Configuration	Results
1	Dual separation nuts, fixed longeron at Sta 77	Levels similar to system test
2	Dual separation nuts, free longeron at Sta 77	Levels exceeded system levels
3	Dual separation nuts, fixed longeron on this and all subsequent tests	Baseline
4	Dual separation nuts	Baseline, measurements on Accelerometers 10, 11, and 12 appeared abnormally low
5	Dual separation nuts	Baseline
6	Only Stage II nut fired	No reduction from baseline
7	Only Stage III nut fired	No reduction from baseline
8	Only Stage III nut fired	Measurements on Accelerometers 10, 11, and 12 appeared abnormally low
9	Stage III nut fired, 75 ft-lb torque	No reduction from baseline
10	Stage III nut fired, 300 ft-lb torque	No reduction from baseline
11	Stage III nut only, 0.063-in. orificed nut	≥ 6-dB reduction from baseline
12	Stage III nut only, 0.063-in. orificed nut	≥ 3-dB reduction from baseline
13	Stage III nut only, 0.063-in. orificed nut	≥ 3-dB reduction from baseline
14	Stage III nut only, castellated washer	No reduction from baseline
15	Dual nuts fired, 0.063-in. orificed nuts	≥ 3-dB reduction from baseline
16	Stage III nut only, reduced initiator charge	≥ 6-dB reduction from baseline
17	Stage III nut only, reduced initiator charge	≥ 5-dB reduction from baseline
18	Stage III nut only, padded stud	No reduction from baseline
19	Stage III nut only, reduced initiator charge	≥ 6-dB reduction from baseline
20	Stage III nut only, crushable washer	No reduction from baseline
21	Stage III nut only, isolation at Sta 133	Slight reduction from baseline
22	Stage III nut only, isolation at Sta 133	No reduction from baseline
23	Stage III nut only, 0.081-in. orificed nut	Similar to reduction with 0.063-in. orificed nut
24	Stage III nut only, 0.081-in. orificed nut	Similar to reduction with 0.063-in. orificed nut
25	Stage III nut only, 0.063-in. orificed nut with modified piston	Similar to reduction with 0.063-in. orificed nut
26	Stage III nut only, 0.063-in. orificed nut with modified piston	Similar to reduction with 0.063-in. orificed nut
27	Stage III nut only, 0.052-in. orificed nut	Greater reduction than with 0.063-in. orificed nut
28	Stage III nut only, 0.052-in. orificed nut	Greater reduction than with 0.063-in. orificed nut
29	Stage III nut only, dual 0.052-in. orificed nut, internal nut cavity recessed	Levels slightly greater than other orificed-nut runs
30	Stage III nut only, dual 0.052-in. orificed nut, no internal recess	Similar to reductions obtained with single 0.052-in. orificed nut
31	Stage III nut only, single 0.052-in. orificed nut	Similar to other 0.052-in. orificed-nut runs
32	Stage III nut only, dual 0.052-in. orificed nut	Similar to other 0.052-in. orificed-nut runs
33	Stage III nut only, single 0.052-in. orificed nut	Similar to other 0.052-in. orificed-nut runs
34	Stage III nut only, dual 0.052-in. orificed nut	Similar to other 0.052-in. orificed-nut runs
35	Stage III nut only, isolator at truss bottom bracket	Reduction of levels at truss bottom, truss top similar to baseline
36	Stage III nut only, isolator at truss bottom	Reduction only at truss bottom
37	Stage III nut only, isolator at truss bottom	Reduction only at truss bottom
38	Stage III nut only, dual 0.052-in. orificed nut, truss bottom-bracket isolation	Reduction at truss bottom greater than with orificed nuts alone
39	Stage III nut only, truss bottom bracket removed	Truss bottom level similar to that with isolation
40	Stage III nut only, truss bottom bracket isolated, top bracket removed	Truss level very low
41	Dual separation nuts, dual 0.052-in. orificed nuts	Similar to other 0.052-in. orificed-nut runs
42	Dual separation nuts, truss bottom isolation, dual 0.052-in. orificed nuts	Levels similar to orificed-nut run without isolation
43	Dual separation nuts, truss bottom isolation, dual 0.052-in. orificed nuts	≥ 6-dB reduction from orificed-nut run without isolation
44	Dual separation nuts, truss bottom isolation	Levels similar to baseline
45	Dual separation nuts, full truss isolation	≥ 6-dB reduction from baseline
46	Dual separation nuts, full truss isolation	Longeron levels very high, truss levels slightly lower than baseline
47	Dual separation nuts, full truss isolation	≥ 6-dB reduction from baseline
48	Dual separation nuts, full truss isolation, dual 0.052-in. orificed nuts	Levels slightly lower than with orificed nuts only
49	Dual separation nuts, full truss isolation, dual 0.052-in. orificed nuts	Levels slightly lower than with orificed nuts only
50	Dual separation nuts, full truss isolation, dual 0.052-in. orificed nuts	Levels slightly lower than with orificed nuts only (measurement on Accelerometer 13 appeared abnormally high
51	Dual separation nuts, full truss isolation	≥ 6-dB reduction from baseline



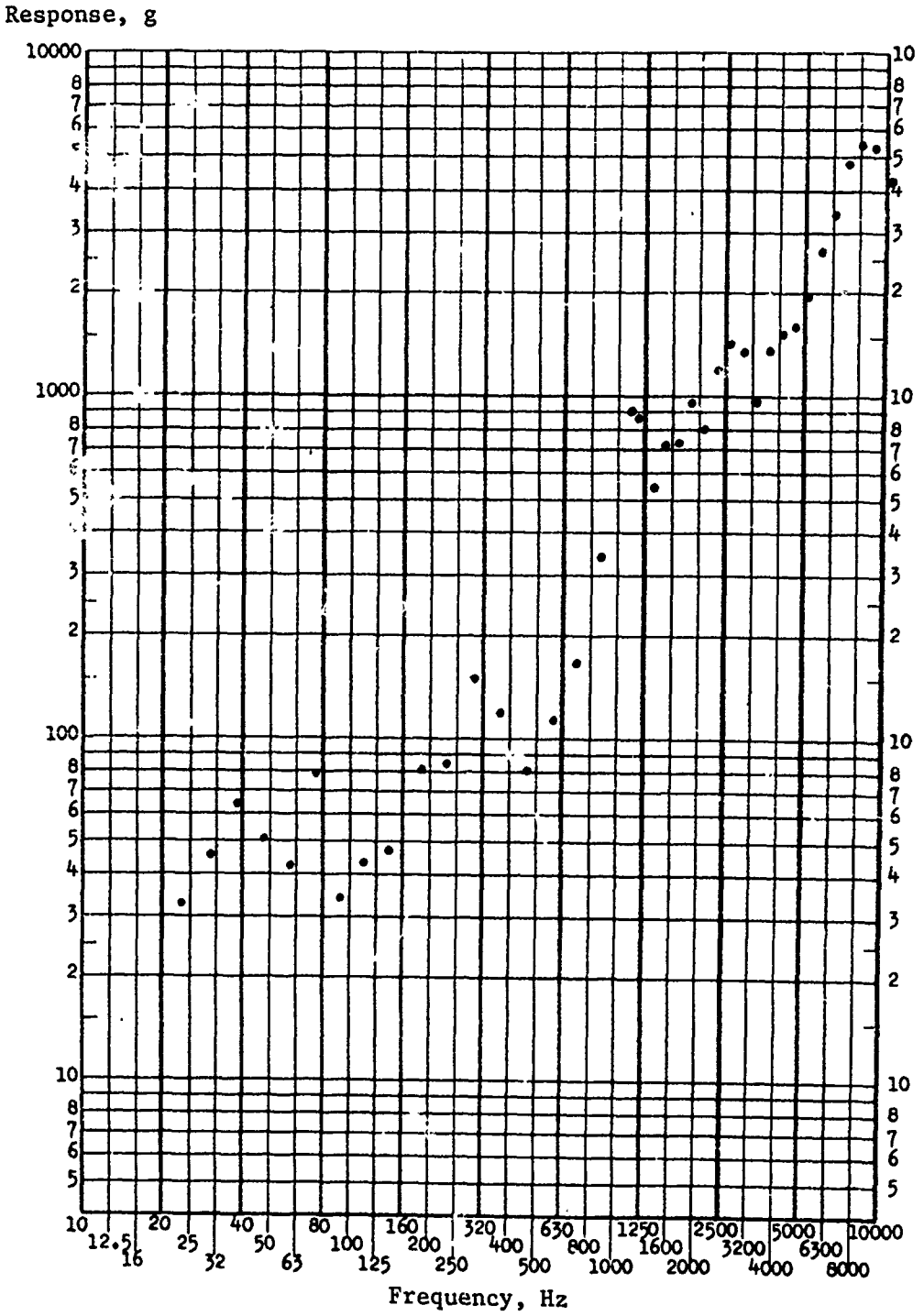
Measurement No. 1 - Longitudinal axis longeron near station 133

Figure 1 Run 1 Shock Response Spectrum



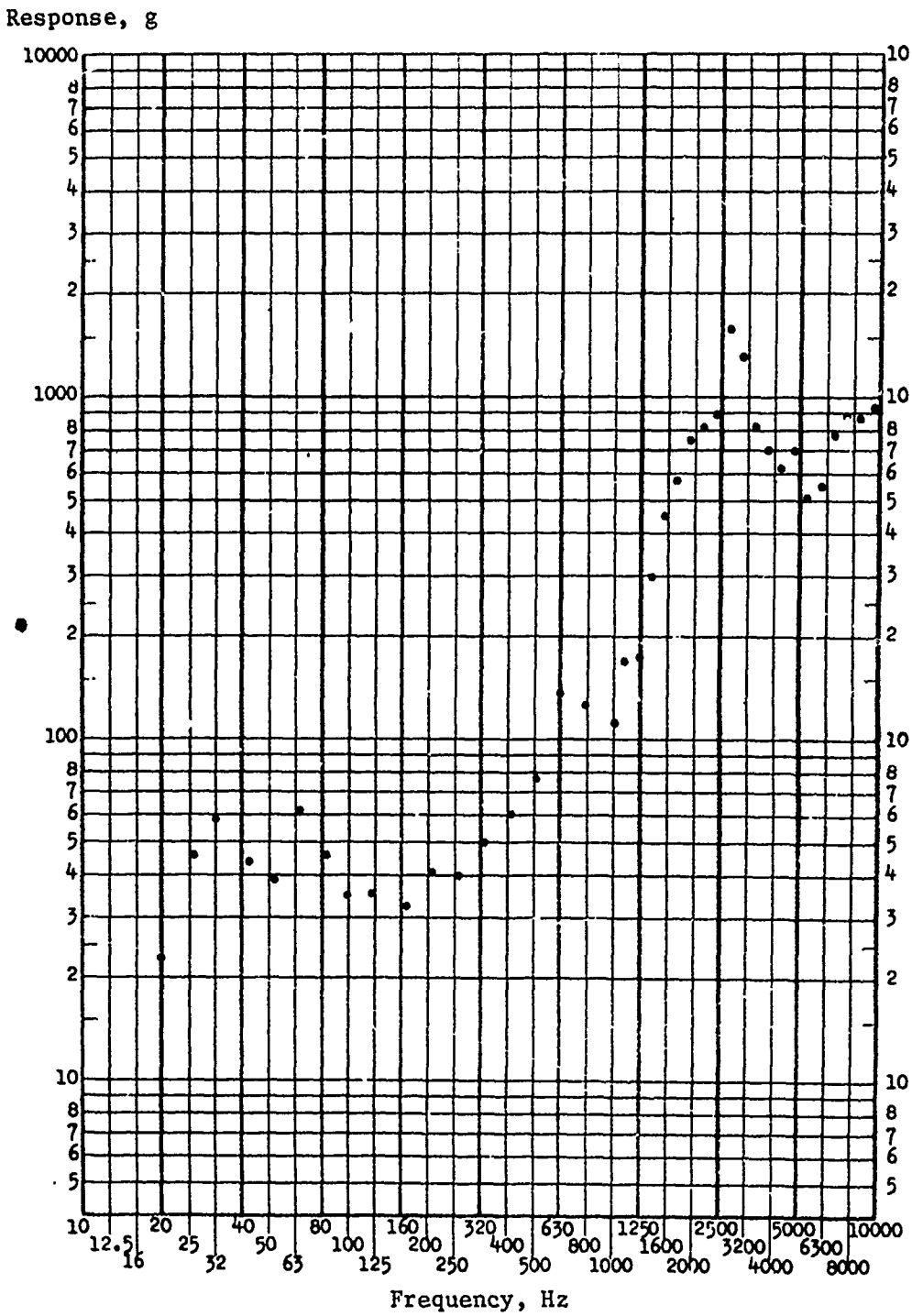
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 2 - Tangential axis longeron near station 133

Figure 1 (cont)



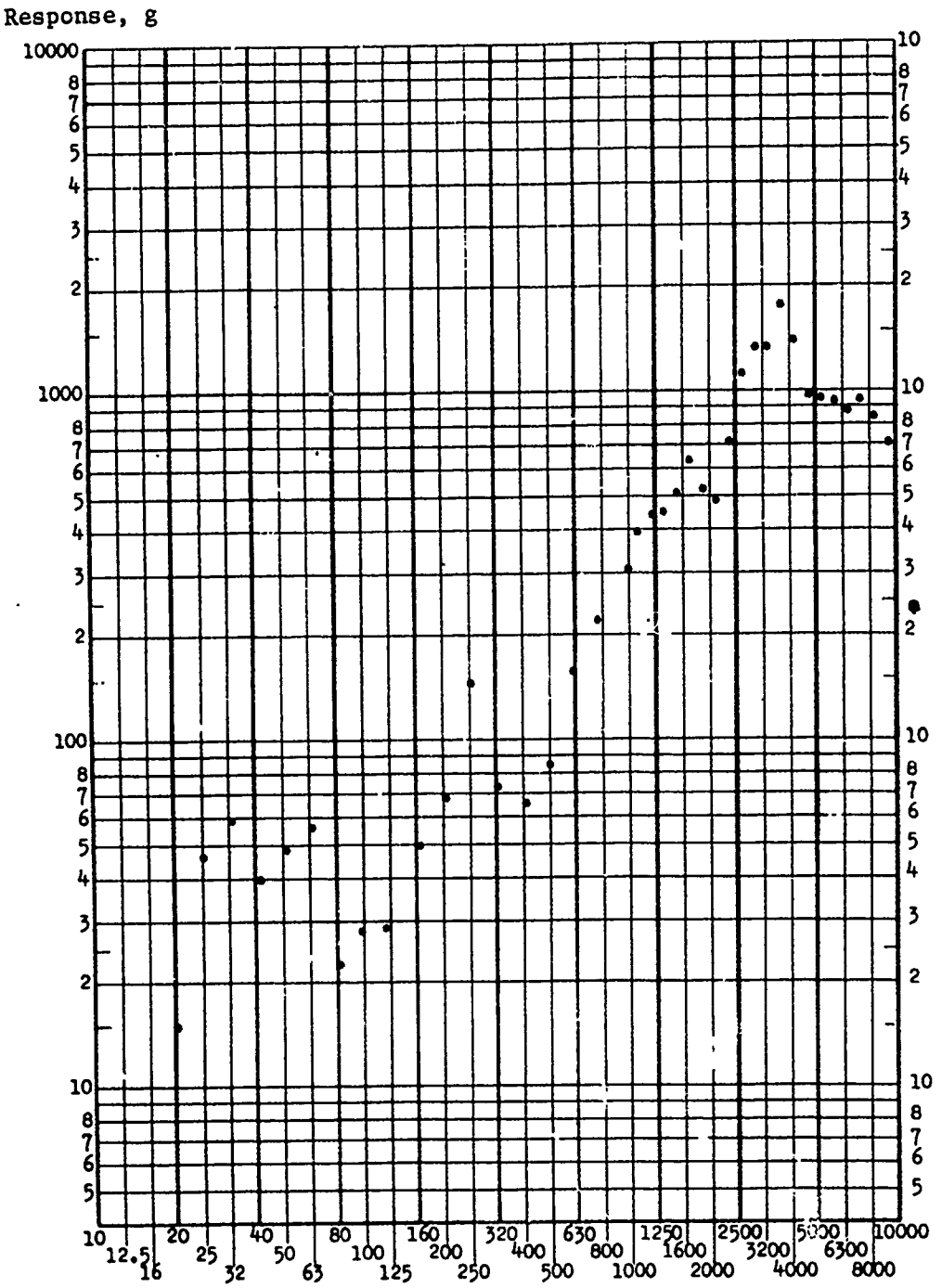
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 3 - Radial axis longeron near station 133

Figure 1 (cont)



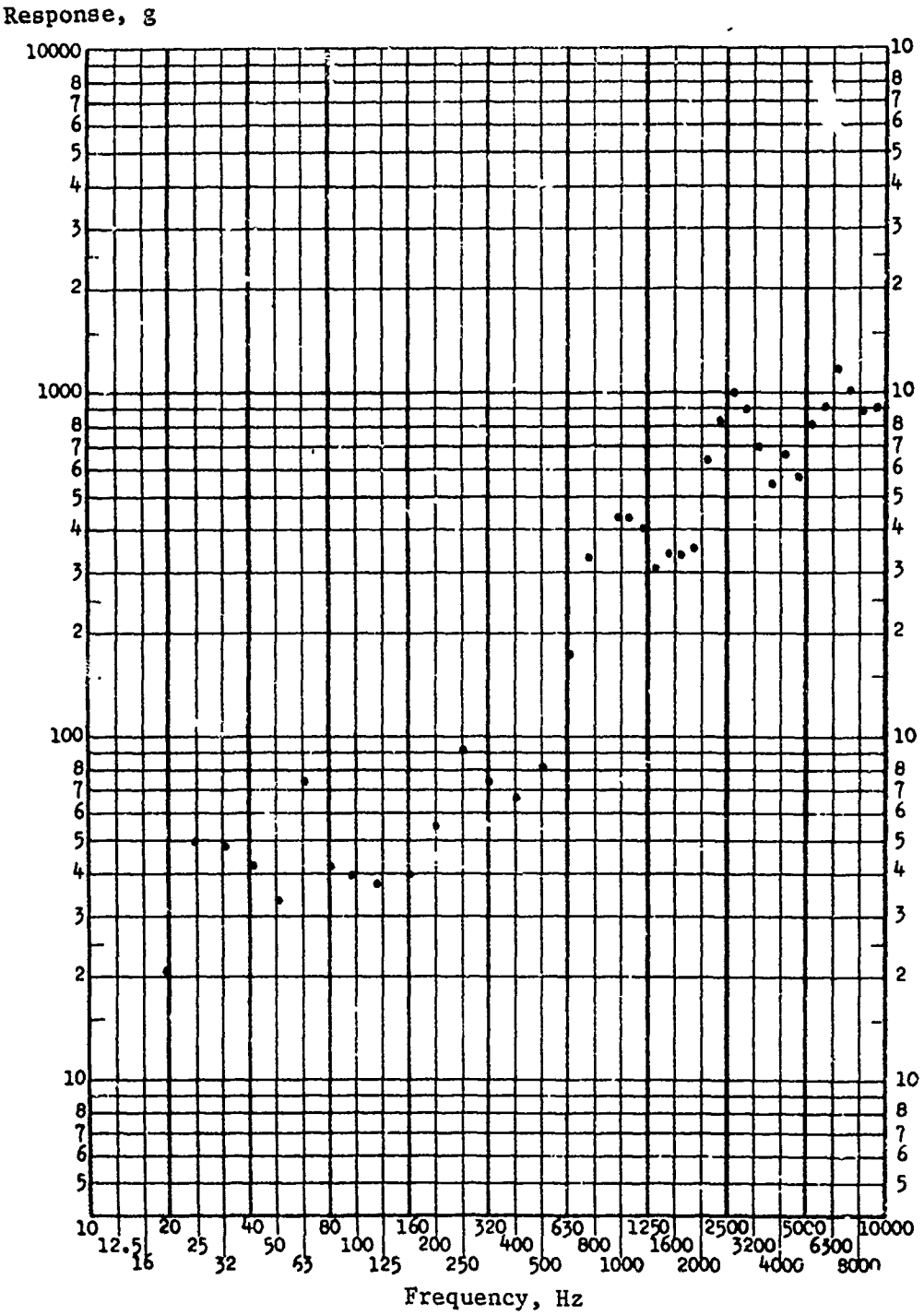
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 1 (cont)



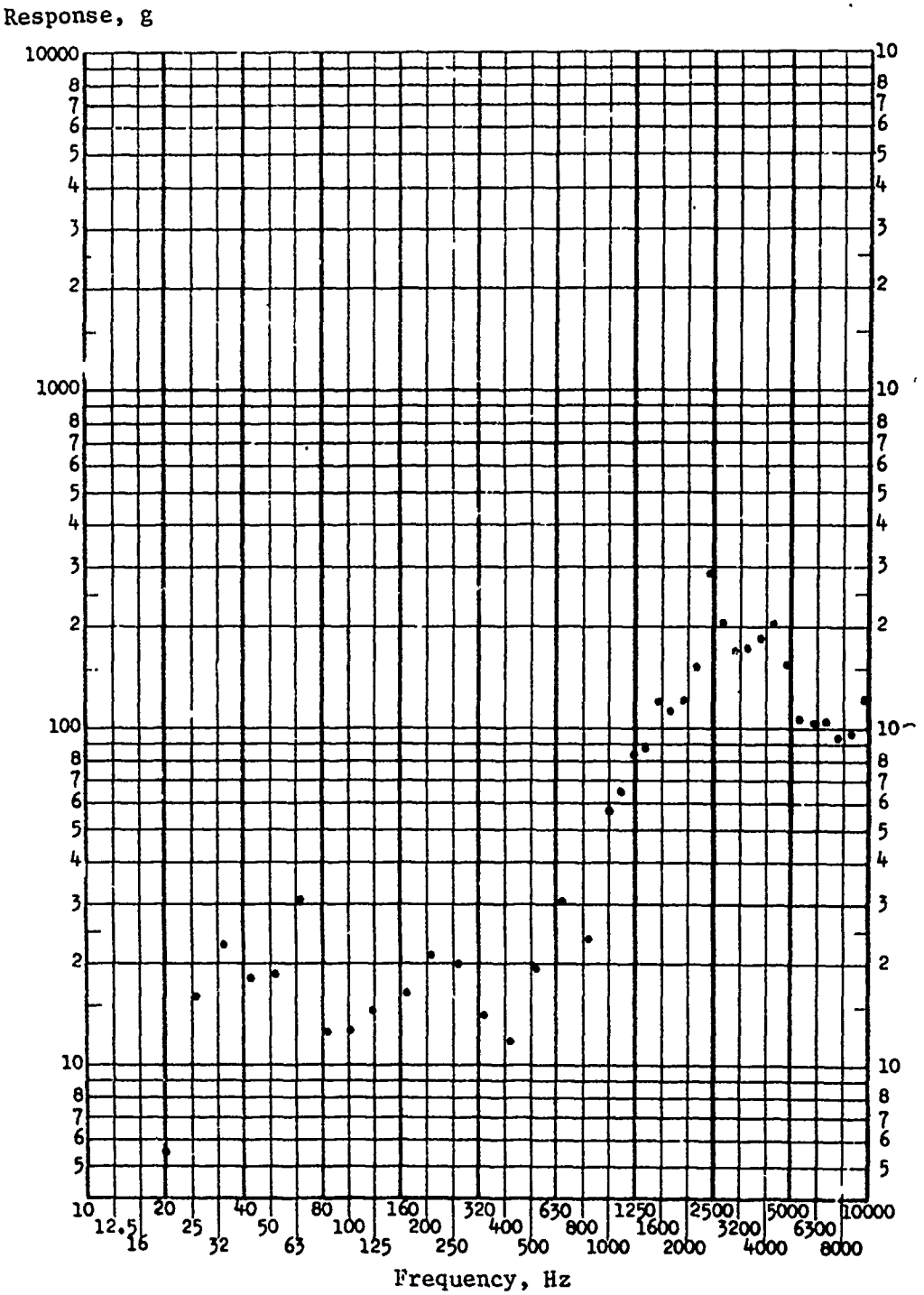
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 5 - Tangential axis longeron near station 117

Figure 1 (cont)



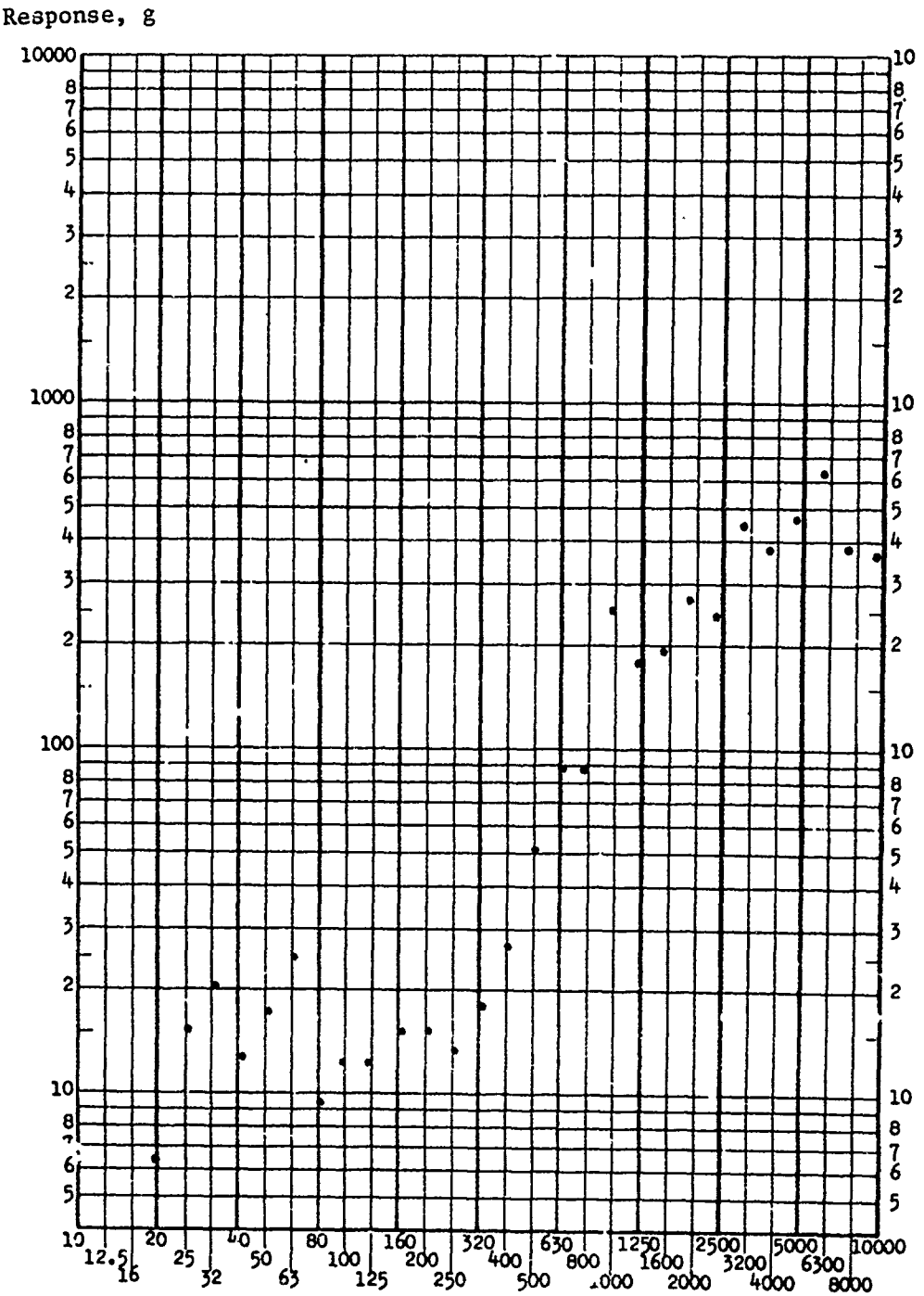
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 6 - Radial axis longeron near station 117

Figure 1 (cont)



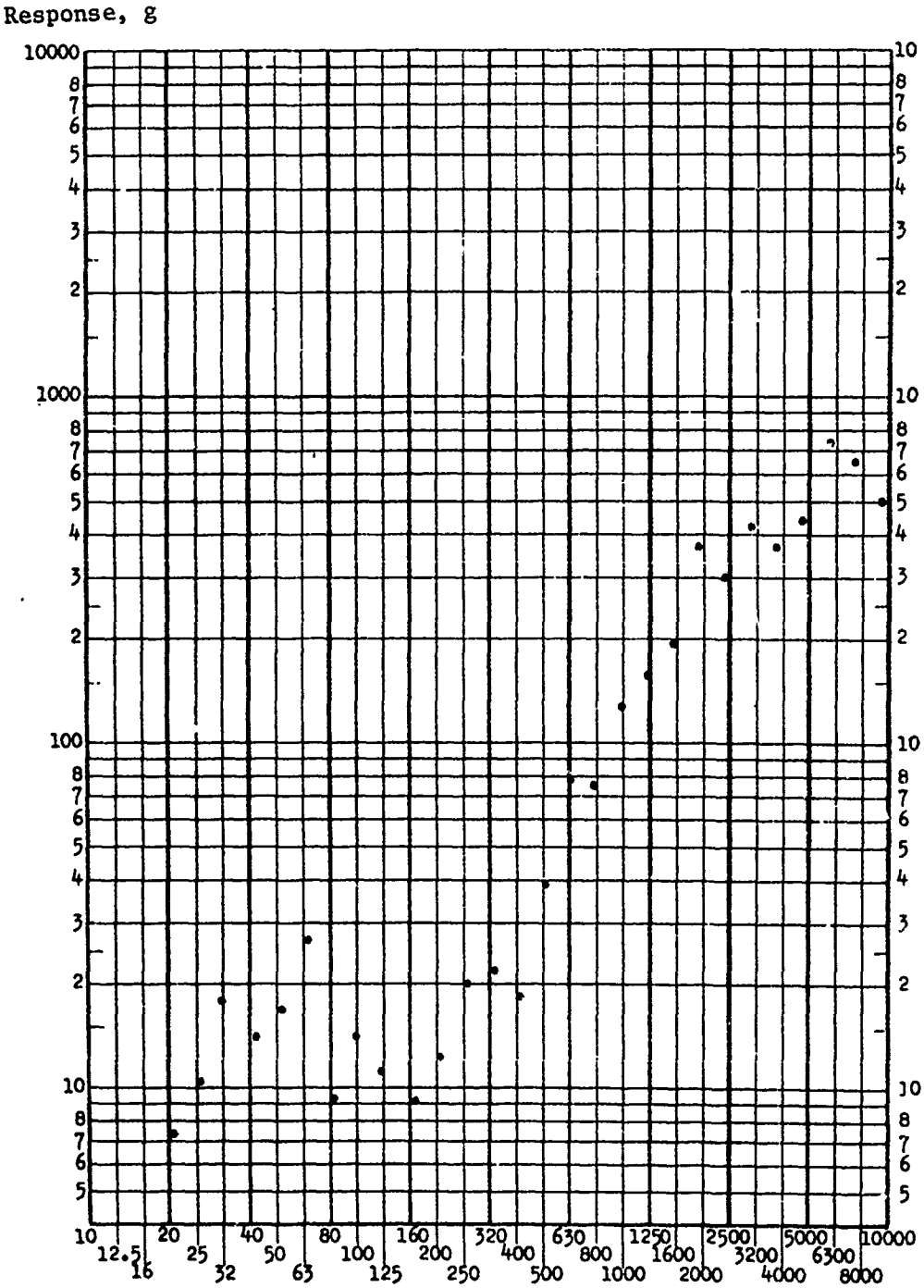
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 1 (cont)



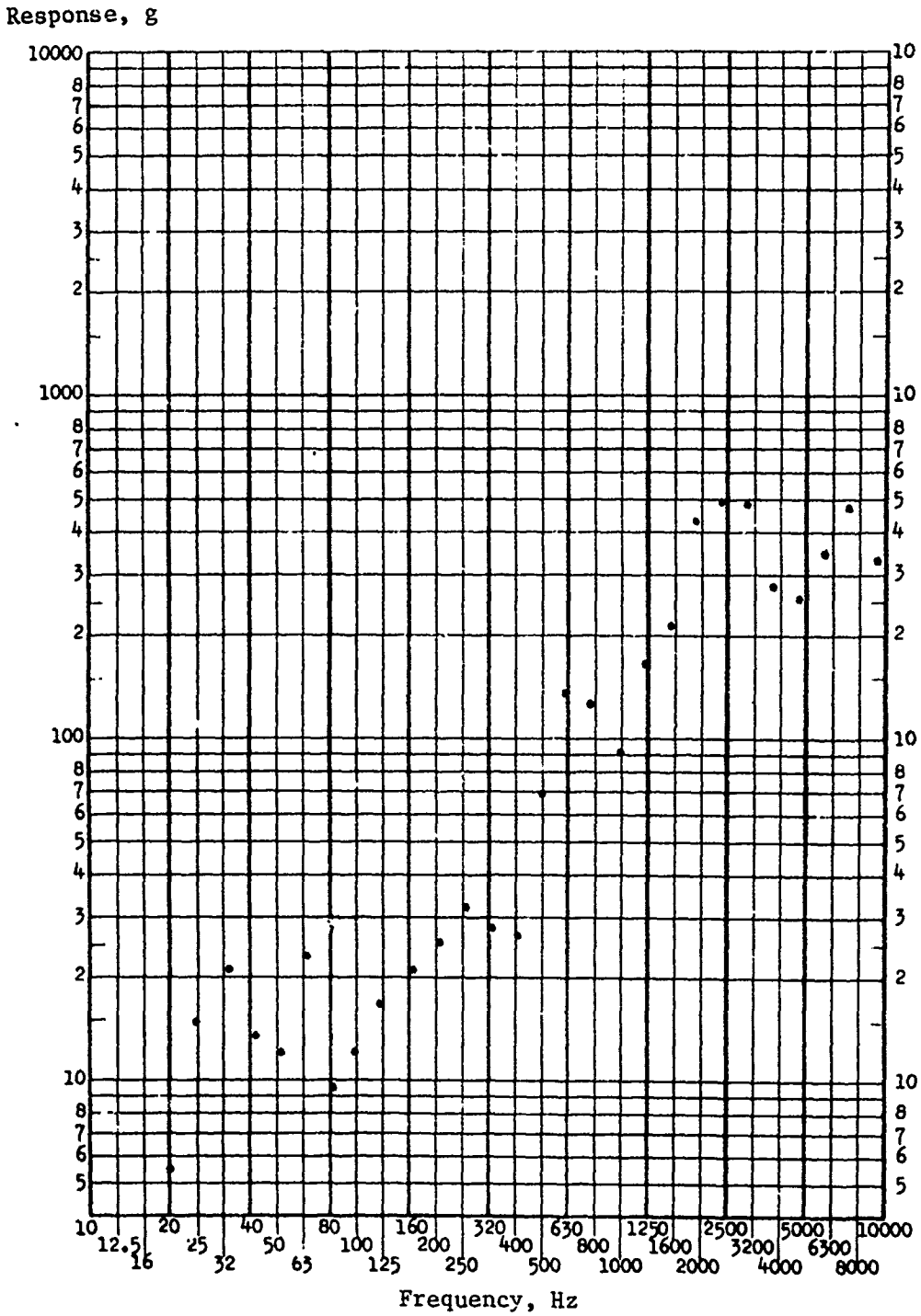
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 8 - Tangential axis longeron near station 77

Figure 1 (cont)



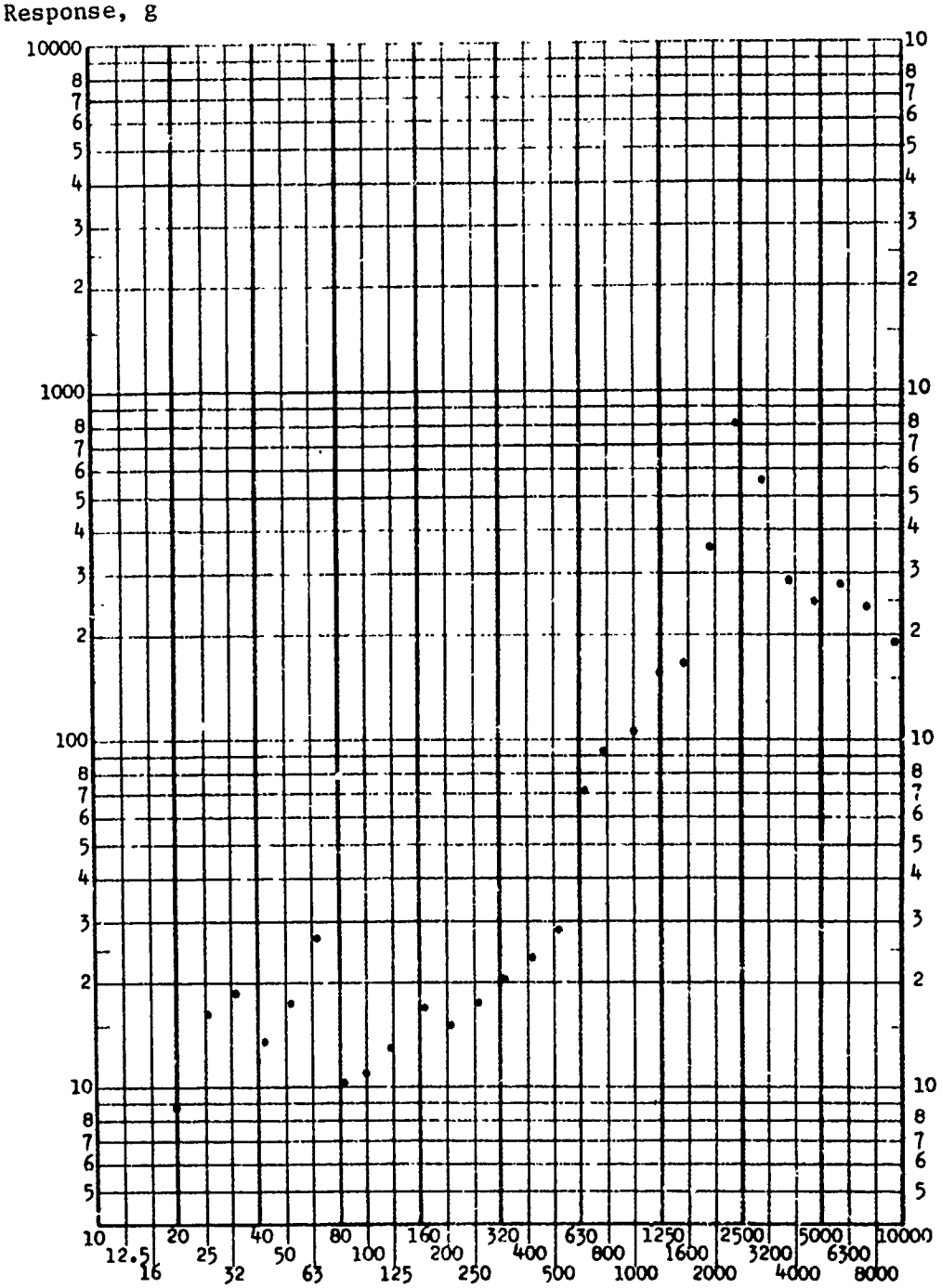
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 9 - Radial axis longeron near station 77

Figure 1 (cont)



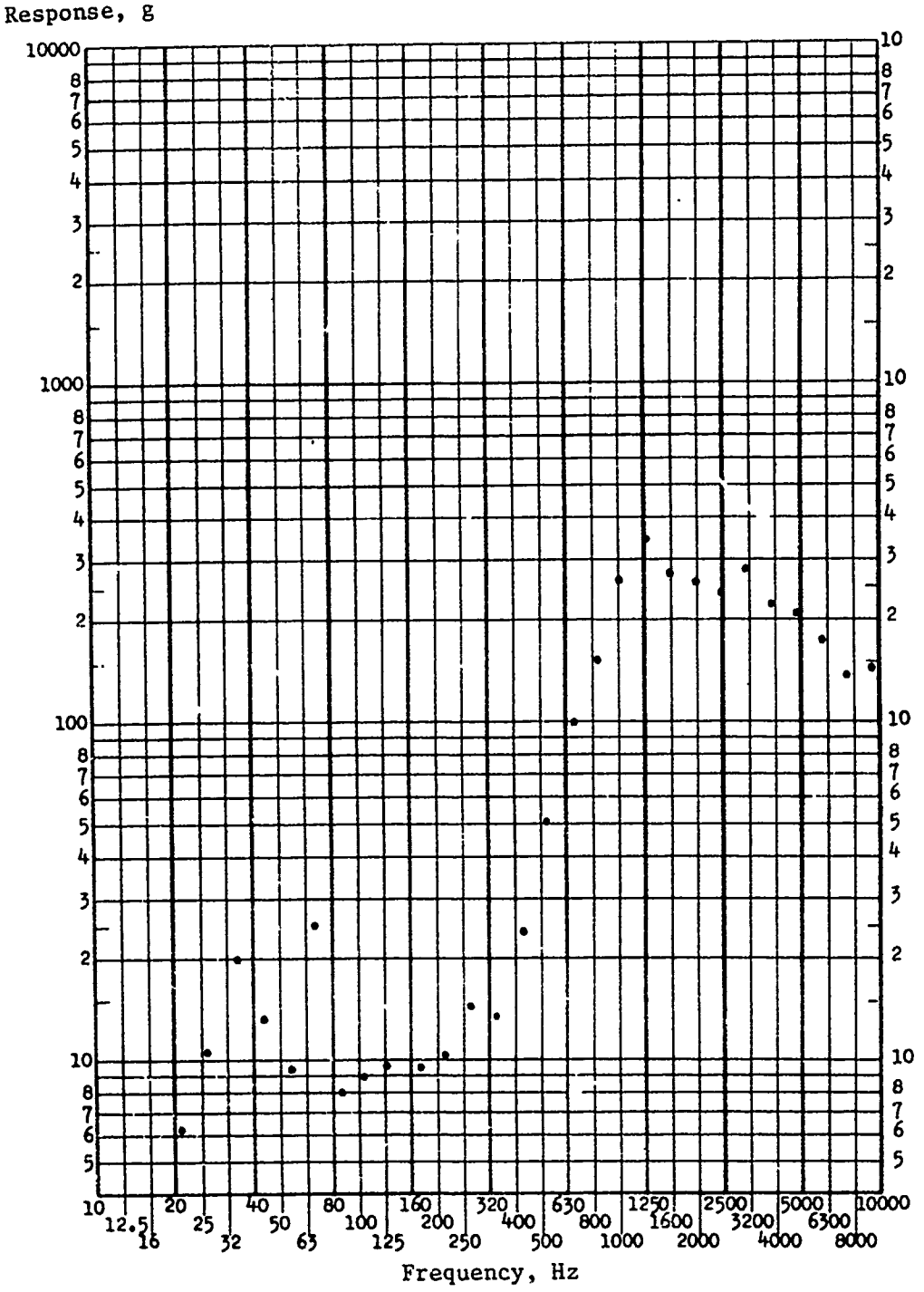
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 10 - Longitudinal axis truss bottom
near station 114 attach point

Figure 1 (cont)



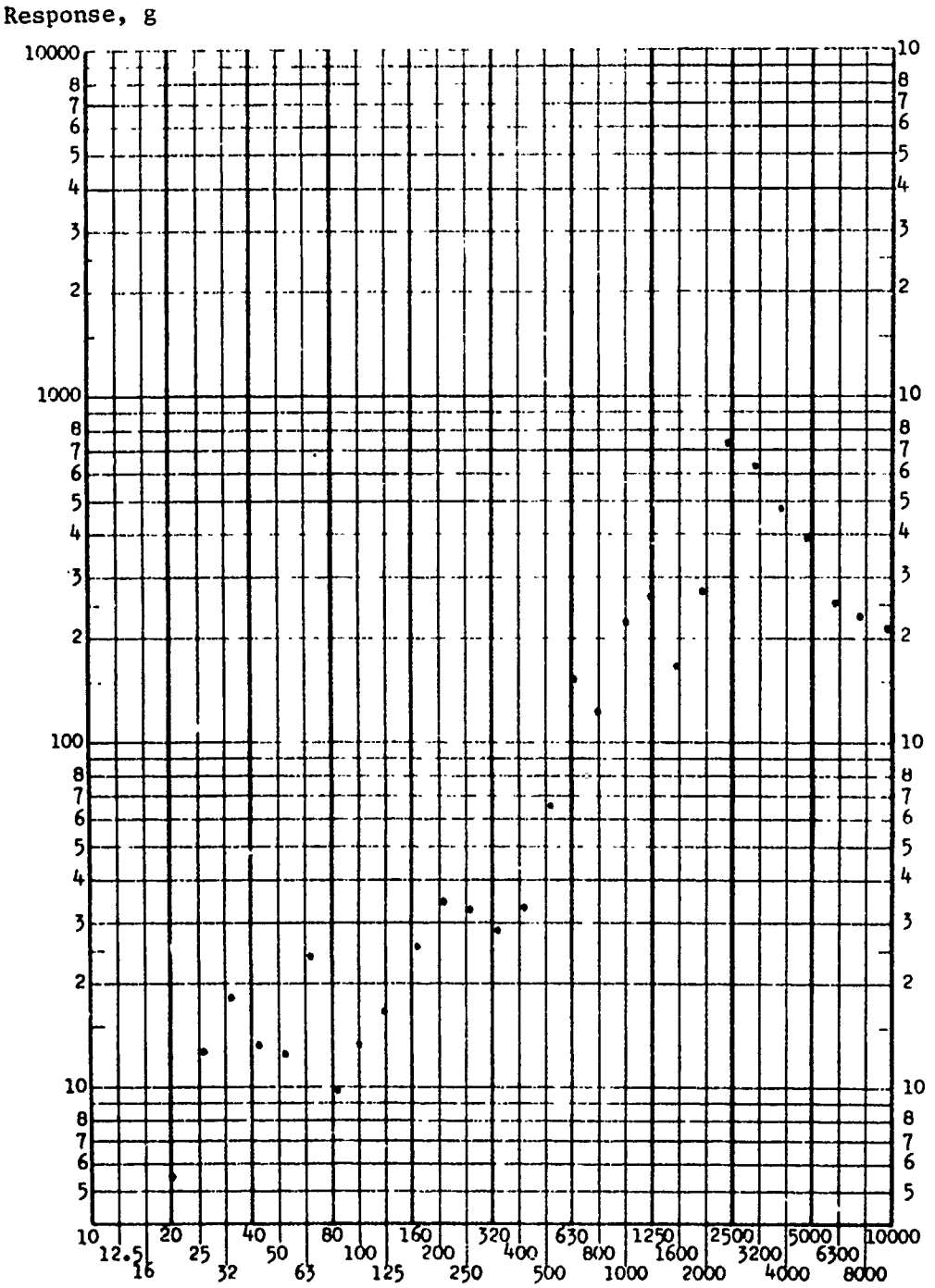
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 1 (cont)



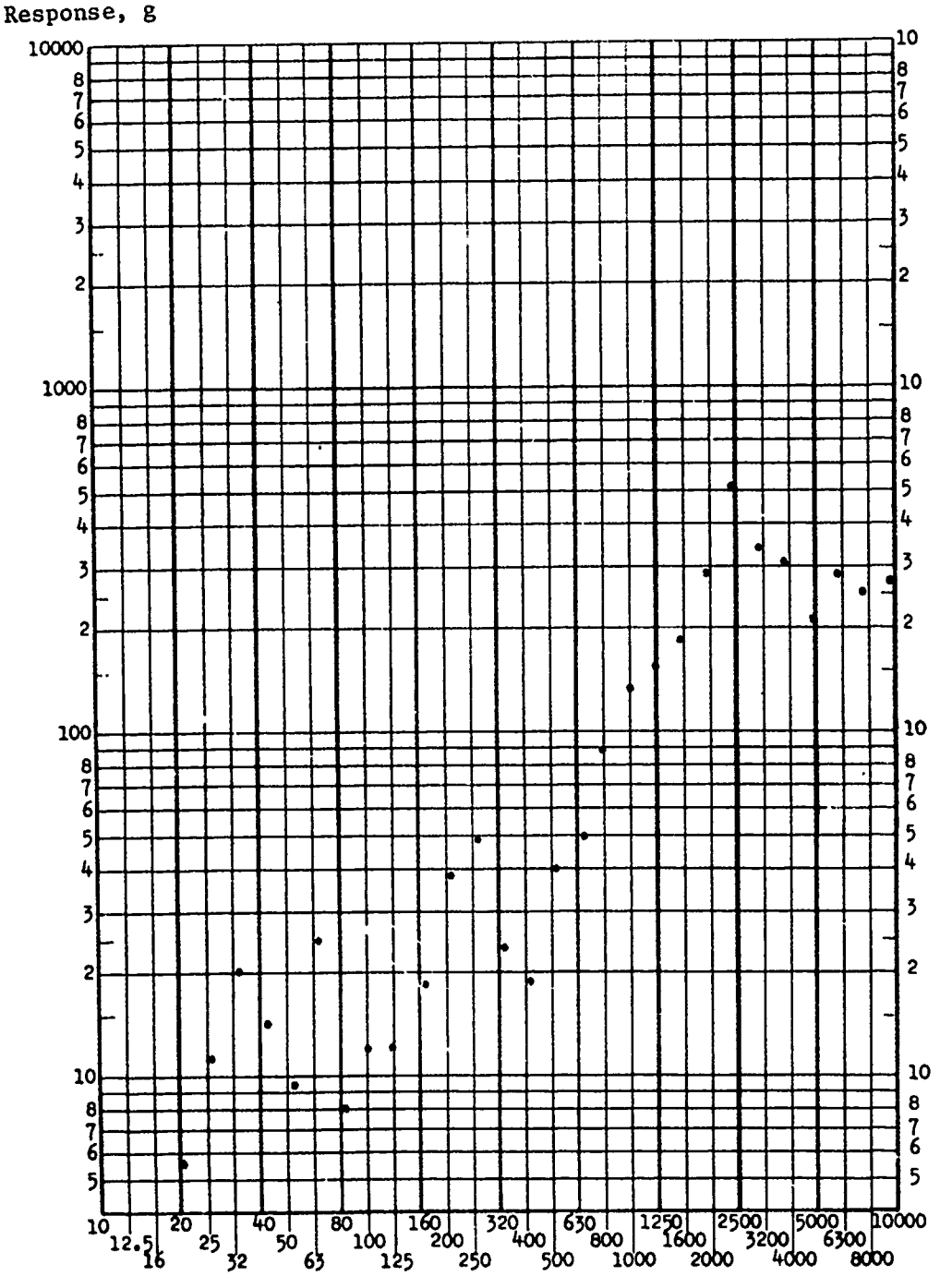
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 1 (cont)



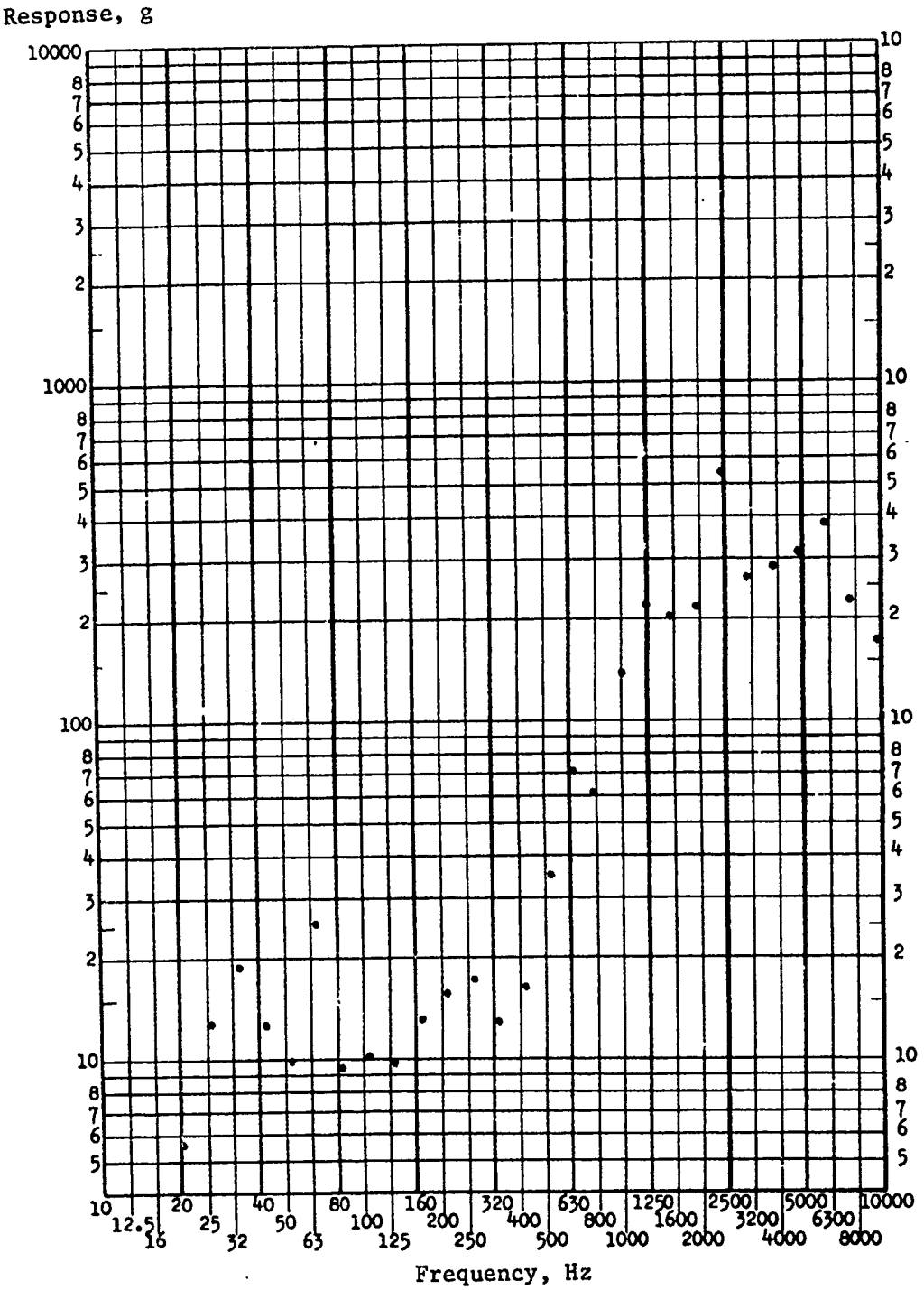
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 1 (cont)



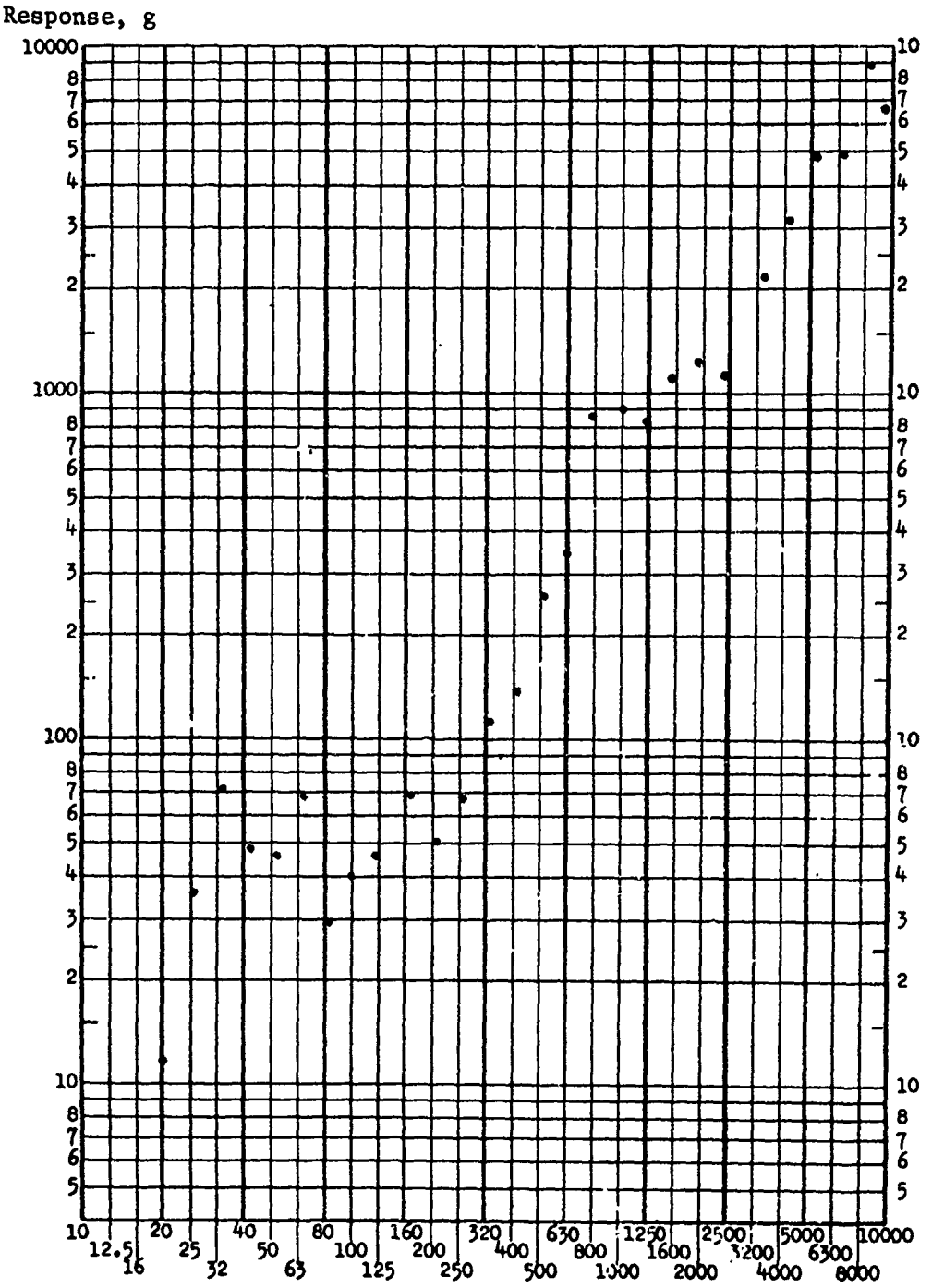
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 1 (cont)



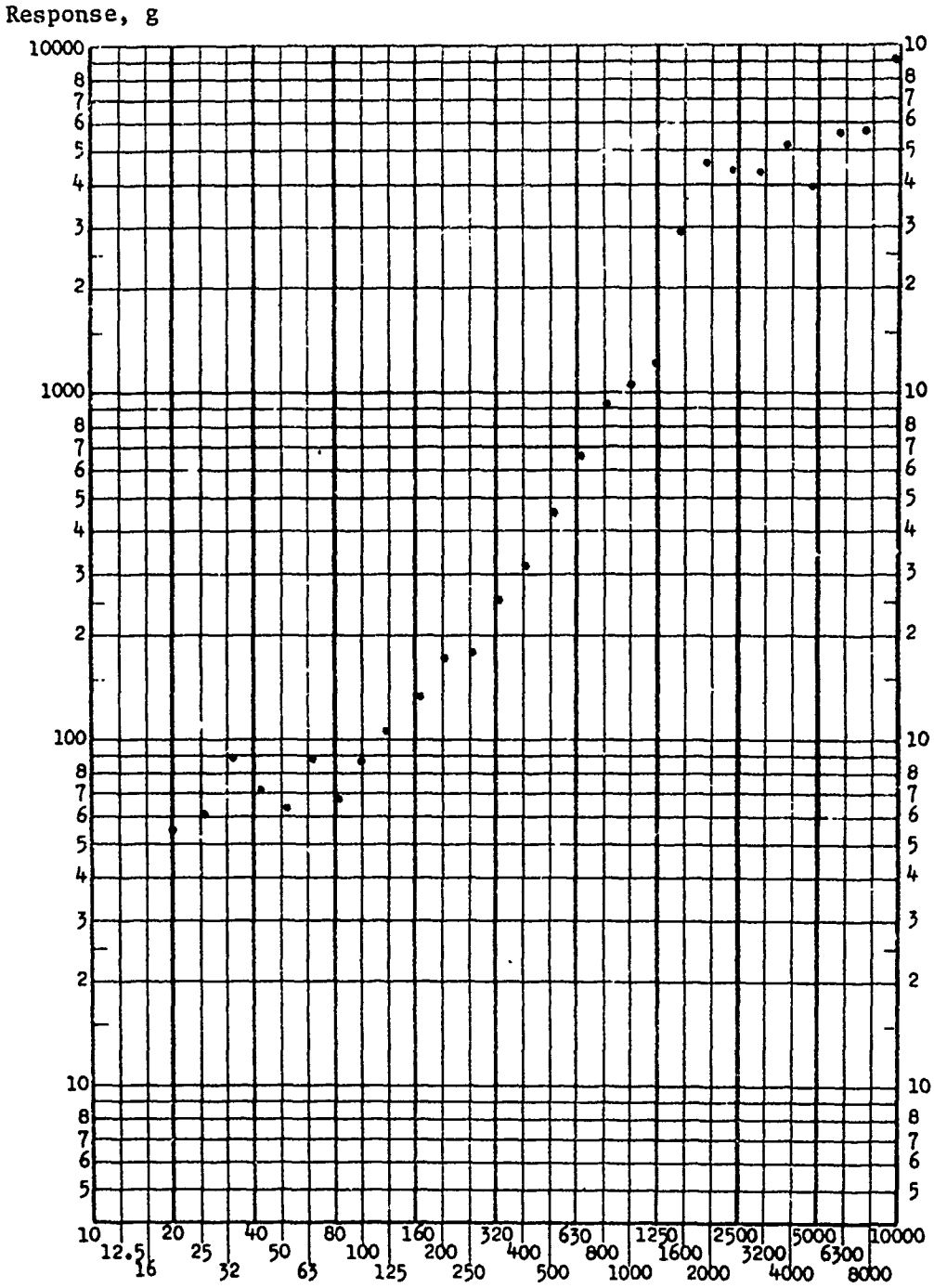
Bench Shock Test - Stage II/III Separation, Run 1
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 1 (concl)



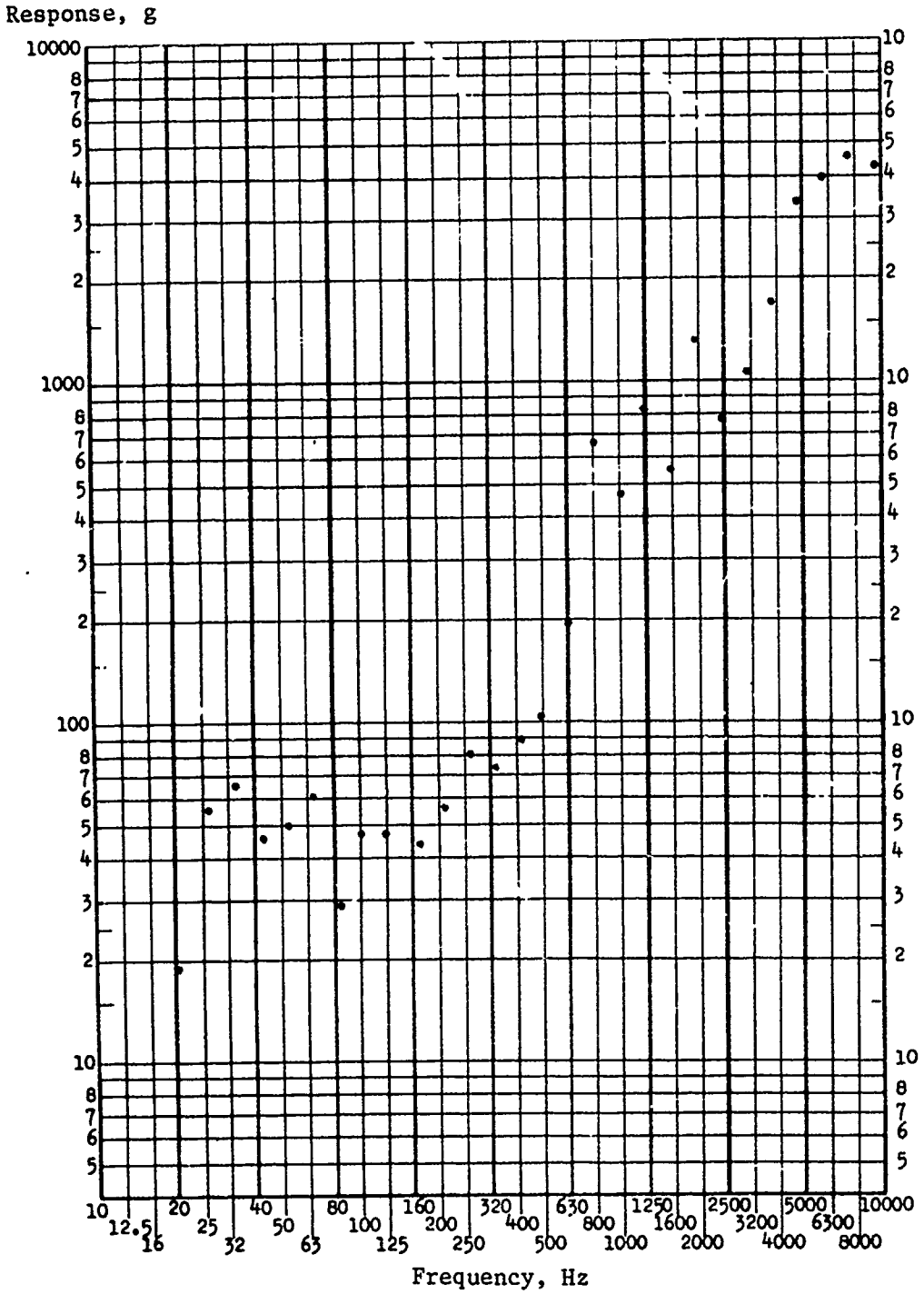
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 2 Run 2 Shock Response Spectrum



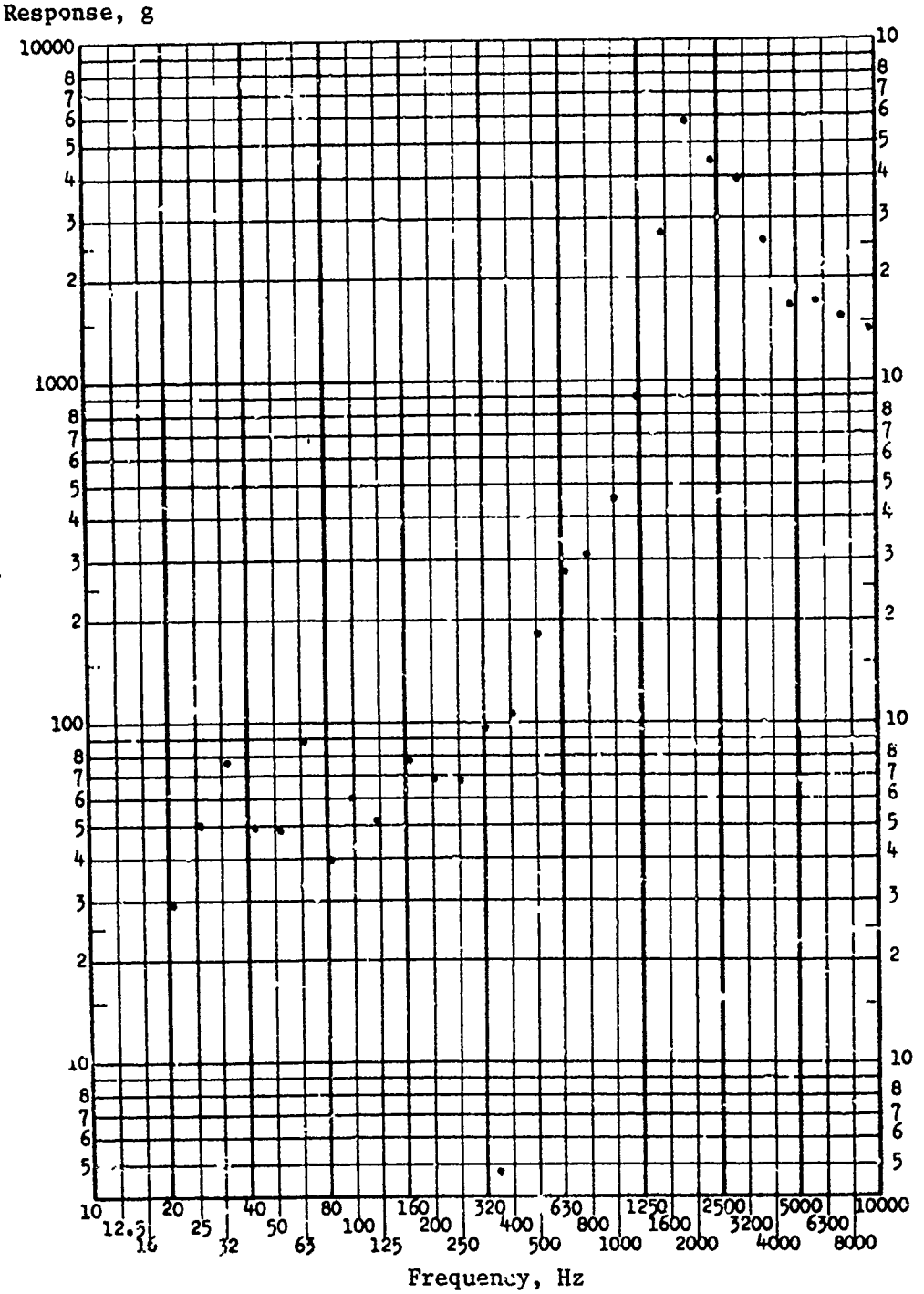
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 2 - Tangential axis longeron near station 133

Figure 2 (cont)



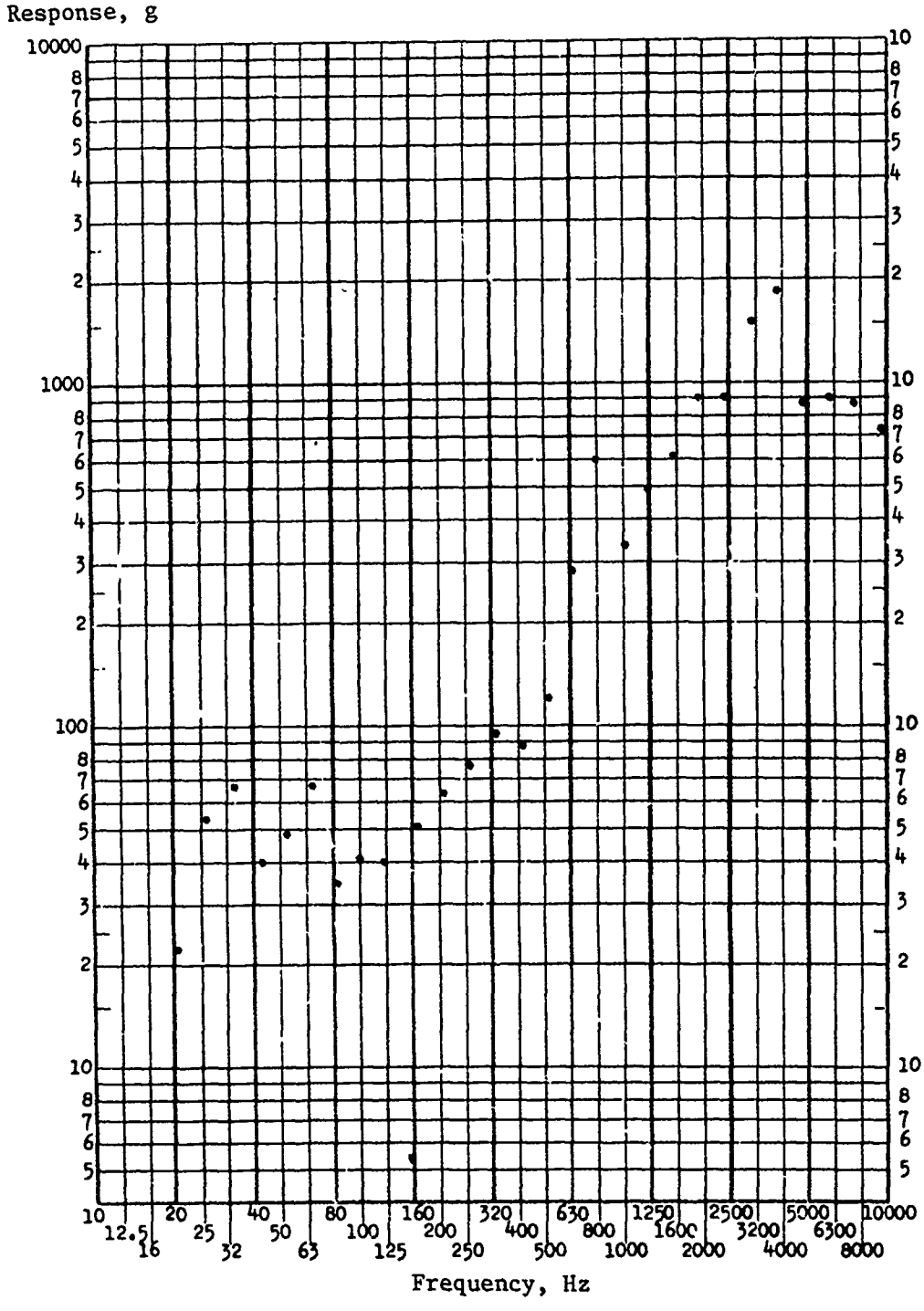
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 3 - Radial axis longeron near station 133

Figure 2 (cont)



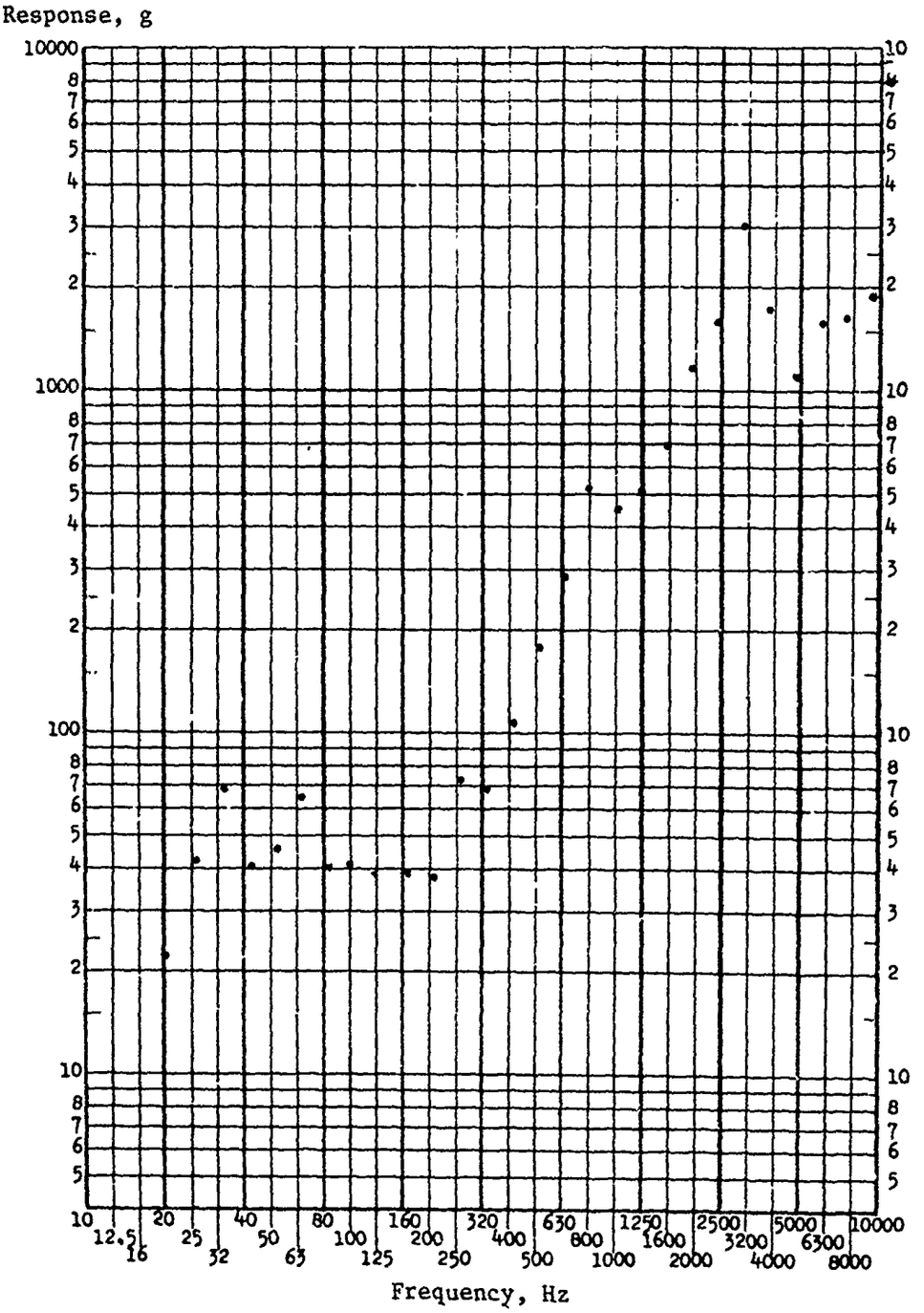
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 2 (cont)



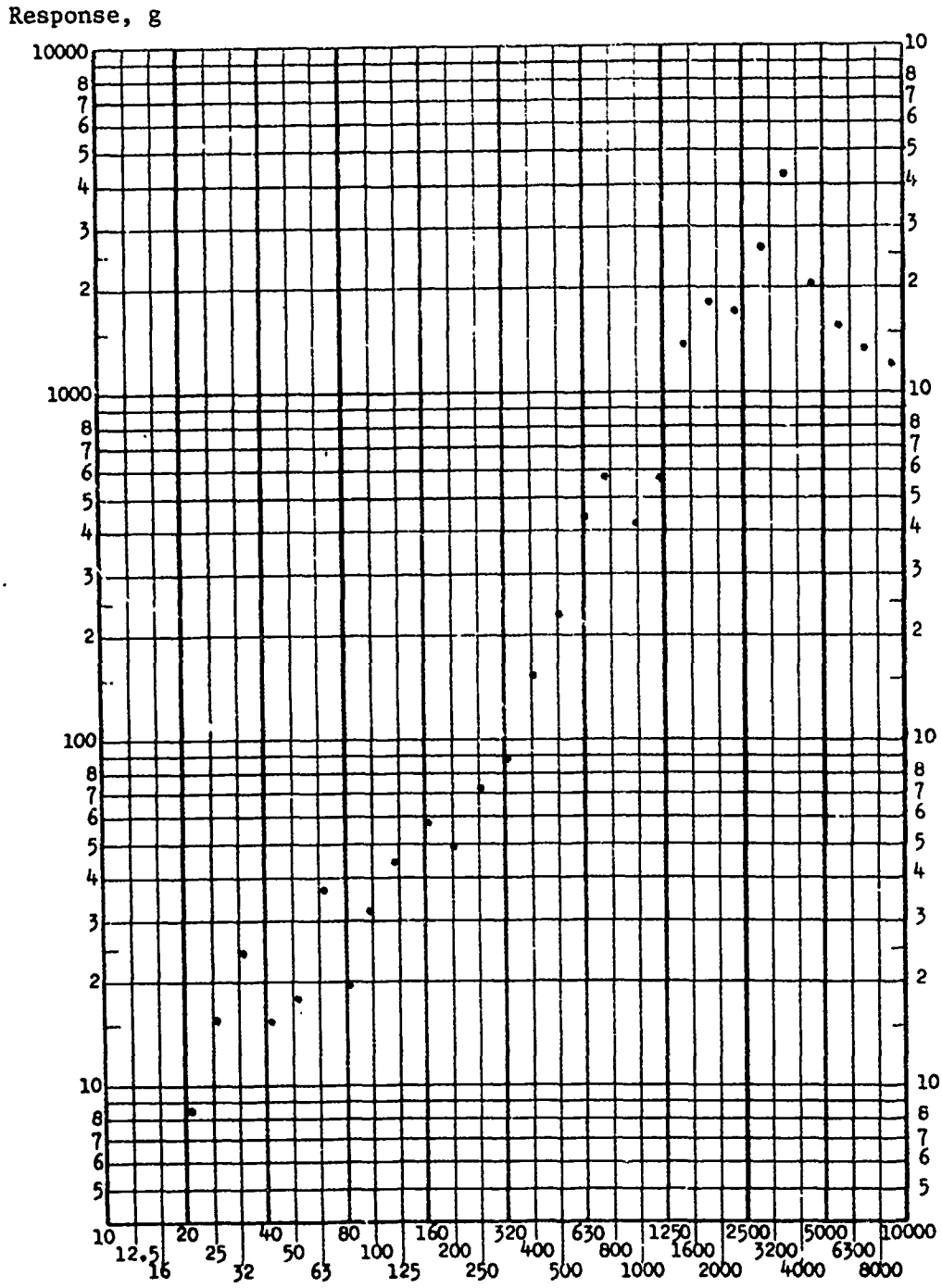
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 5 - Tangential axis longeron near station 117

Figure 2 (cont)



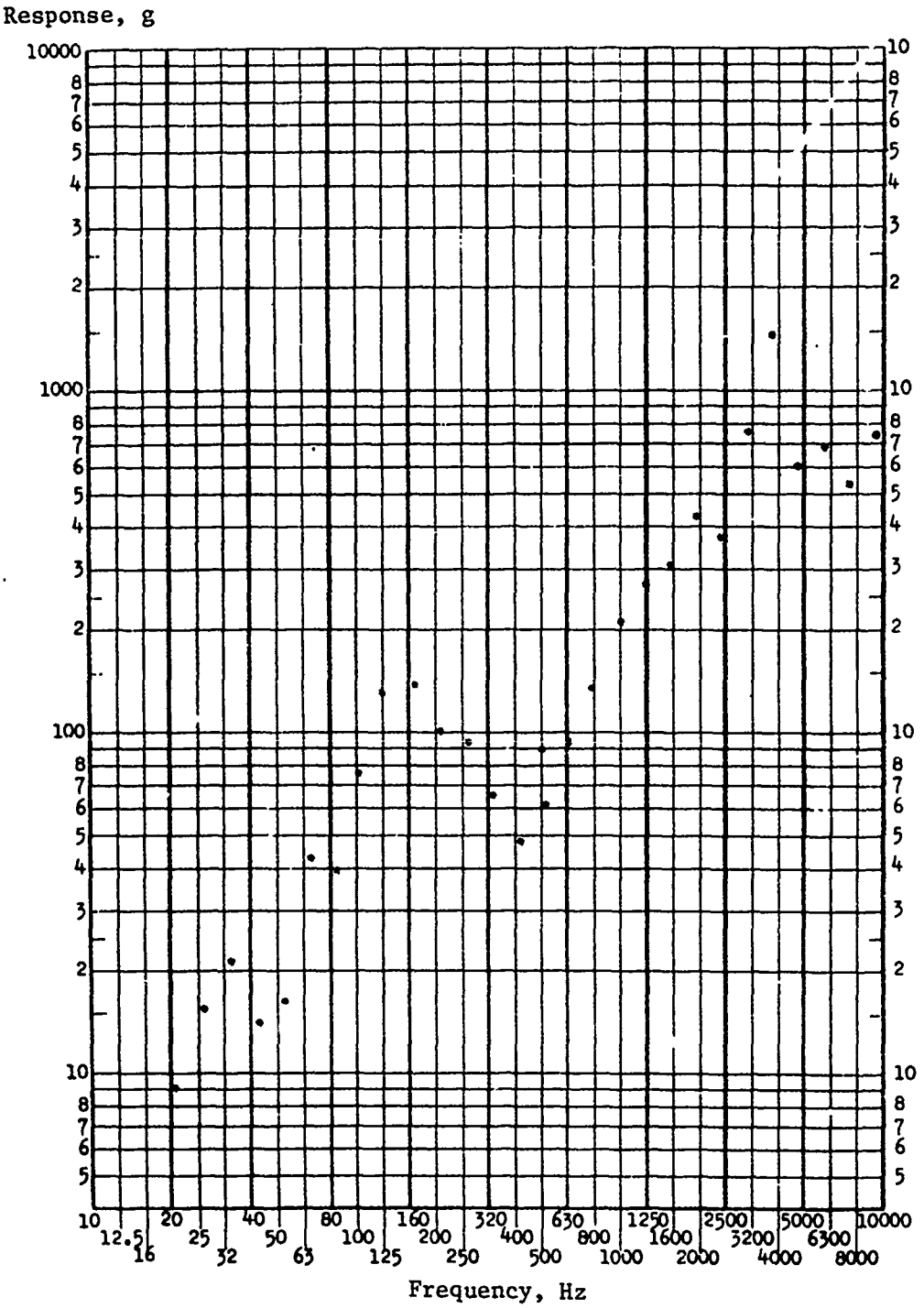
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 6 - Radial axis longeron near station 117

Figure 2 (cont)



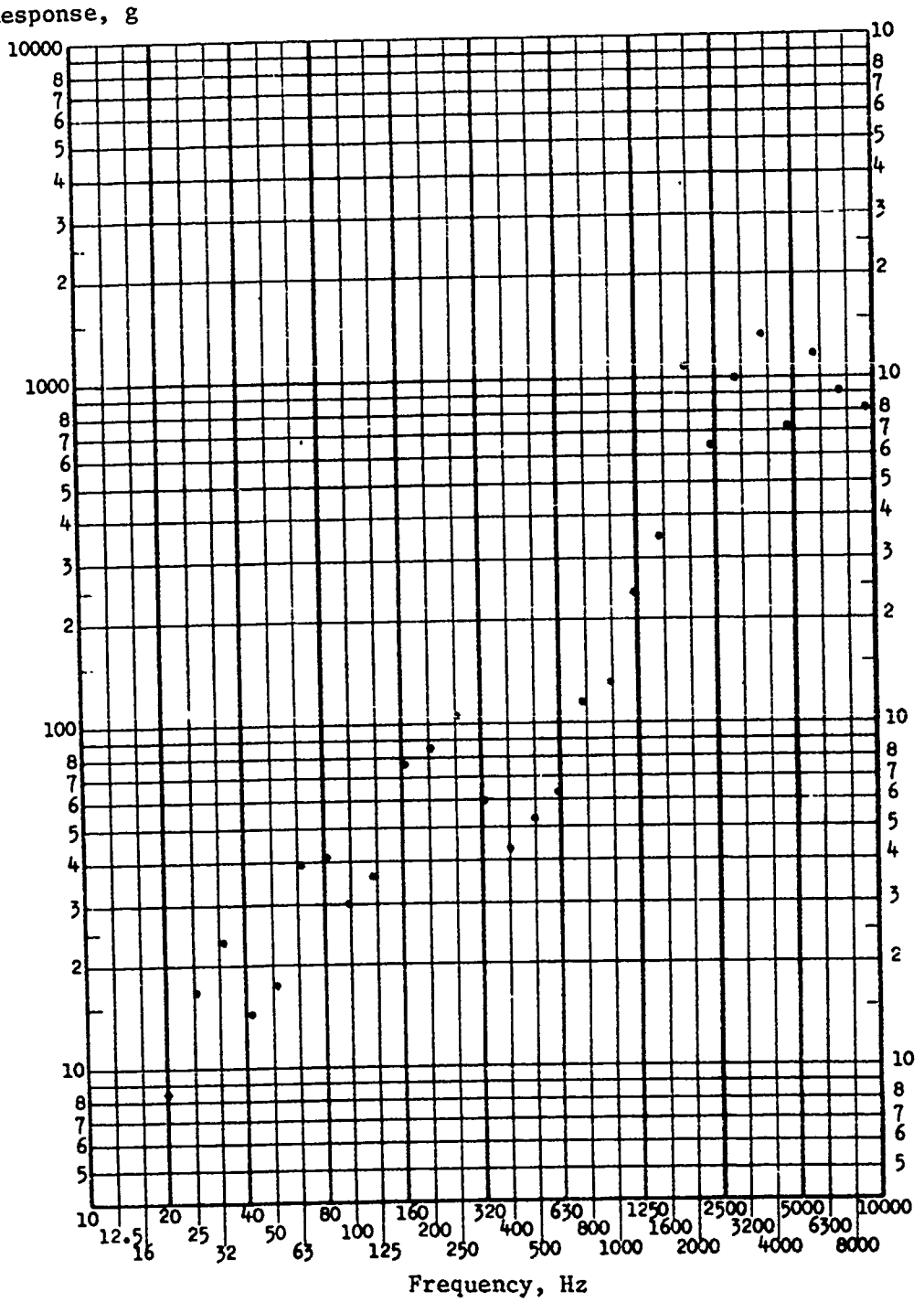
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure (cont)



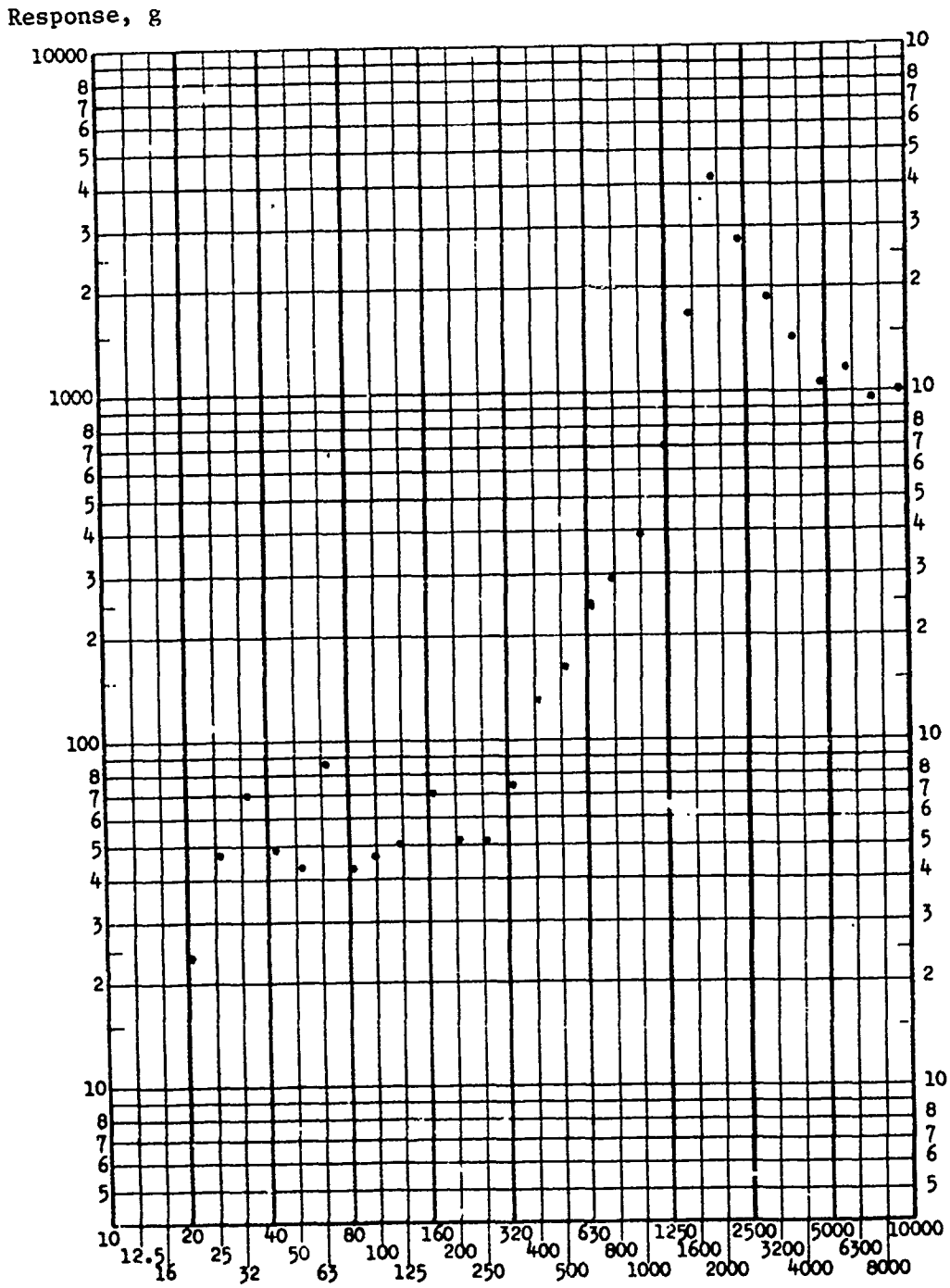
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 8 - Tangential axis longeron near station 77

Figure 2 (cont)



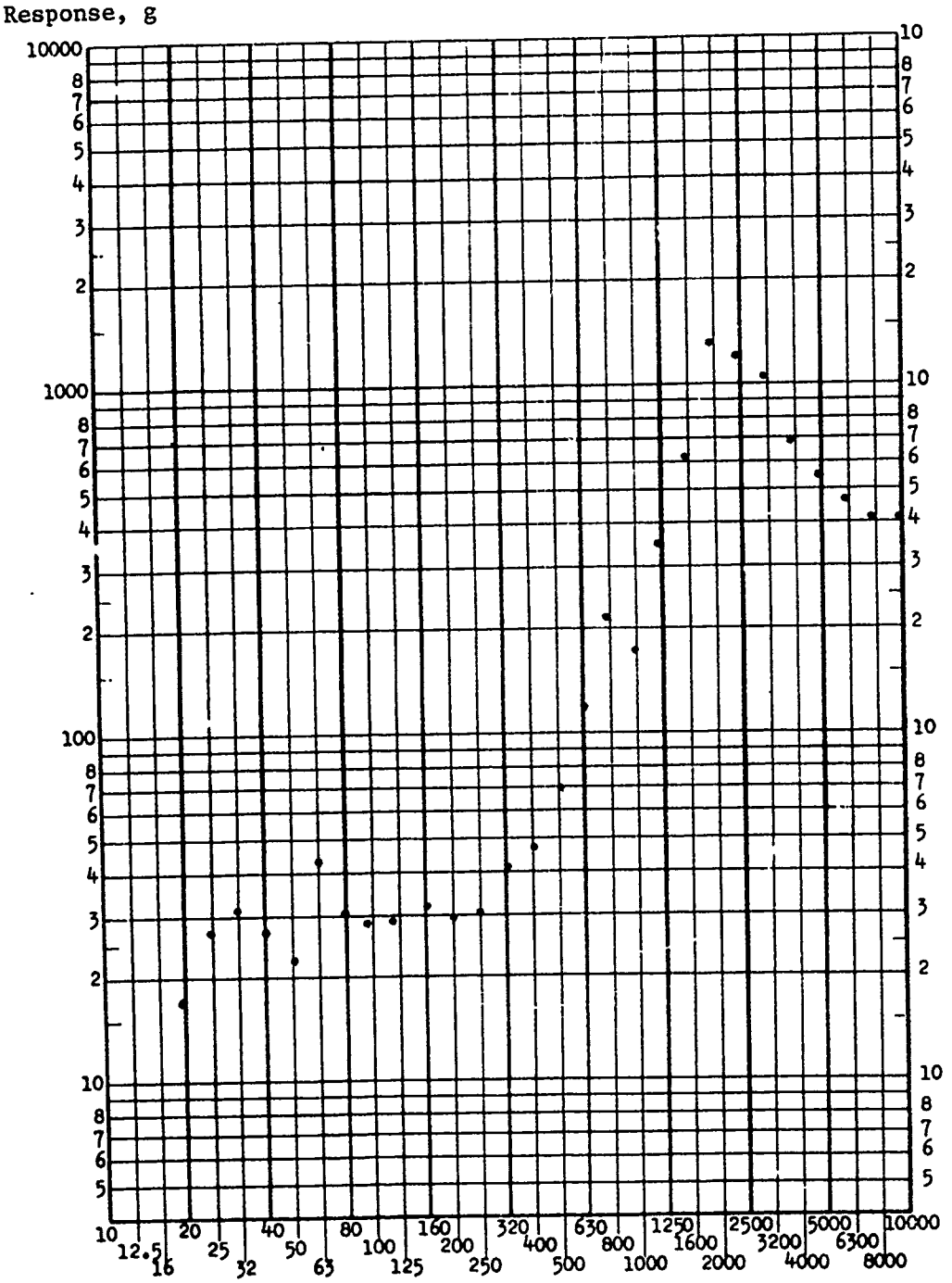
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 9 - Radial axis longeron near station 77

Figure 2 (cont)



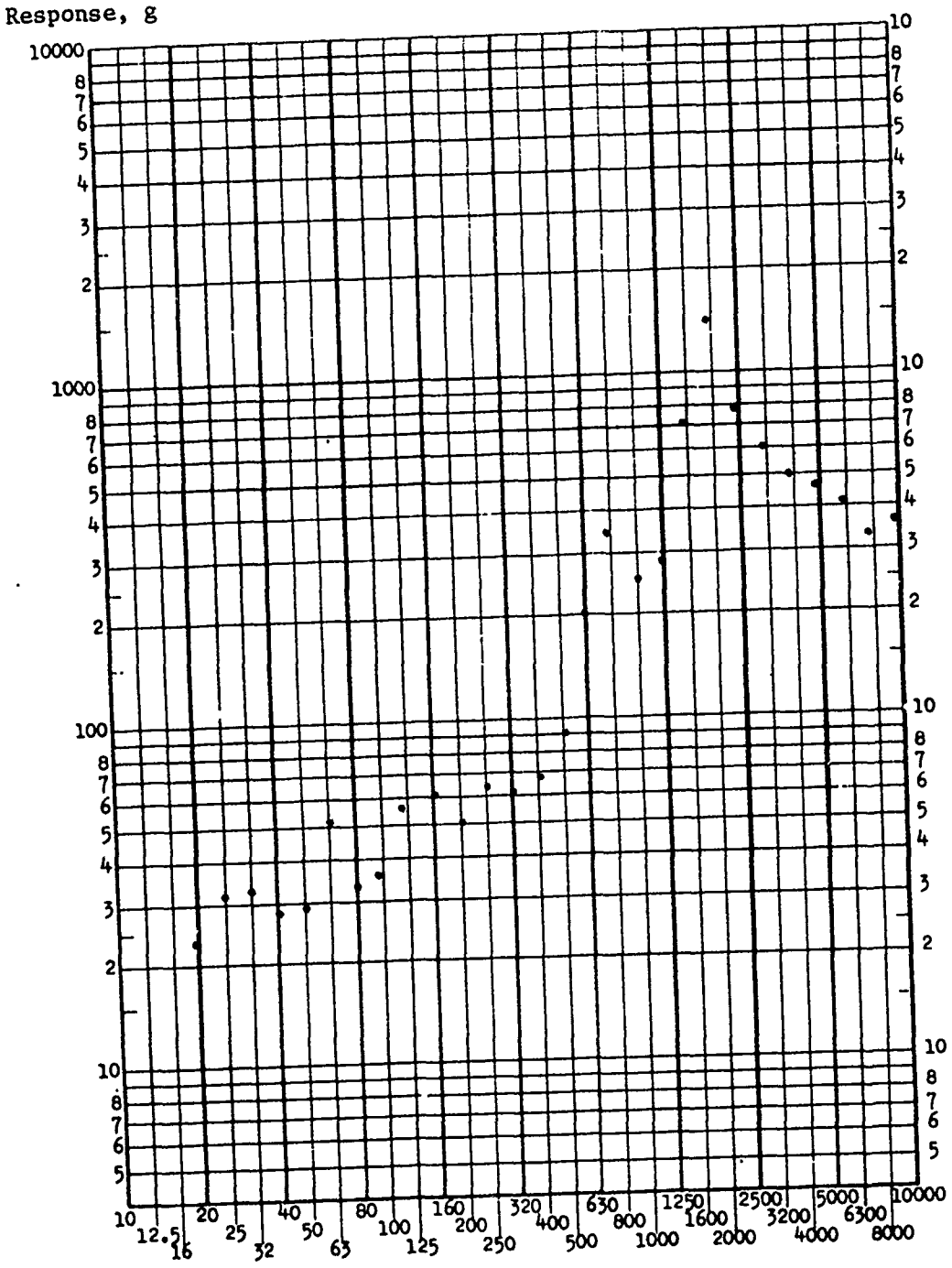
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 2 (cont)



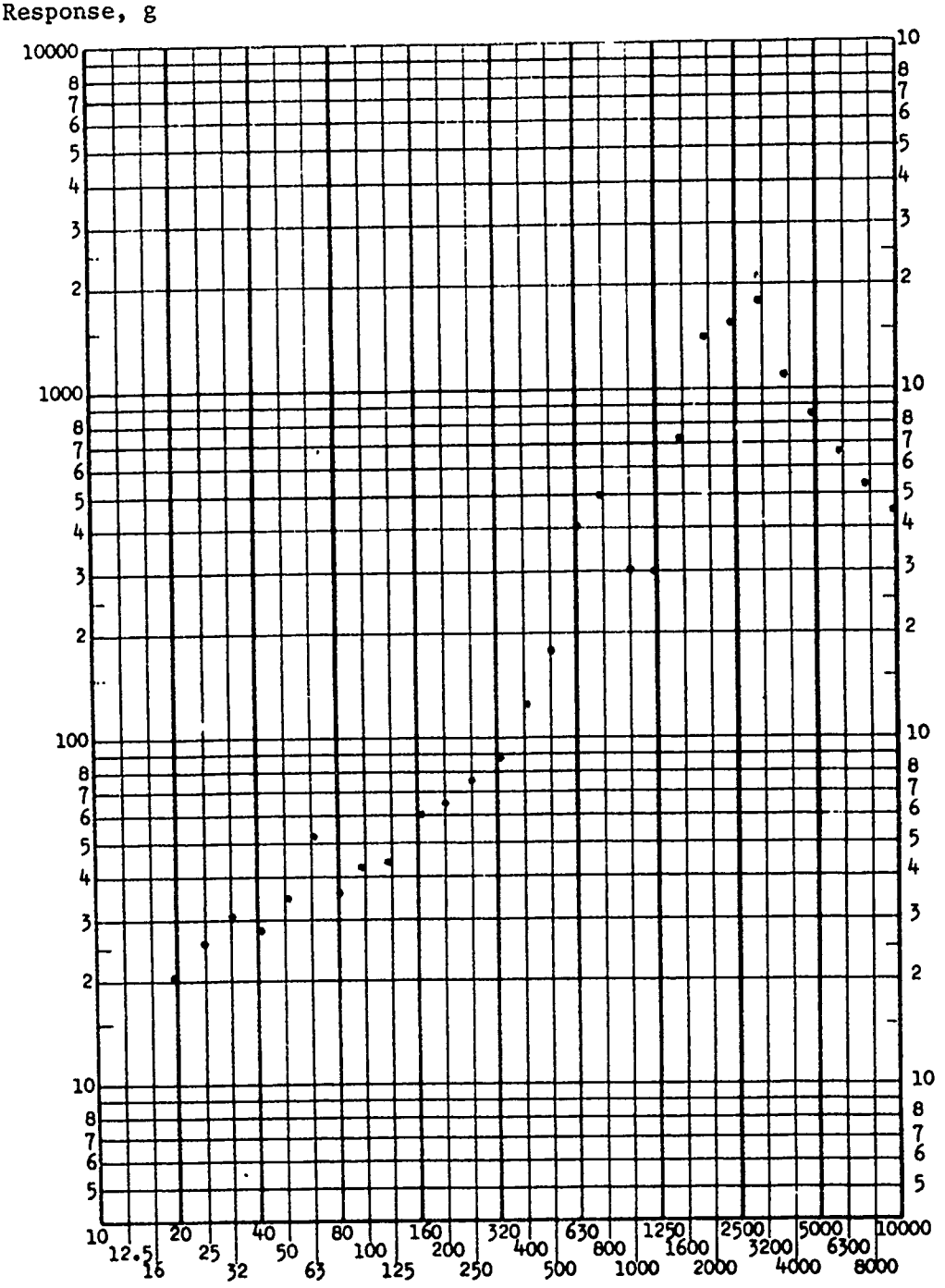
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 2 (cont)



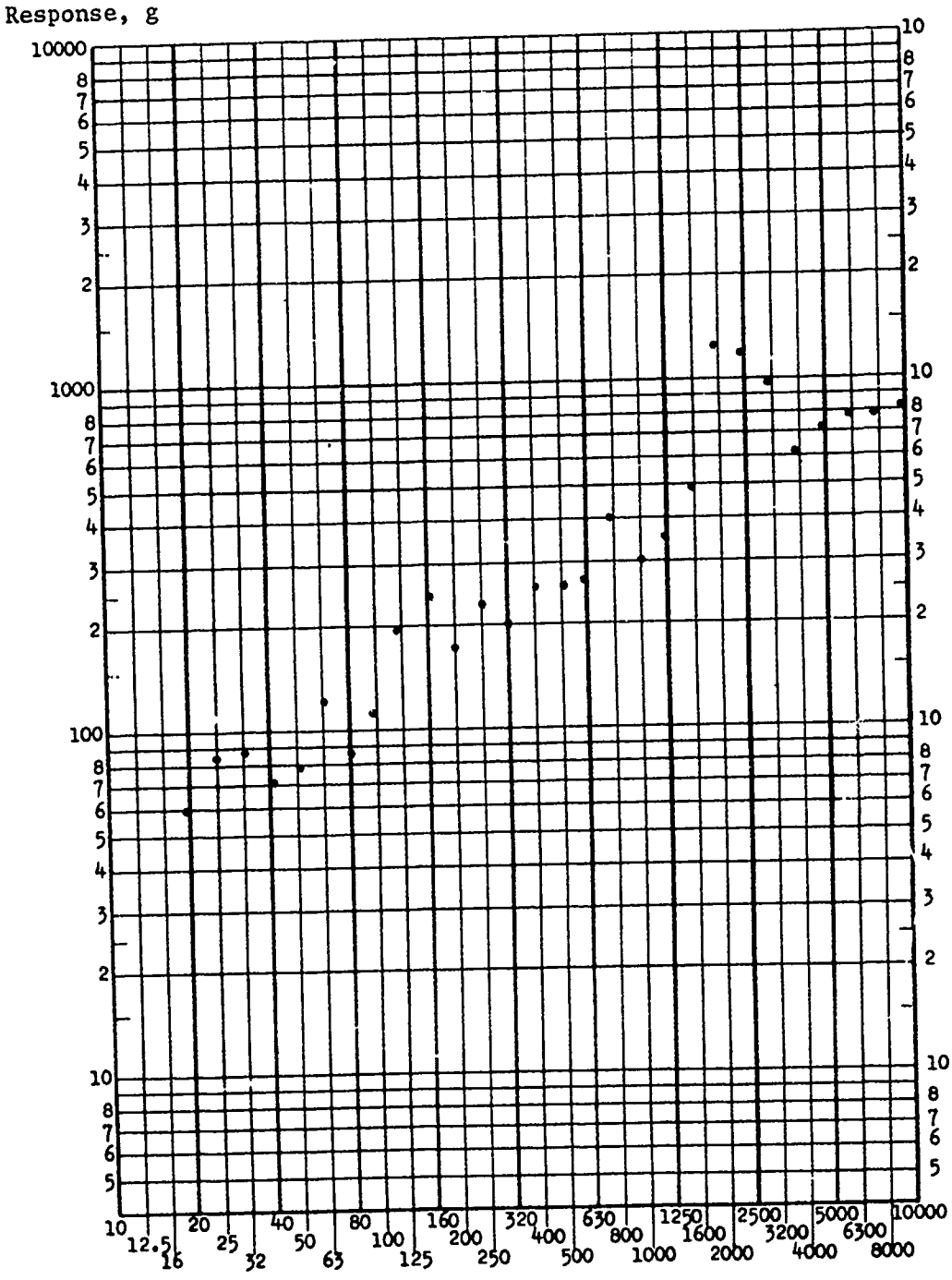
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 2 (cont)



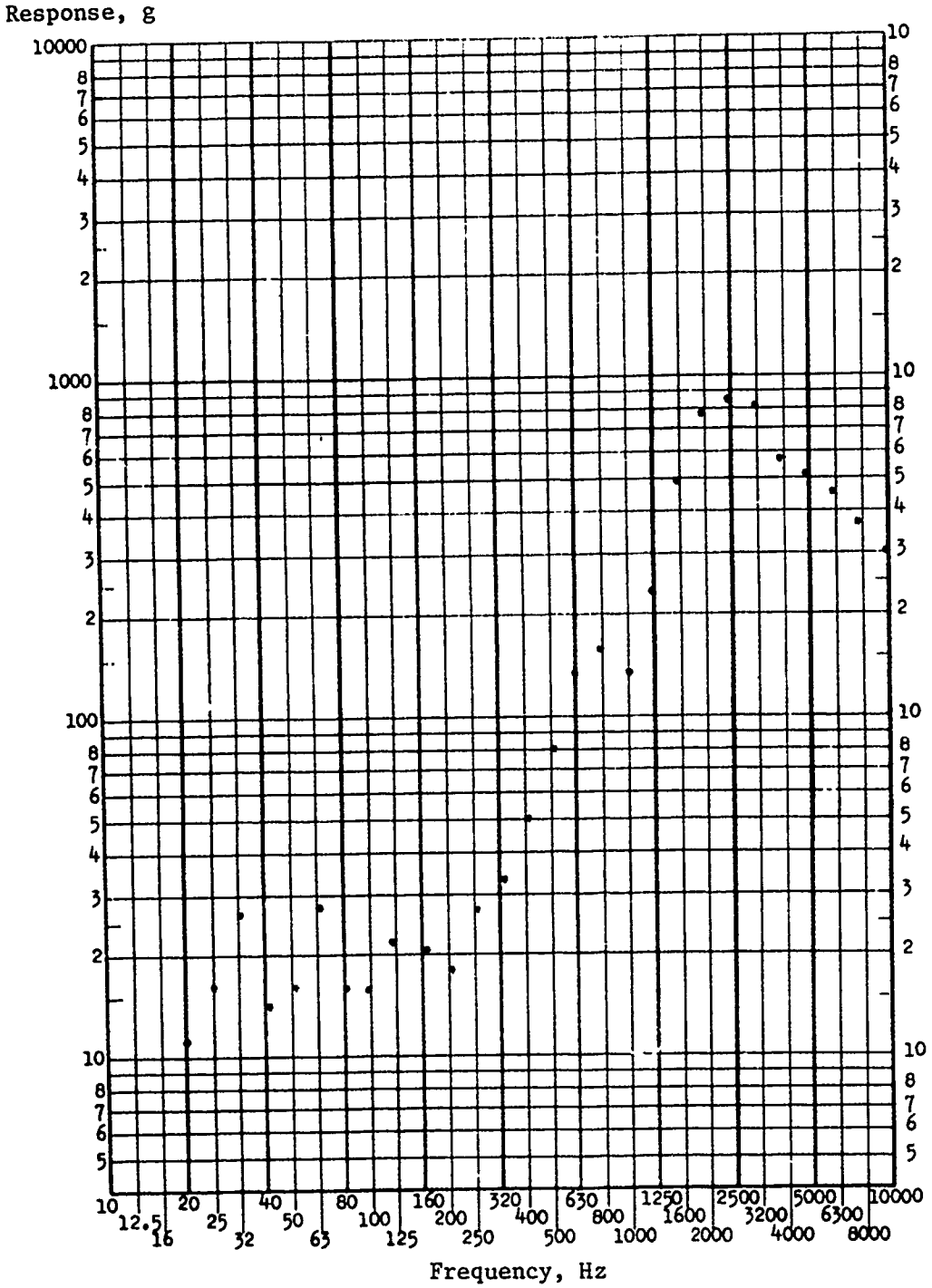
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 2 (cont)



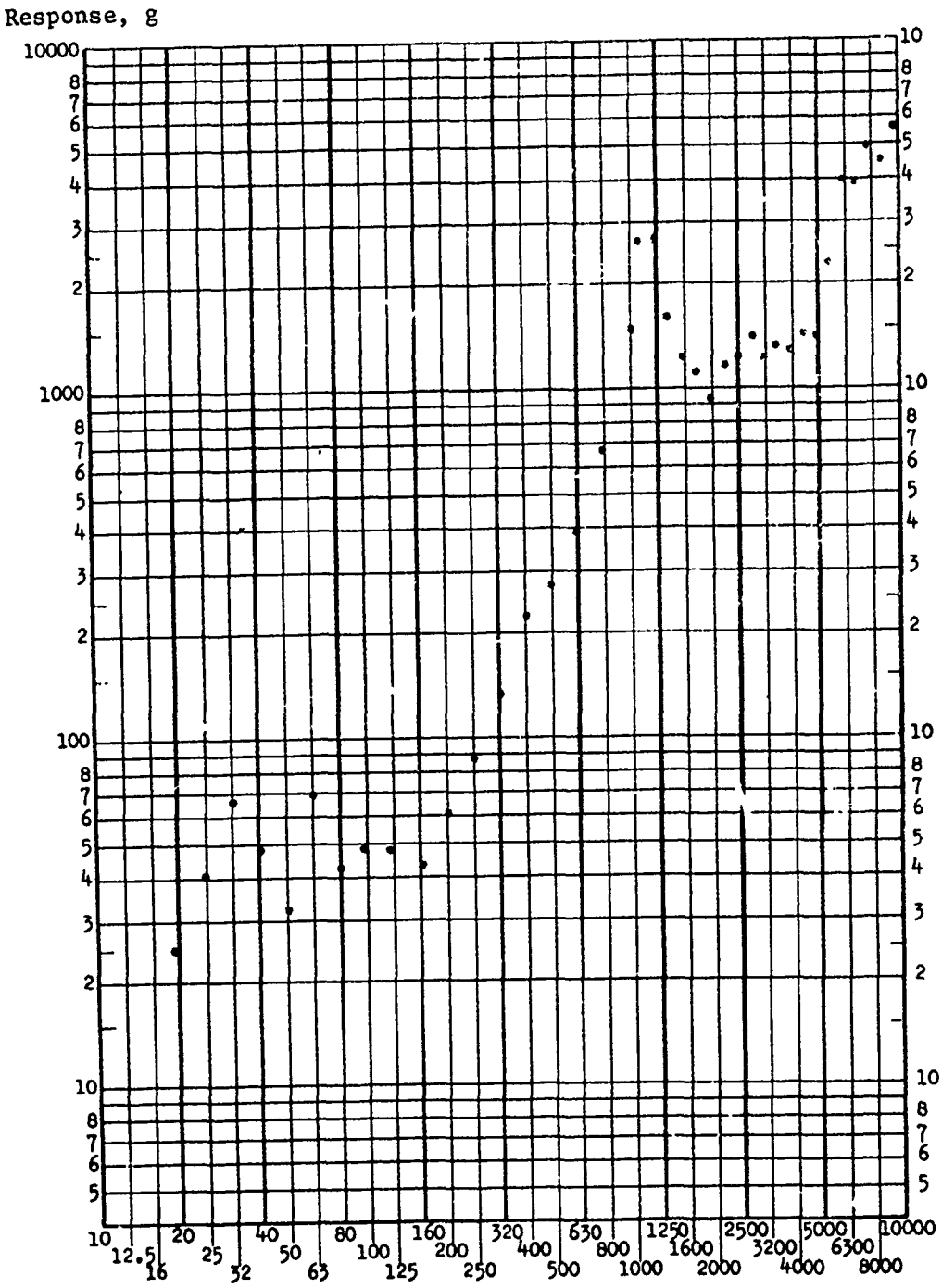
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 2 (cont)



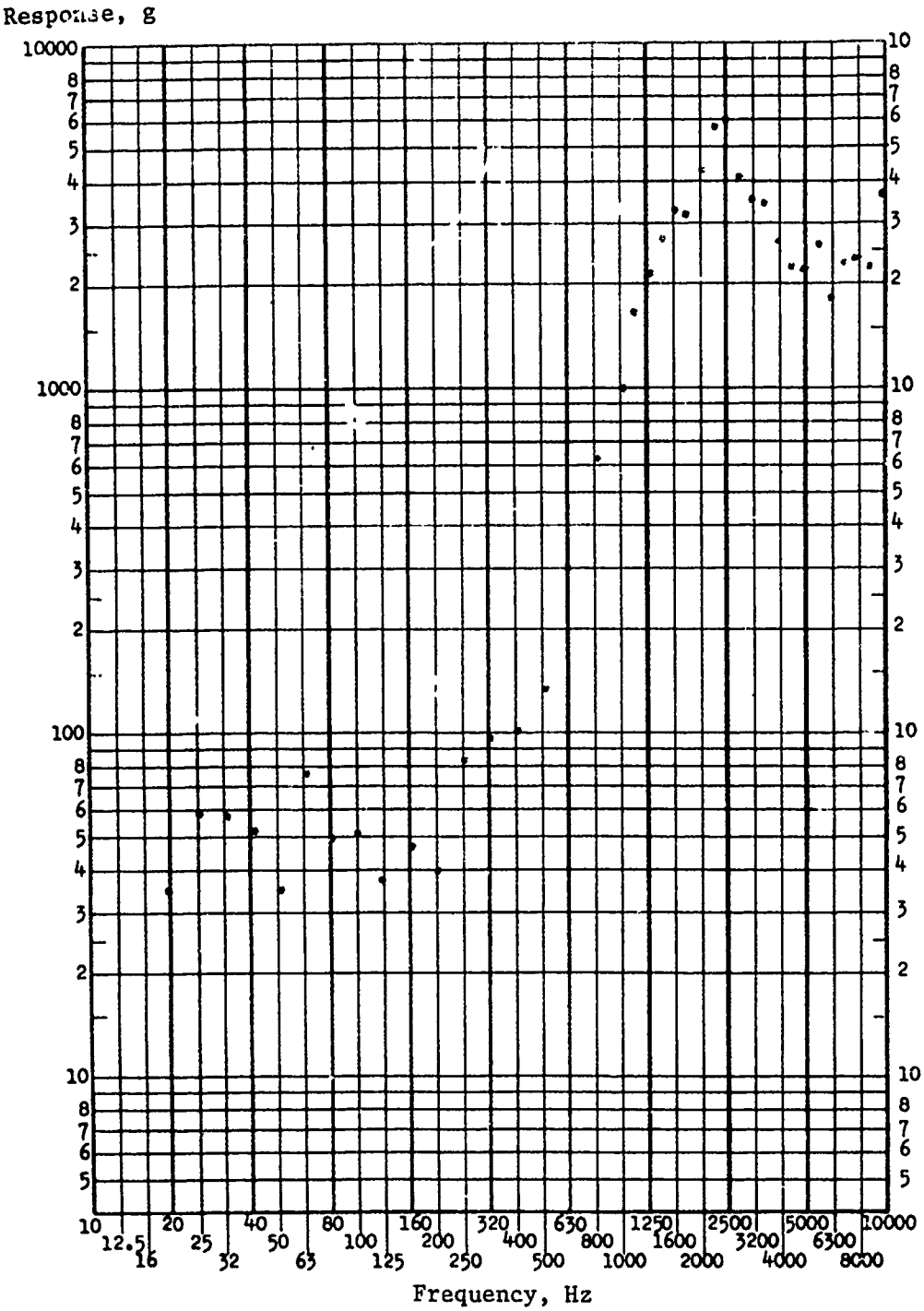
Bench Shock Test - Stage II/III Separation, Run 2
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 2 (concl)



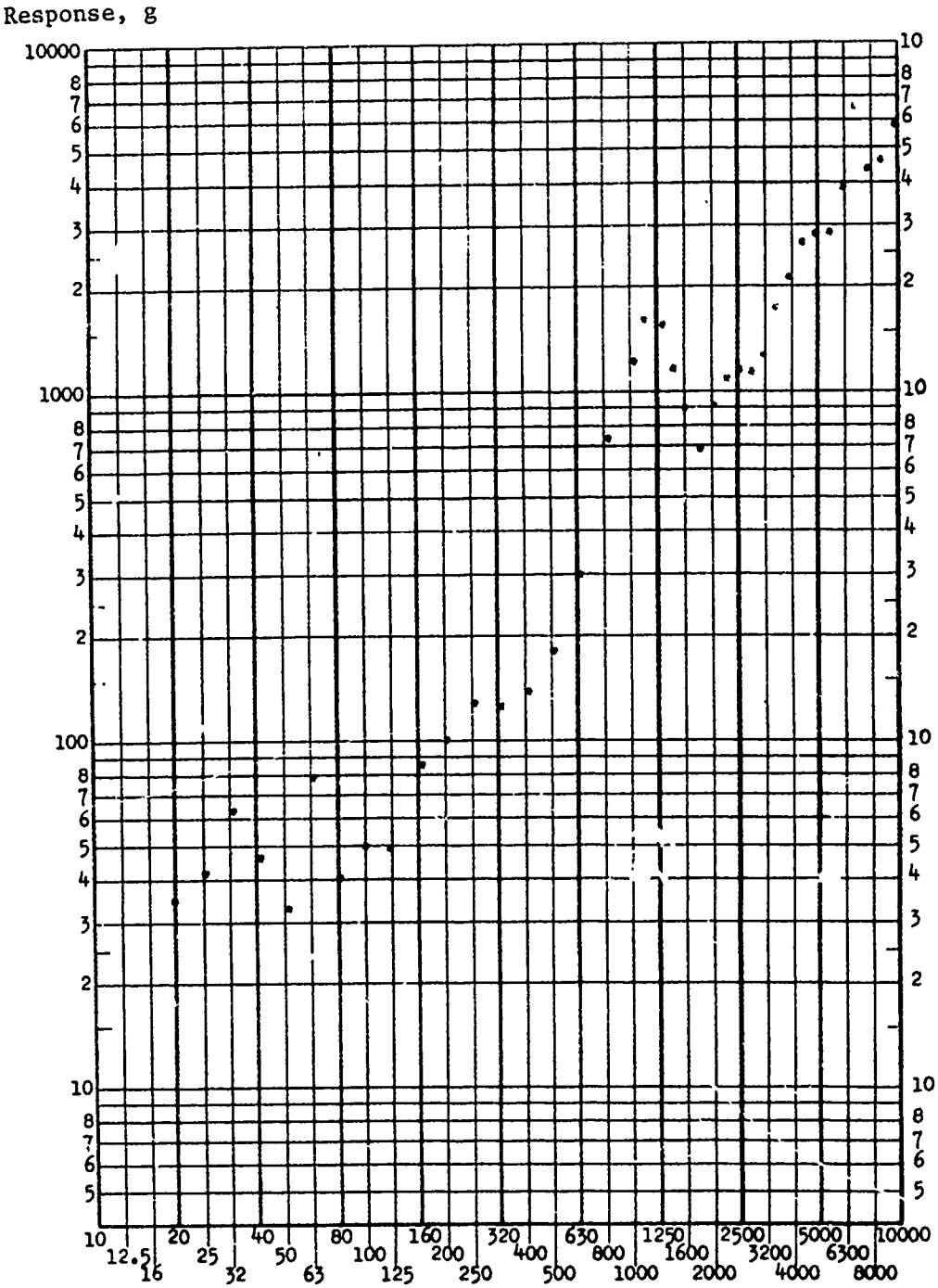
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 3 Run 3 Shock Response Spectrum



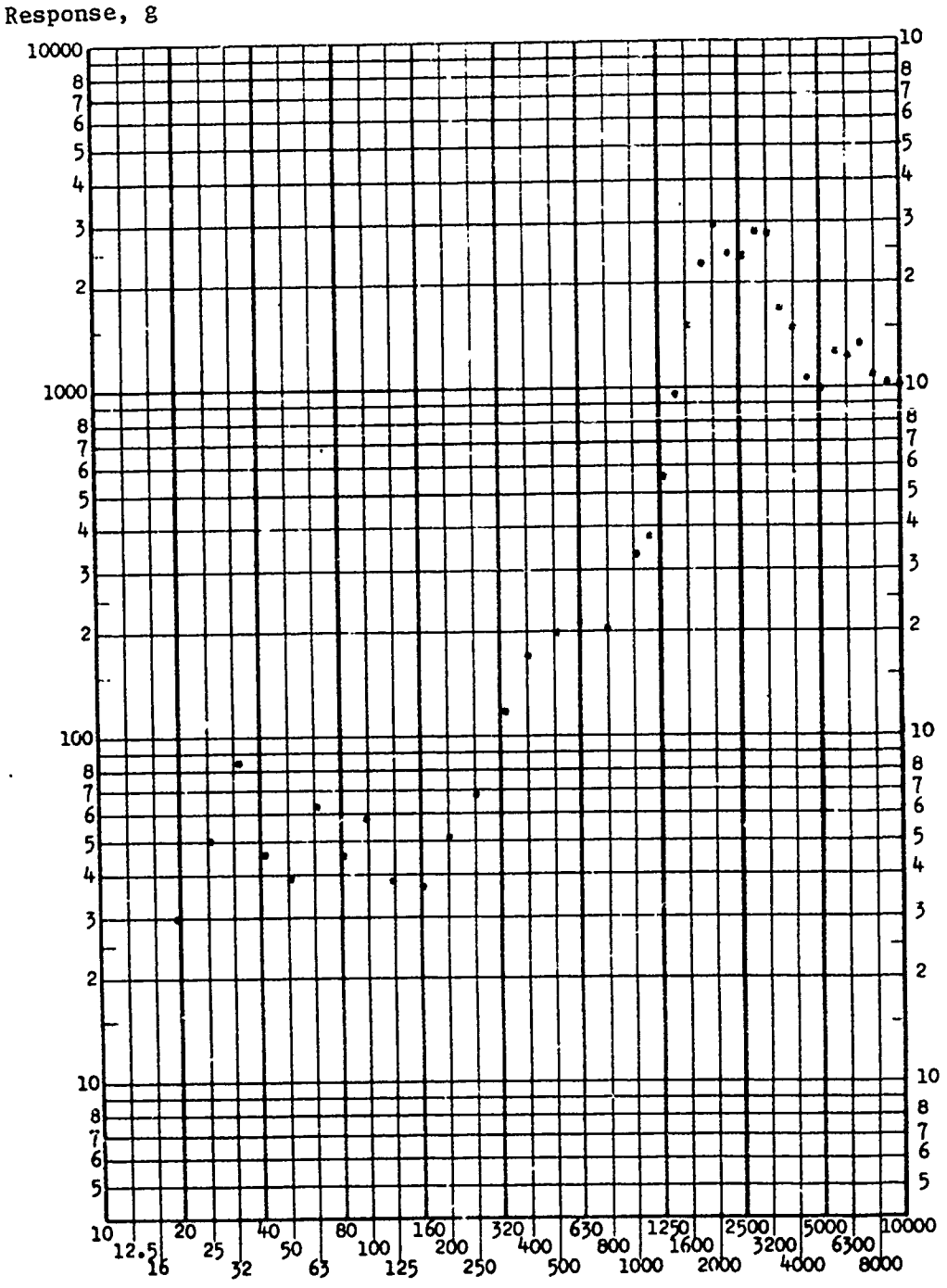
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 2 - Tangential axis longeron near station 133

Figure 3 (cont)



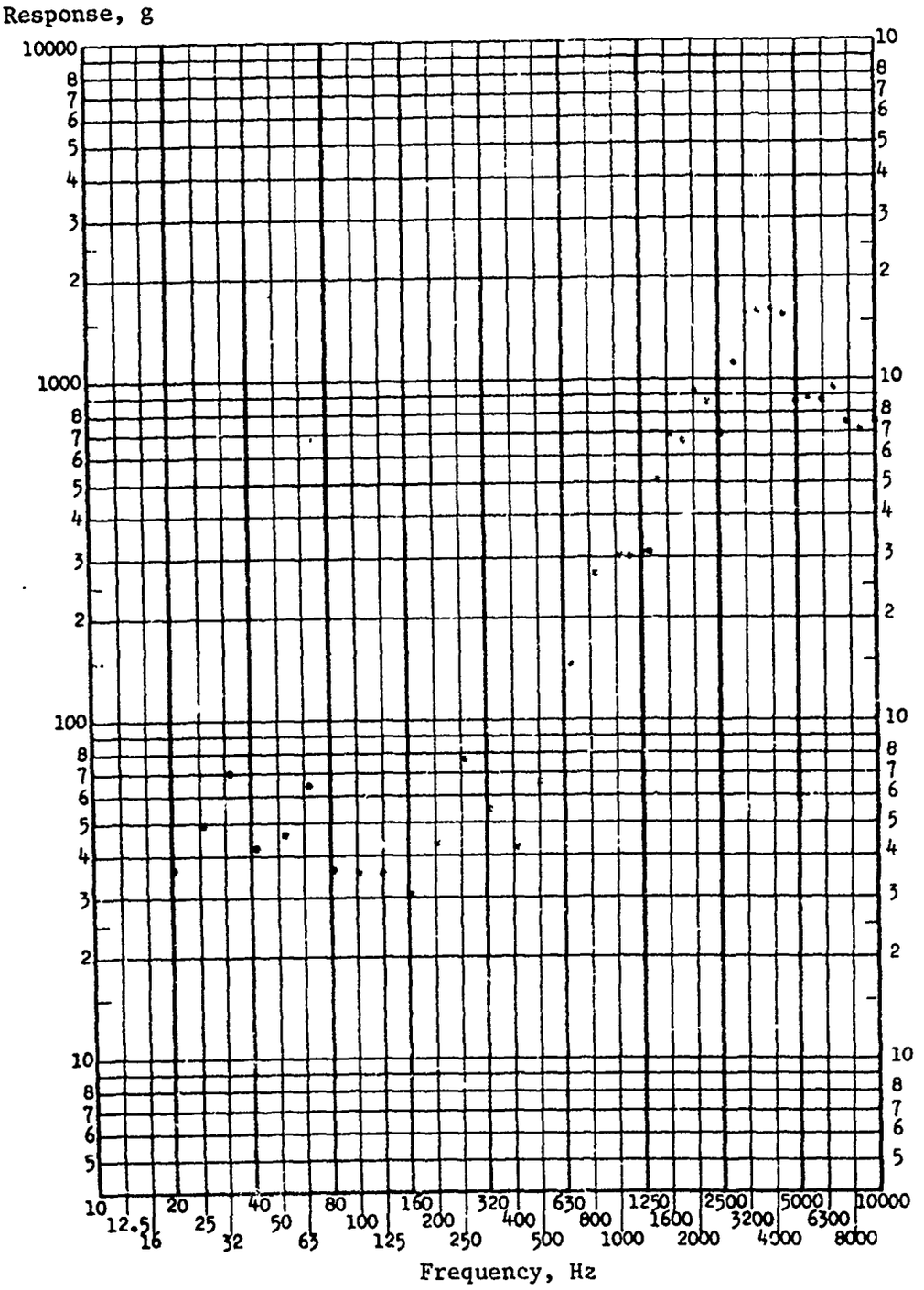
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 3 - Radial axis longeron near station 133

Figure 3 (cont)



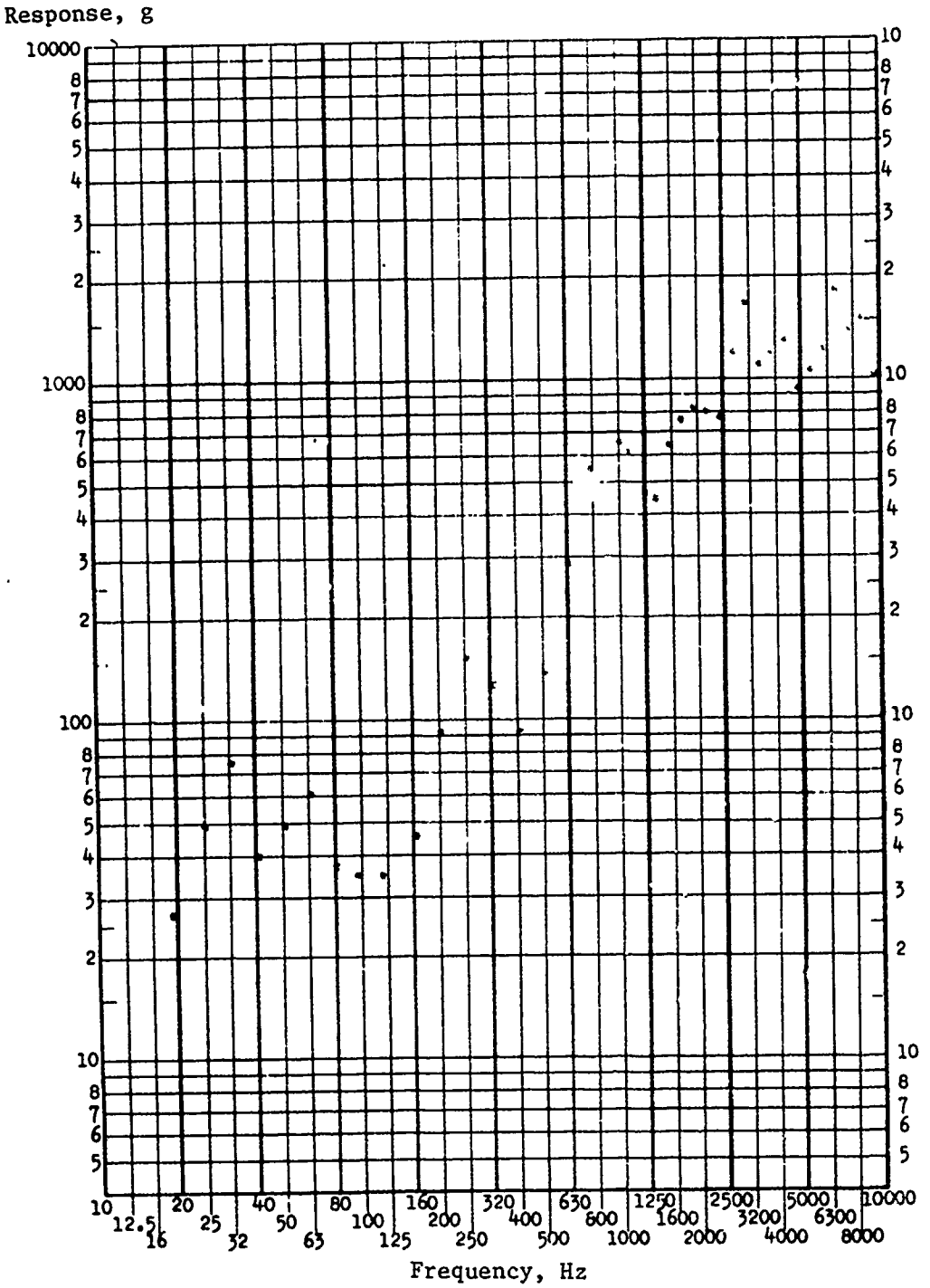
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 3 (cont)



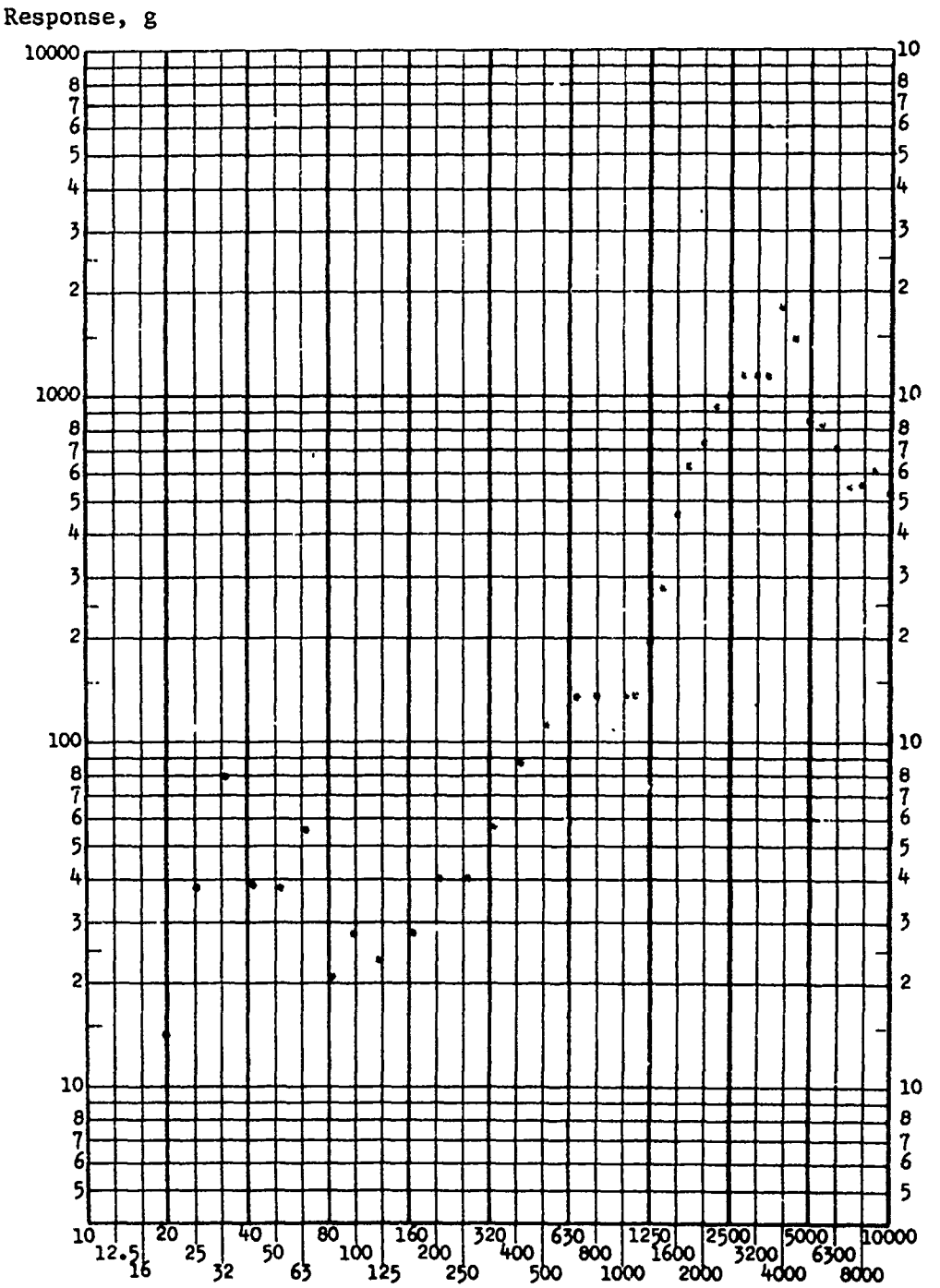
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 5 - Tangential axis longeron near station 117

Figure 3 (cont)



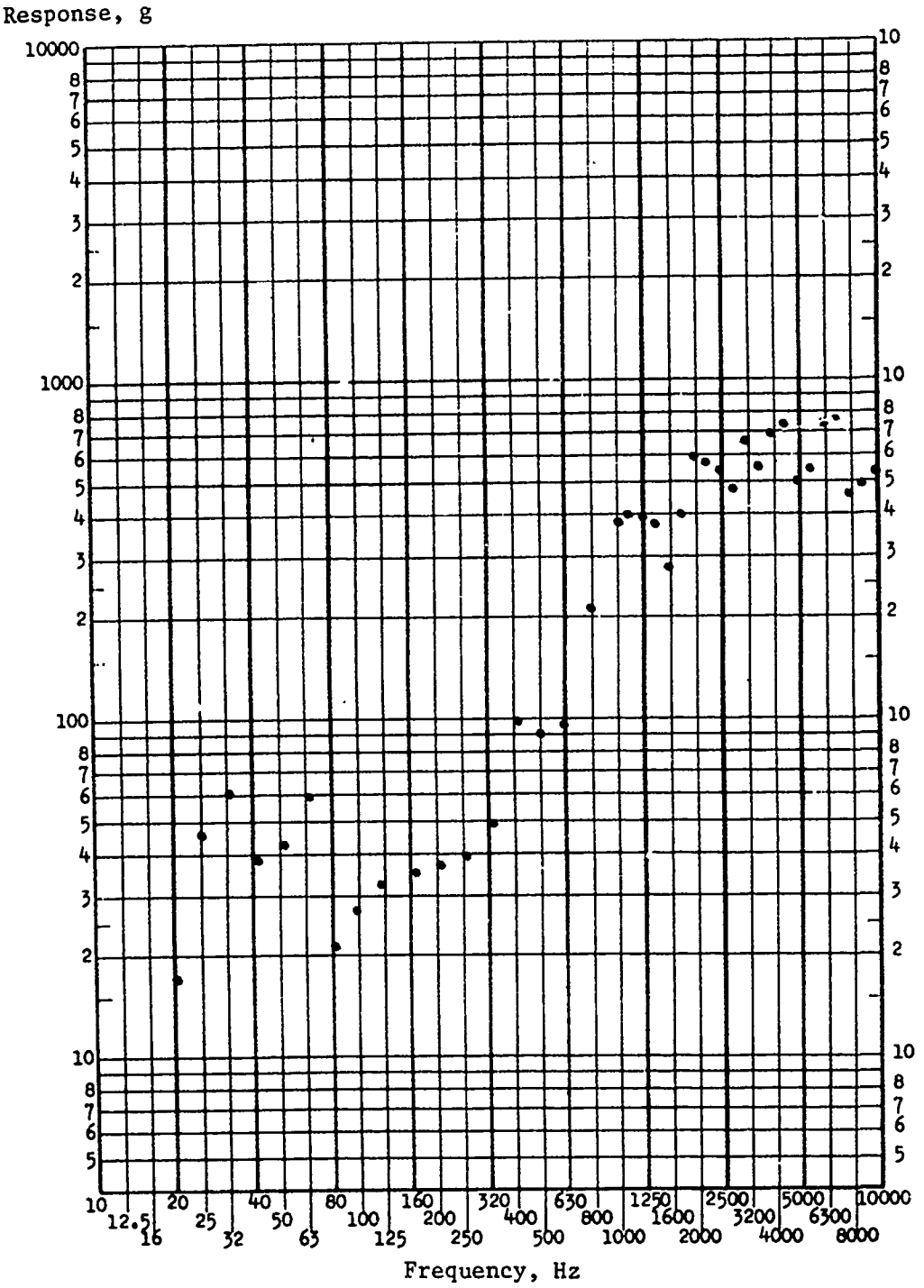
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 6 - Radial axis longeron near station 117

Figure 3 (cont)



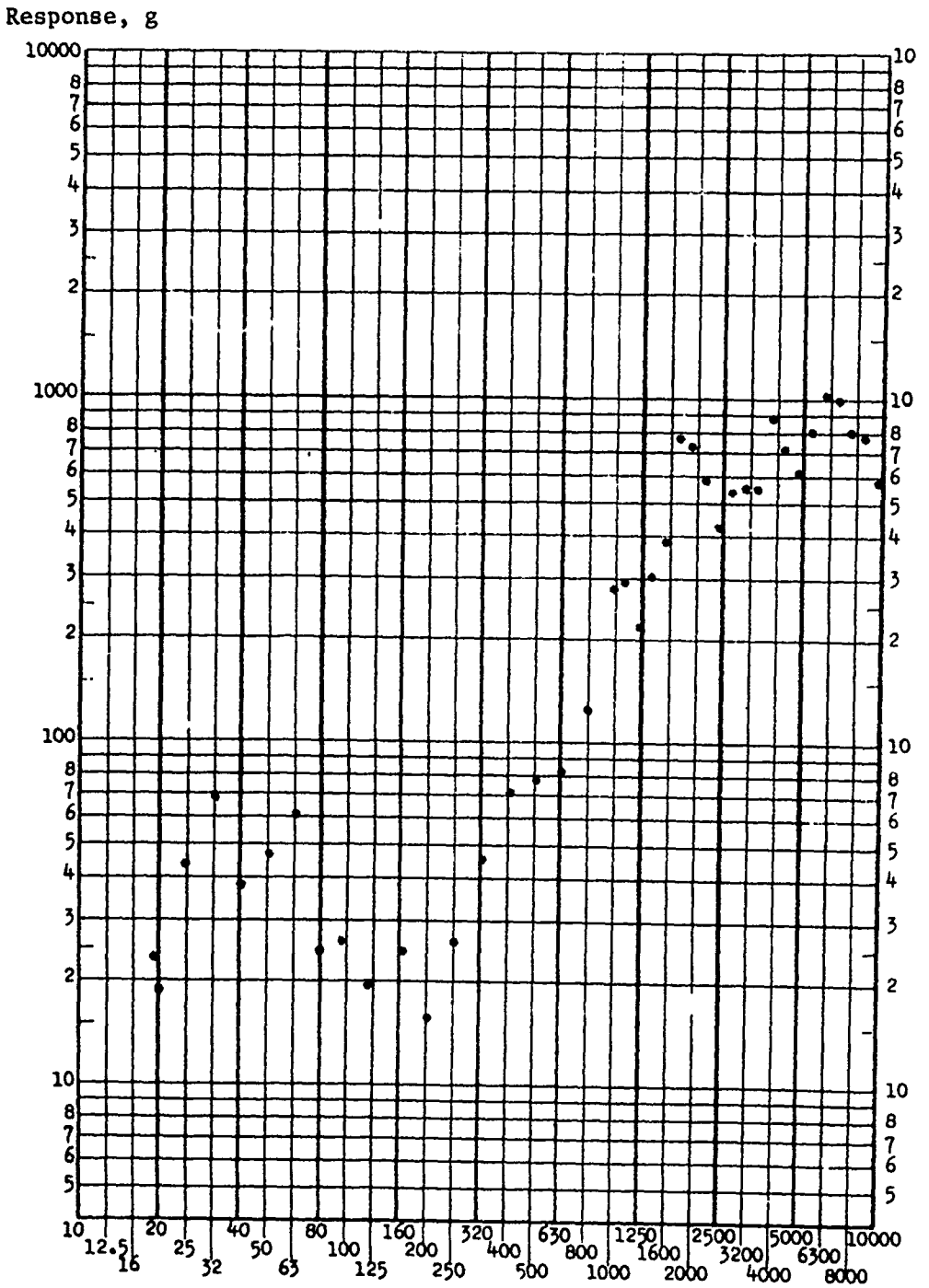
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 3 (cont)



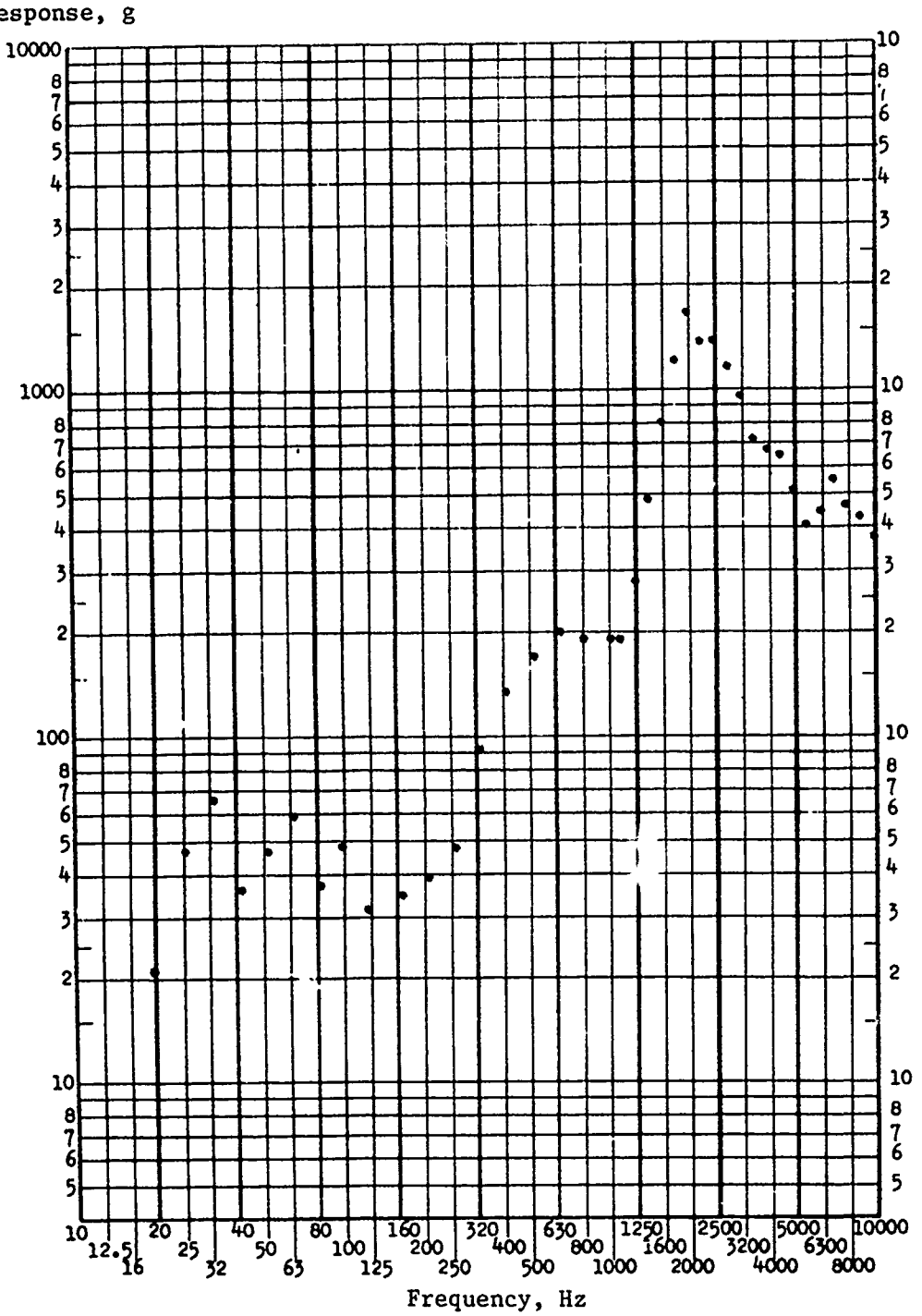
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 8 - Tangential axis longeron near station 77

Figure 3 (cont)



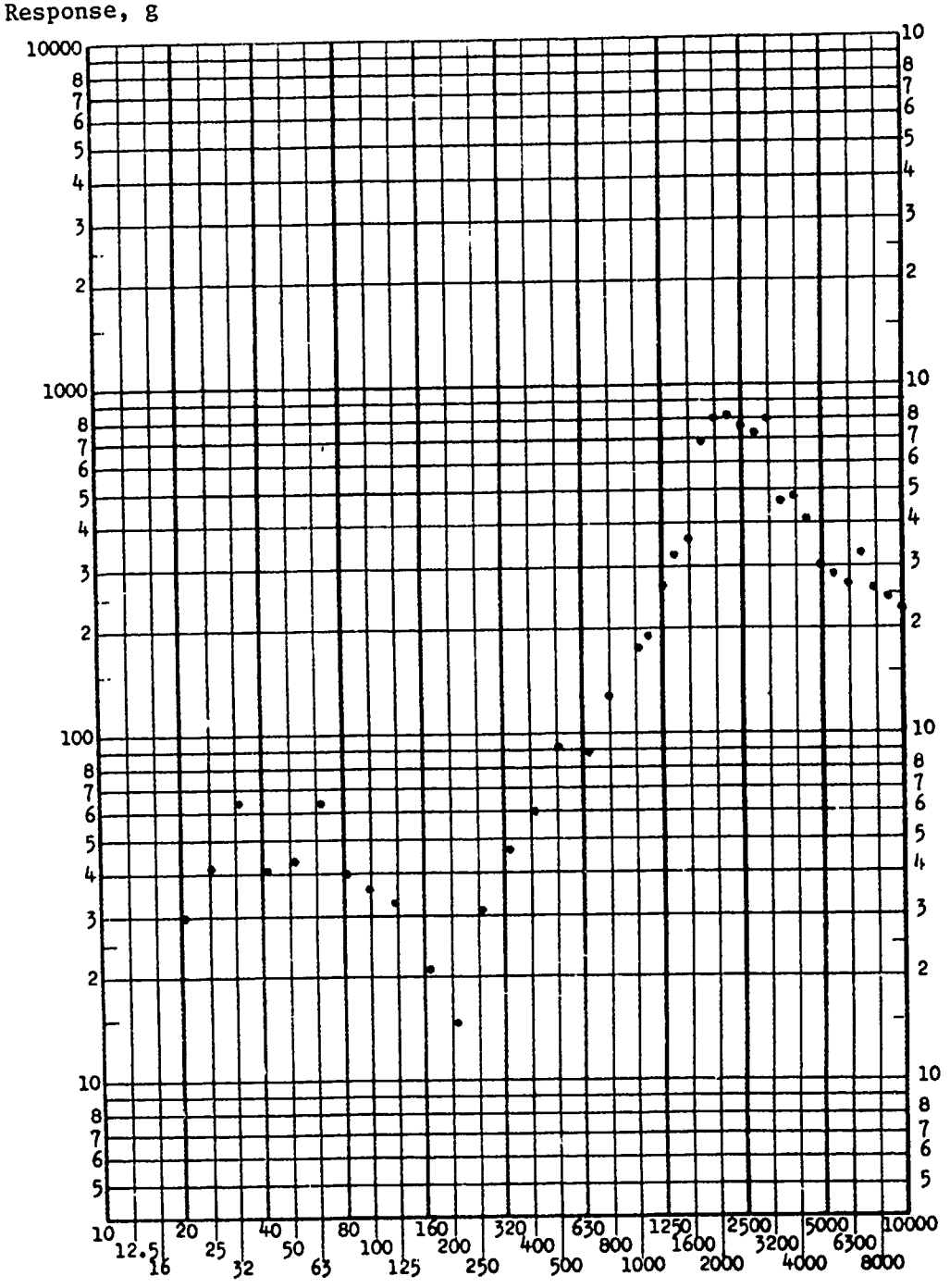
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 9 - Radial axis longeron near station 77

Figure 3 (cont)



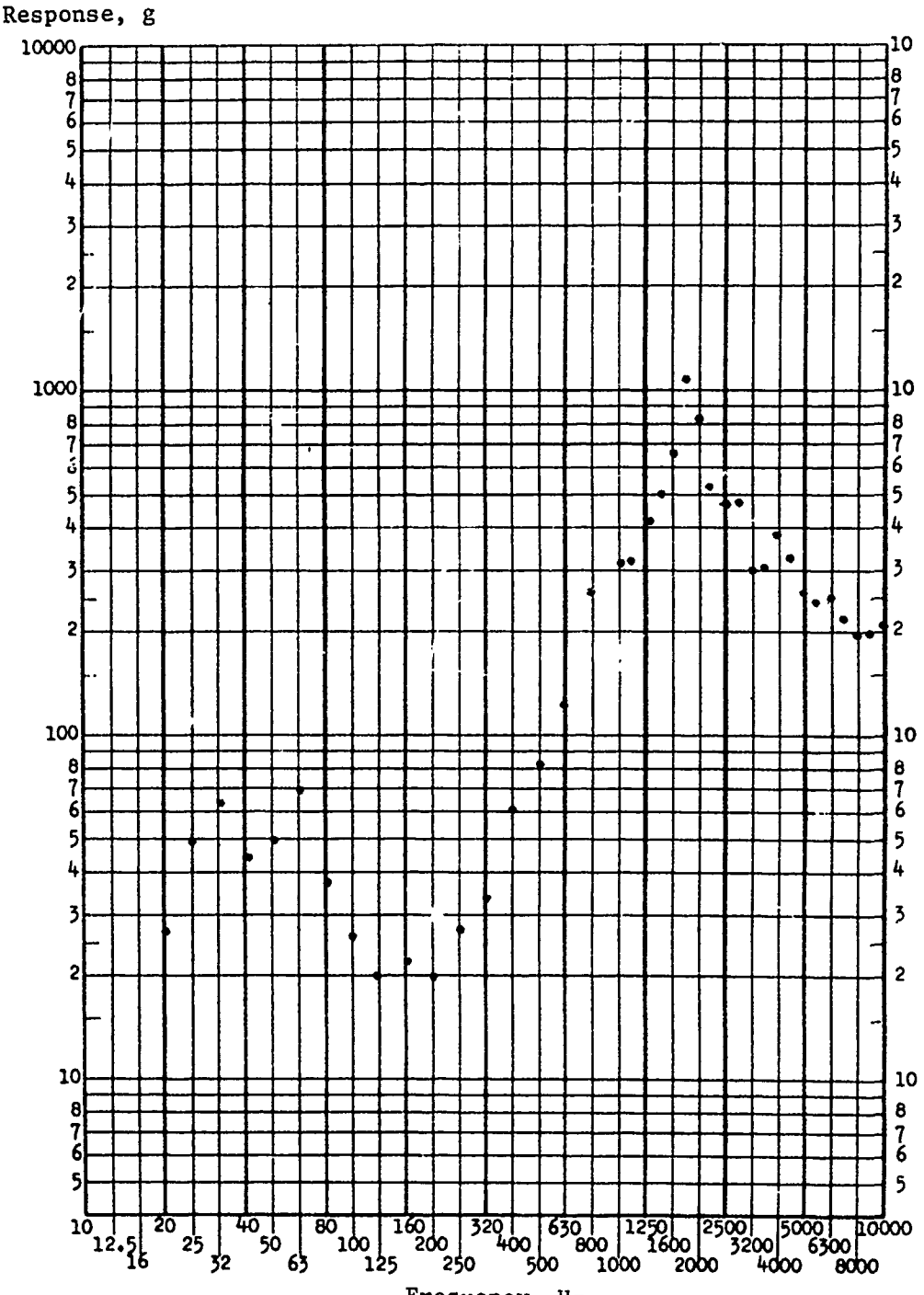
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 3 (cont)



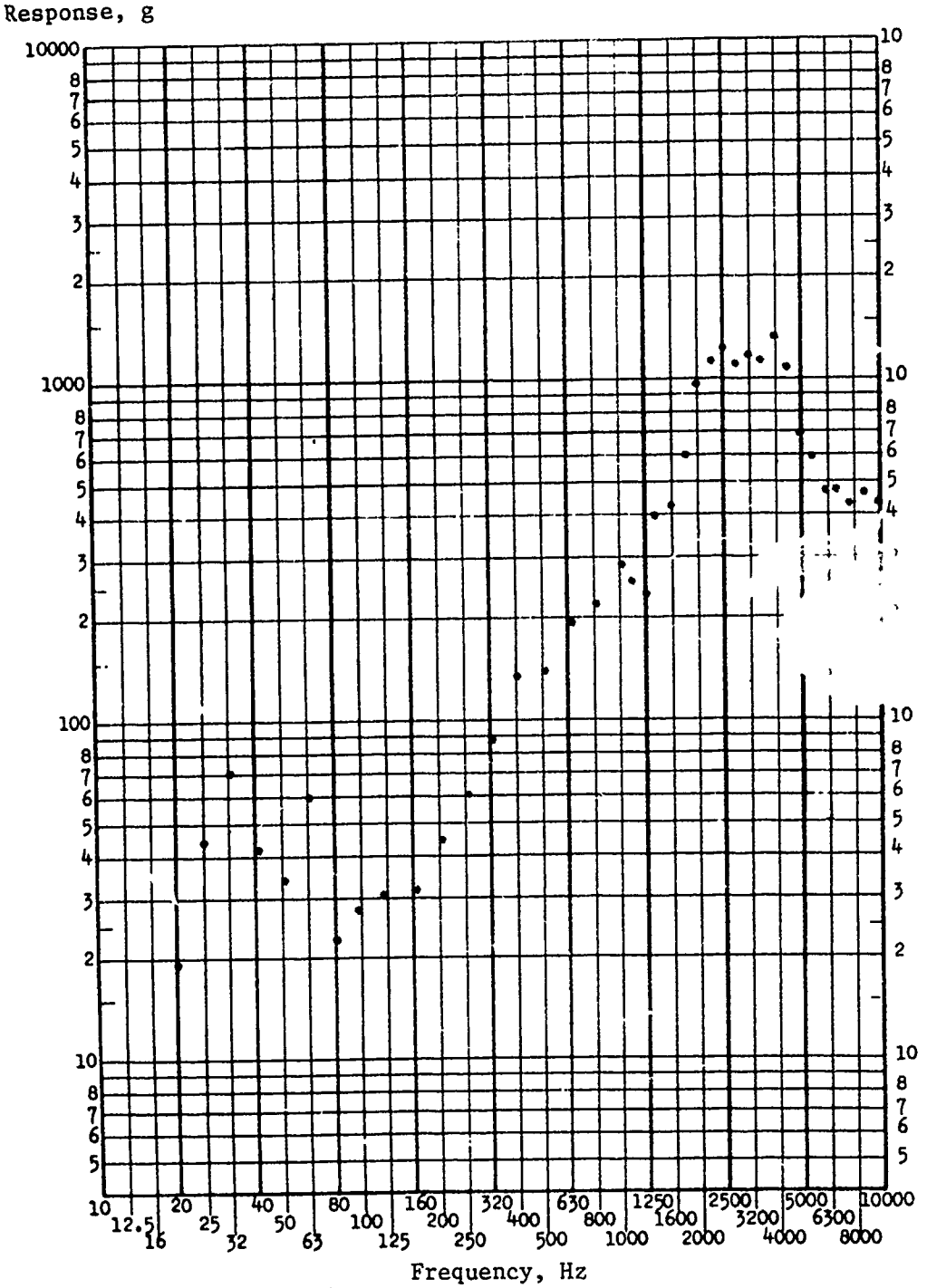
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 3 (cont)



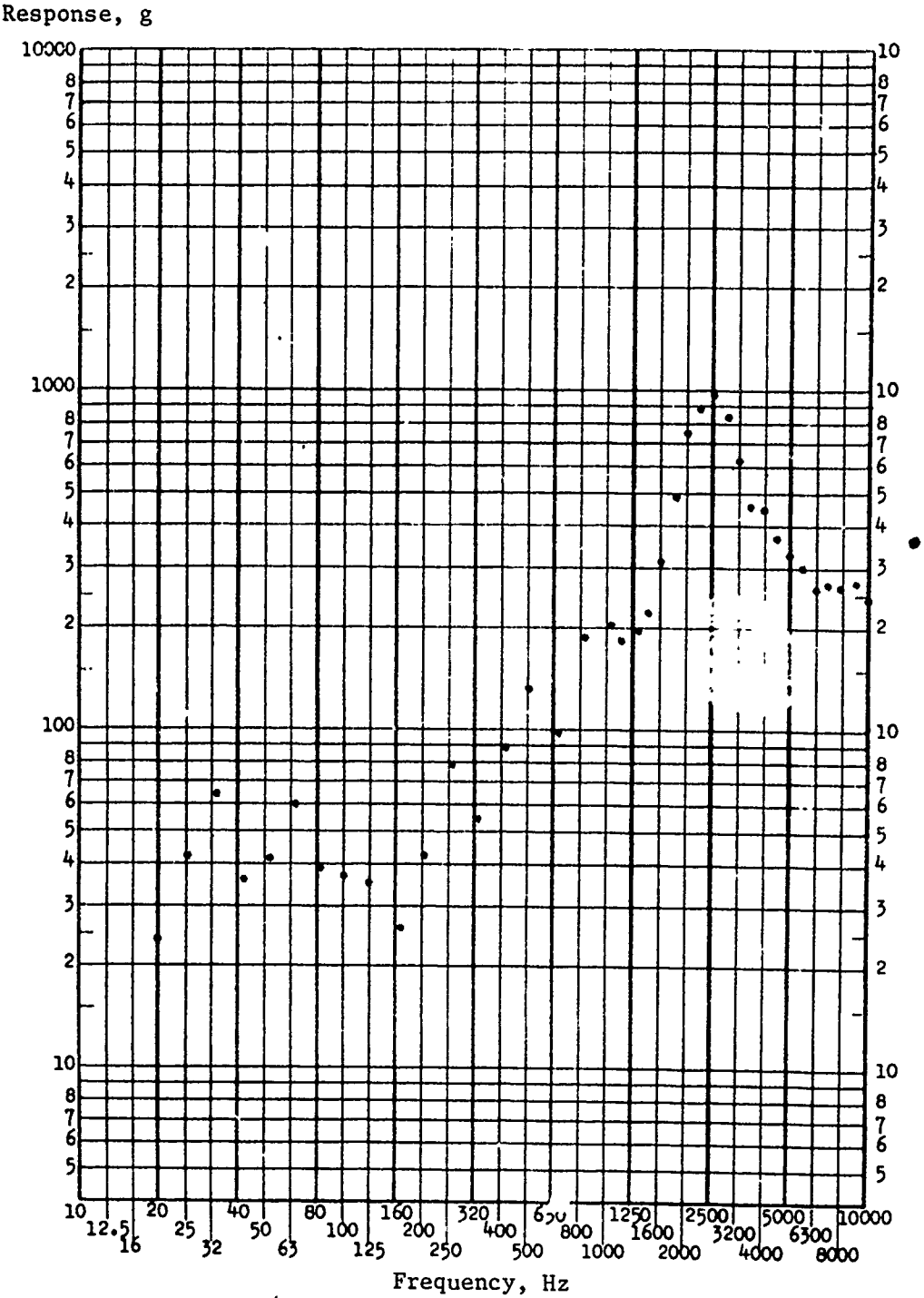
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 3 (cont)



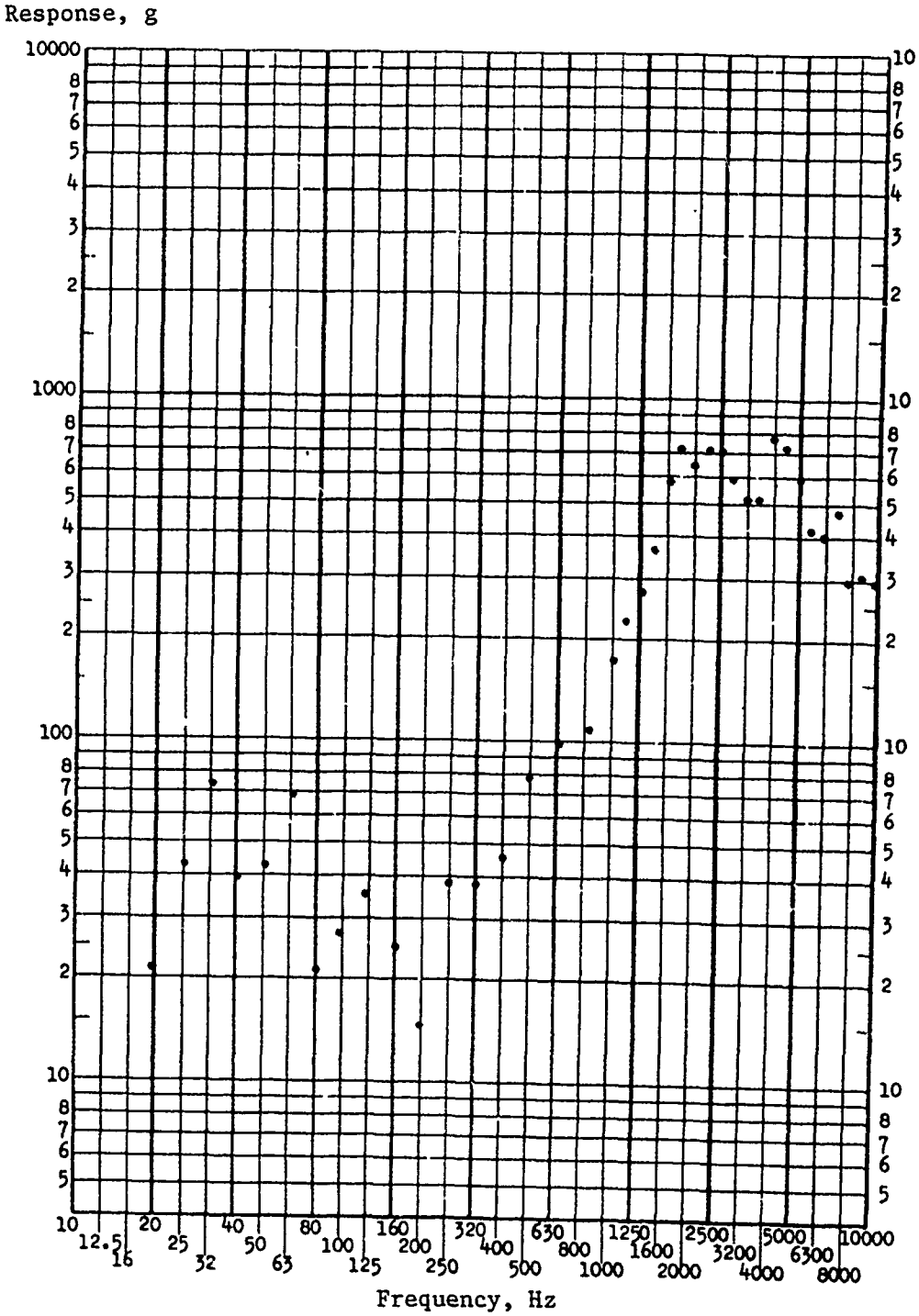
Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 3 (cont)



Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 3 (cont)



Bench Shock Test - Stage II/III Separation, Run 3
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 3 (concl)

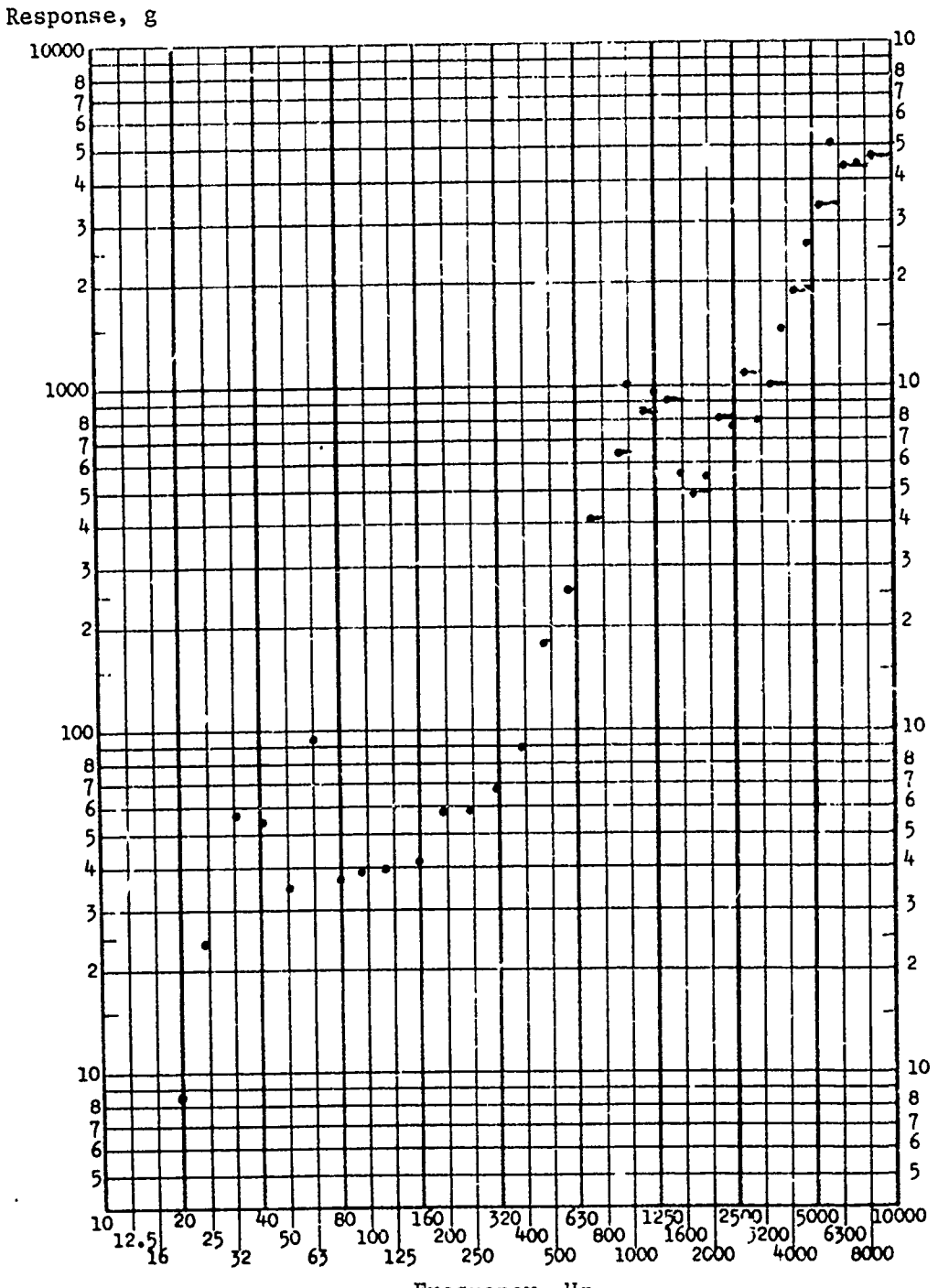
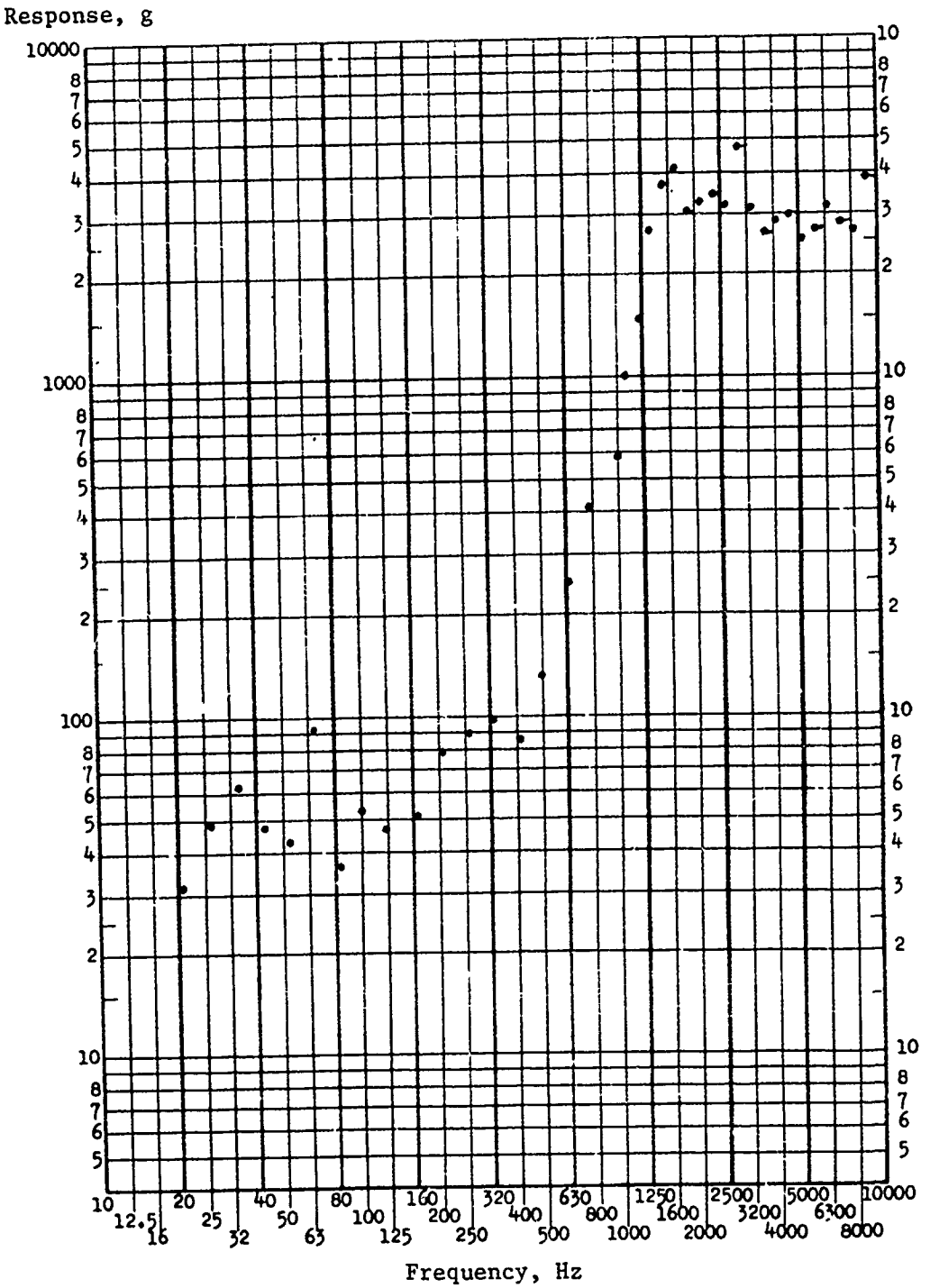
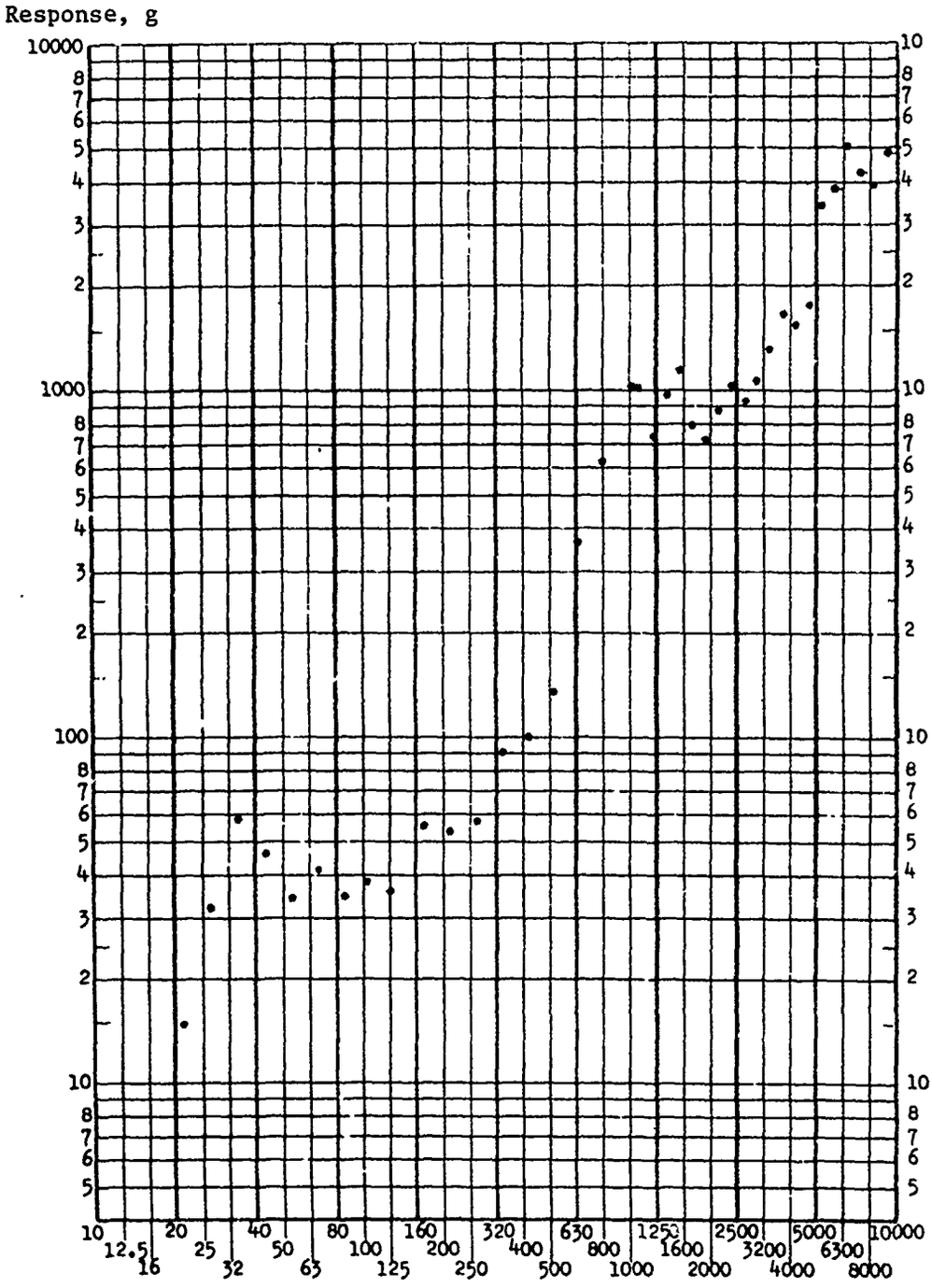


Figure 4 Run 4 Shock Response Spectrum



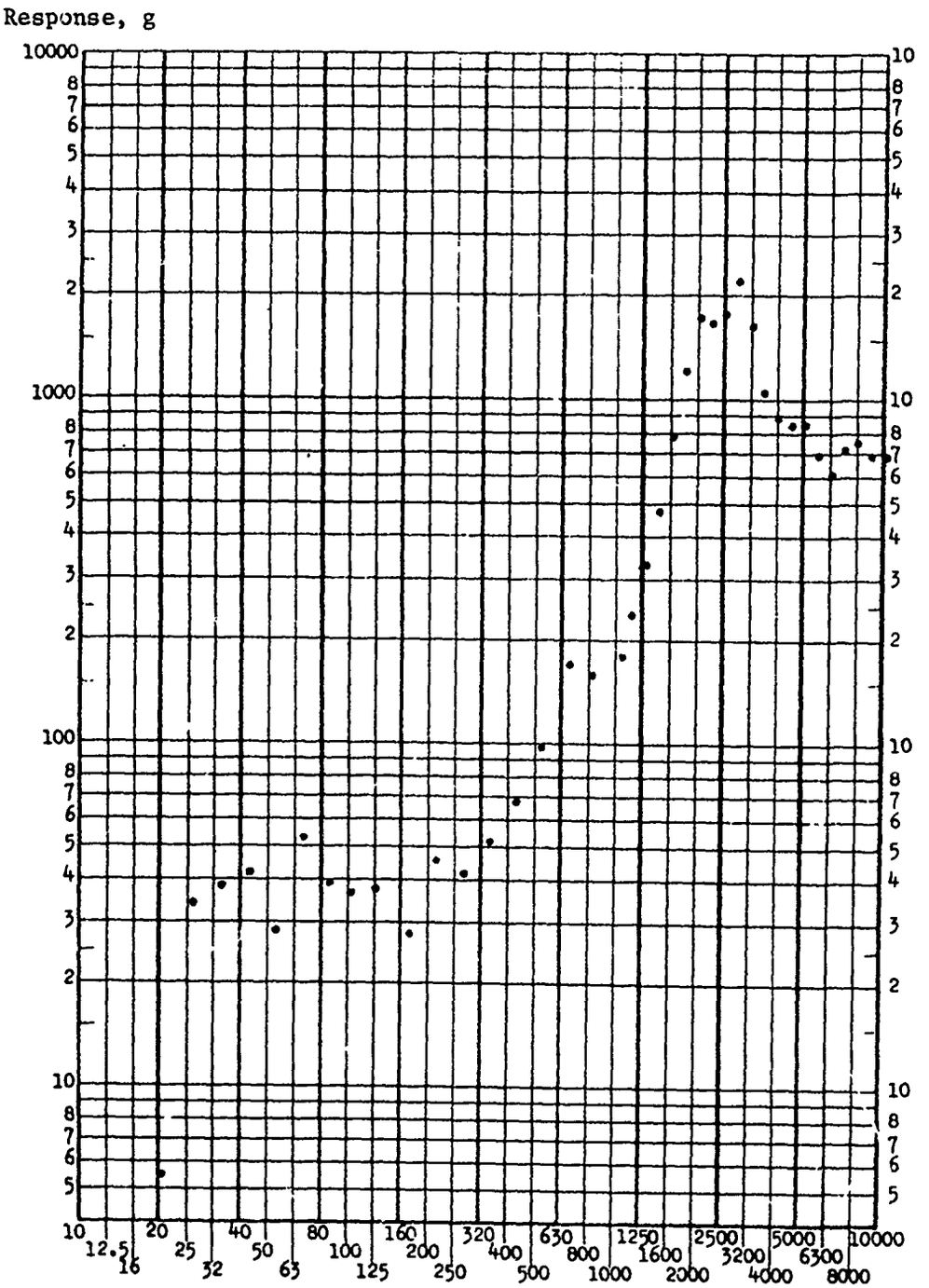
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 2 - Tangential axis longeron near station 133

Figure 4 (cont)



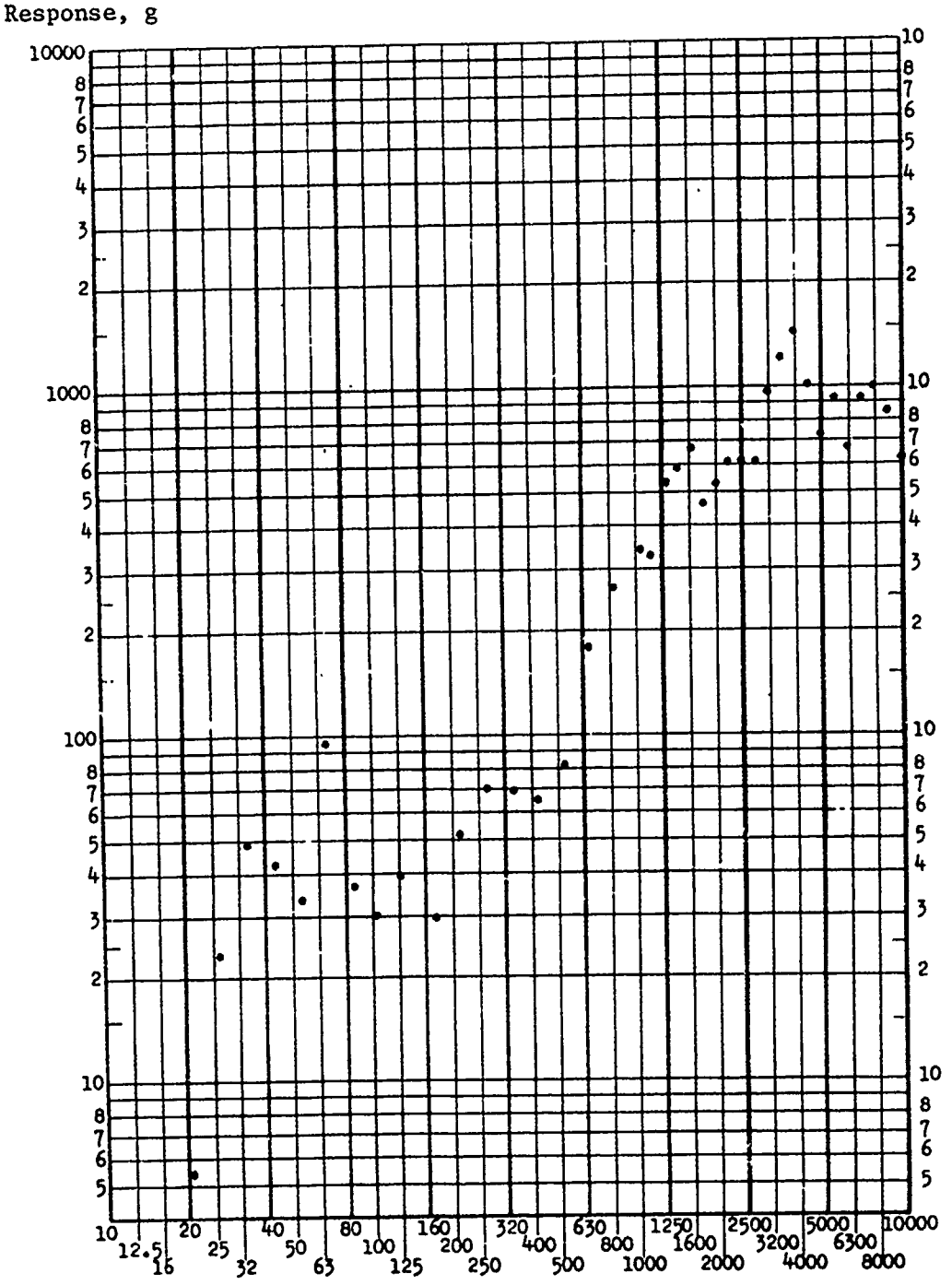
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 3 - Radial axis longeron near station 133

Figure 4 (cont)



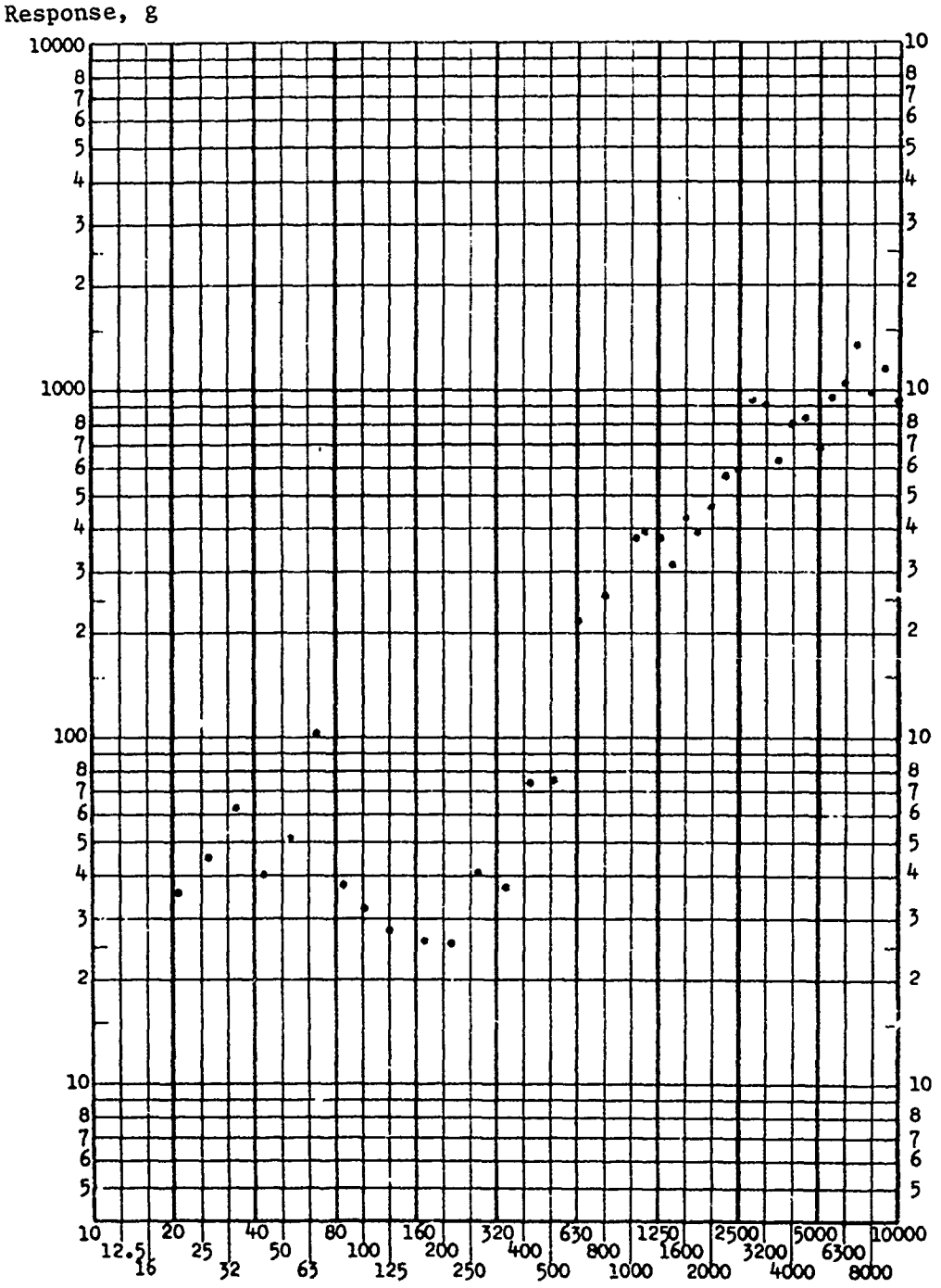
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 4 (cont)



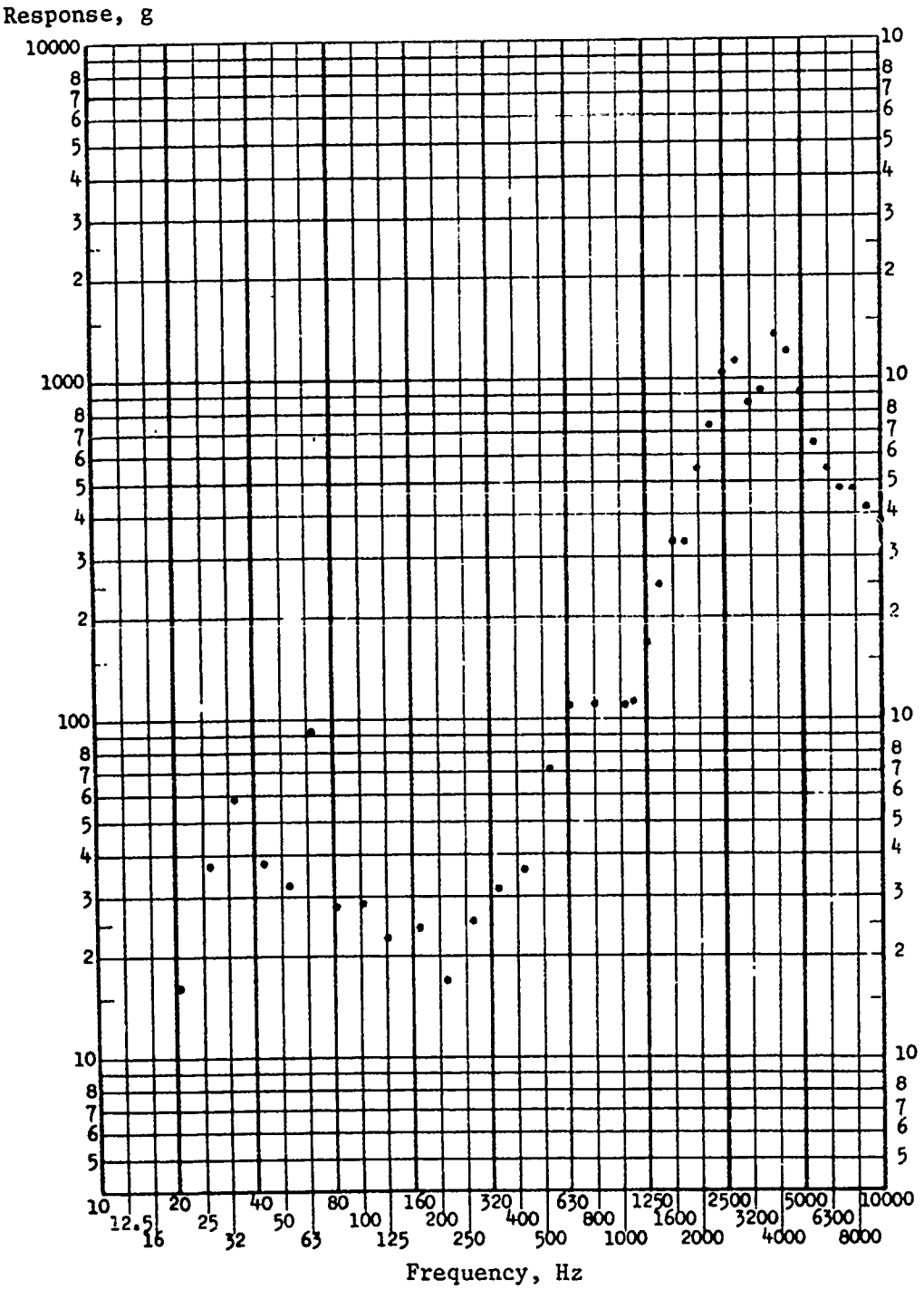
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 5 - Tangential axis longeron near station 117

Figure 4 (cont)



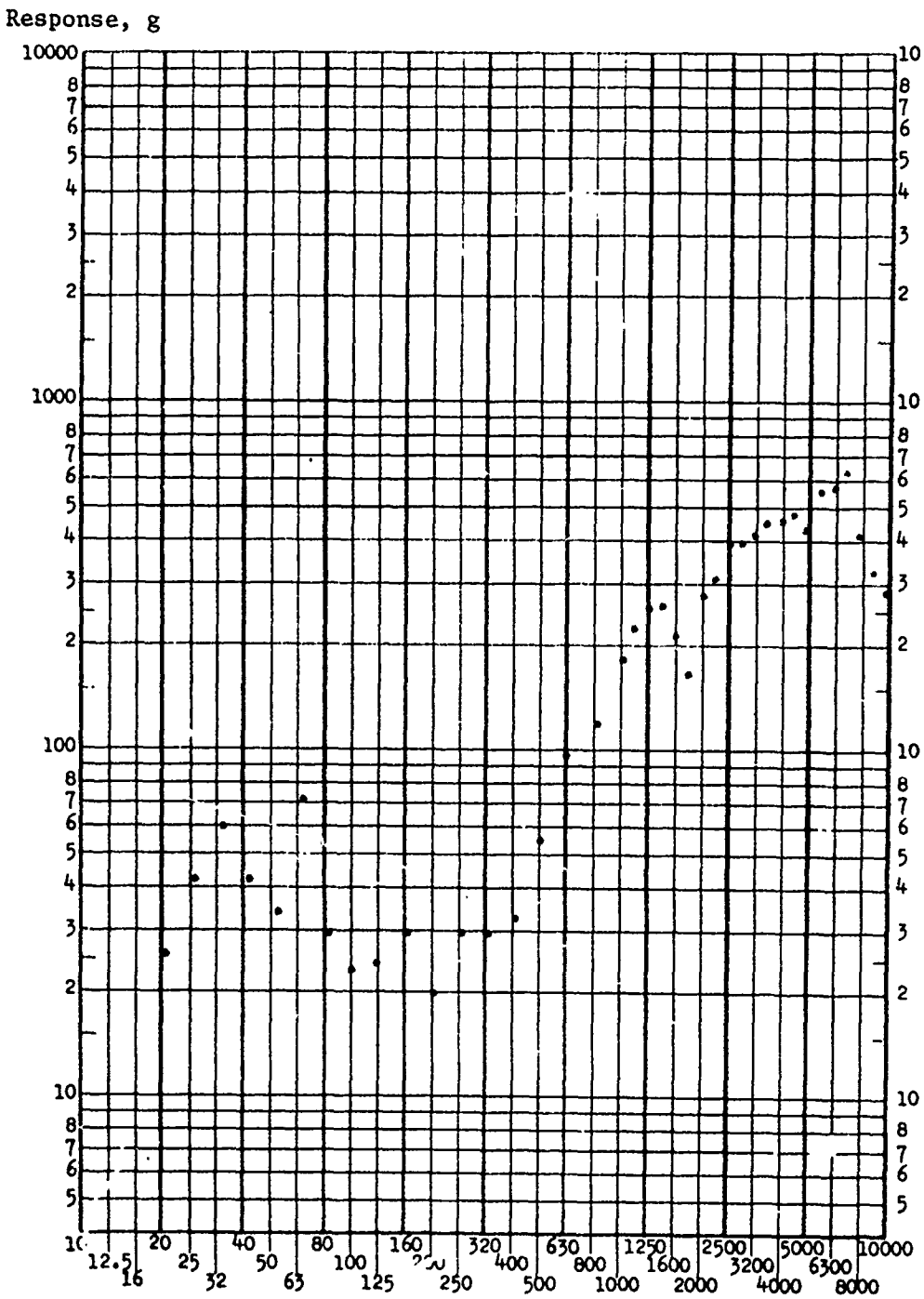
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 6 - Radial axis longeron near station 117

Figure 4 (cont)



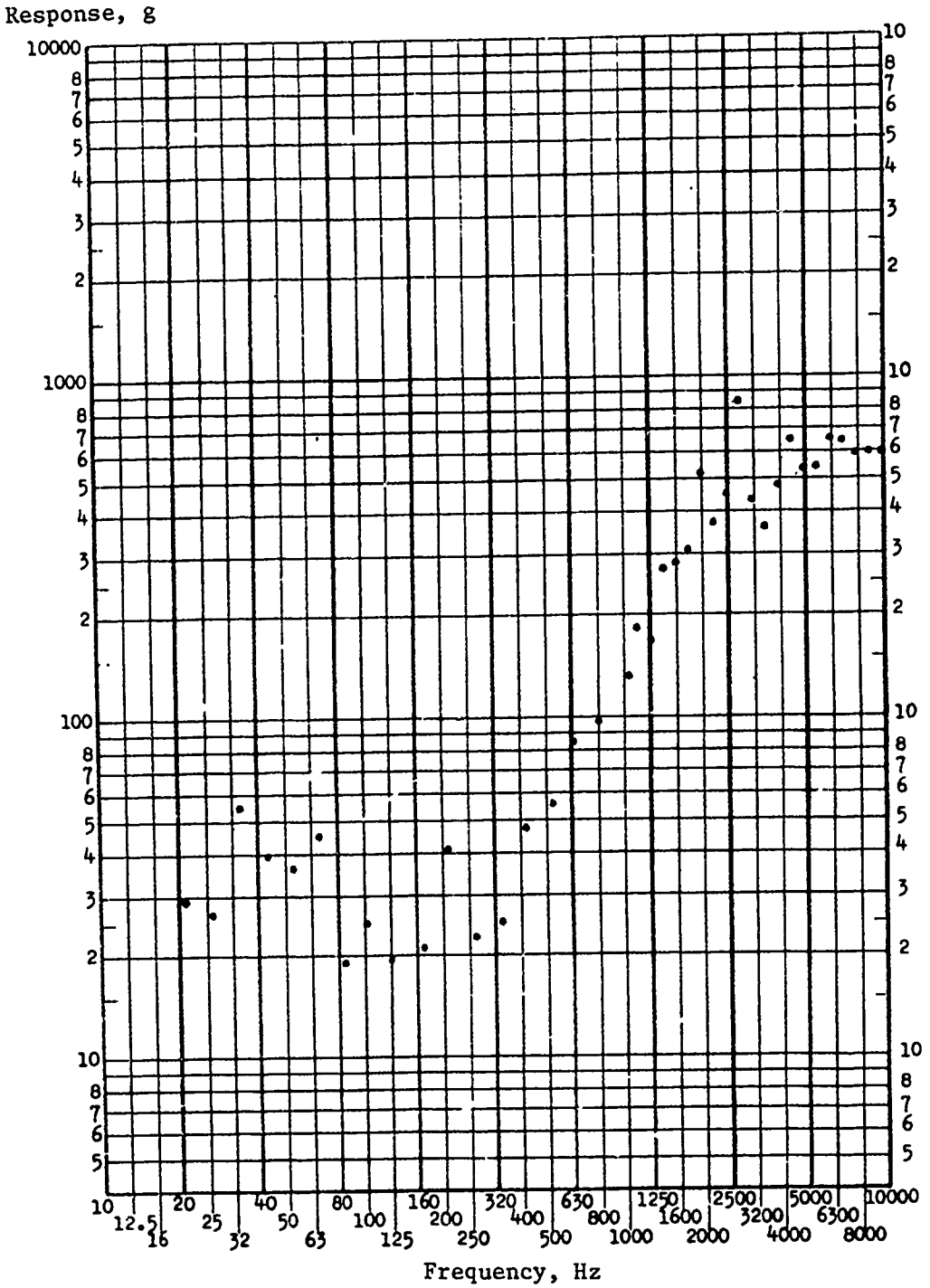
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 4 (cont)



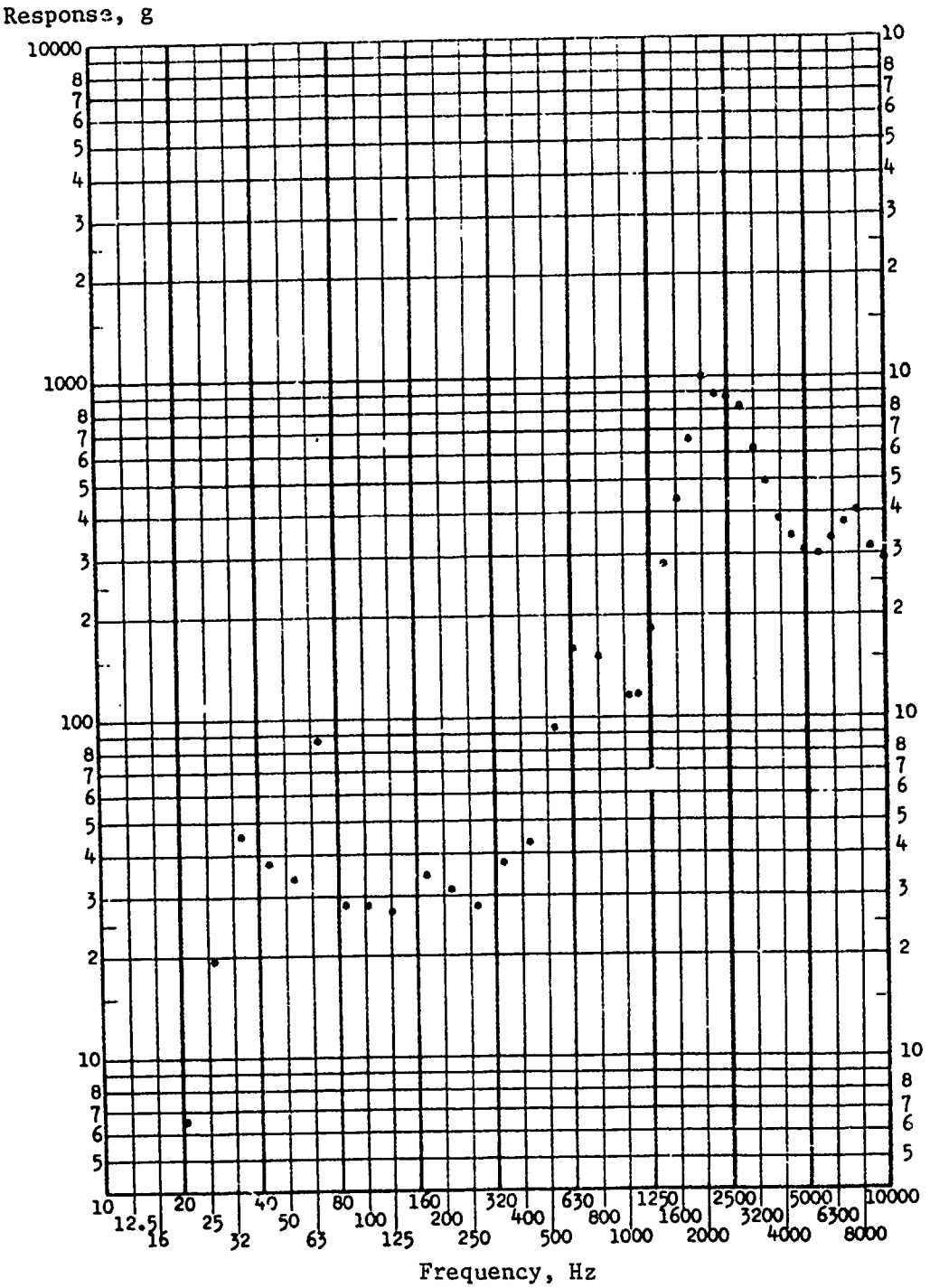
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 8 - Tangential axis longeron near station 77

Figure 4 (cont)



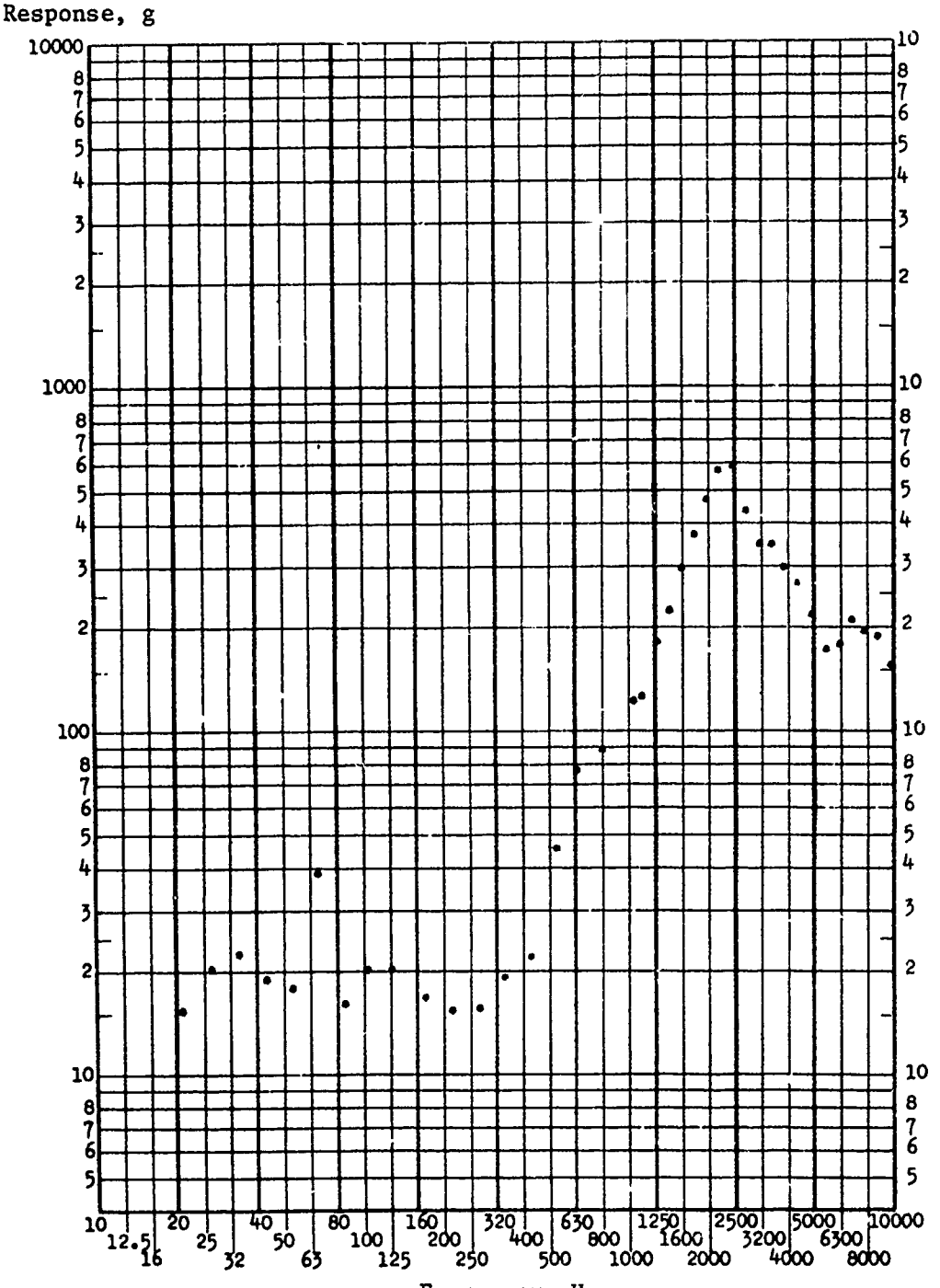
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 9 - Radial axis longeron near station 77

Figure 4 (cont)



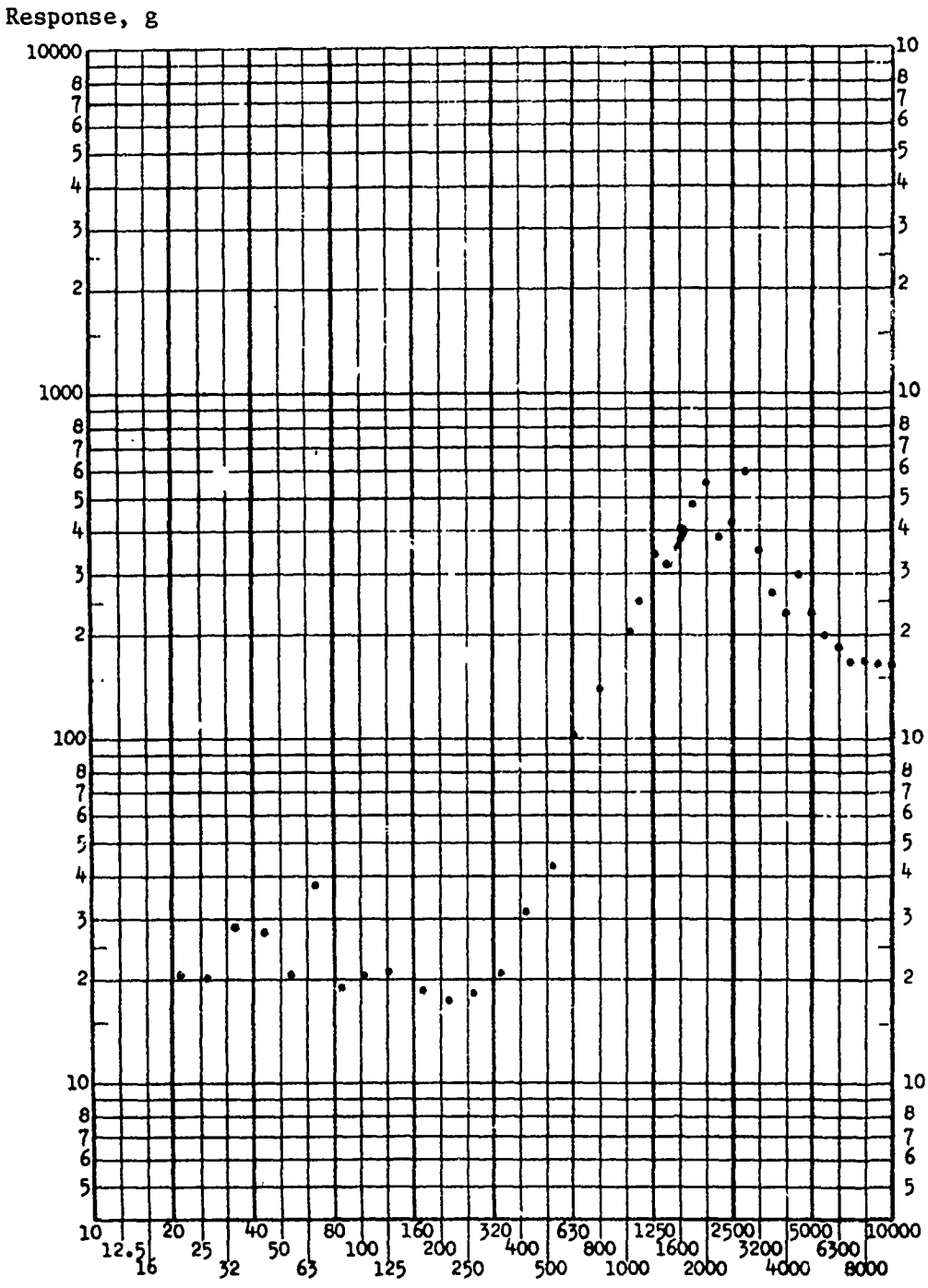
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 4 (cont)



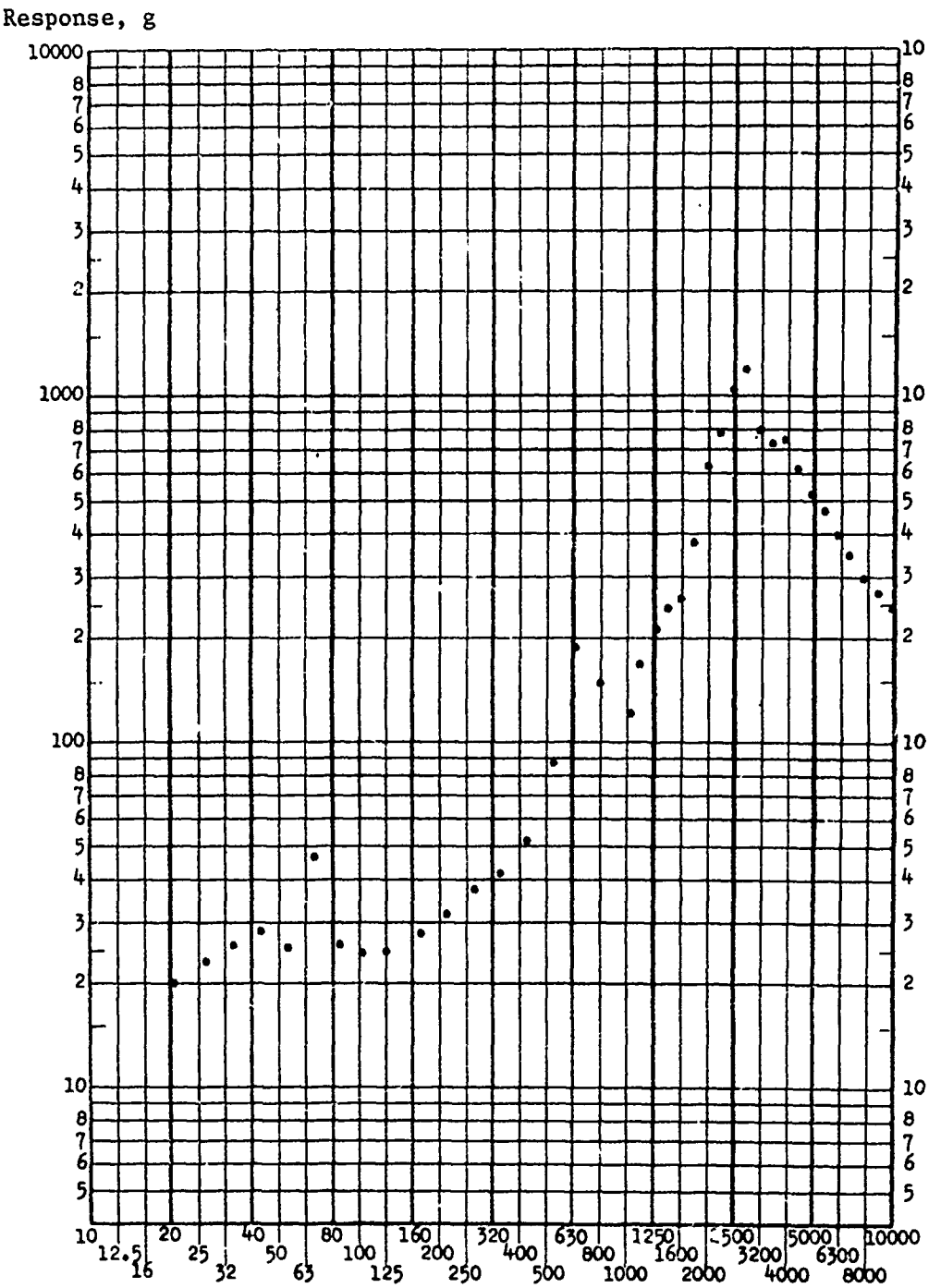
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 4 (cont)



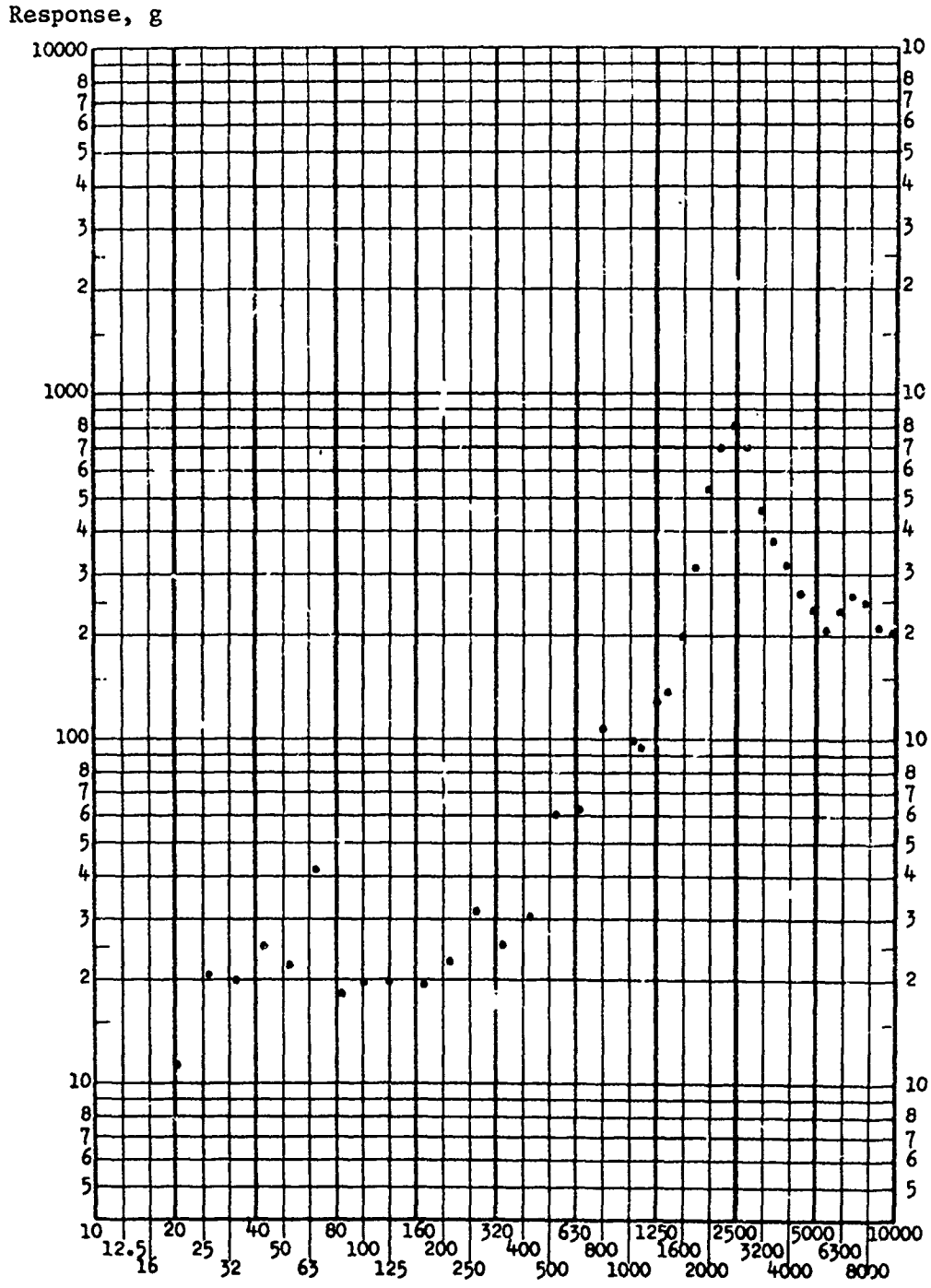
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 4 (cont)



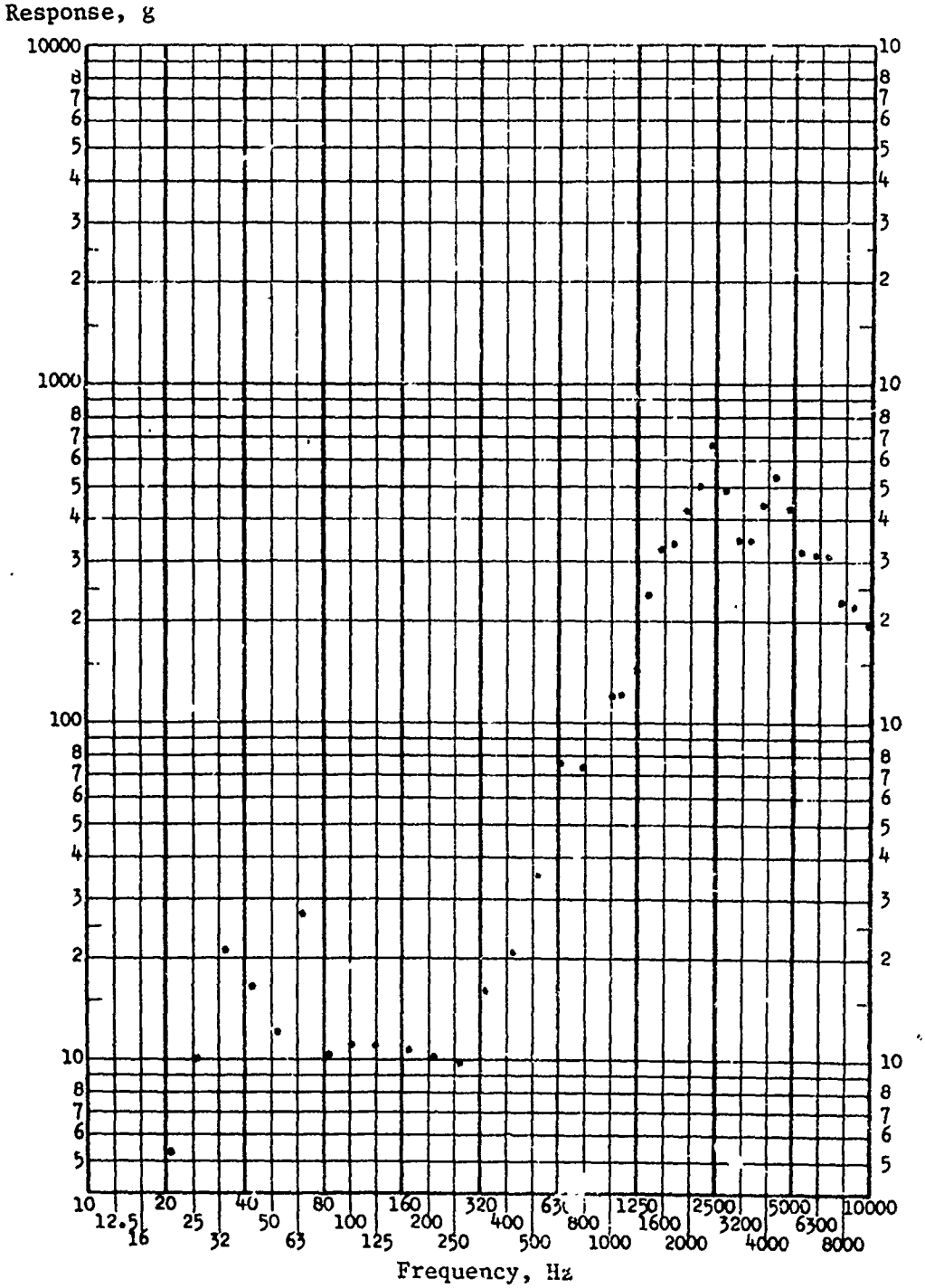
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 4 (cont)



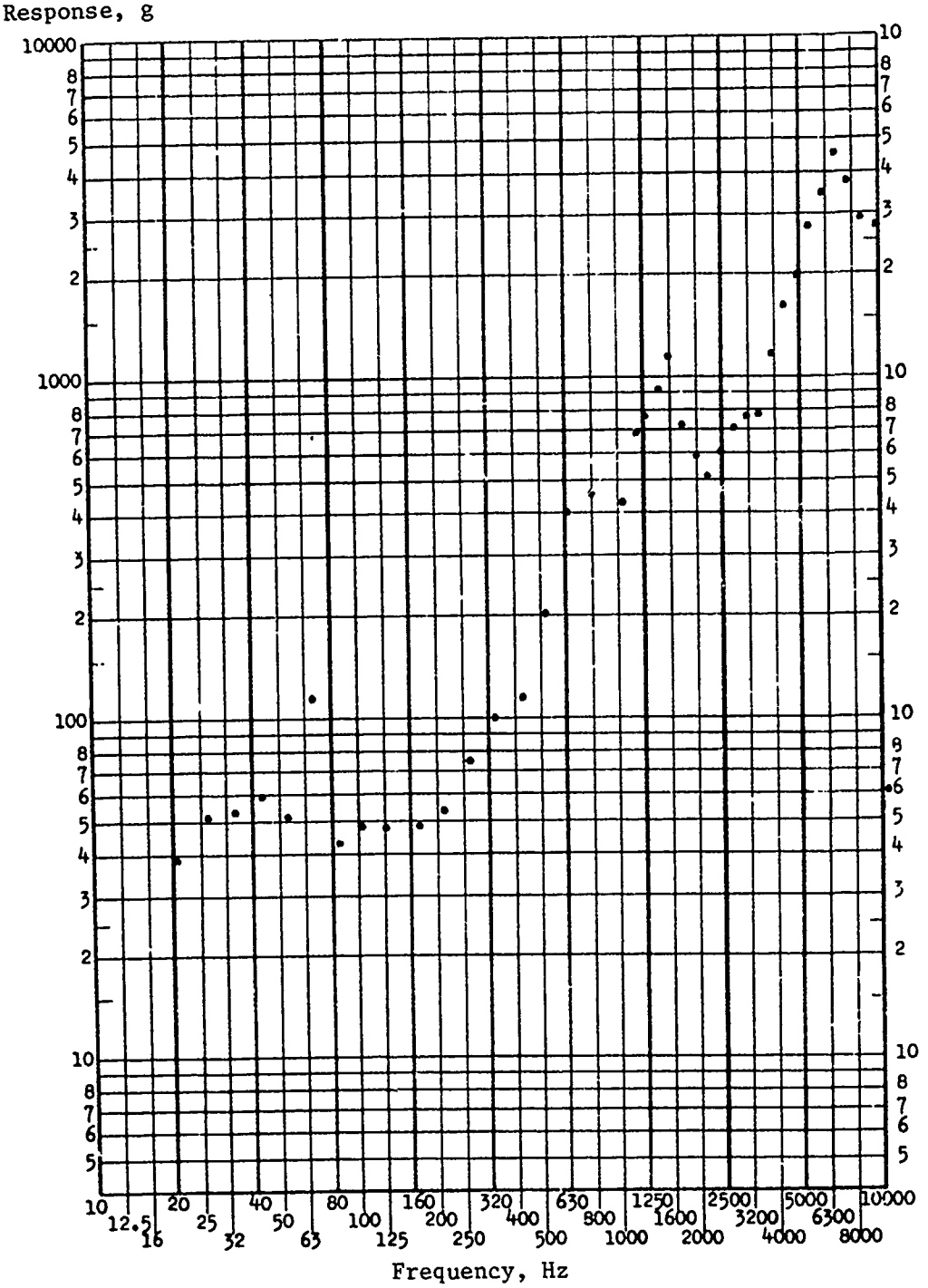
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 4 (cont)



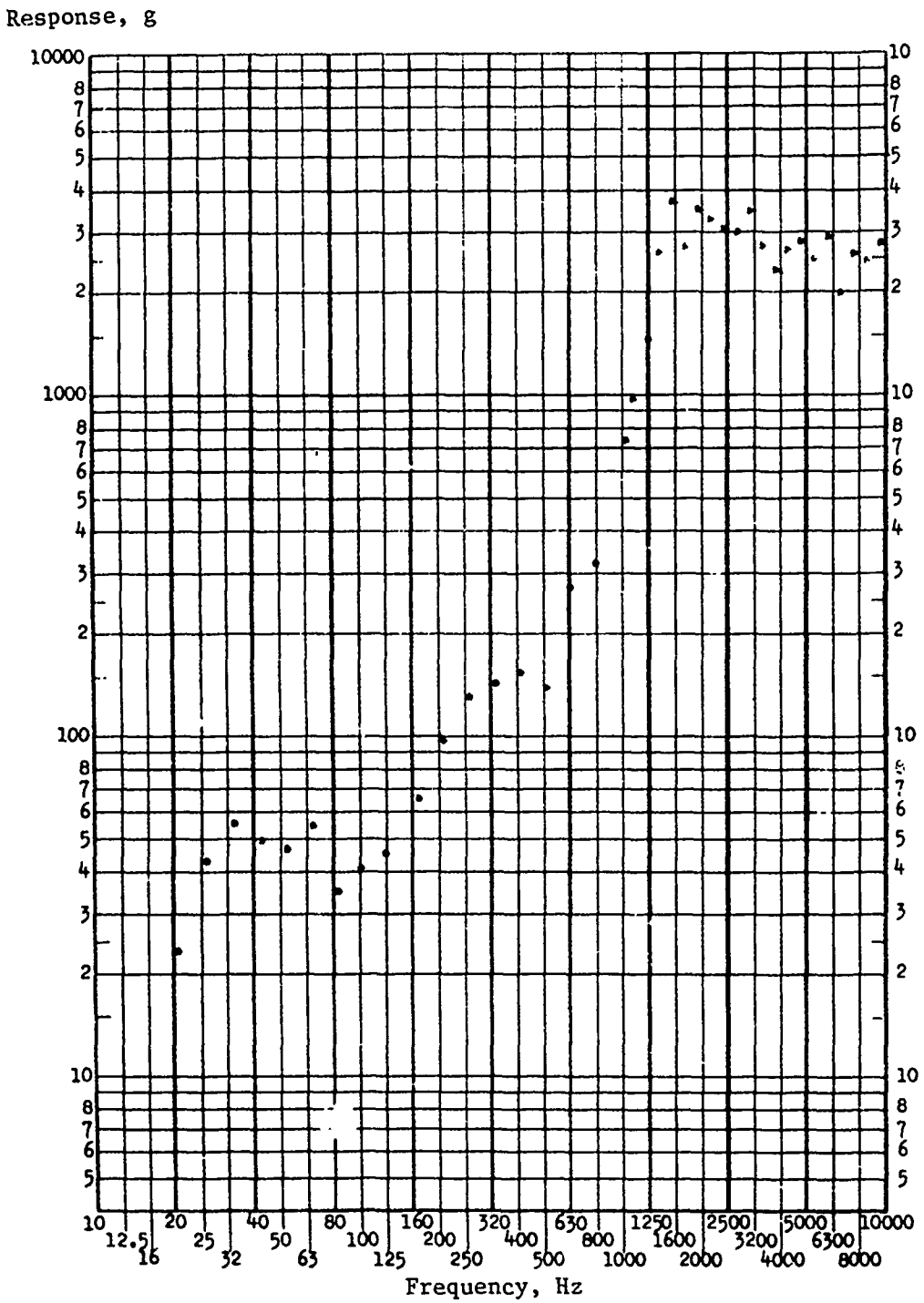
Bench Shock Test - Stage II/III Separation, Run 4
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 4 (concl)



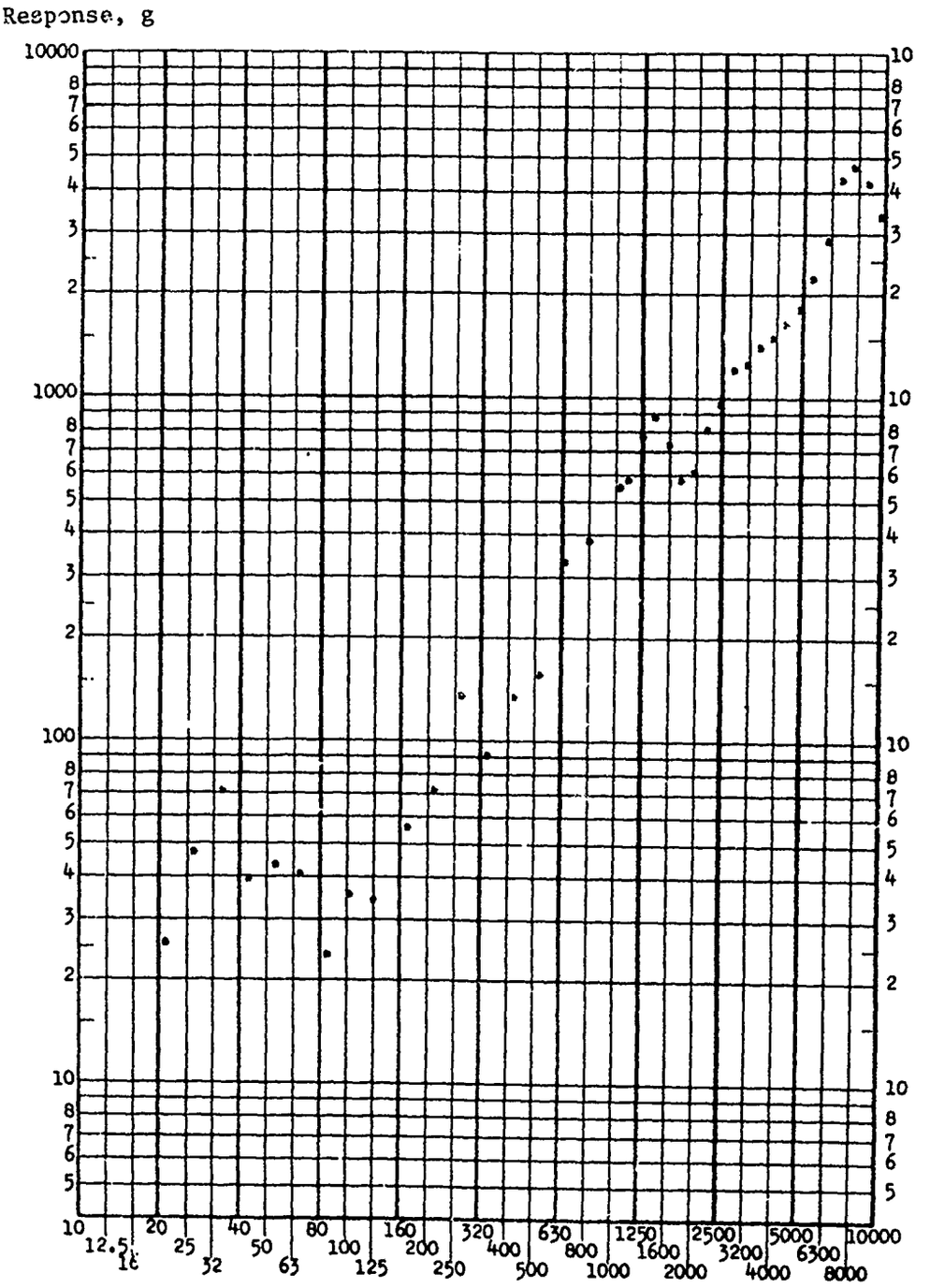
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 5 Run 5 Shock Response Spectrum



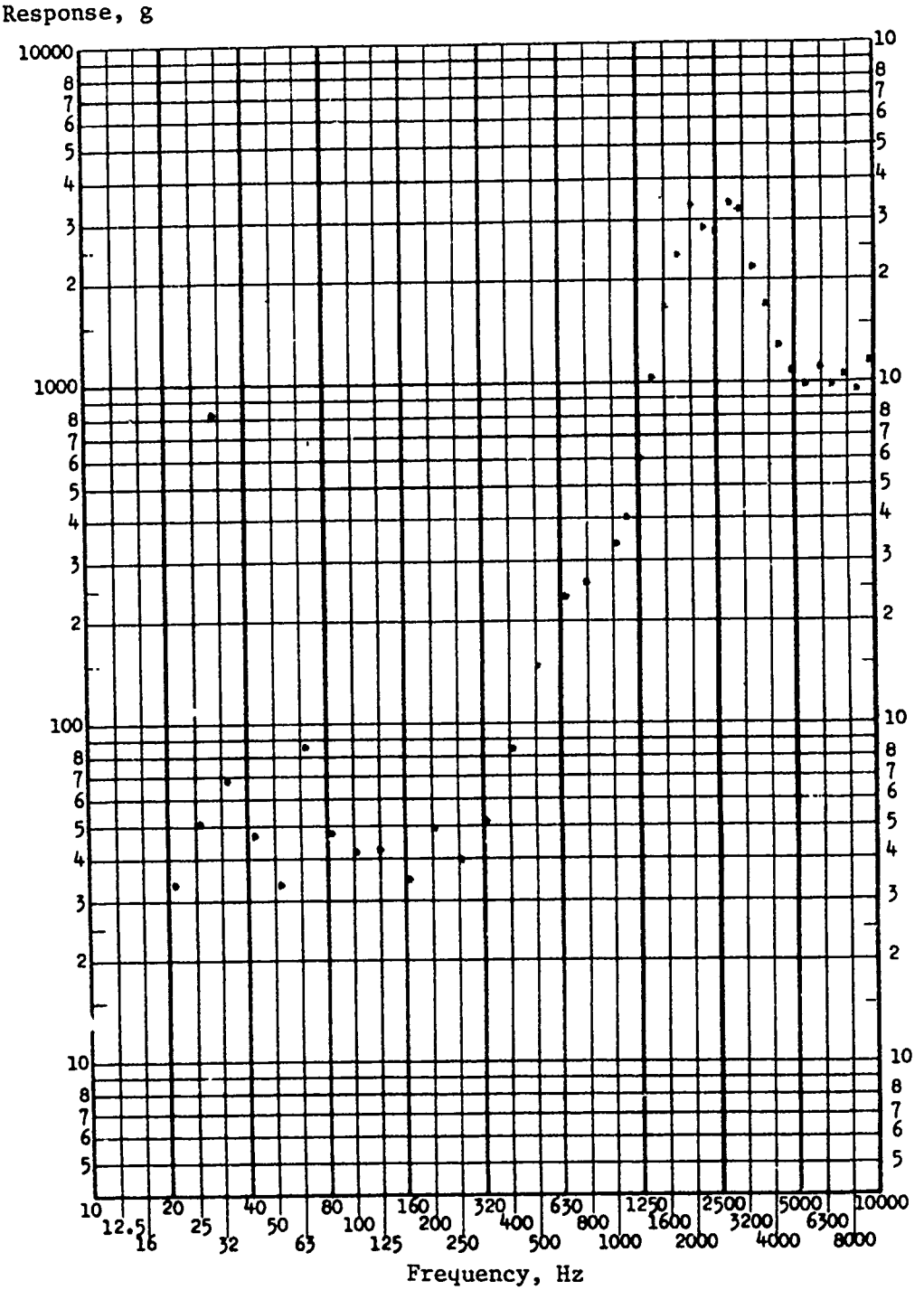
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 2 - Tangential axis longeron near station 133

Figure 5 (cont)



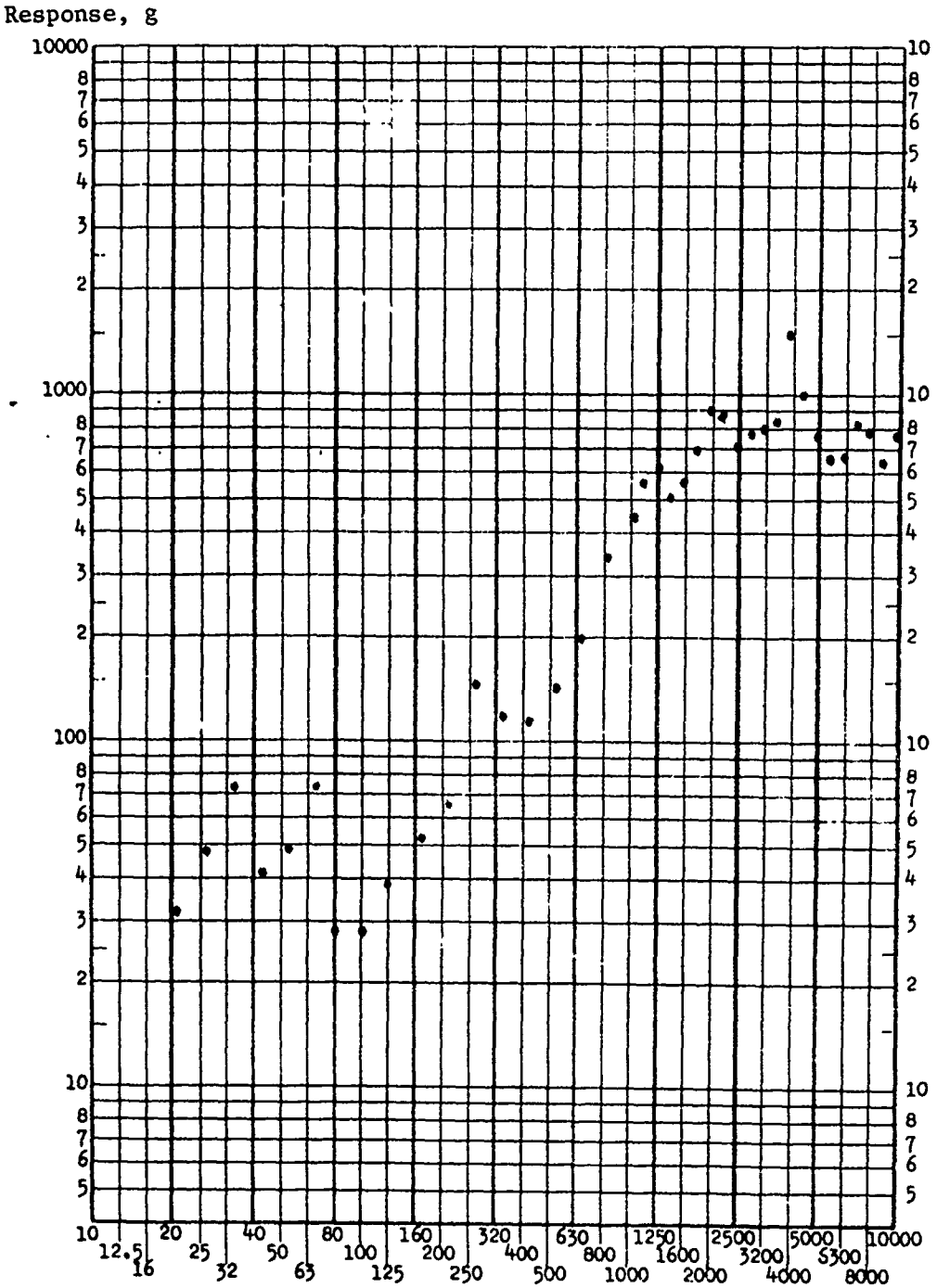
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 3 - Radial axis longeron near station 133

Figure 5 (cont)



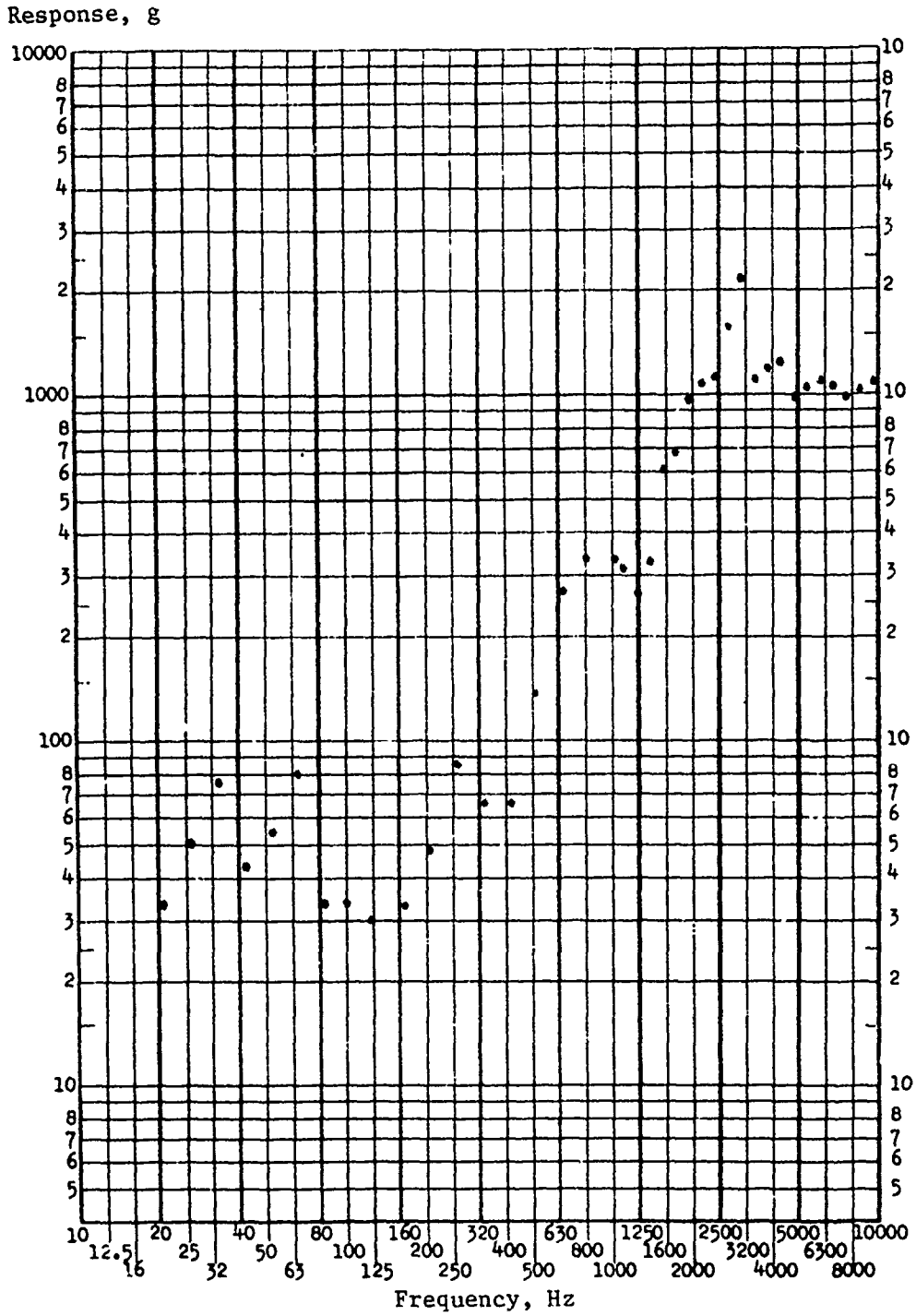
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 5 (cont)



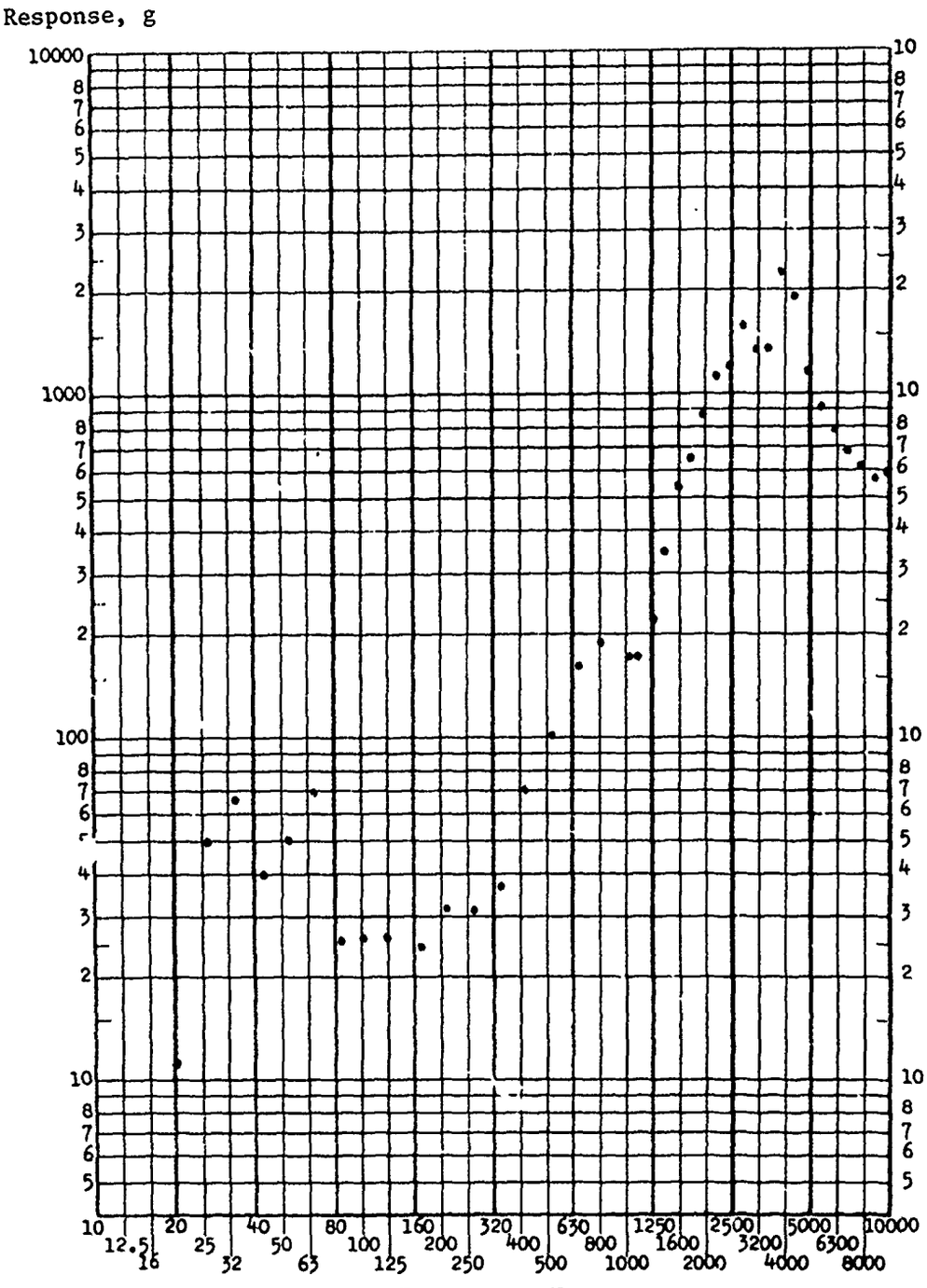
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 5 - Tangential axis longeron near station 117

Figure 5 (cont)



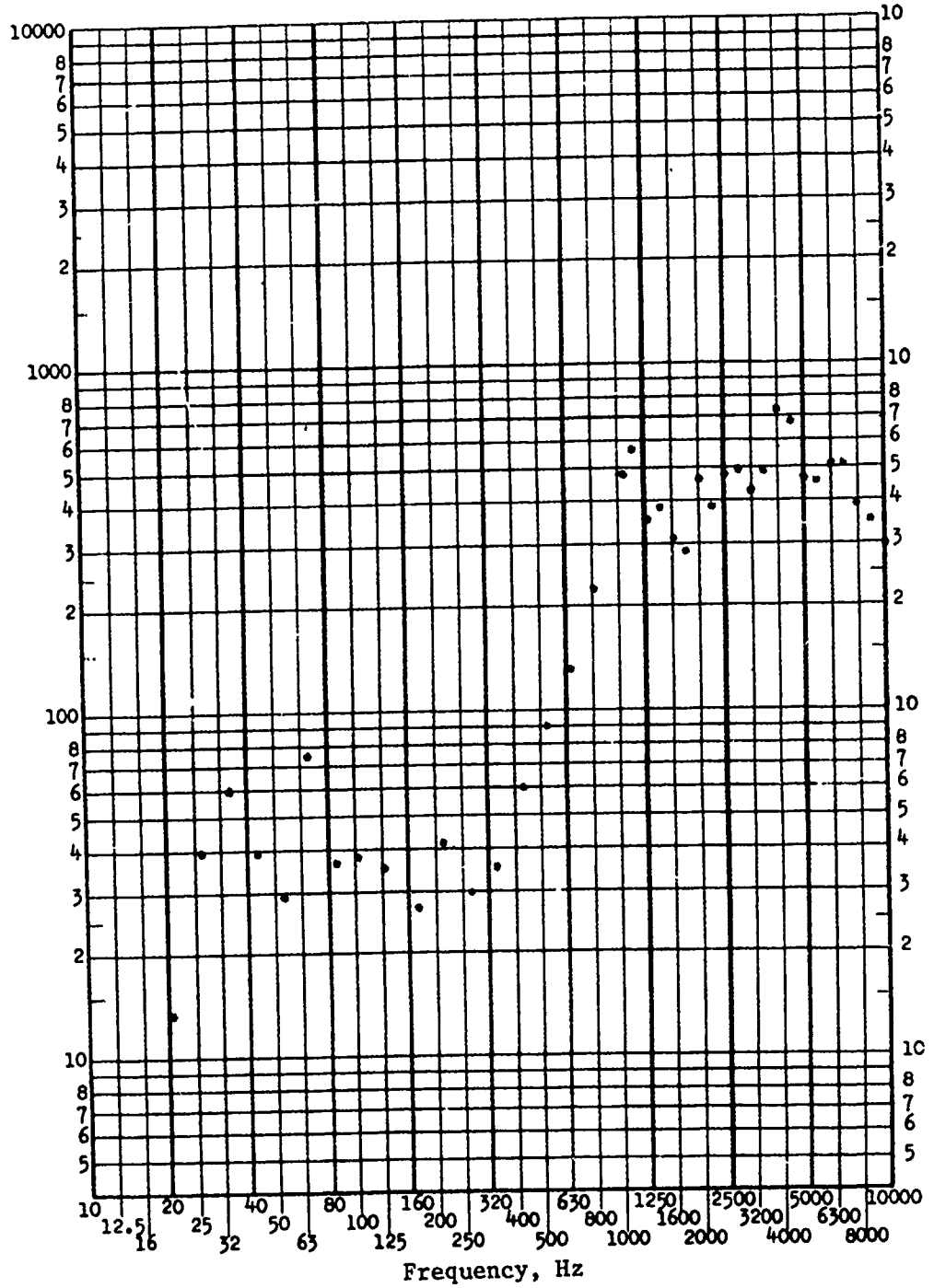
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 6 - Radial axis longeron near station 117

Figure 5 (cont)



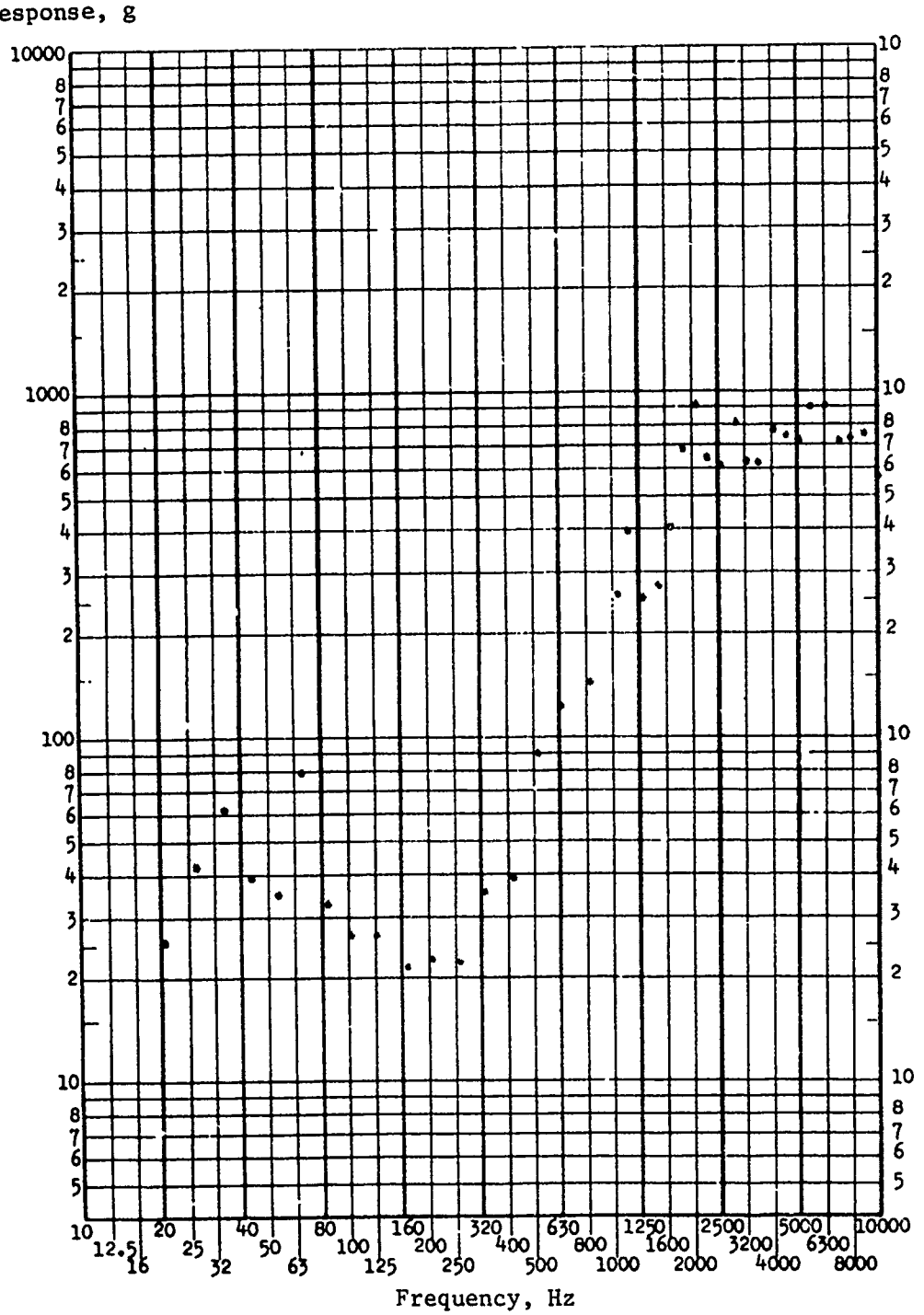
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 5 (cont)



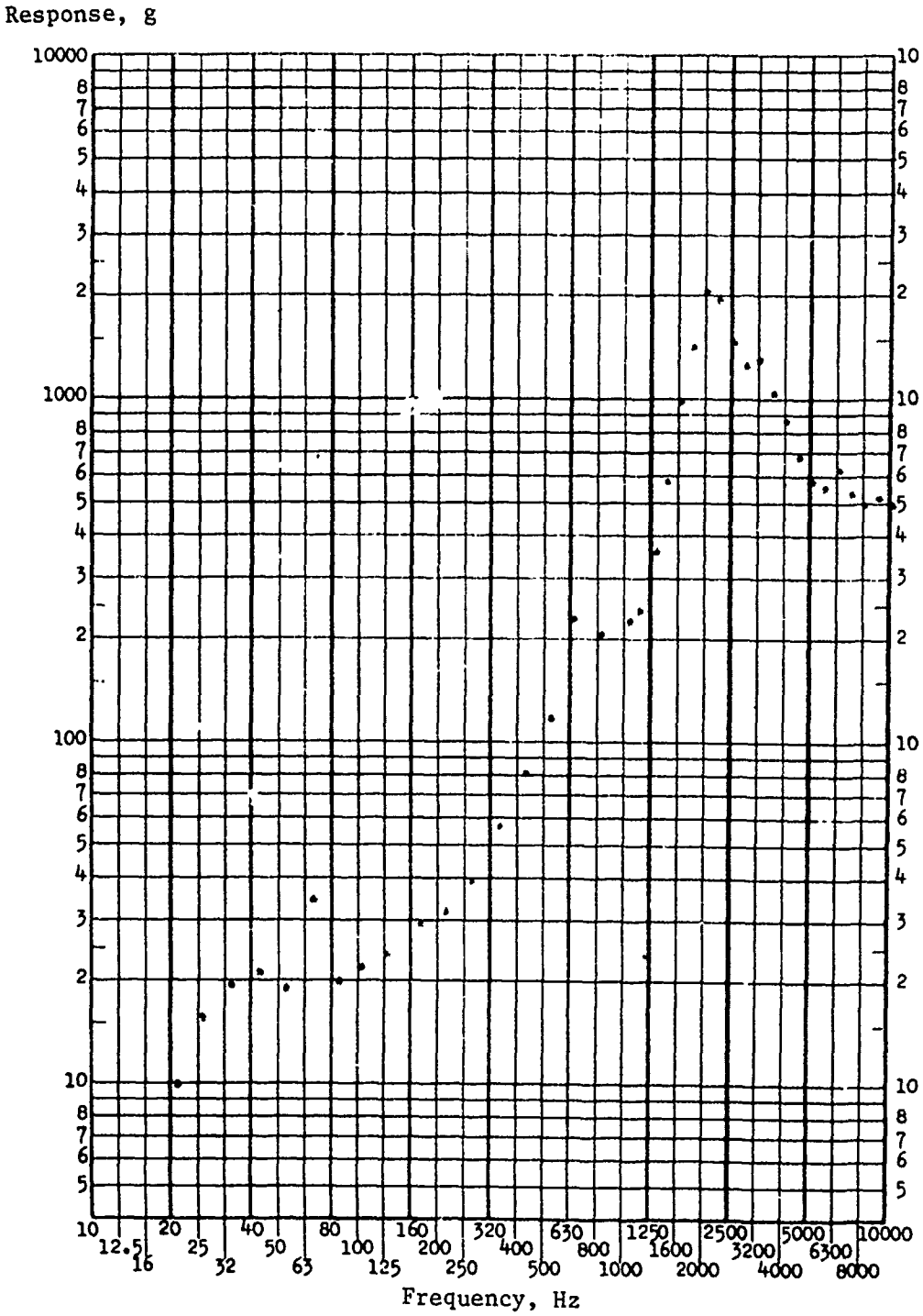
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 8 - Tangential axis longeron near station 77

Figure 5 (cont)



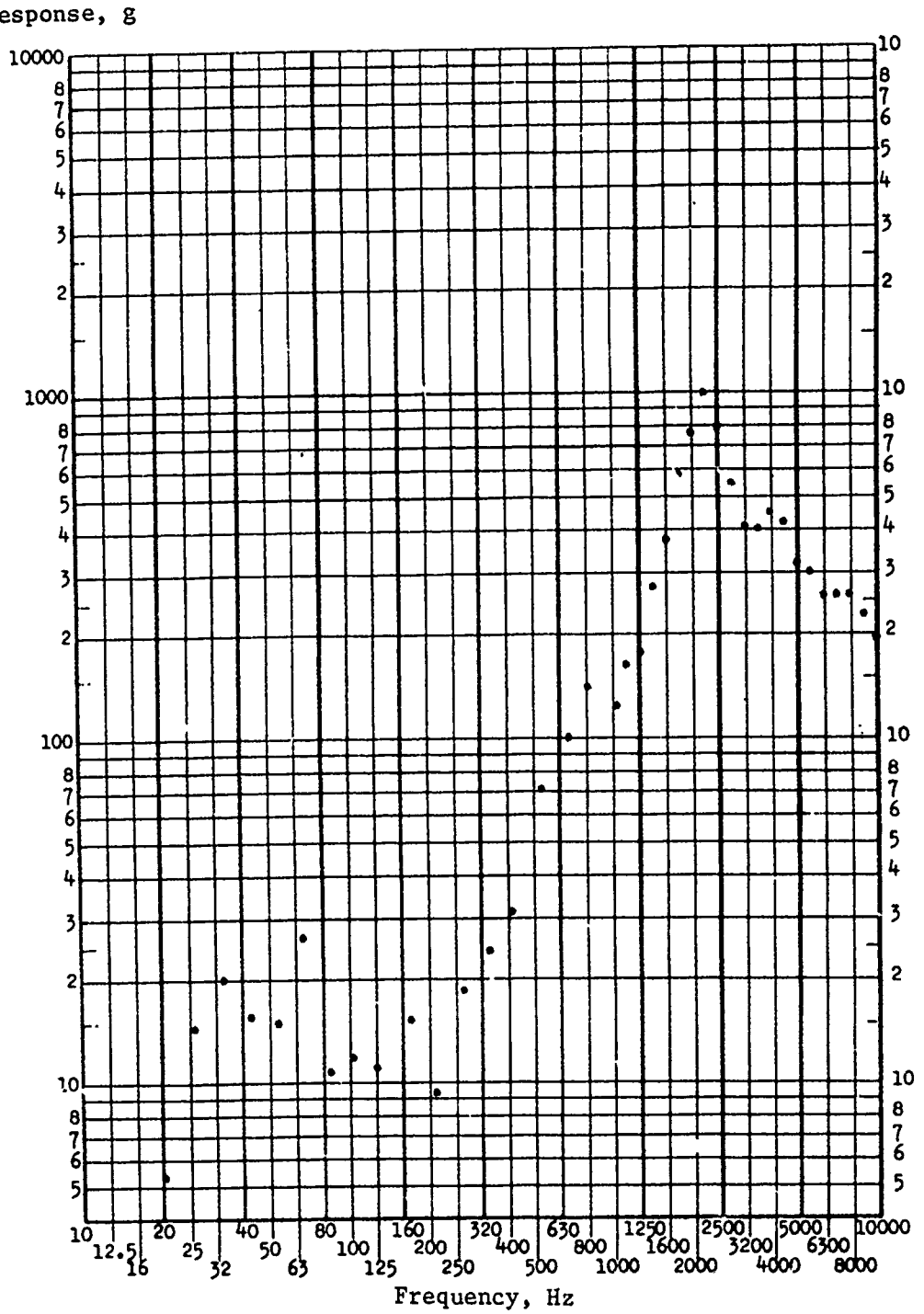
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 9 - Radial axis longeron near station 77

Figure 5 (cont)



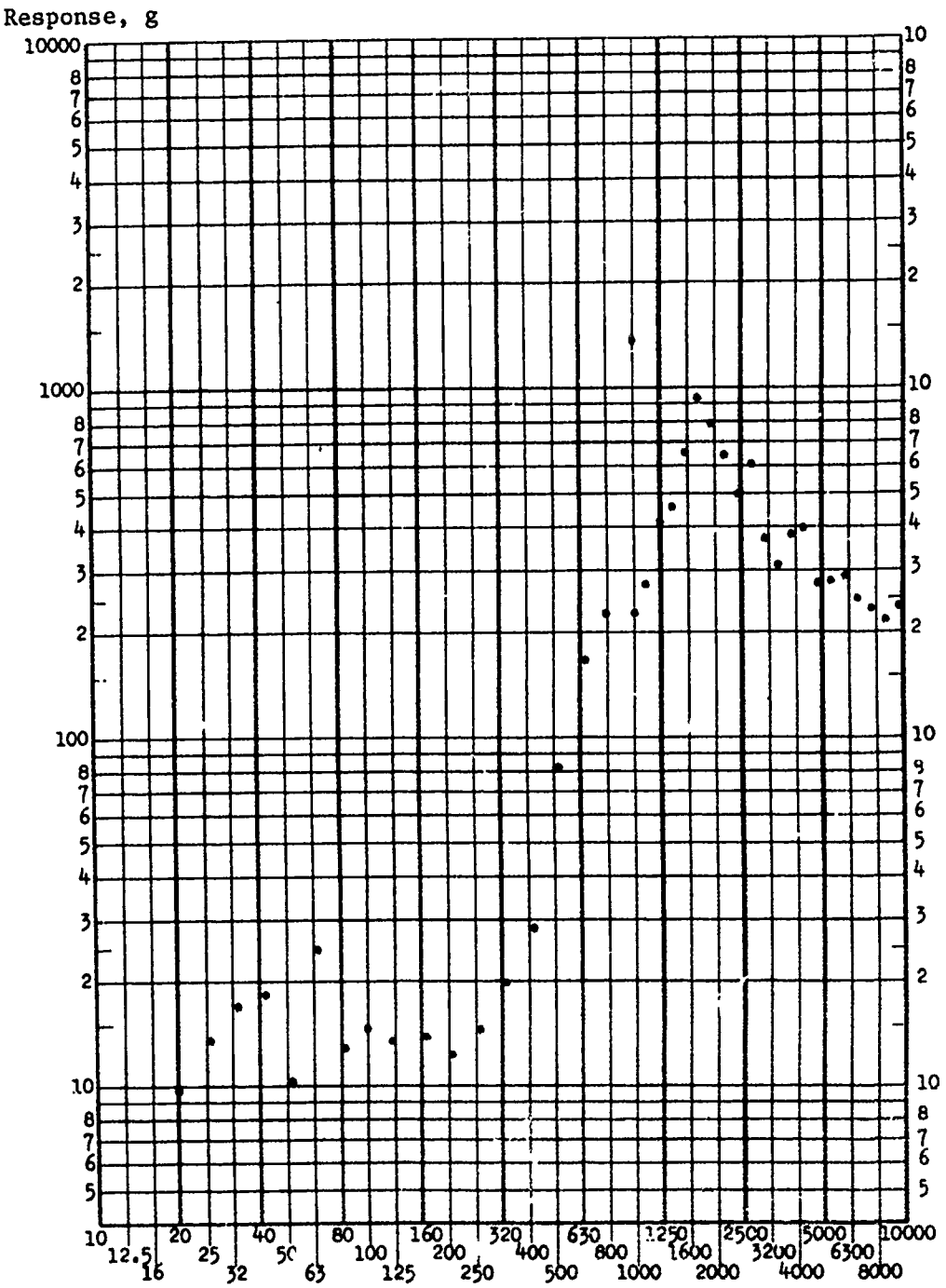
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 5 (cont)



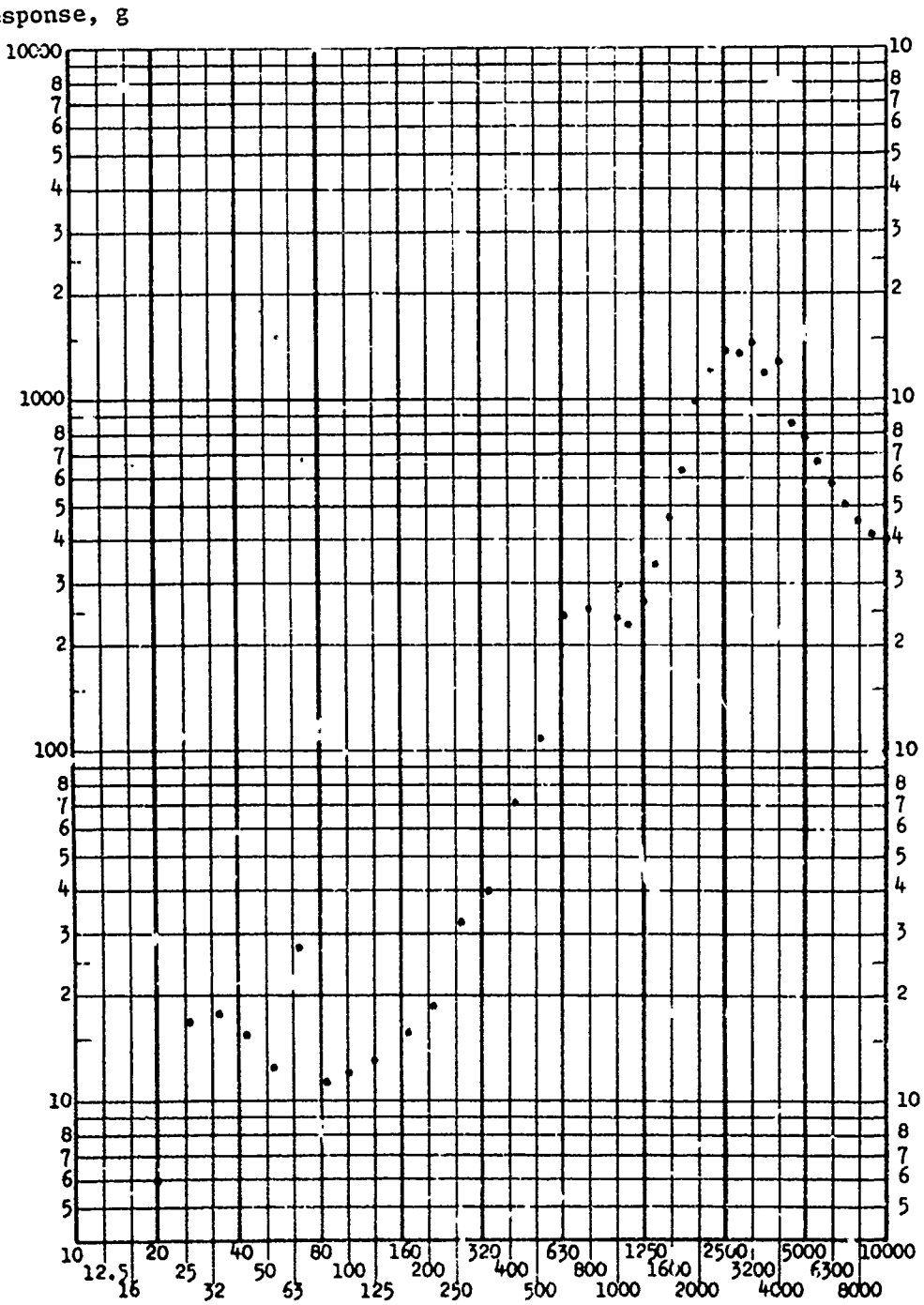
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 5 (cont)



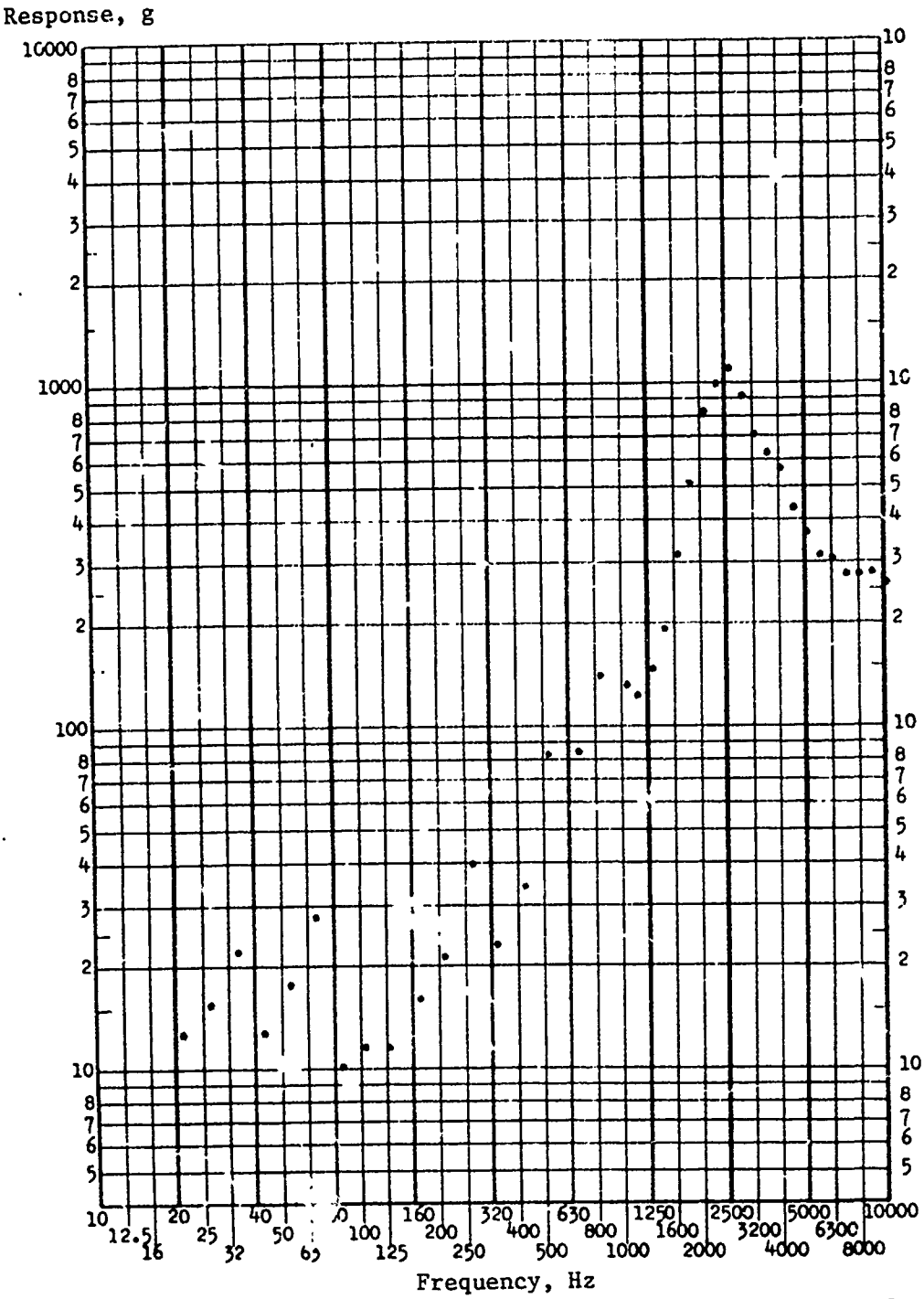
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 5 (cont)



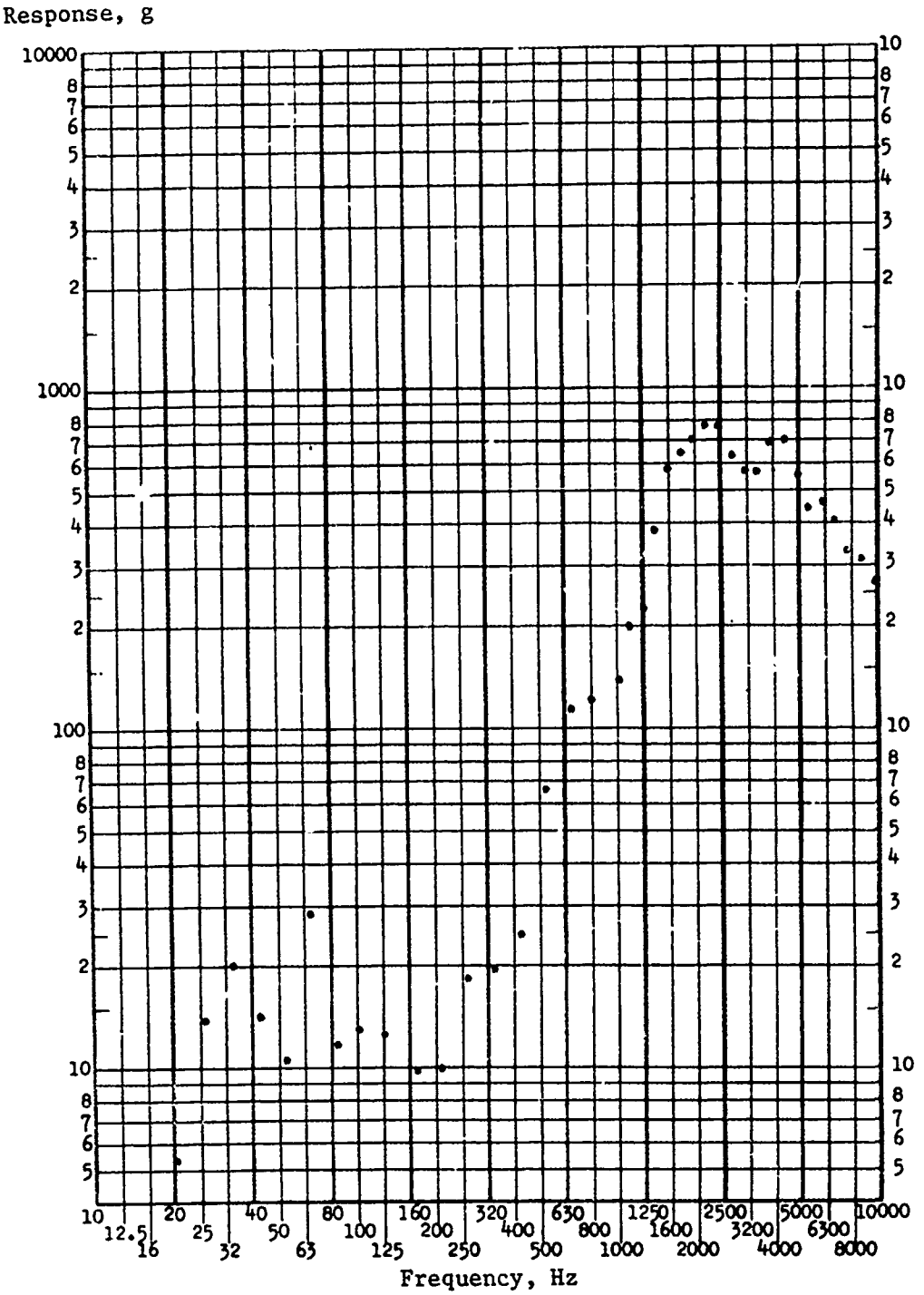
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 5 (cont)



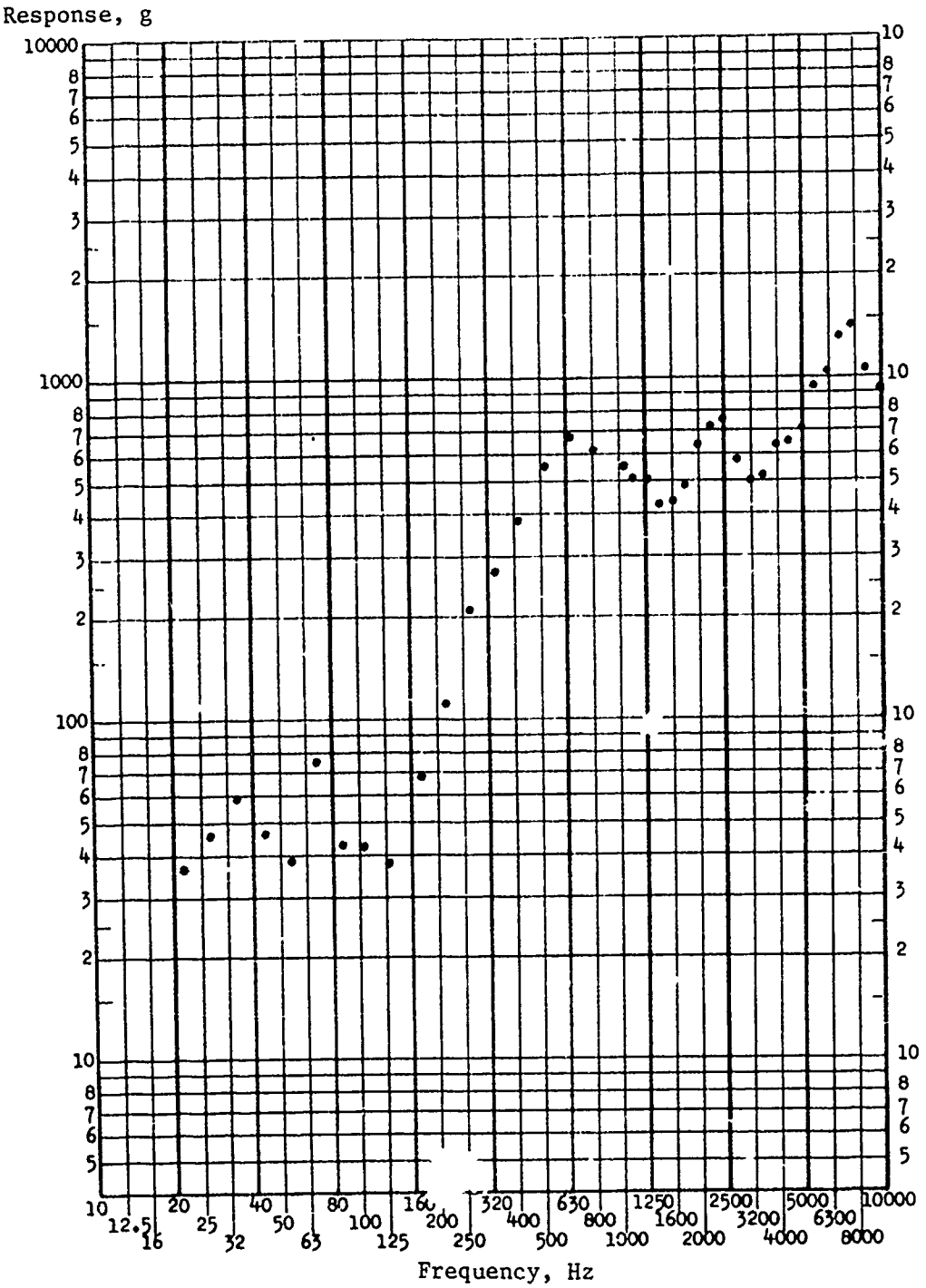
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 5 (cont)



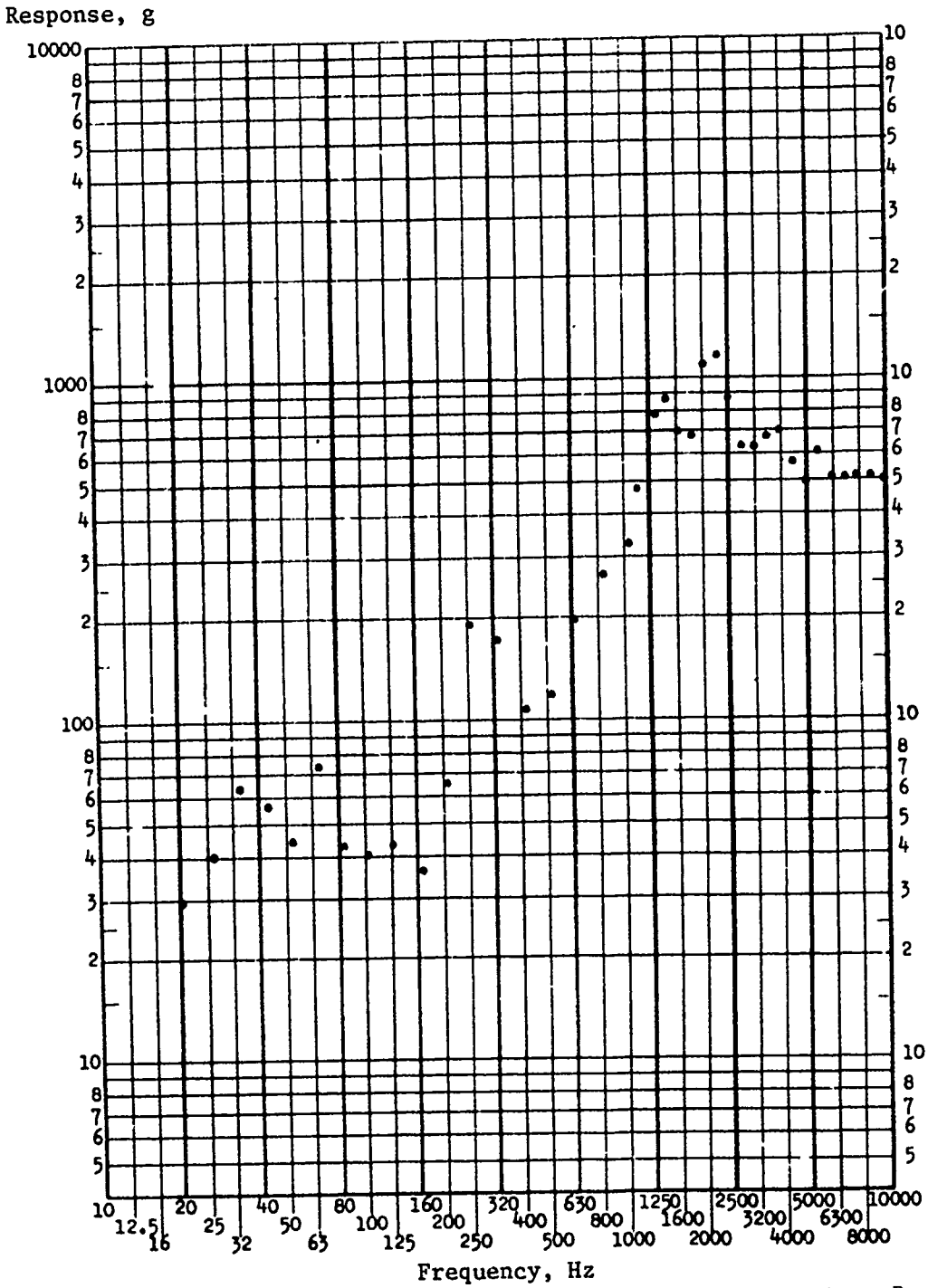
Bench Shock Test - Stage II/III Separation, Run 5
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 5 (concl)



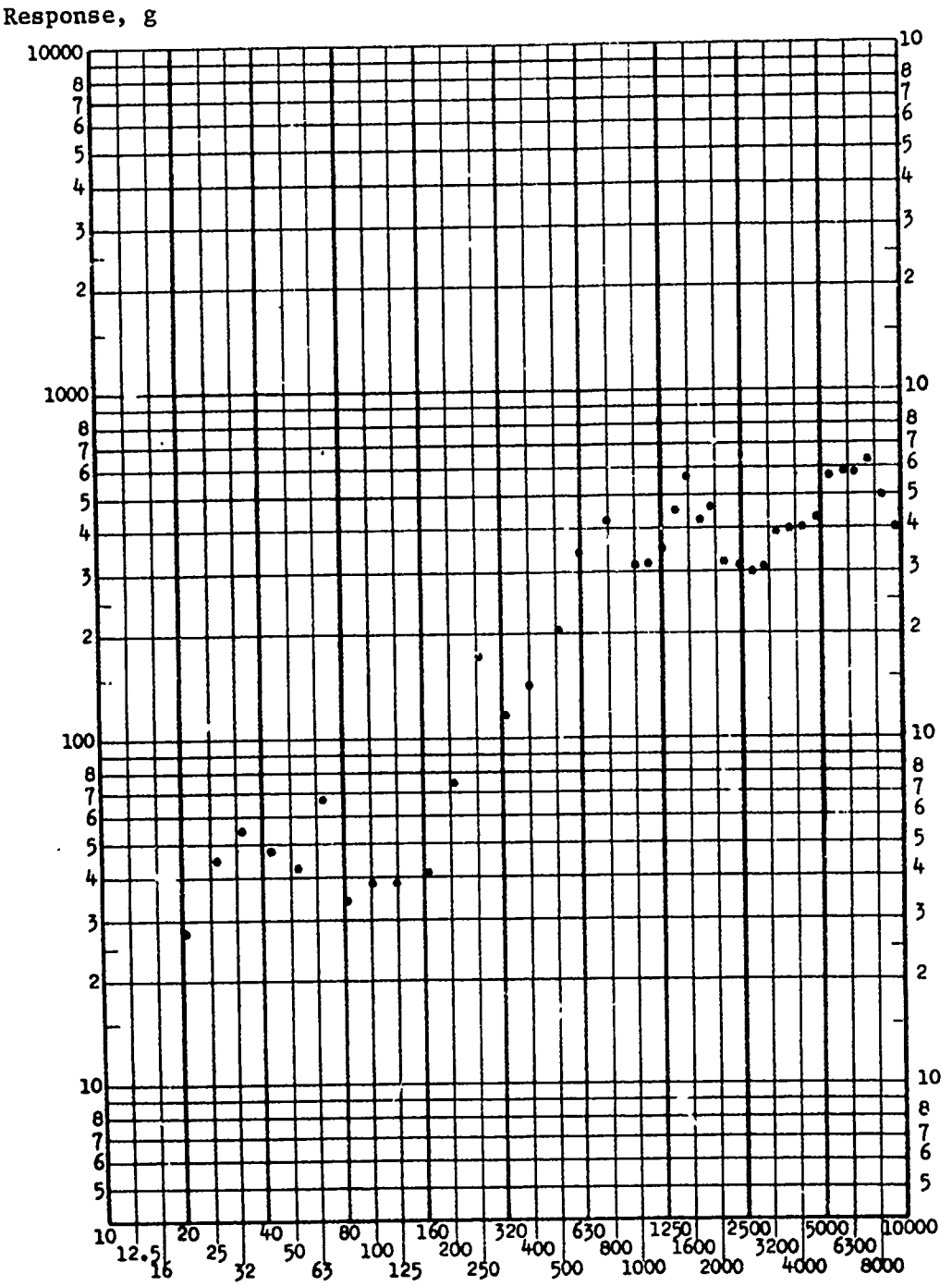
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 1 - Longitudinal axis longeron near station 133

Figure 6 Run 6 Shock Response Spectrum



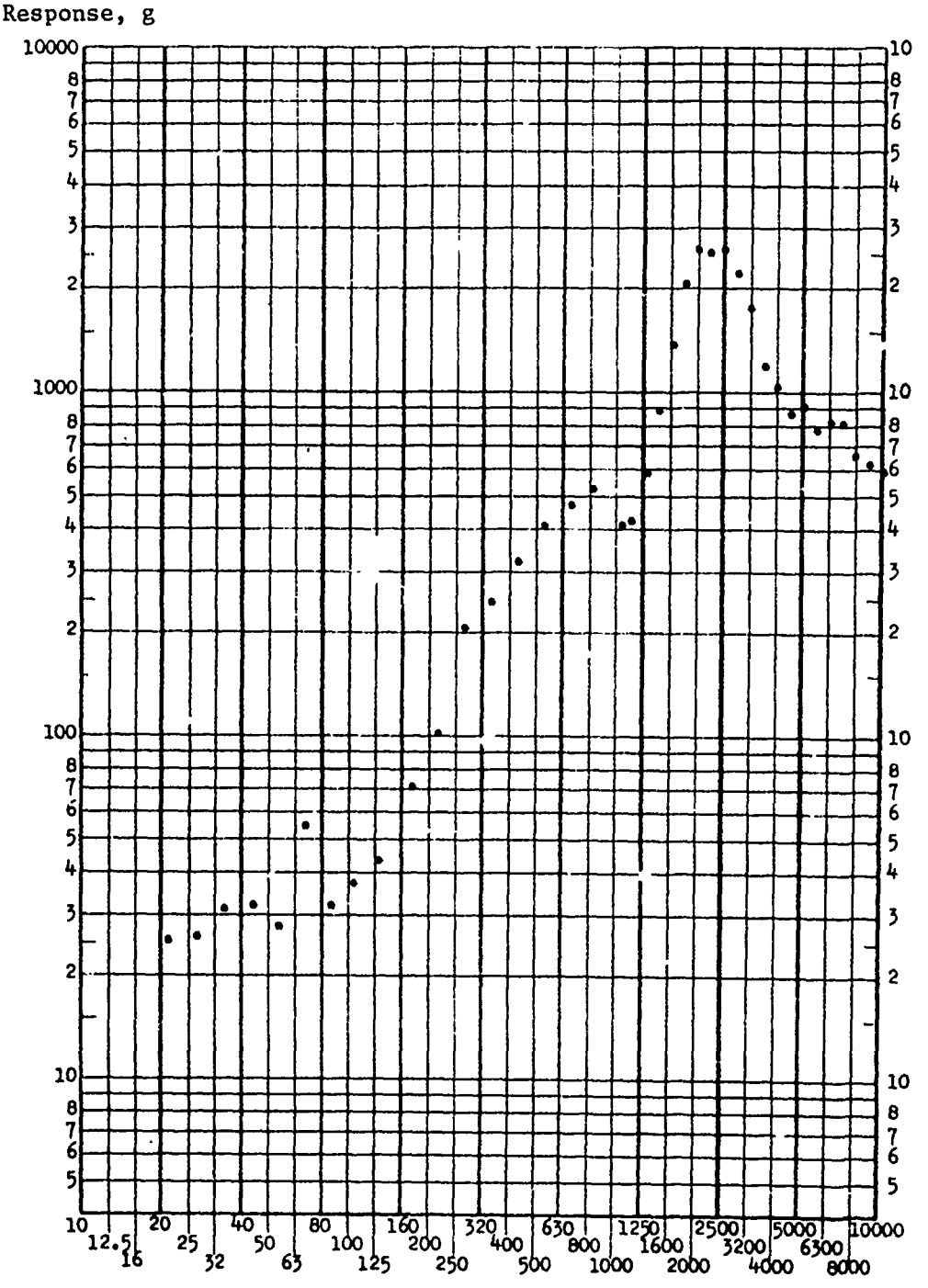
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 2 - Tangential axis longeron near station 133

Figure 6 (cont)



Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 3 - Radial axis longeron near station 133

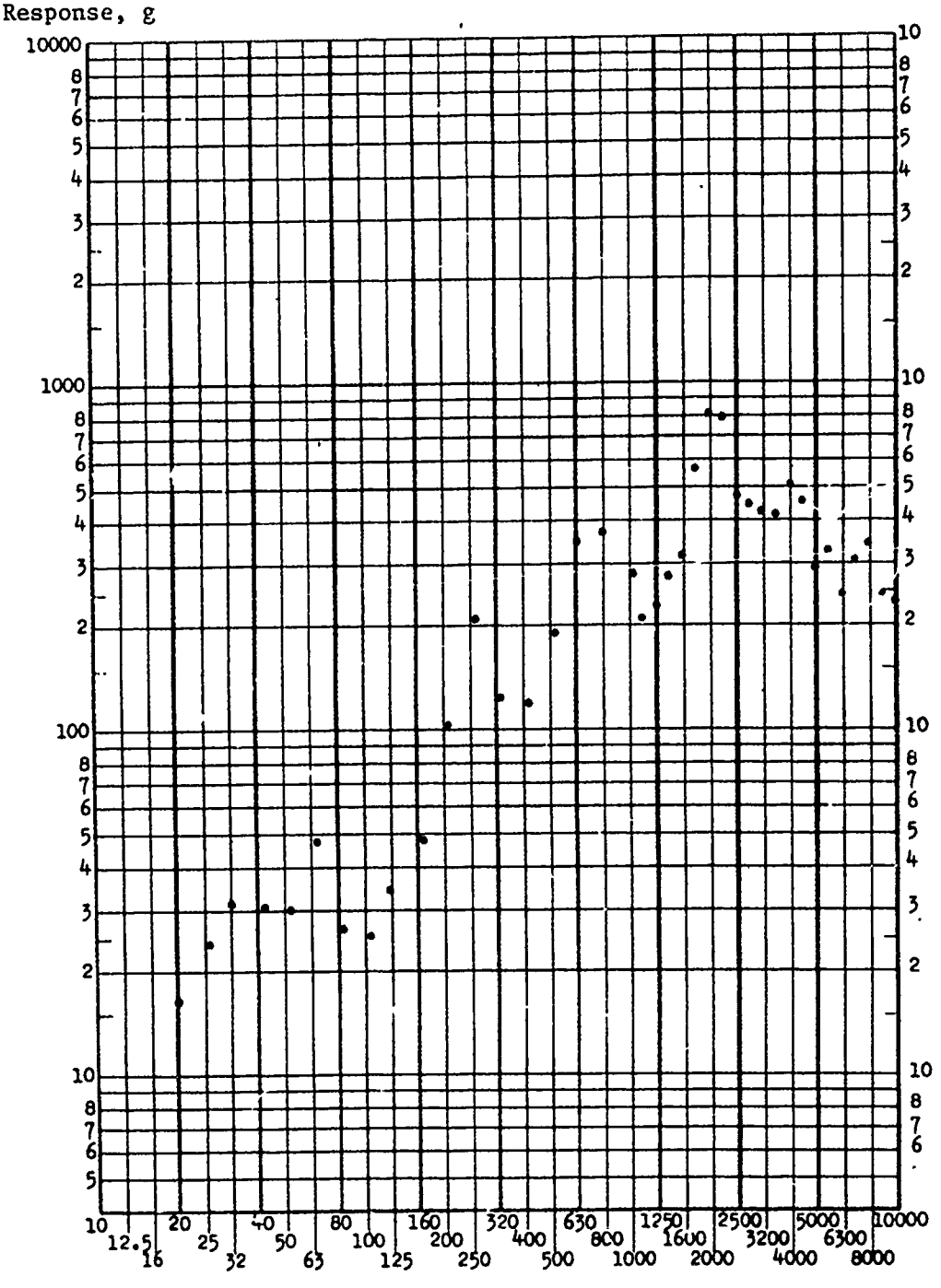
Figure 6 (cont)



Frequency, Hz

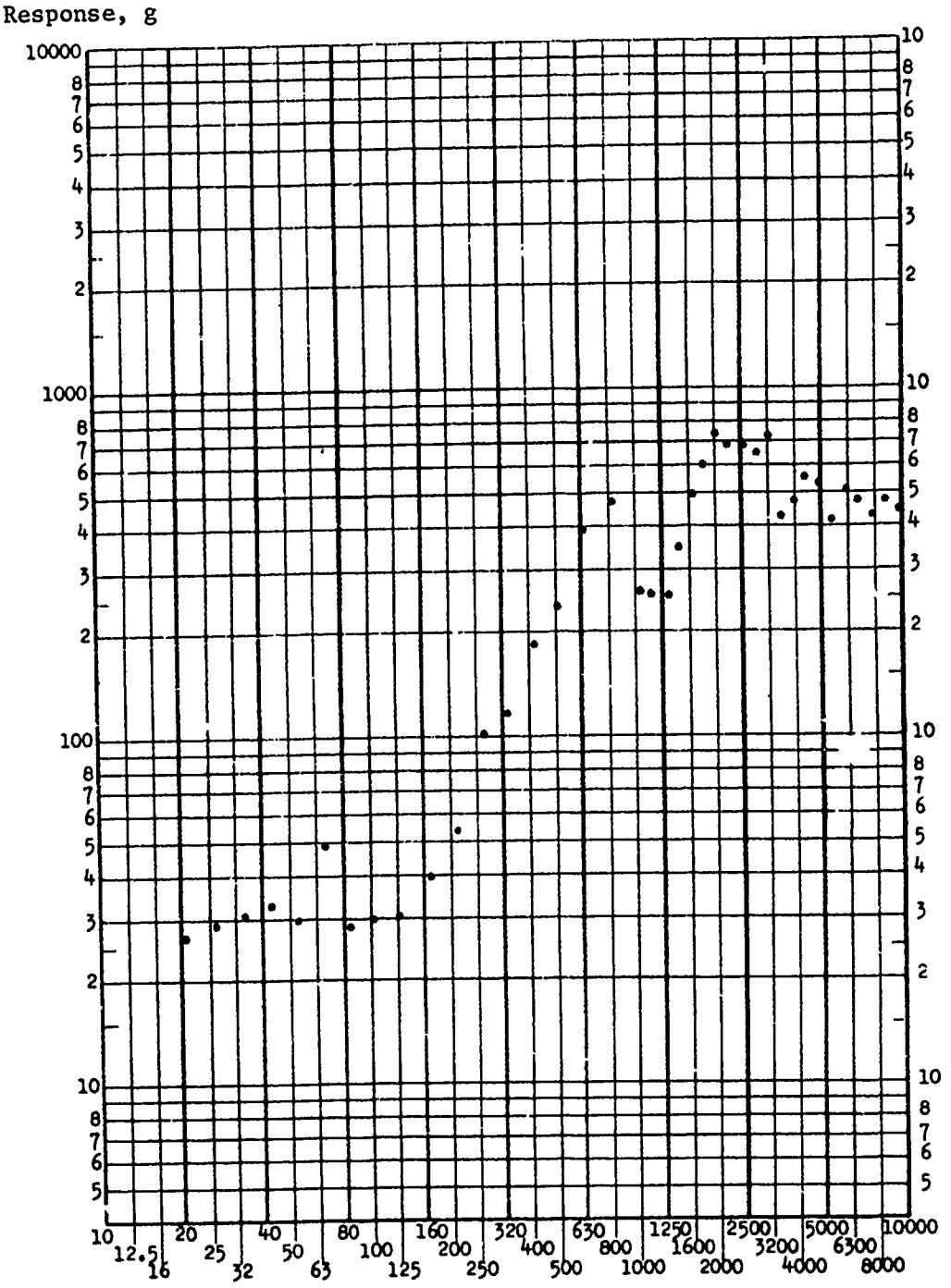
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 6 (cont)



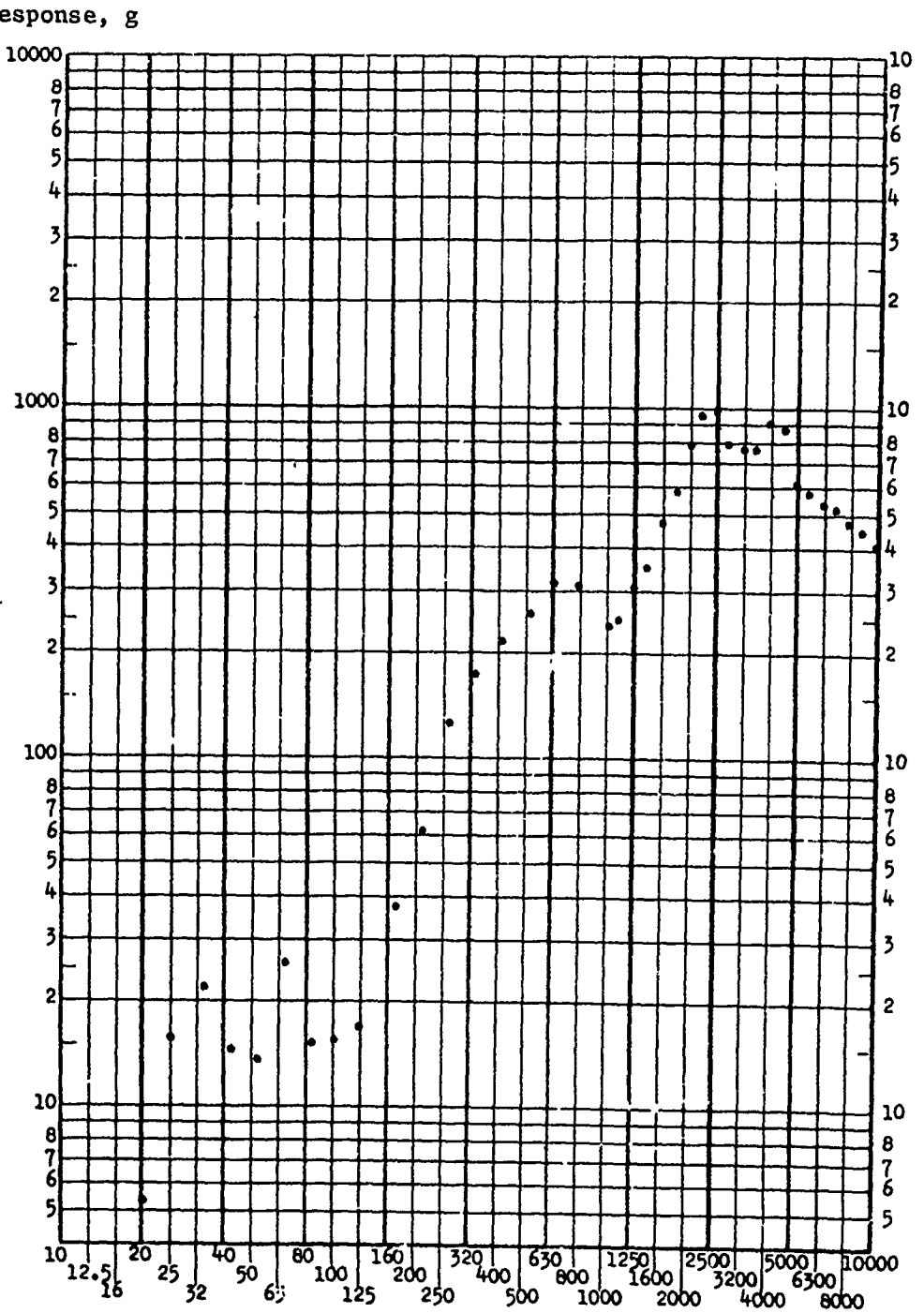
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 5 - Tangential axis longeron near station 117

Figure 6 (cont)



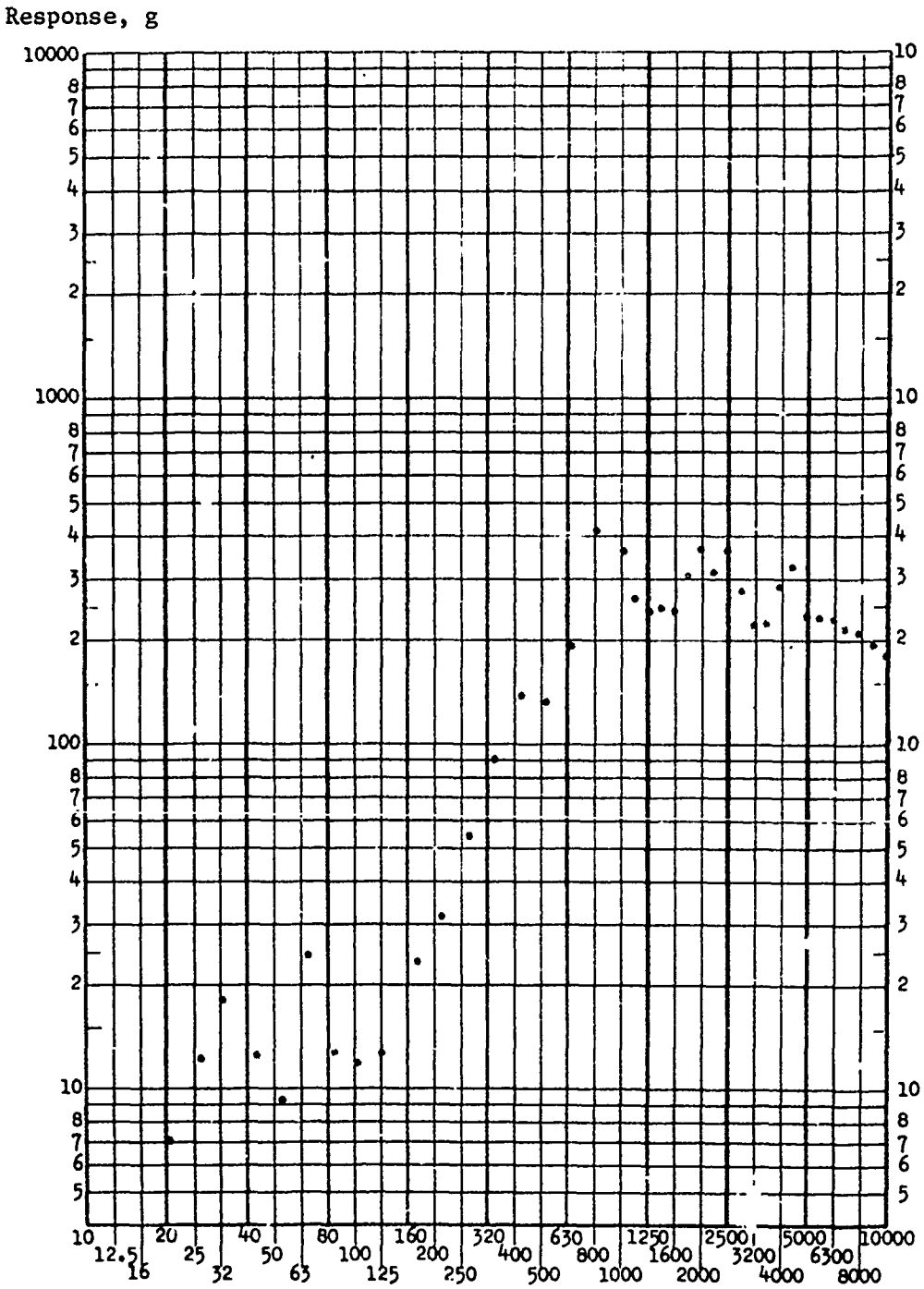
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 6 - Radial axis longeron near station 117

Figure 6 (cont)



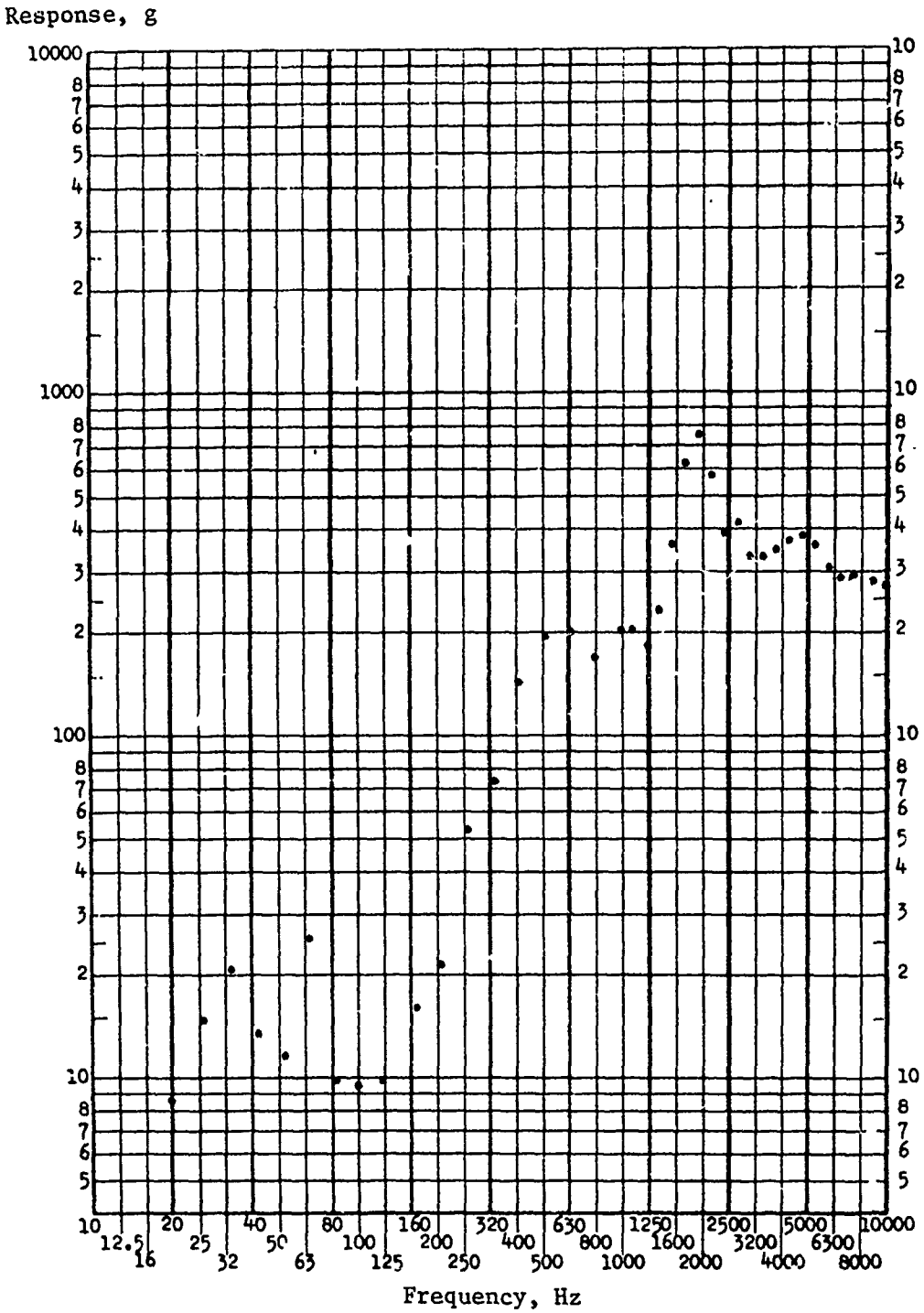
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 6 (cont)



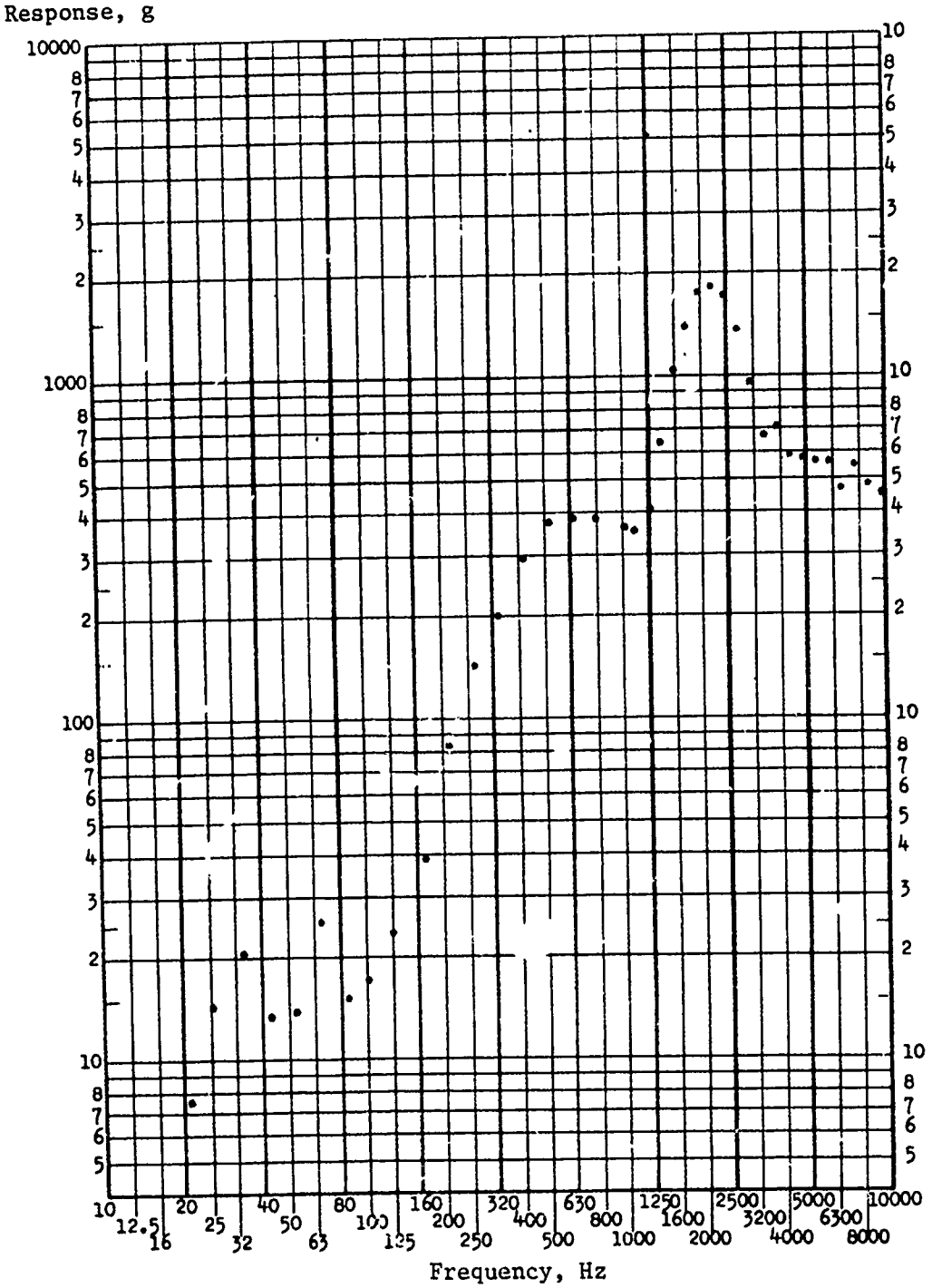
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 8 - Tangential axis longeron near station 77

Figure 6 (cont)



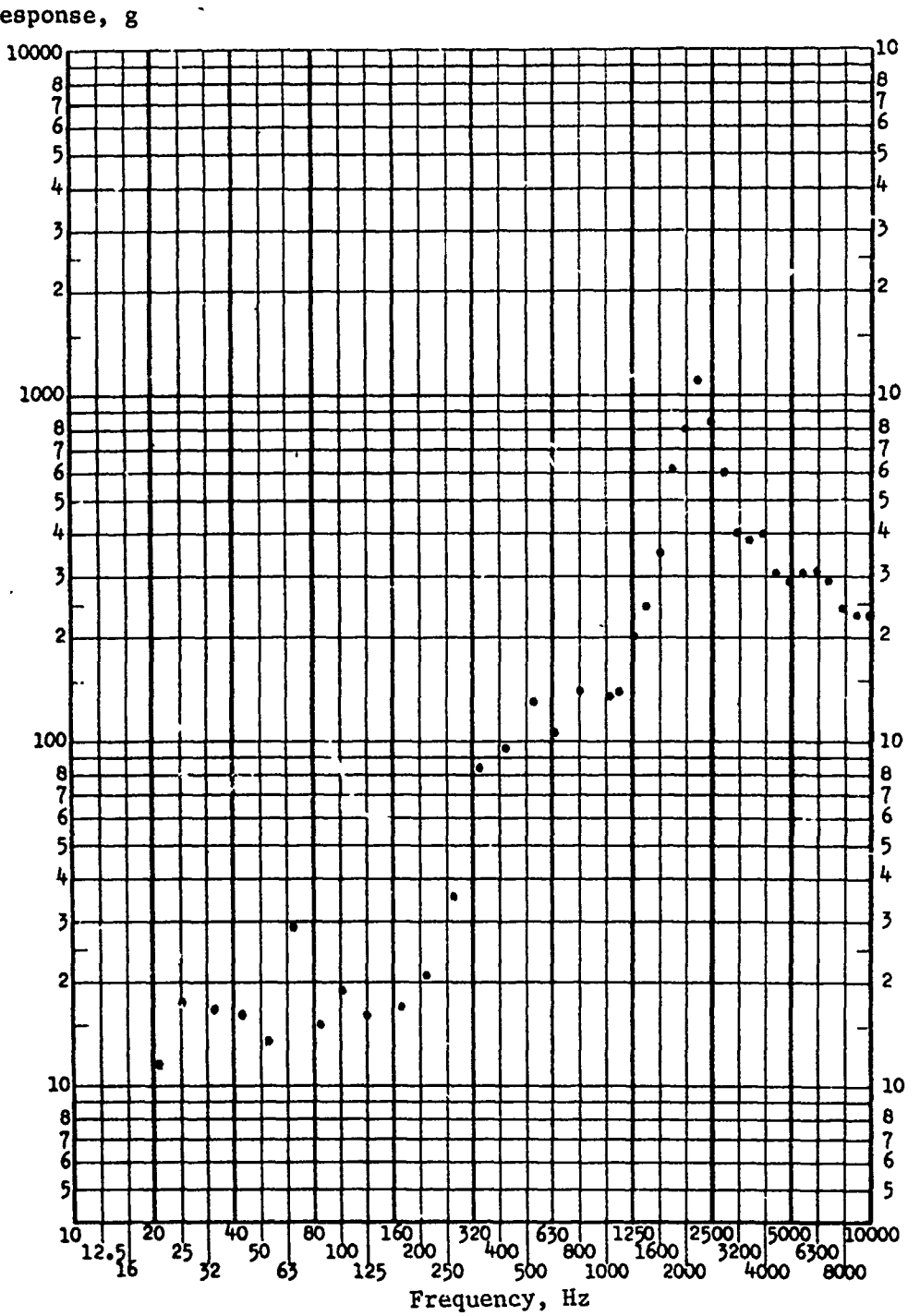
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 9 - Radial axis longeron near station 77

Figure 6 (cont)



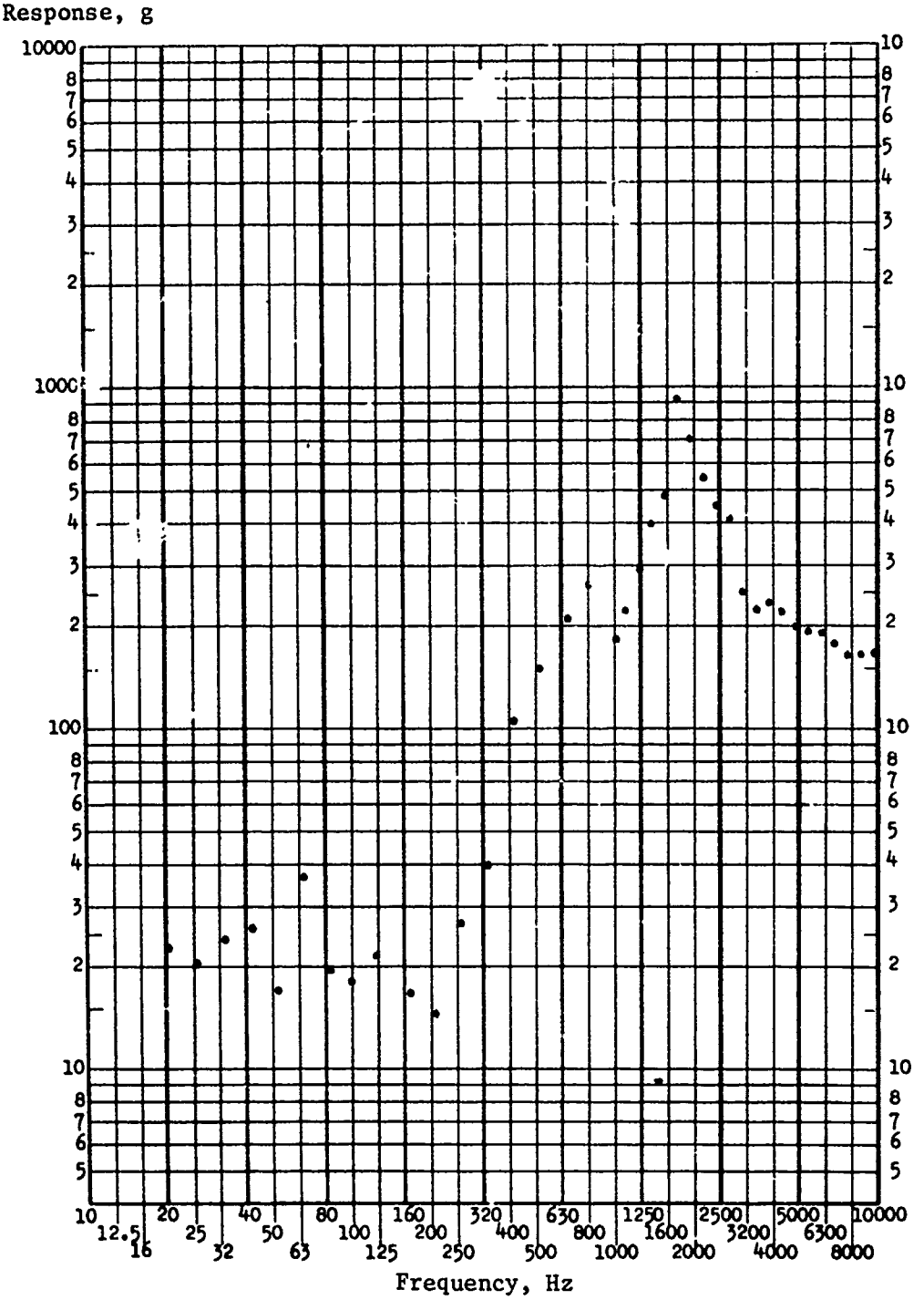
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 6 (cont)



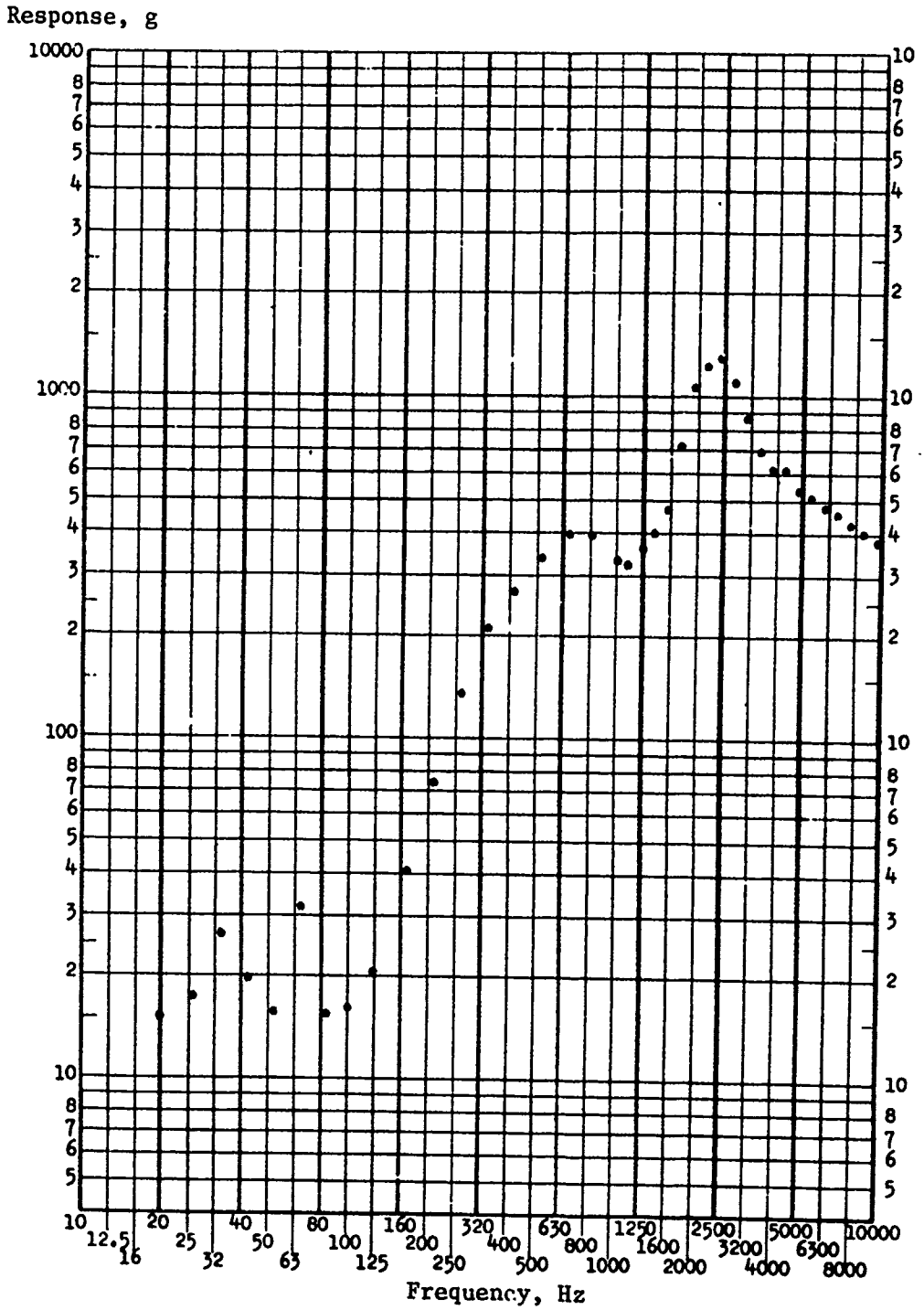
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 6 (cont)



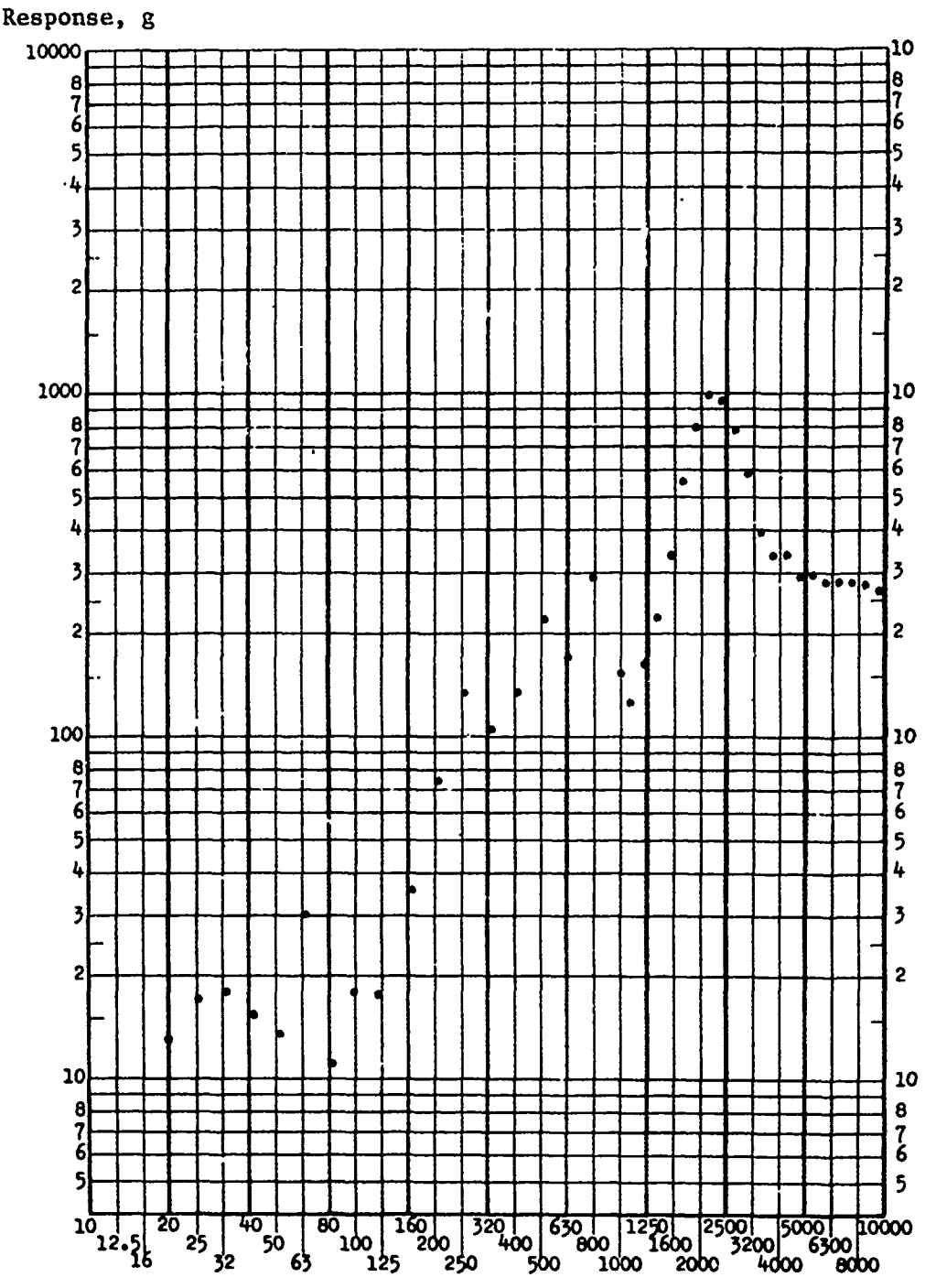
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 6 (cont)



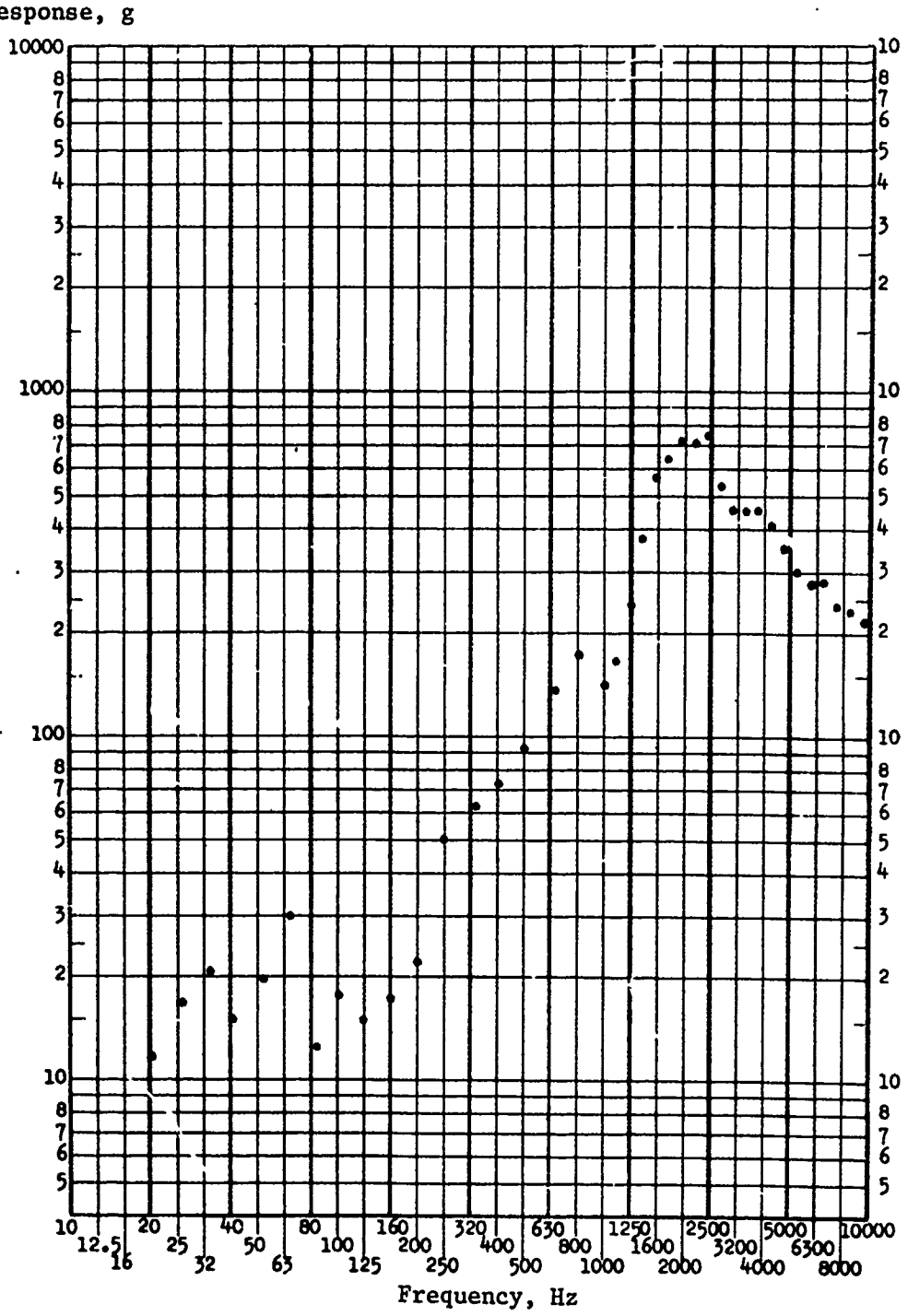
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 6 (cont)



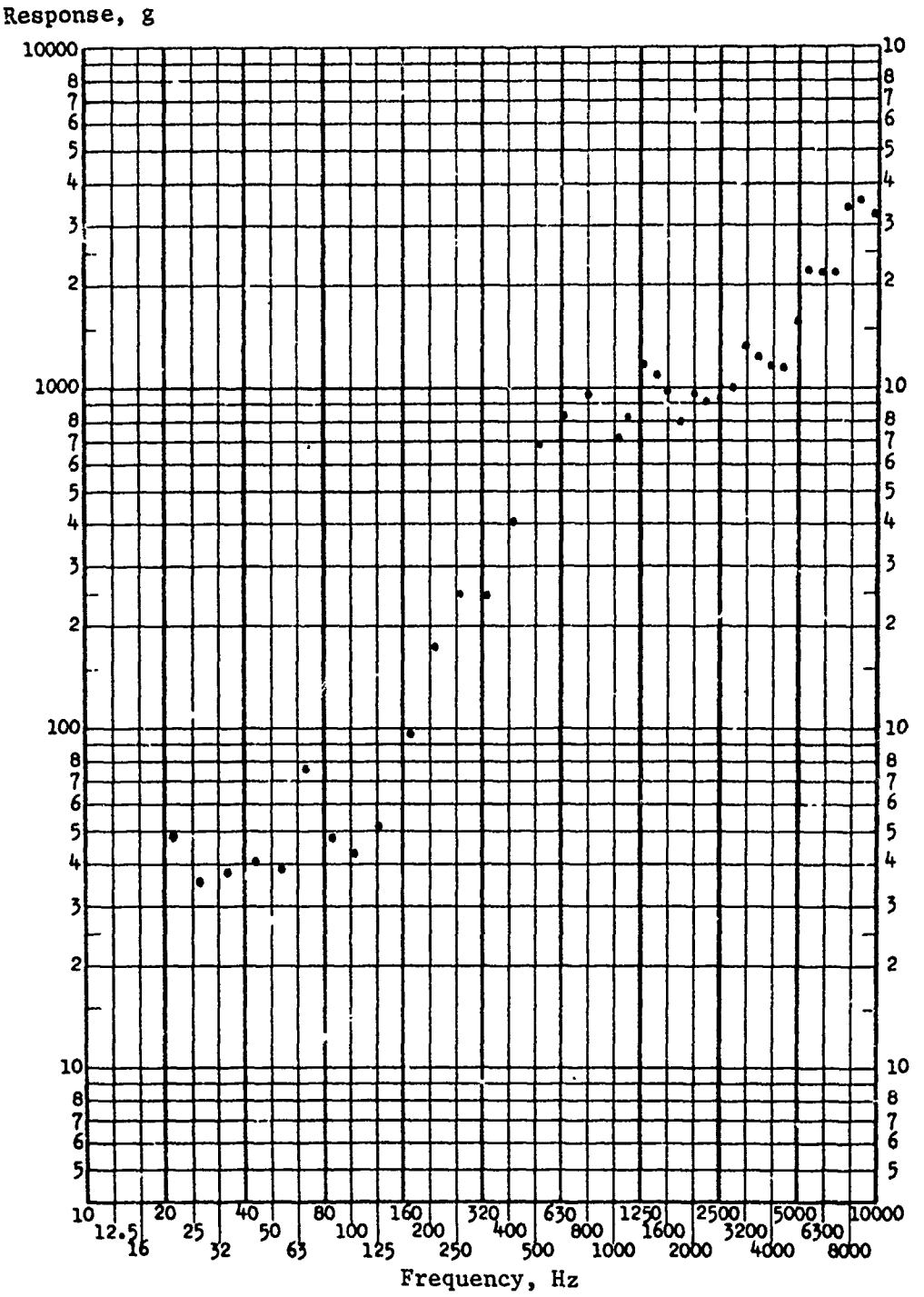
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 6 (cont)



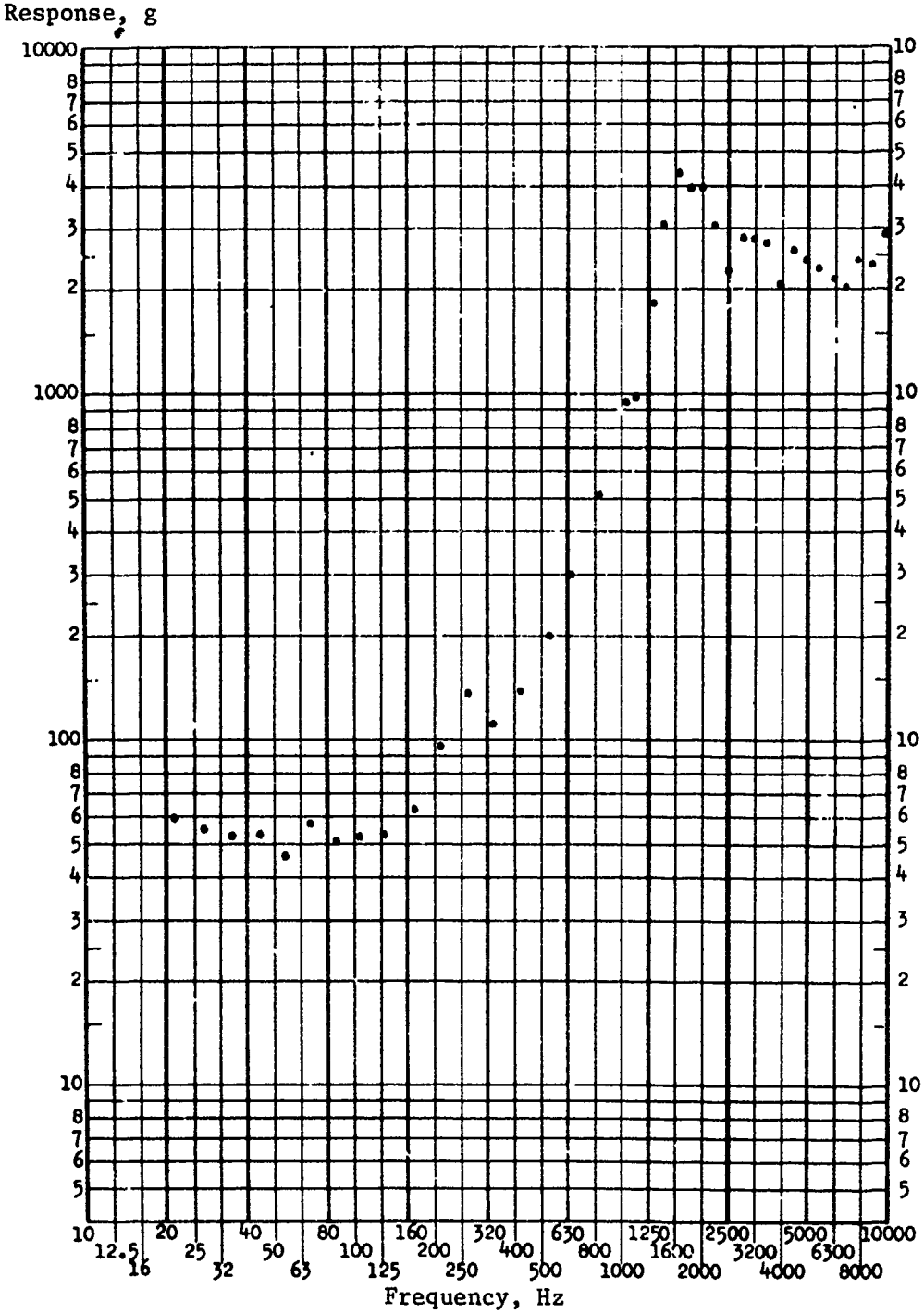
Bench Shock Test - Stage II/III Separation, Run 6
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 6 (concl)



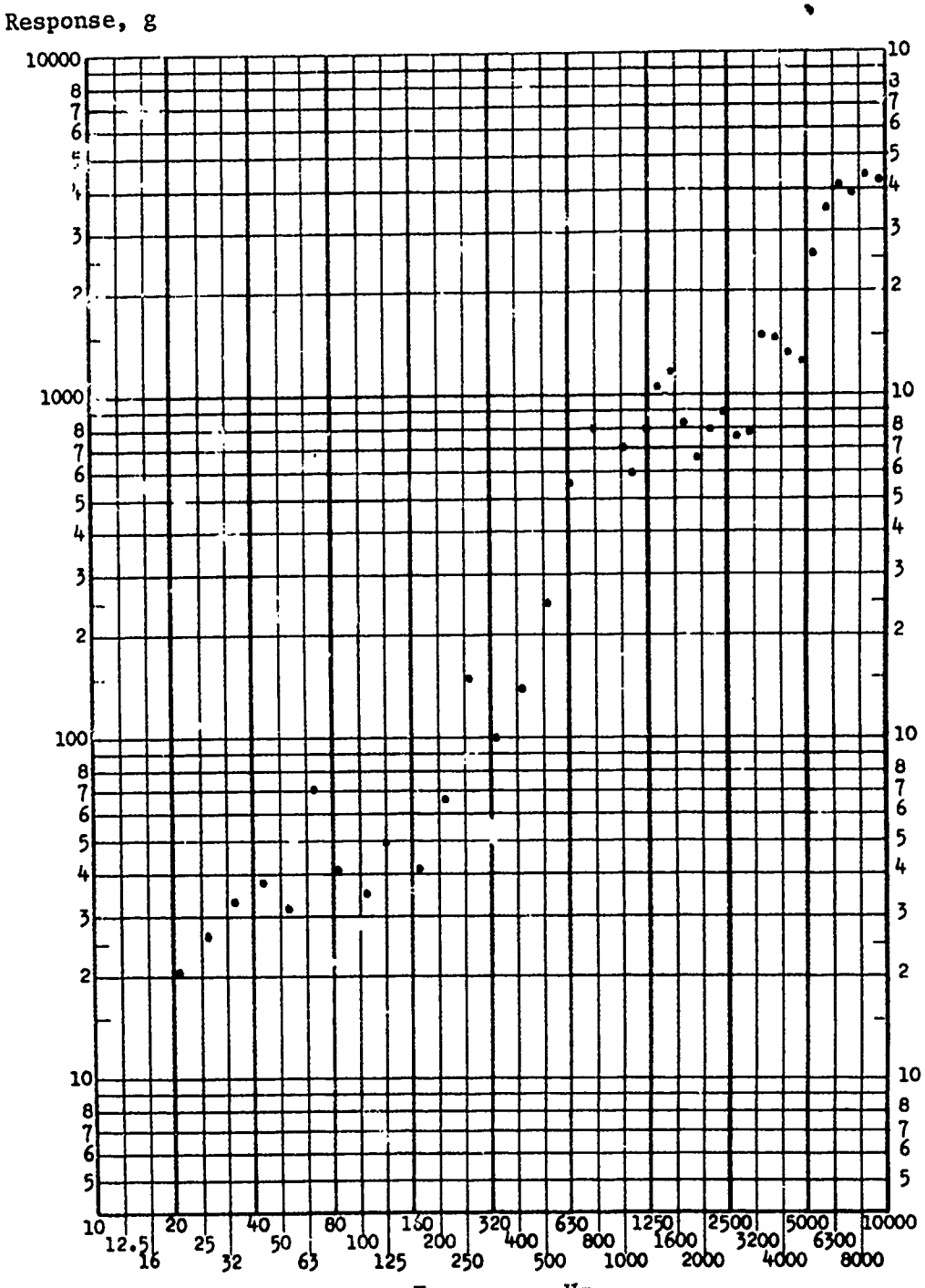
Bench Shock Test - Stage II/III Separation, Run 7
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 7 Run 7 Shock Response Spectrum



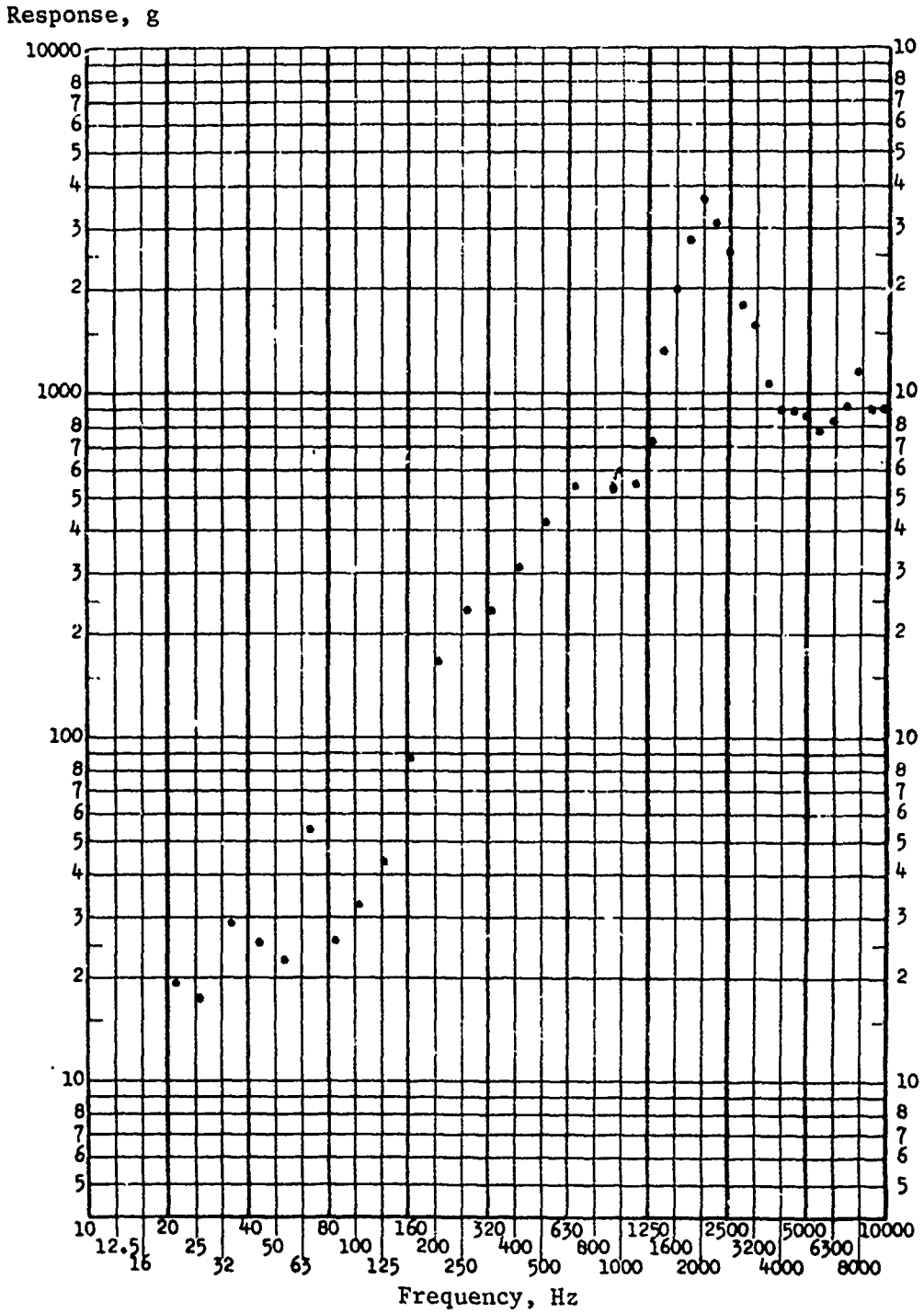
Bench Shock Test - Stage II/III Separation, Run 7
Measurement No. 2 - Tangential axis longeron near station 133

Figure 7 (cont)



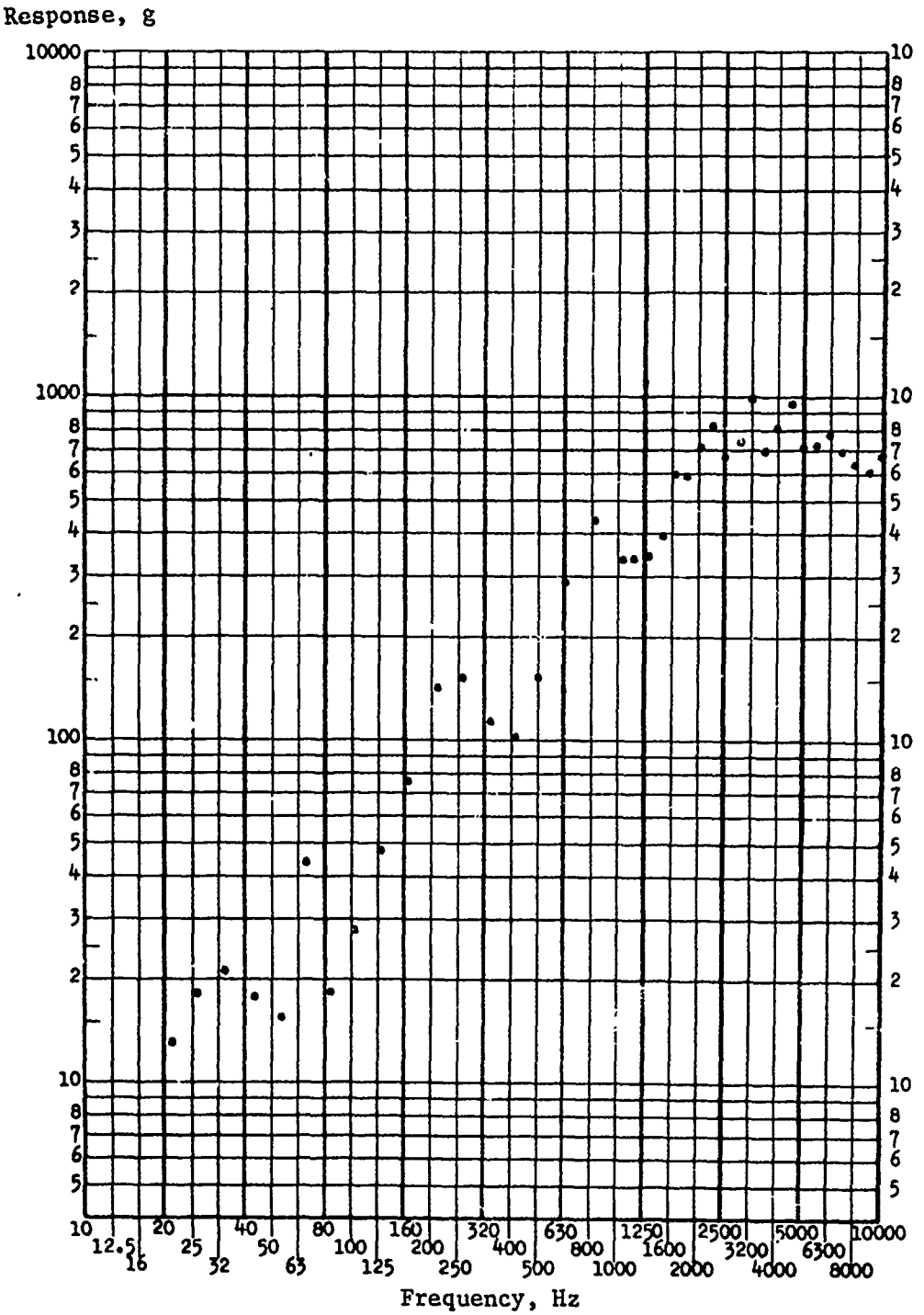
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 3 - Radial axis longeron near station 133

Figure 7 (cont)



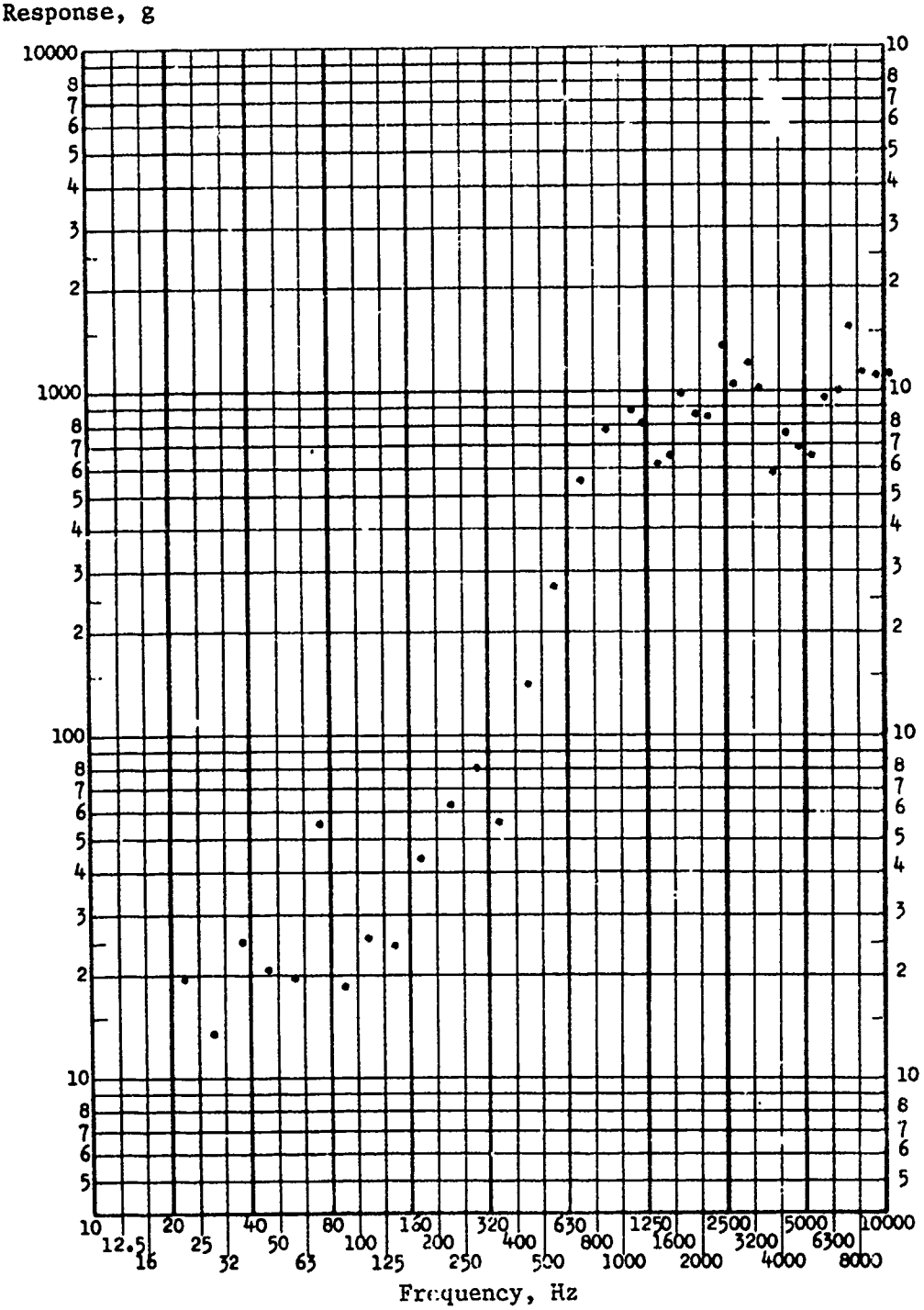
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 7 (cont)



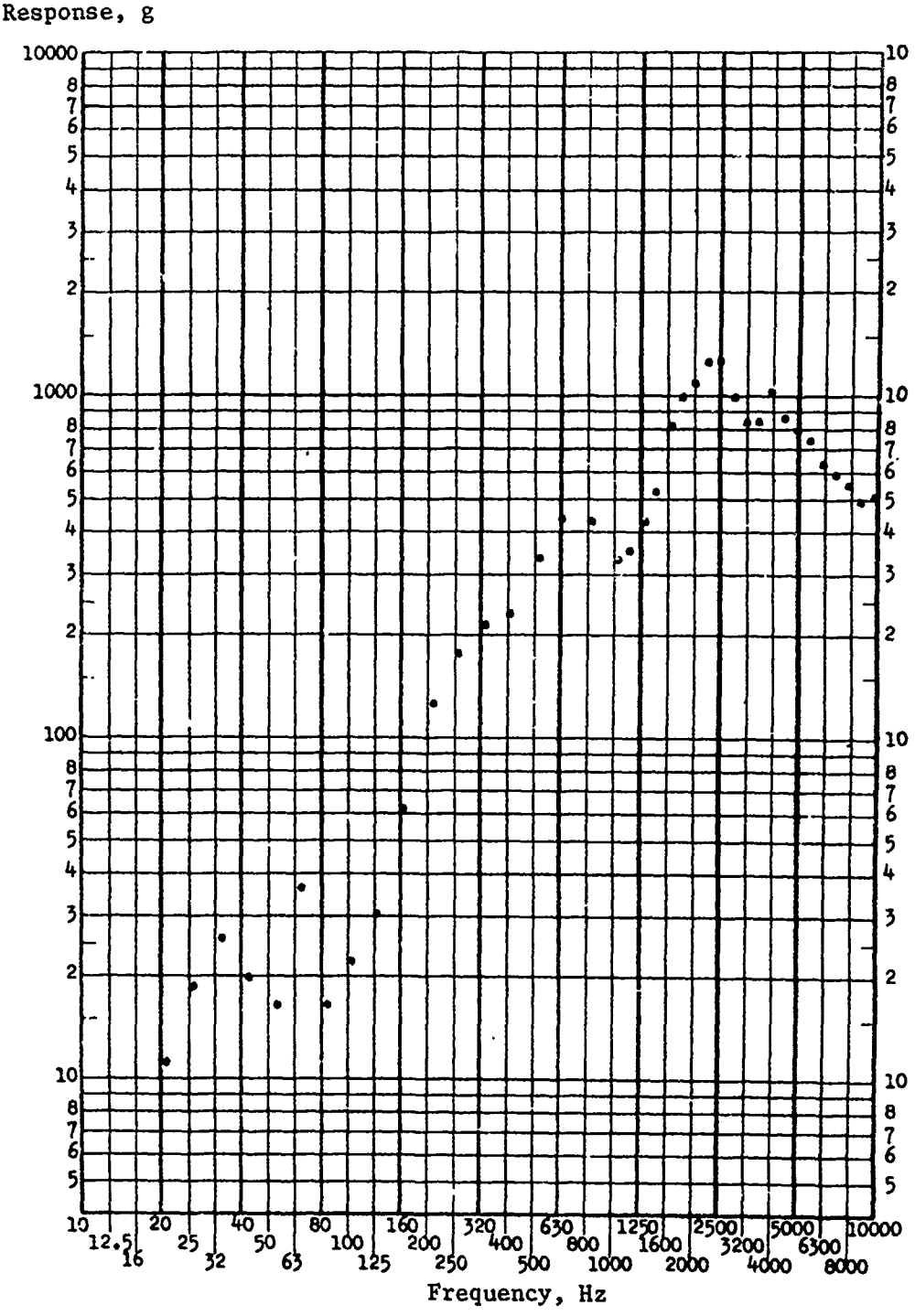
Bench Shock Test - Stage II/III Separation, Run 7
Measurement No. 5 - Tangential axis longeron near station 117

Figure 7 (cont)



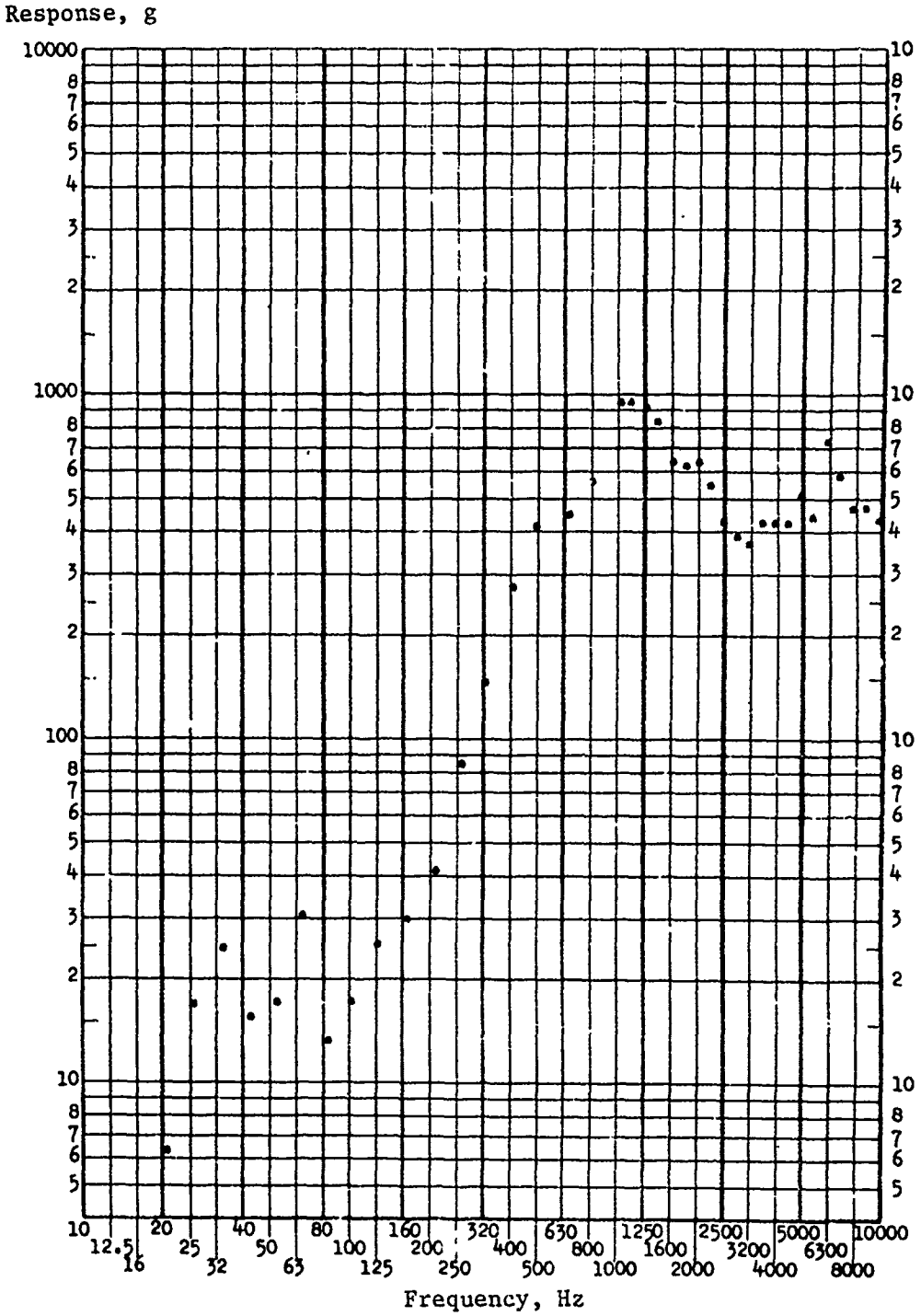
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 6 - Radial axis longeron near station 117

Figure 7 (cont)



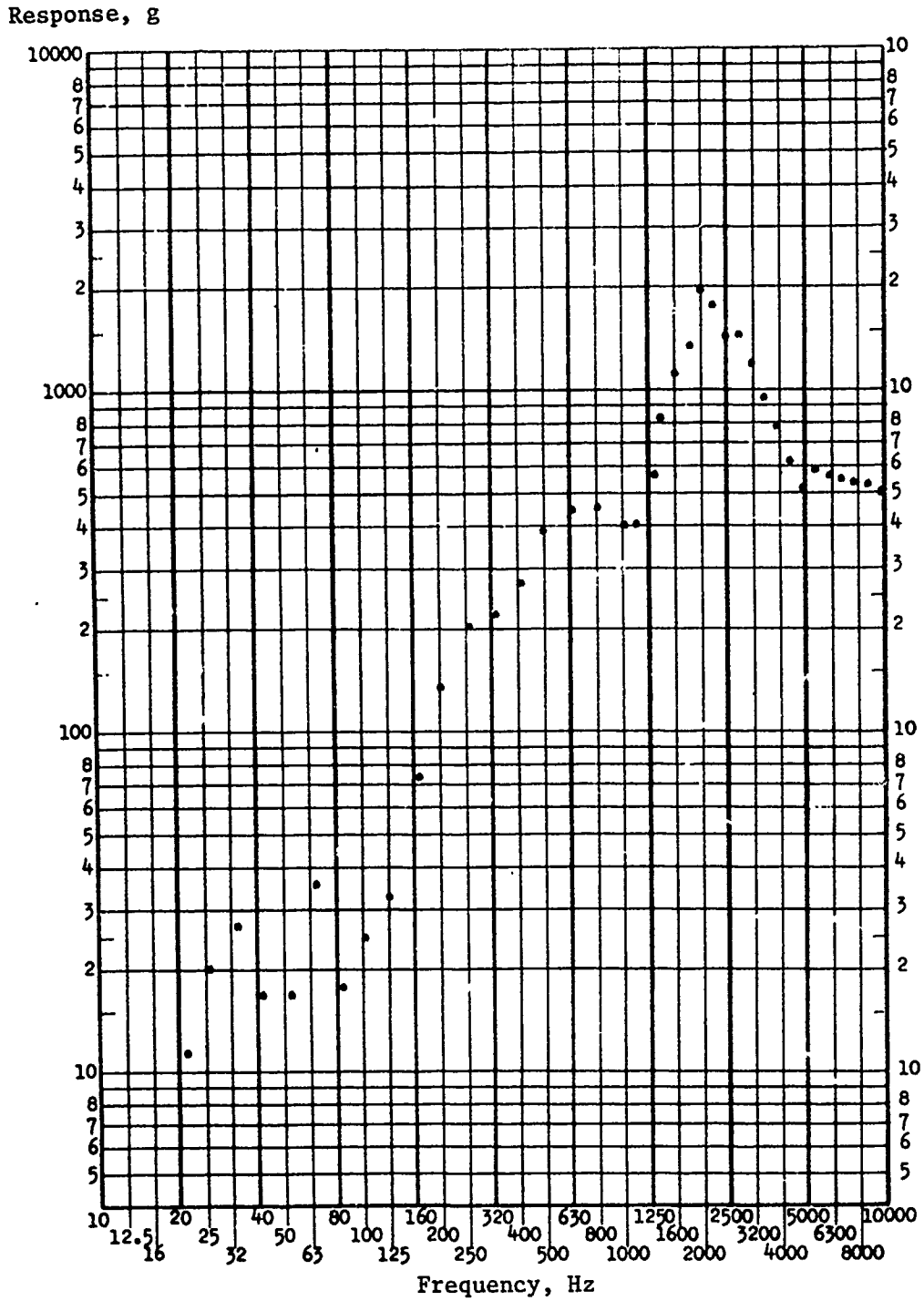
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 7 (cont)



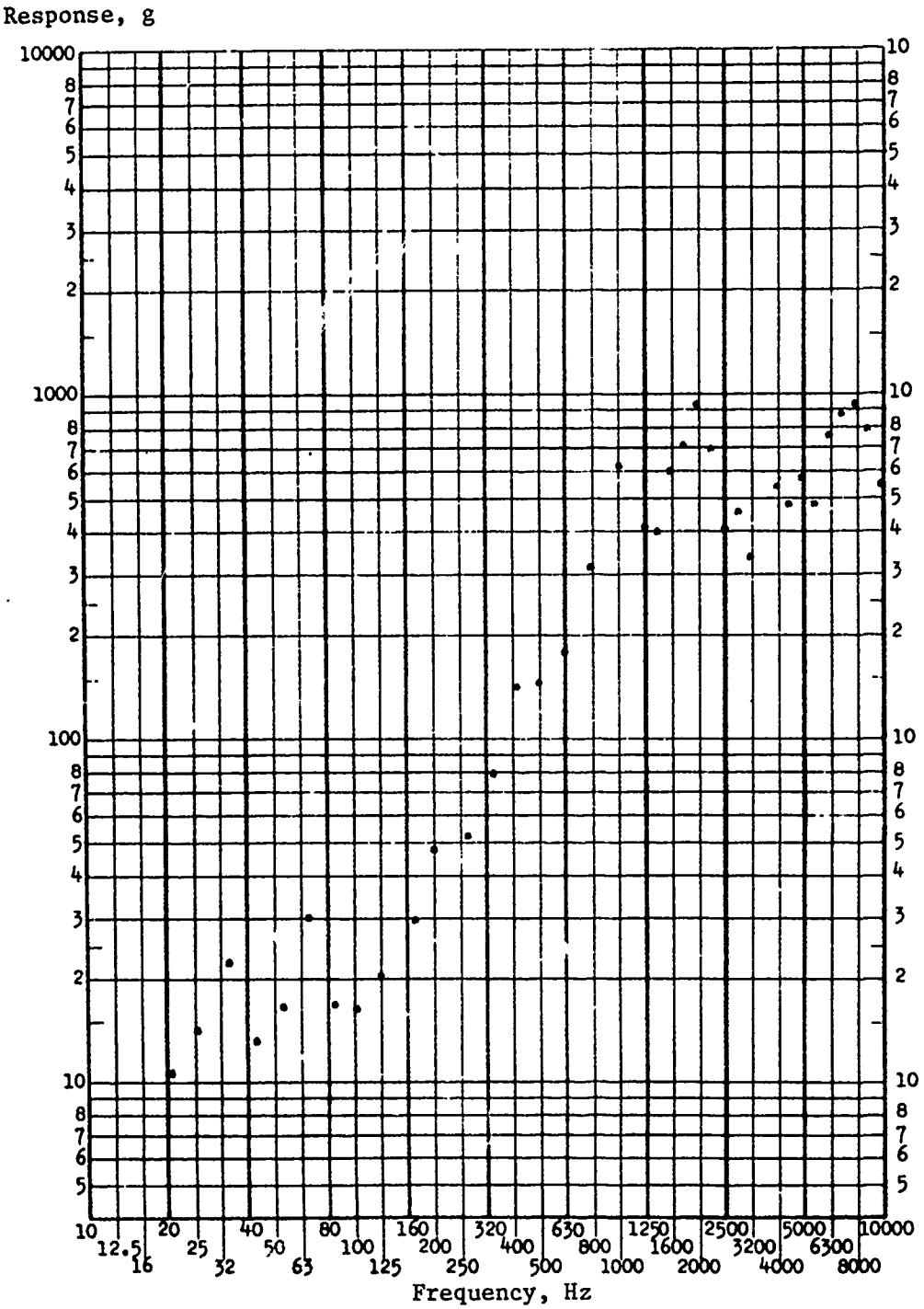
Bench Shock Test - Stage II/III Separation, Run 7__
Measurement No. 8 - Tangential axis longeron near station 77

Figure 7 (cont)



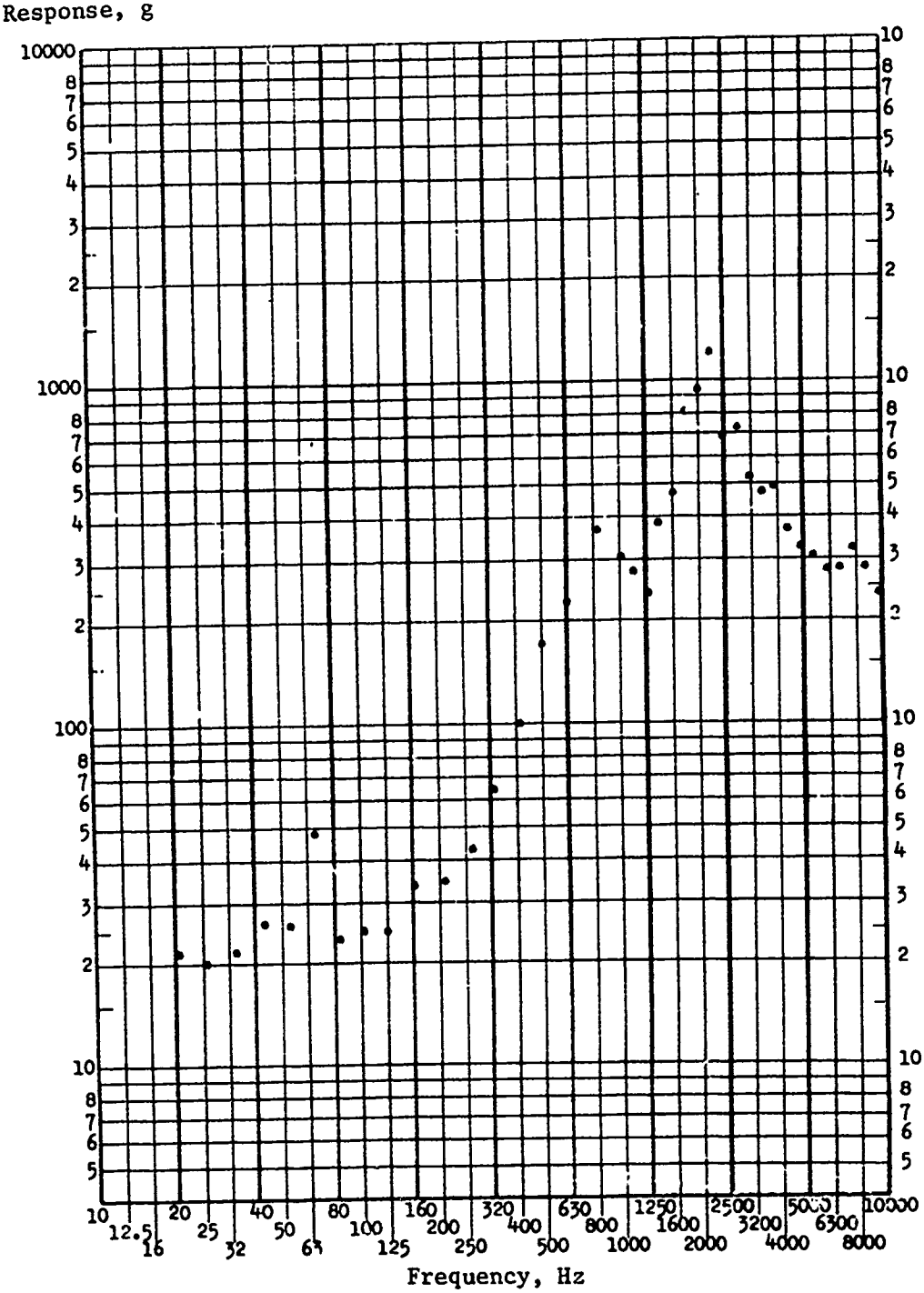
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 9 - Radial axis longeron near station 77

Figure 7 (cont)



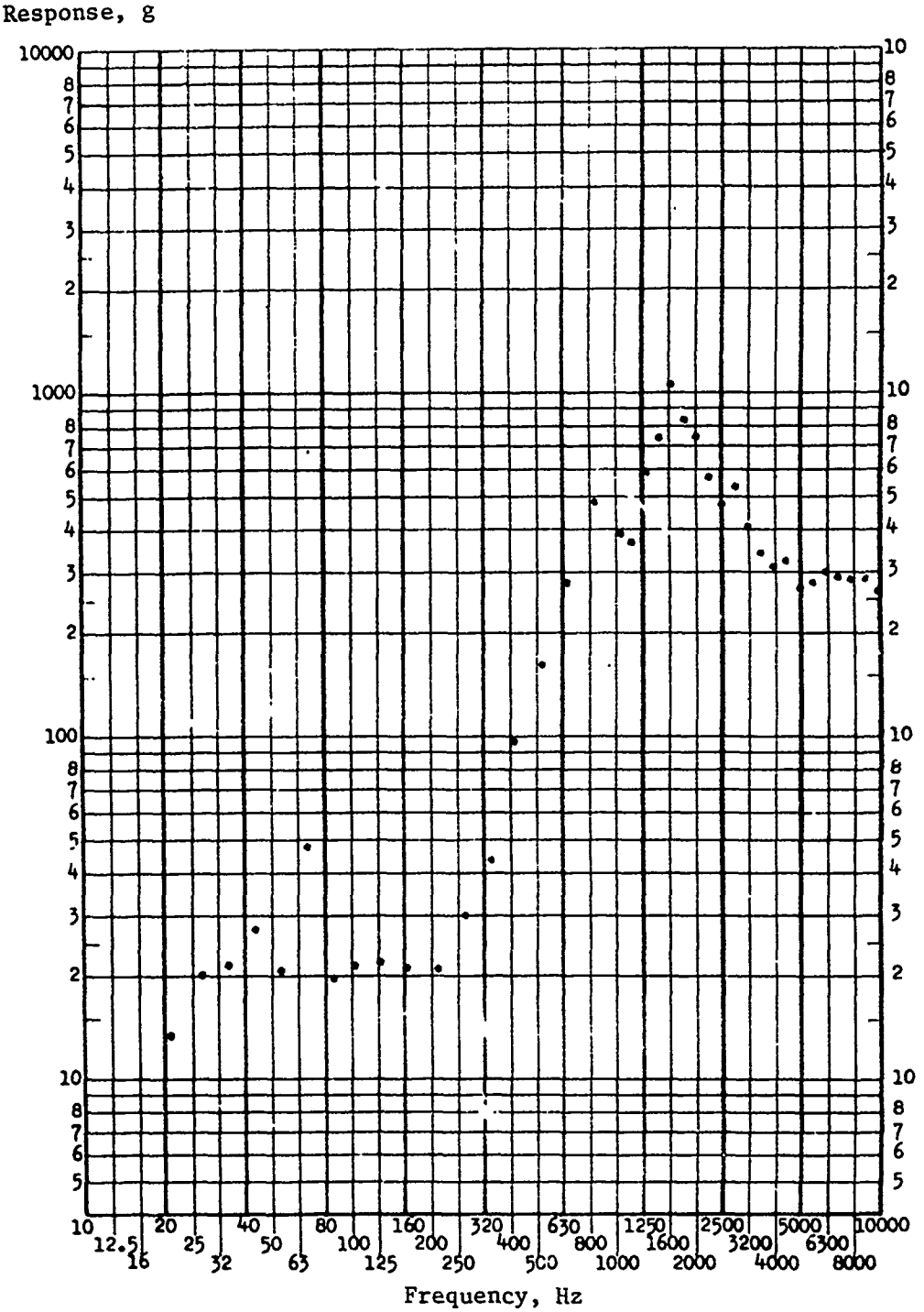
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 7 (cont)



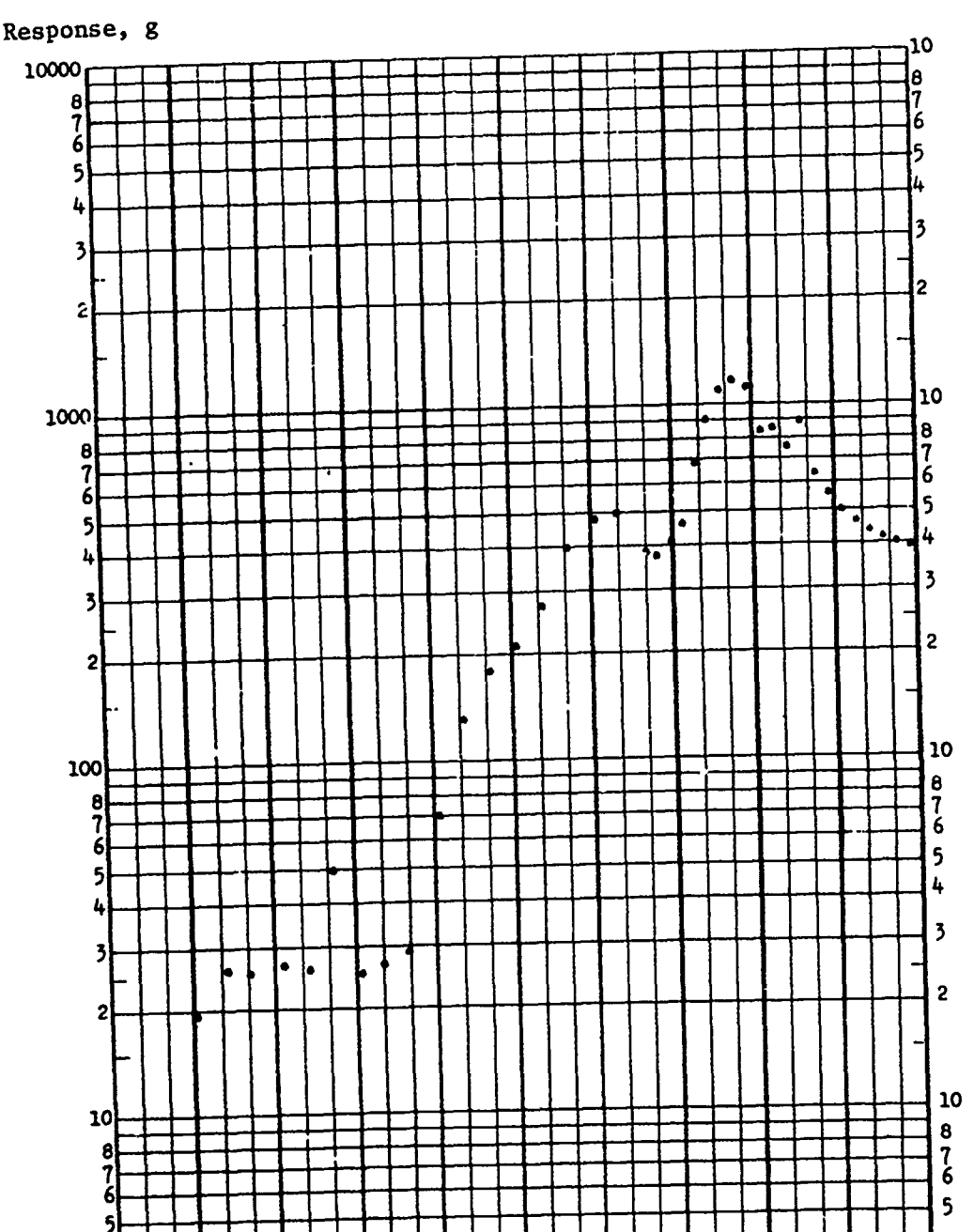
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 7 (cont)



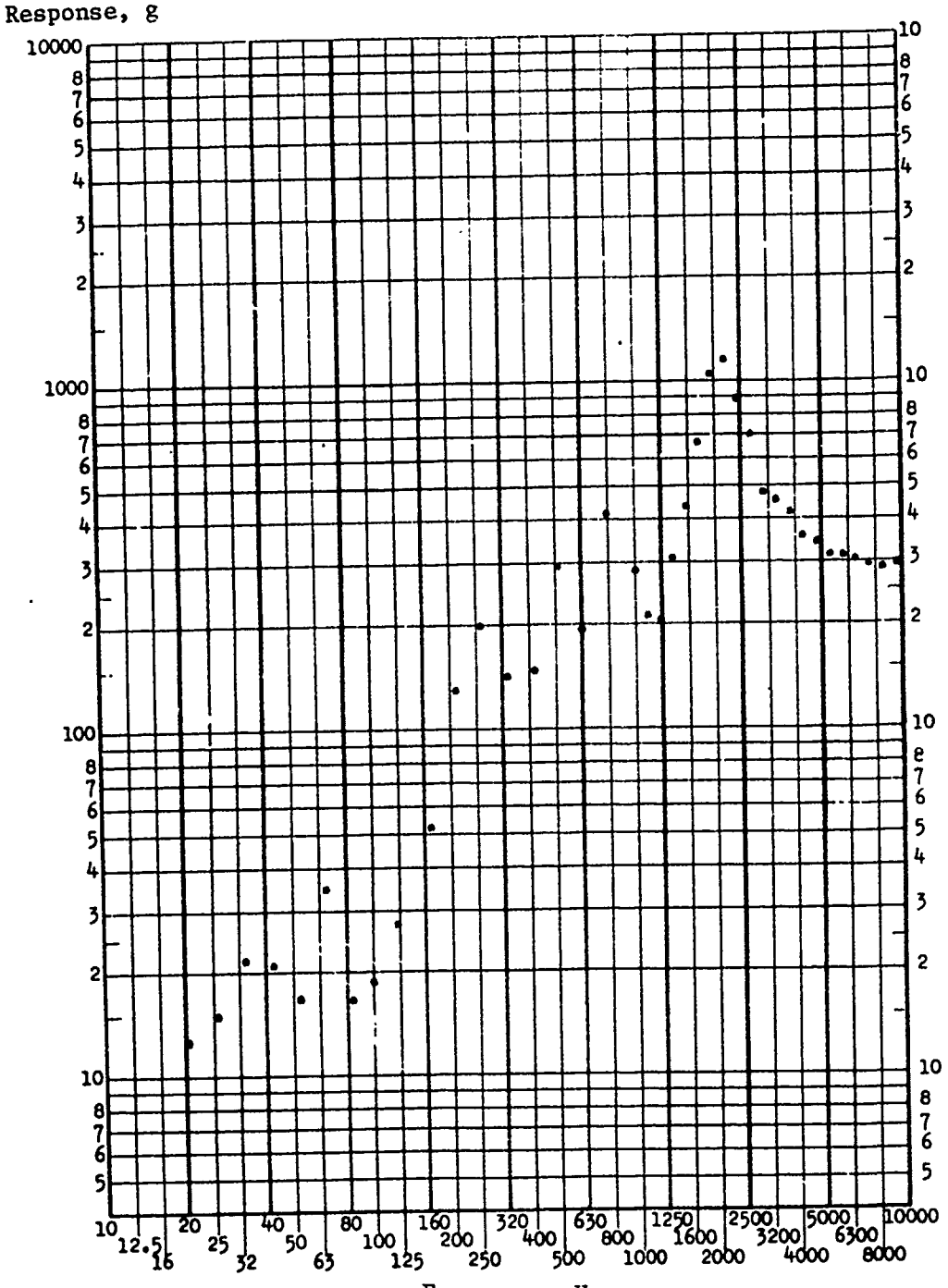
Bench Shock Test - Stage II/III Separation, Run 7
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 7 (cont)



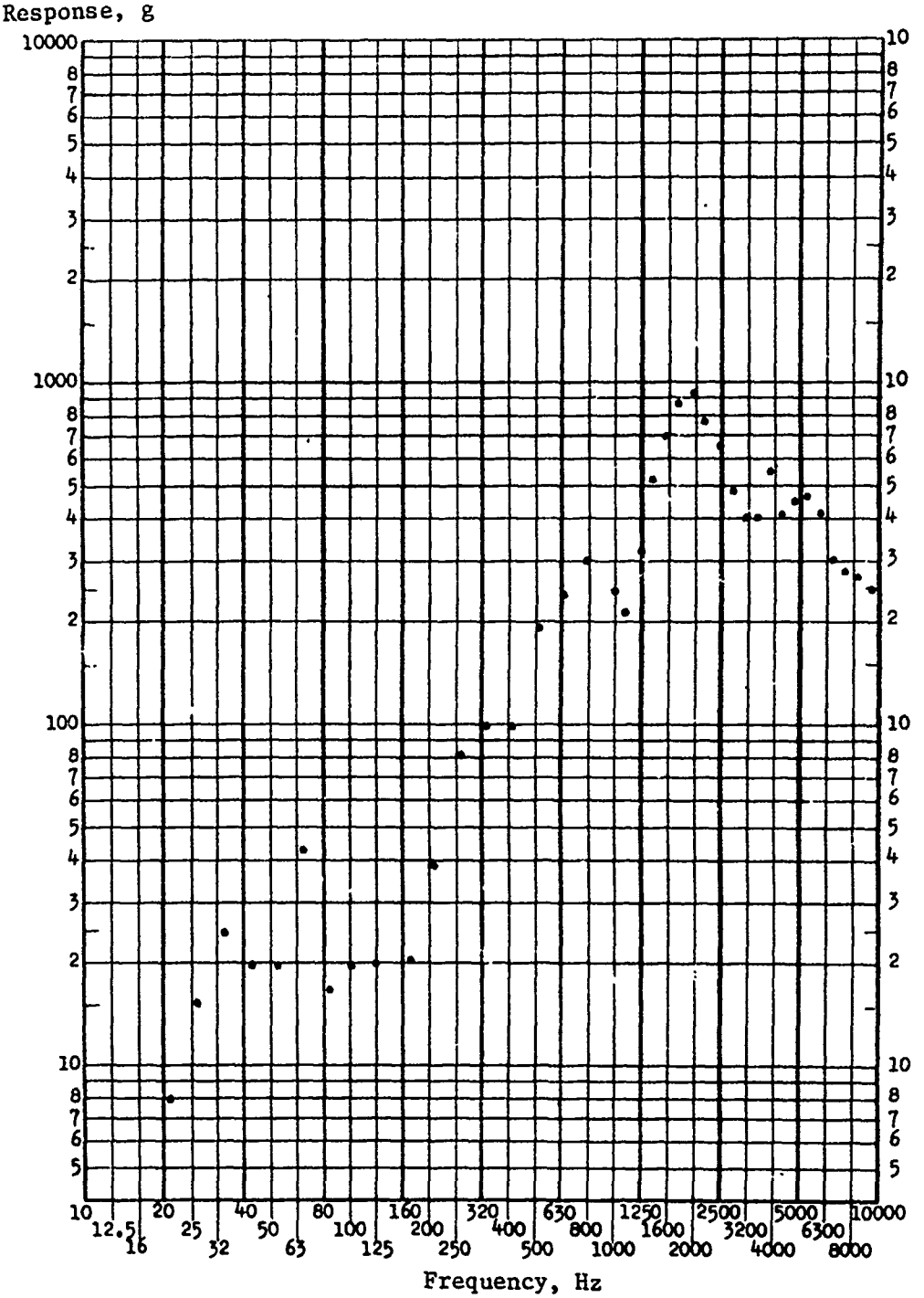
Bench Shock Test - Stage II/III Separation, Run 7___
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 7 (cont)



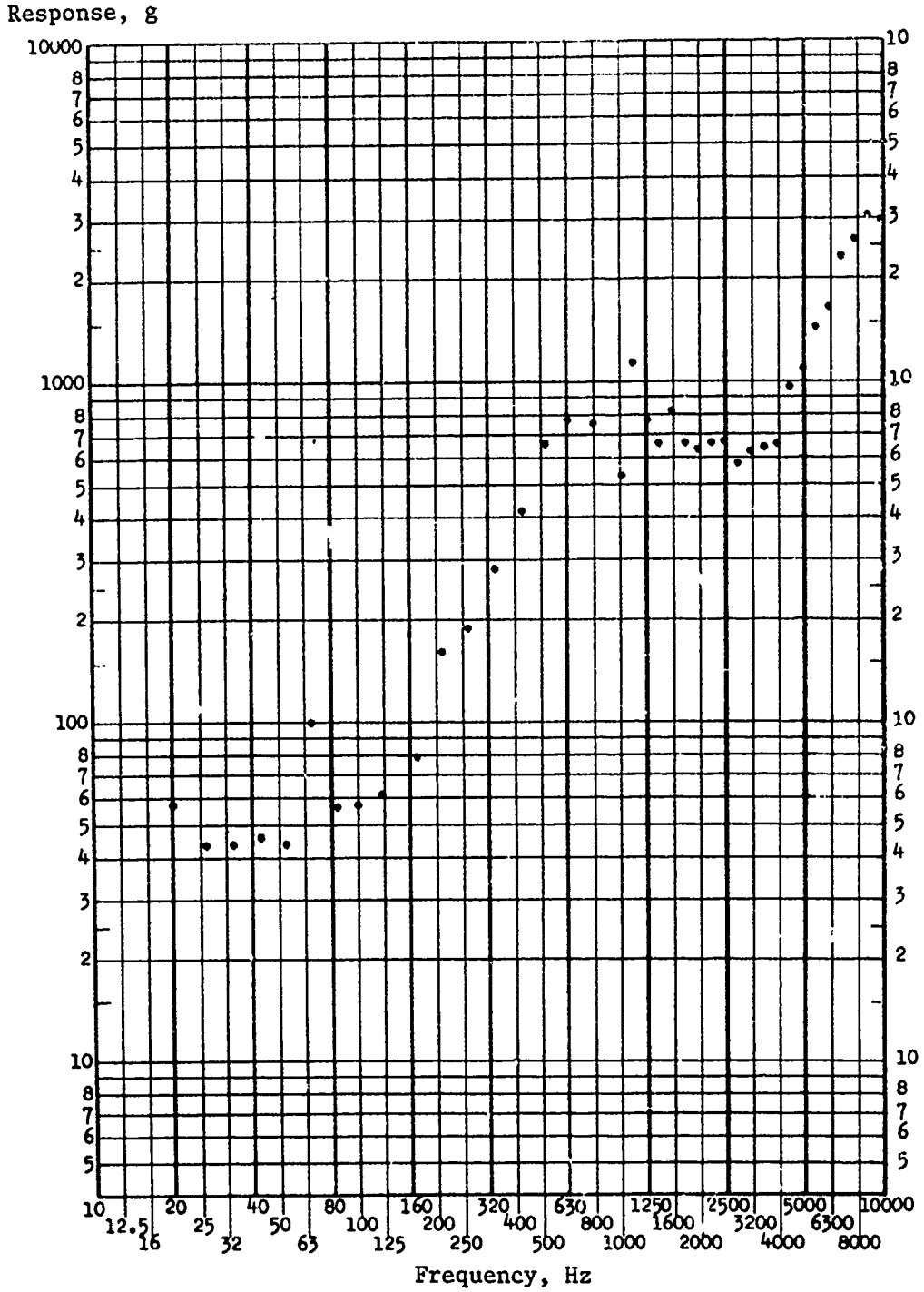
Bench Shock Test - Stage II/III Separation, Run 7
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 7 (cont)



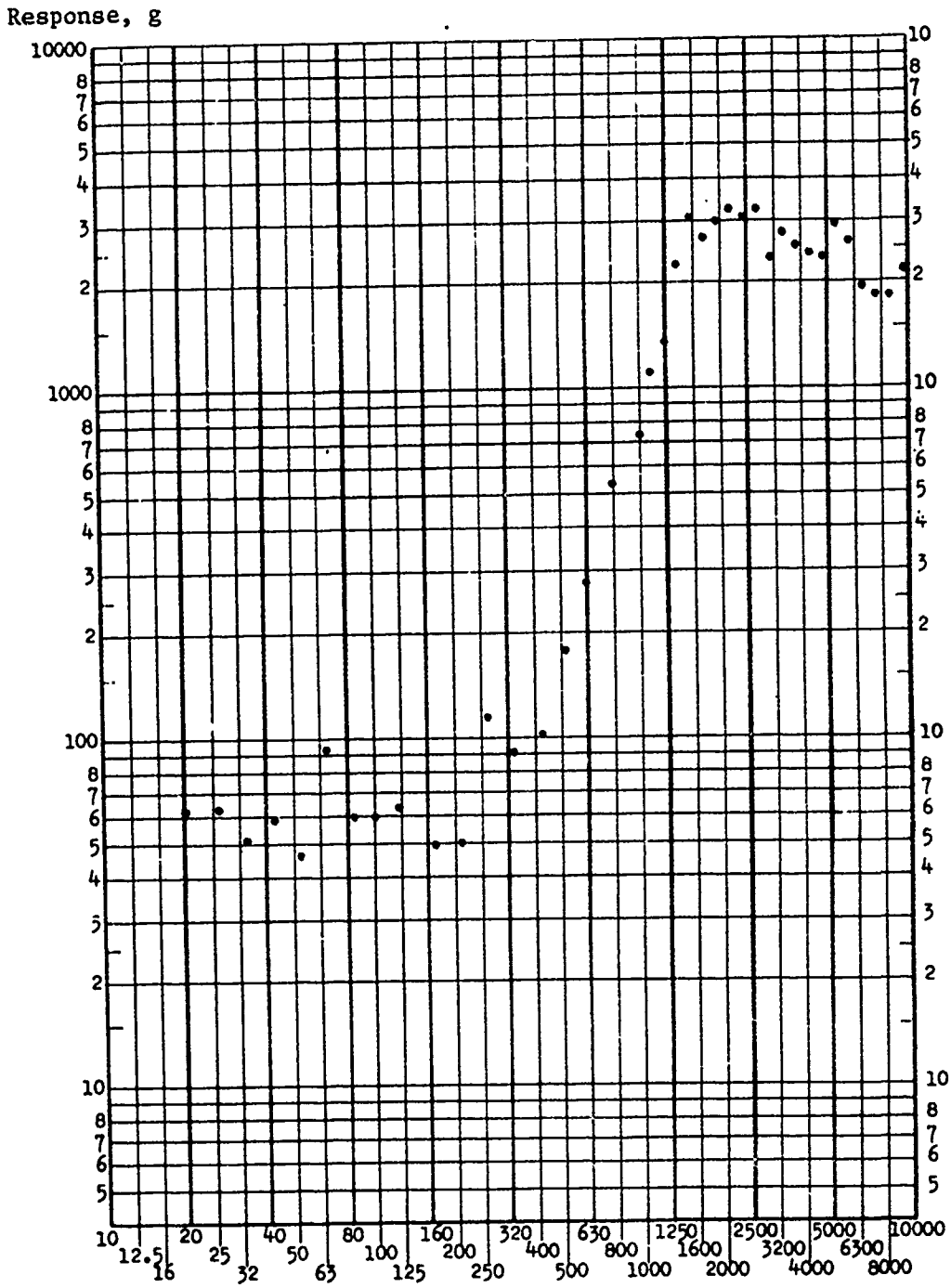
Bench Shock Test - Stage II/III Separation, Run 7
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 7 (concl)



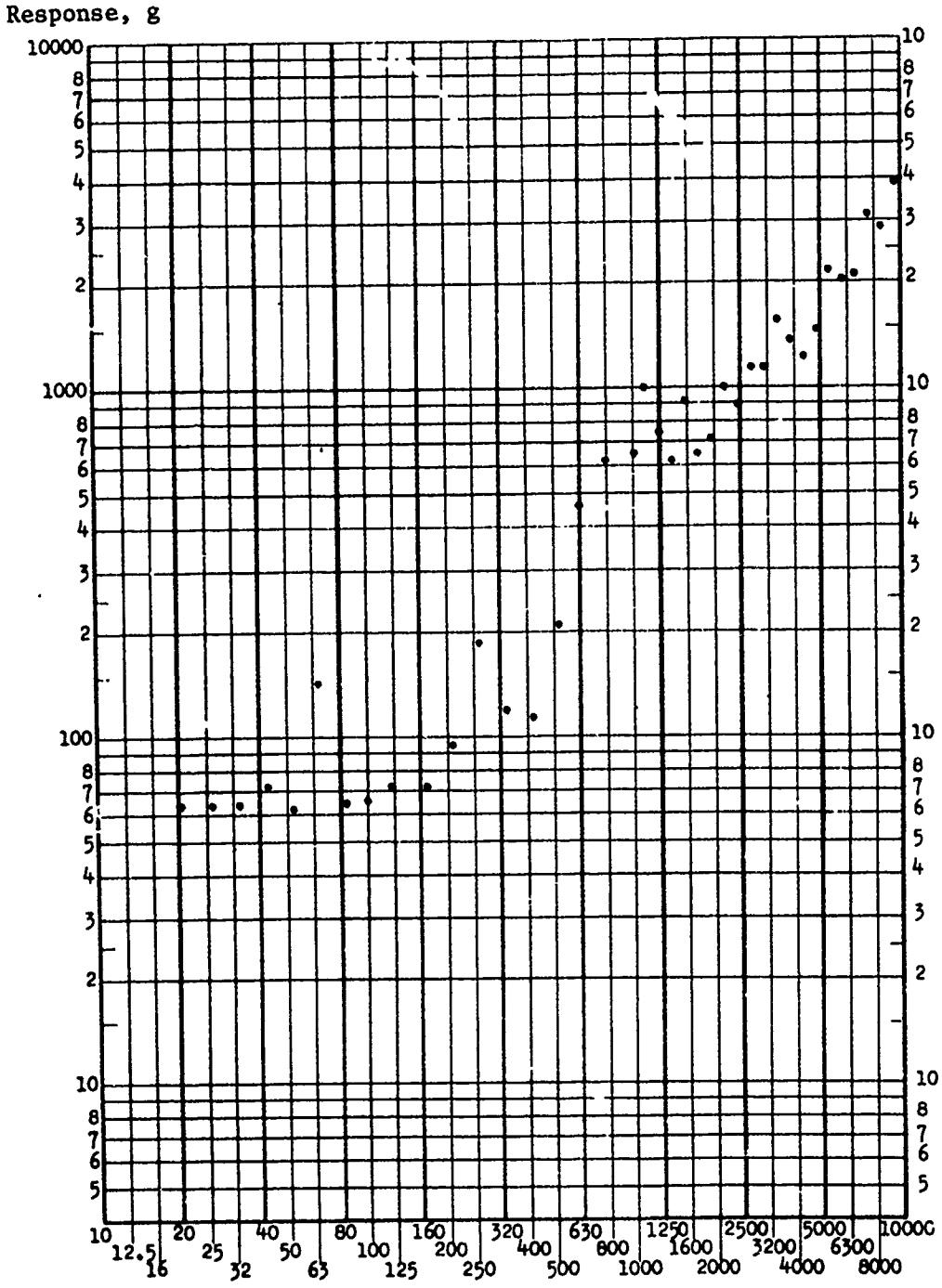
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 8 Run 8 Shock Response Spectrum



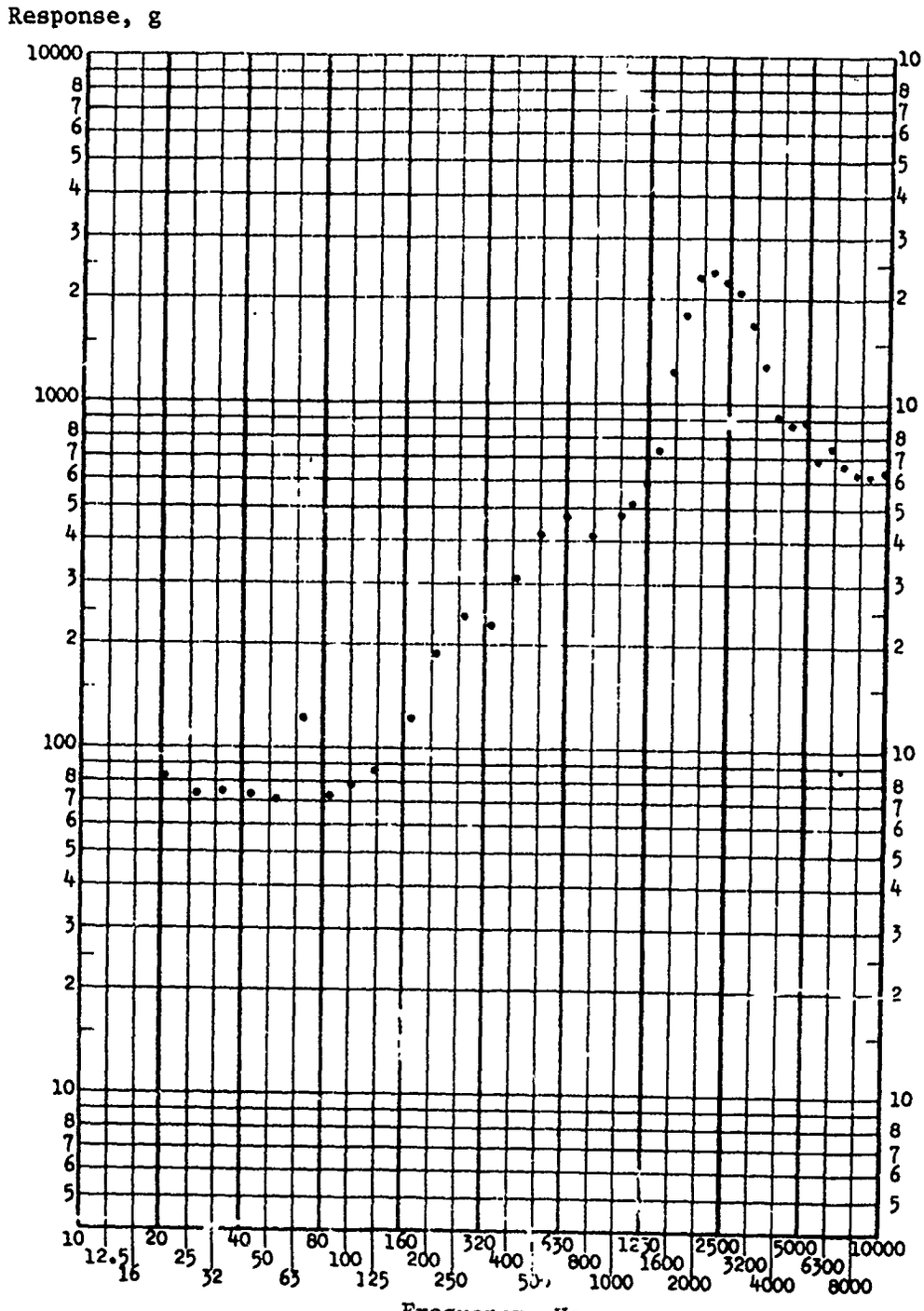
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 2 - Tangential axis longeron near station 133

Figure 8 (cont)



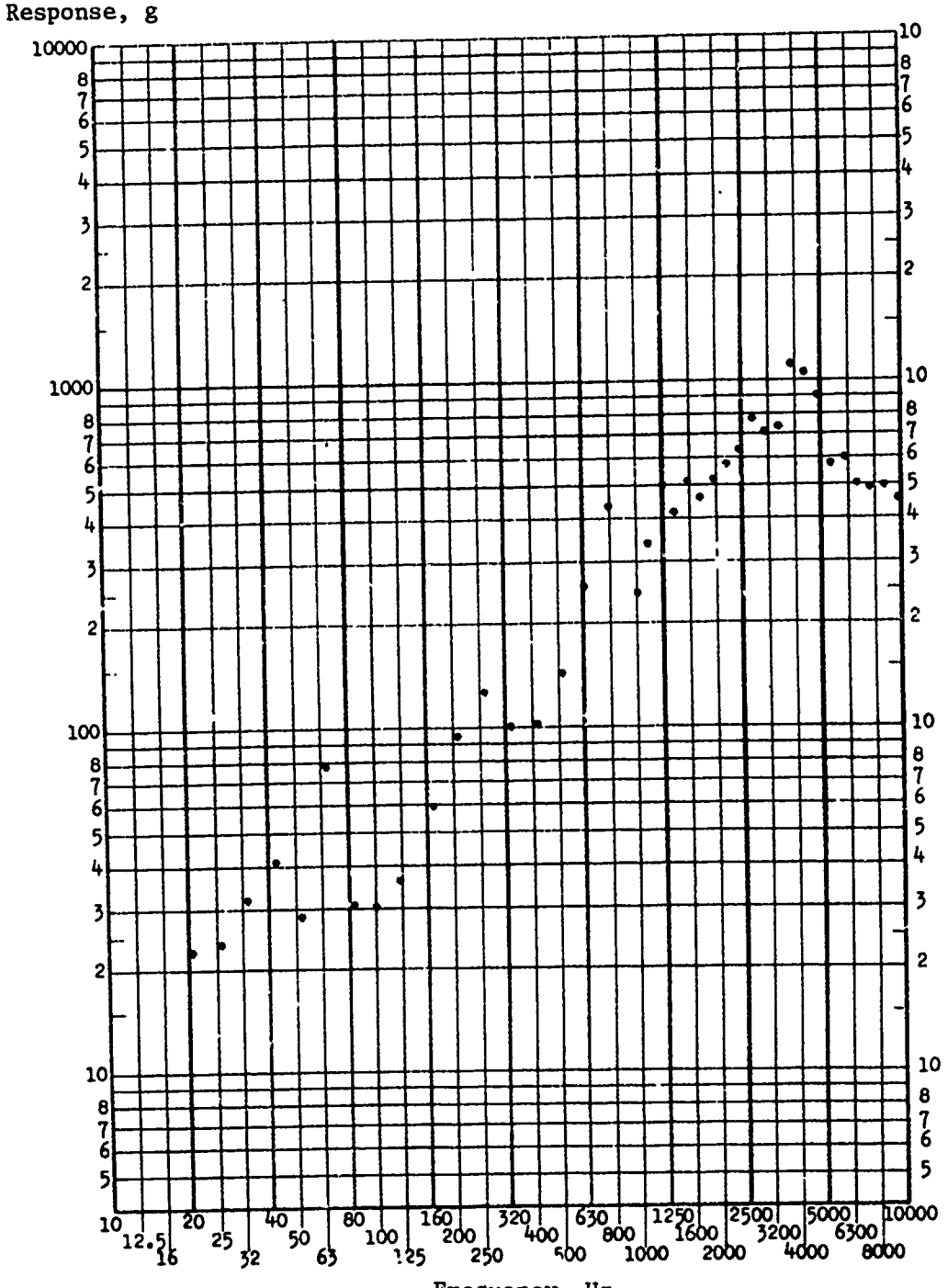
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 3 - Radial axis longeron near station 133

Figure 8 (cont)



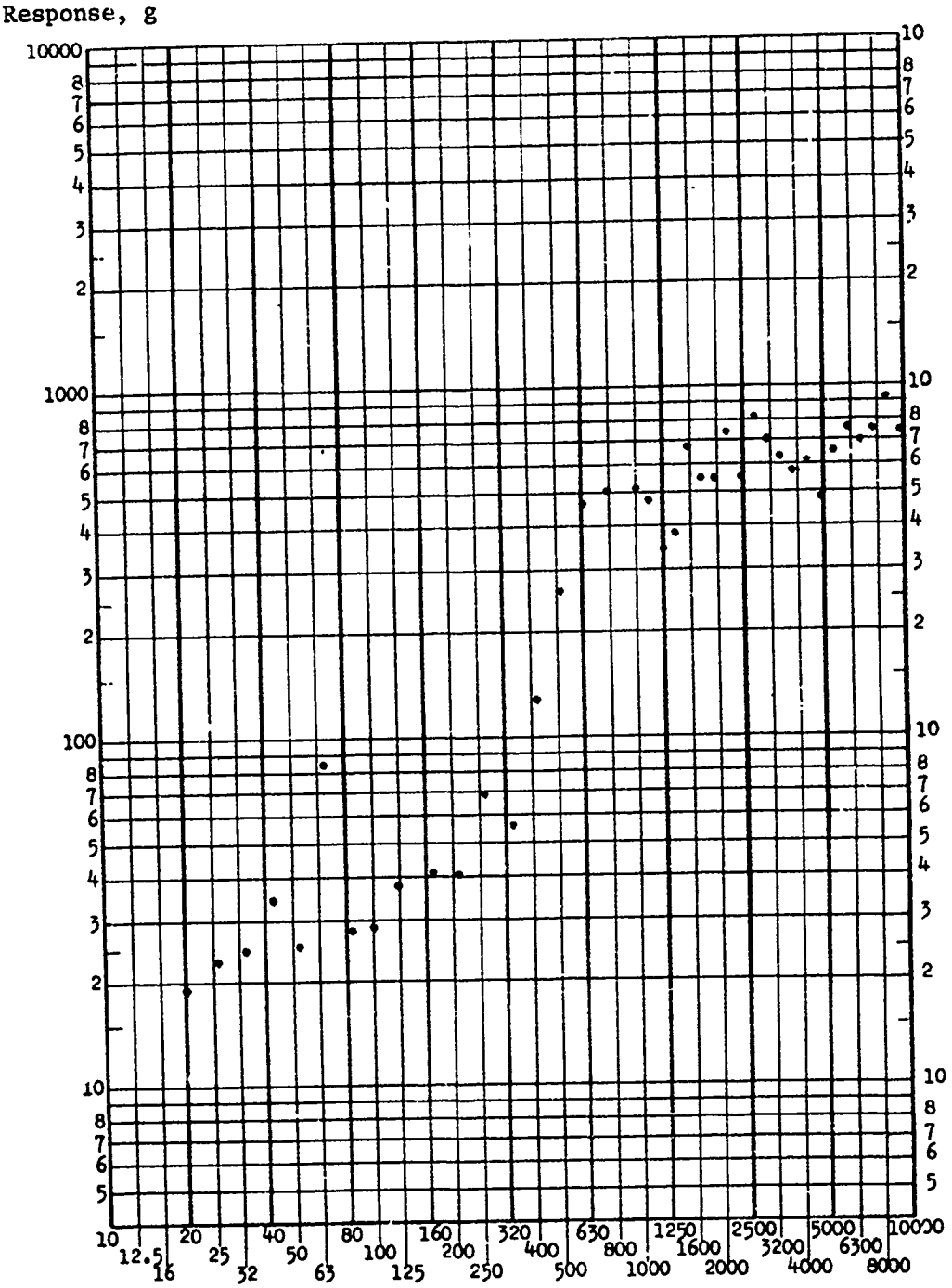
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 8 (cont)



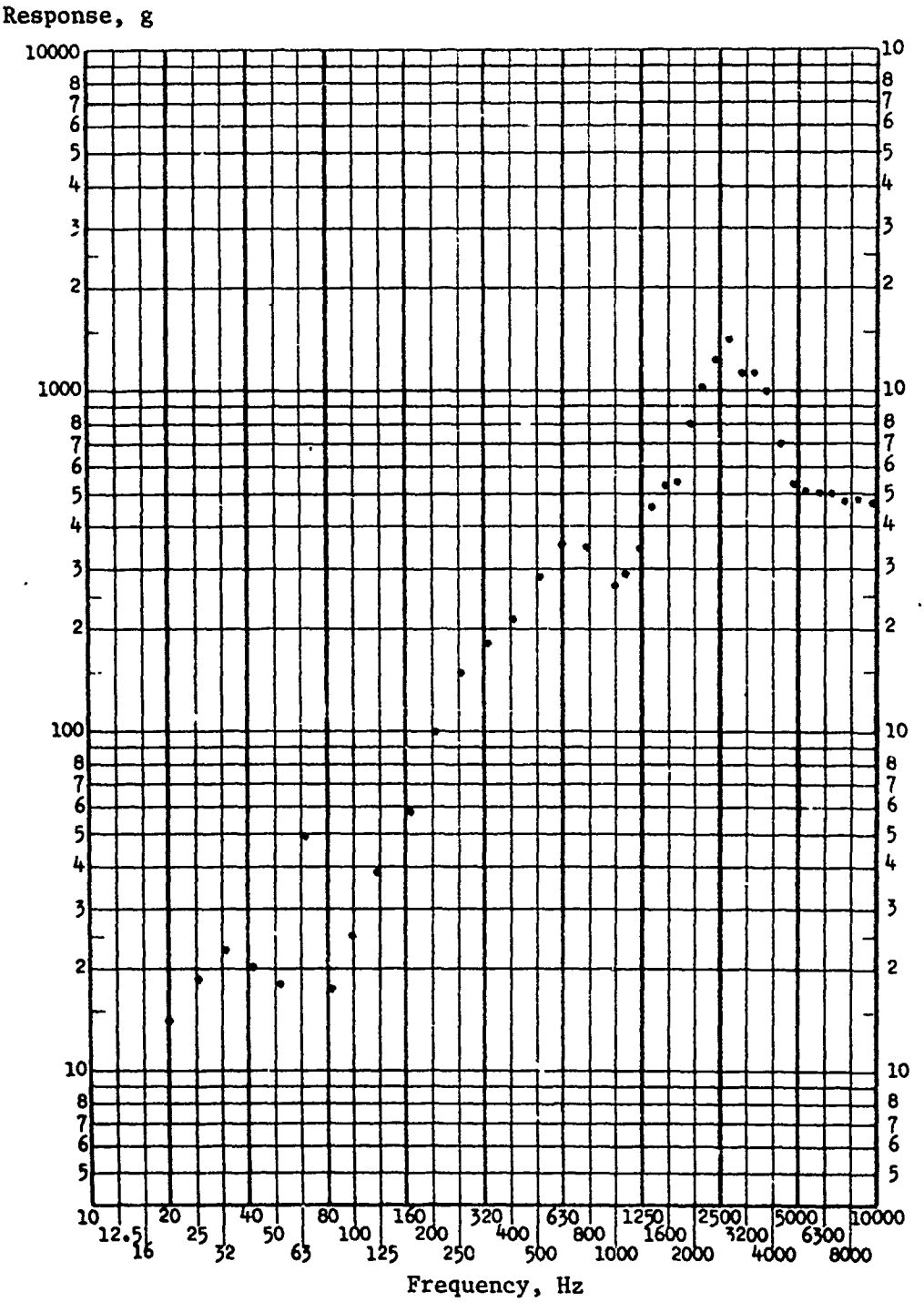
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 5 - Tangential axis longeron near station 117

Figure 8 (cont)



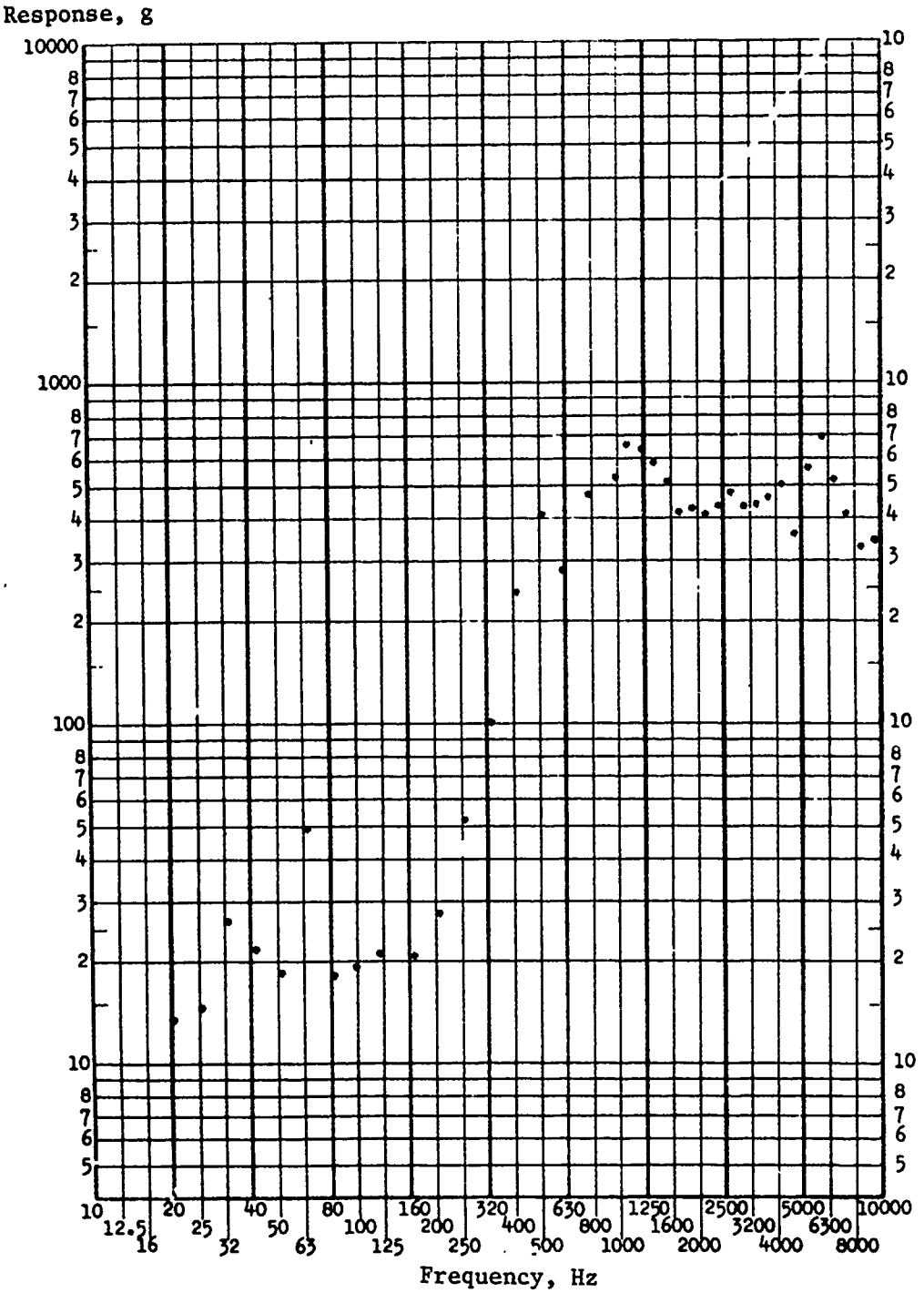
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 6 - Radial axis longeron near station 117

Figure 8 (cont)



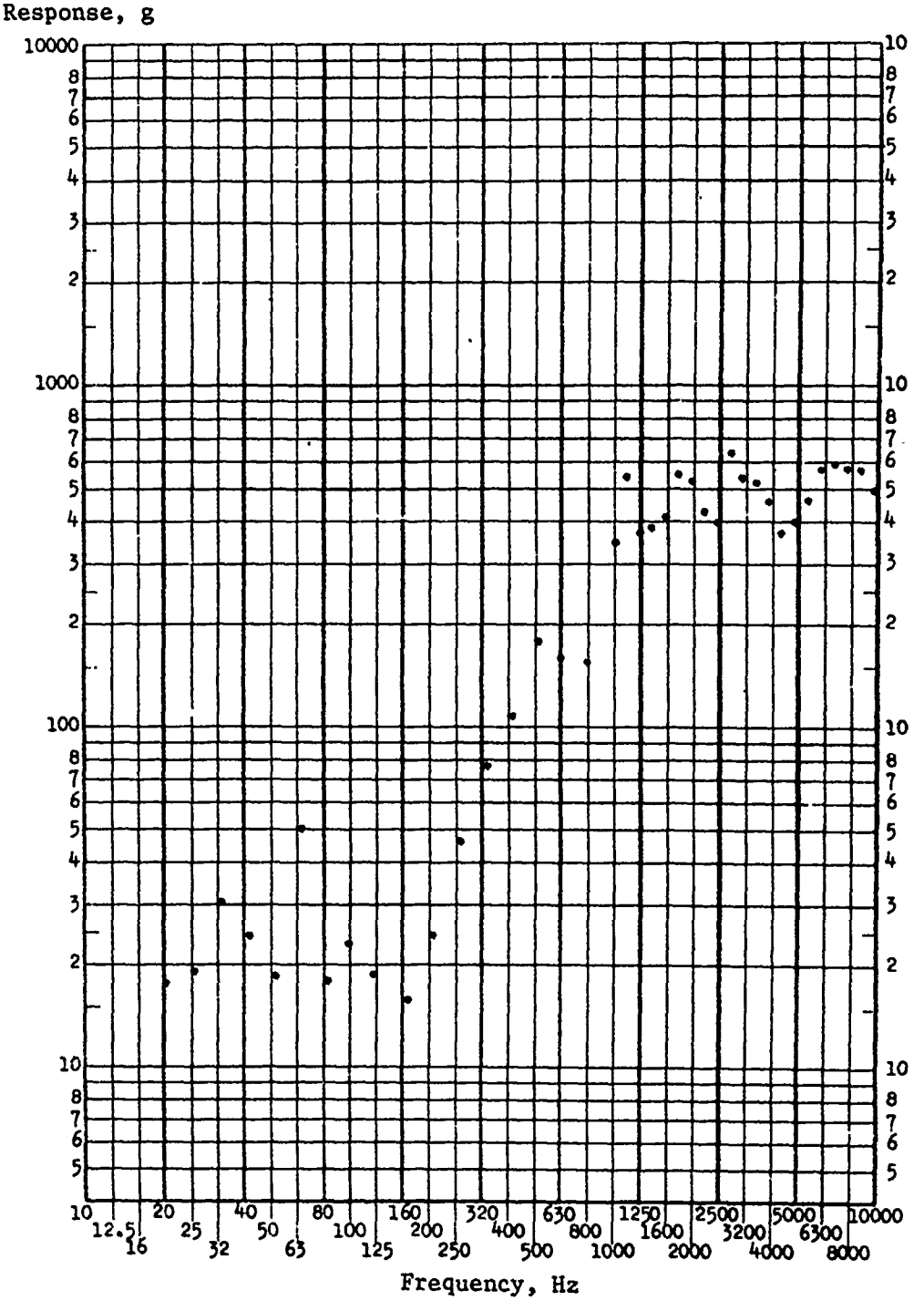
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 8 (cont)



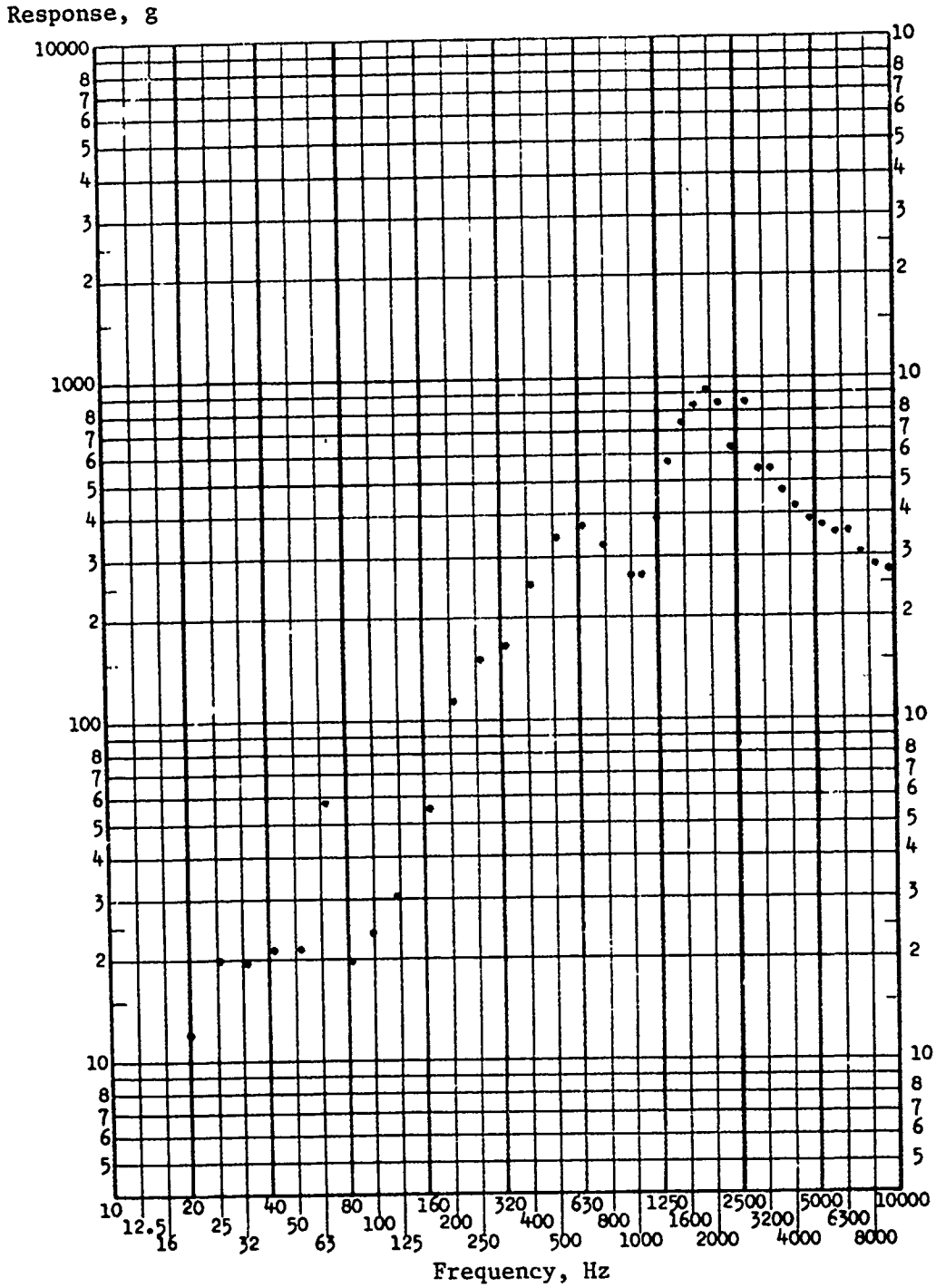
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 8 - Tangential axis longeron near station 77

Figure 8 (cont)



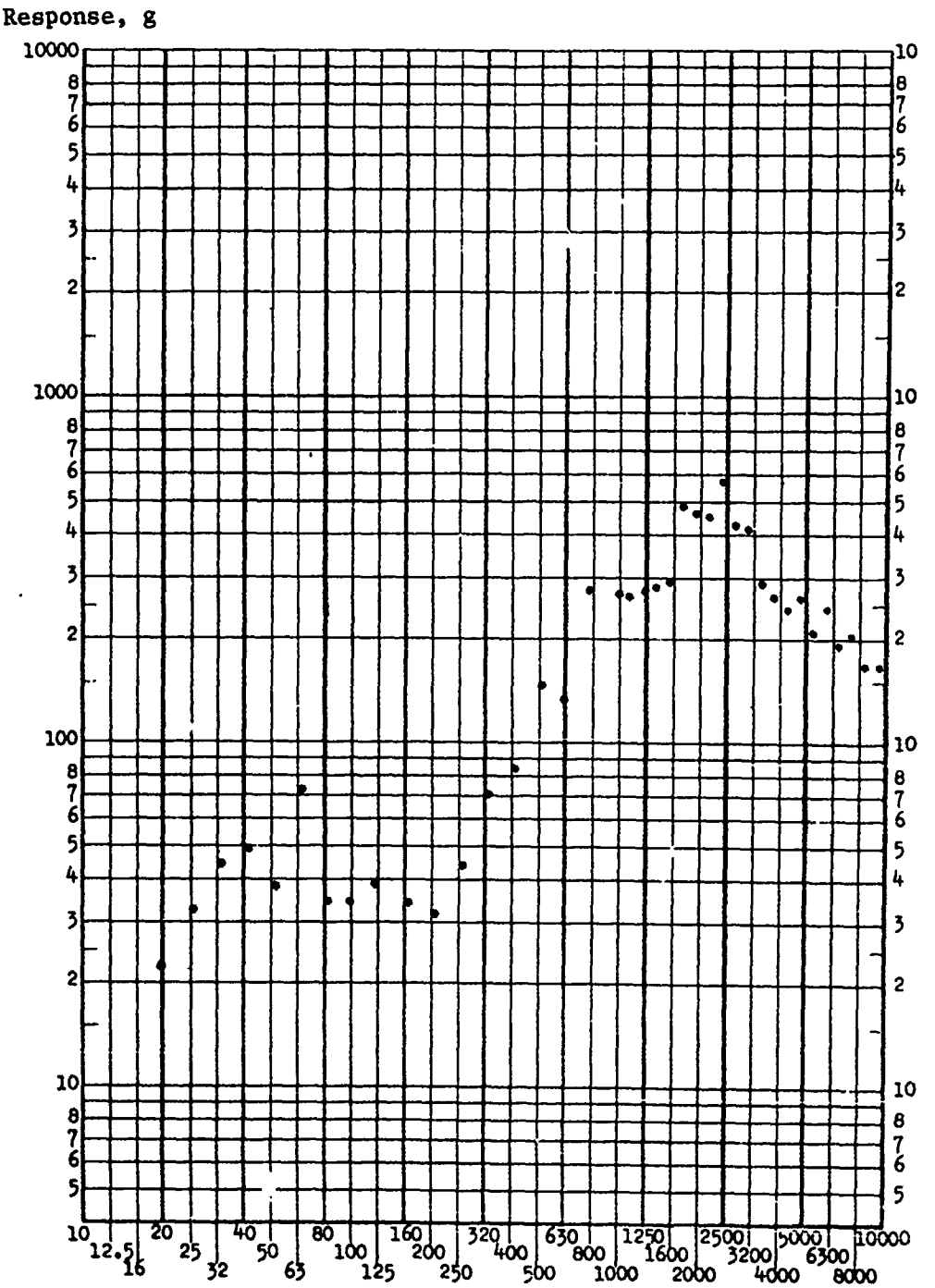
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 9 - Radial axis longeron near station 77

Figure 8 (cont)



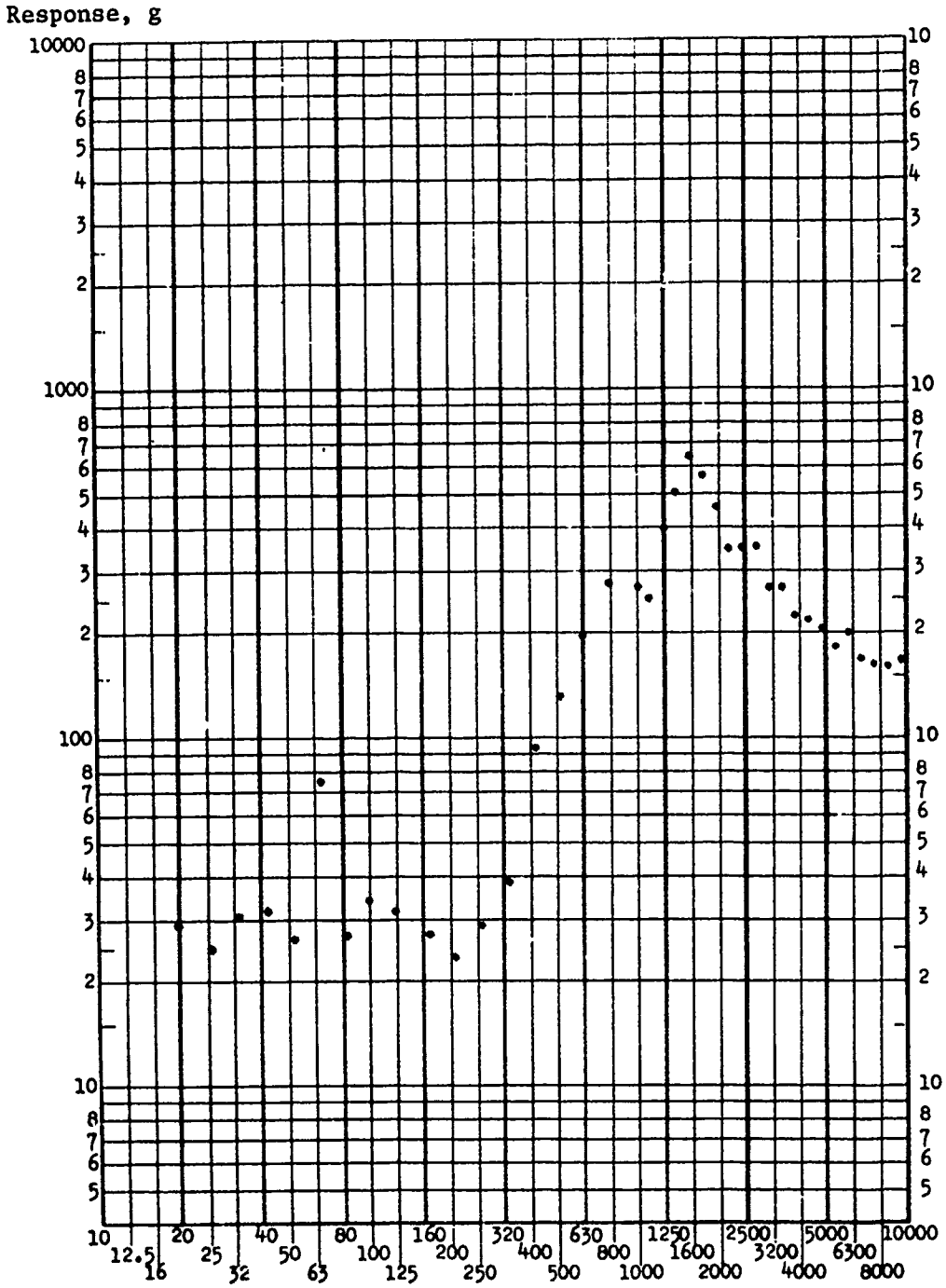
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 8 (cont)



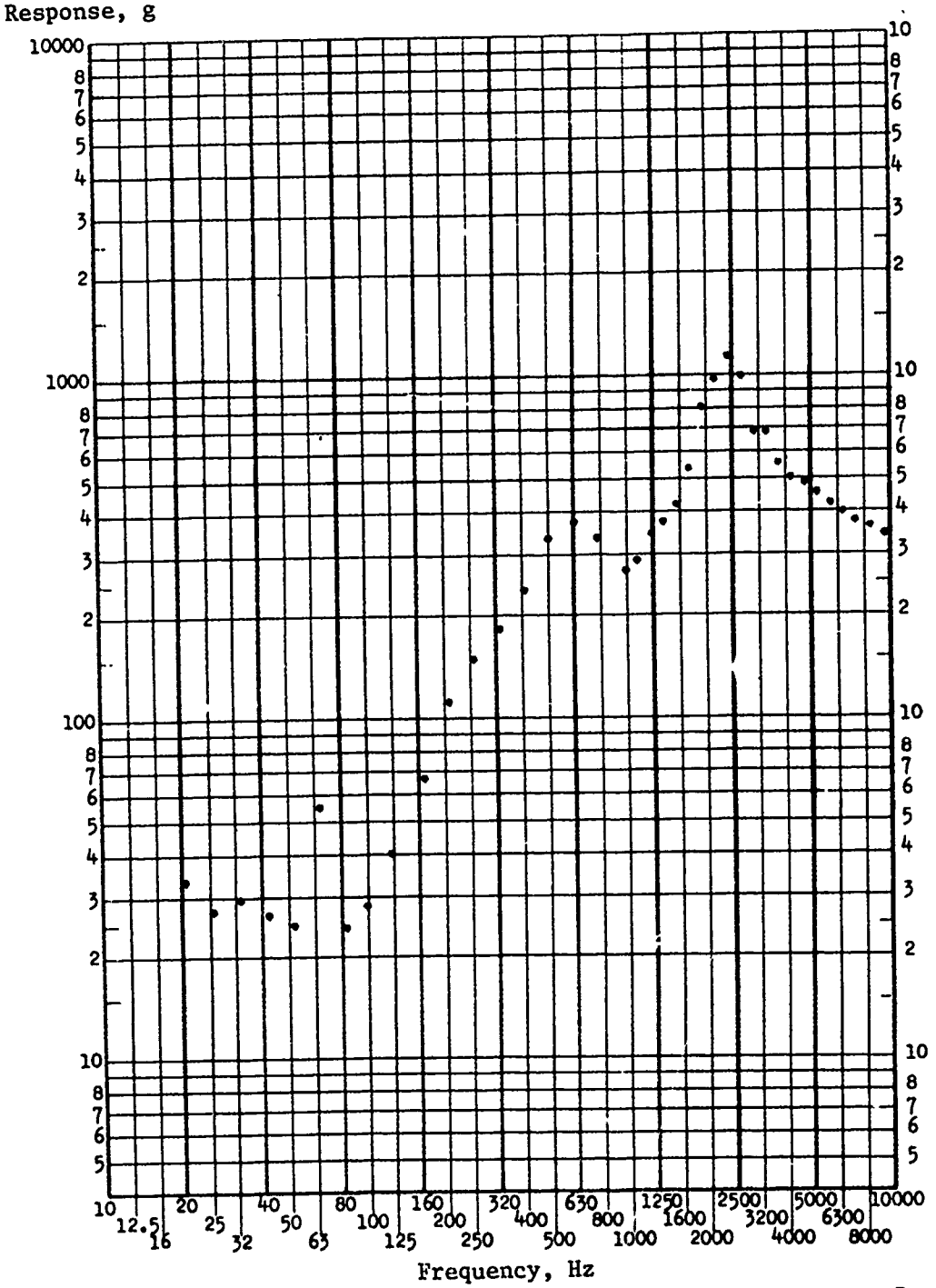
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 8 (cont)



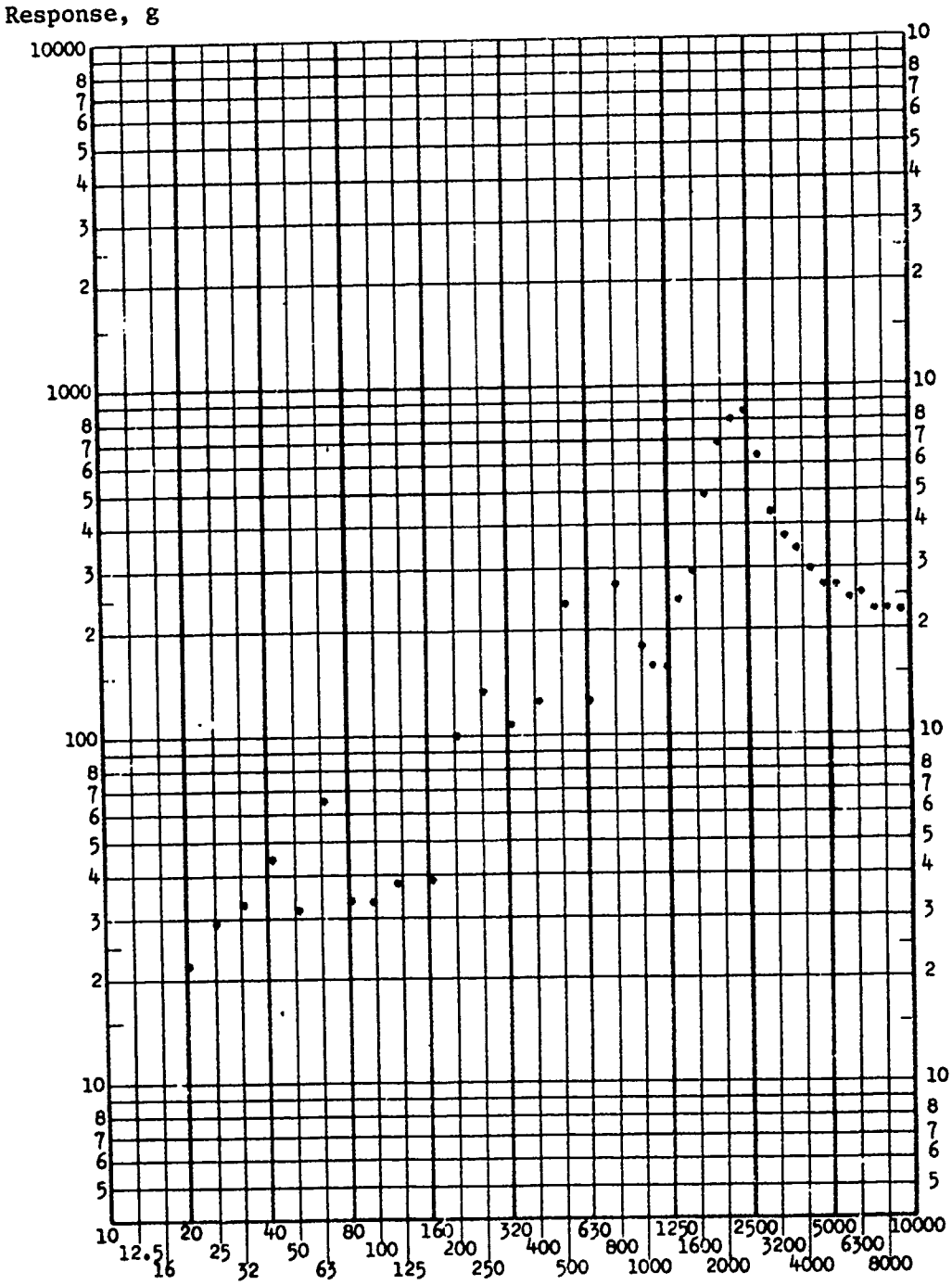
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 8 (cont)



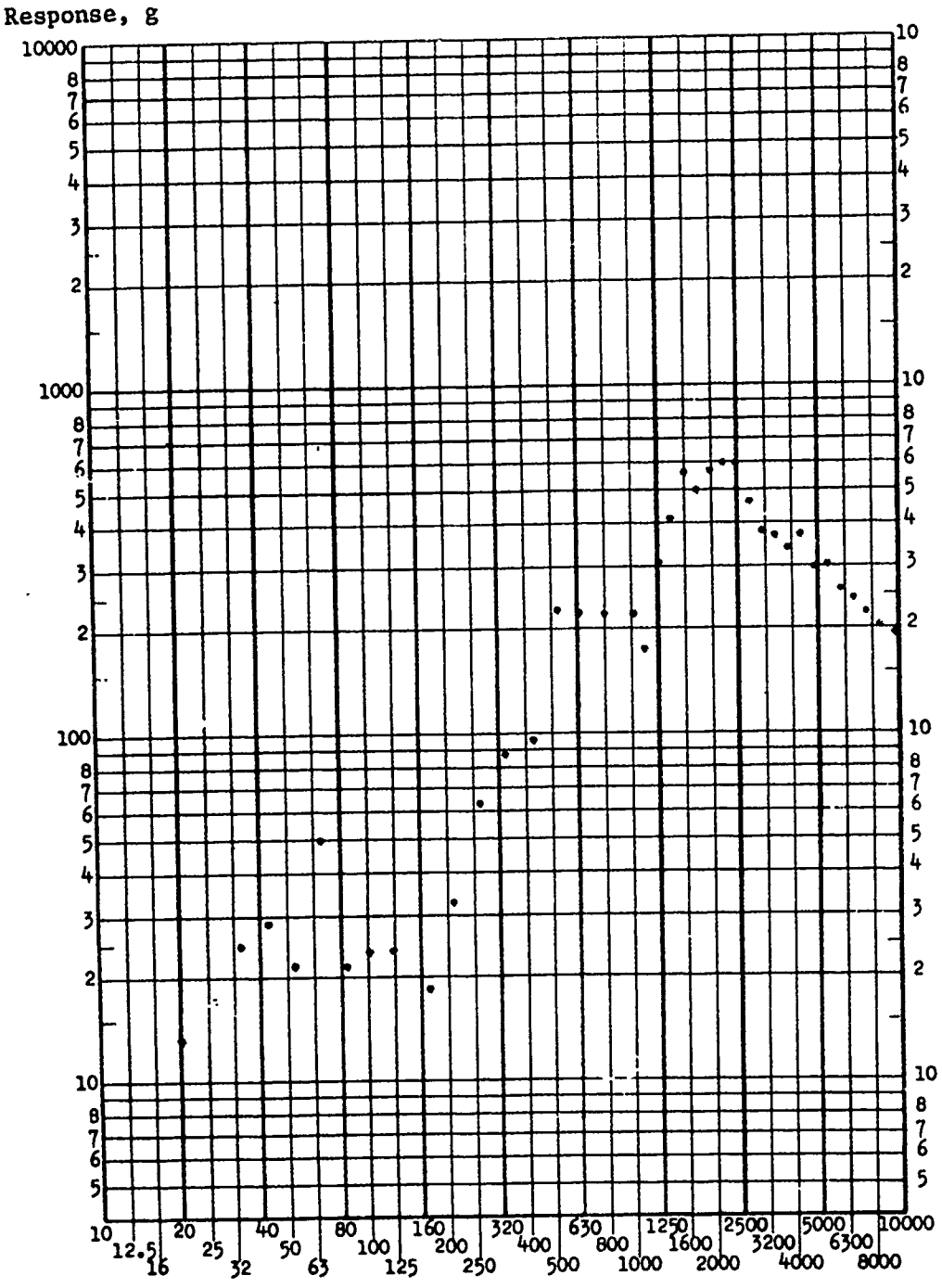
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 8 (cont)



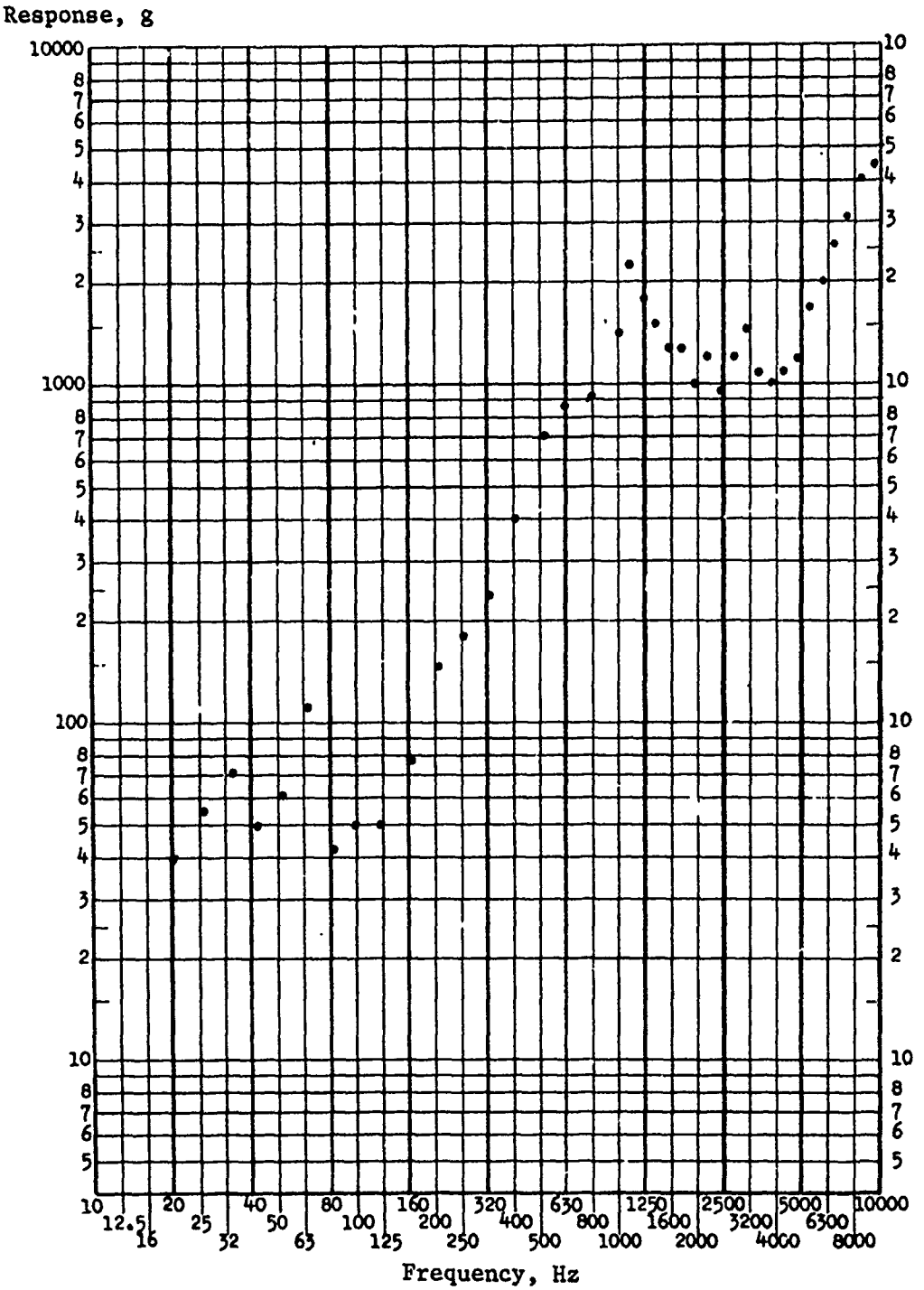
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 8 (cont)



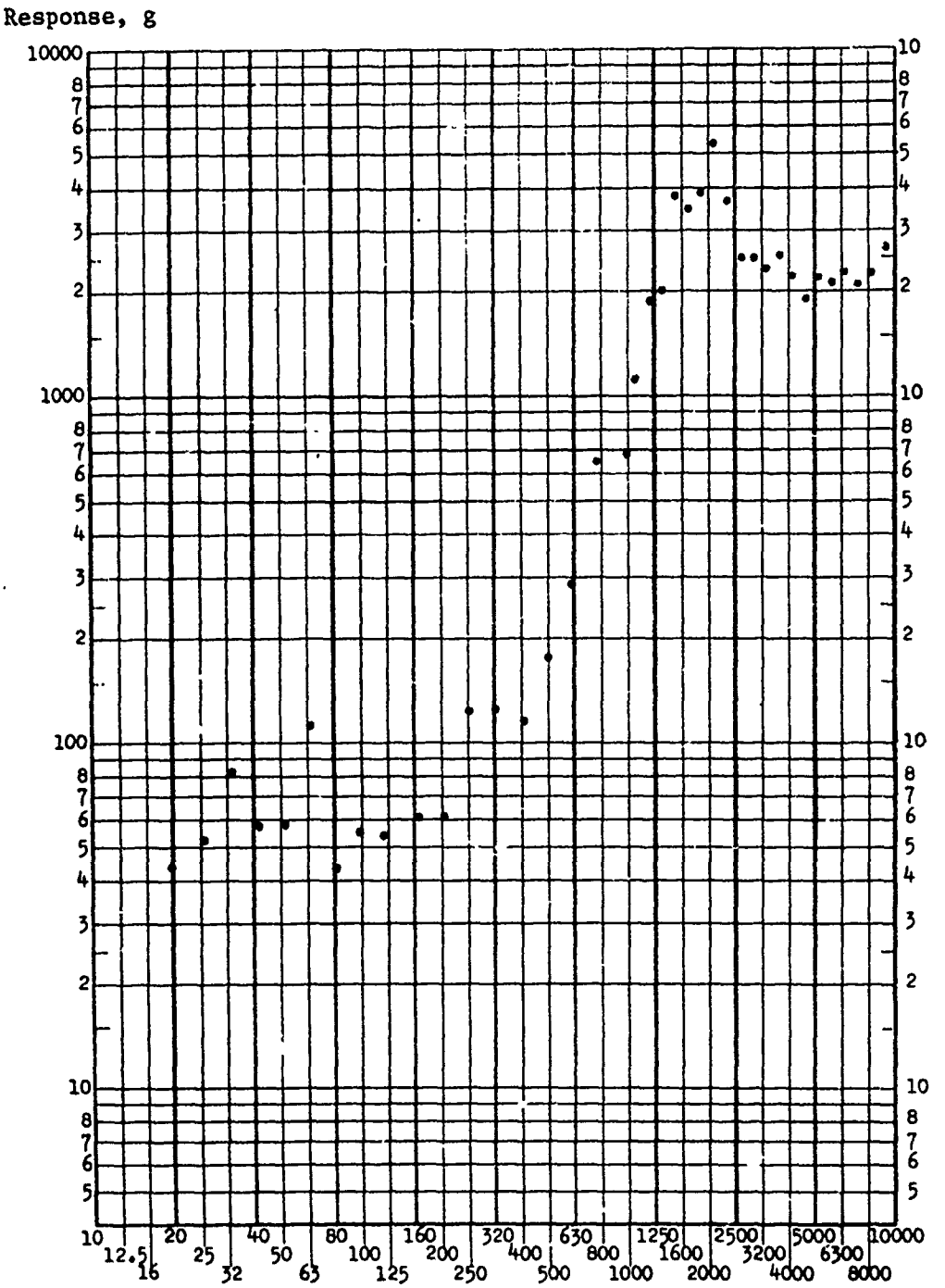
Bench Shock Test - Stage II/III Separation, Run 8
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 8 (concl)



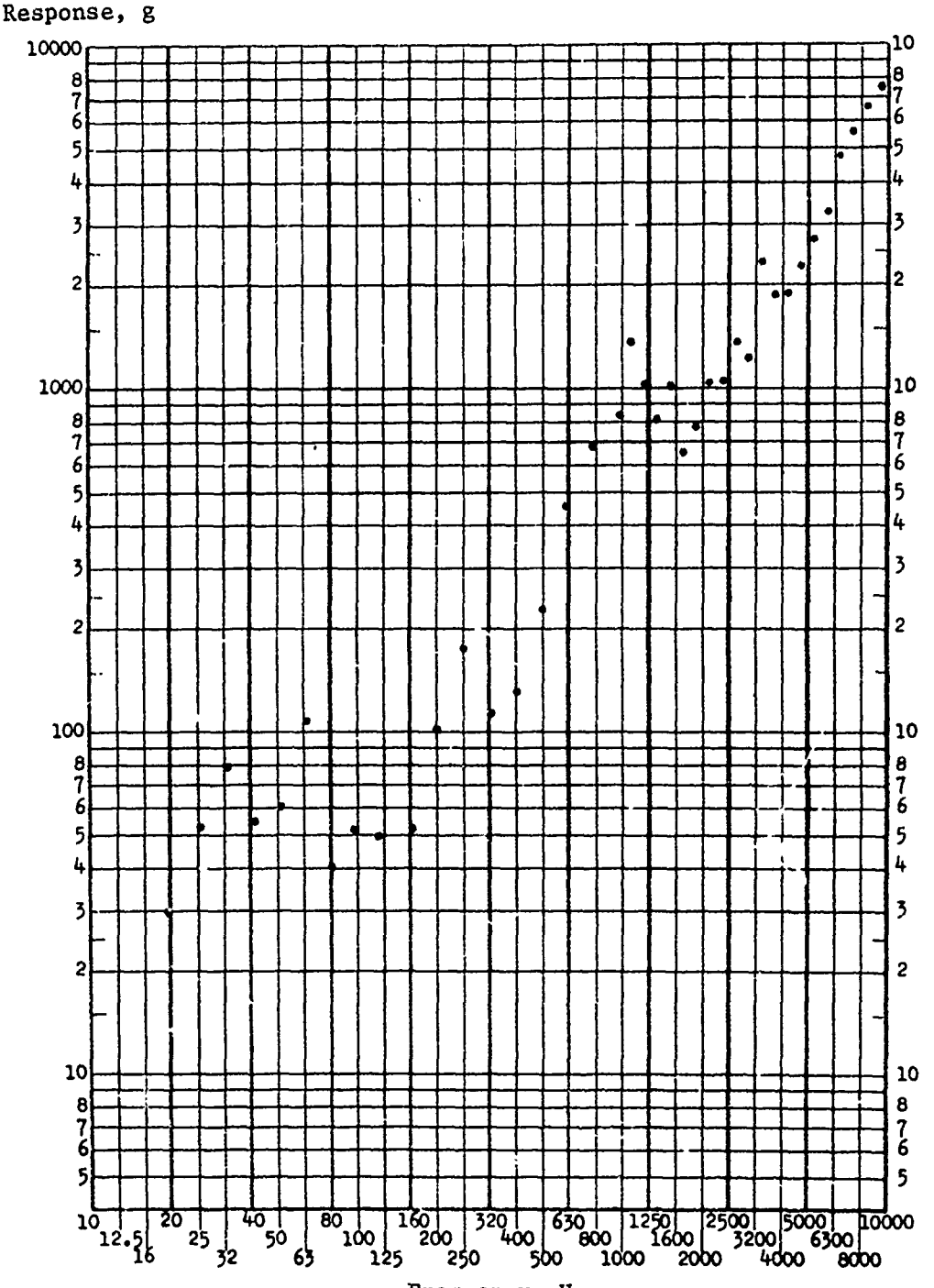
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 9 Run 9 Shock Response Spectrum



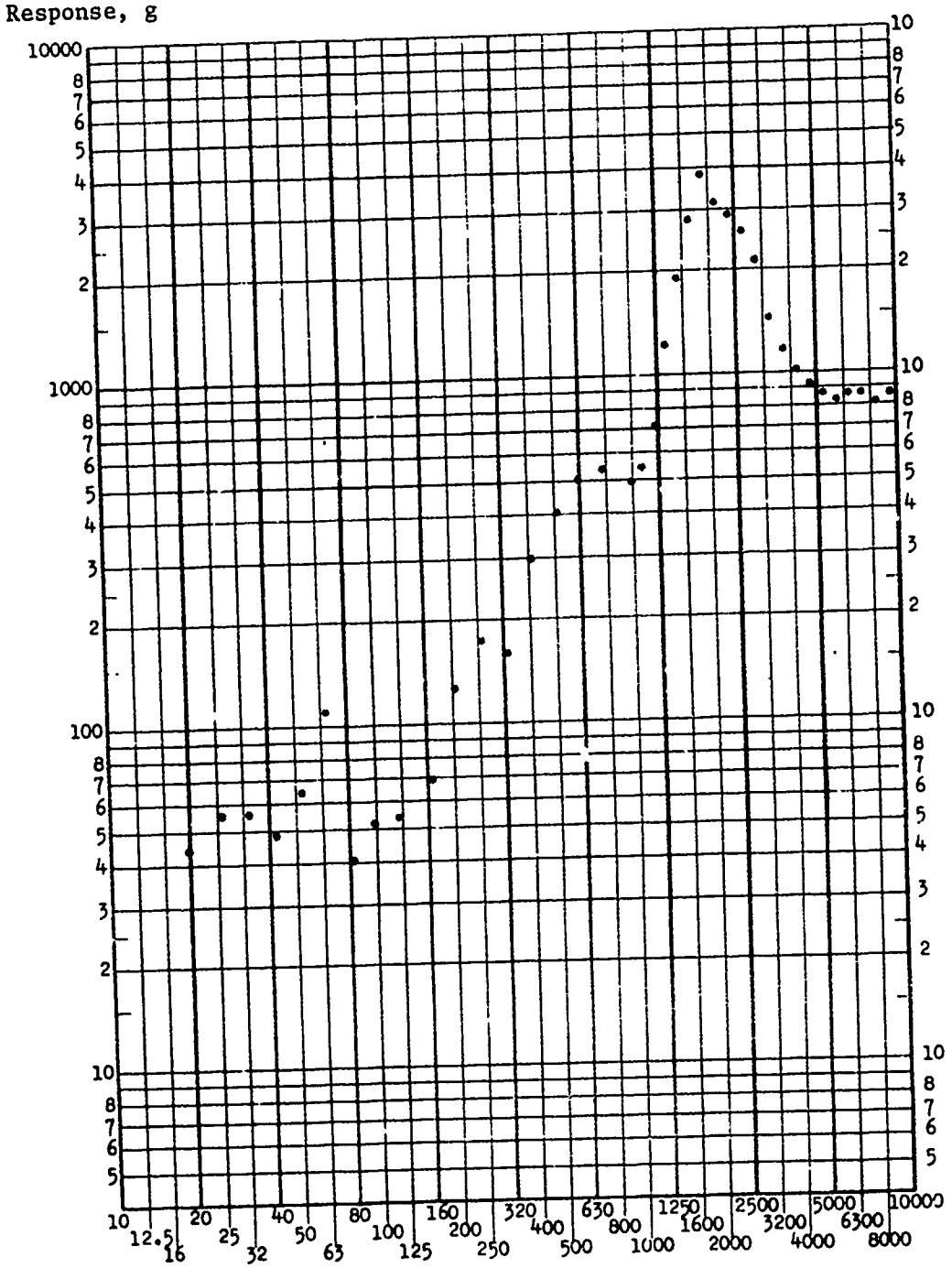
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 2 - Tangential axis longeron near station 133

Figure 9 (cont)



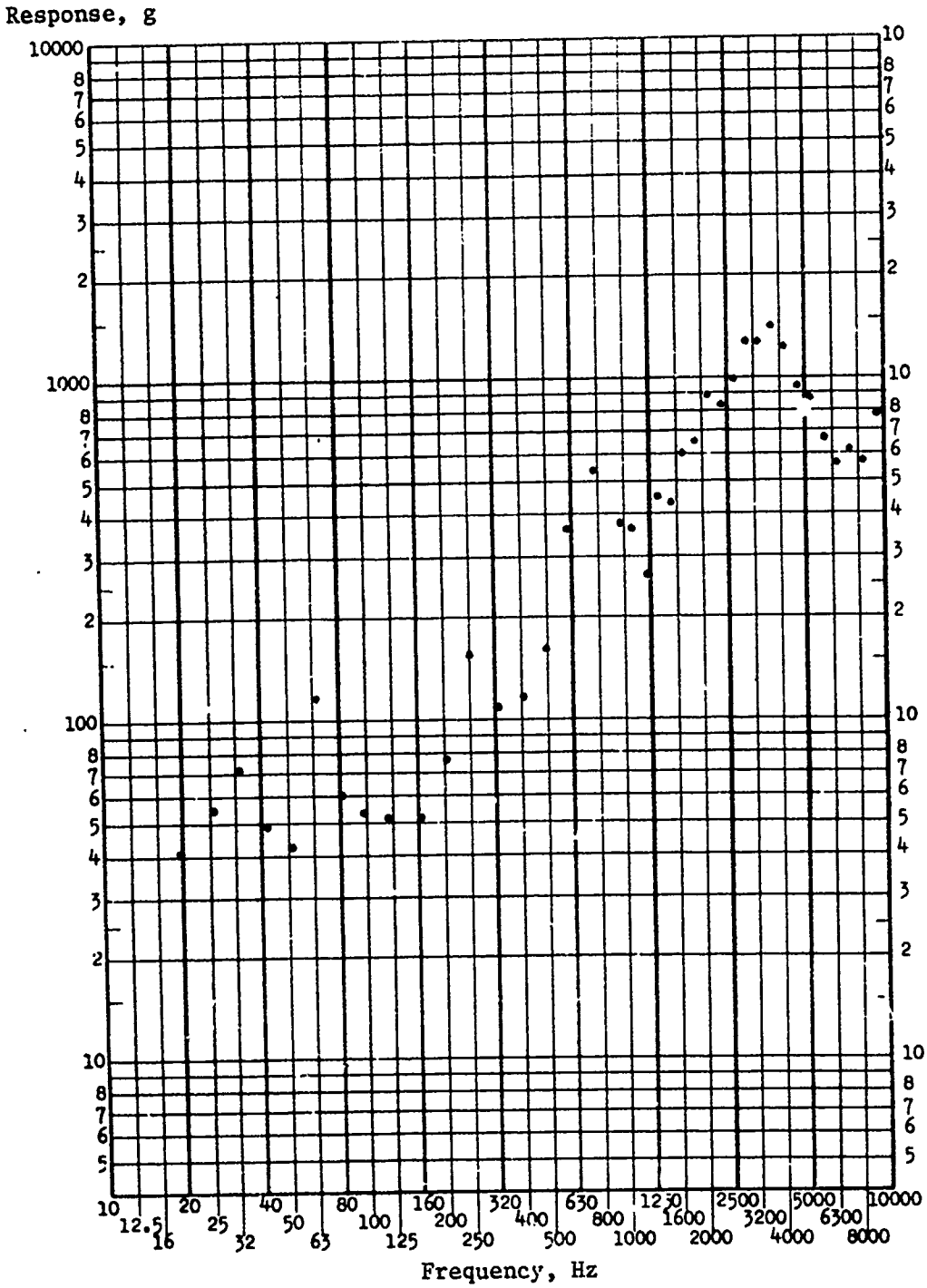
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 3 - Radial axis longeron near station 133

Figure 9 (cont)



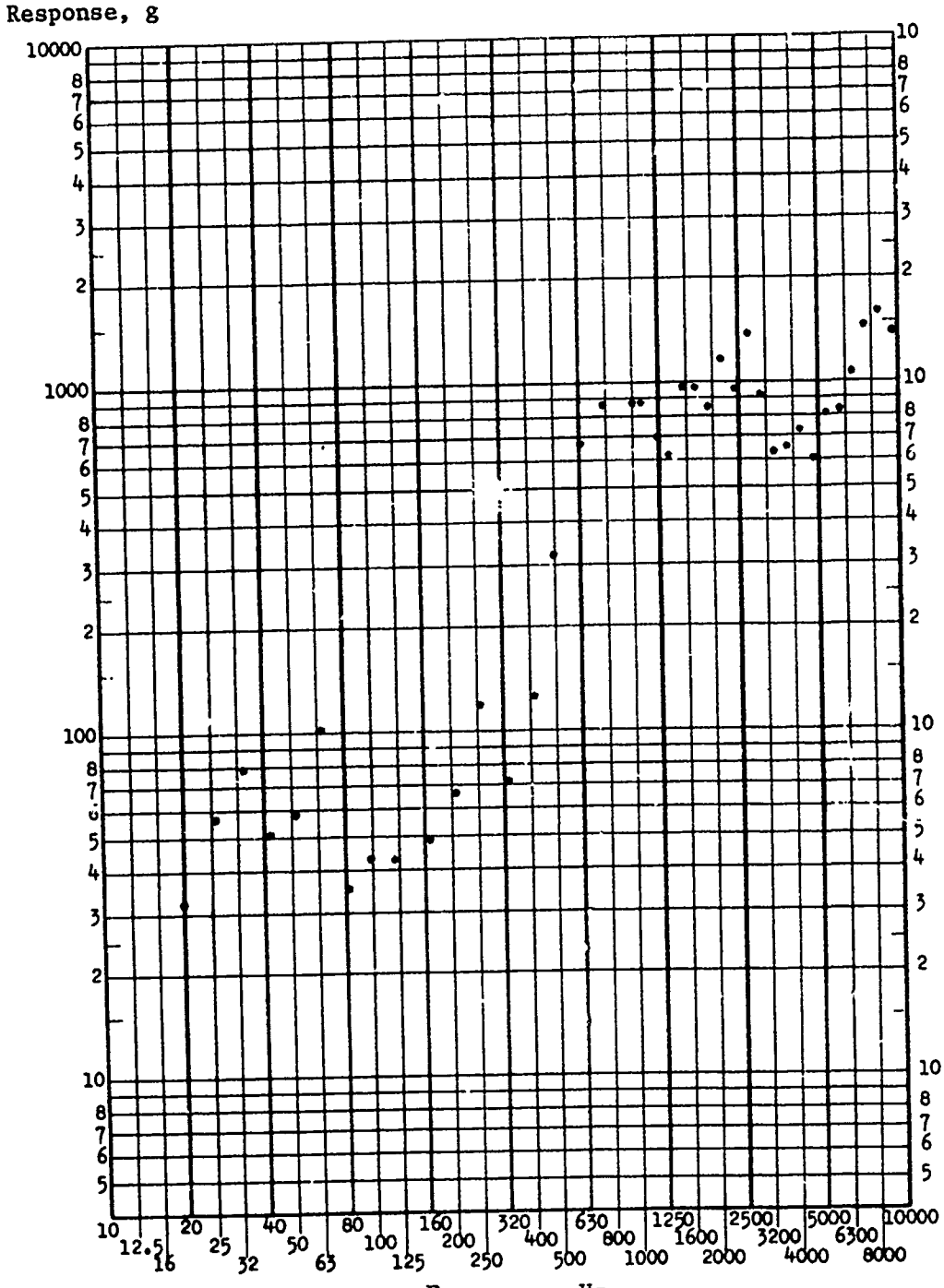
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 9 (cont)



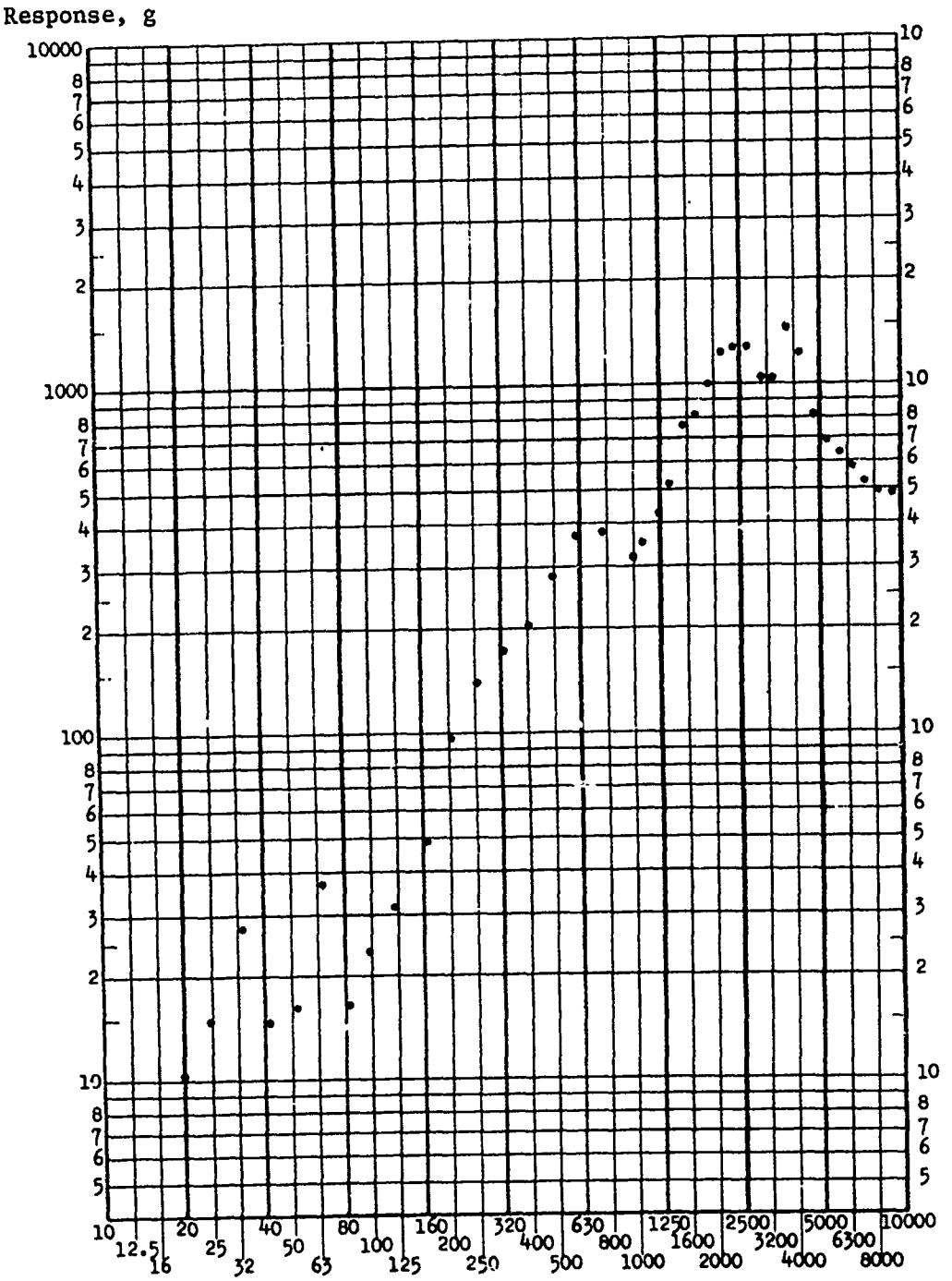
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 5 - Tangential axis longeron near station 117

Figure 9 (cont)



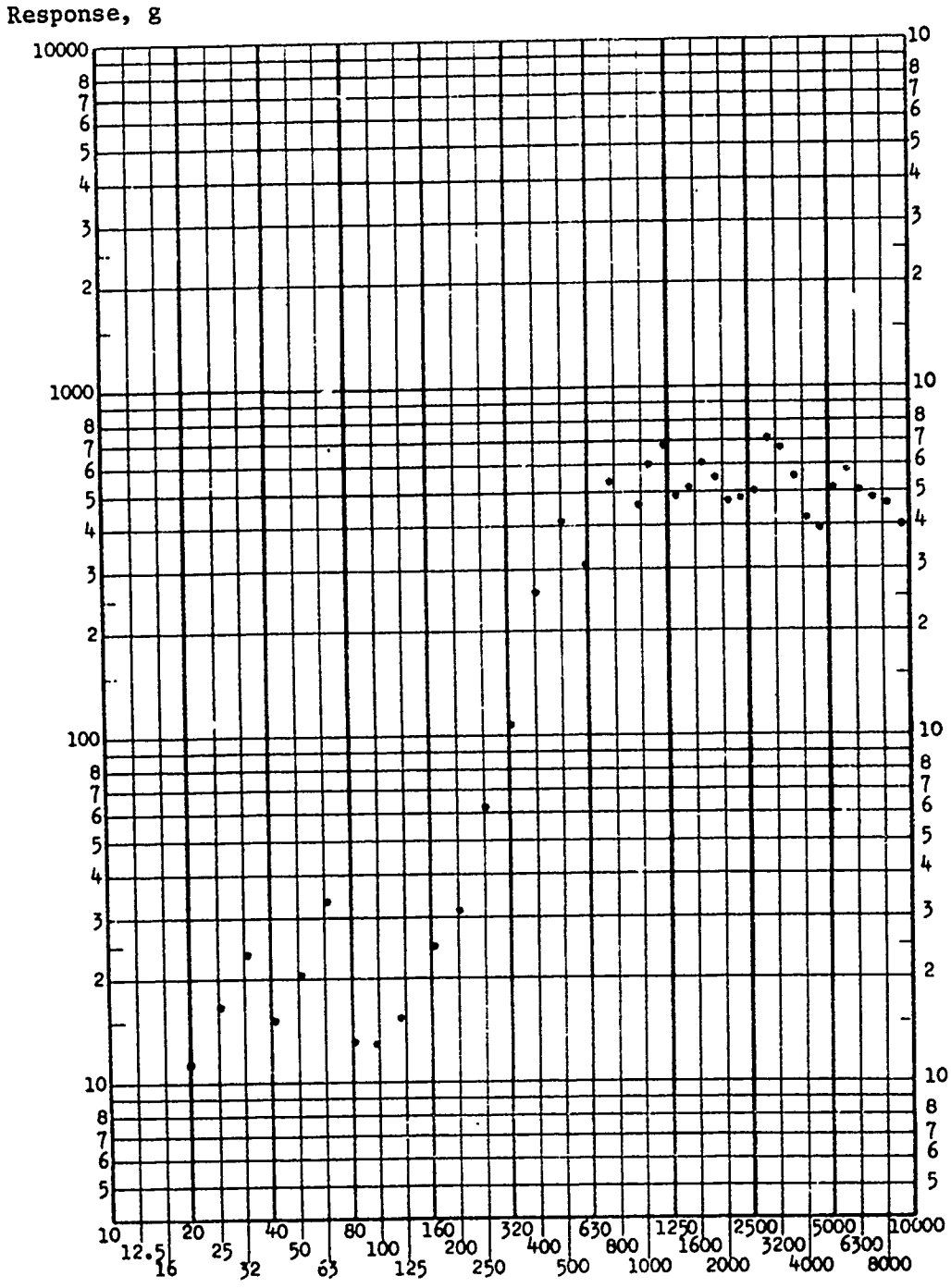
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 6 - Radial axis longeron near station 117

Figure 9 (cont)



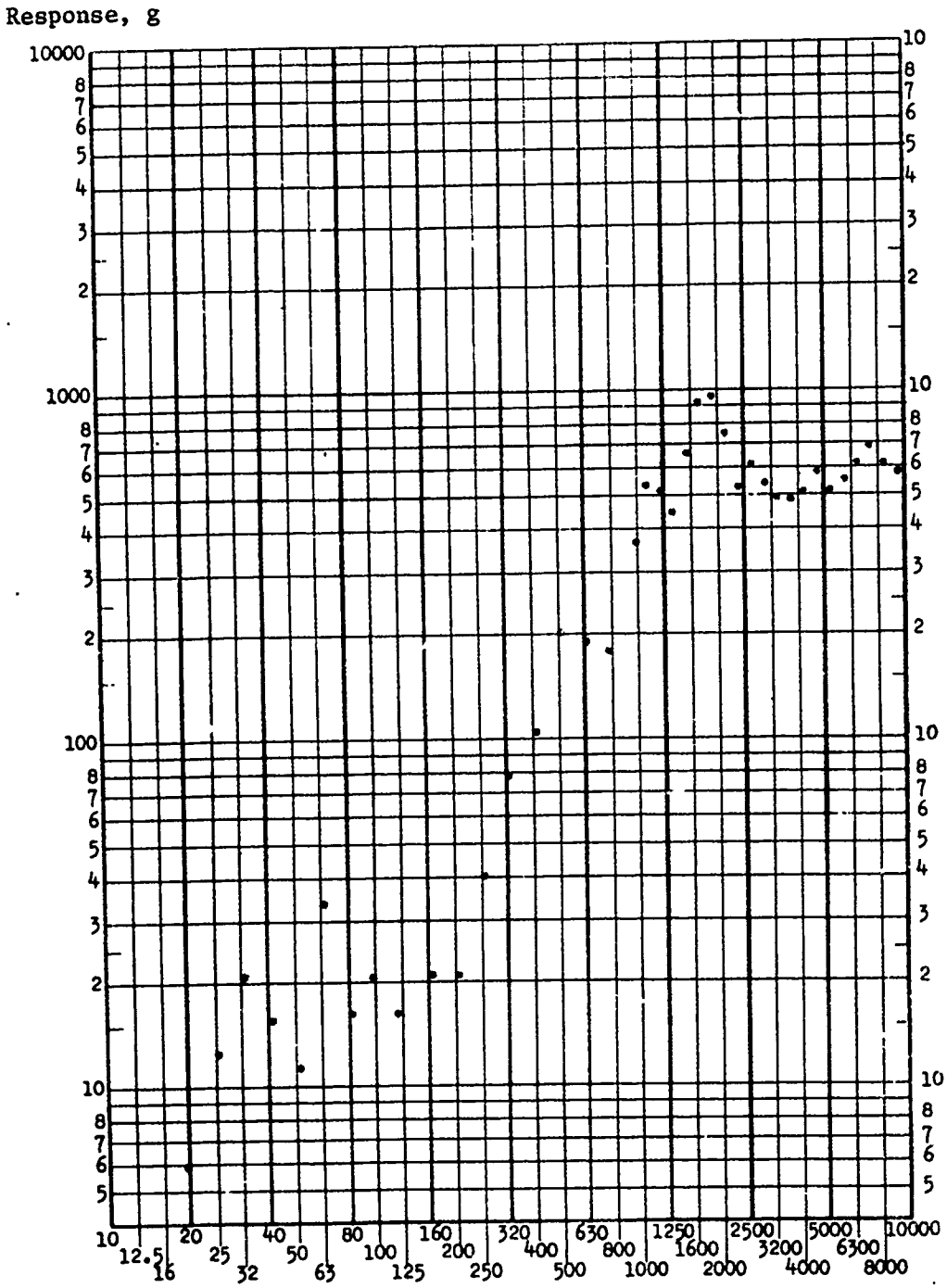
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 9 (cont)



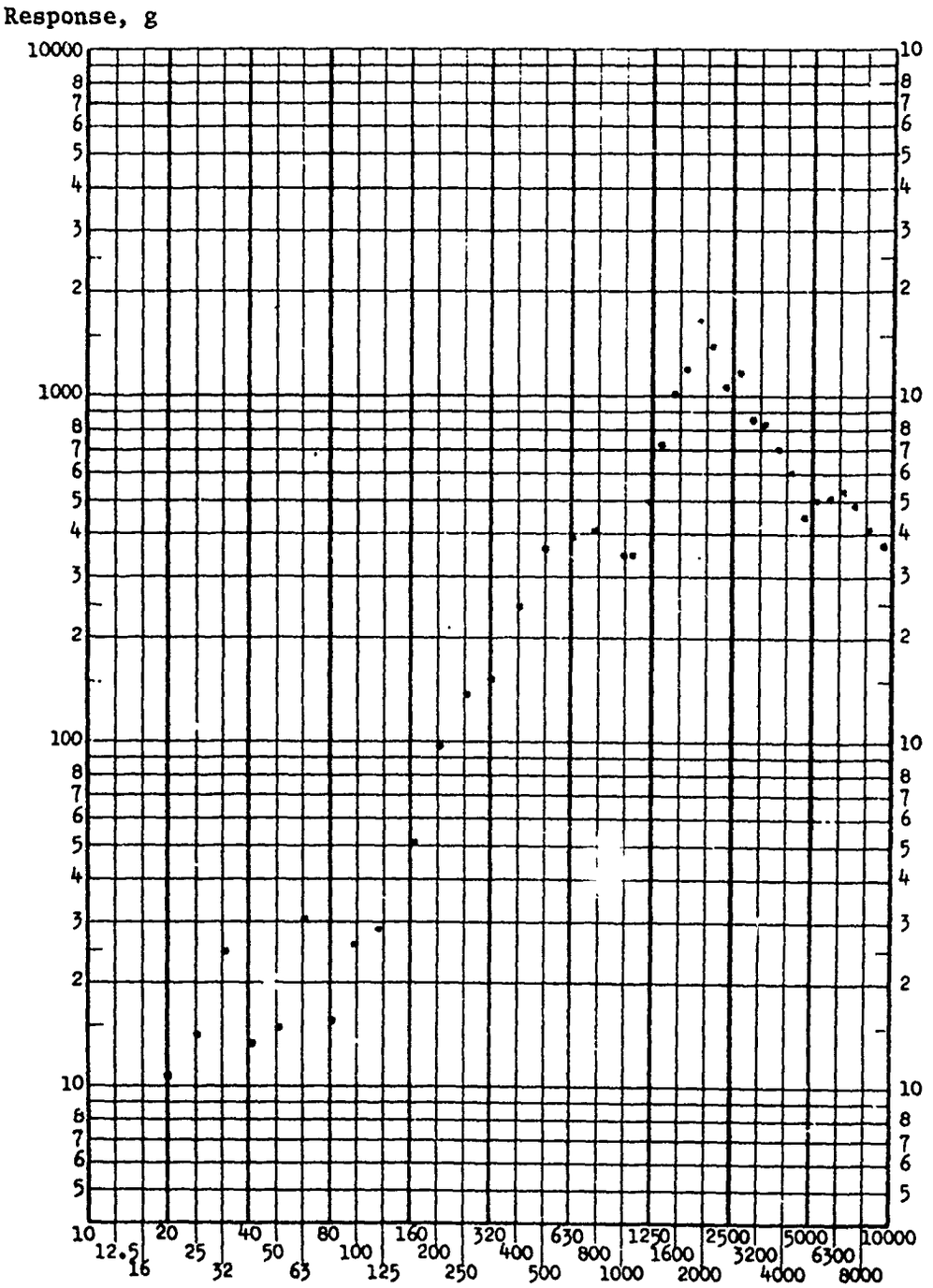
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 8 - Tangential axis longeron near station 77

Figure 9 (cont)



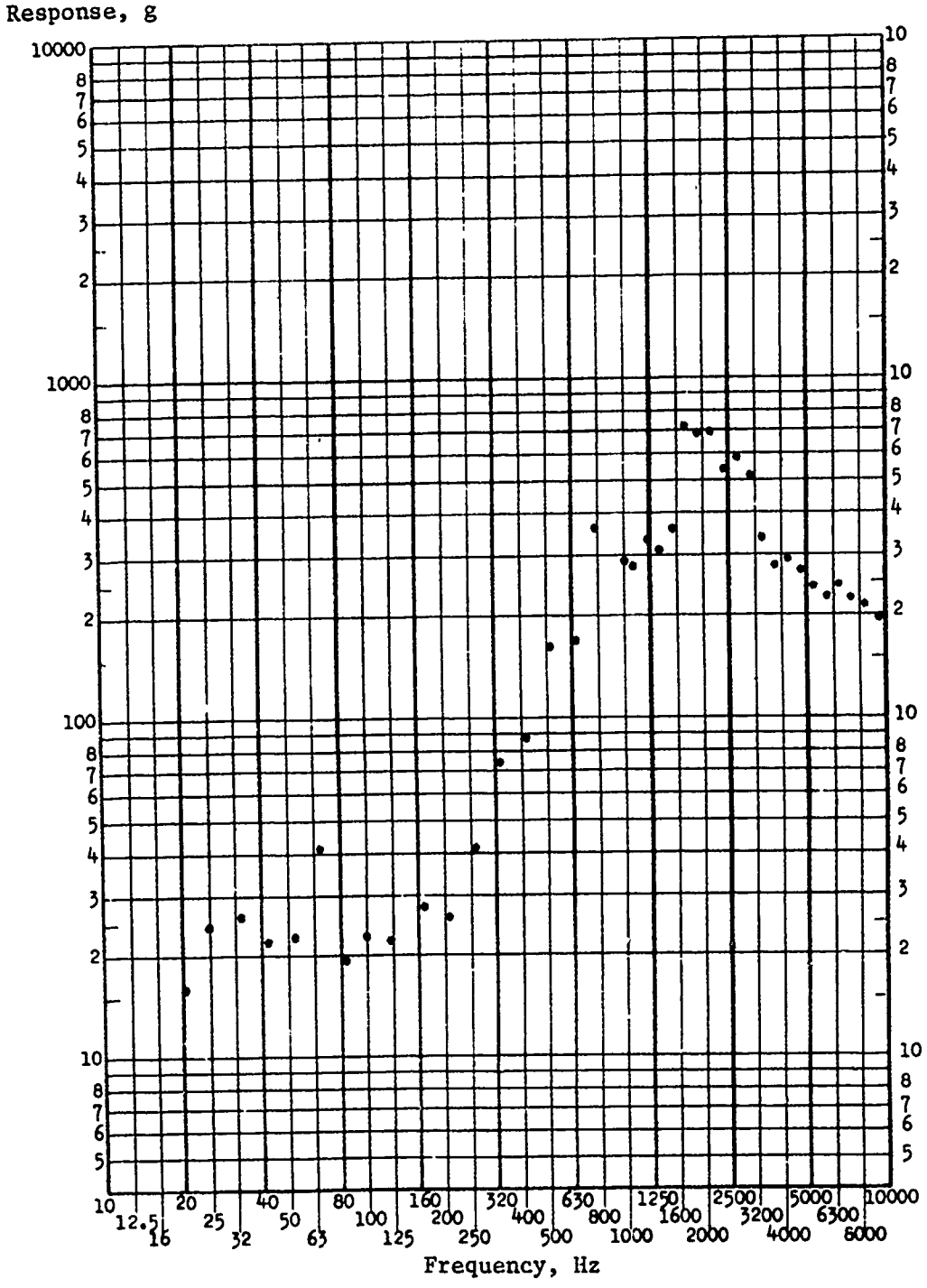
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 9 - Radial axis longeron near station 77

Figure 9 (cont)



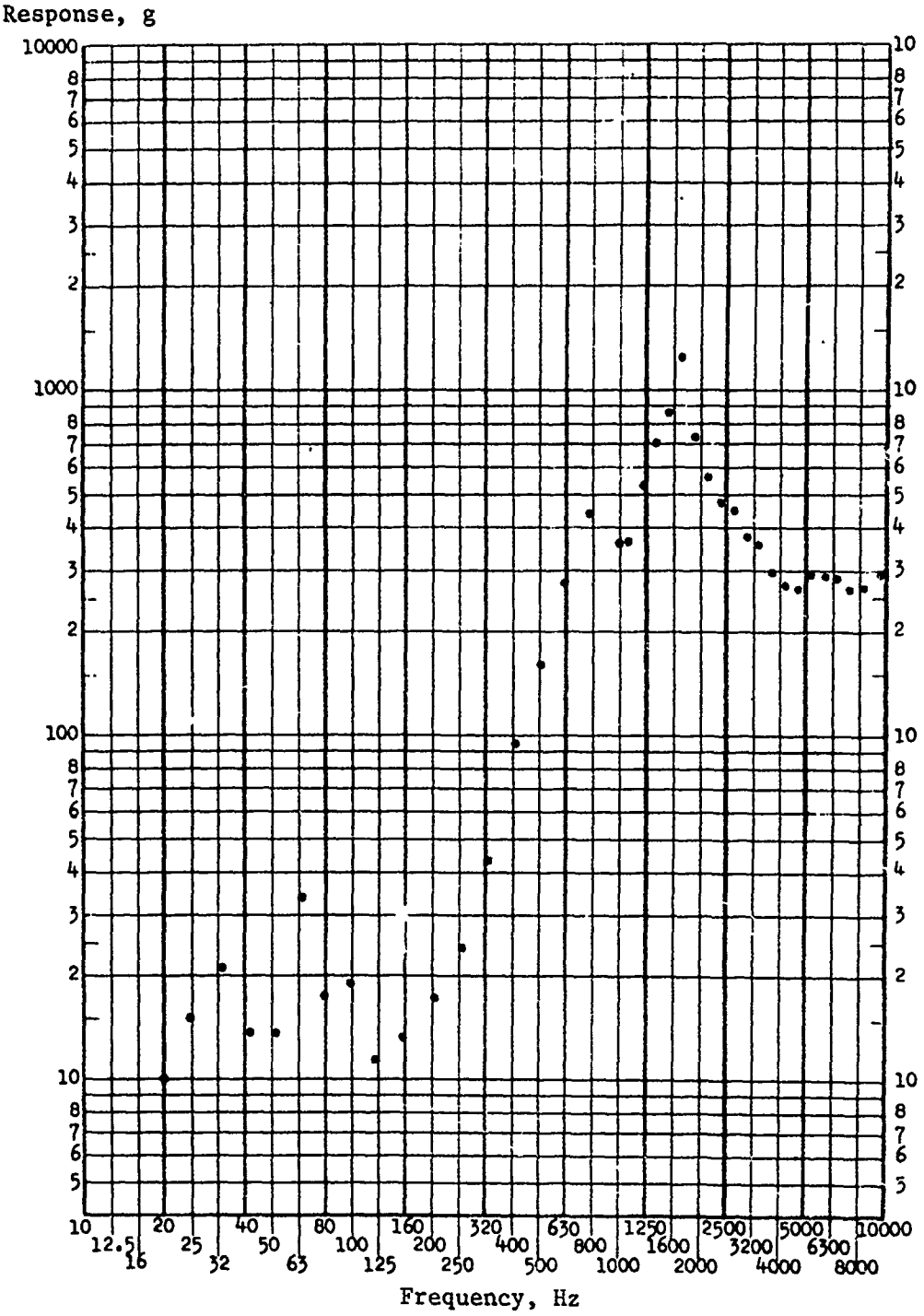
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 9 (cont)



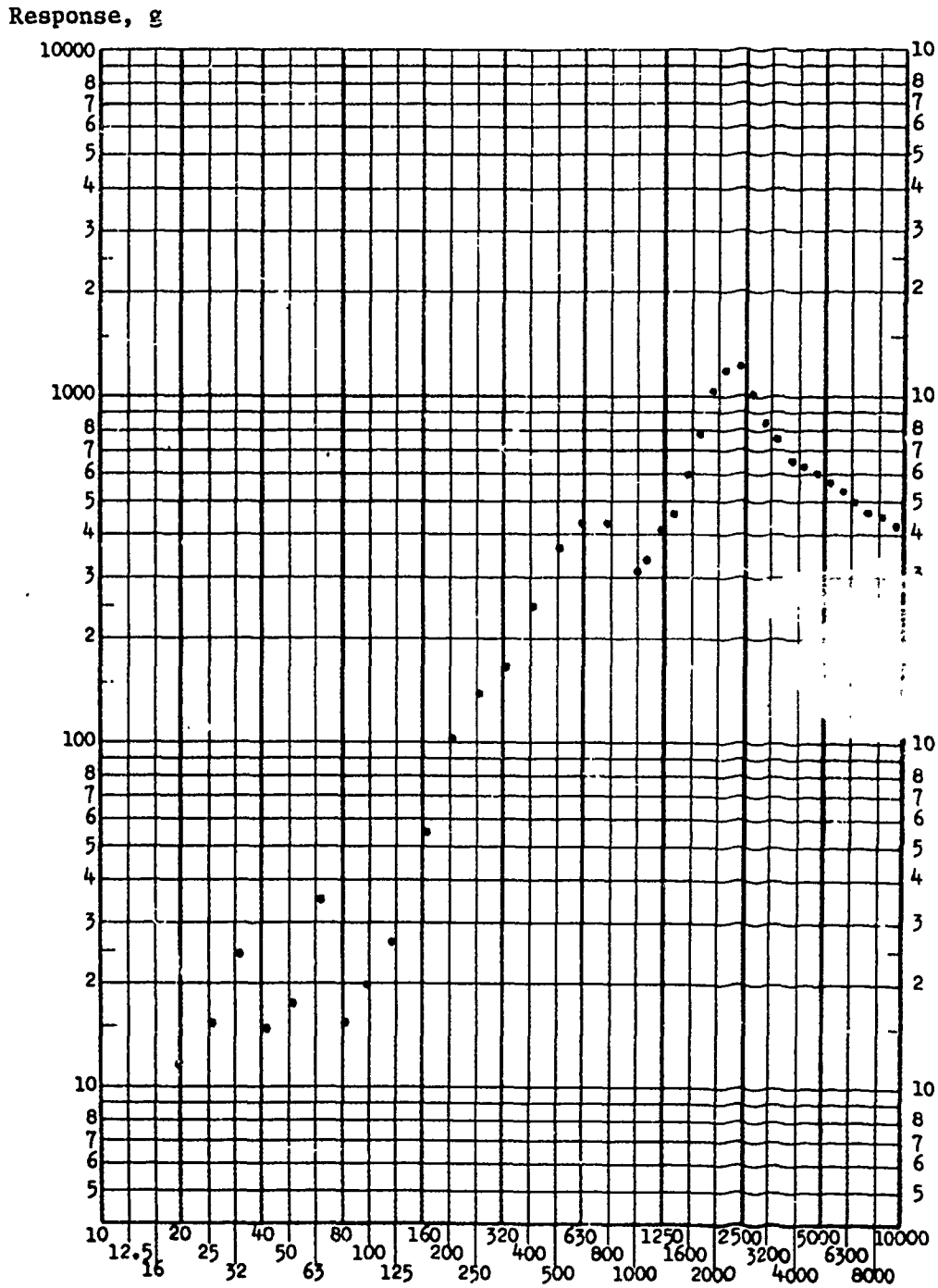
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 3 (cont)



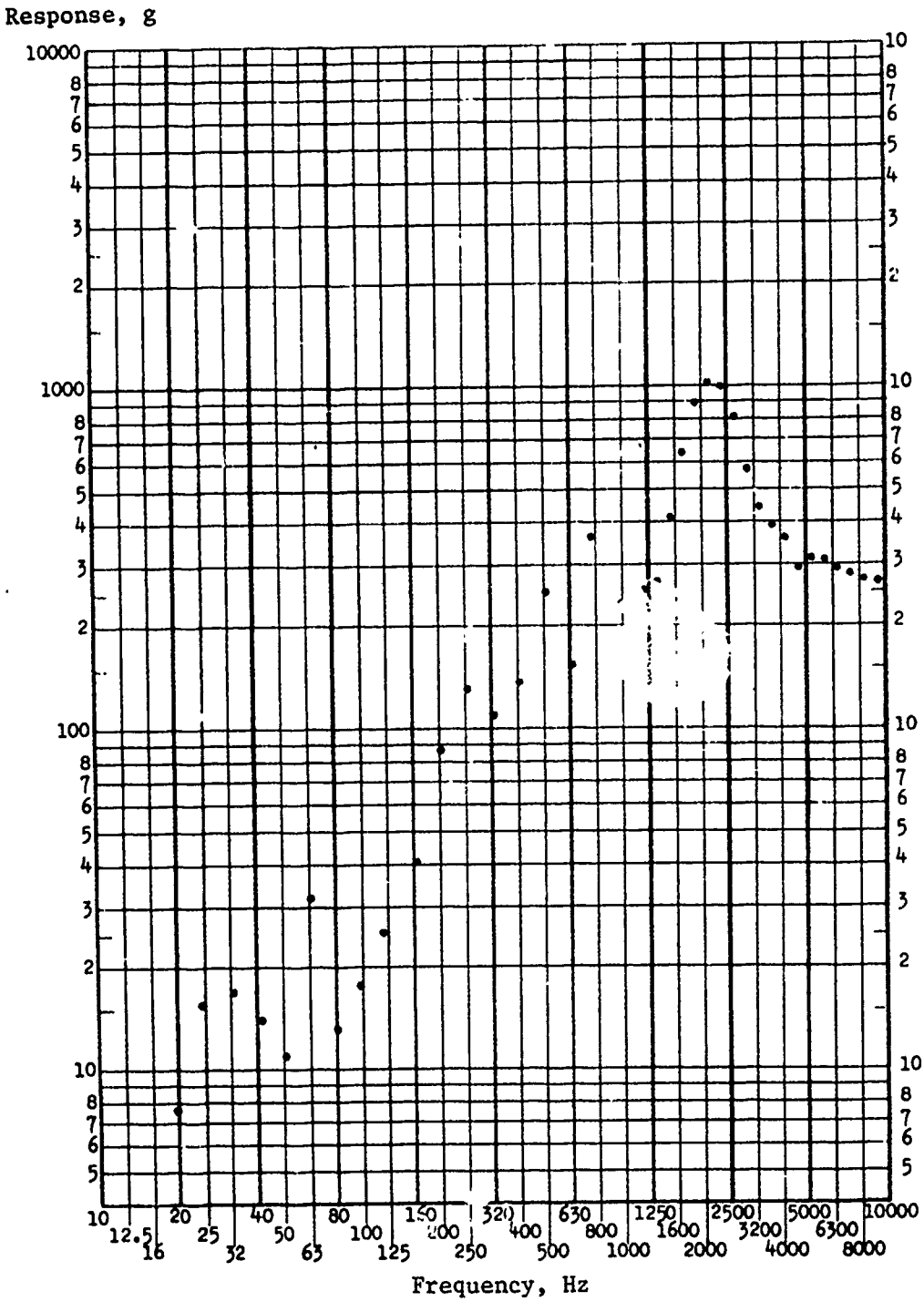
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 9 (cont)



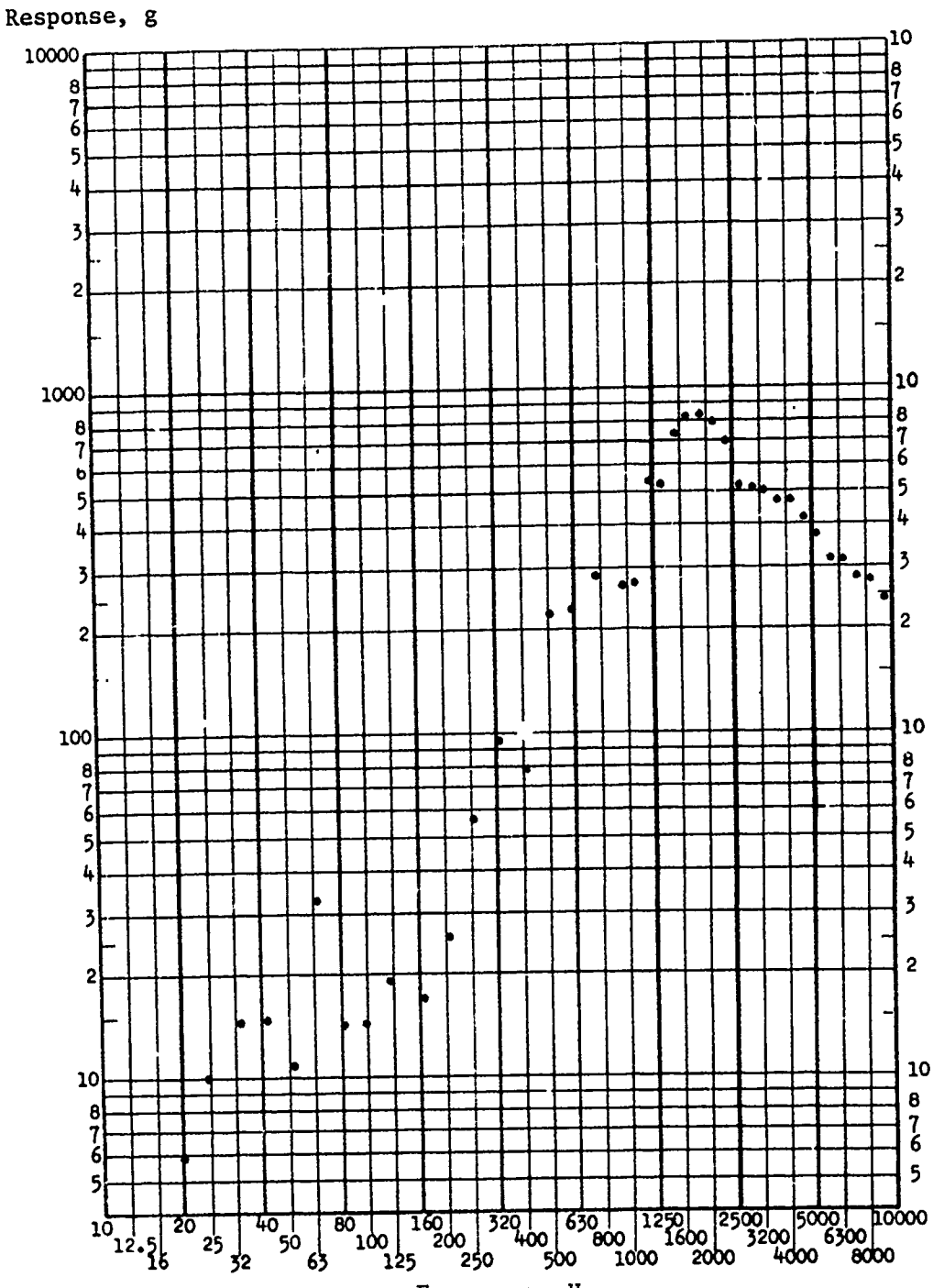
Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 9 (cont)



Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 9 (cont)



Bench Shock Test - Stage II/III Separation, Run 9
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 9 (concl)

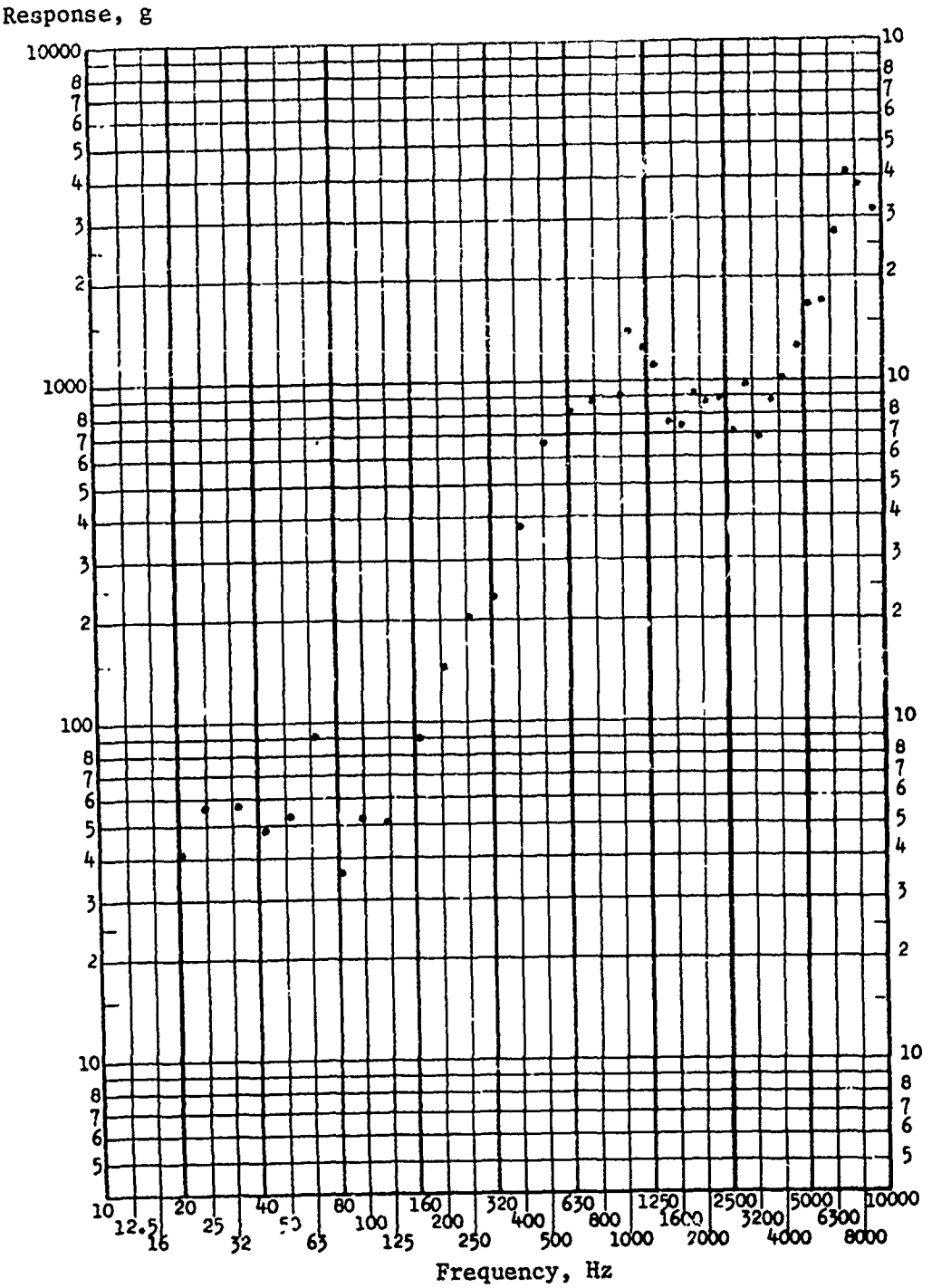
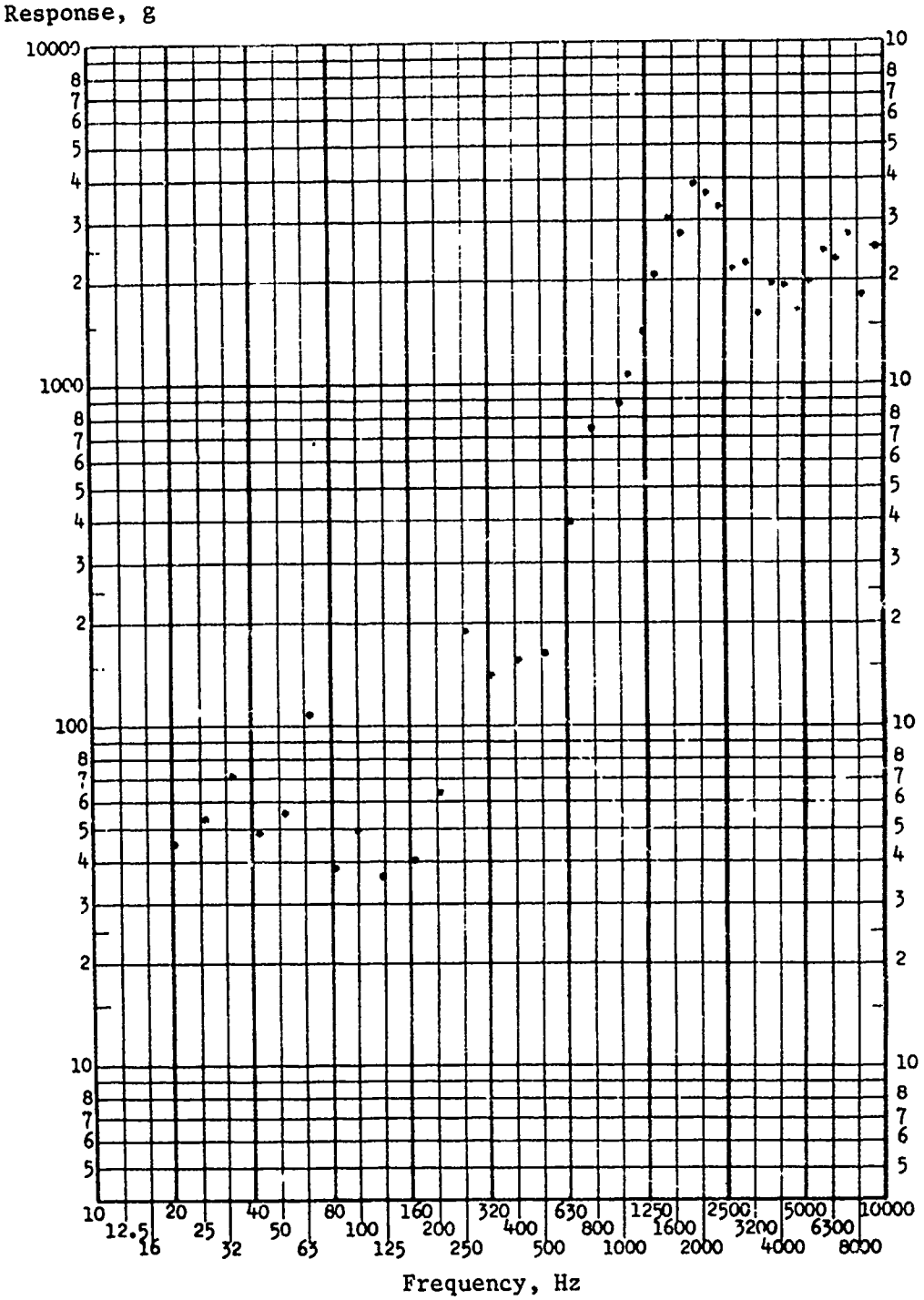
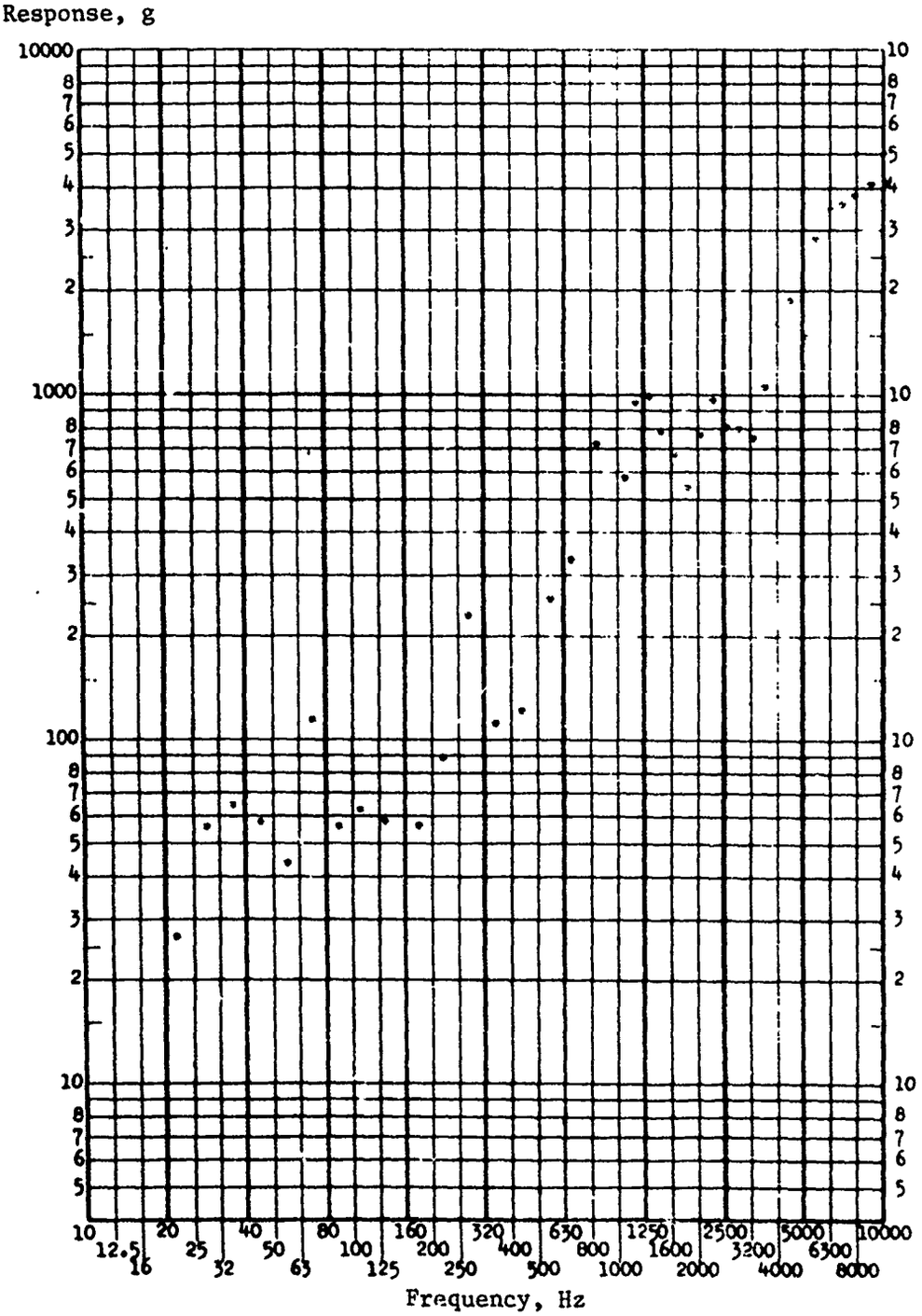


Figure 10 Run 10 Shock Response Spectrum



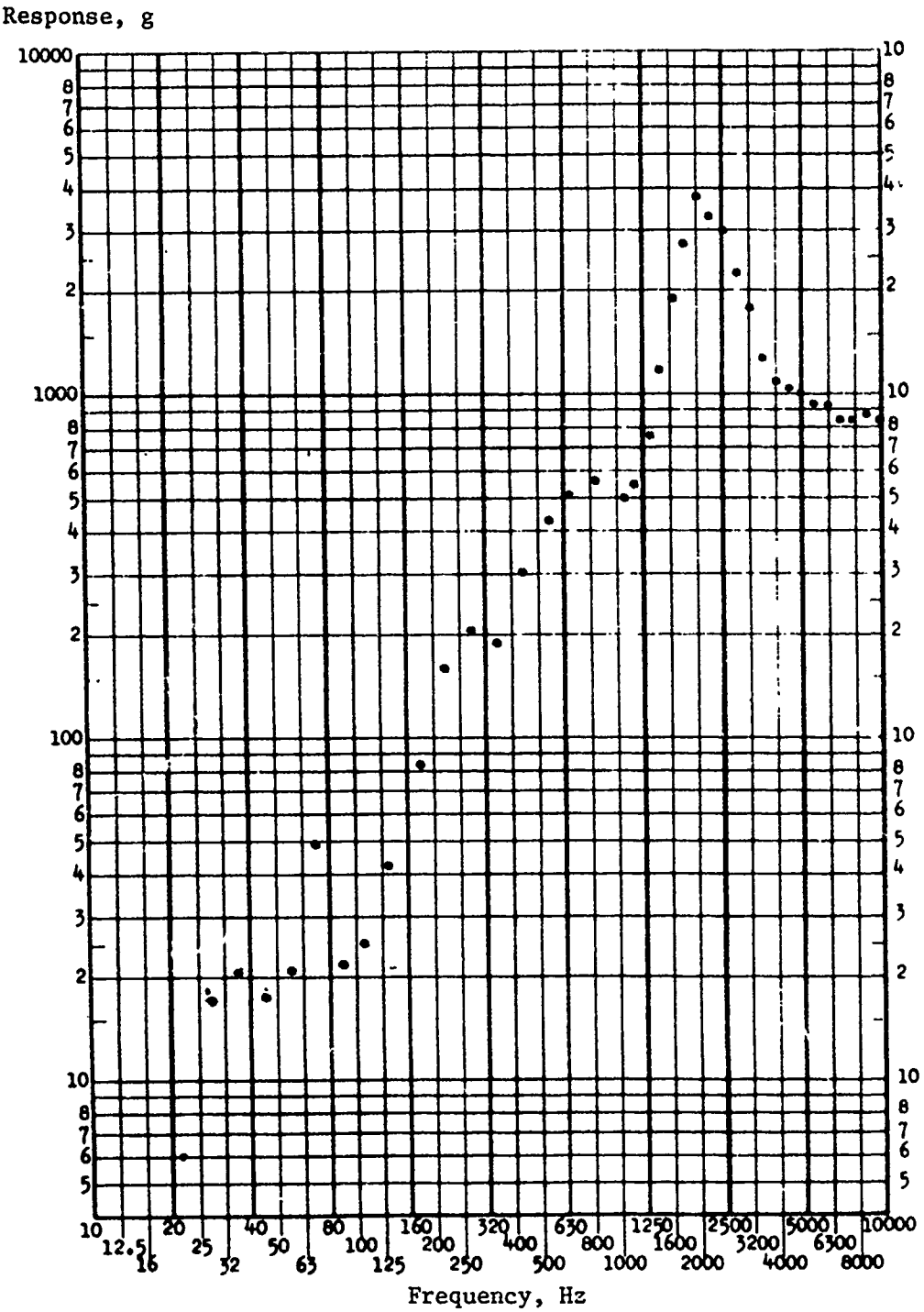
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 2 - Tangential axis longeron near station 133

Figure 10 (cont)

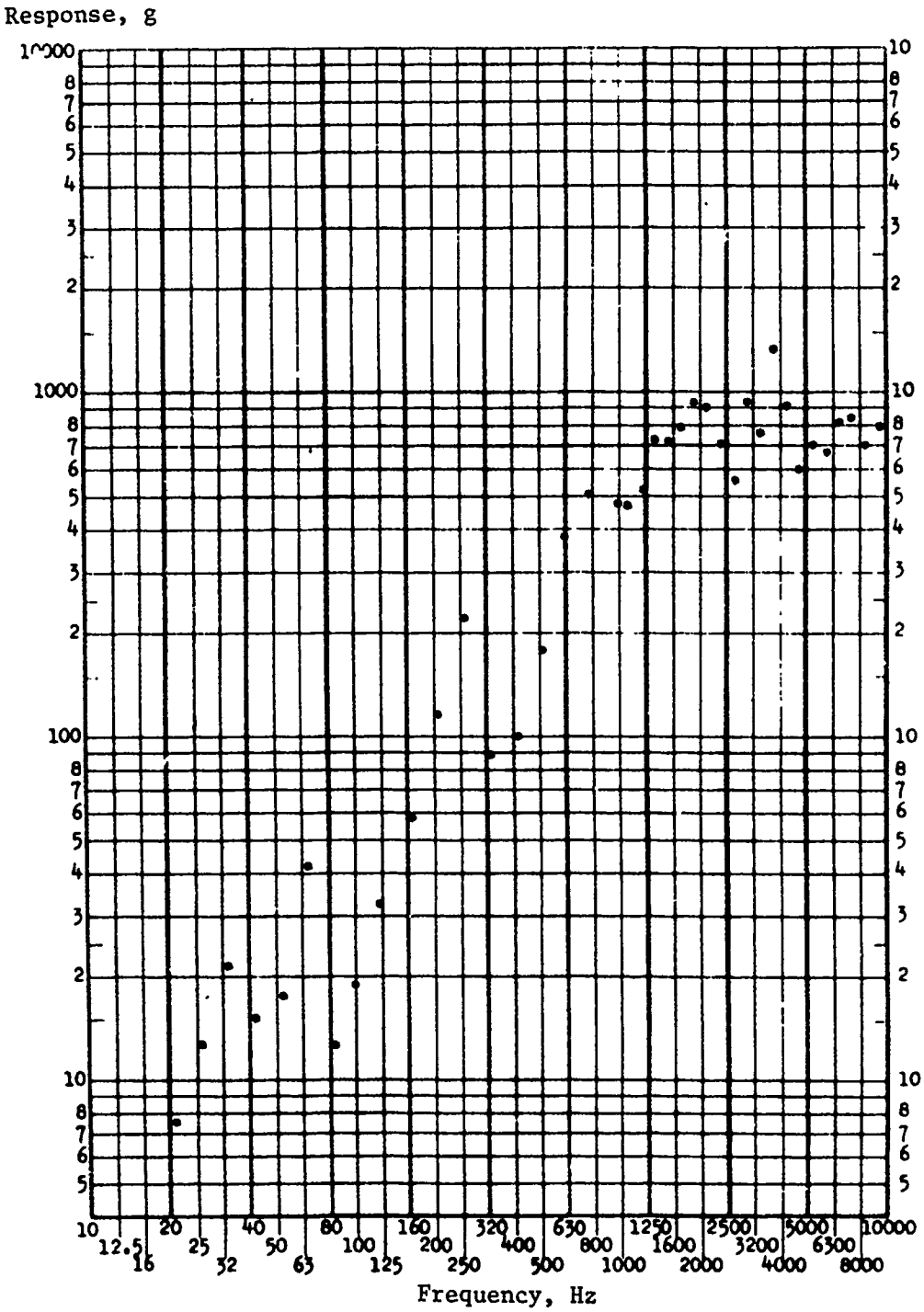


Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 3 - Radial axis longeron near station 133

Figure 10 (cont)

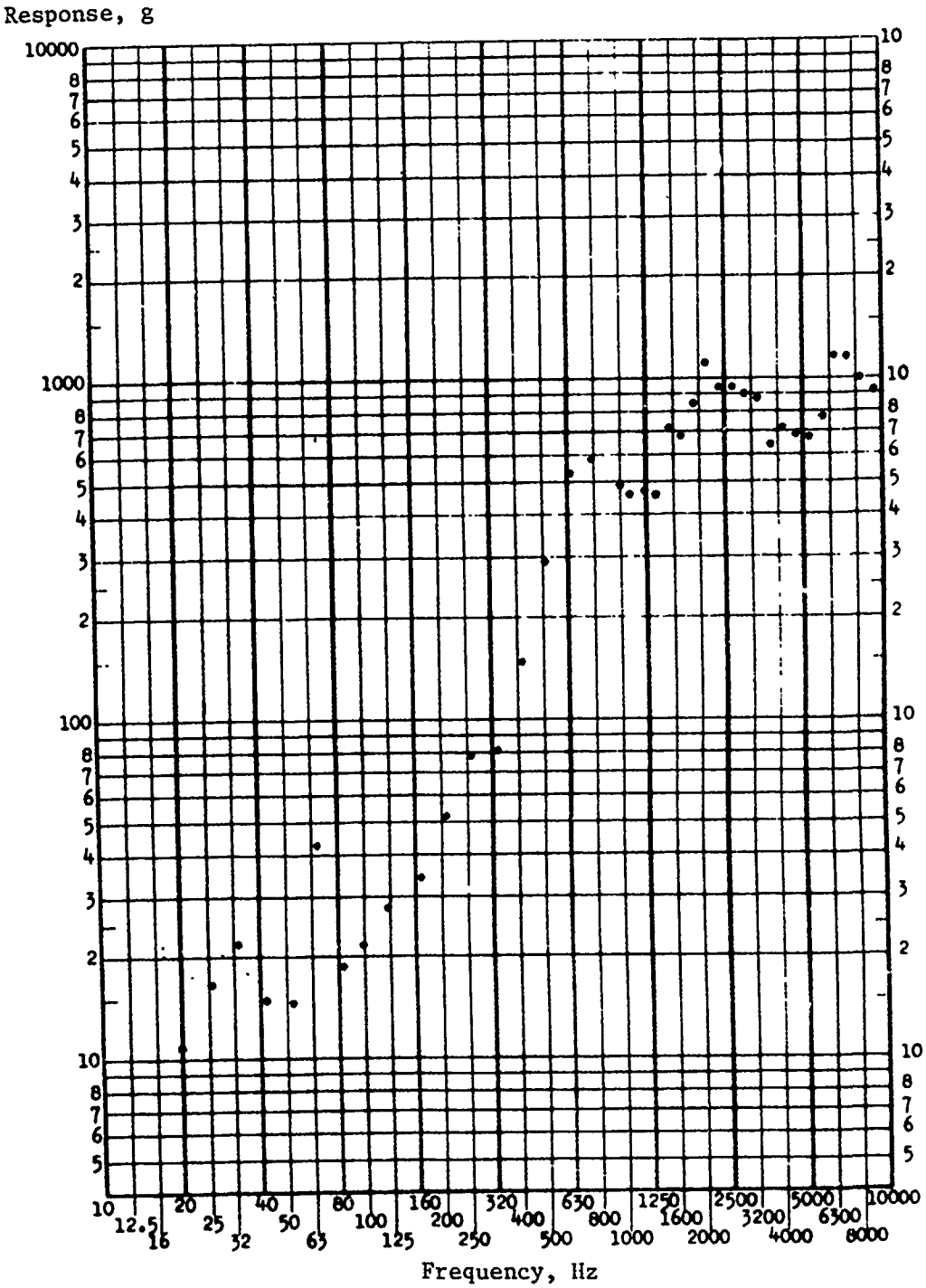


Bench Shock Test - Stage II/III Separation, Run 10
Measurement No. 4 - Longitudinal axis longeron near station 117



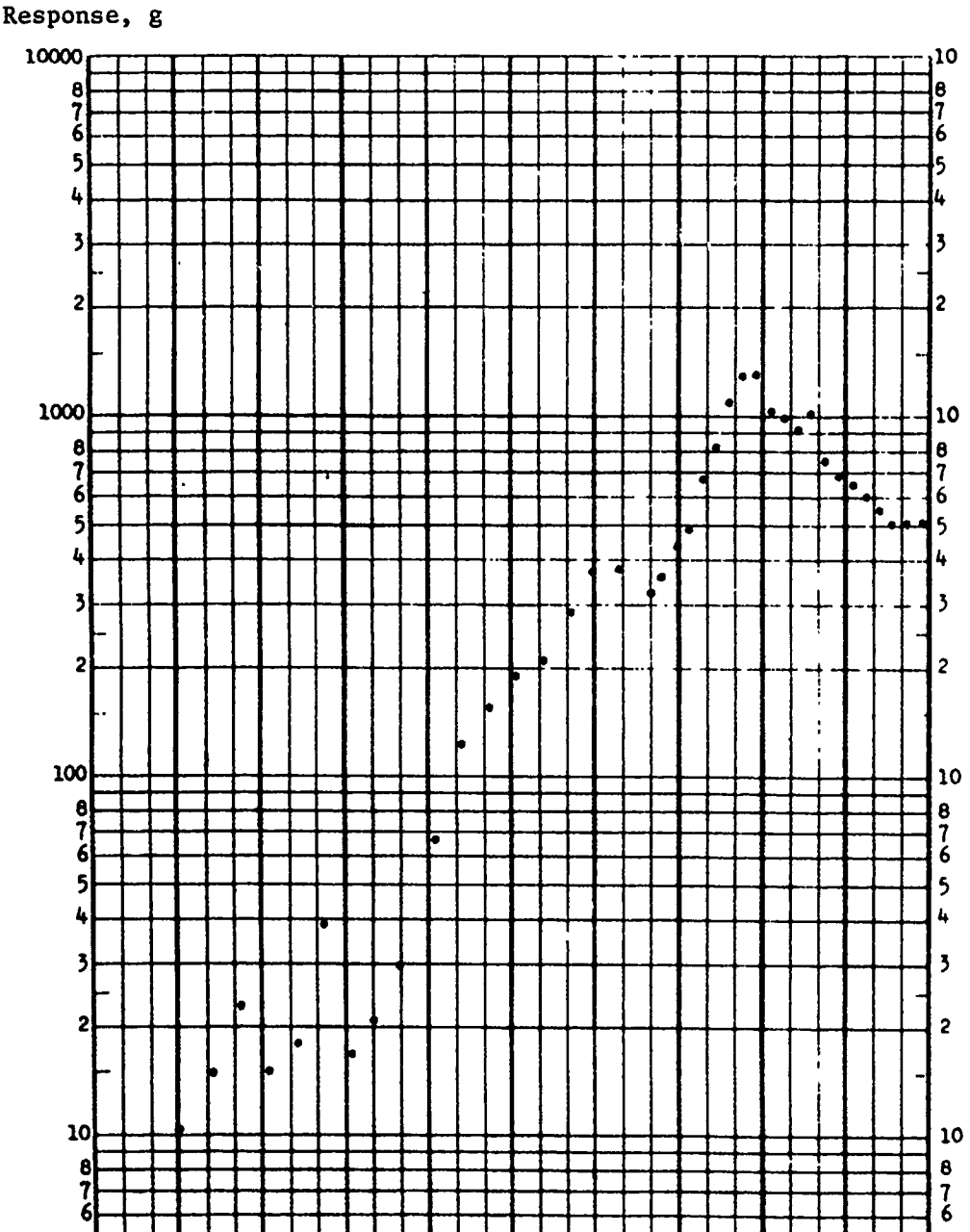
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 5 - Tangential axis longeron near station 117

Figure 10 (cont)



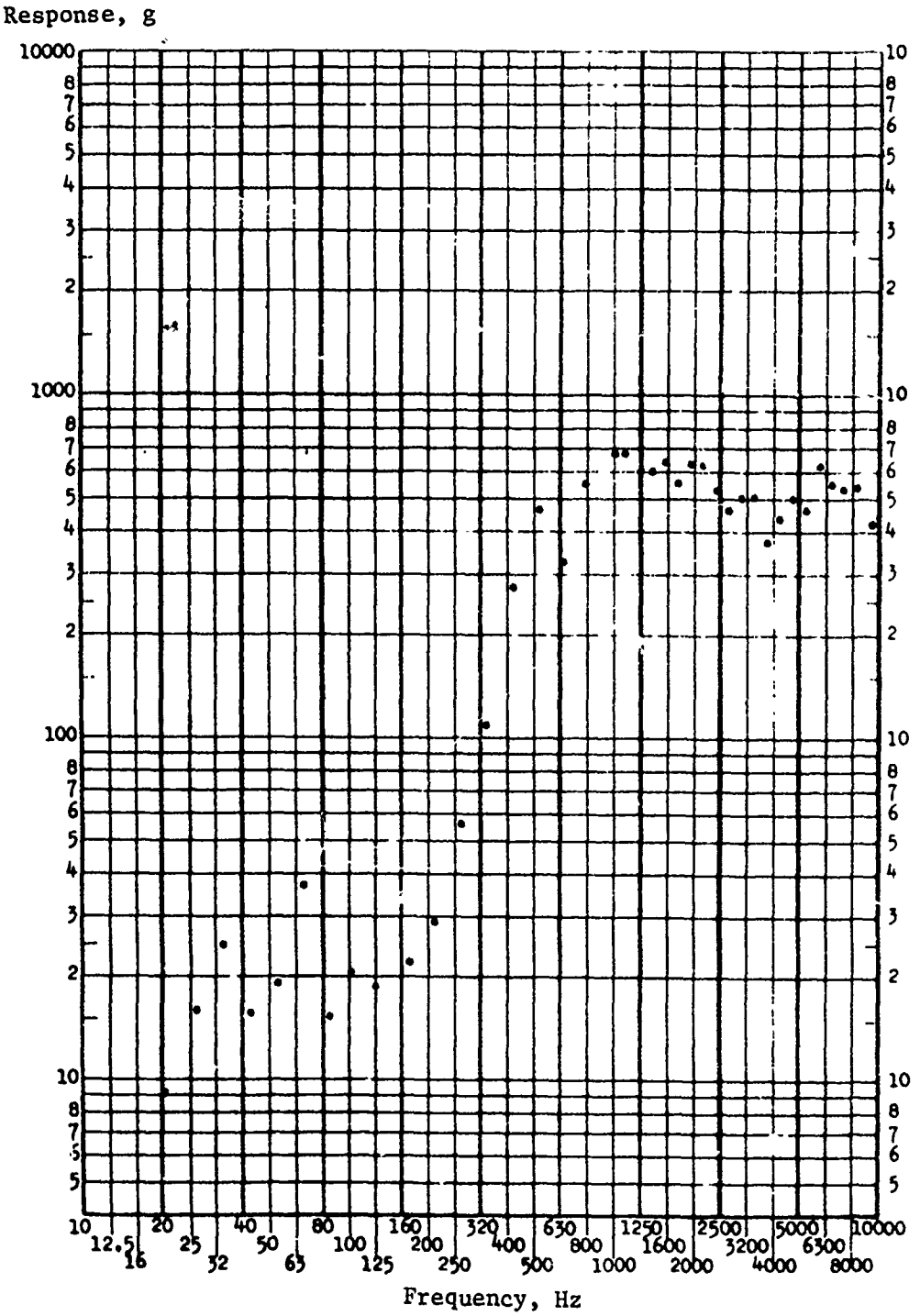
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 6 - Radial axis longeron near station 117

Figure 10 (cont)



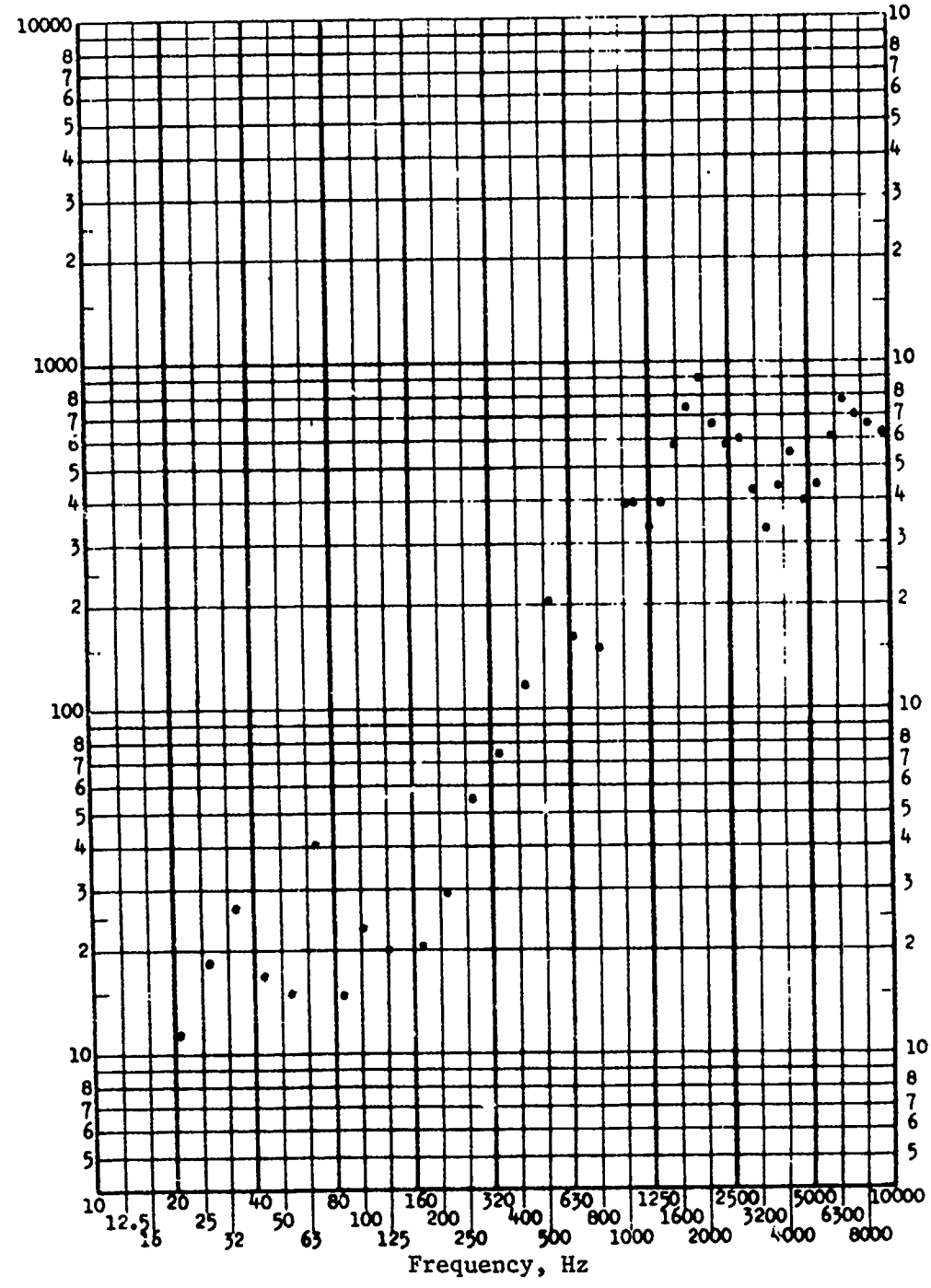
Bench Shock Test - Stage II/III Separation, Run 10
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 10 (cont)



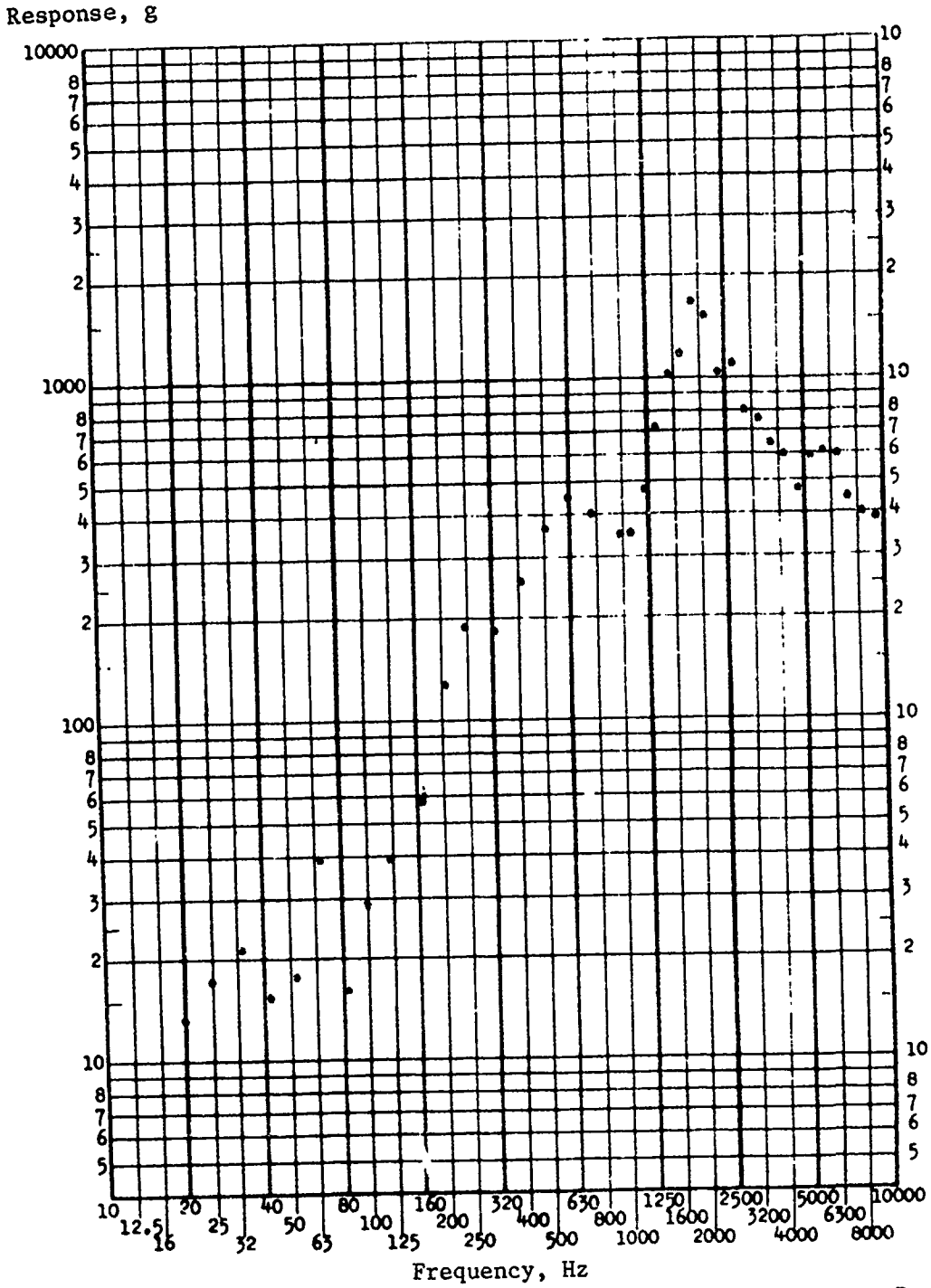
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 8 - Tangential axis longeron near station 77

Figure 10 (cont)



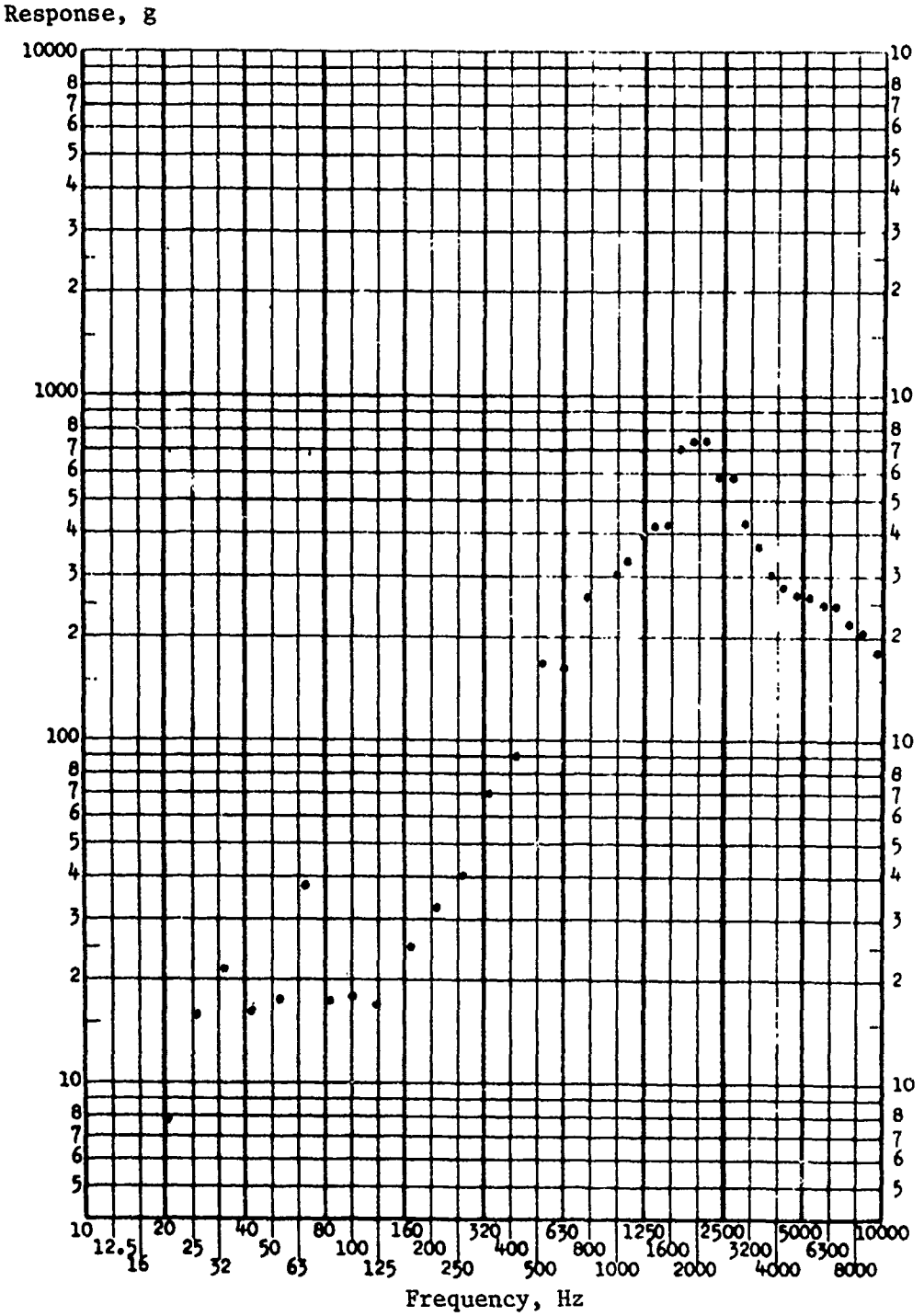
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 9 - Radial axis longeron near station 77

Figure 10 (cont)



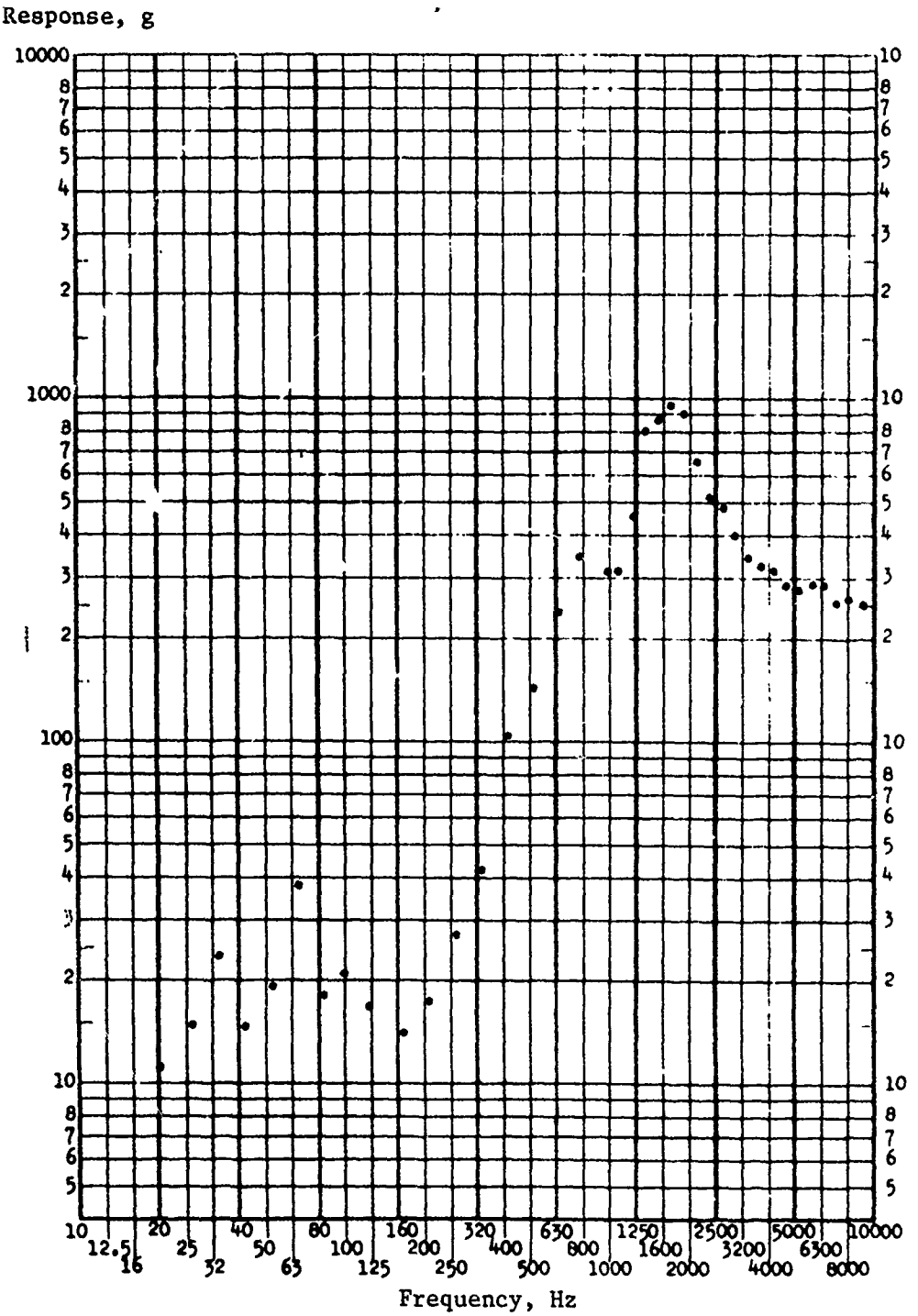
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 10 (cont)



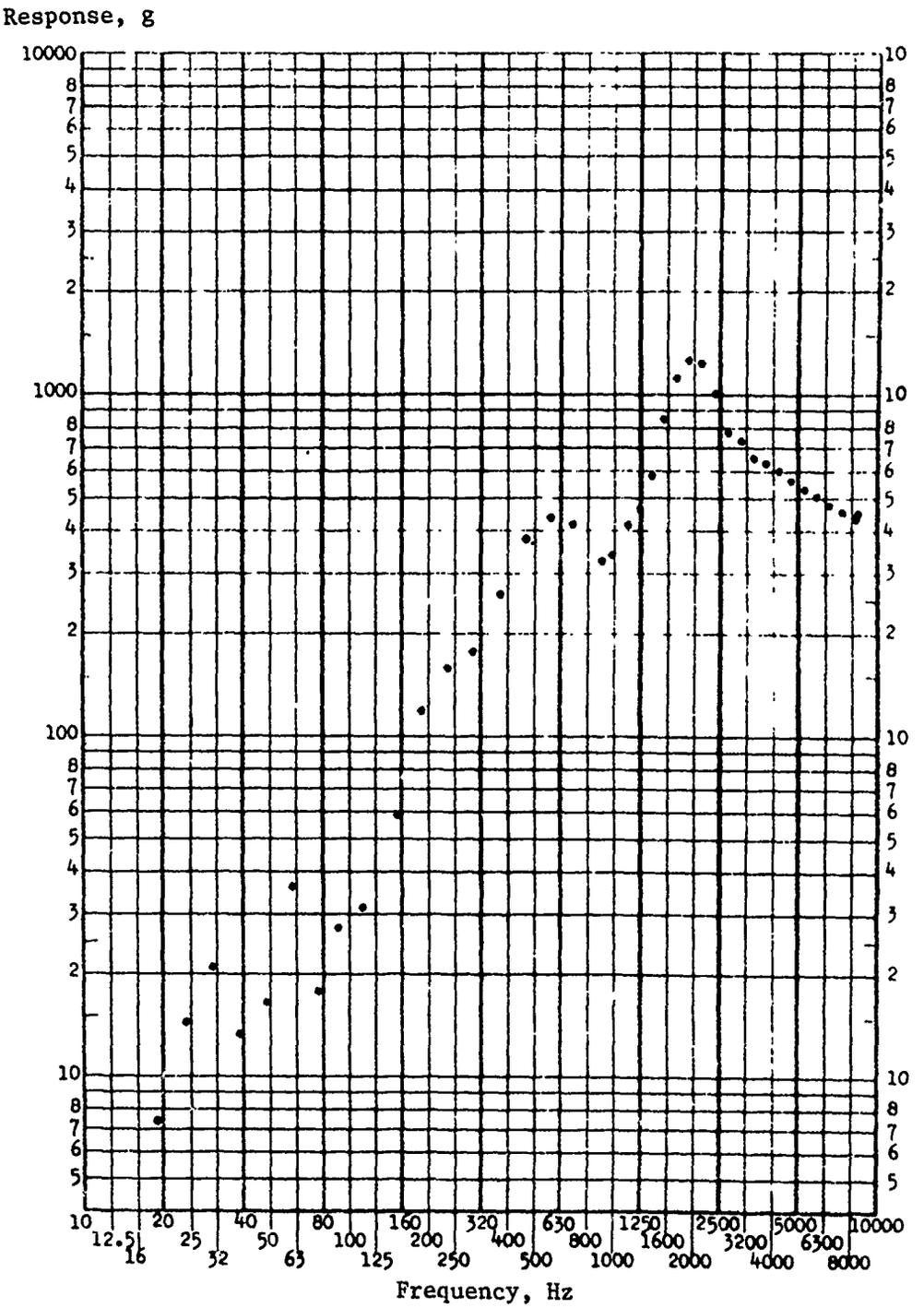
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 10 (cont)



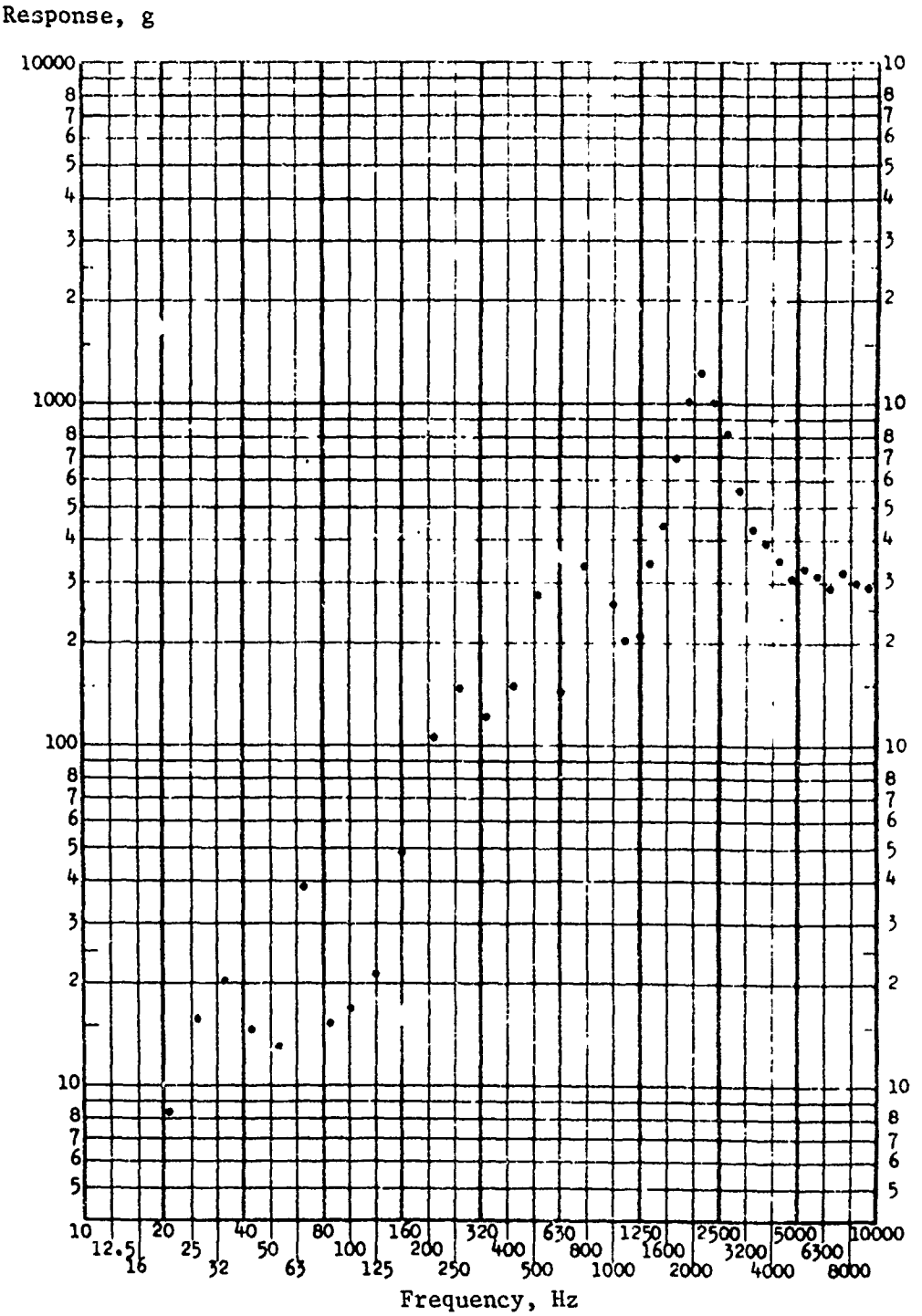
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 10 (cont)



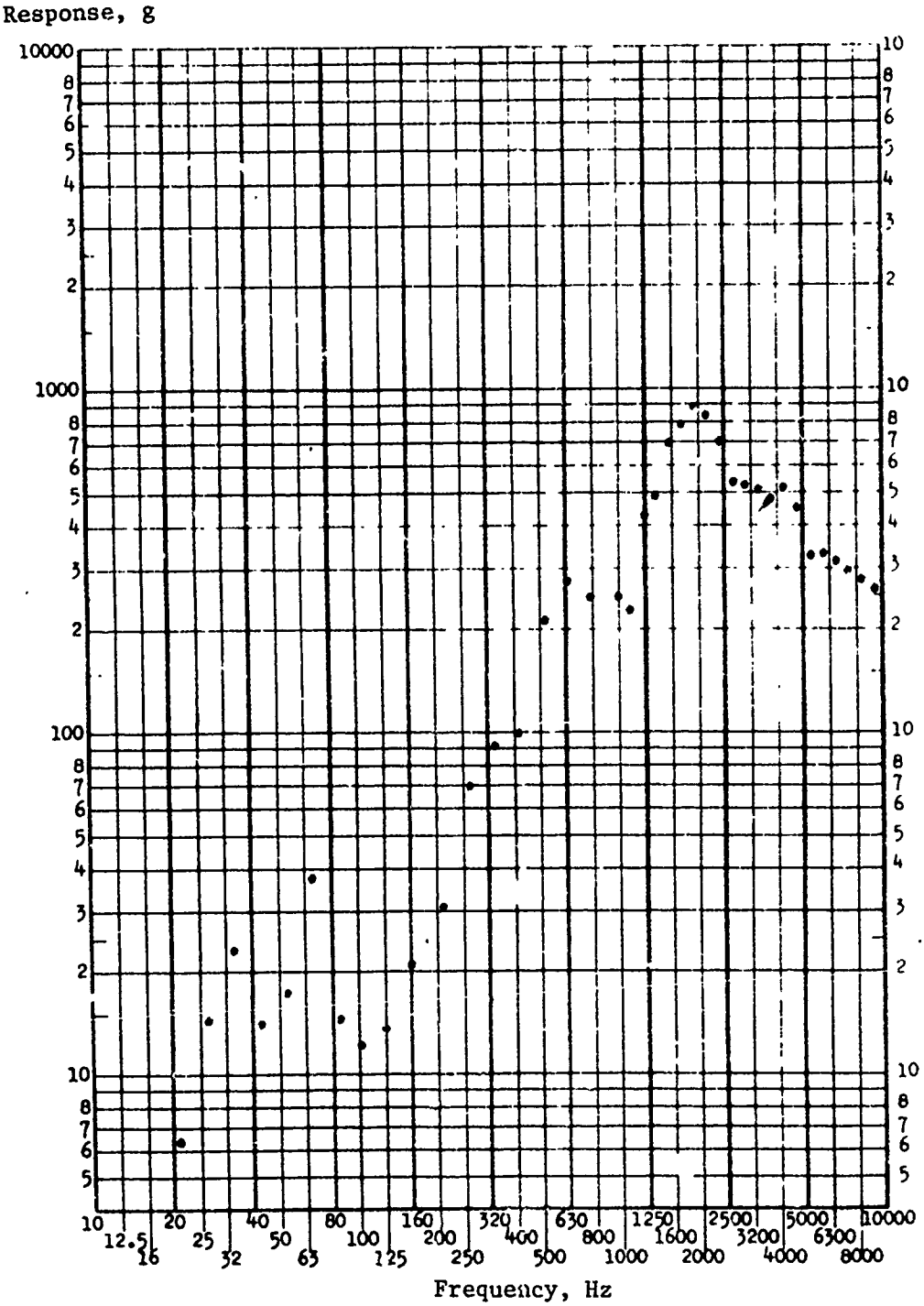
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 10 (cont)



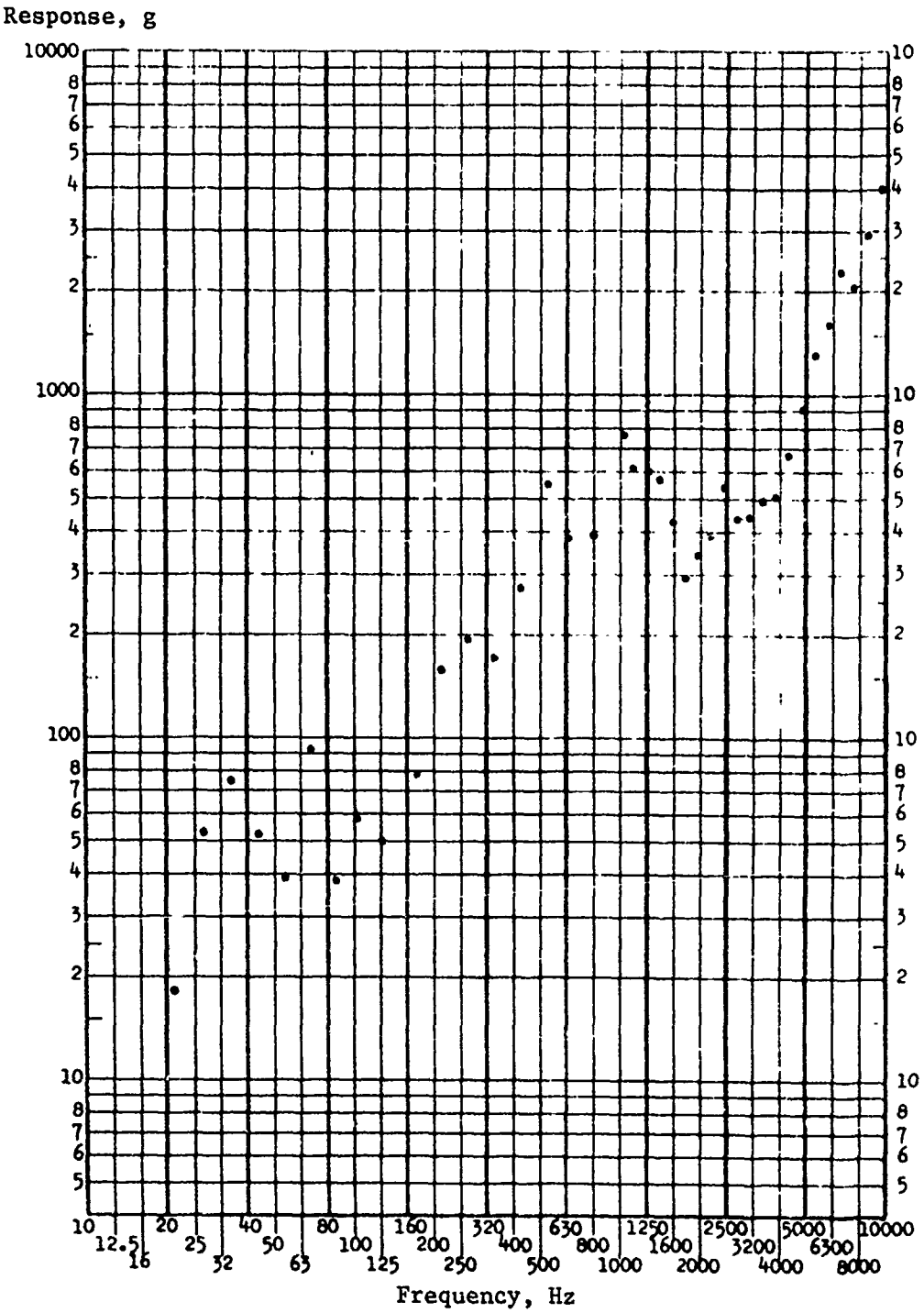
Bench Shock Test - Stage II/III Separation, Run 10_
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 10 (cont)



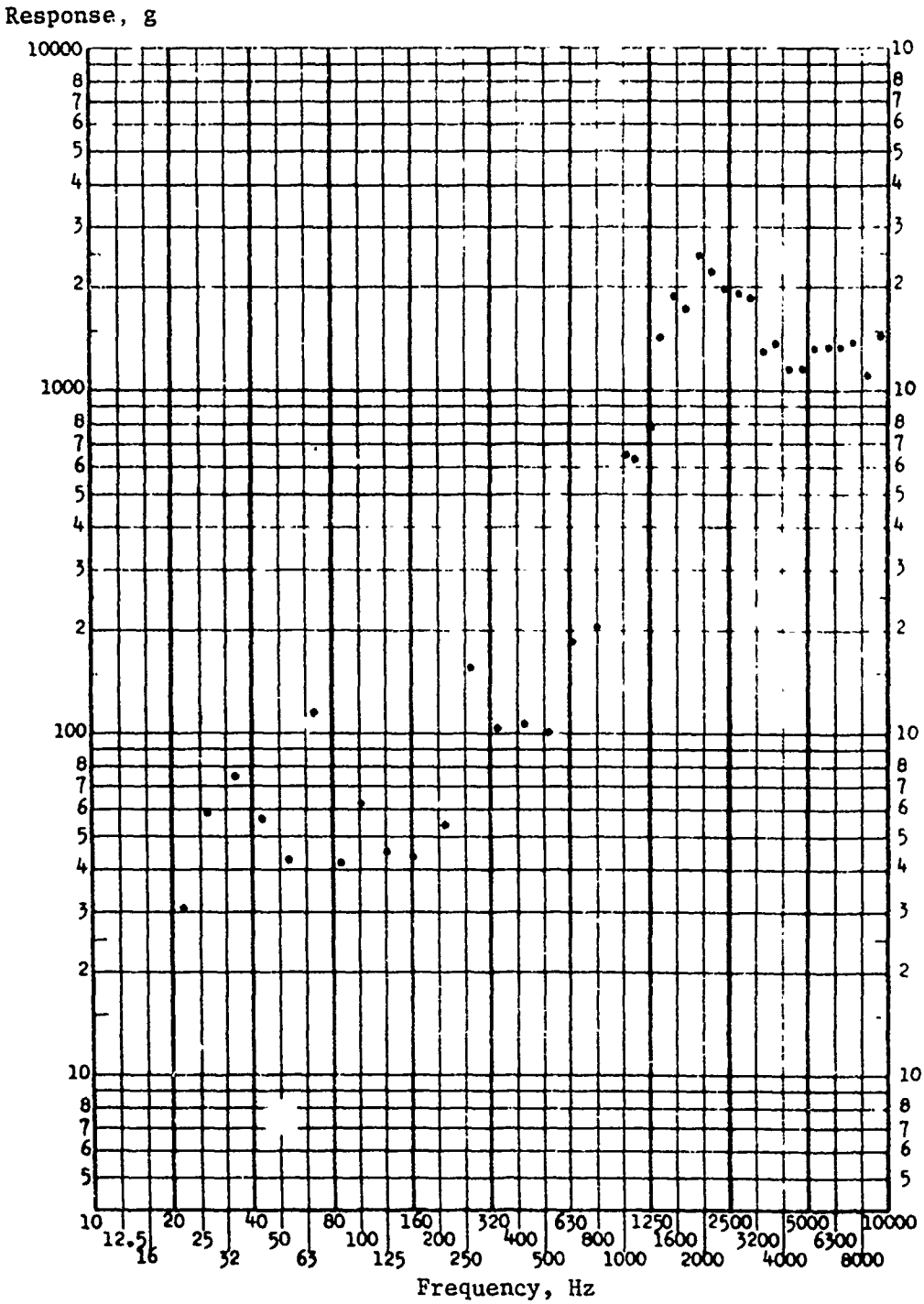
Bench Shock Test - Stage II/III Separation, Run 10__
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 10 (concl)



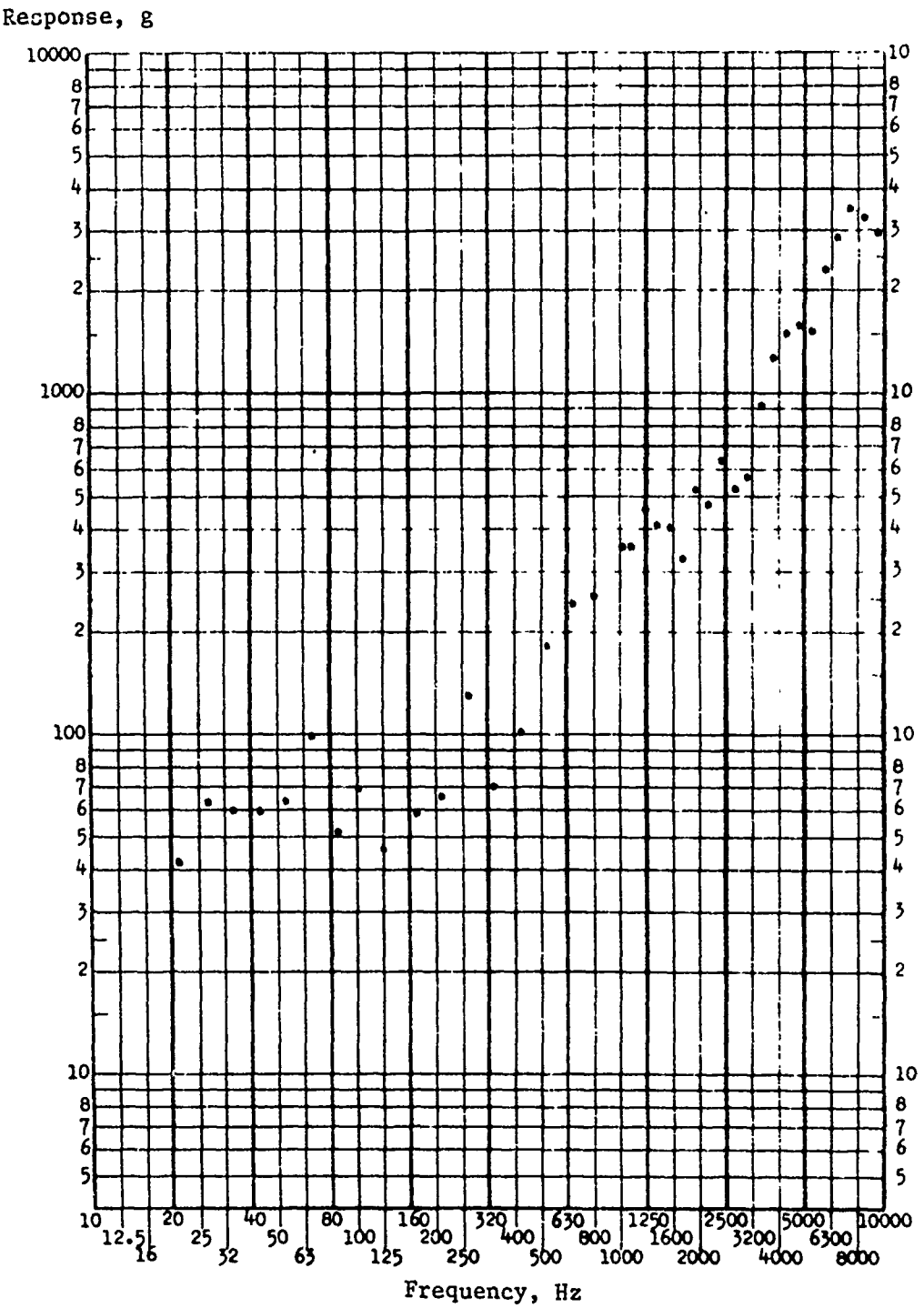
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 11 Run 11 Shock Response Spectrum



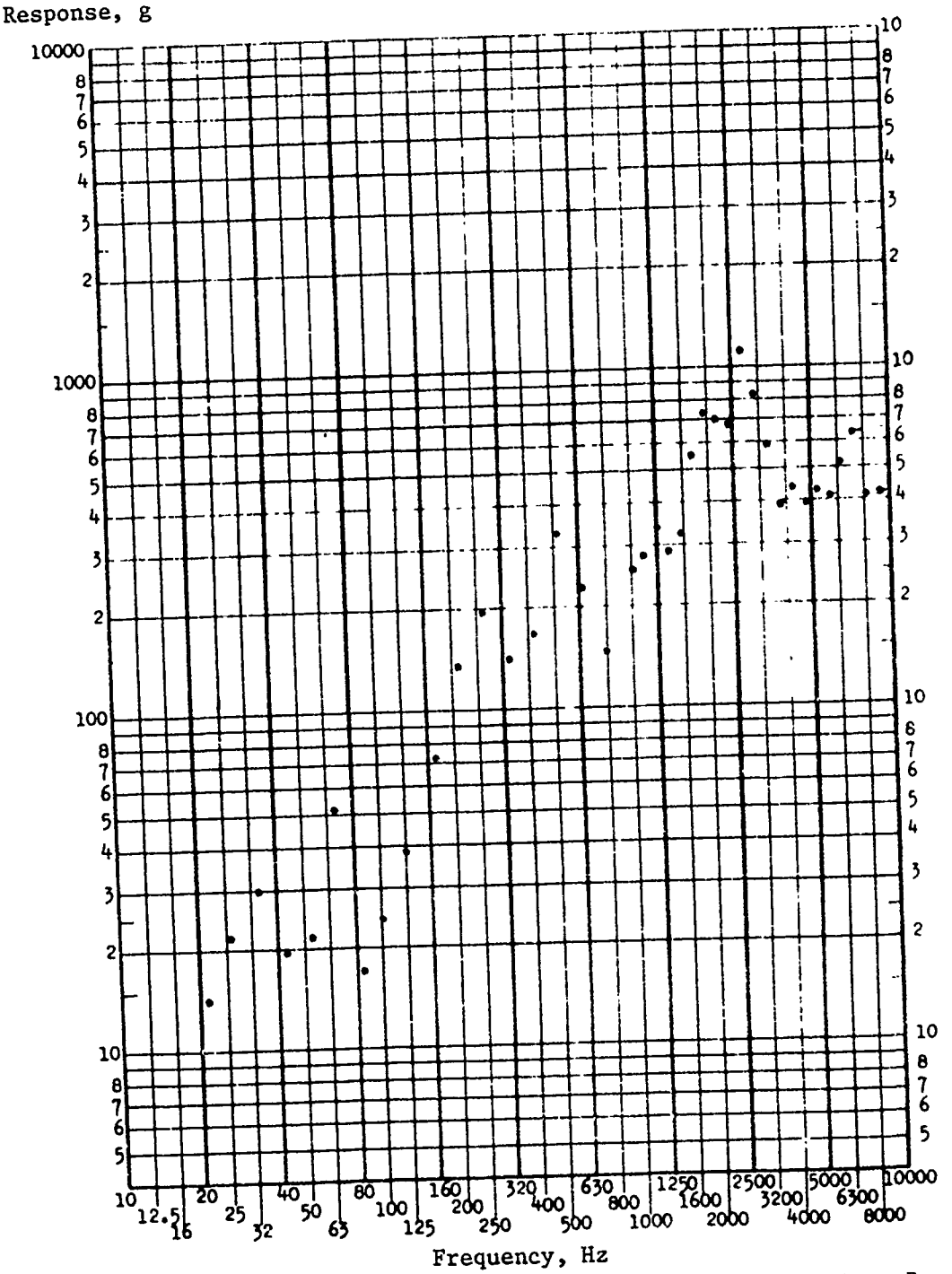
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 2 - Tangential axis longeron near station 133

Figure 11 (cont)



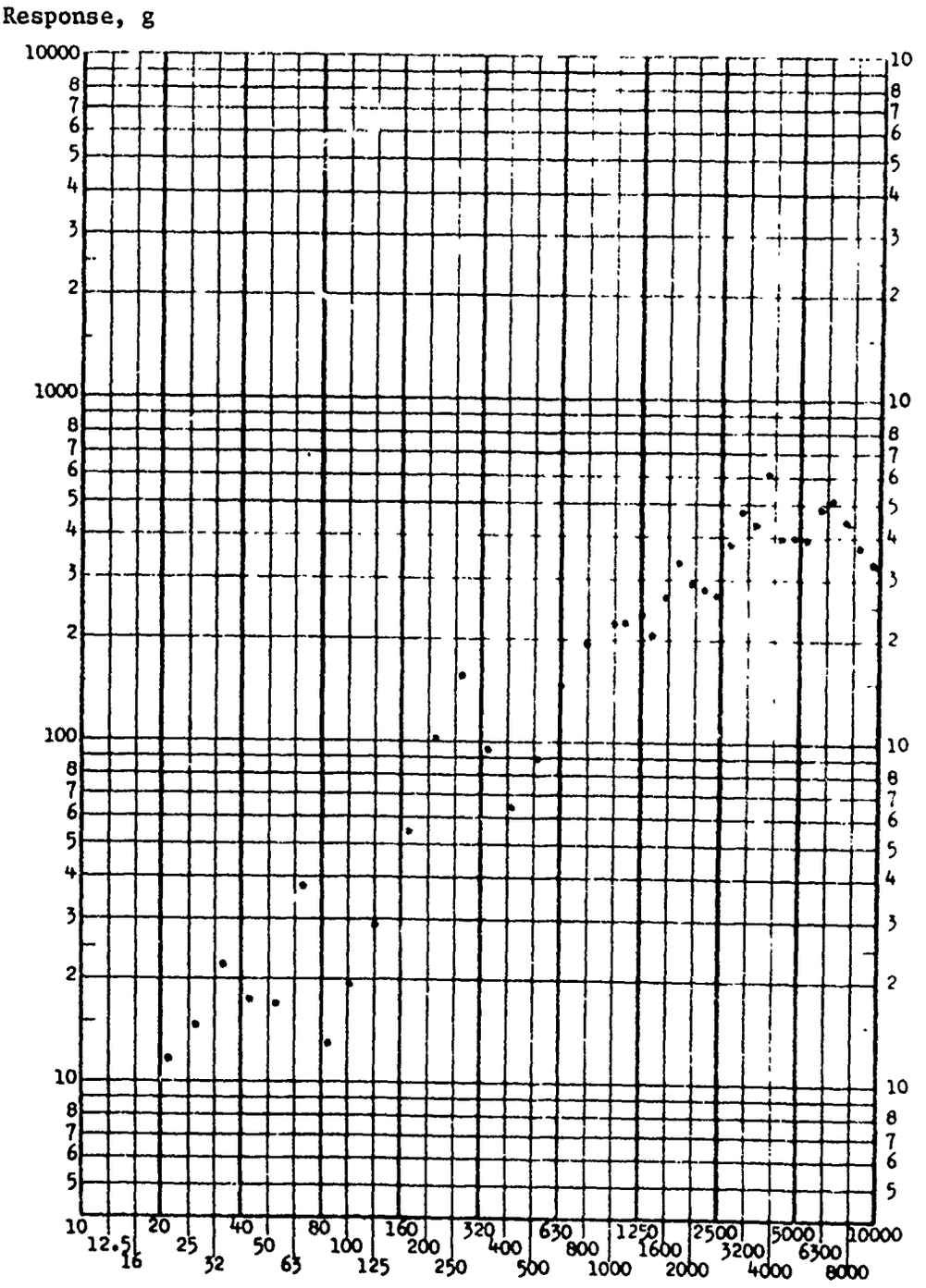
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 3 - Radial axis longeron near station 133

Figure 11 (cont)



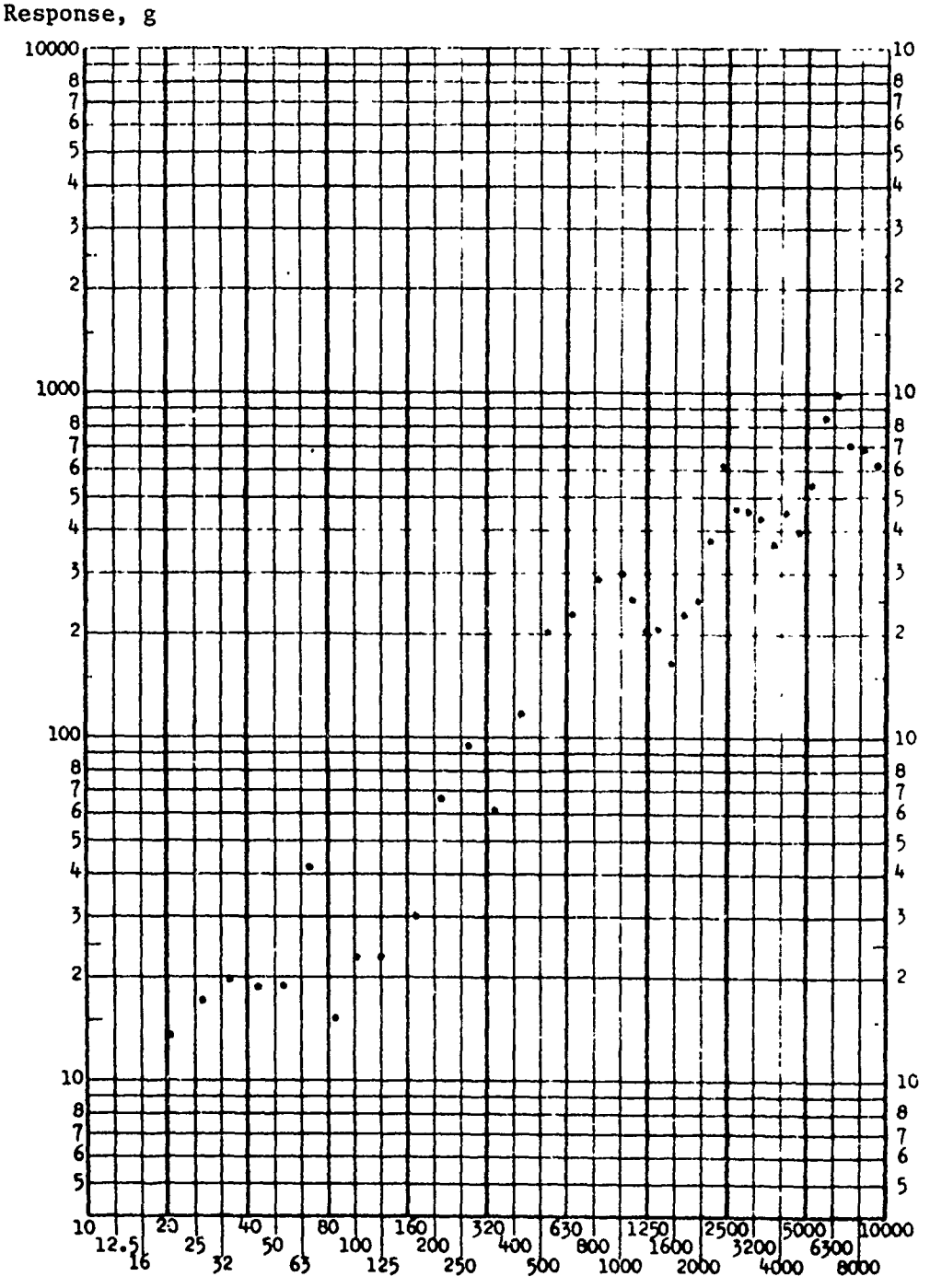
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 11 (cont)



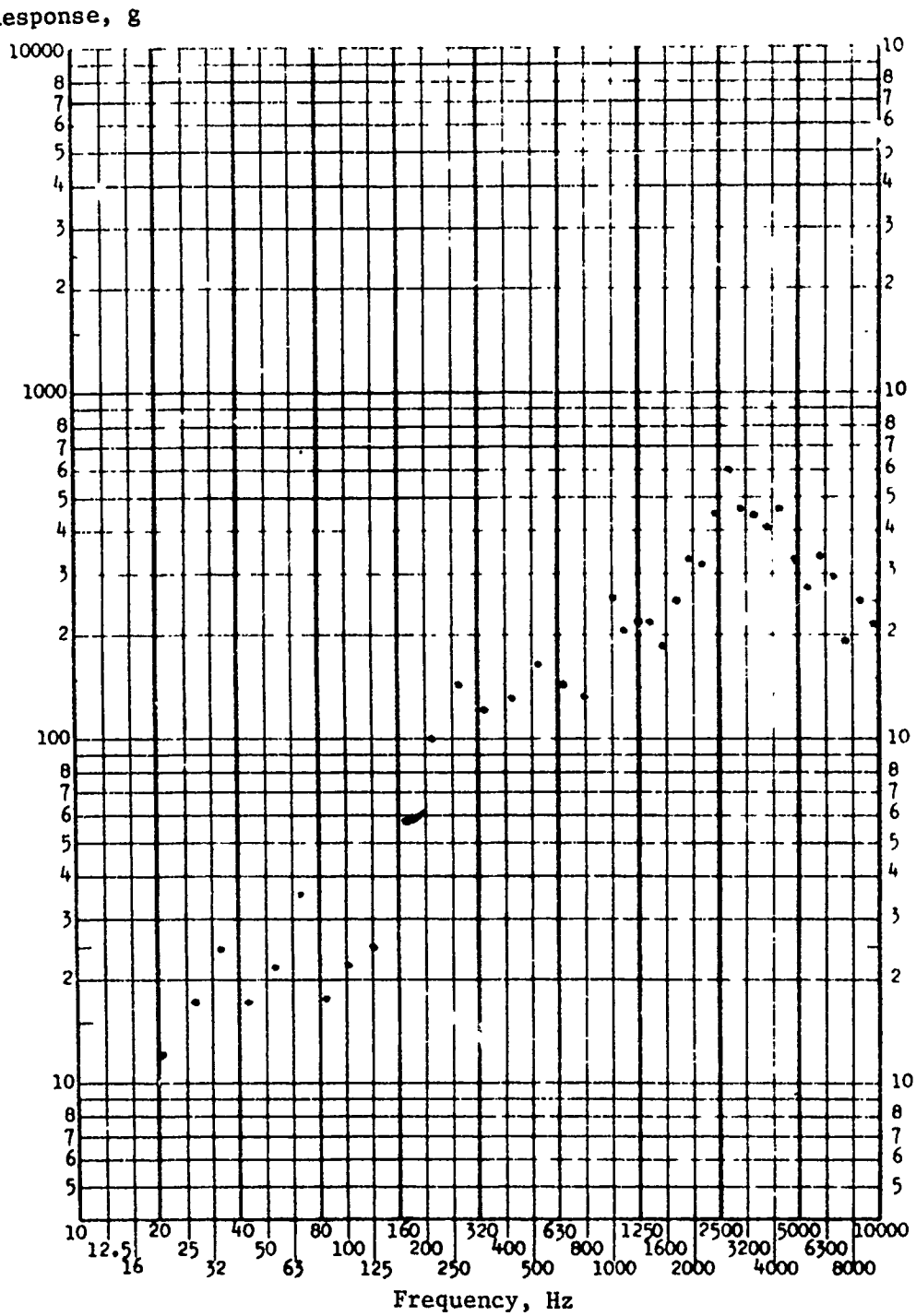
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 5 - Tangential axis longeron near station 117

Figure 11 (cont)



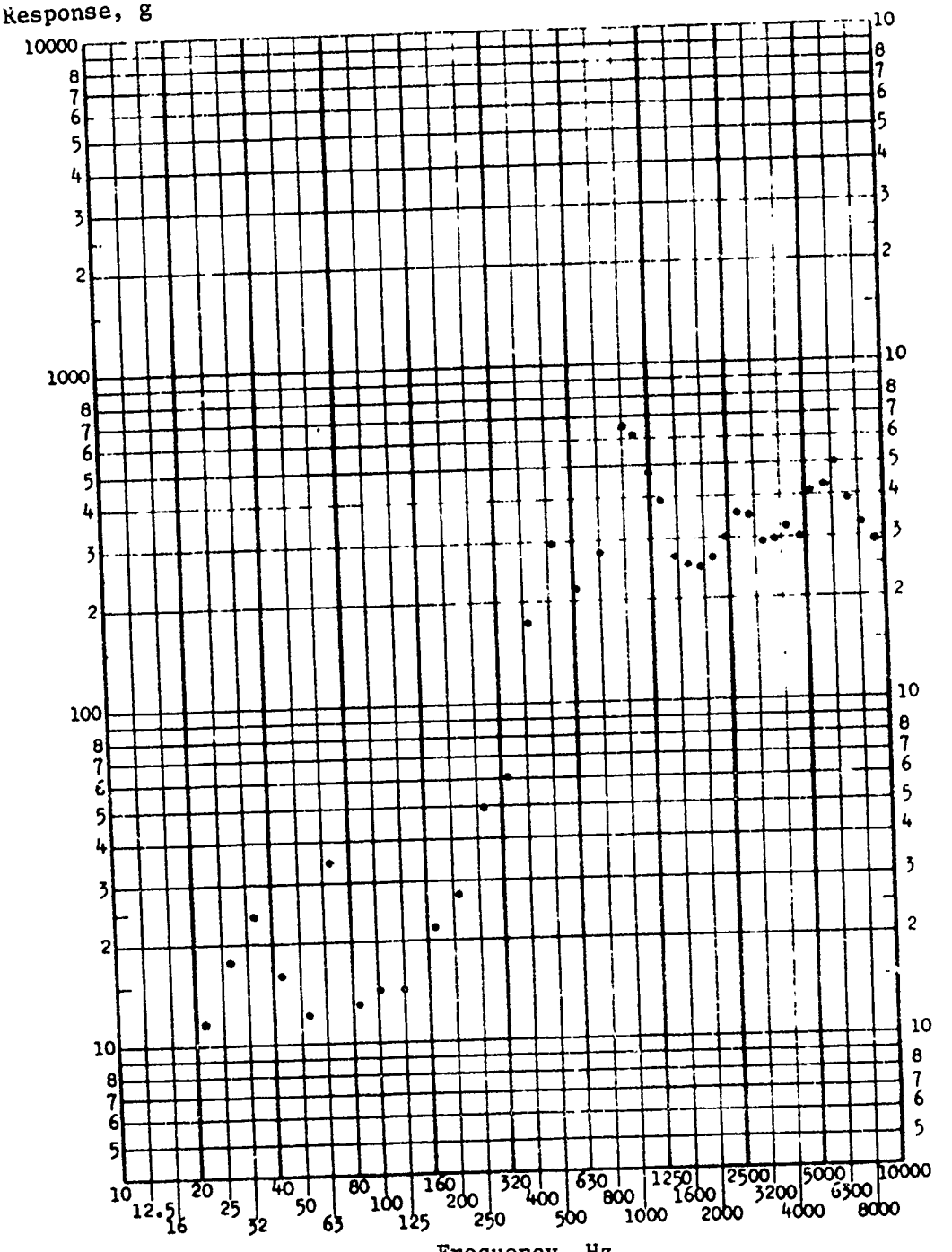
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 6 - Radial axis longeron near station 117

Figure 11 (cont)



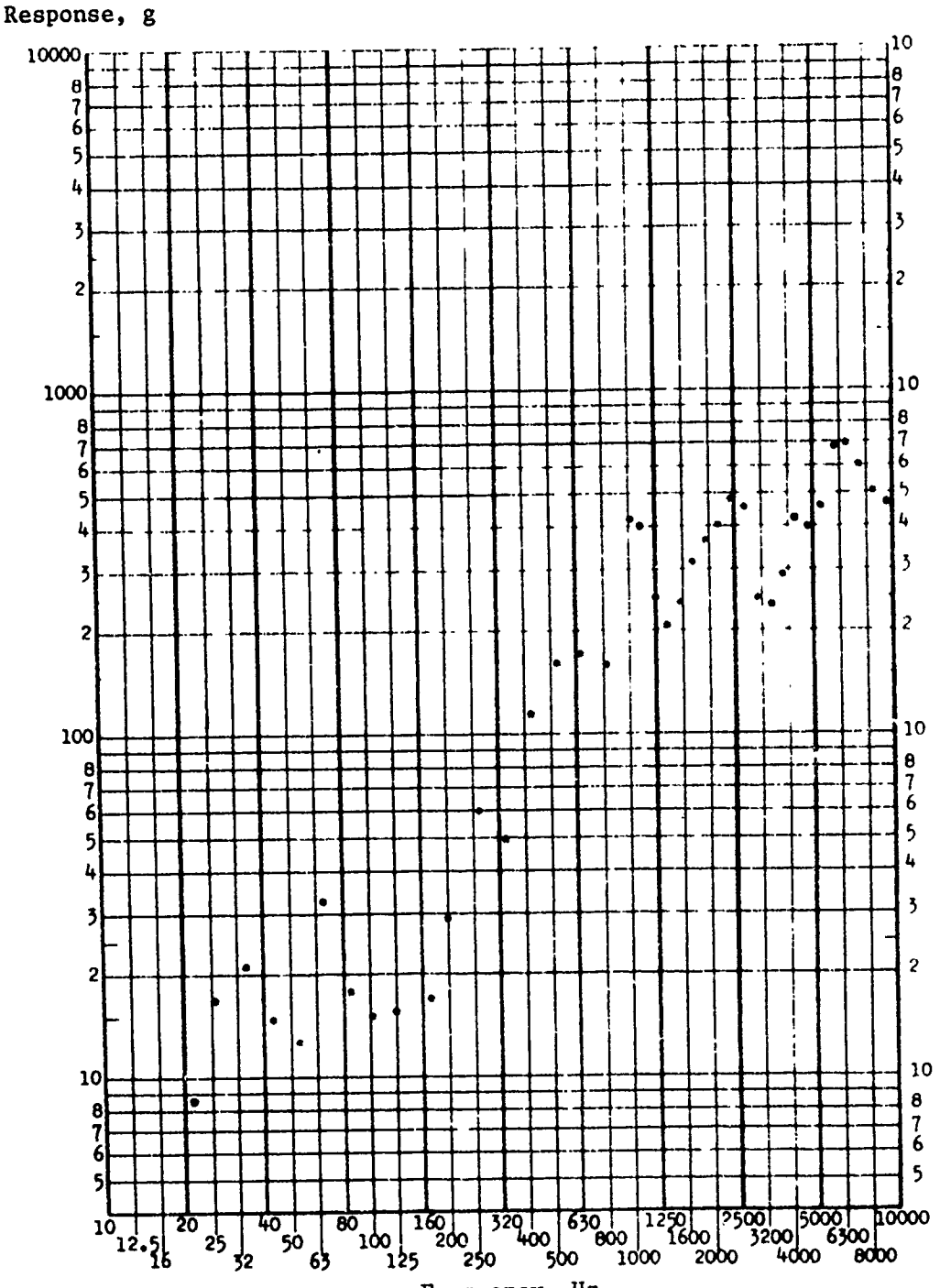
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 11 (cont)



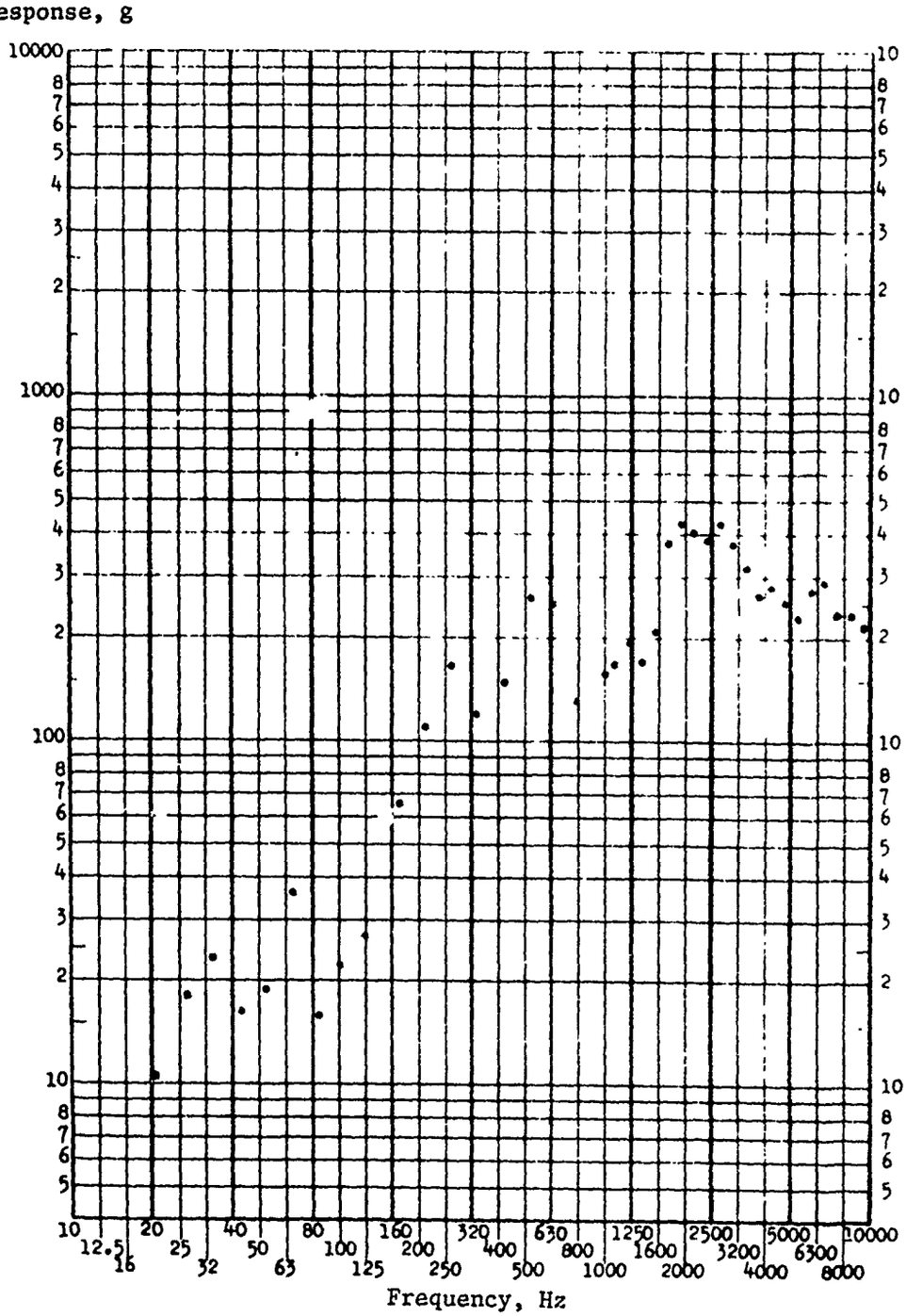
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 8 - Tangential axis longeron near station 77

Figure 11 (cont)



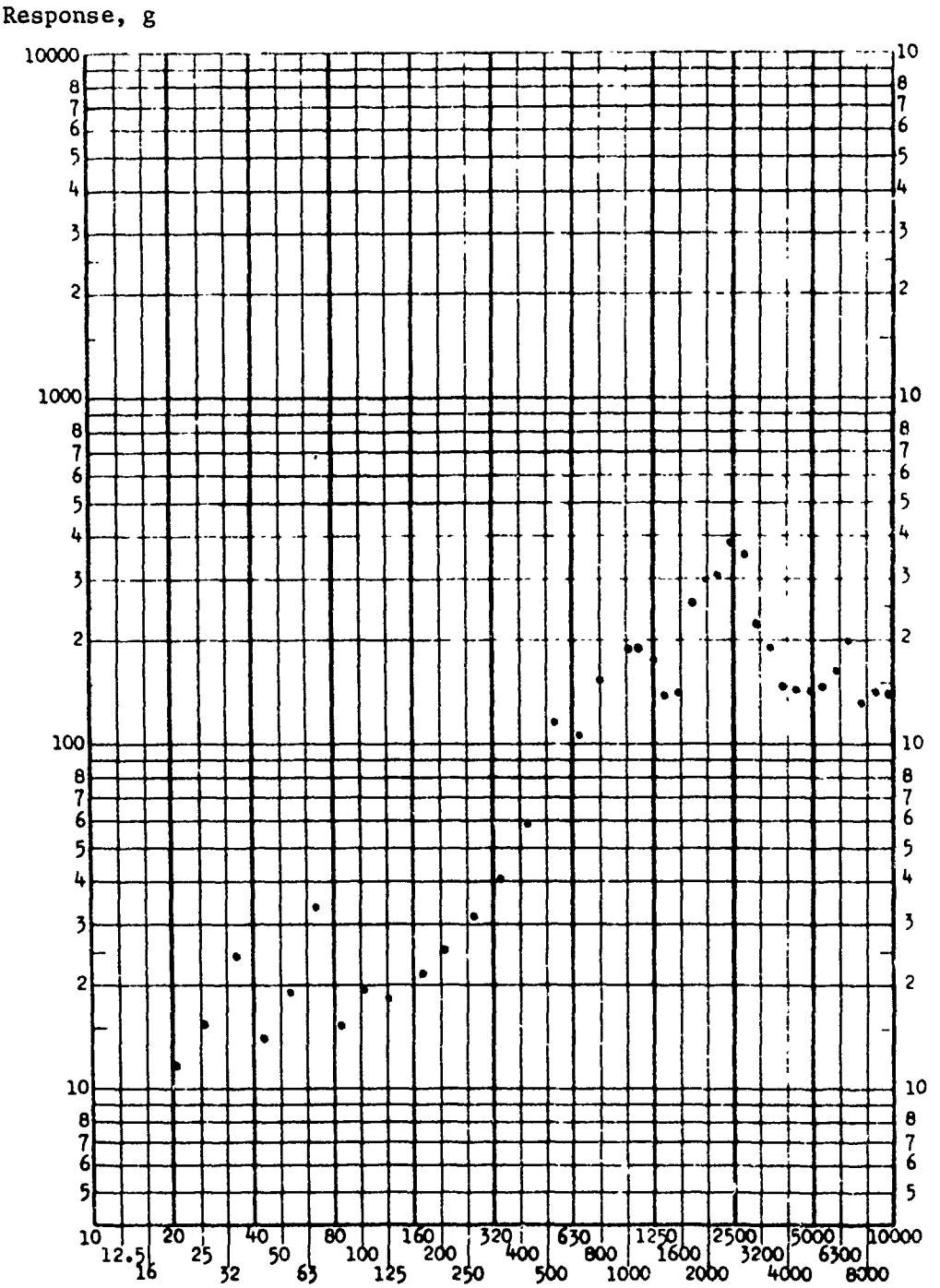
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 9 - Radial axis longeron near station 77

Figure 11 (cont)



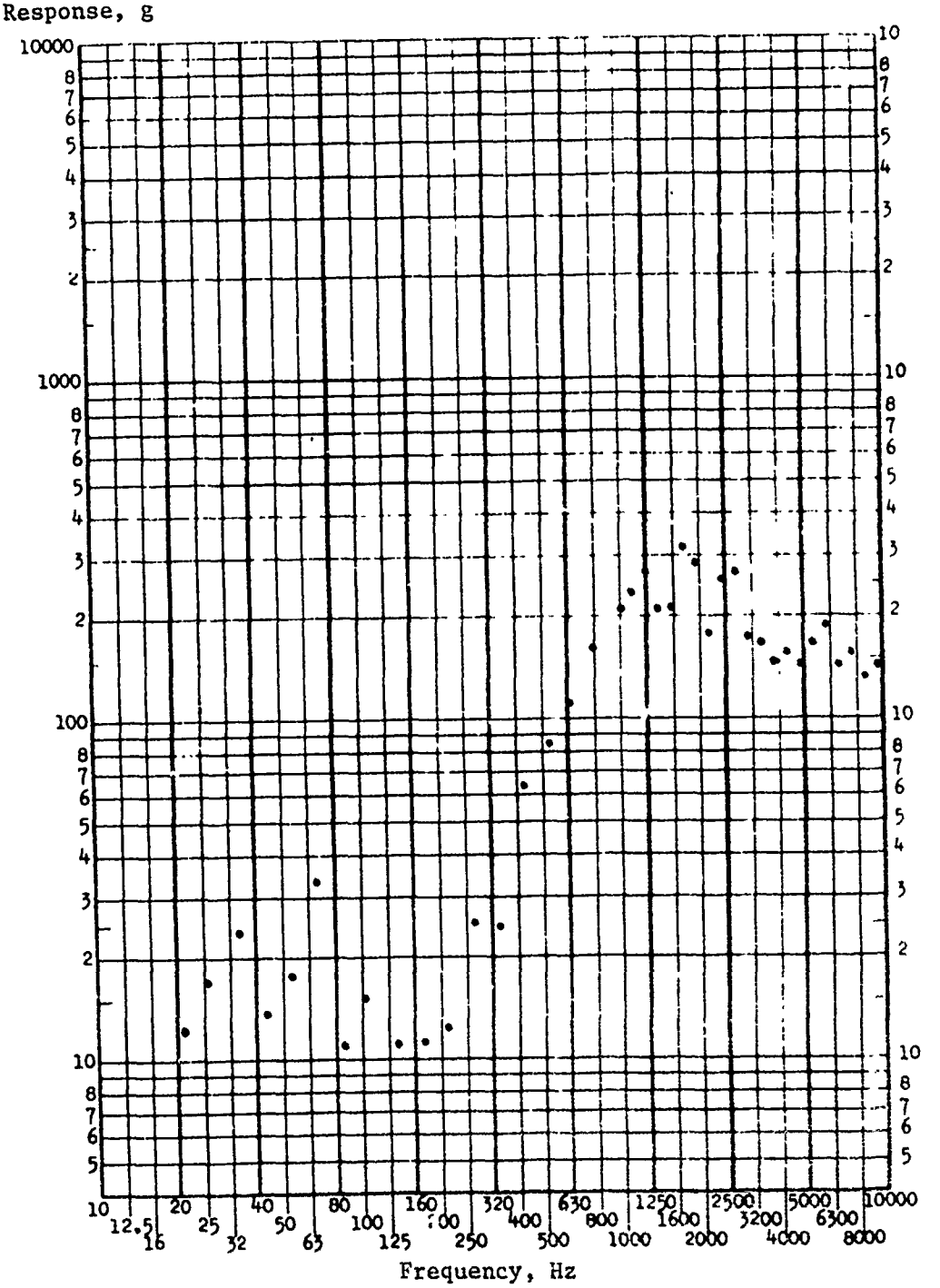
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 11 (cont)



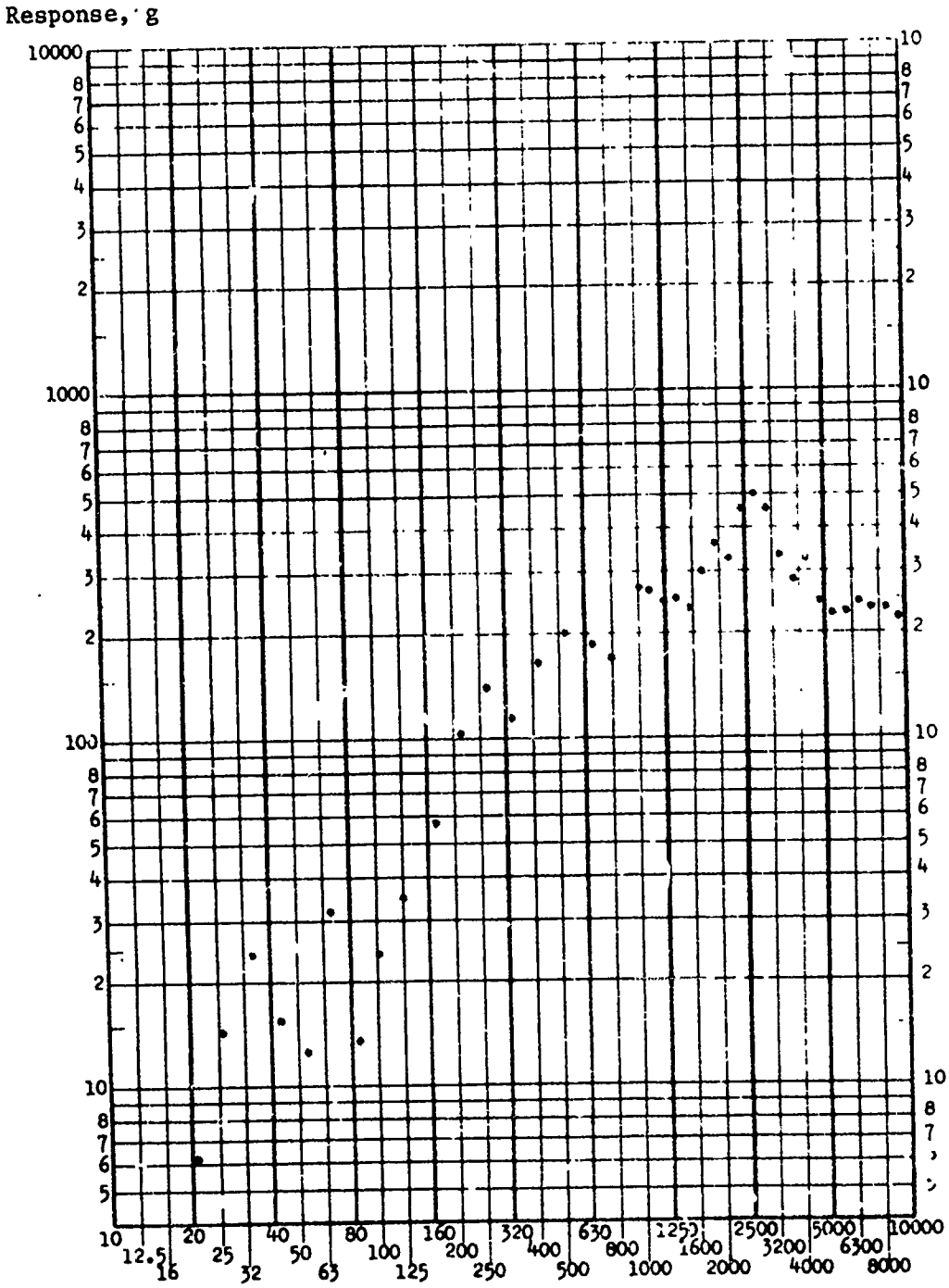
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 11 (cont)



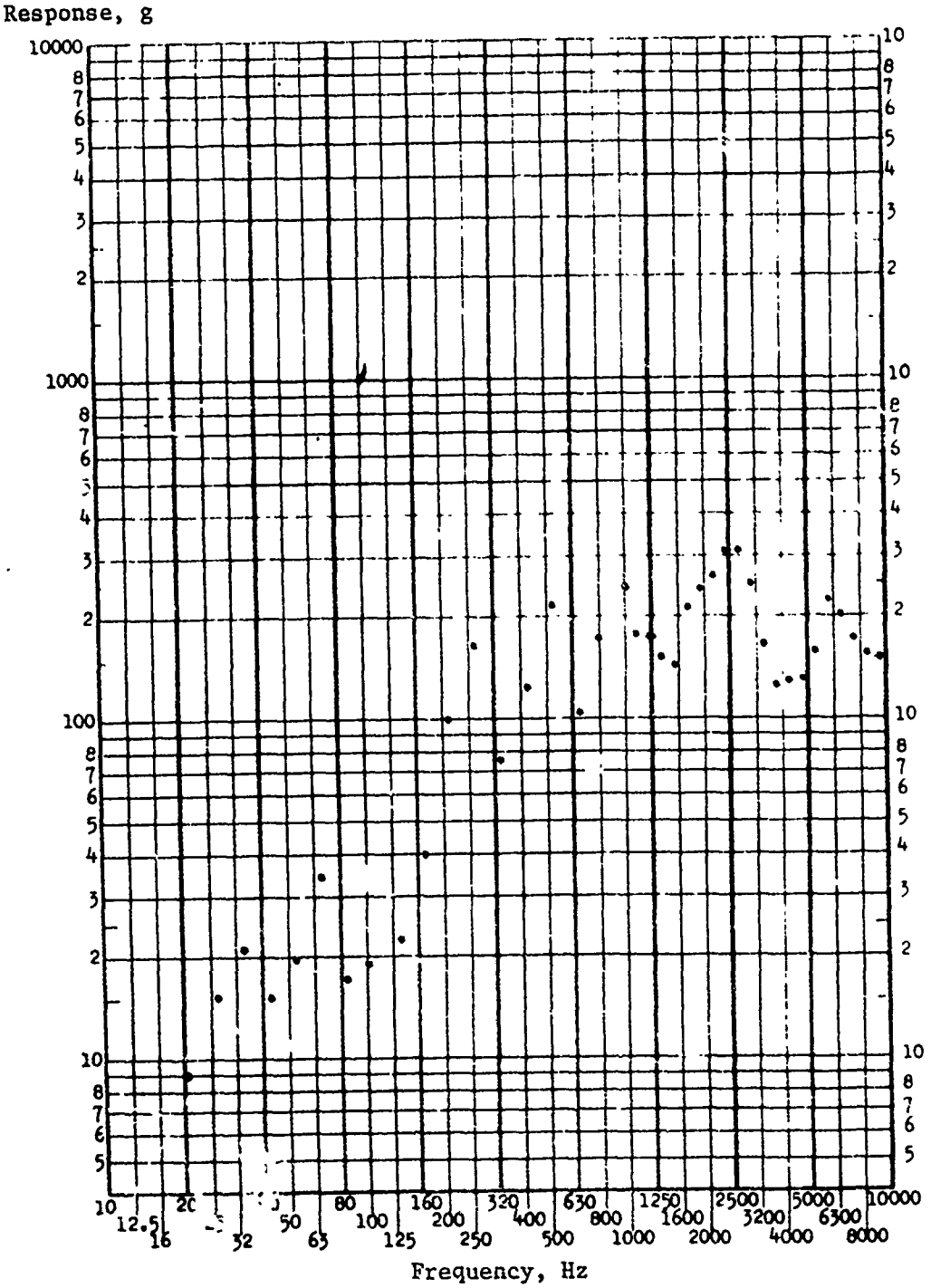
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 11 (cont)



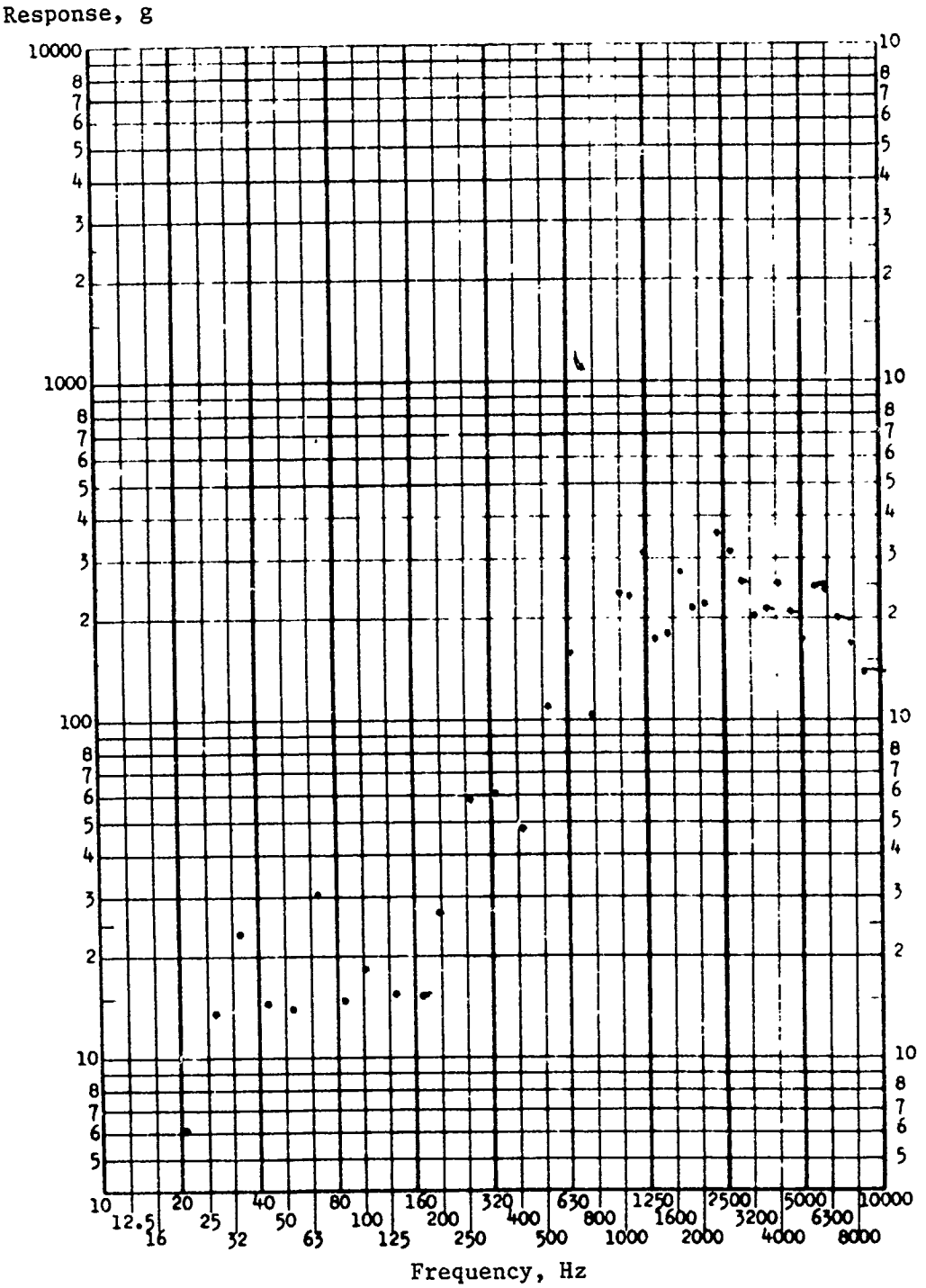
Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 11 (cont)



Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 11 (cont)



Bench Shock Test - Stage II/III Separation, Run 11
Measurement No. 15 - Lateral axis truss top rear longeron attach point

Figure 11 (concl)

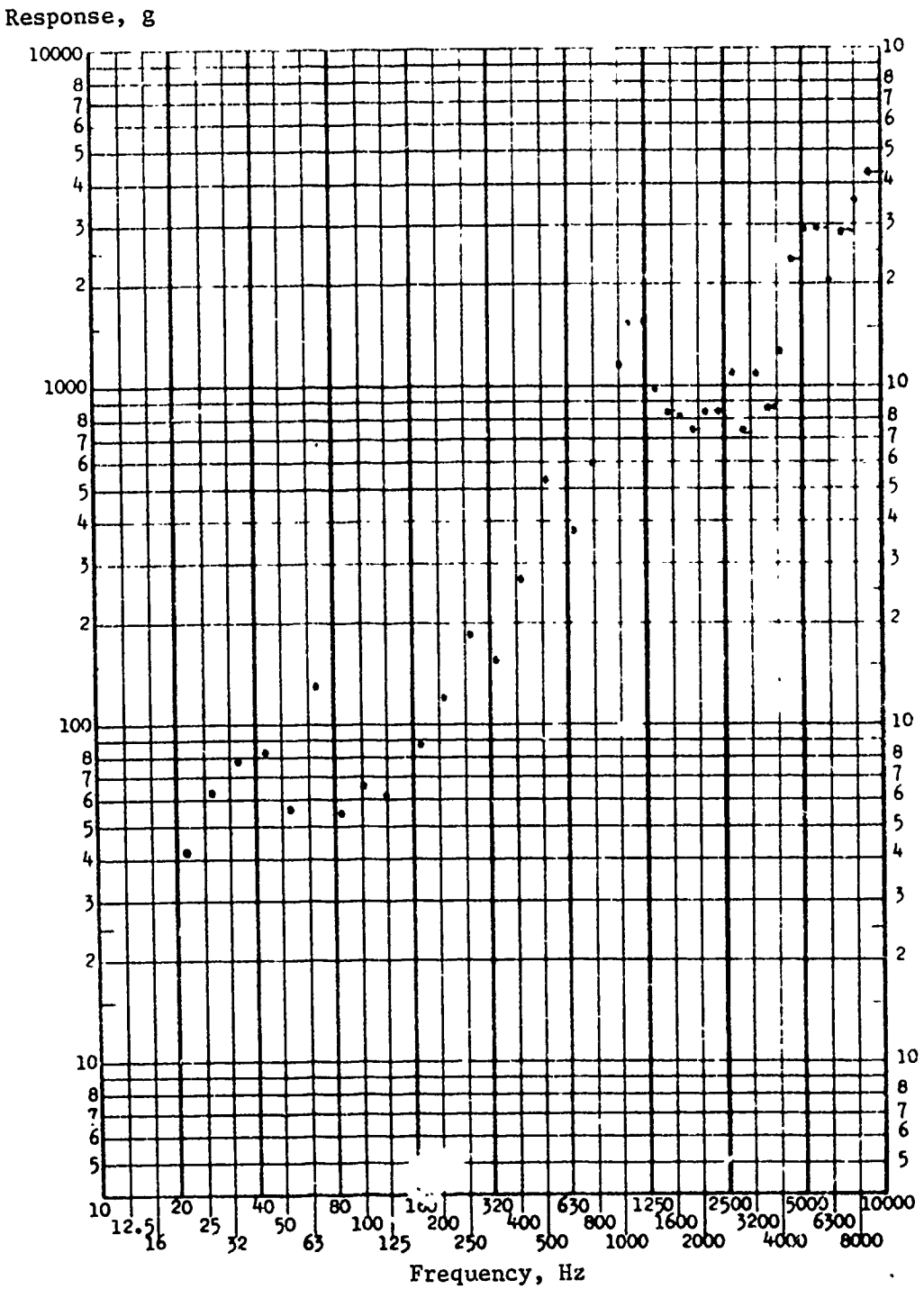
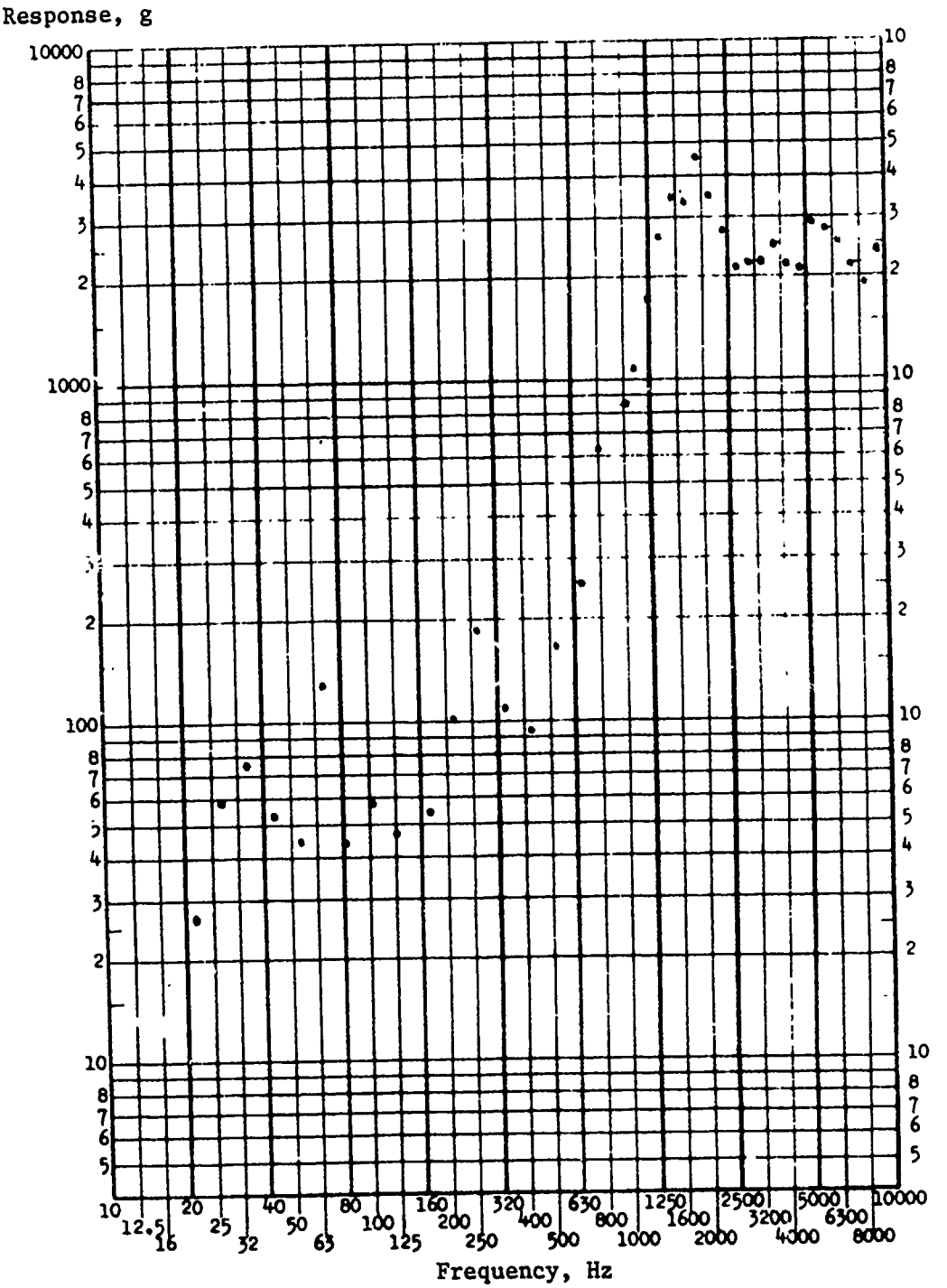
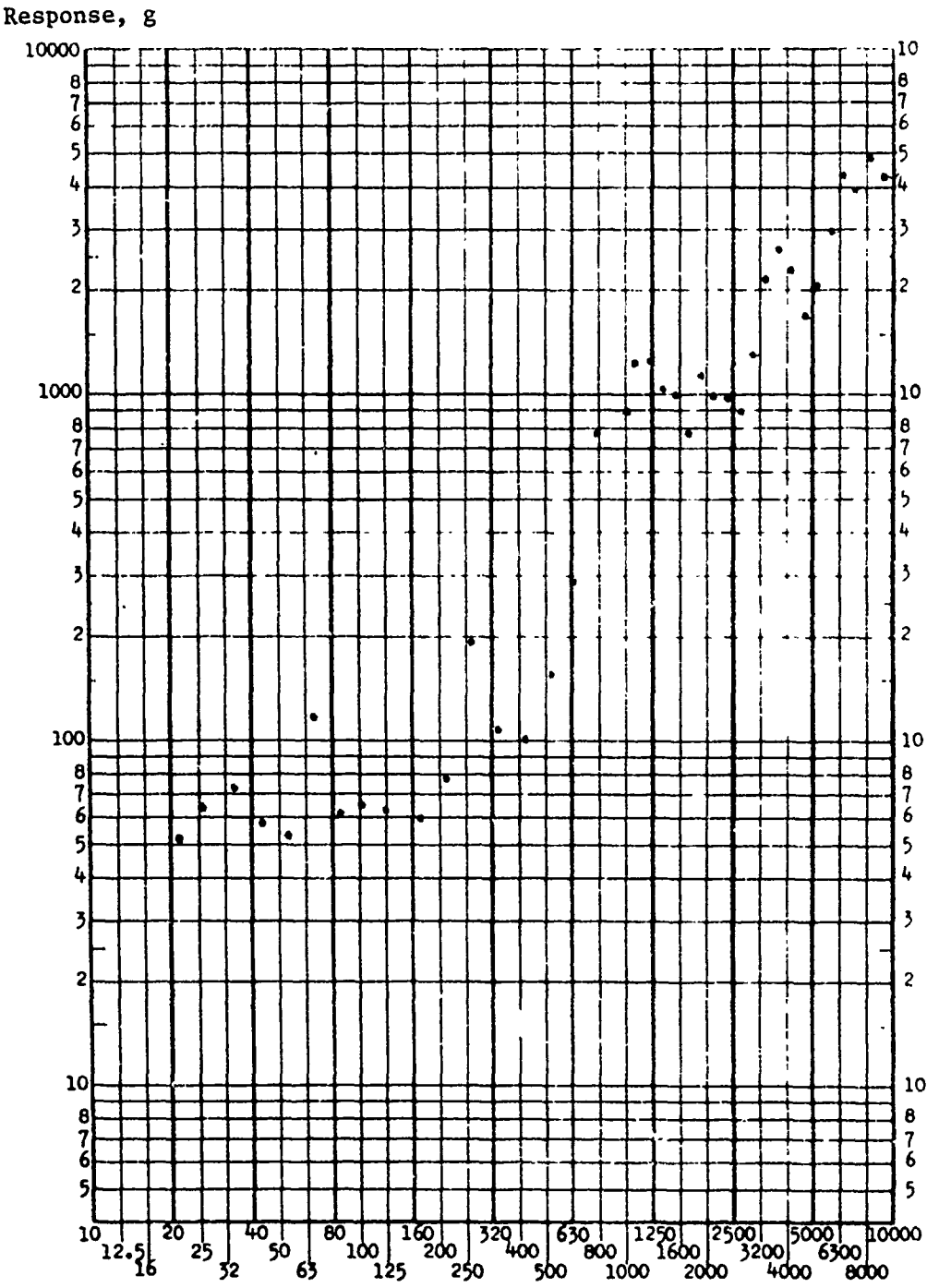


Figure 12 Run 12 Shock Response Spectrum



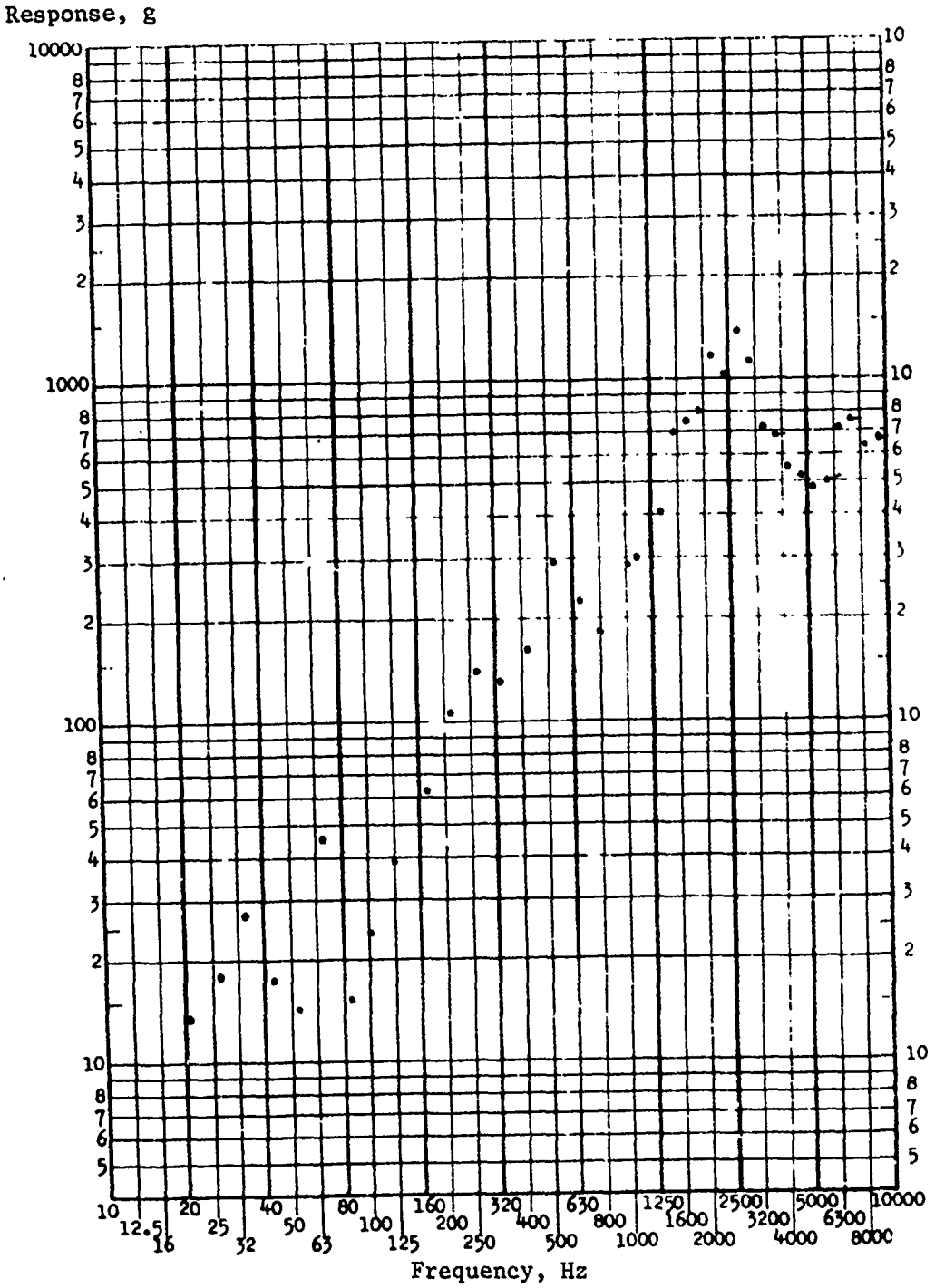
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 2 - Tangential axis longeron near station 133

Figure 12 (cont)



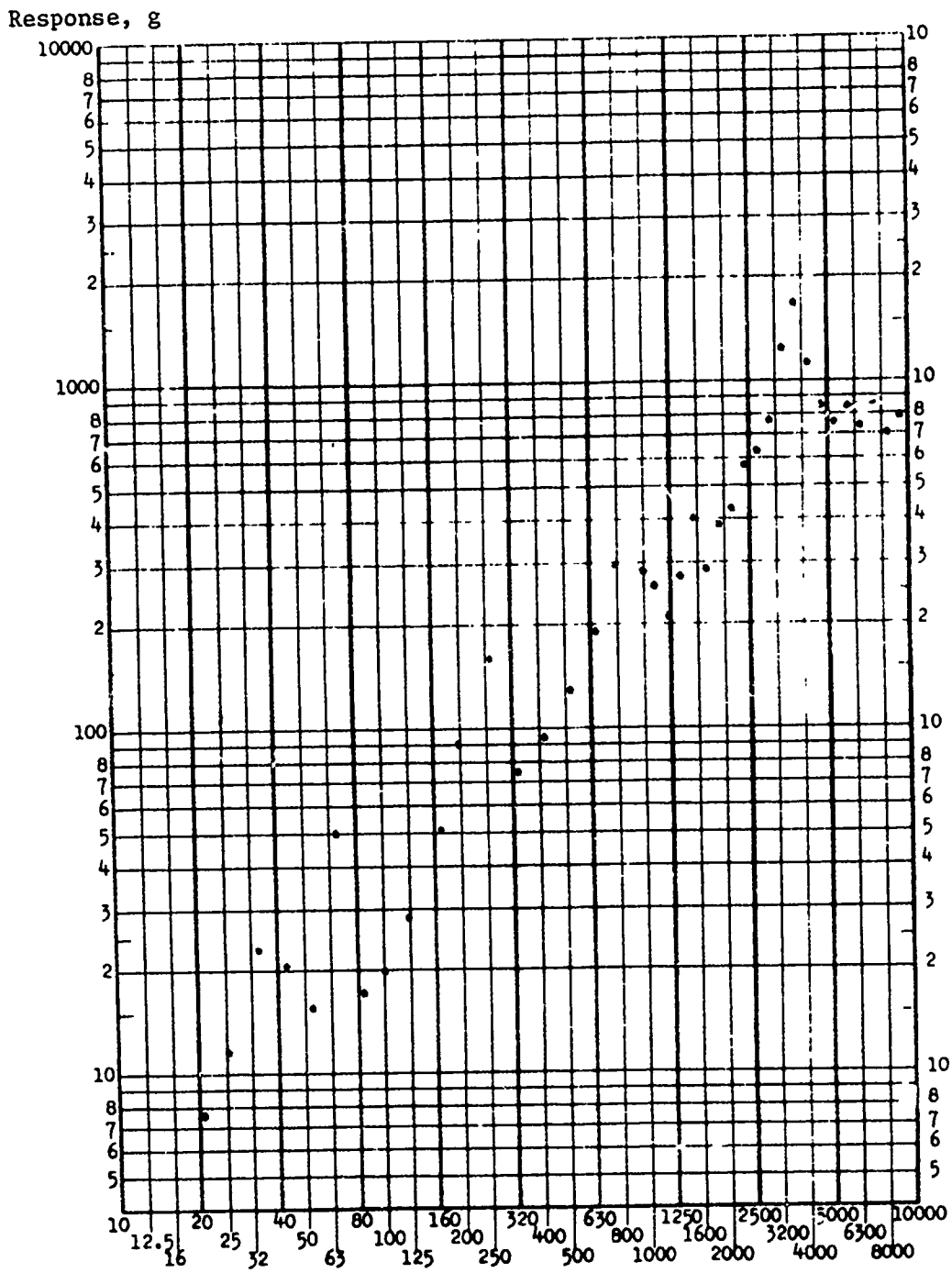
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 3 - Radial axis longeron near station 133

Figure 12 (cont)



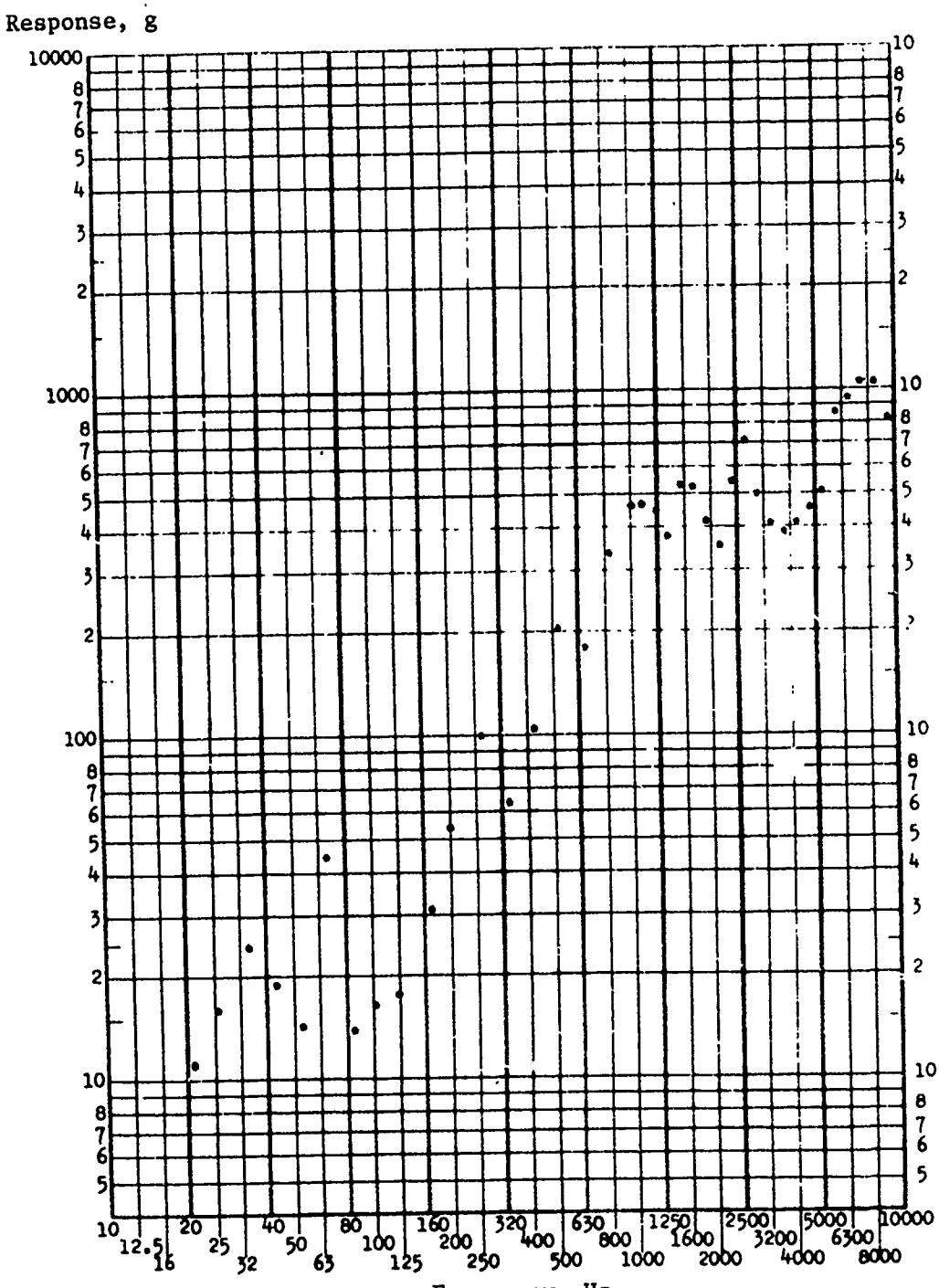
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 12 (cont)



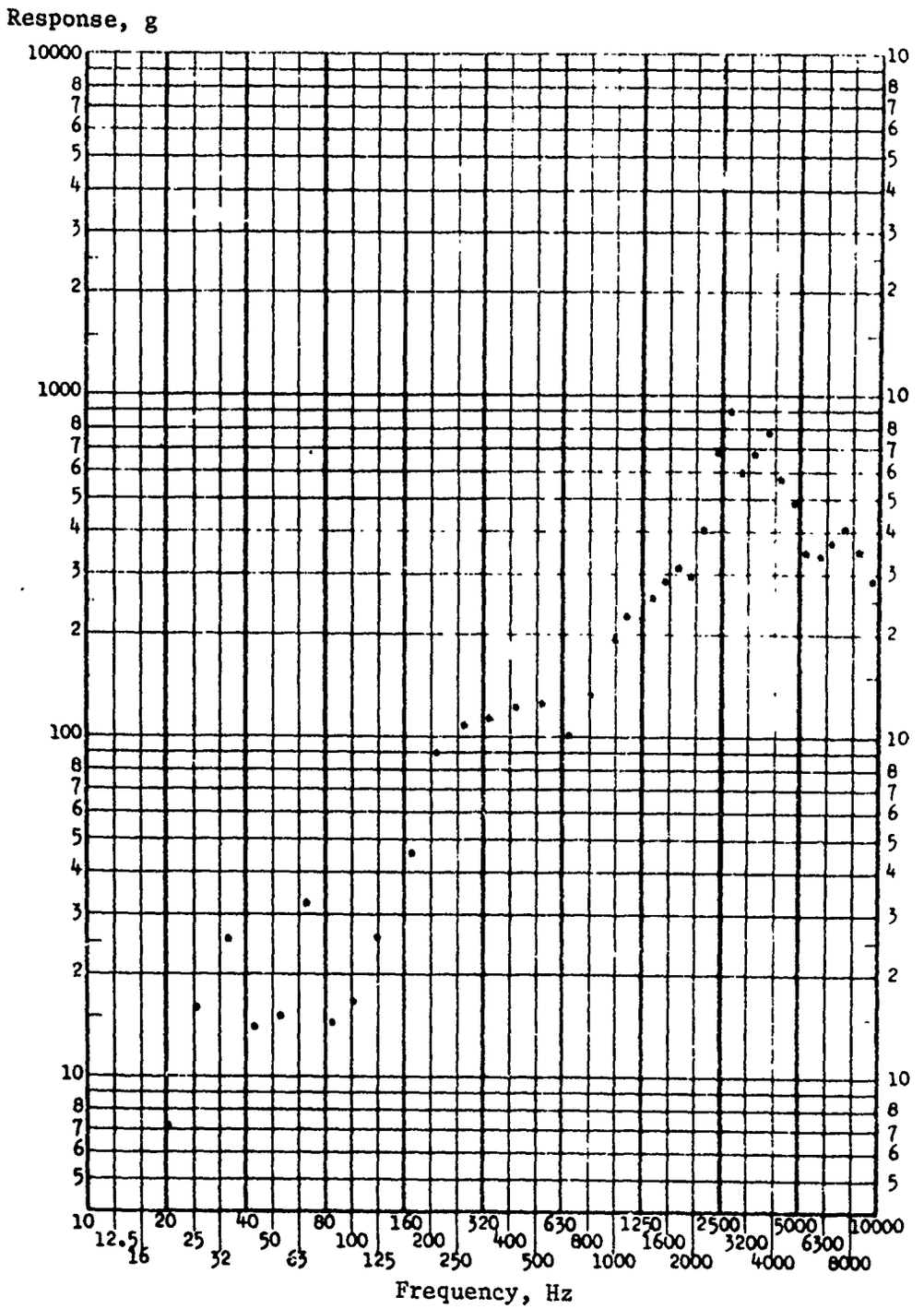
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 5 - Tangential axis longeron near station 117

Figure 12 (cont)



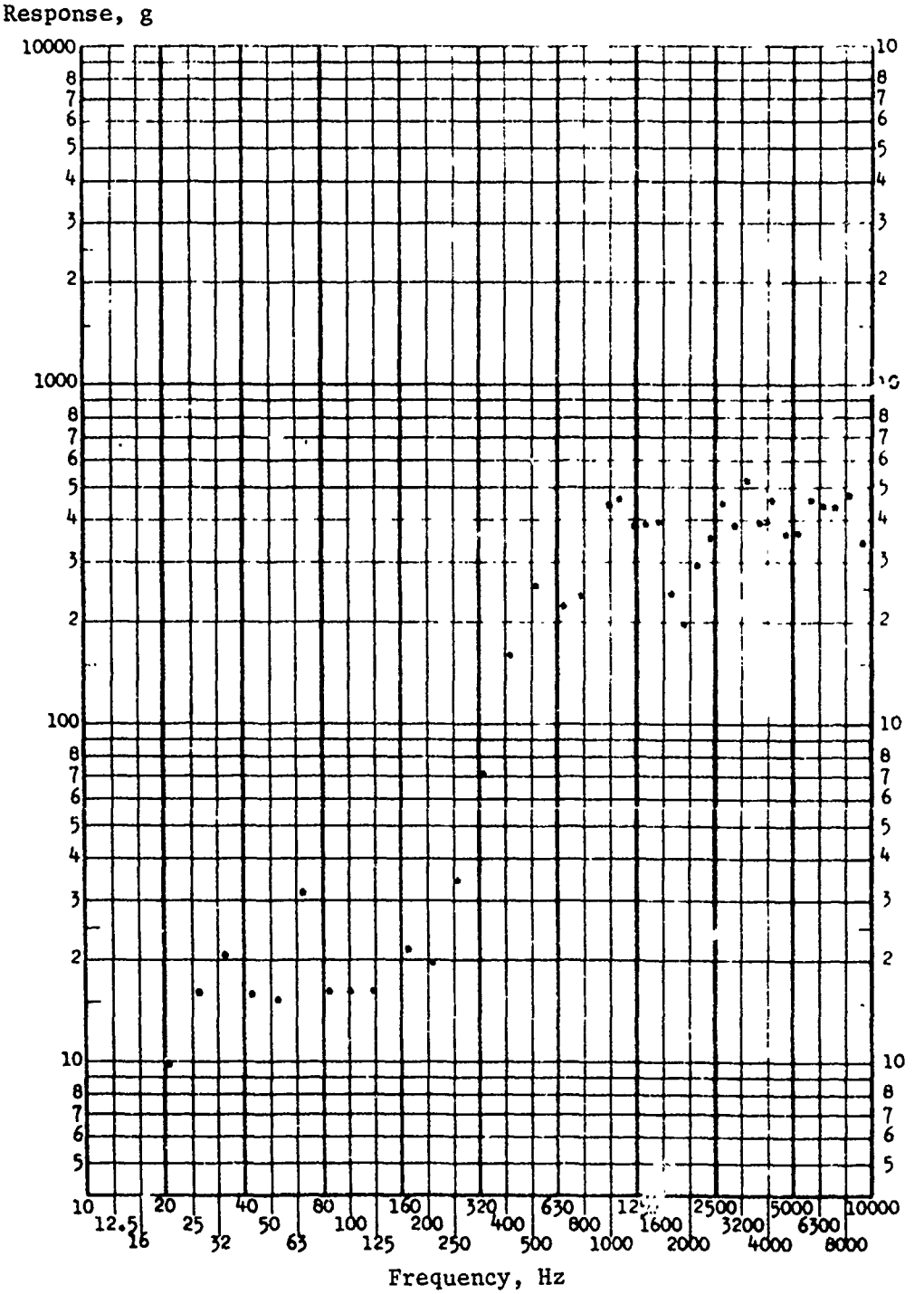
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 6 - Radial axis longeron near station 117

Figure 12 (cont)



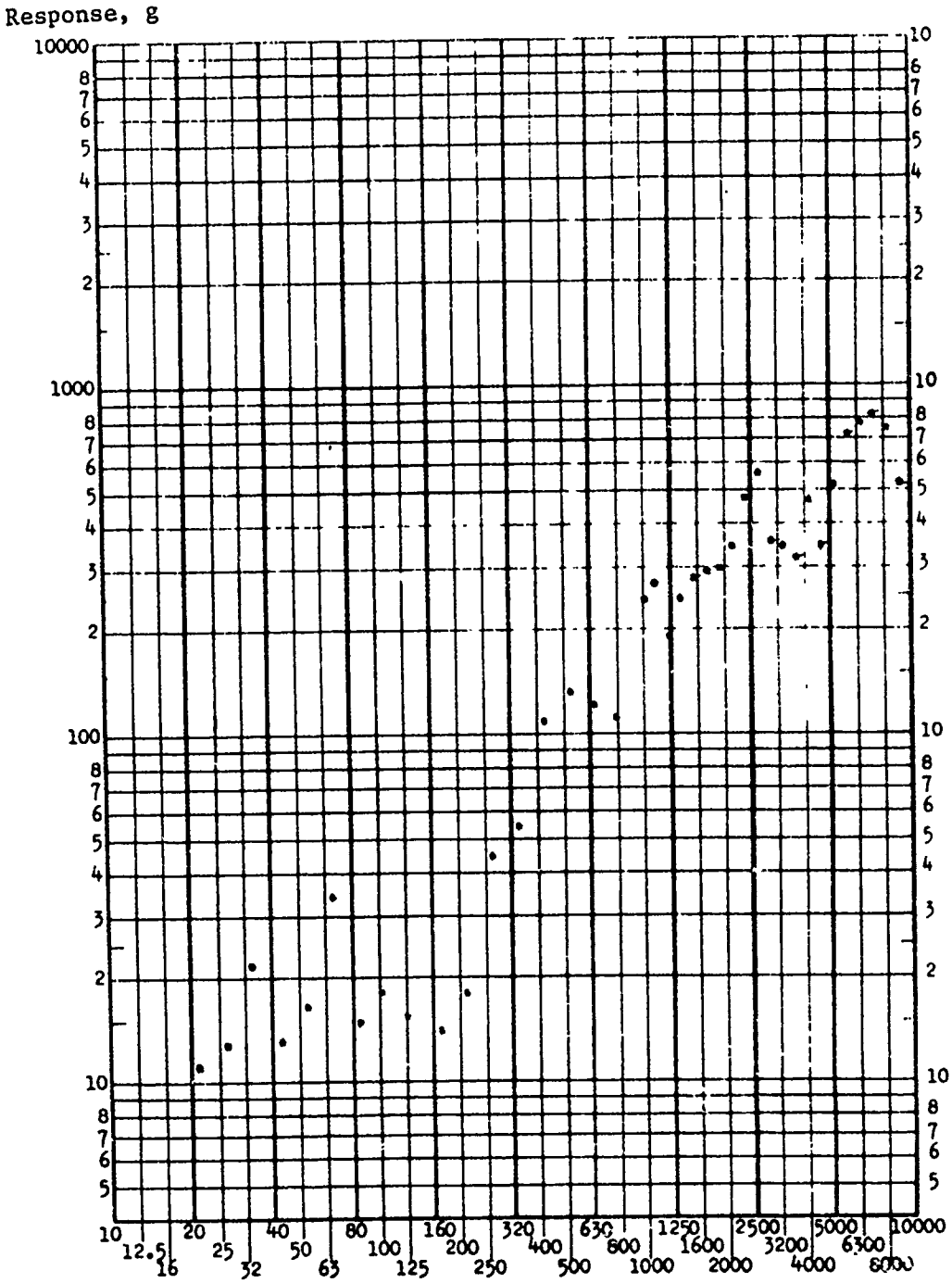
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 12 (cont)



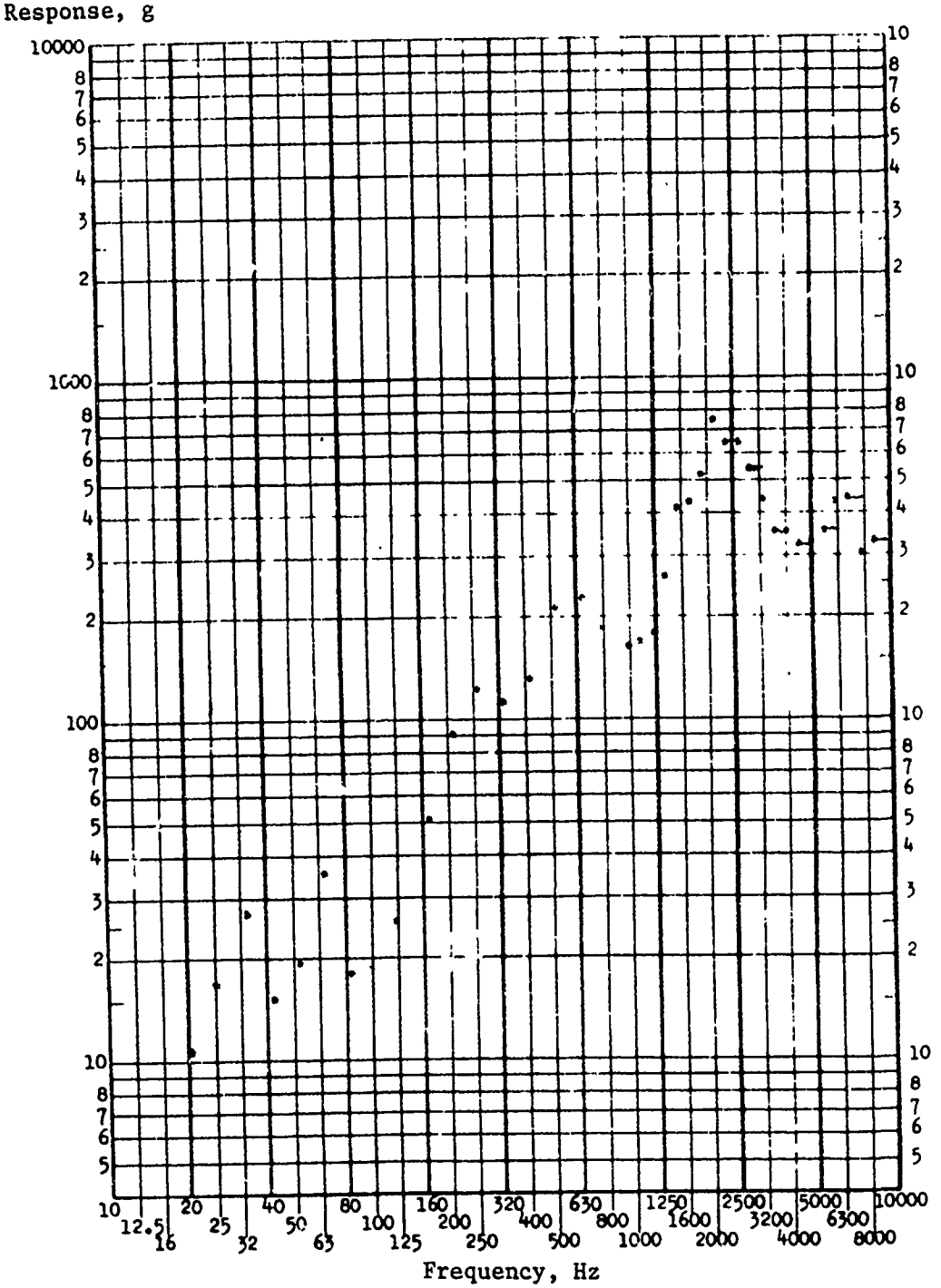
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 8 - Tangential axis longeron near station 77

Figure 12 (cont)



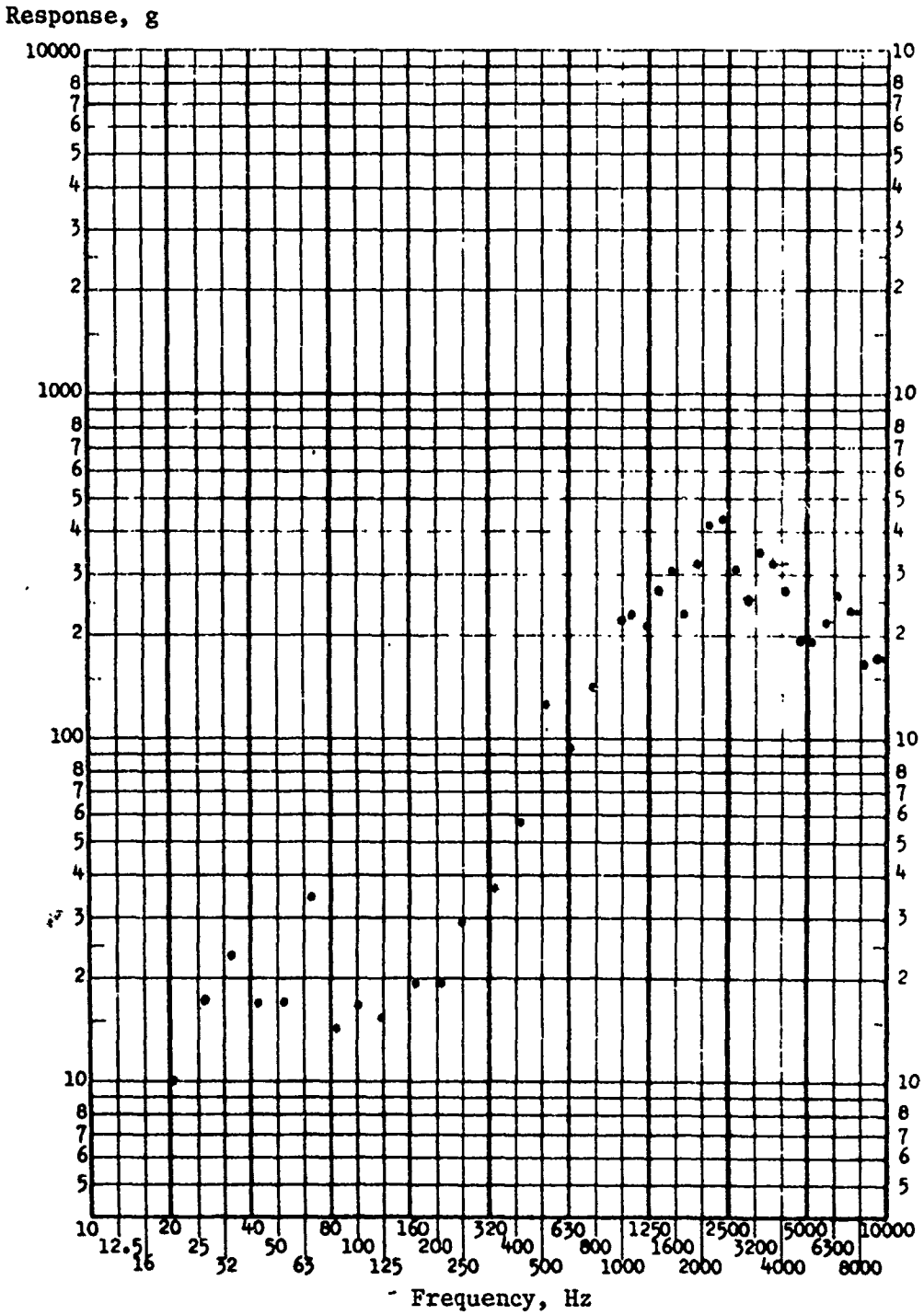
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 9 - Radial axis longeron near station 77

Figure 12 (cont)



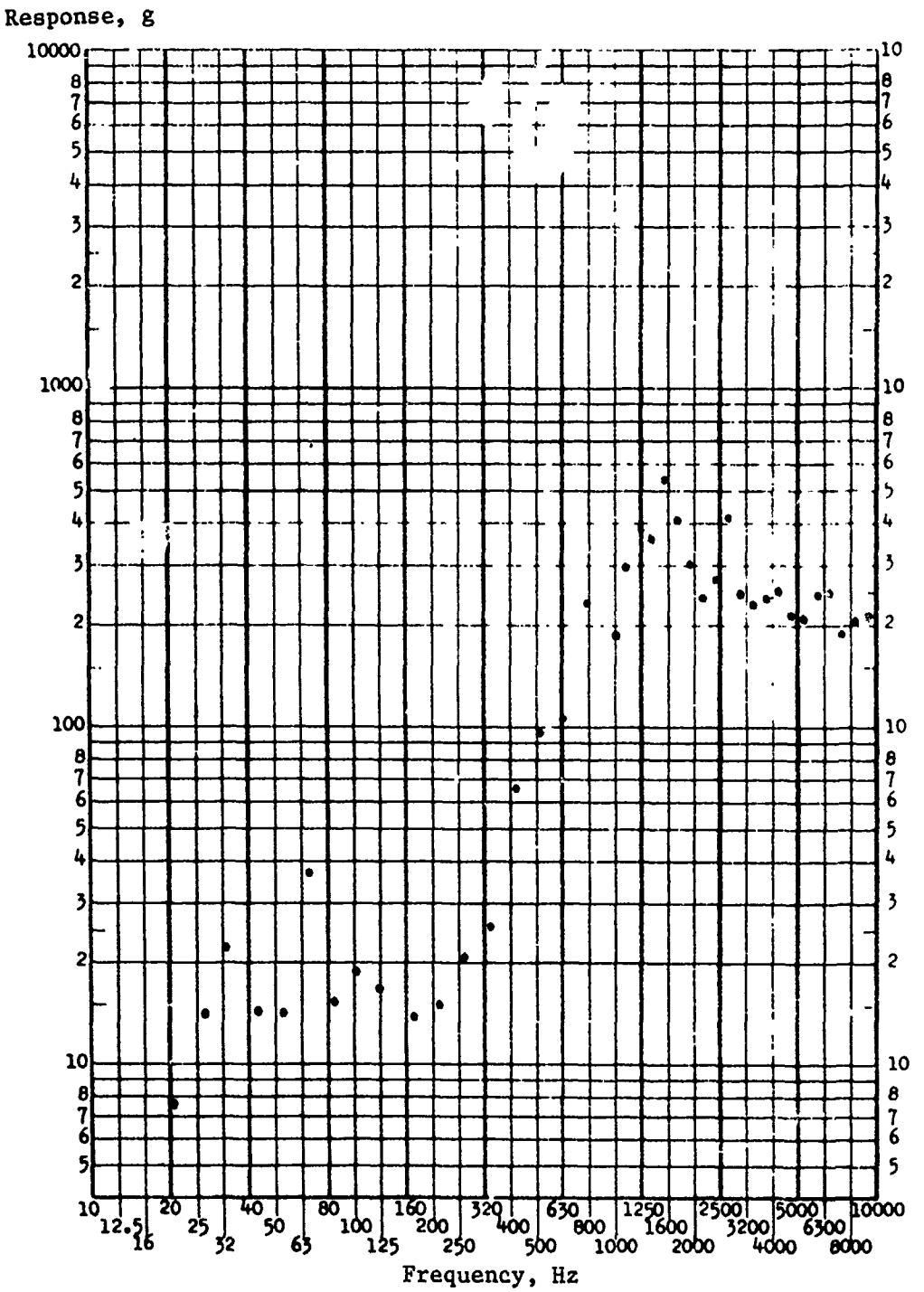
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 12 (cont)



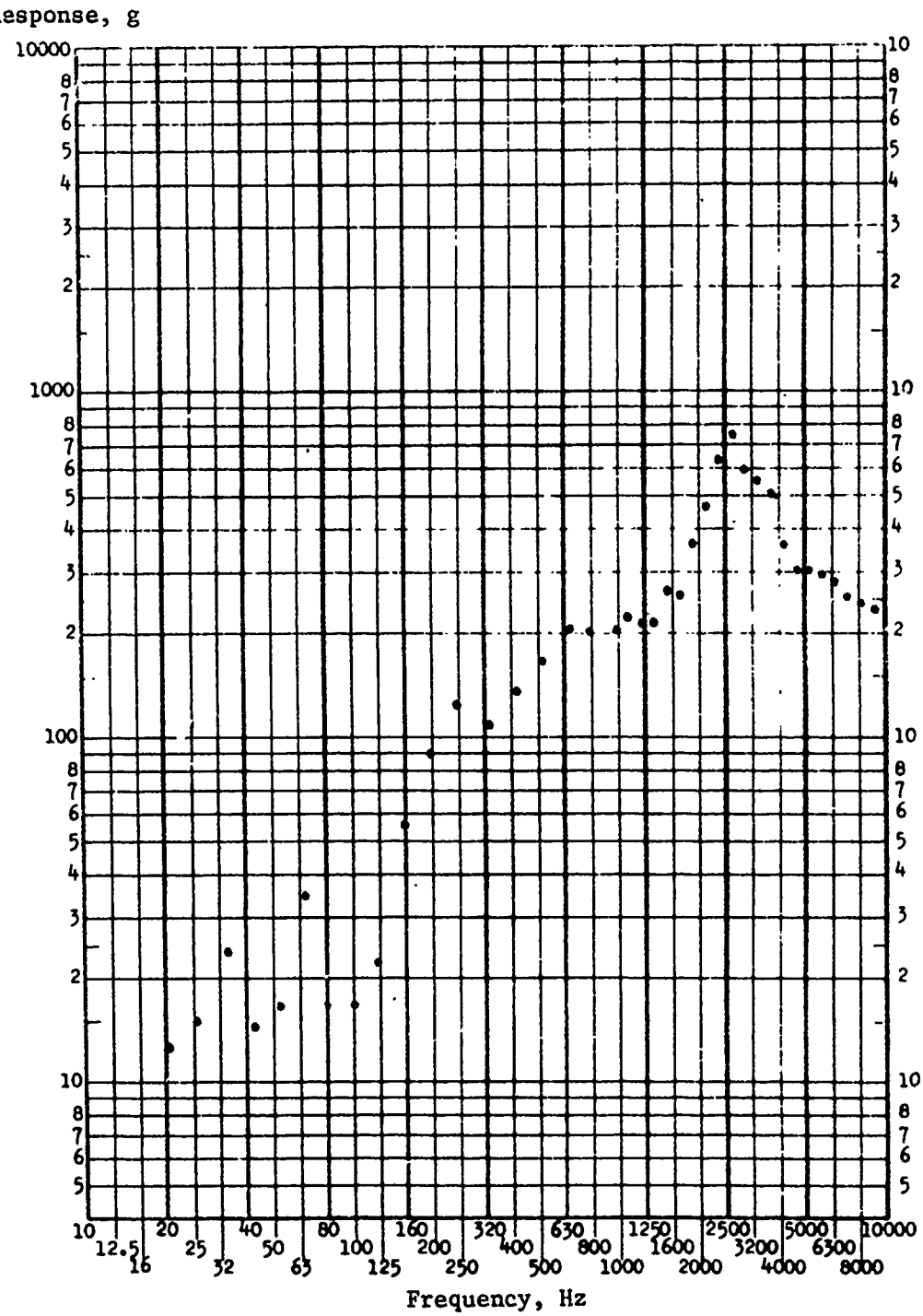
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 12 (cont)



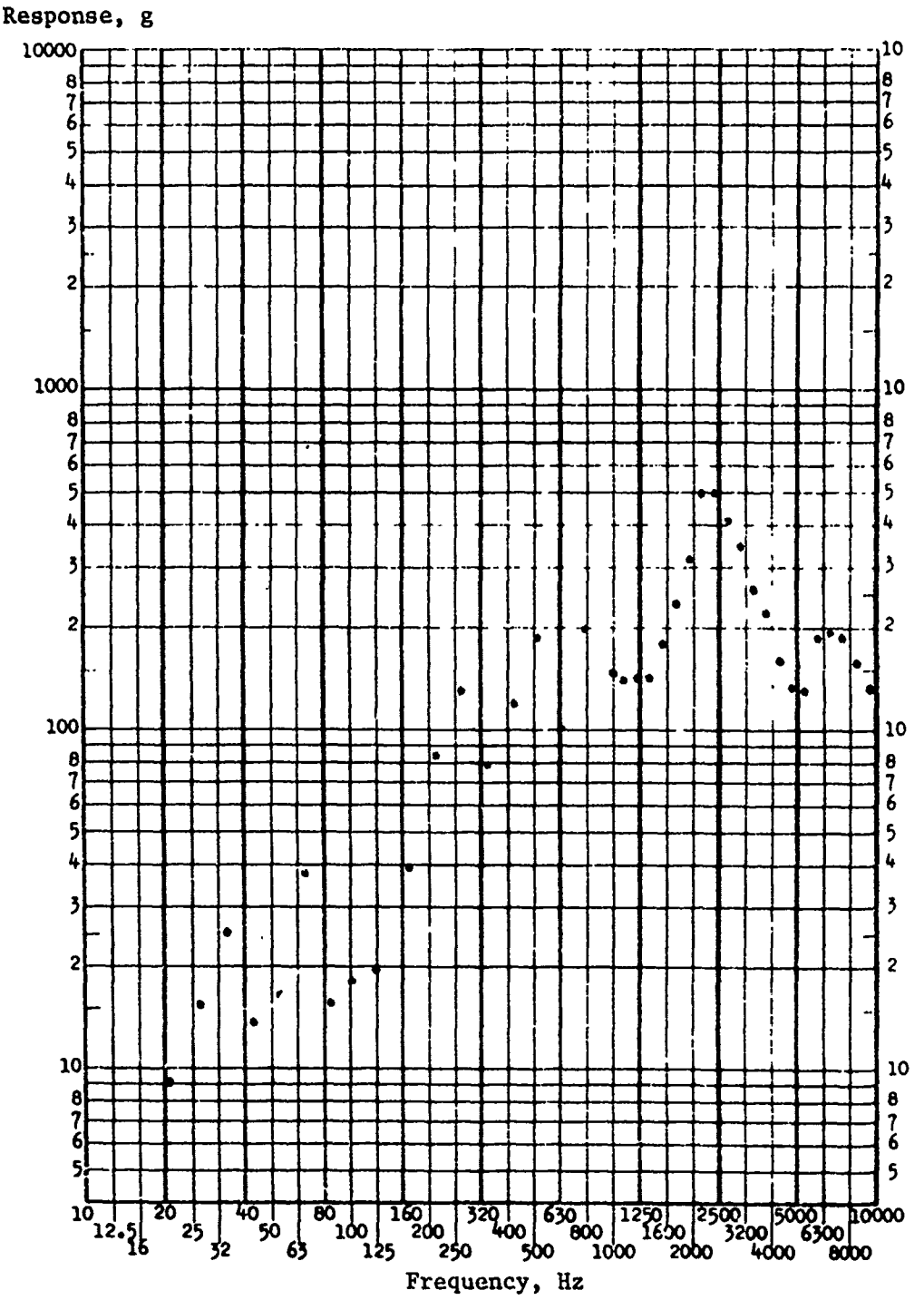
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 12 (cont)



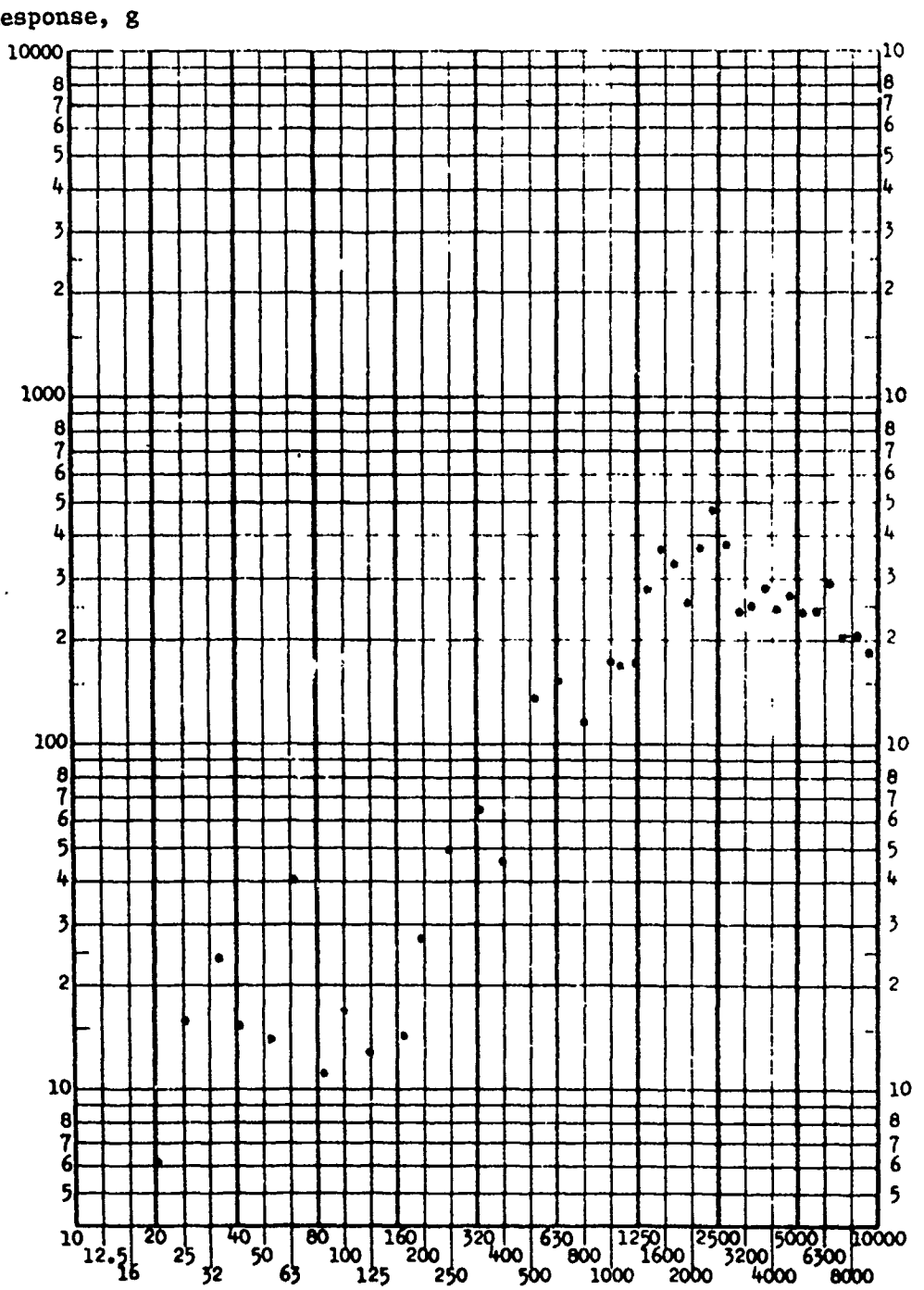
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 12 (cont)



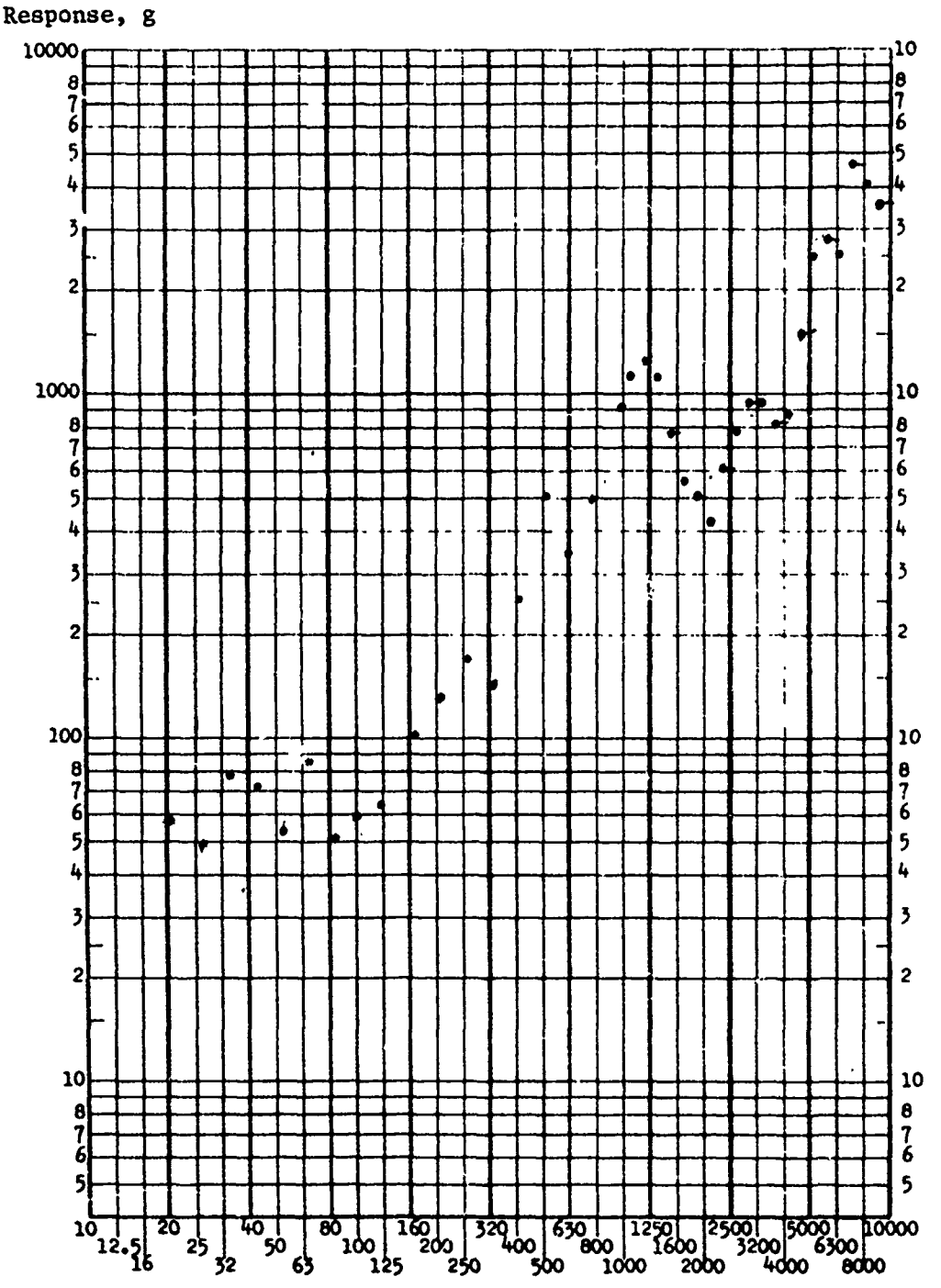
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 12 (cont)



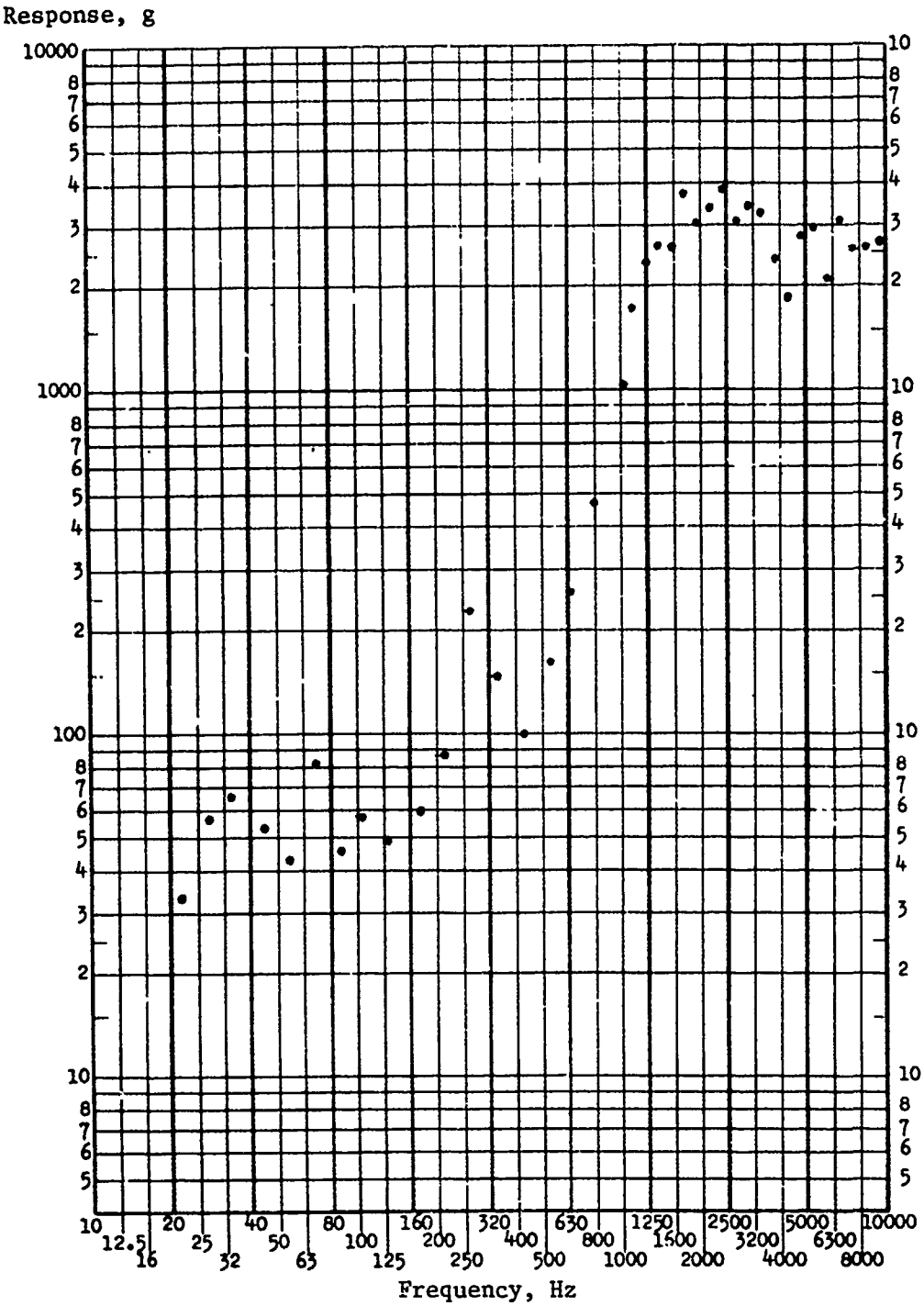
Bench Shock Test - Stage II/III Separation, Run 12
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 12 (concl)



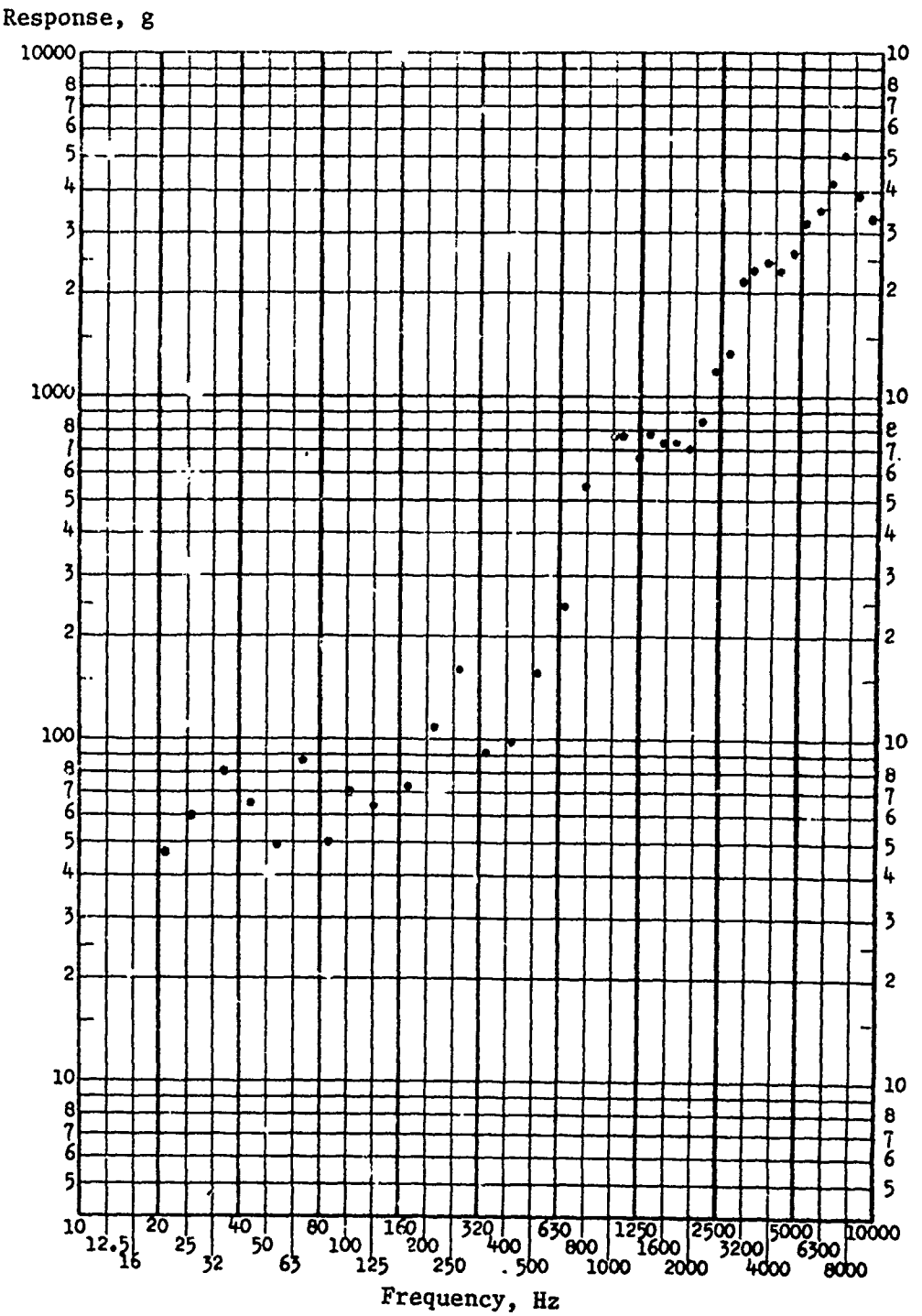
Bench Shock Test - Stage II/III Separation, Run 13
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 13 Run 13 Shock Response Spectrum



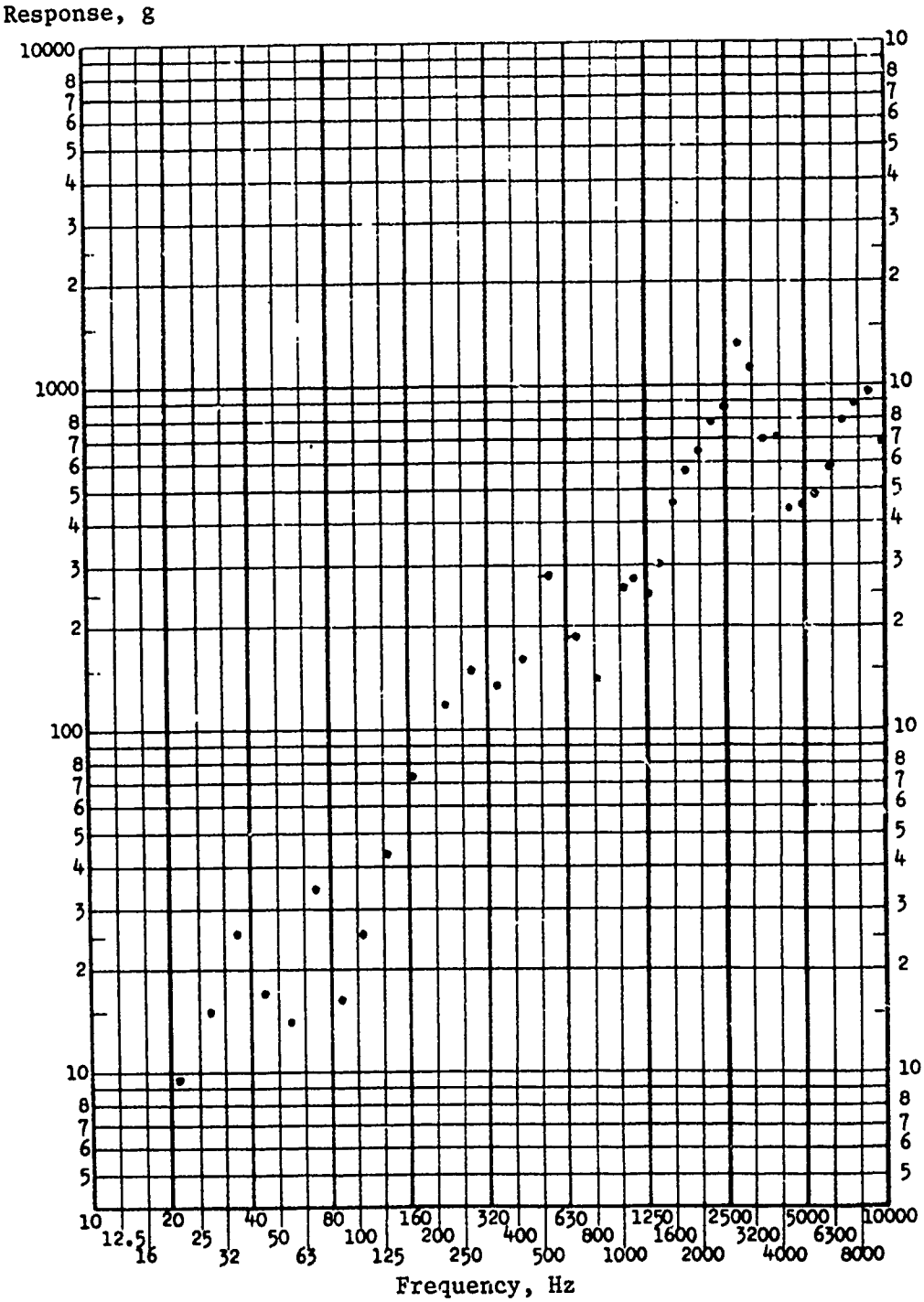
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 13 (cont)



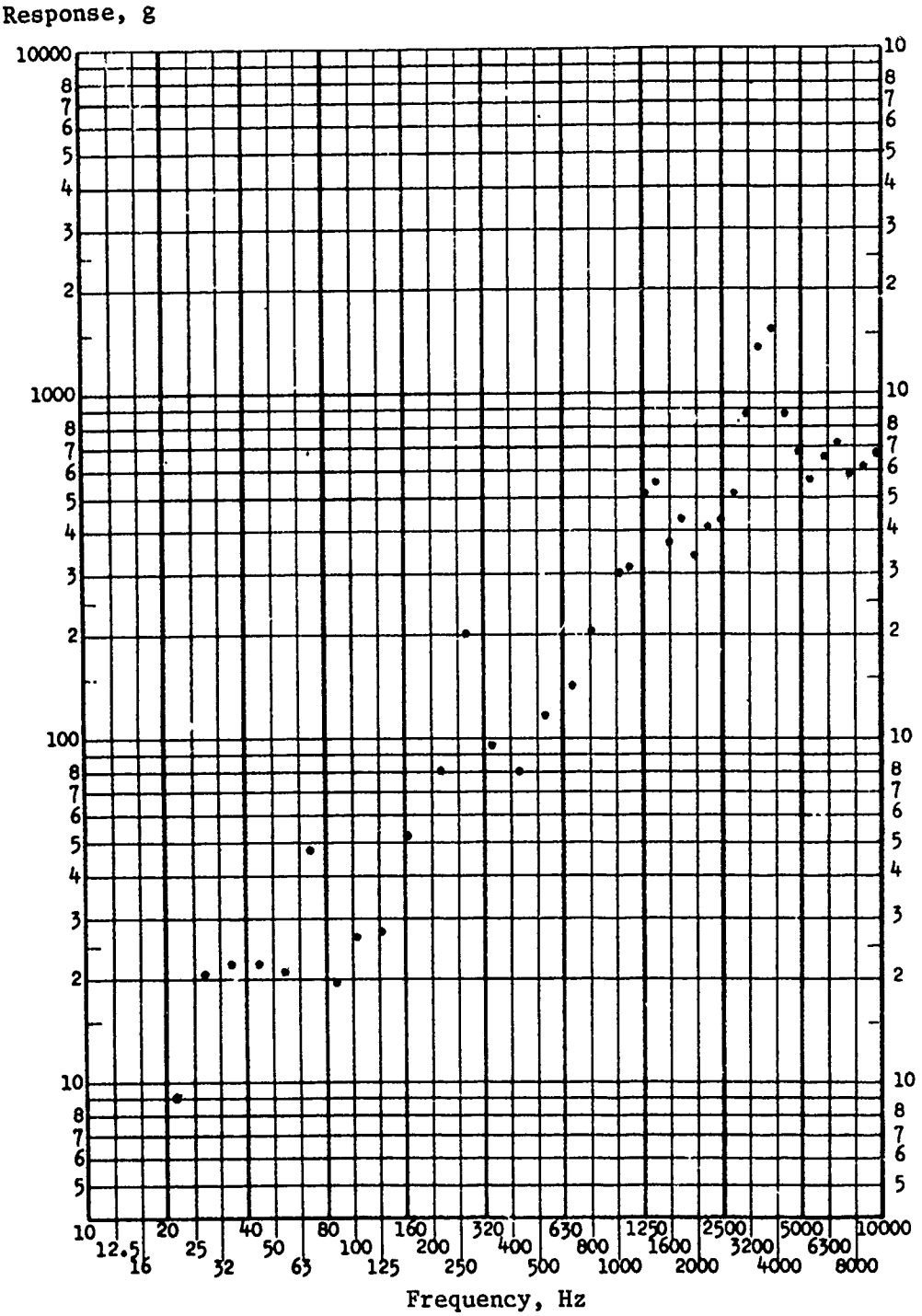
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 13 (cont)



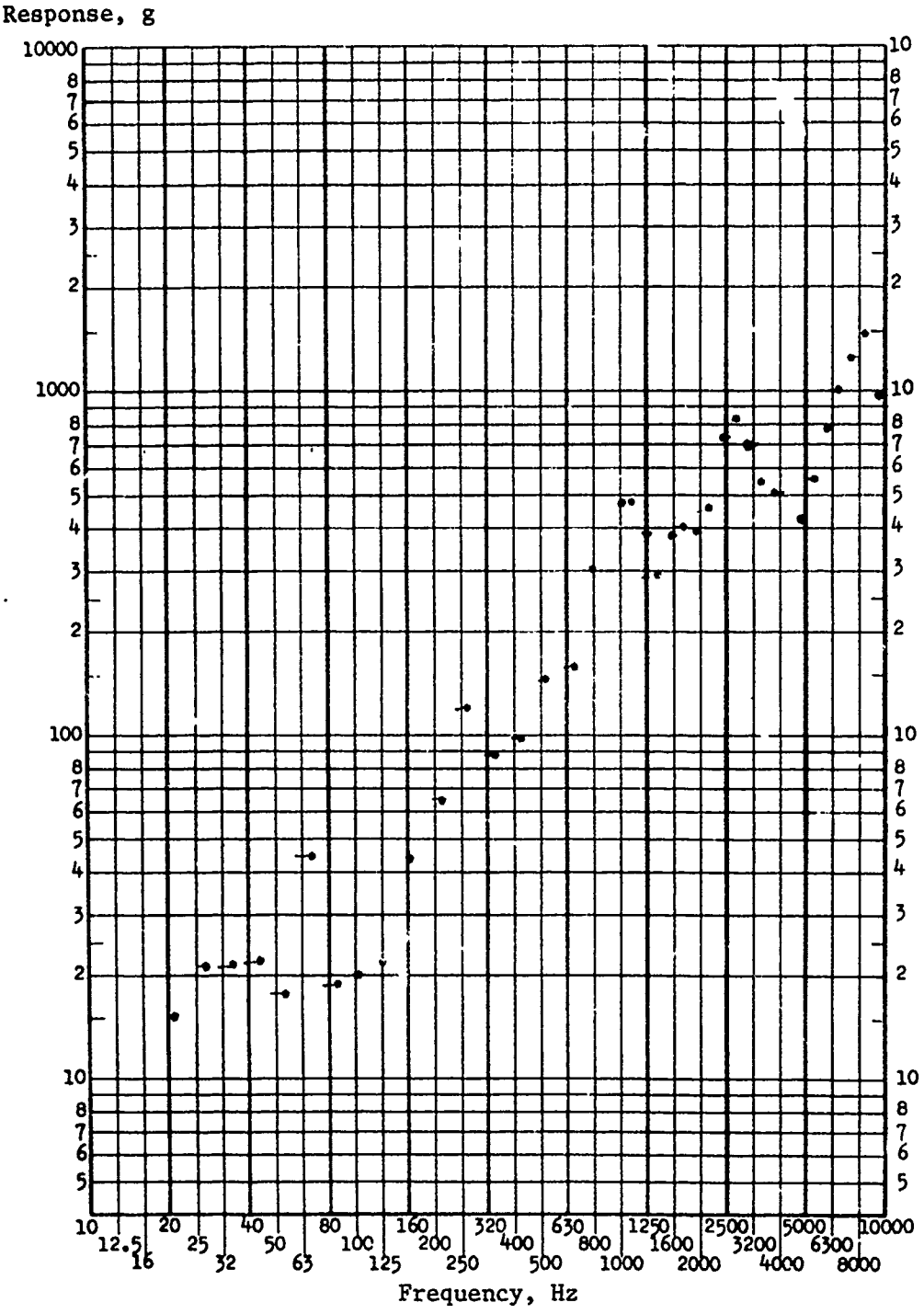
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 13 (cont)



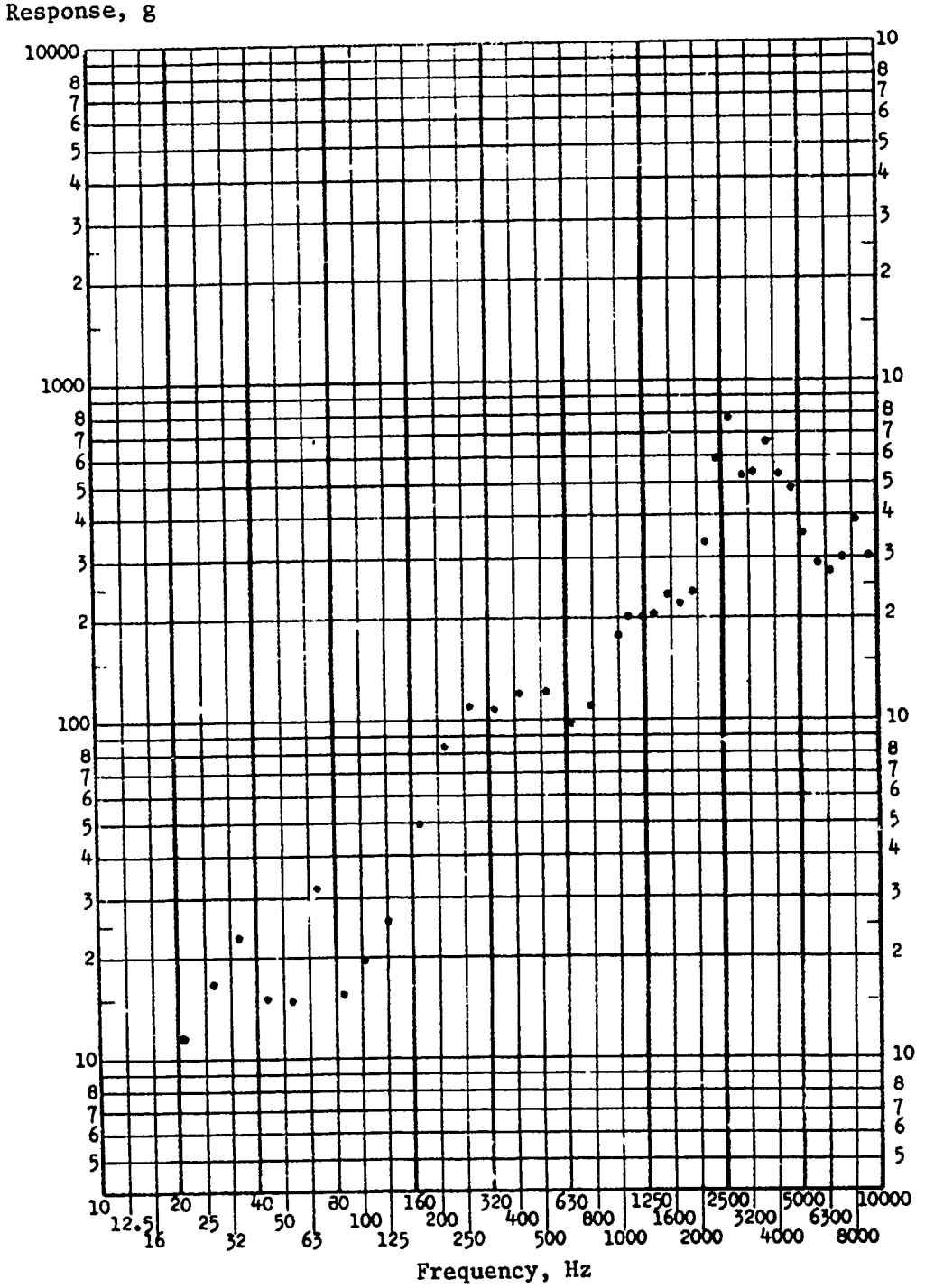
Bench Shock Test - Stage II/III Separation, Run 13
Measurement No. 5 - Tangential axis longeron near station 117

Figure 13 (cont)



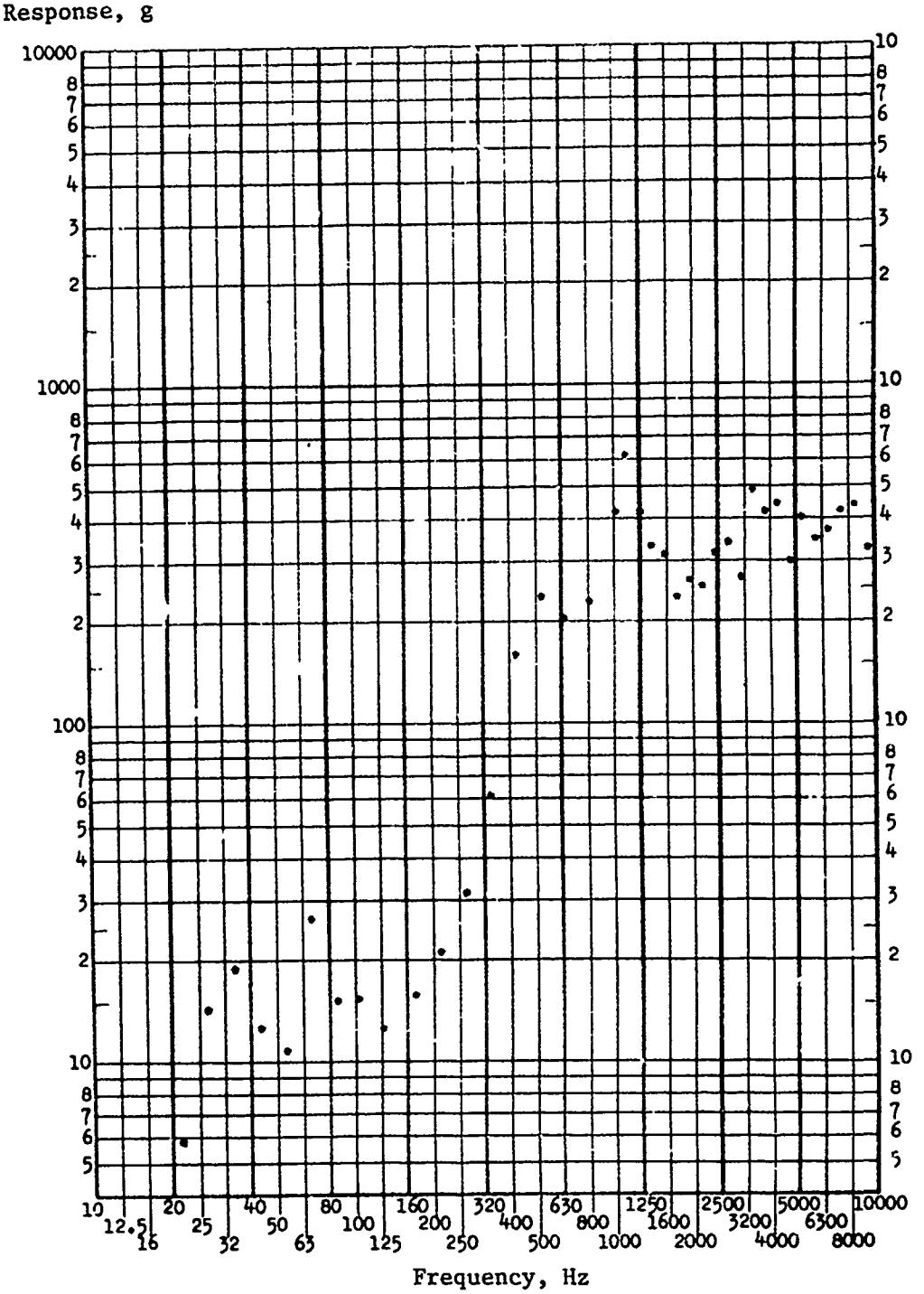
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 6 - Radial axis longeron near
station 117

Figure 13 (cont)



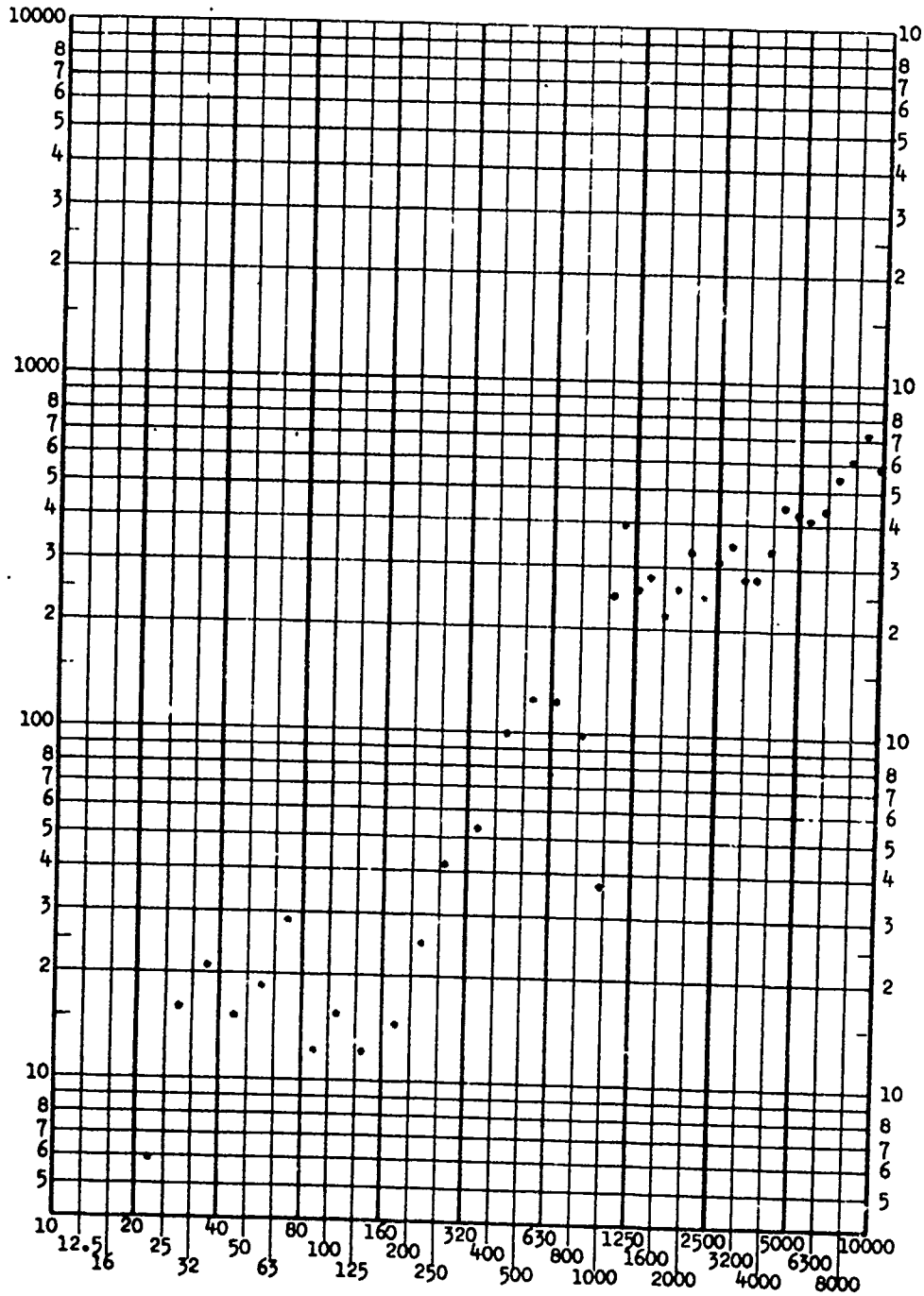
Bench Shock Test - Stage II/III Separation, Run 13
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 13 (cont)



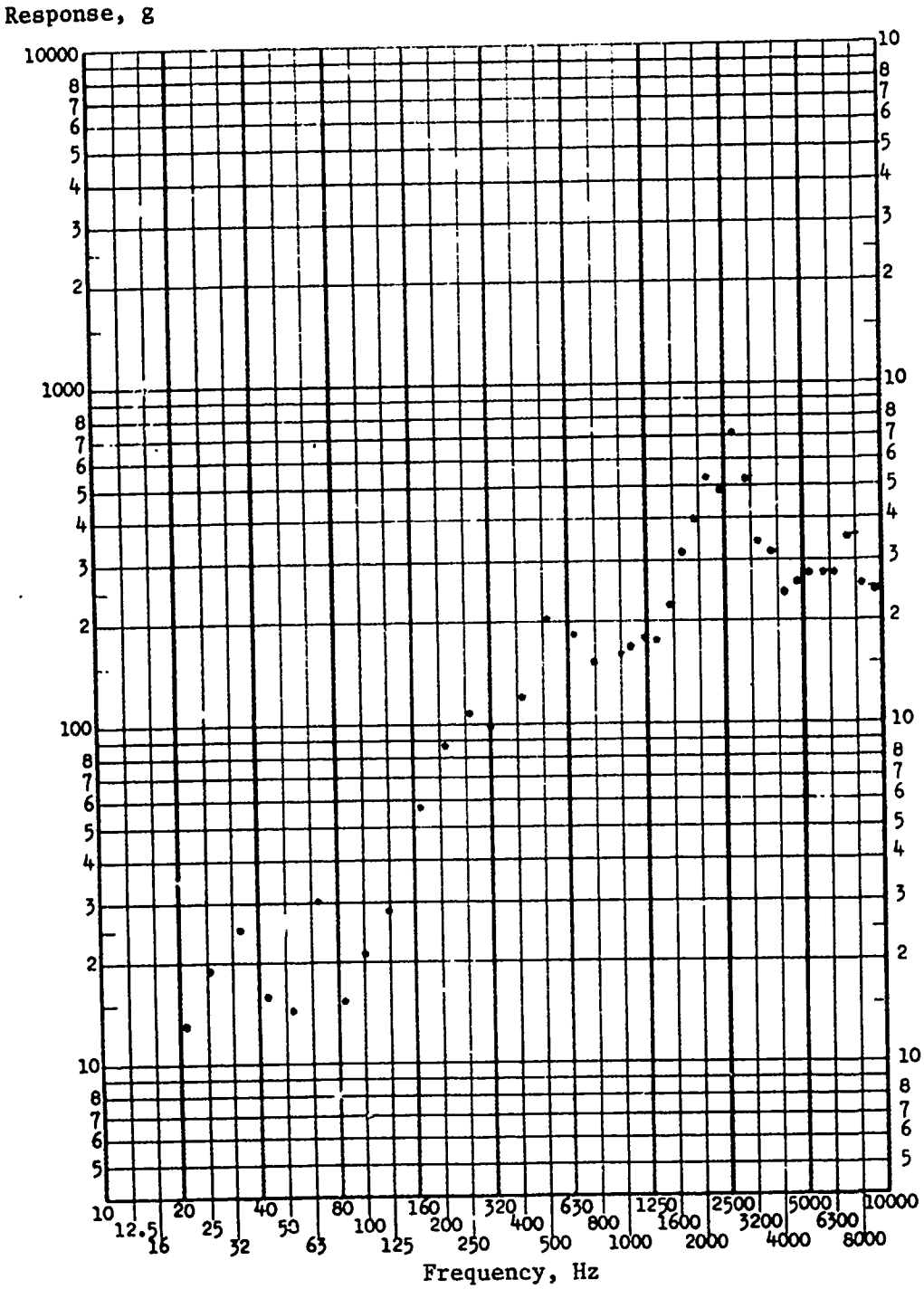
Bench Shock Test - Stage II/III Separation, Run 13
Measurement No. 8 - Tangential axis longeron near station 77

Figure 13 (cont)



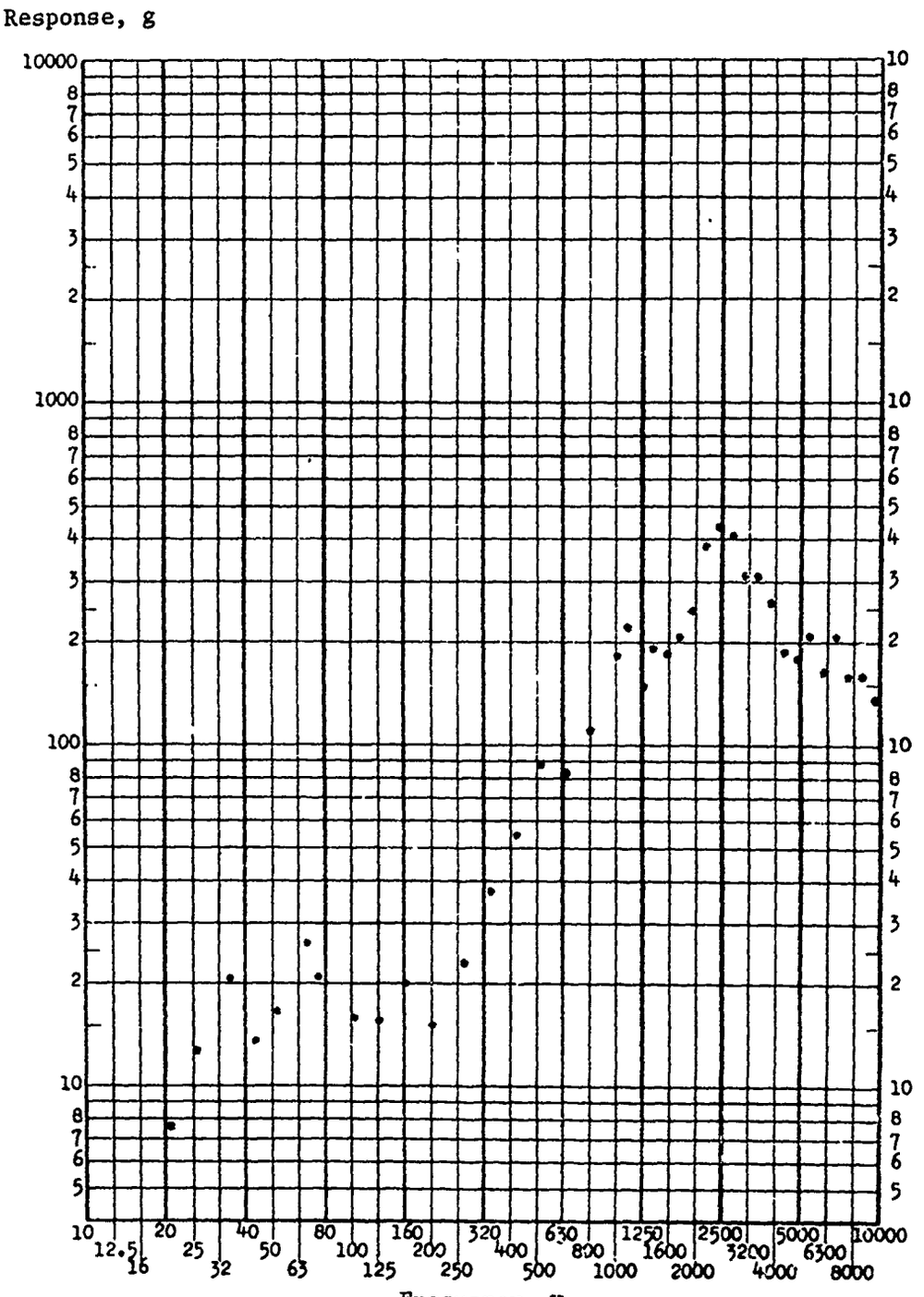
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 9 - Radial axis longeron near station 77

Figure 13 (cont)



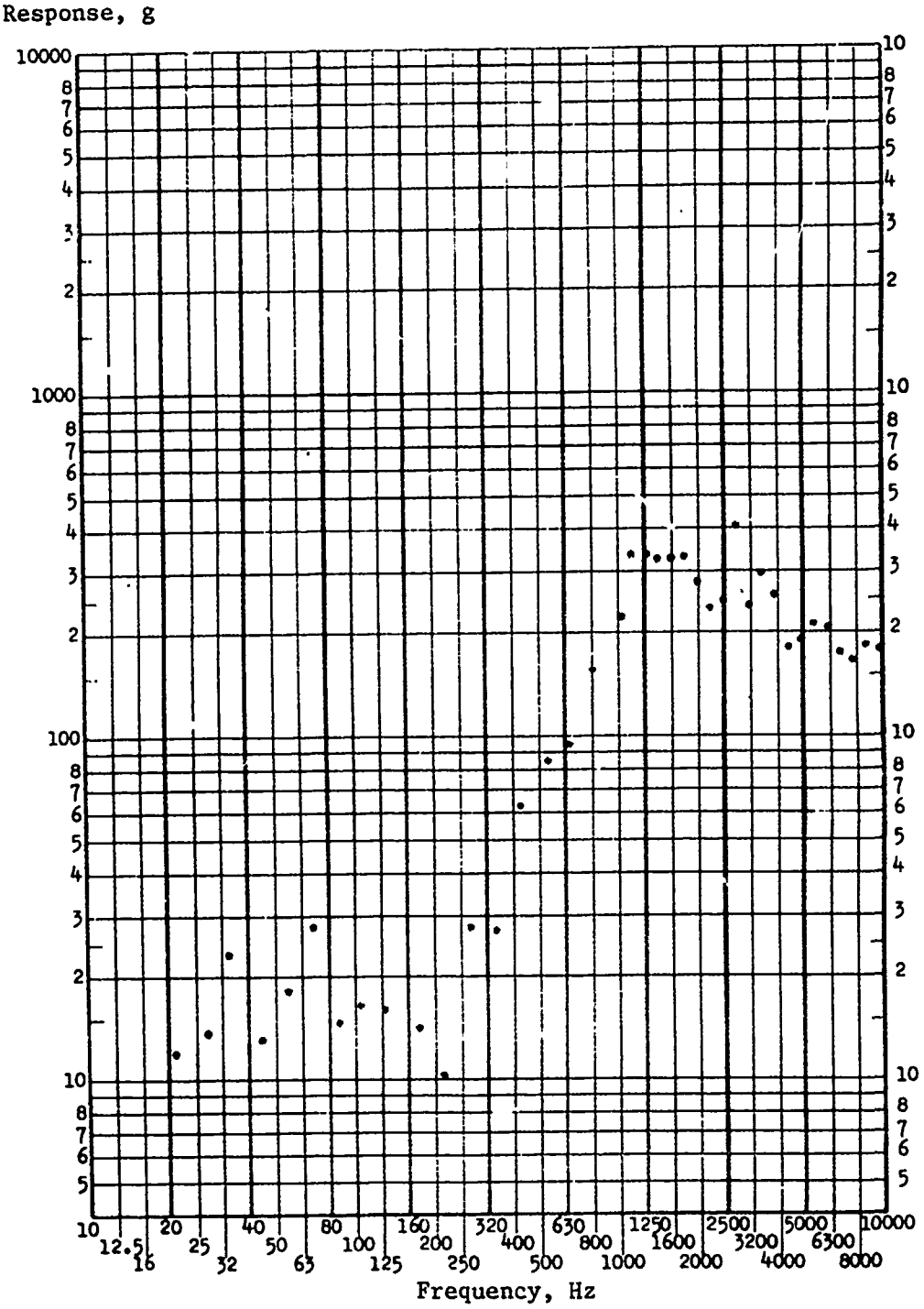
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 10 - Longitudinal axis truss bottom
near station 114 attach point

Figure 13 (cont)



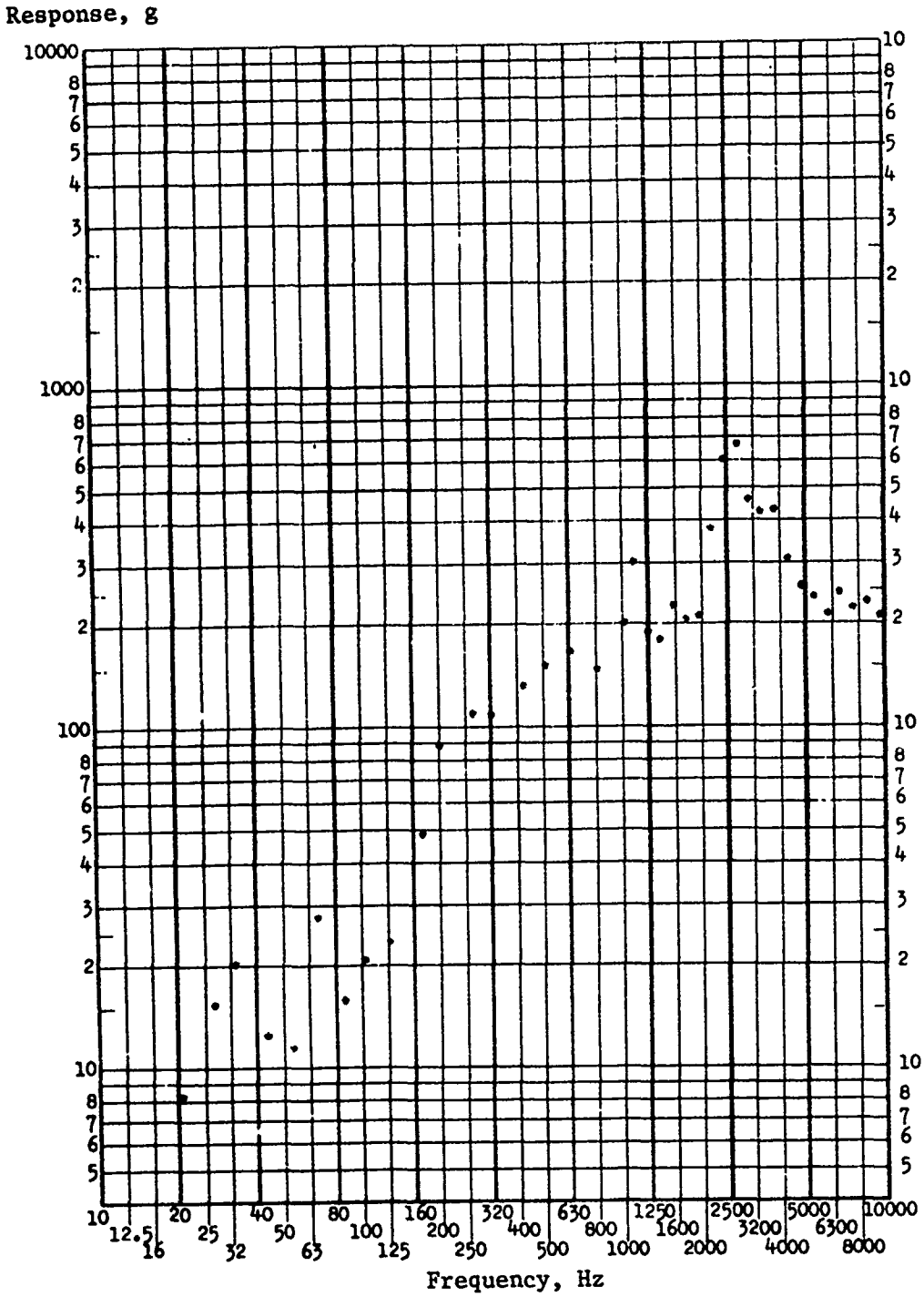
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 11 - Lateral axis truss bottom near
station 114 attach point

Figure 13 (cont)



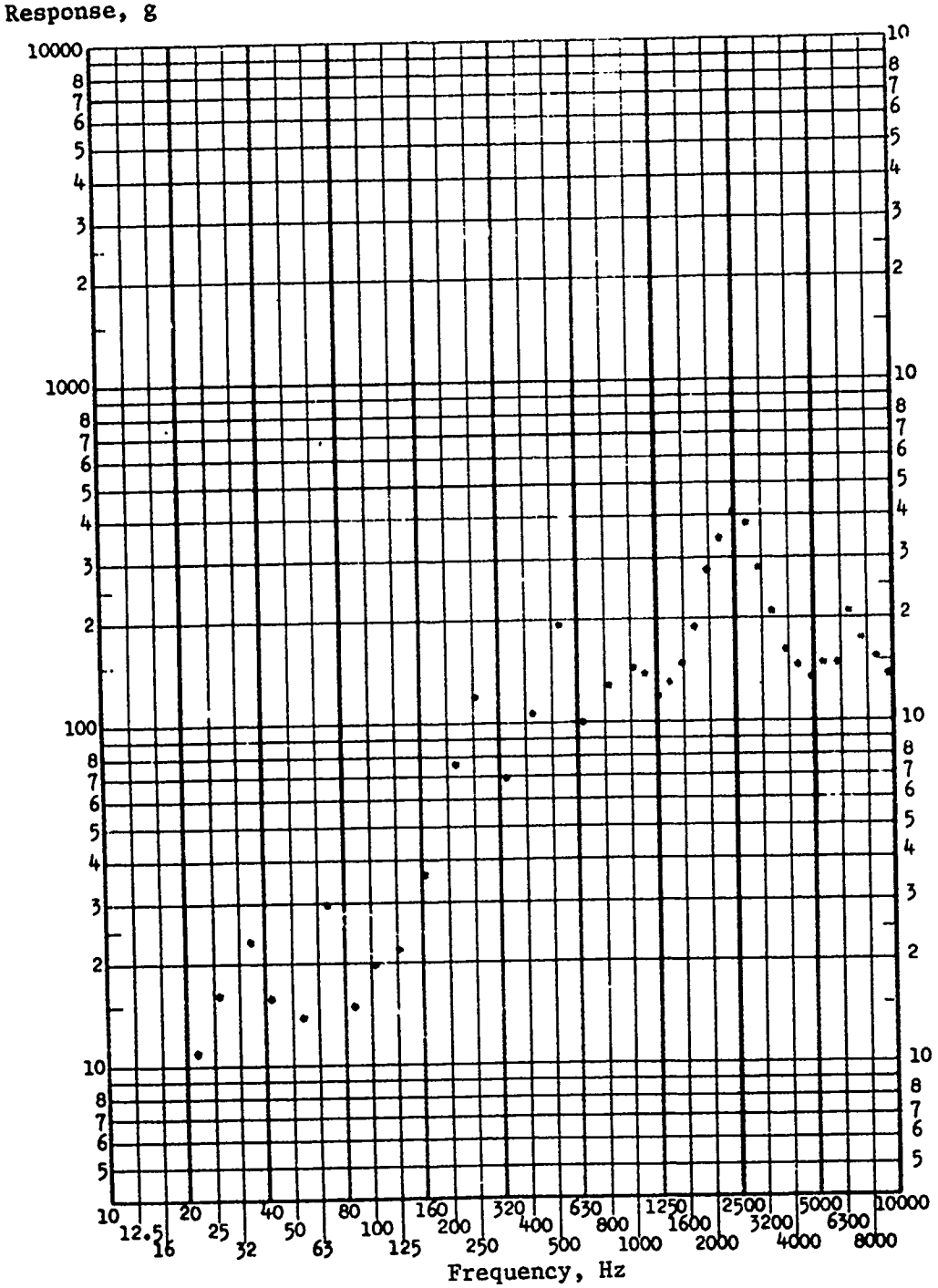
Bench Shock Test - Stage II/III Separation, Run 13
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 13 (cont)



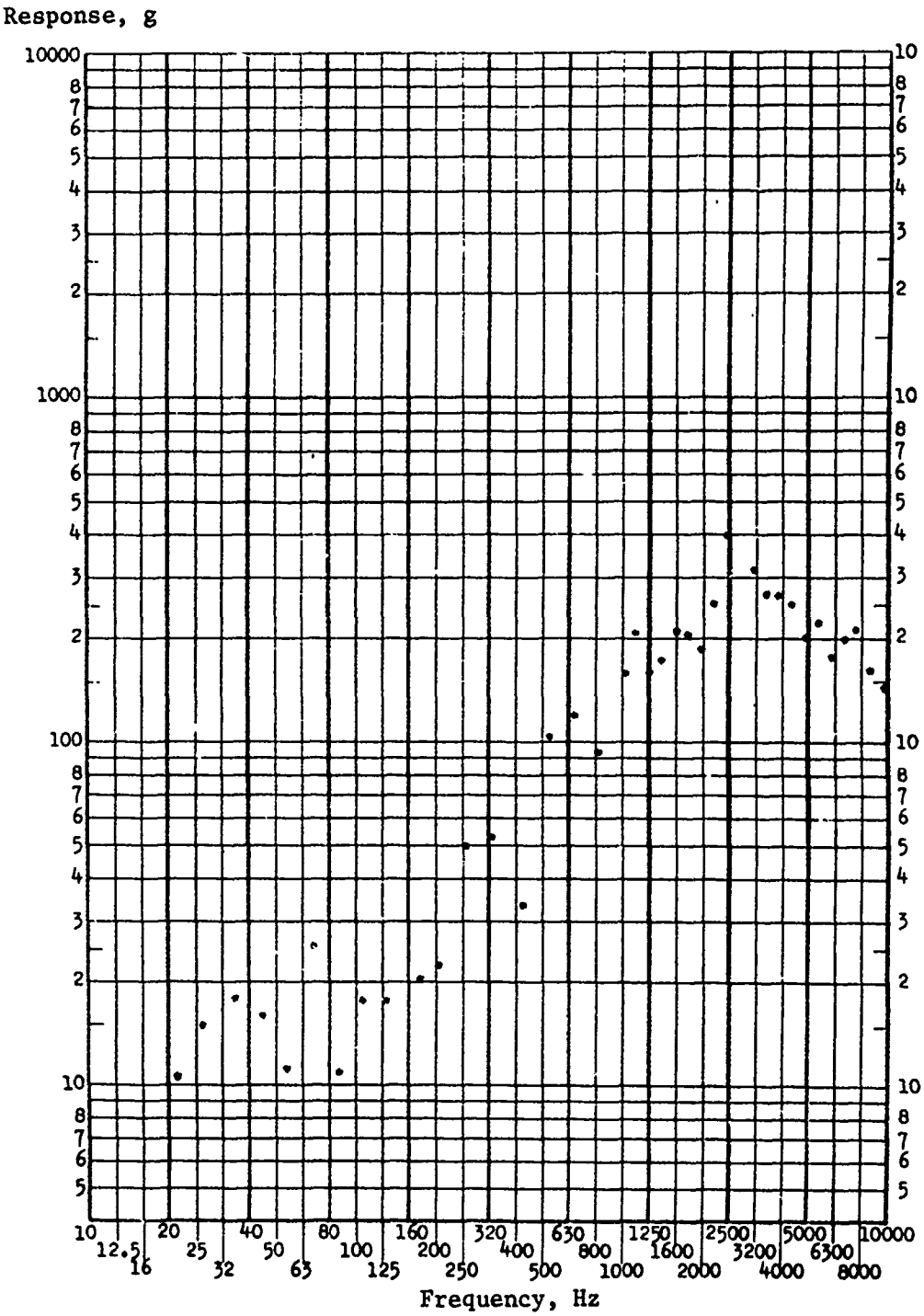
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 13 (cont)



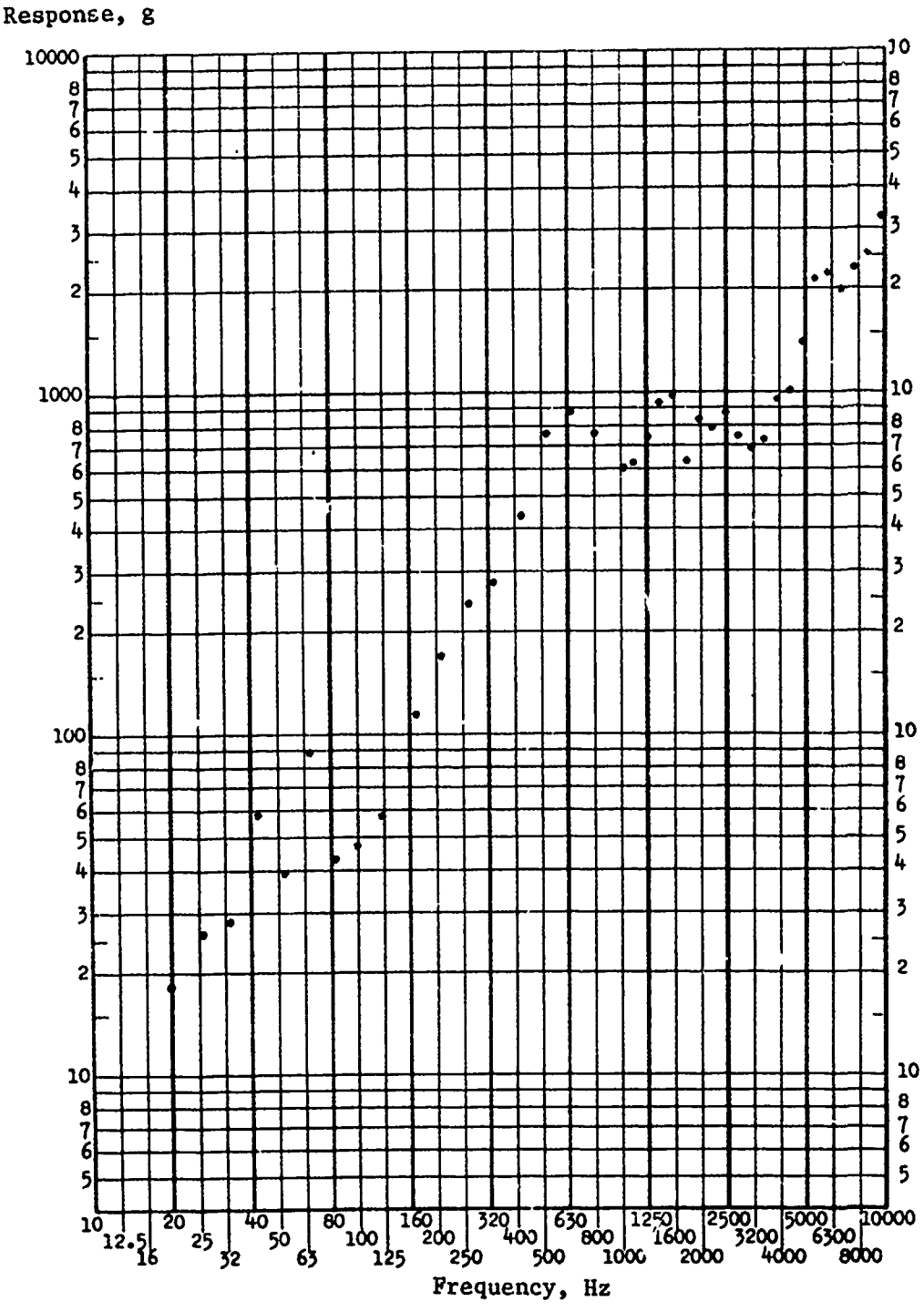
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 14 - Lateral axis truss top near
longeron attach point

Figure 13 (cont)



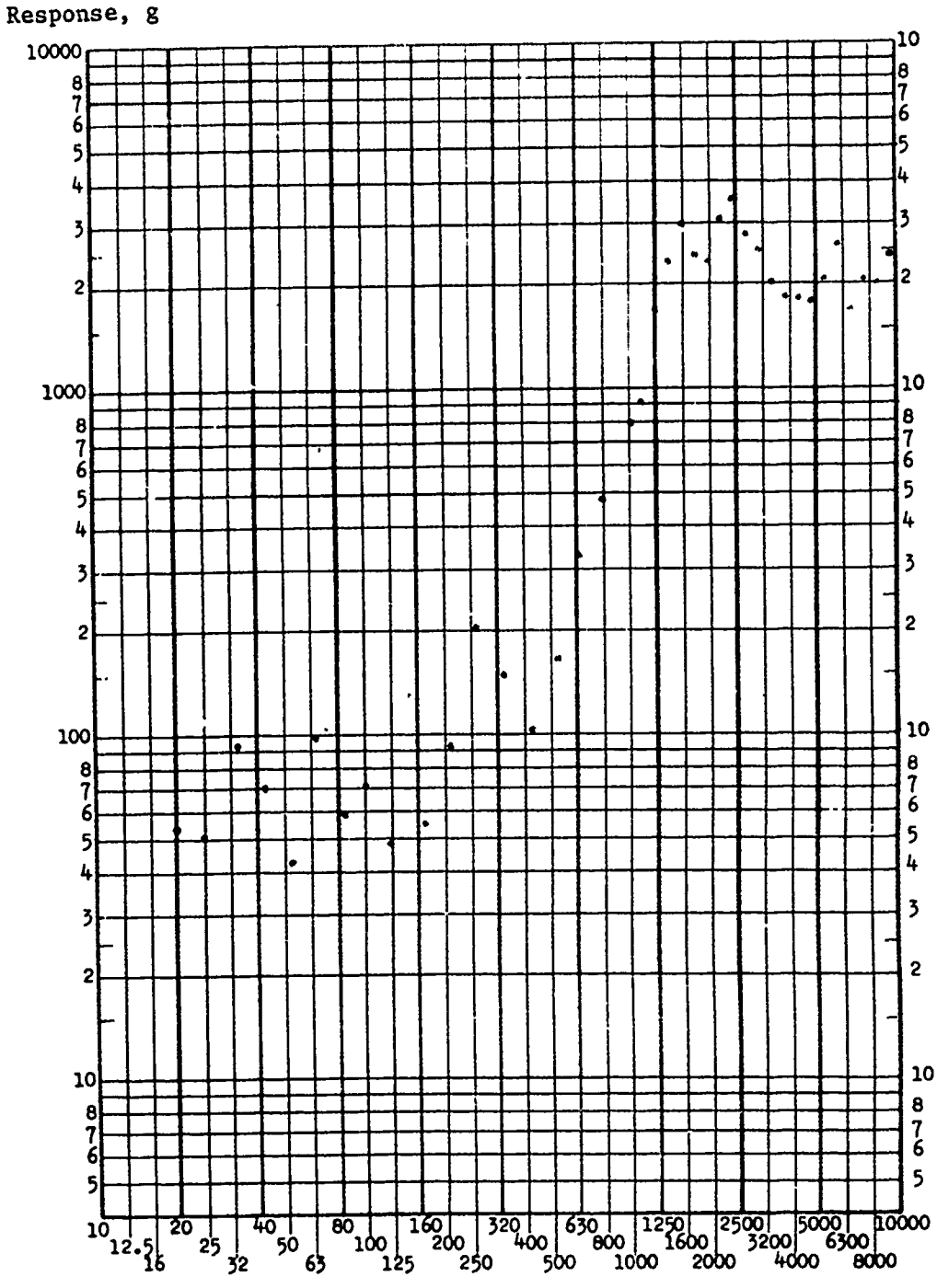
Bench Shock Test - Stage II/III Separation, Run 13 _
Measurement No. 15 - Lateral axis truss top near
longeron attach point

Figure 13 (concl)



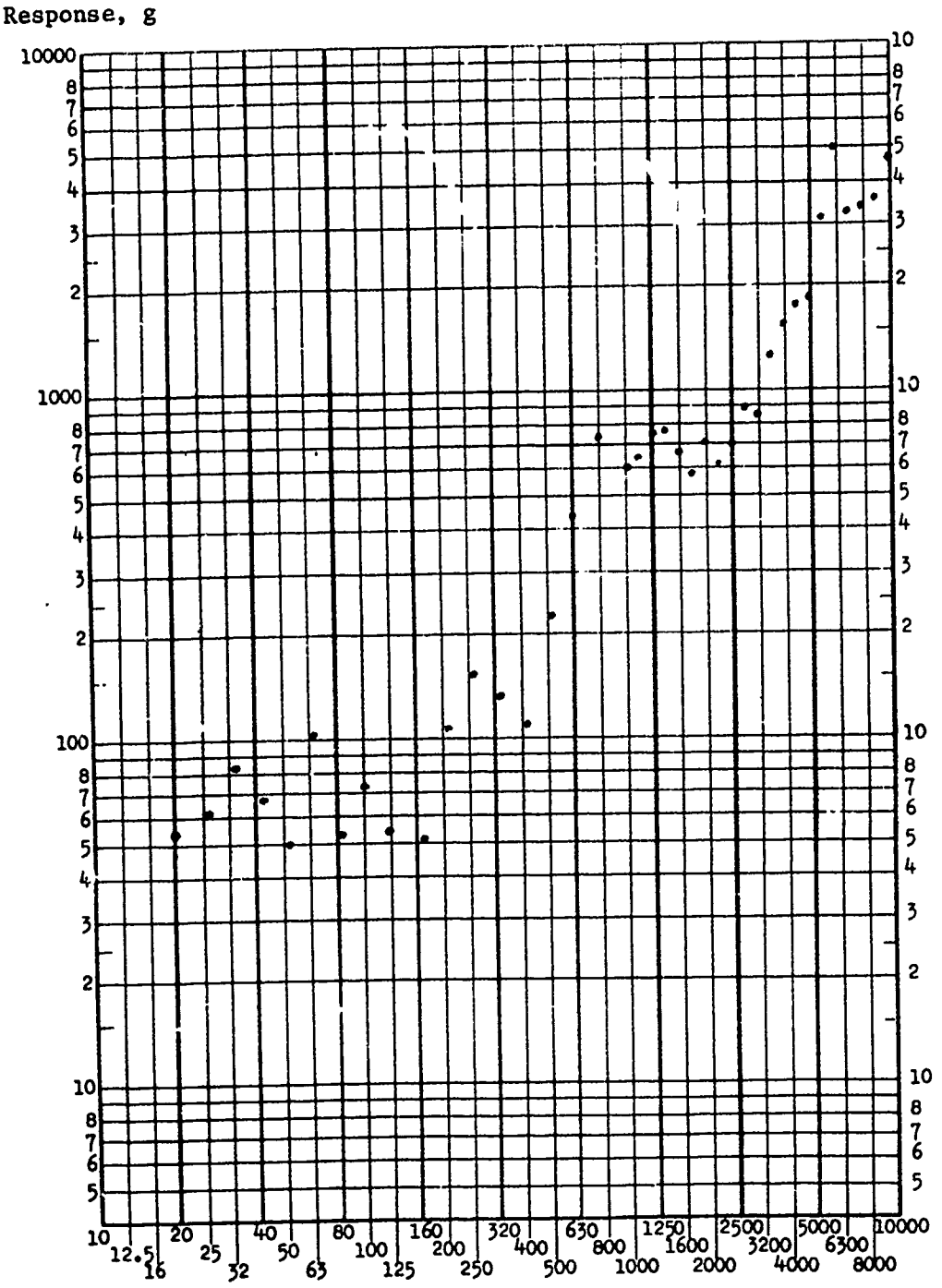
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 14 Run 14 Shock Response Spectrum



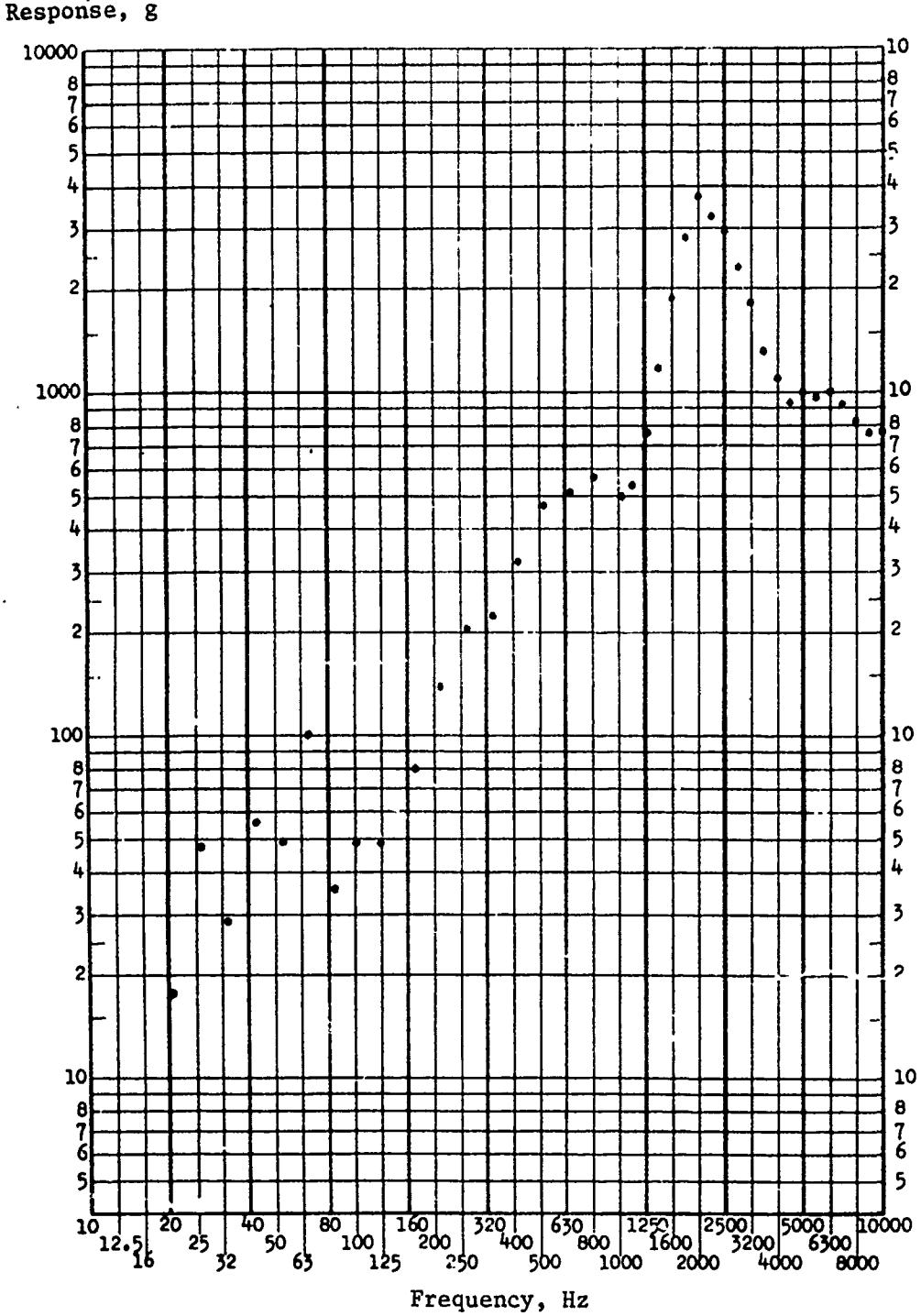
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 14 (cont)



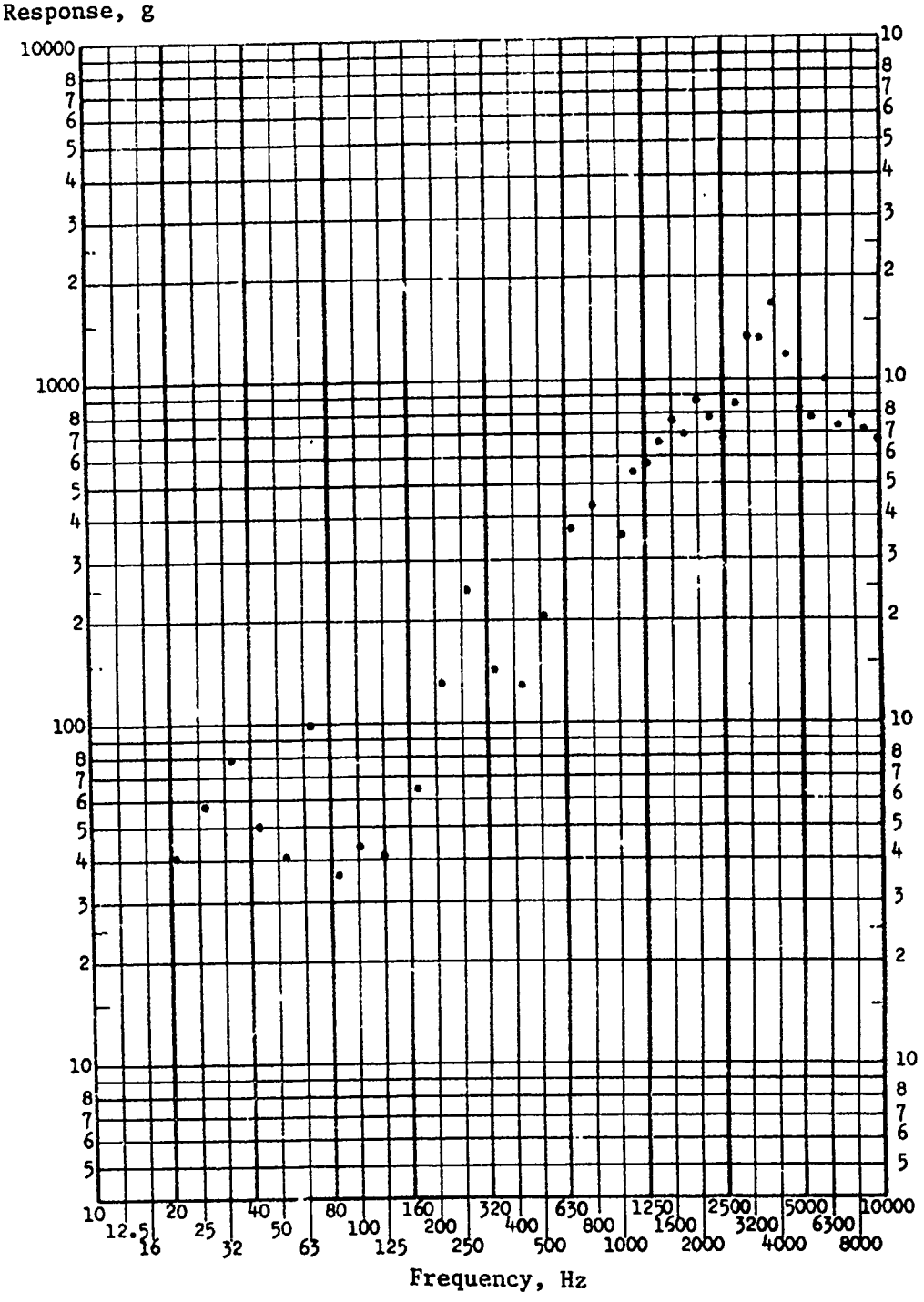
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 14 (cont)



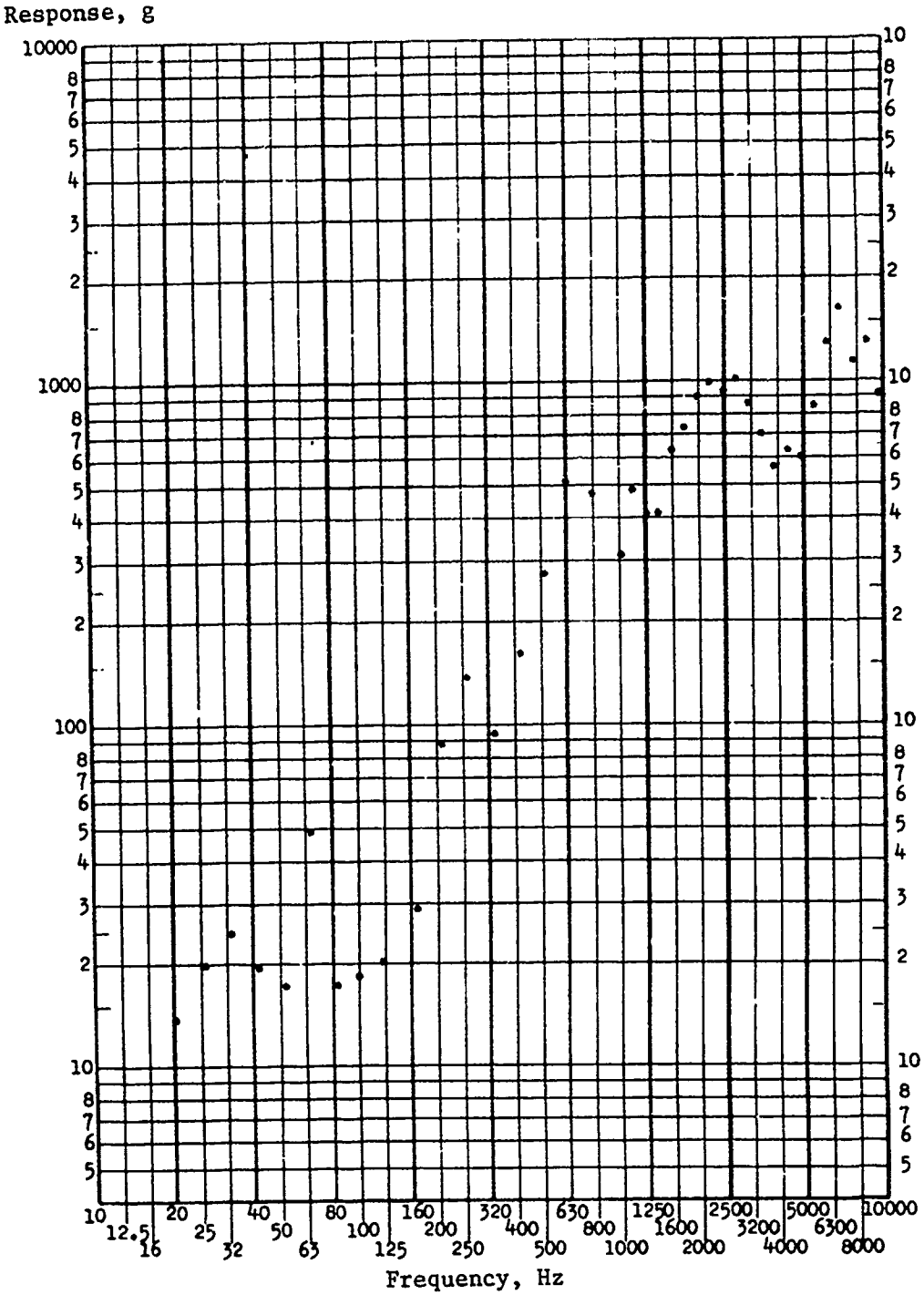
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 14 (cont)



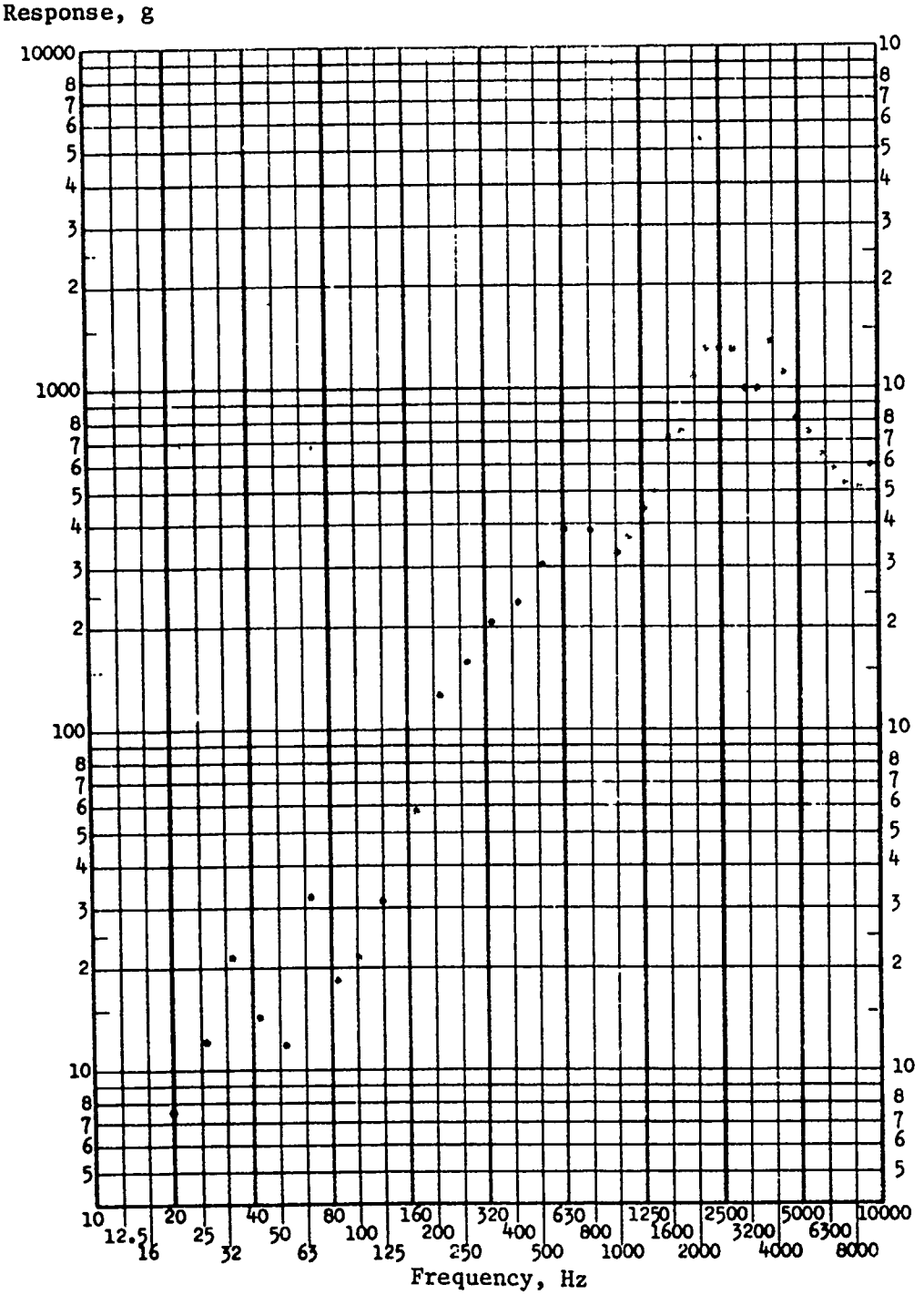
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 5 - Tangential axis longeron near station 117

Figure 14 (cont)



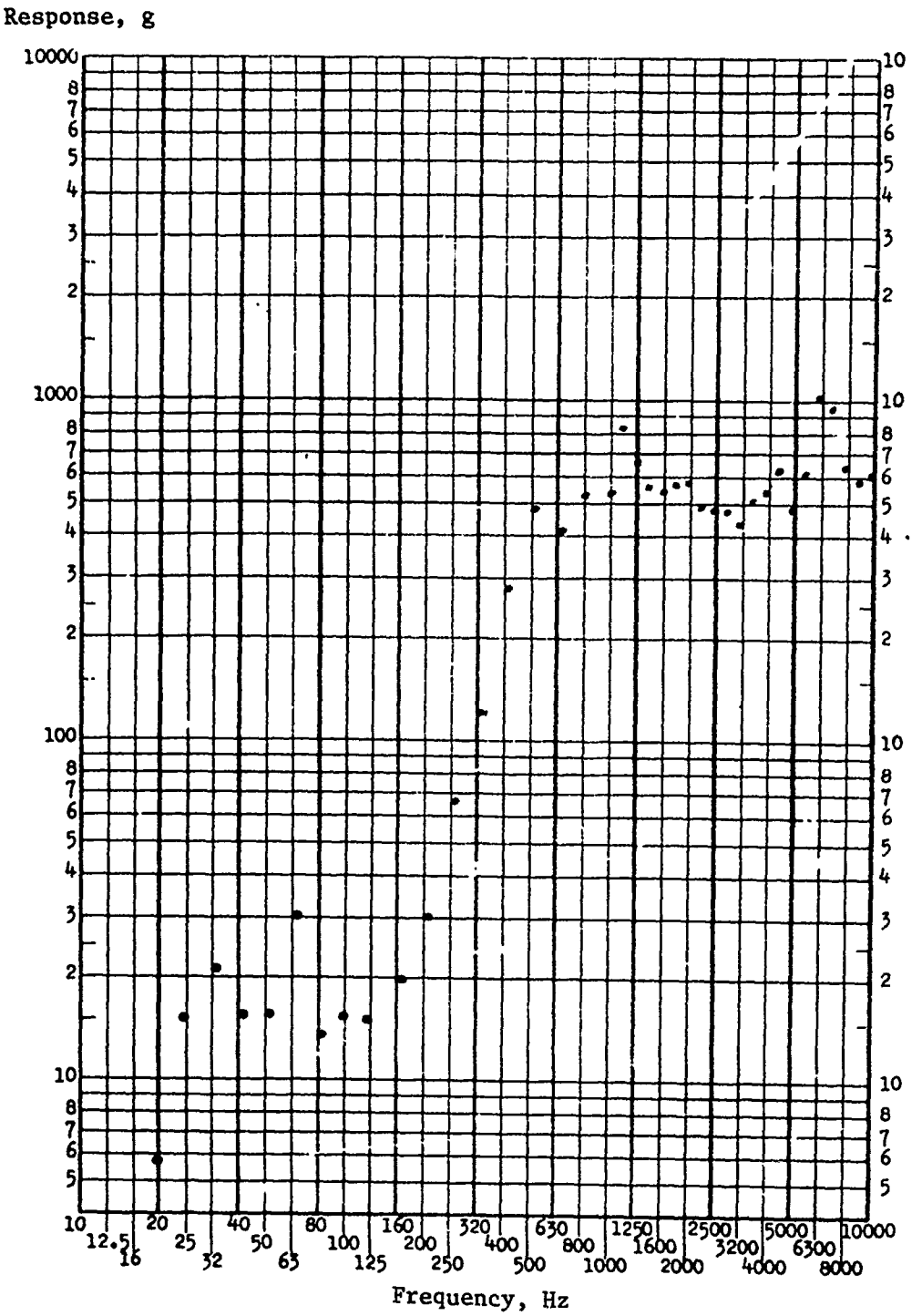
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 6 - Radial axis longeron near station 117

Figure 14 (cont)



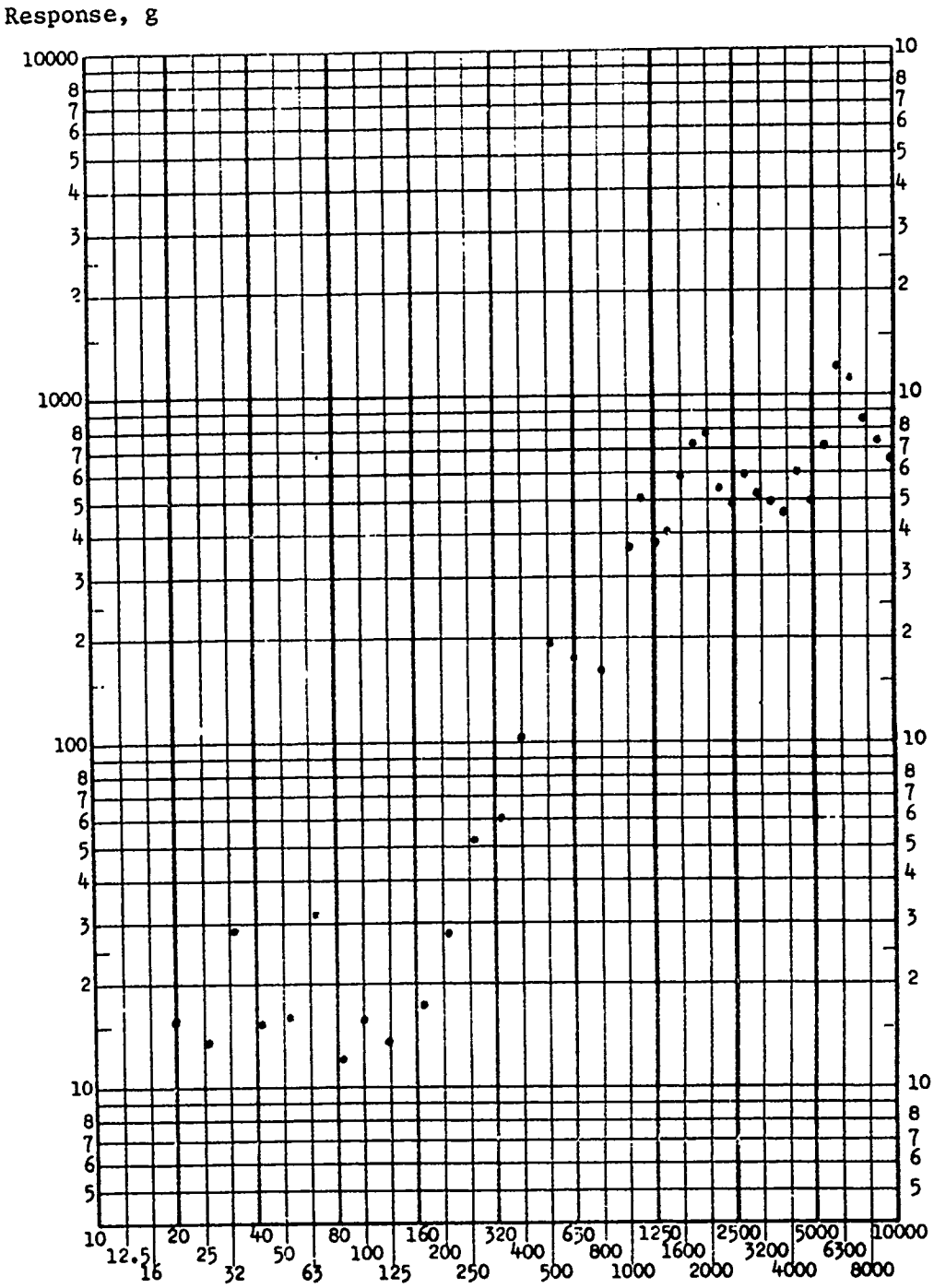
Bench Shock Test - Stage II/III Separation, Run 14
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 14 (cont)



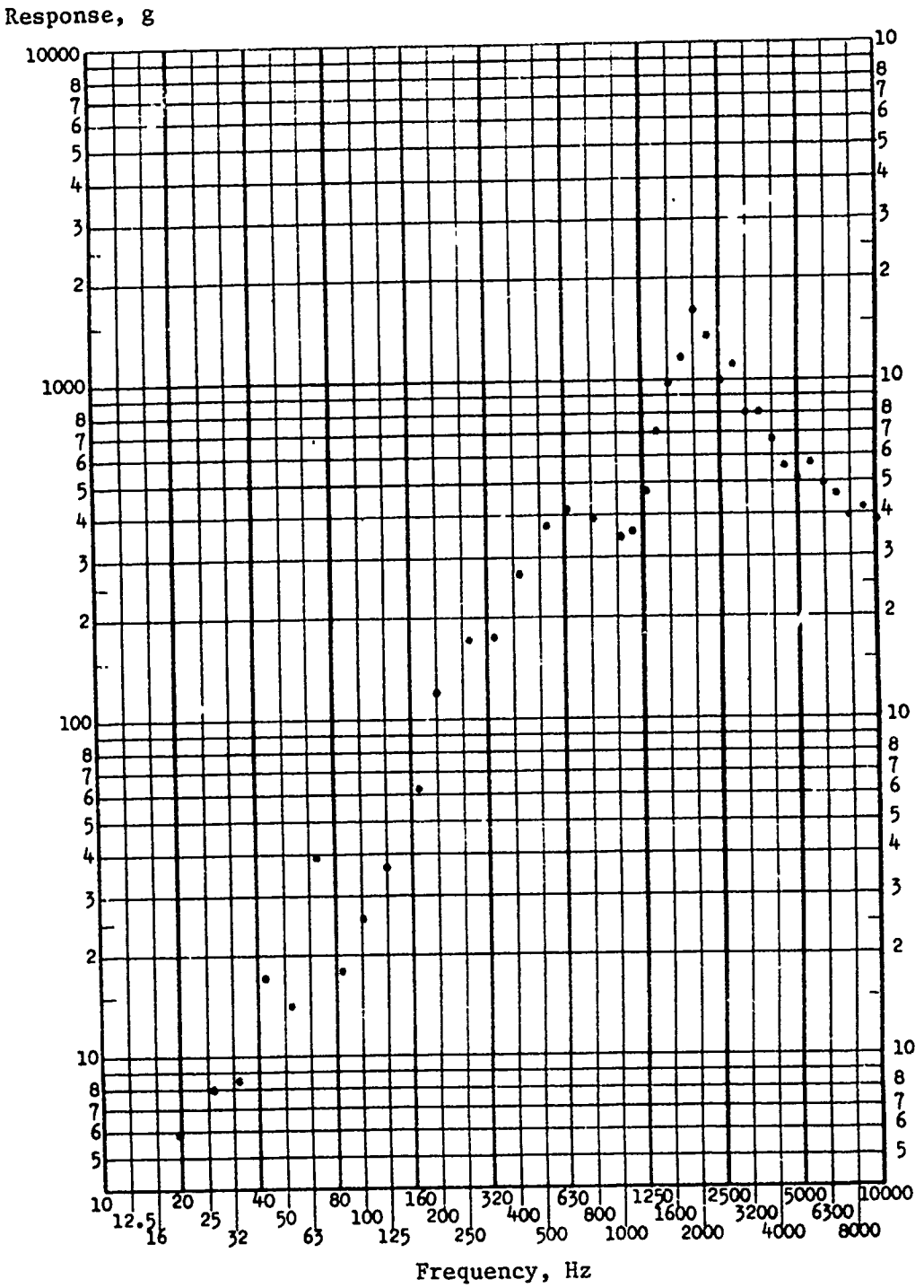
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 8 - Tangential axis longeron ne .r
station 77

Figure 14 (cont)



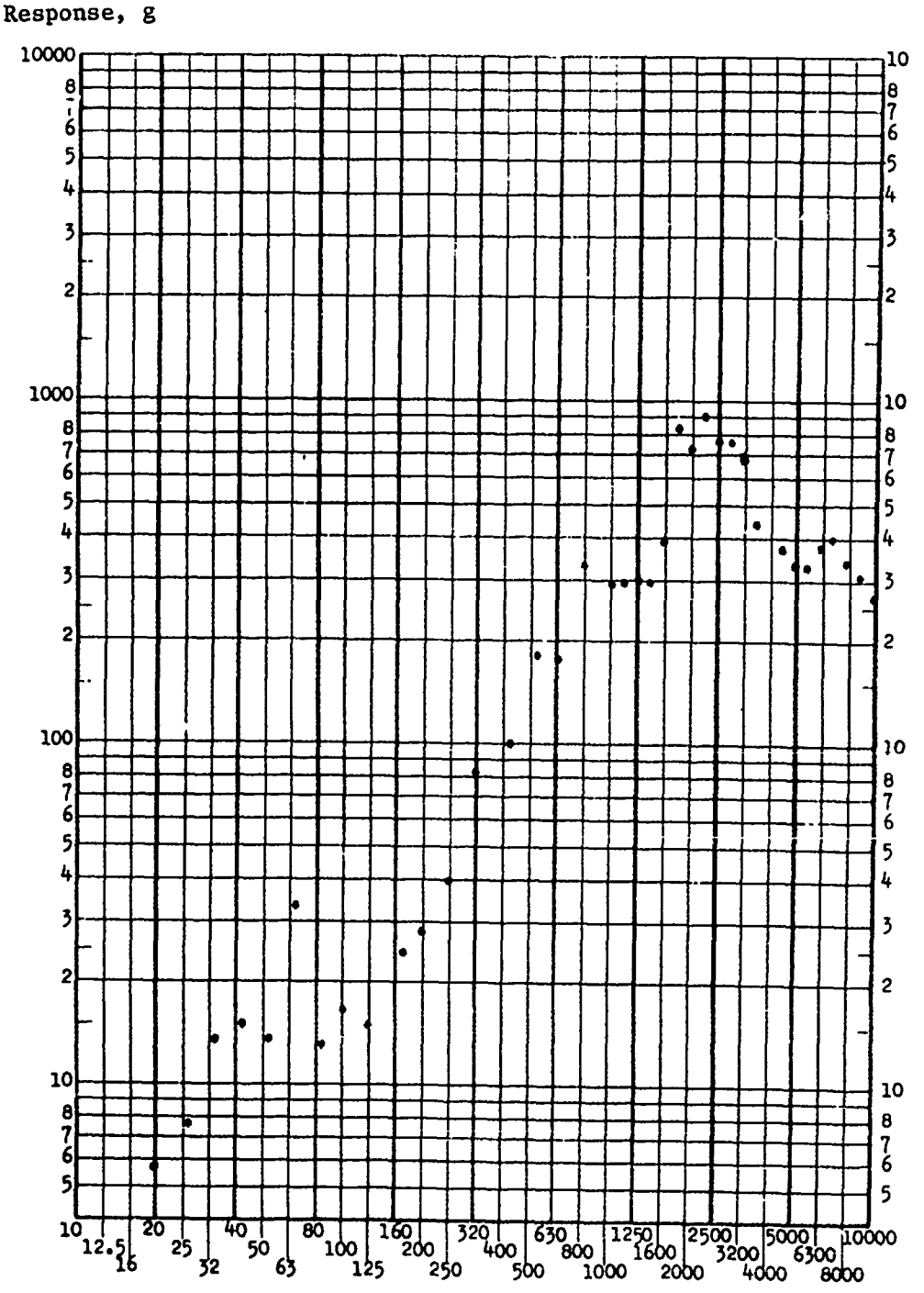
Bench Shock Test - Stage II/III Separation, Run 14
Measurement No. 9 - Radial axis longeron near station 77

Figure 14 (cont)



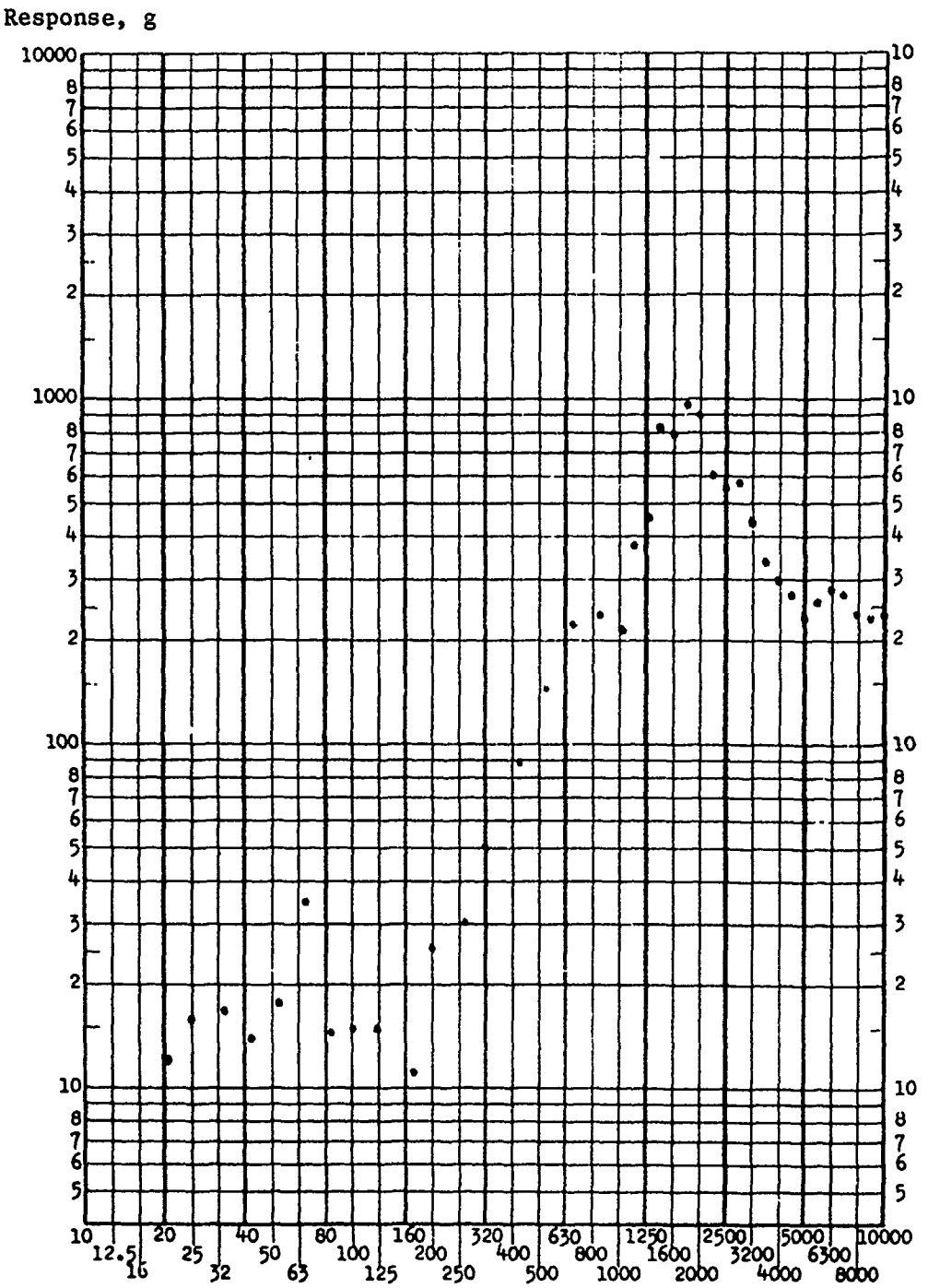
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 10 - Longitudinal axis truss bottom
near station 114 attach point

Figure 14 (cont)



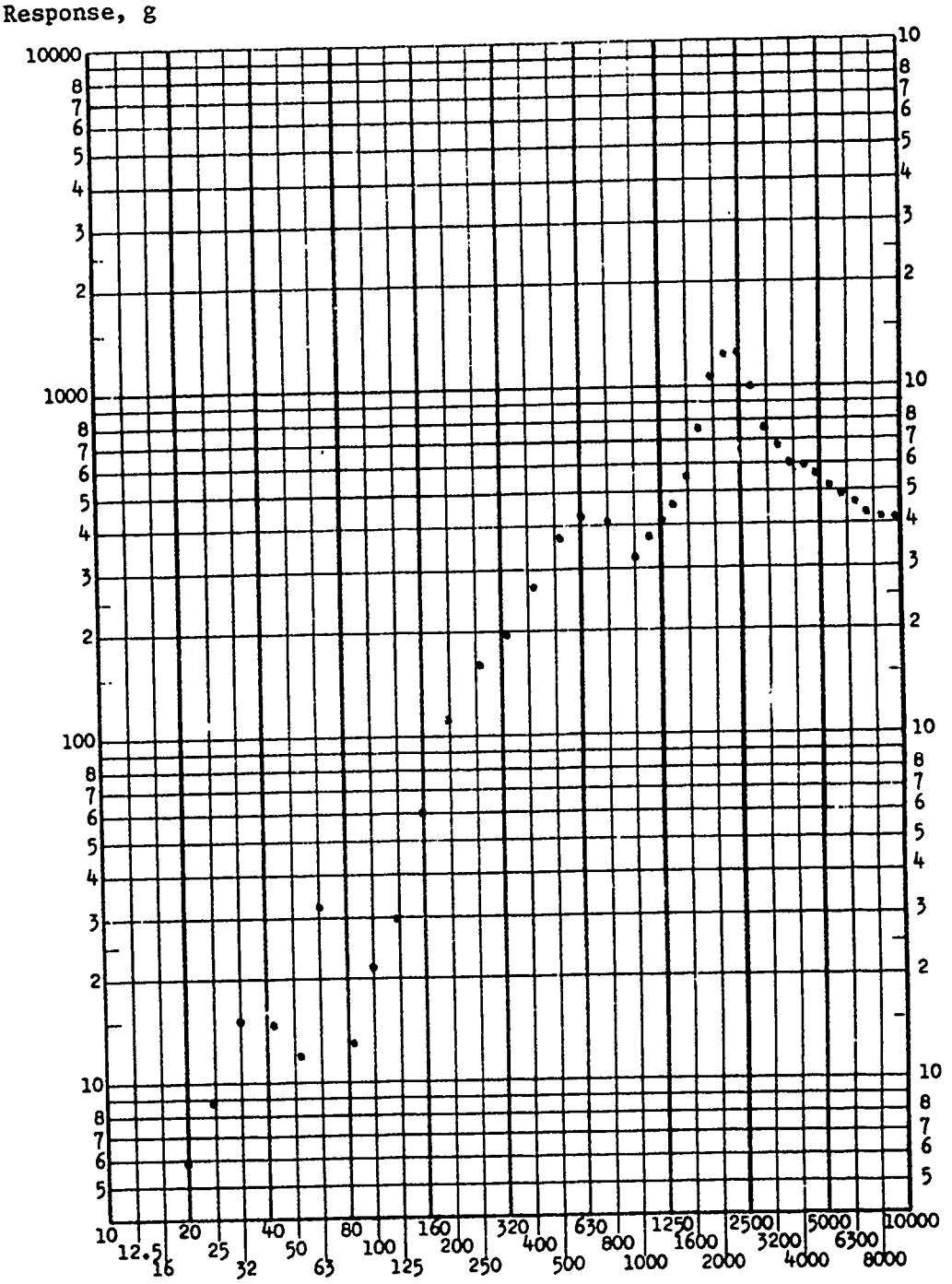
Bench Shock Test - Stage II/III Separation, Run 14
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 14 (cont)



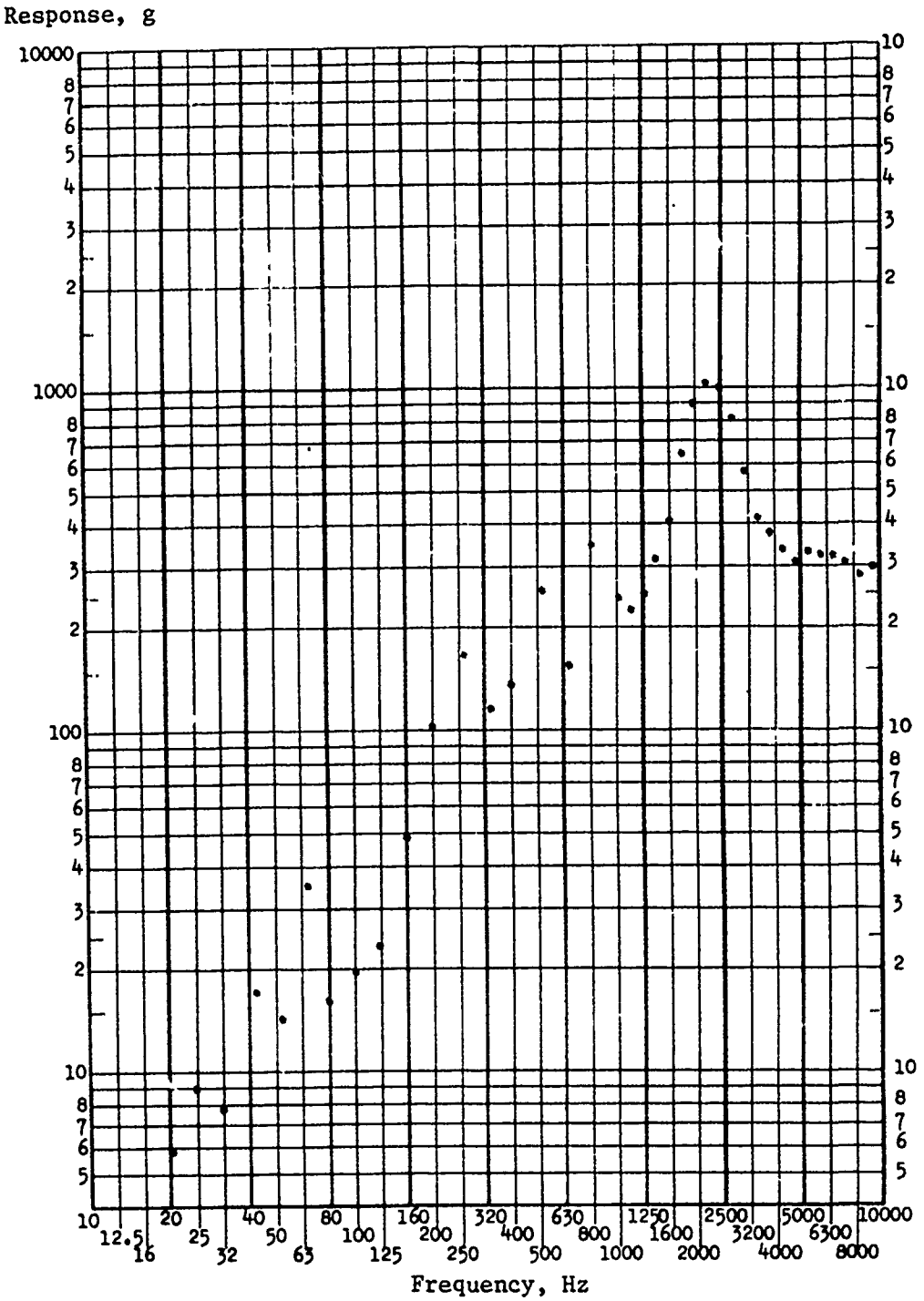
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 14 (cont)



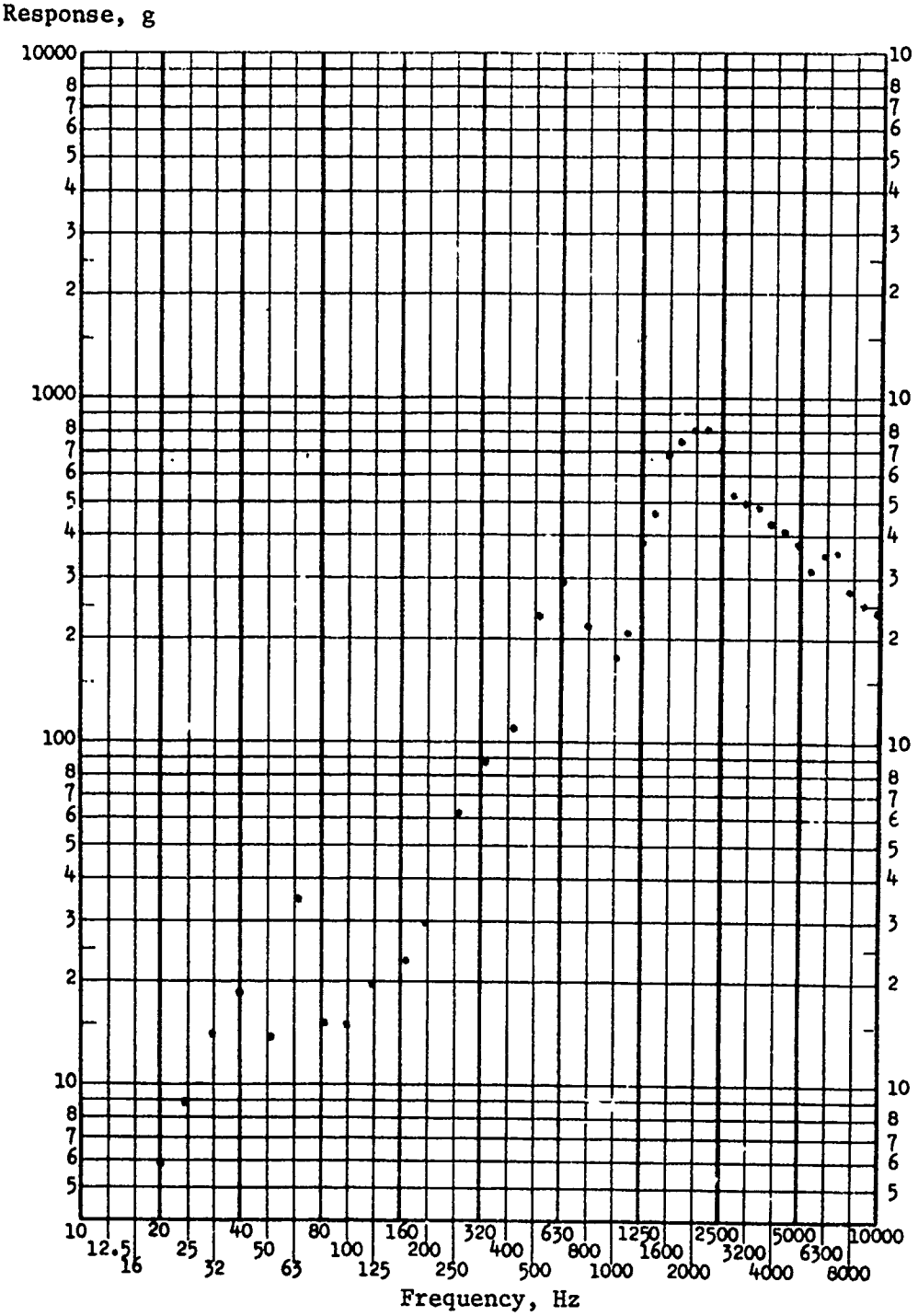
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 14 (cont)



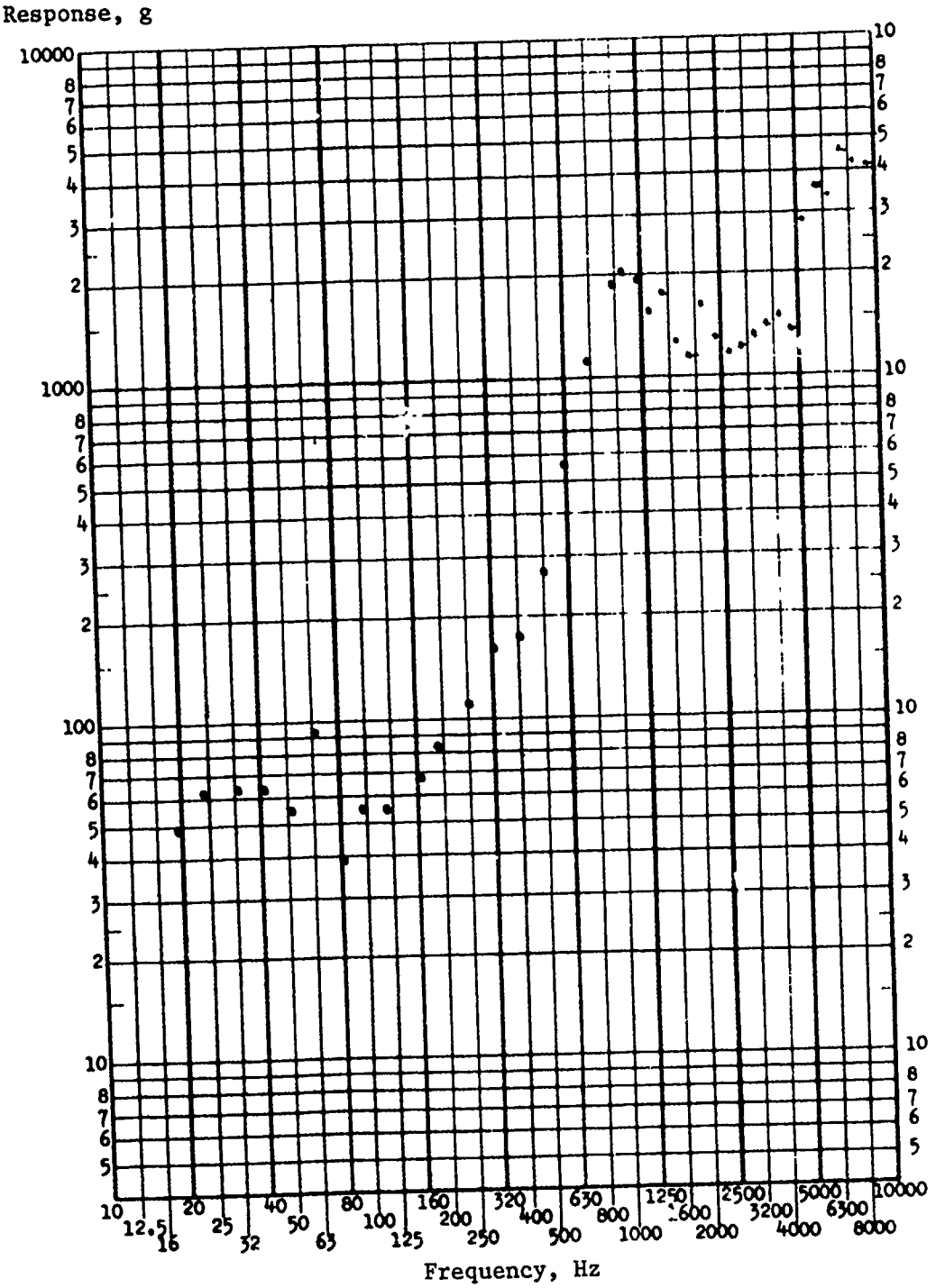
Bench Shock Test - Stage II/III Separation, Run 14 _
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 14 (cont)



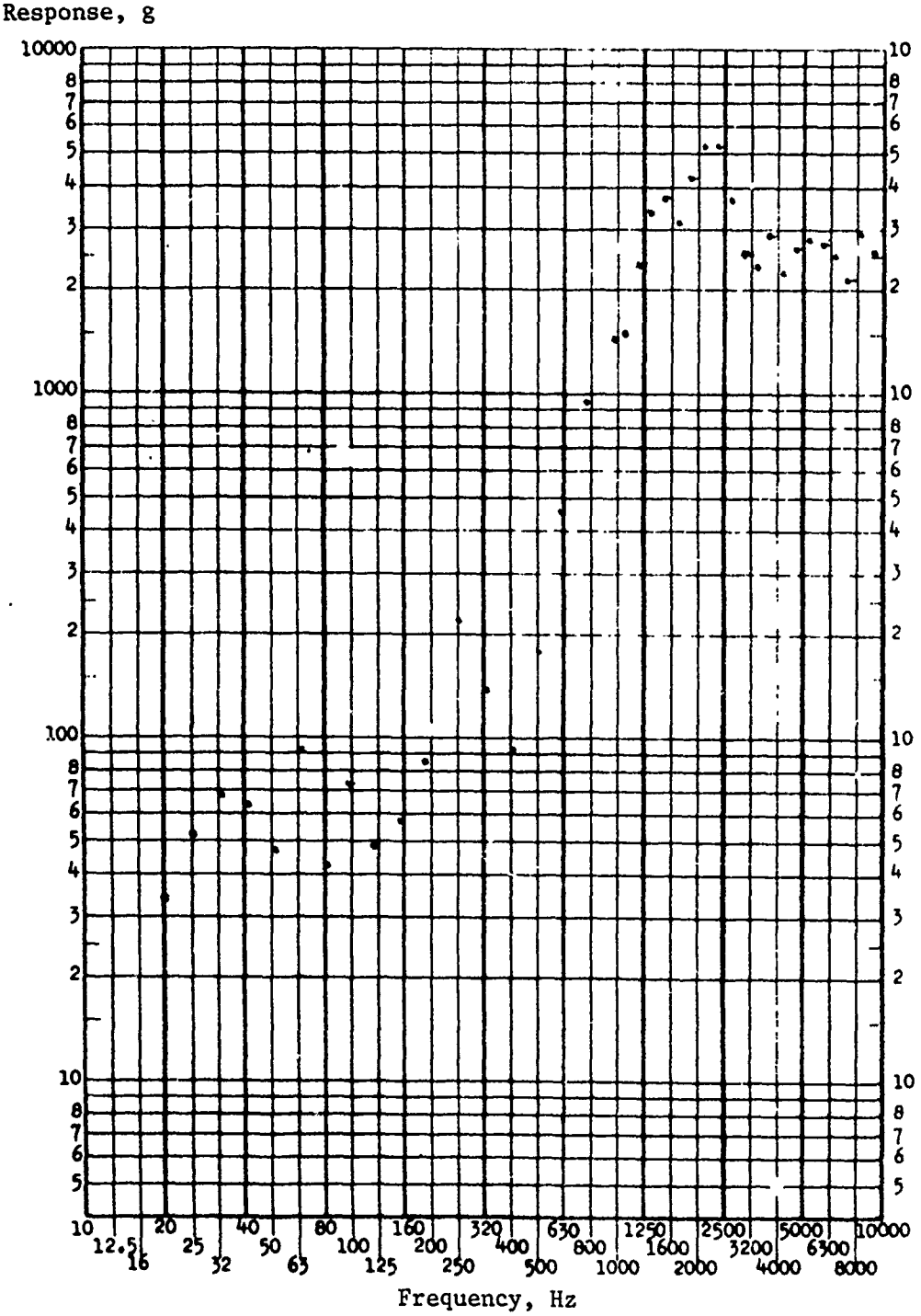
Bench Shock Test - Stage II/III Separation, Run 14
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 14 (concl)



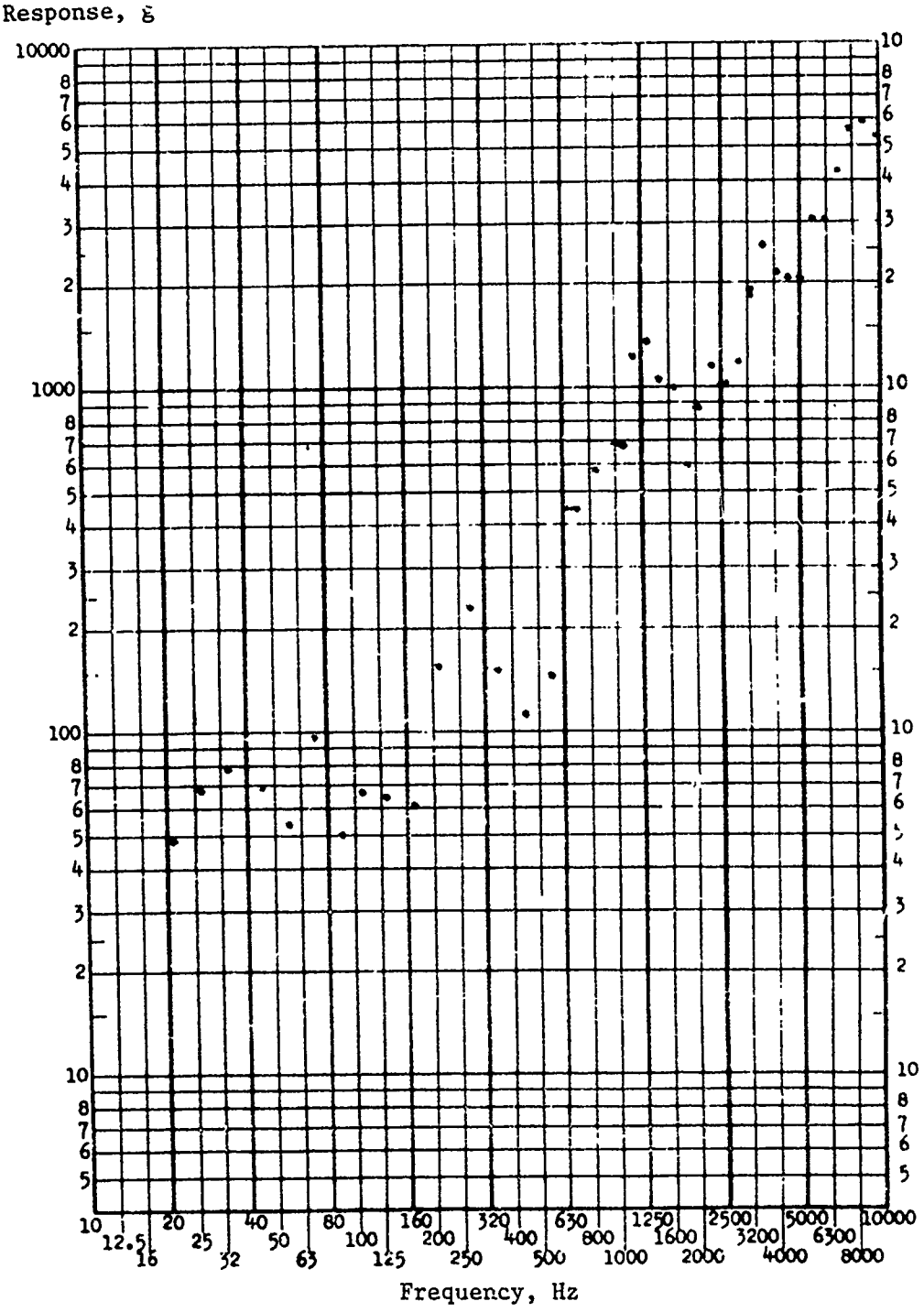
Bench Shock Test - Stage II/III Separation, Run 15
Measurement No. 1 - Longitudinal axis longeron near station 133

Figure 15 Run 15 Shock Response Spectrum



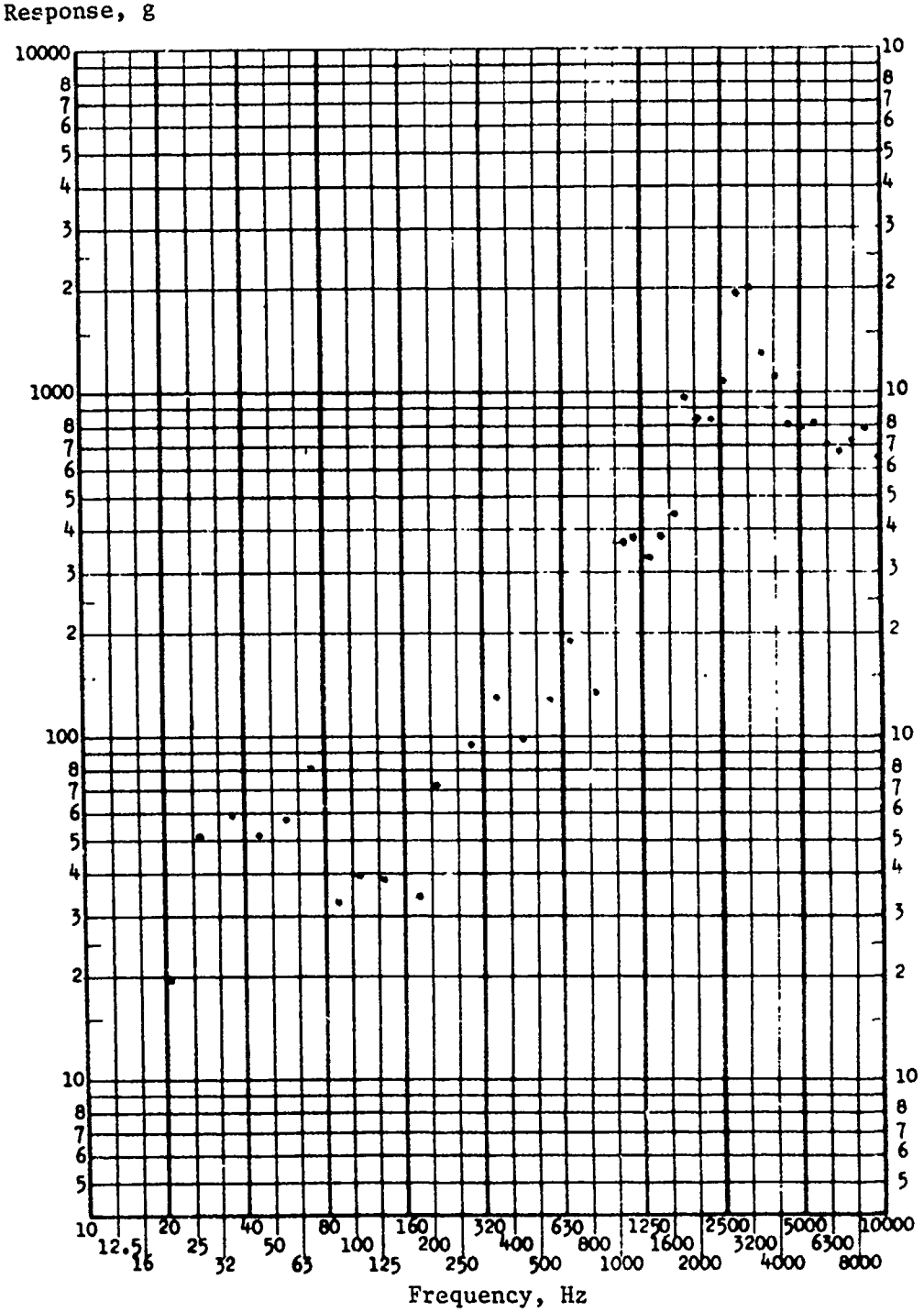
Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 2 - Tangential axis longeron near station 133

Figure 15 (cont)



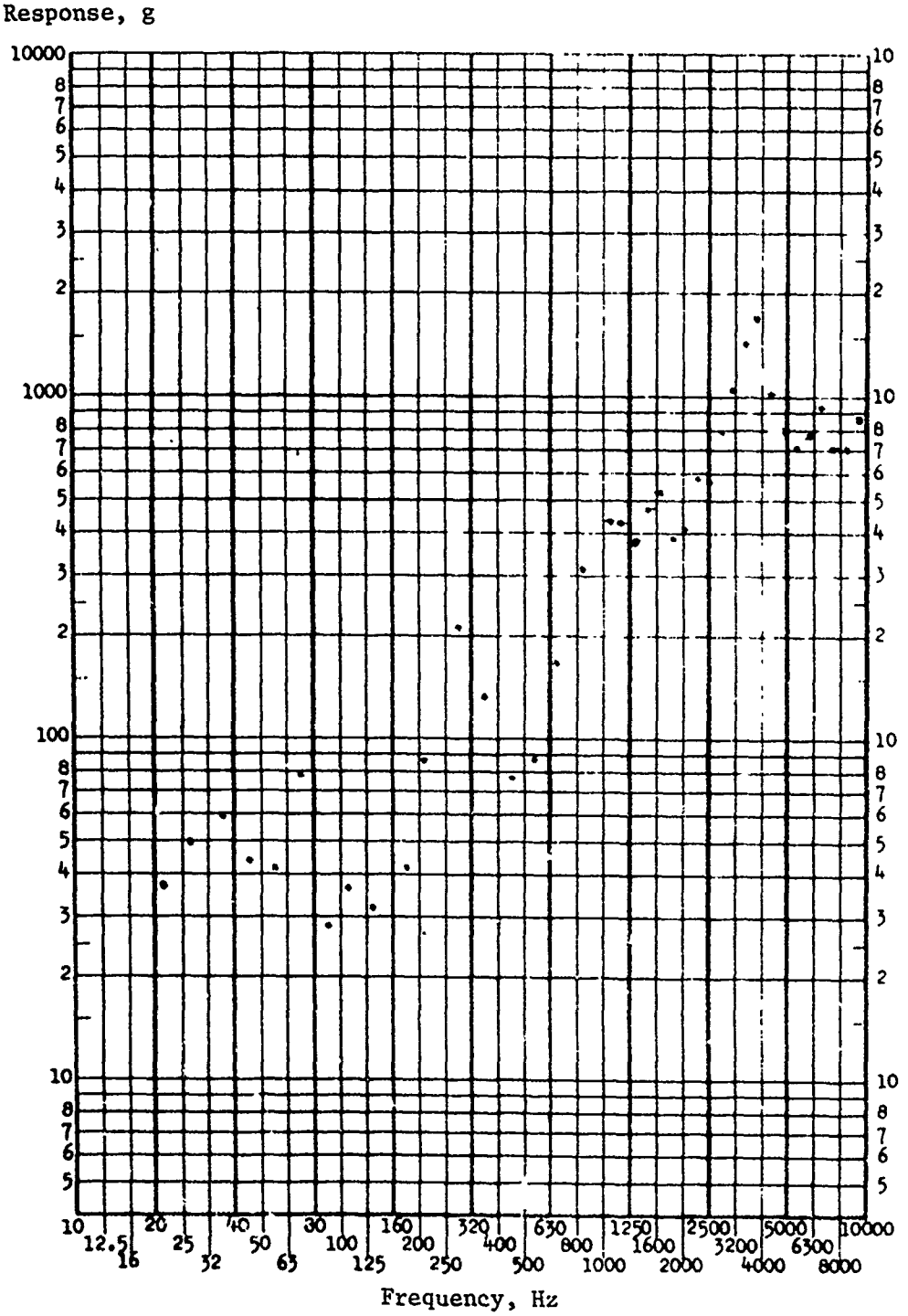
Bench Shock Test - Stage II/III Separation, Run 15
Measurement No. 3 - Radial axis longeron near station 133

Figure 15 (cont)



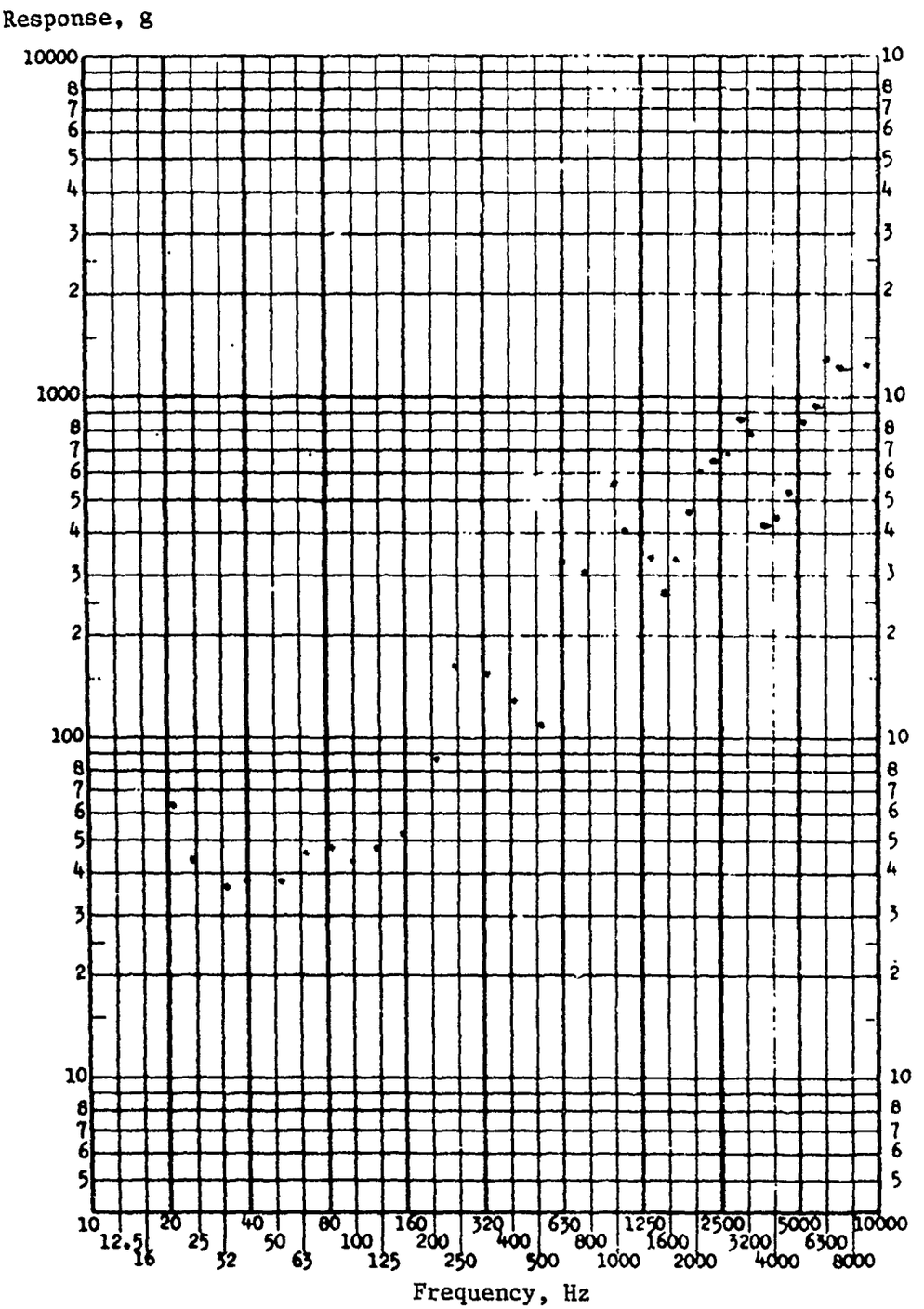
Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 15 (cont)



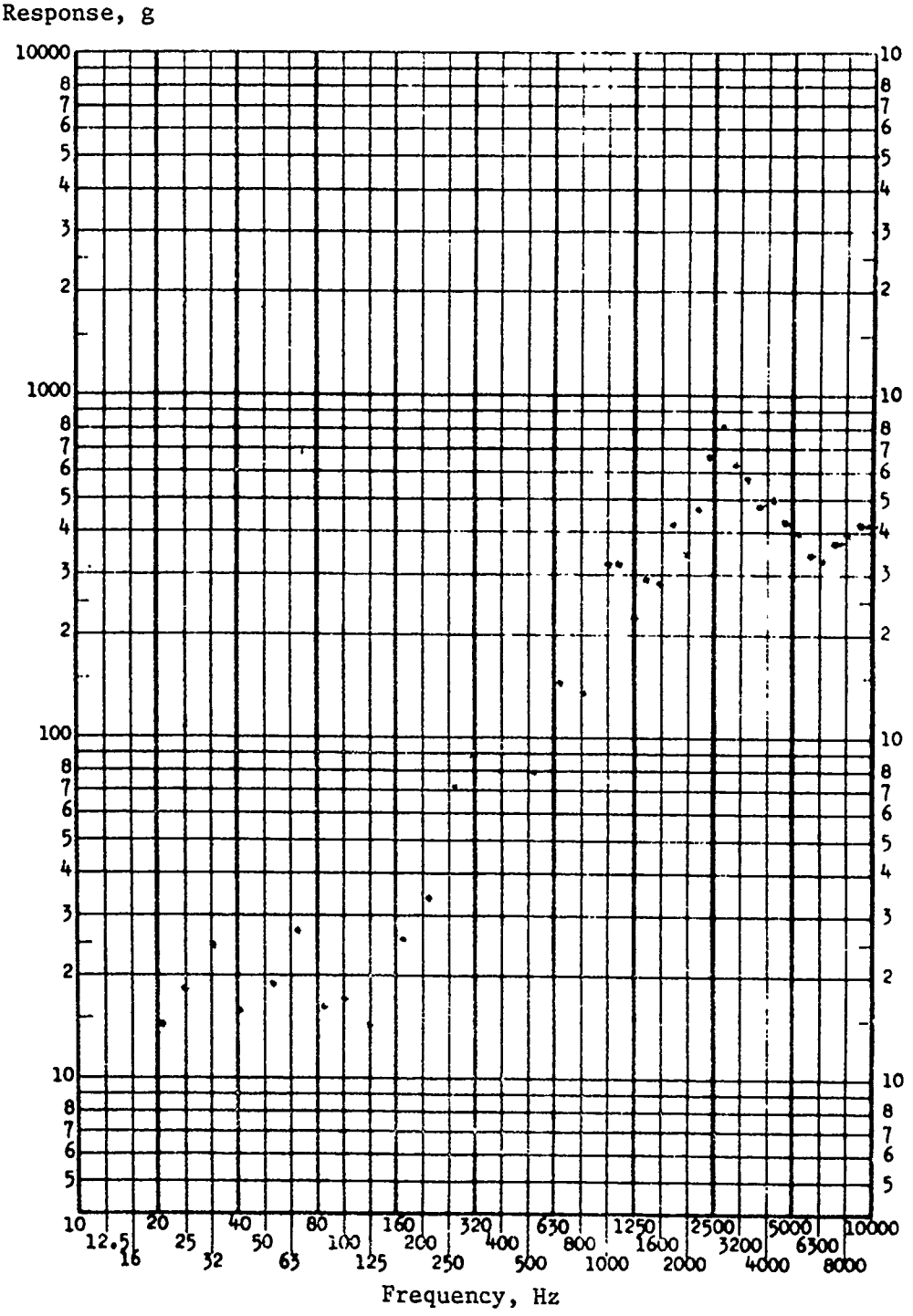
Bench Shock Test - Stage II/III Separation, Run 15 _
Measurement No. 5 - Tangential axis longeron near station 117

Figure 15 (cont)



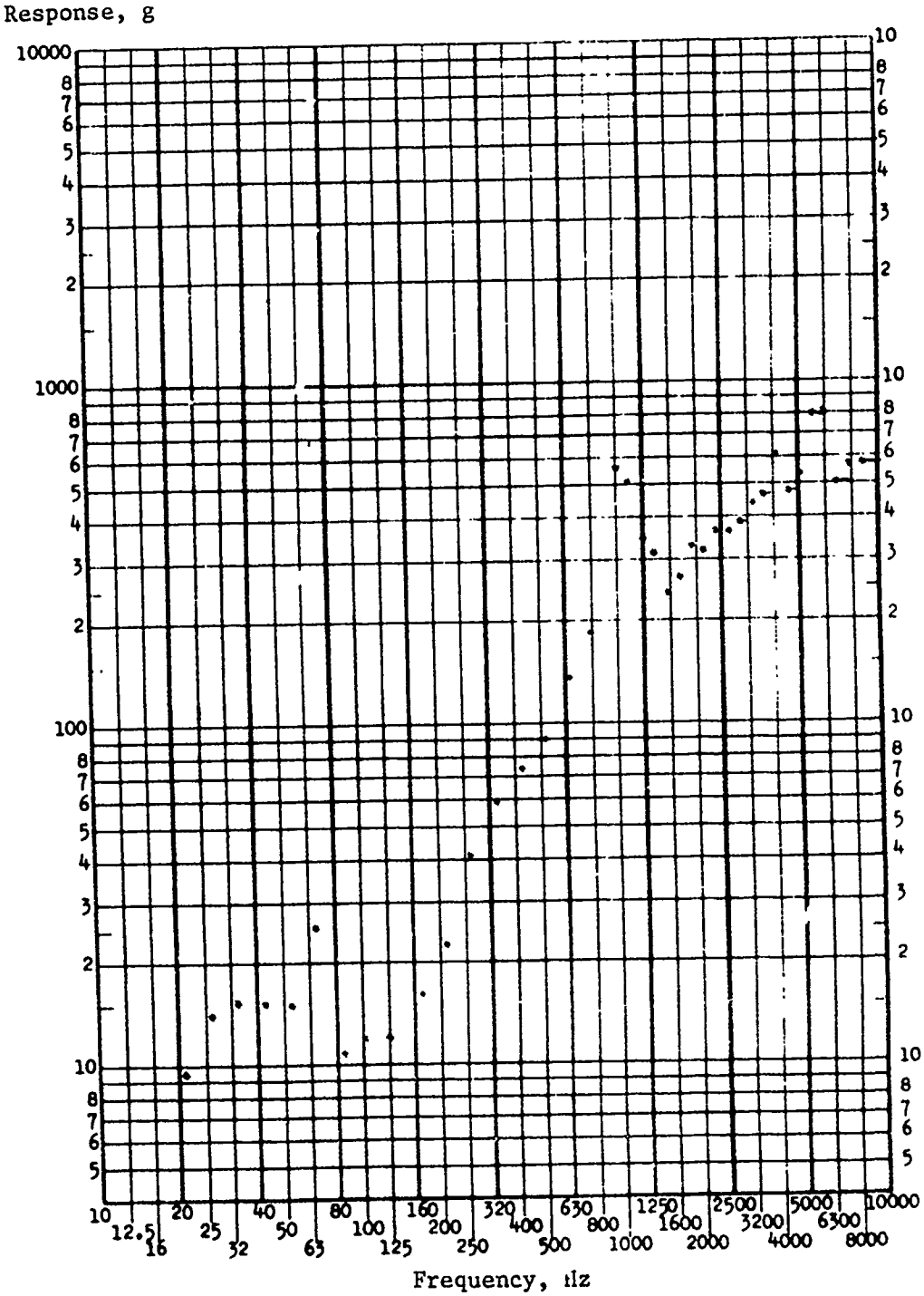
Bench Shock Test - Stage II/III Separation, Run 15 _
Measurement No. 6 - Radial axis longeron near station 117

Figure 15 (cont)



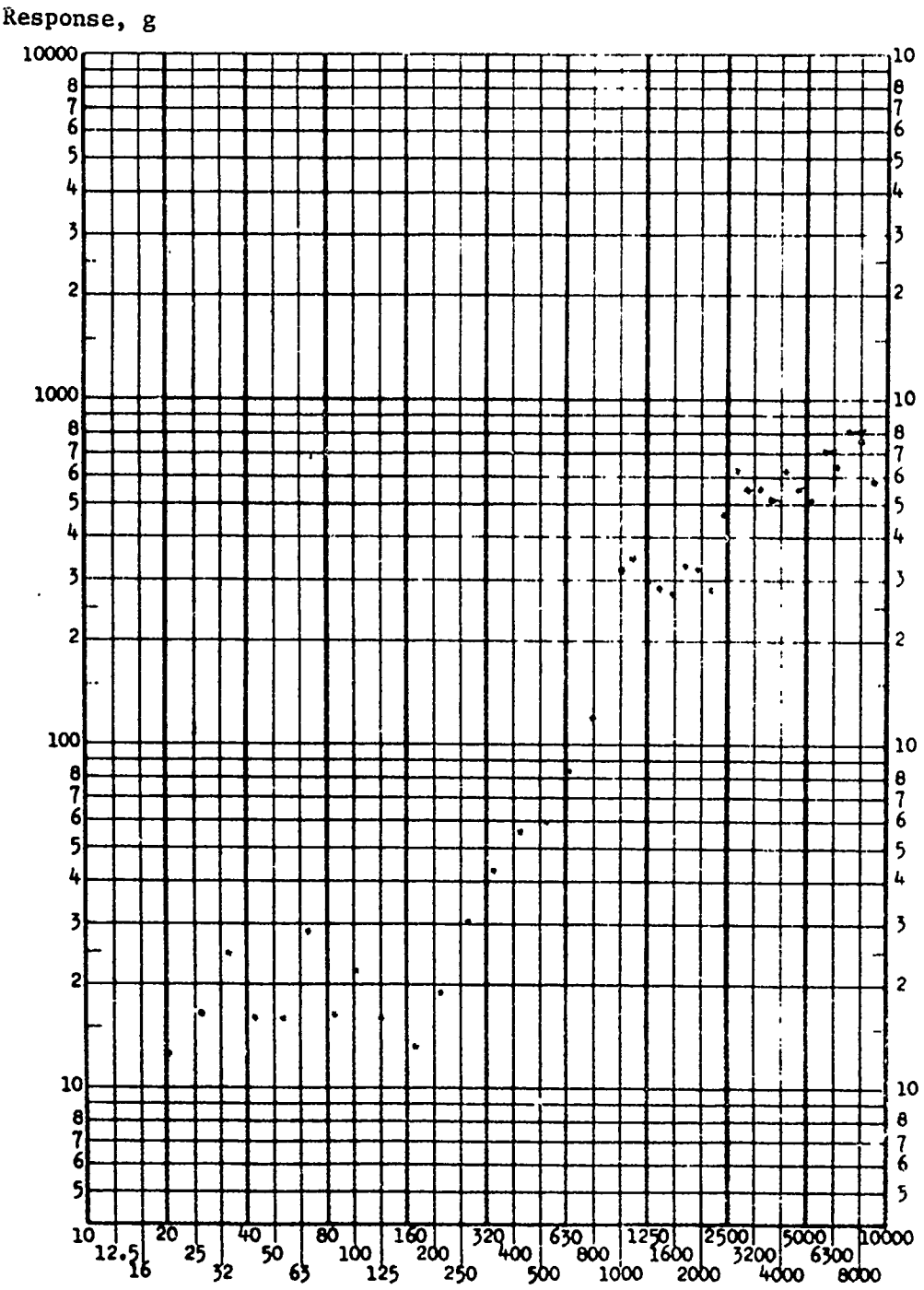
Bench Shock Test - Stage II/III Separation, Run 15
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 15 (cont)



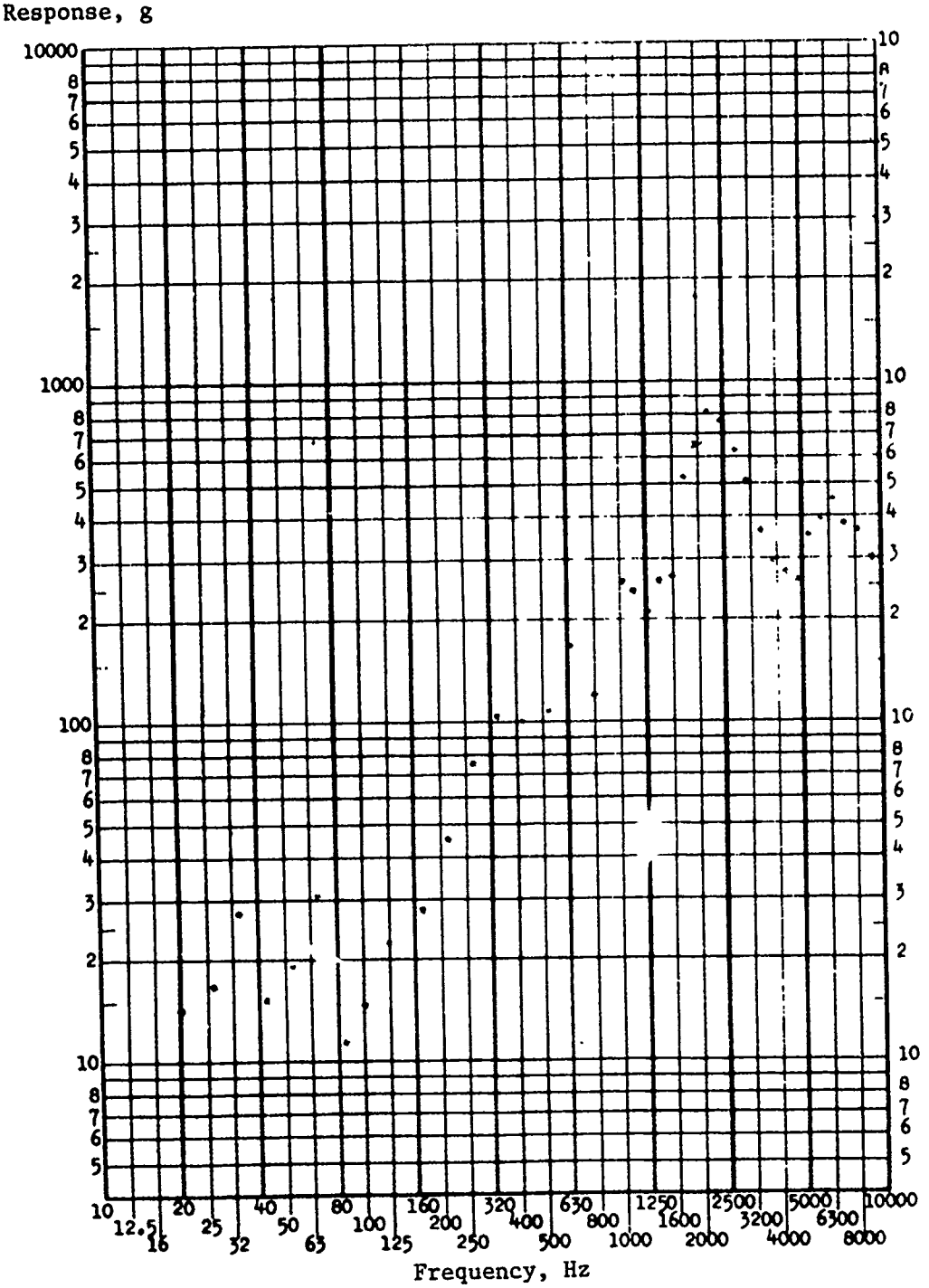
Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 8 - Tangential axis longeron near station 77

Figure 15 (cont)



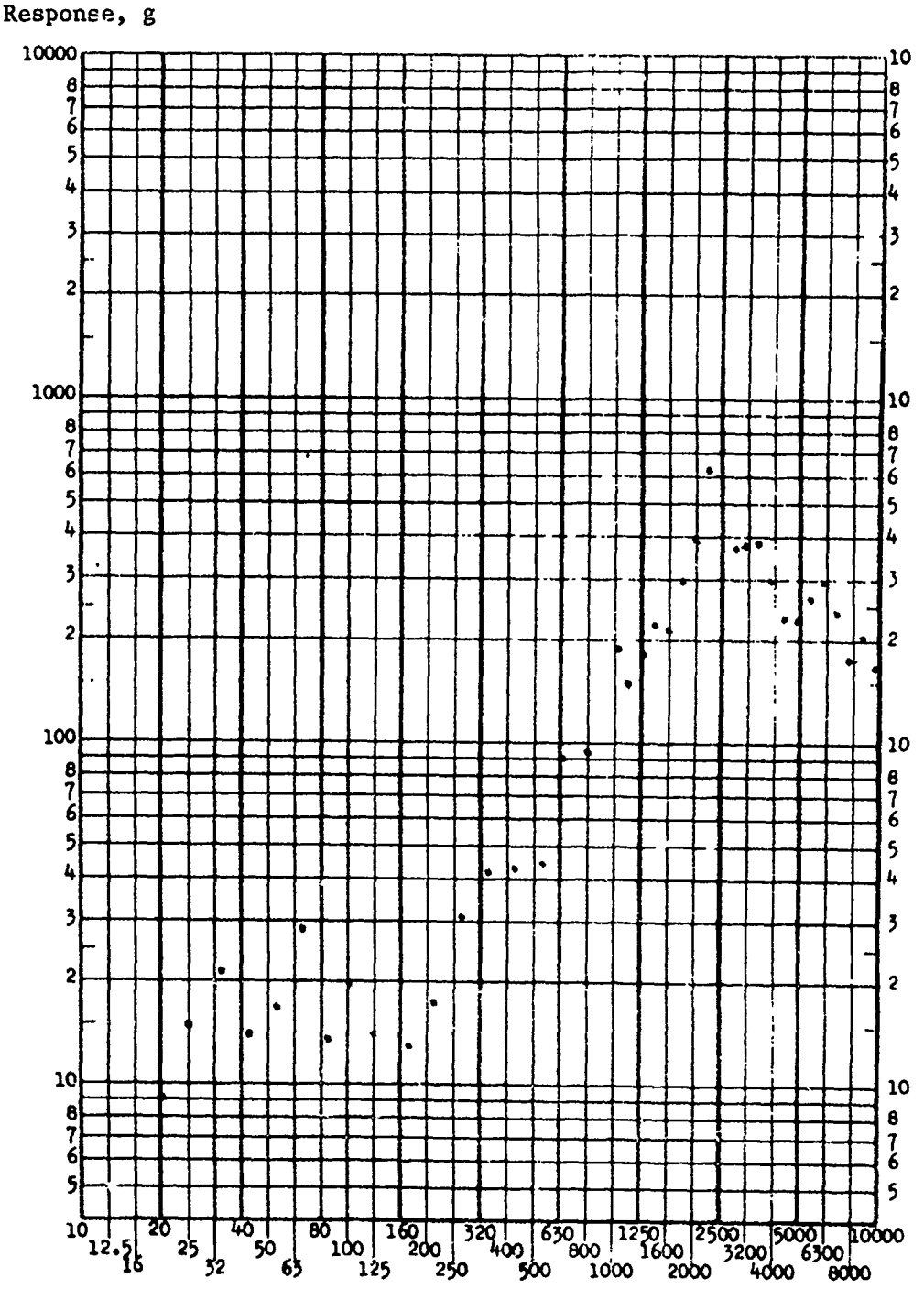
Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 9 - Radial axis longeron near station 77

Figure 15 (cont)



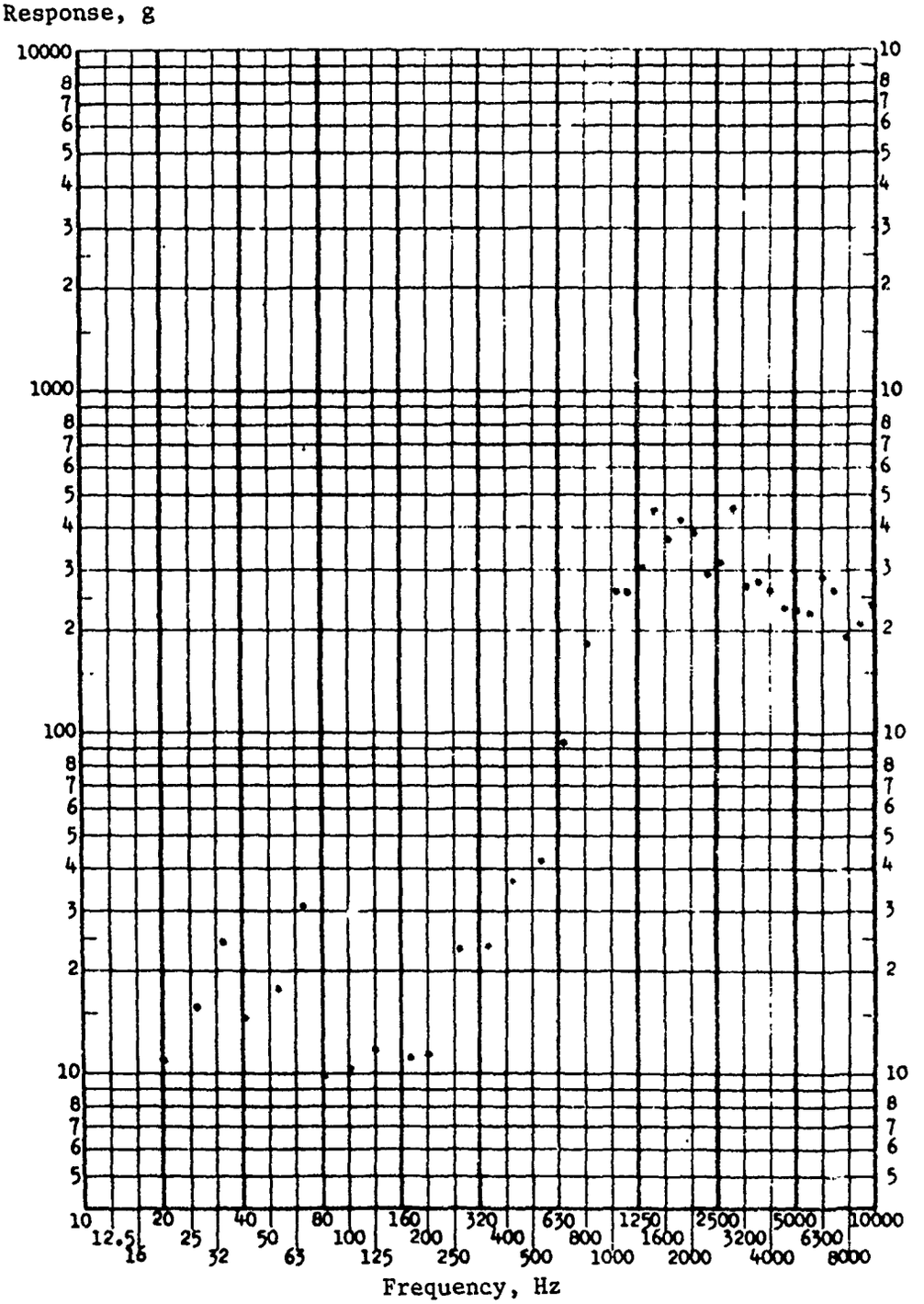
Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 10 - Longitudinal axis truss bottom
near station 114 attach point

Figure 15 (cont)



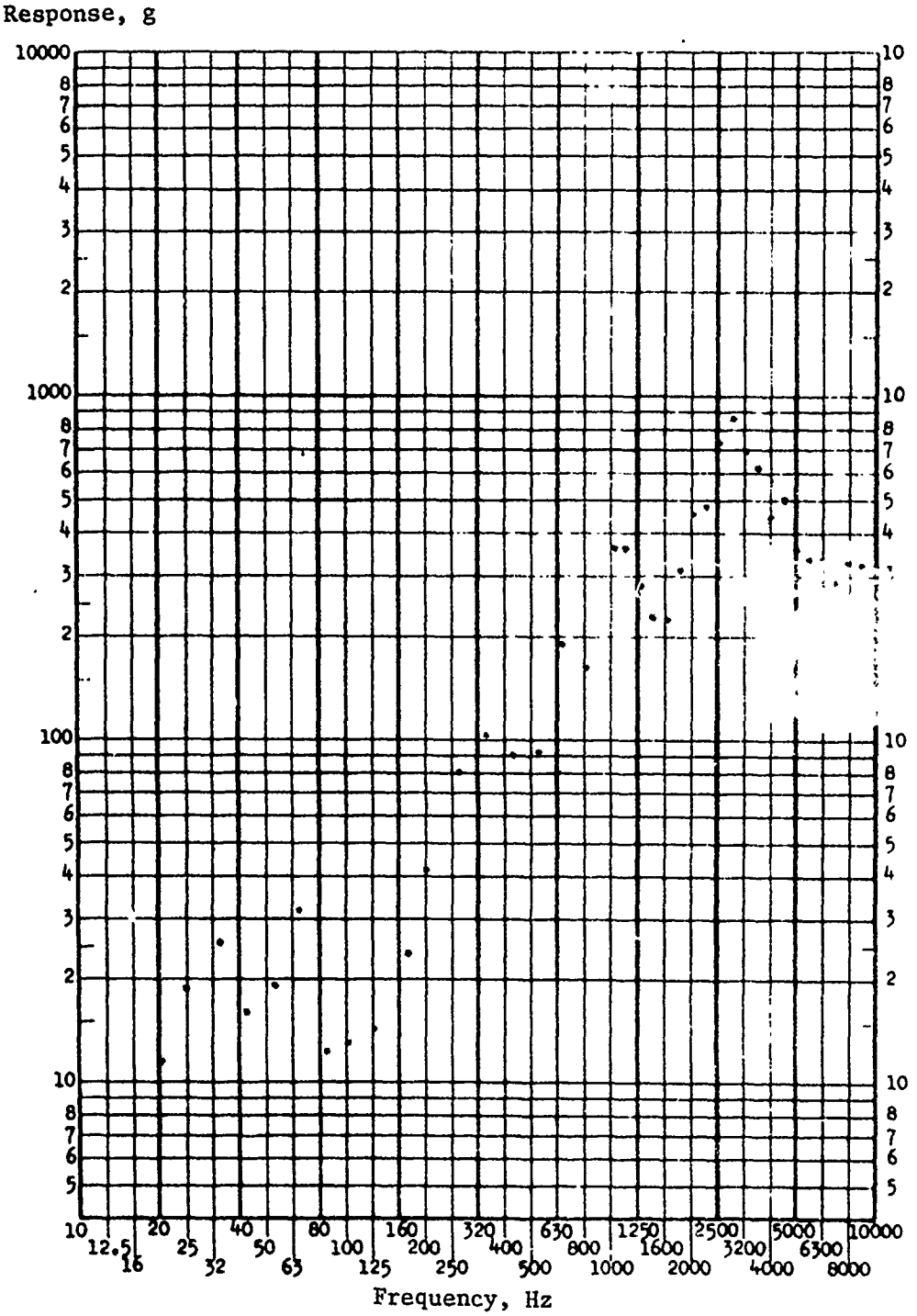
Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 15 (cont)



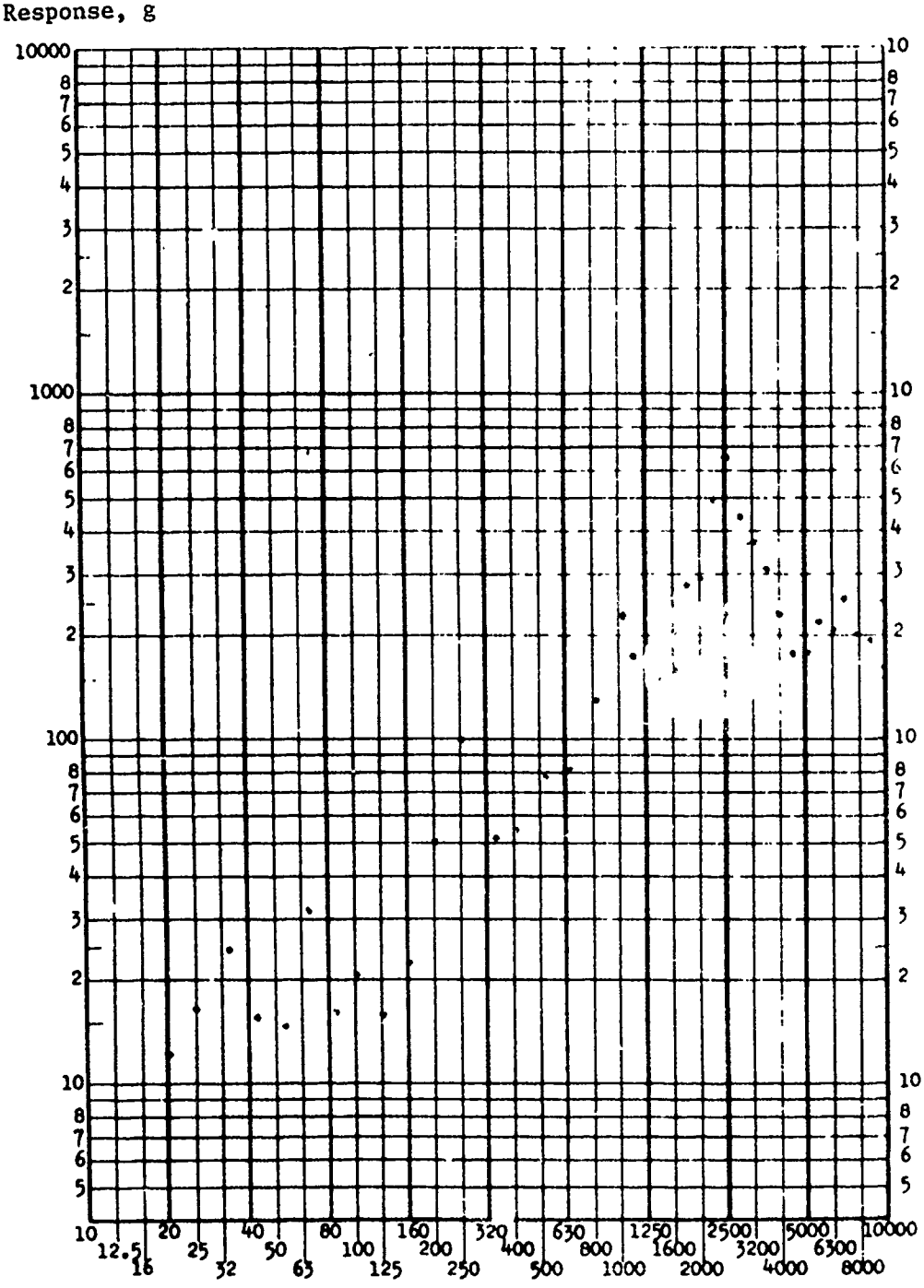
Bench Shock Test - Stage II/III Separation, Run 15
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 15 (cont)



Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

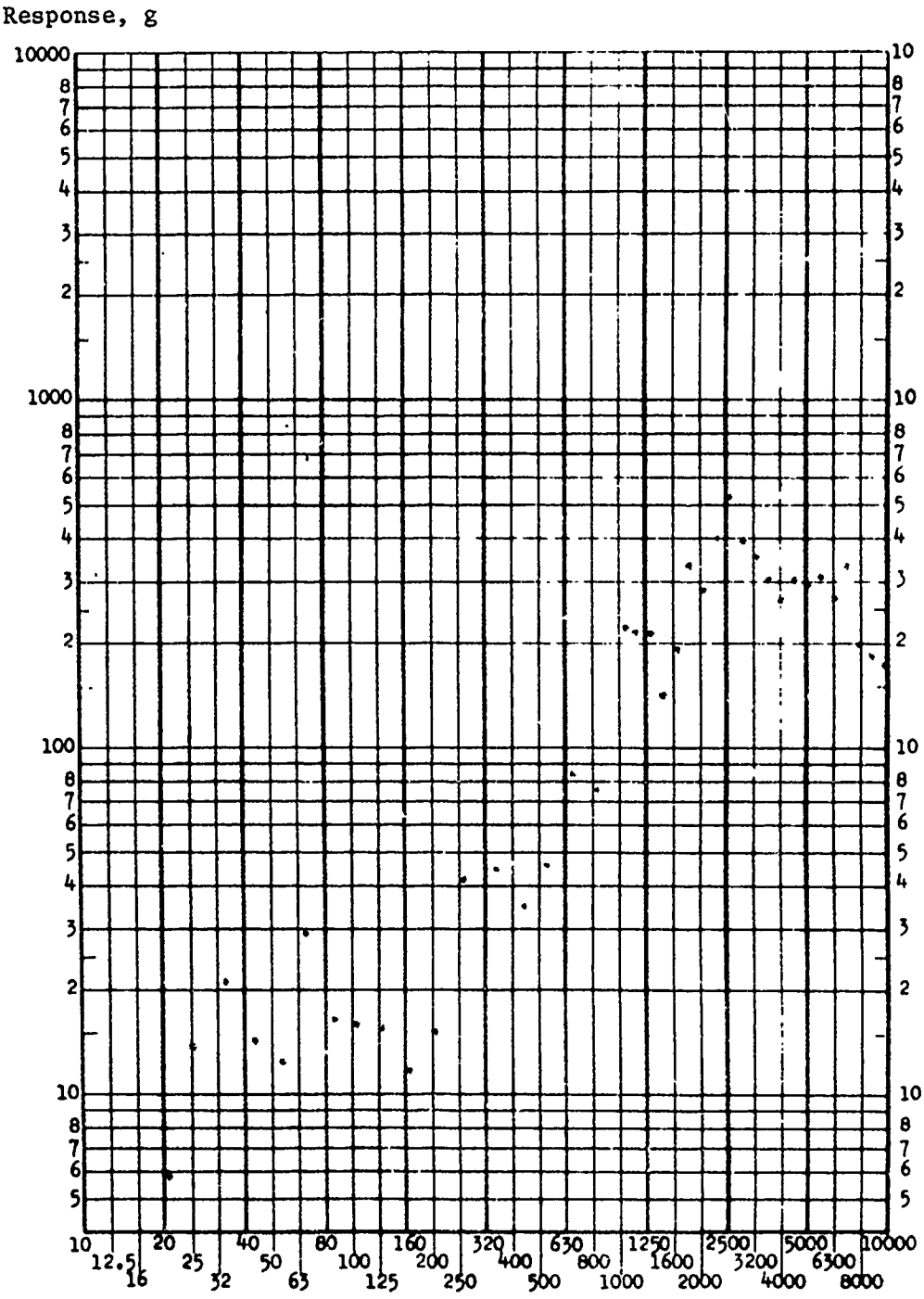
Figure 15 (cont)



Frequency, Hz

Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 15 (cont)



Bench Shock Test - Stage II/III Separation, Run 15__
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 15 (concl)

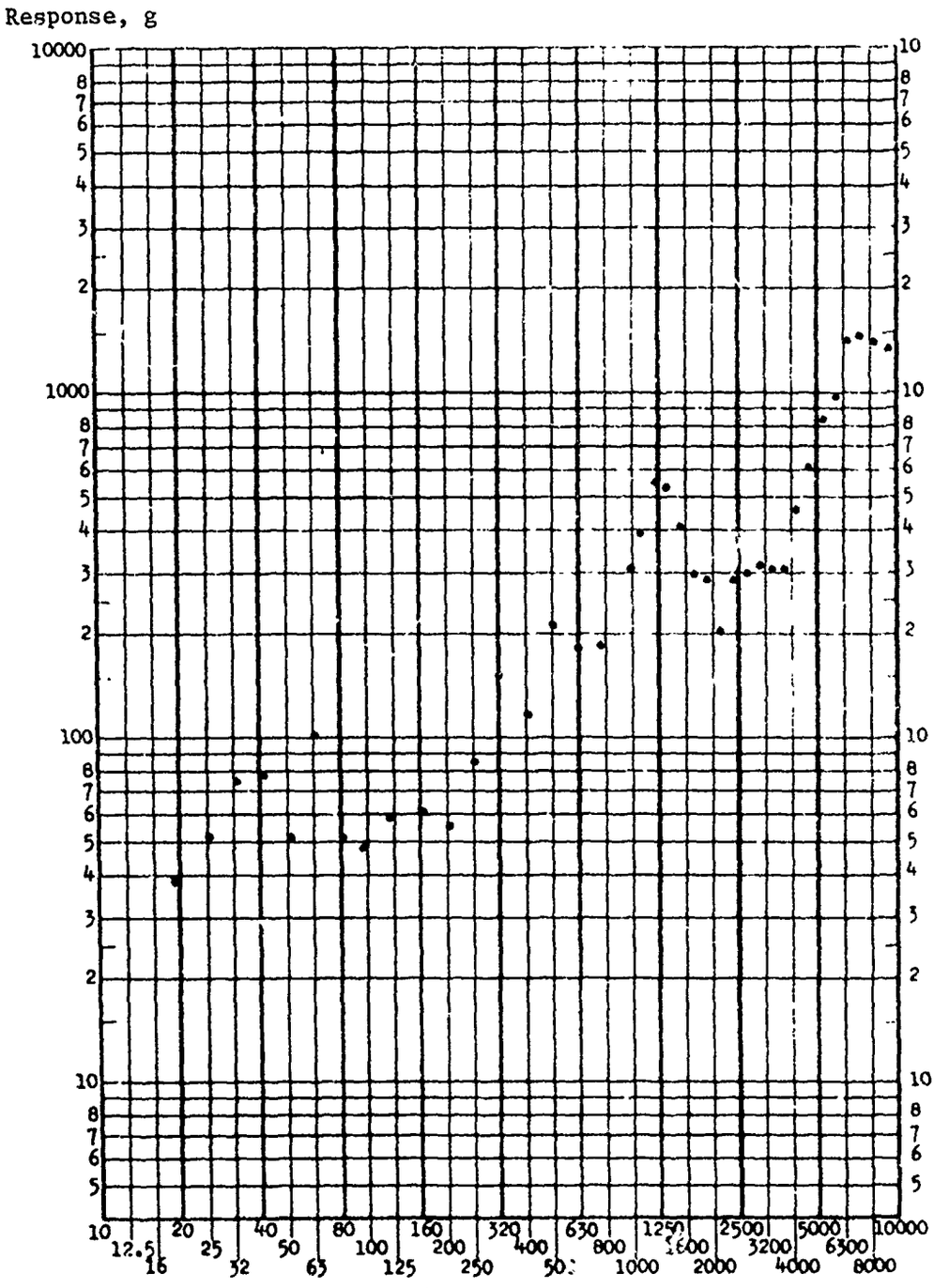
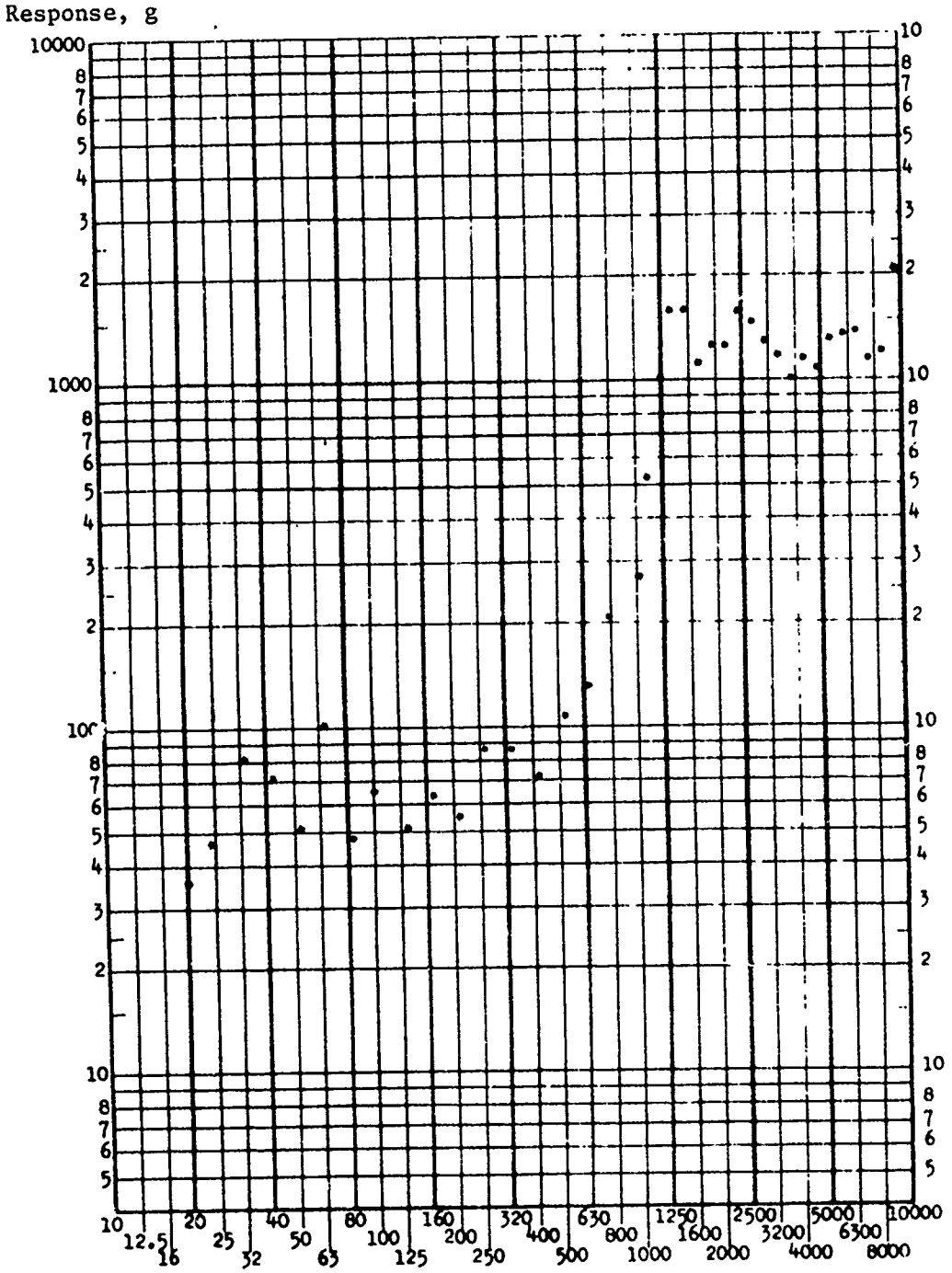
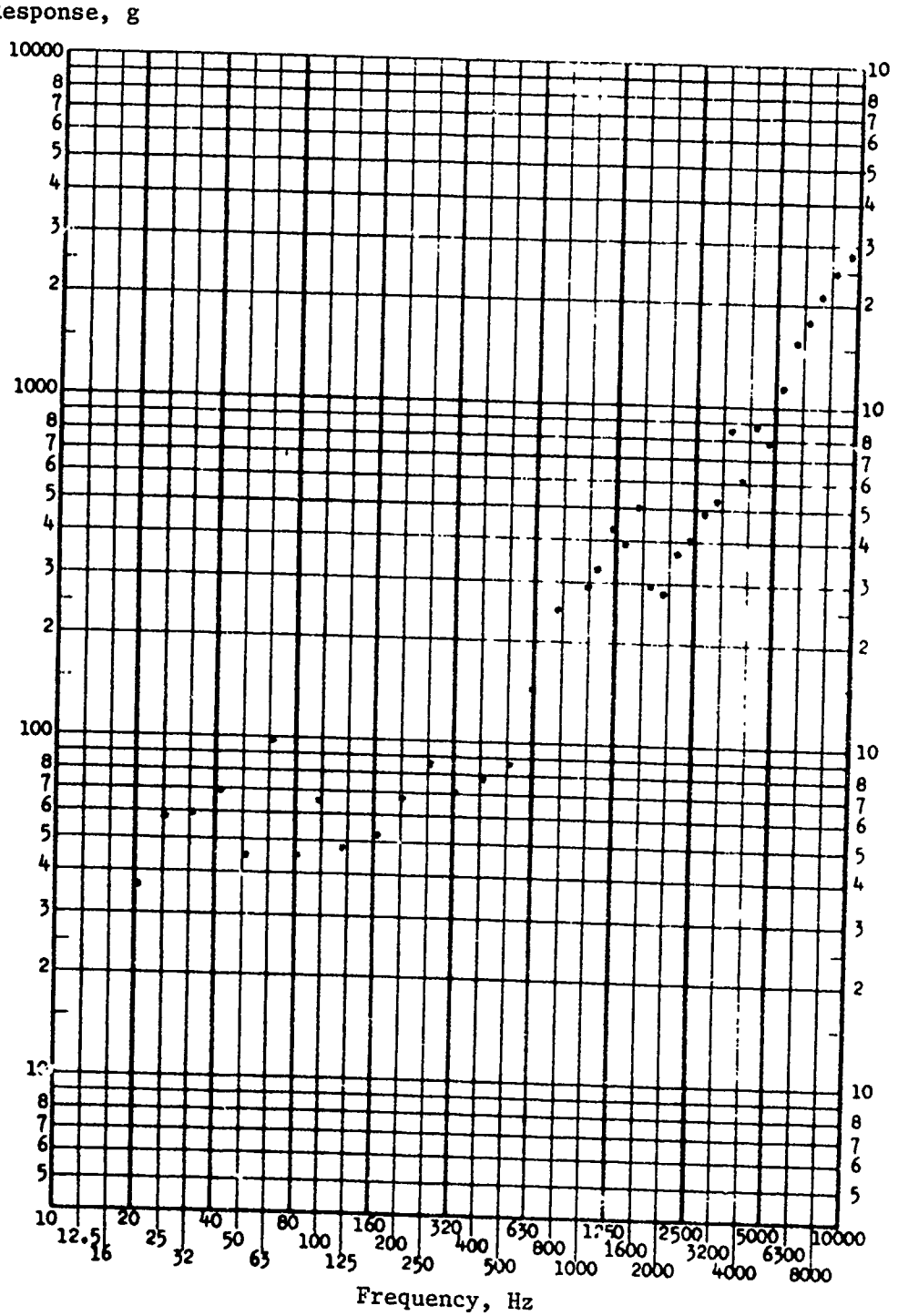


Figure 16 Run 16 Shock Response Spectrum



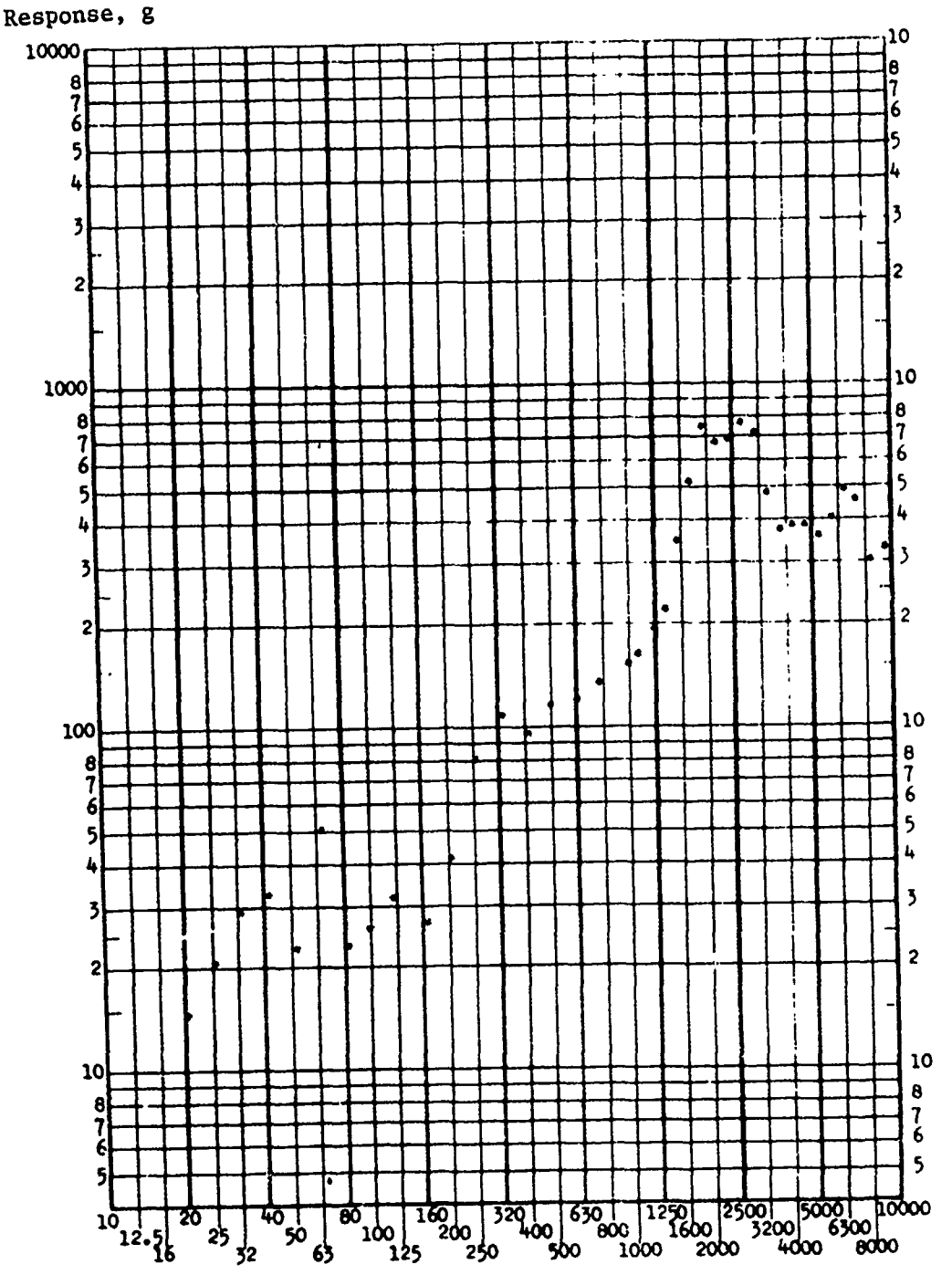
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 2 - Tangential axis longeron near station 133

Figure 16 (cont)



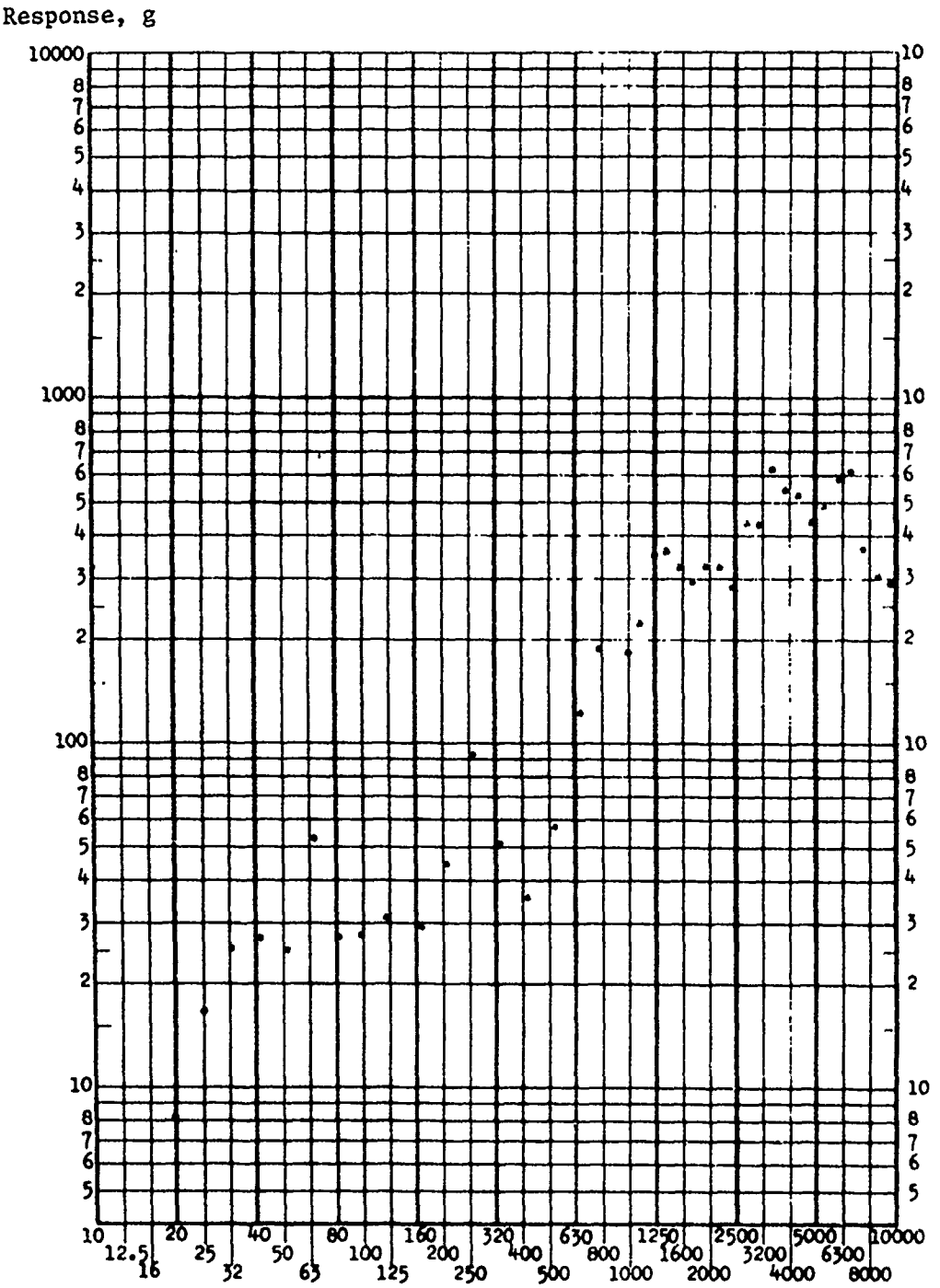
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 3 - Radial axis longeron near station 133

Figure 16 (cont)



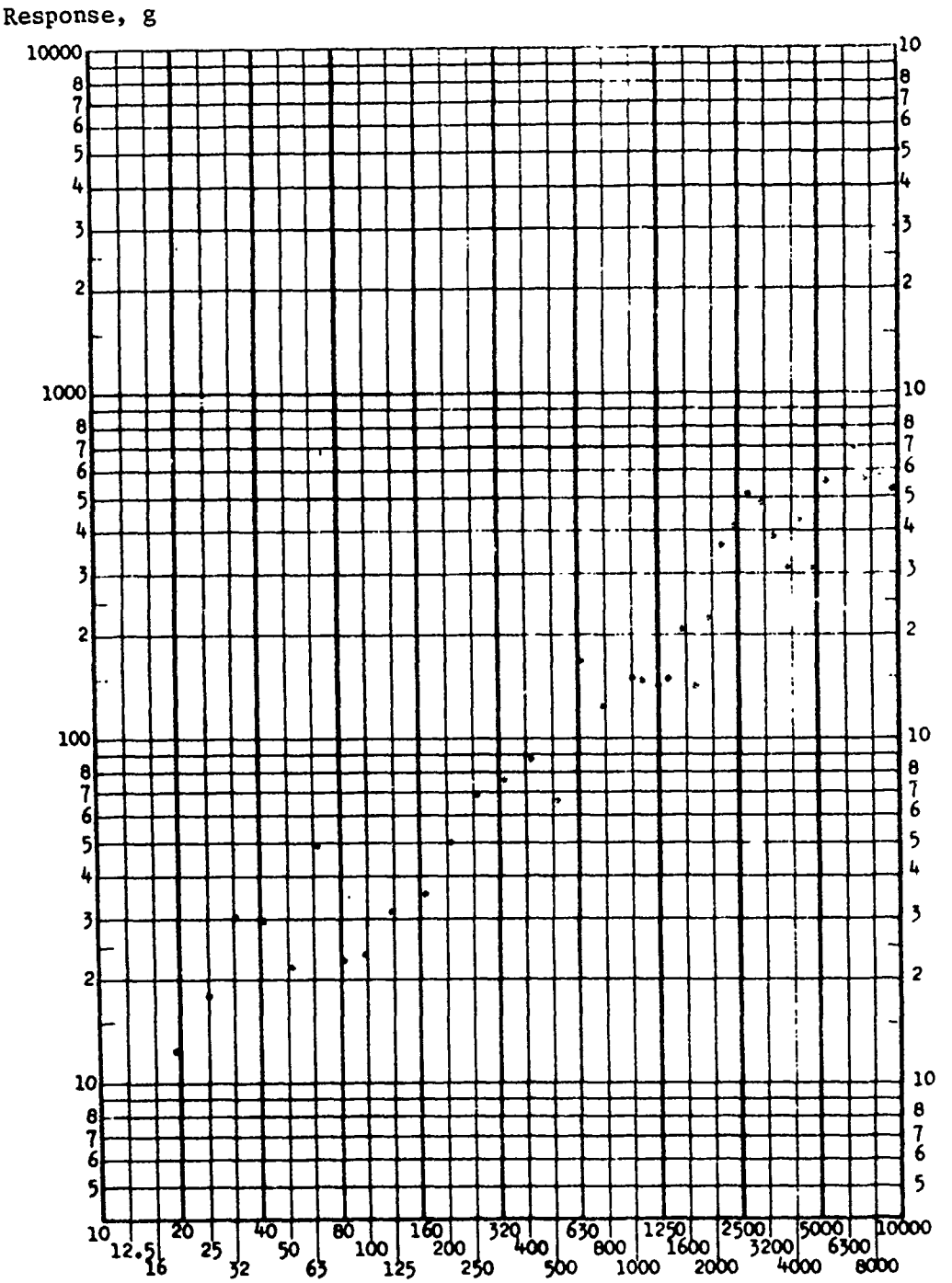
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 16 (cont)



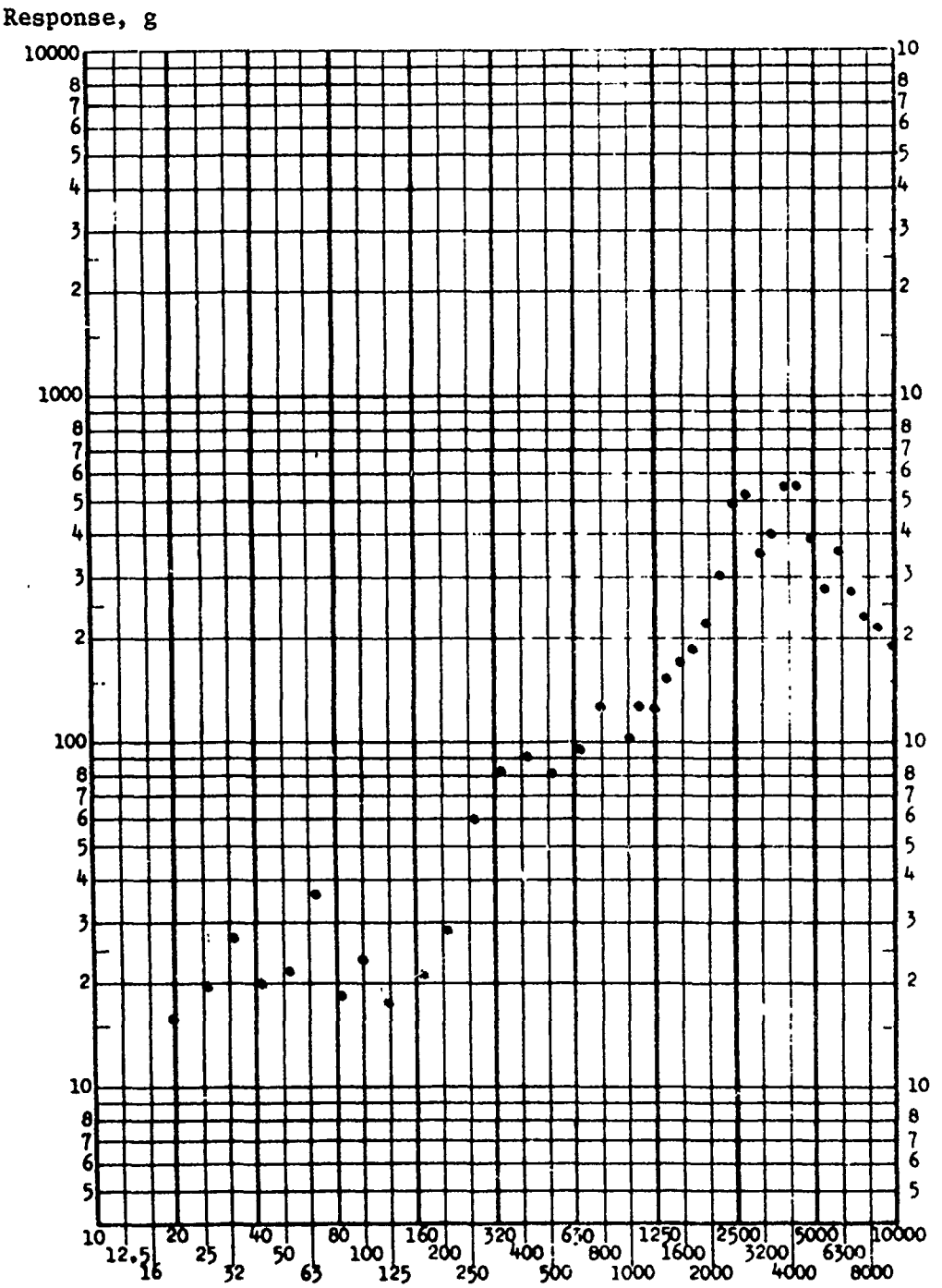
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 5 - Tangential axis longeron near station 117

Figure 16 (cont)



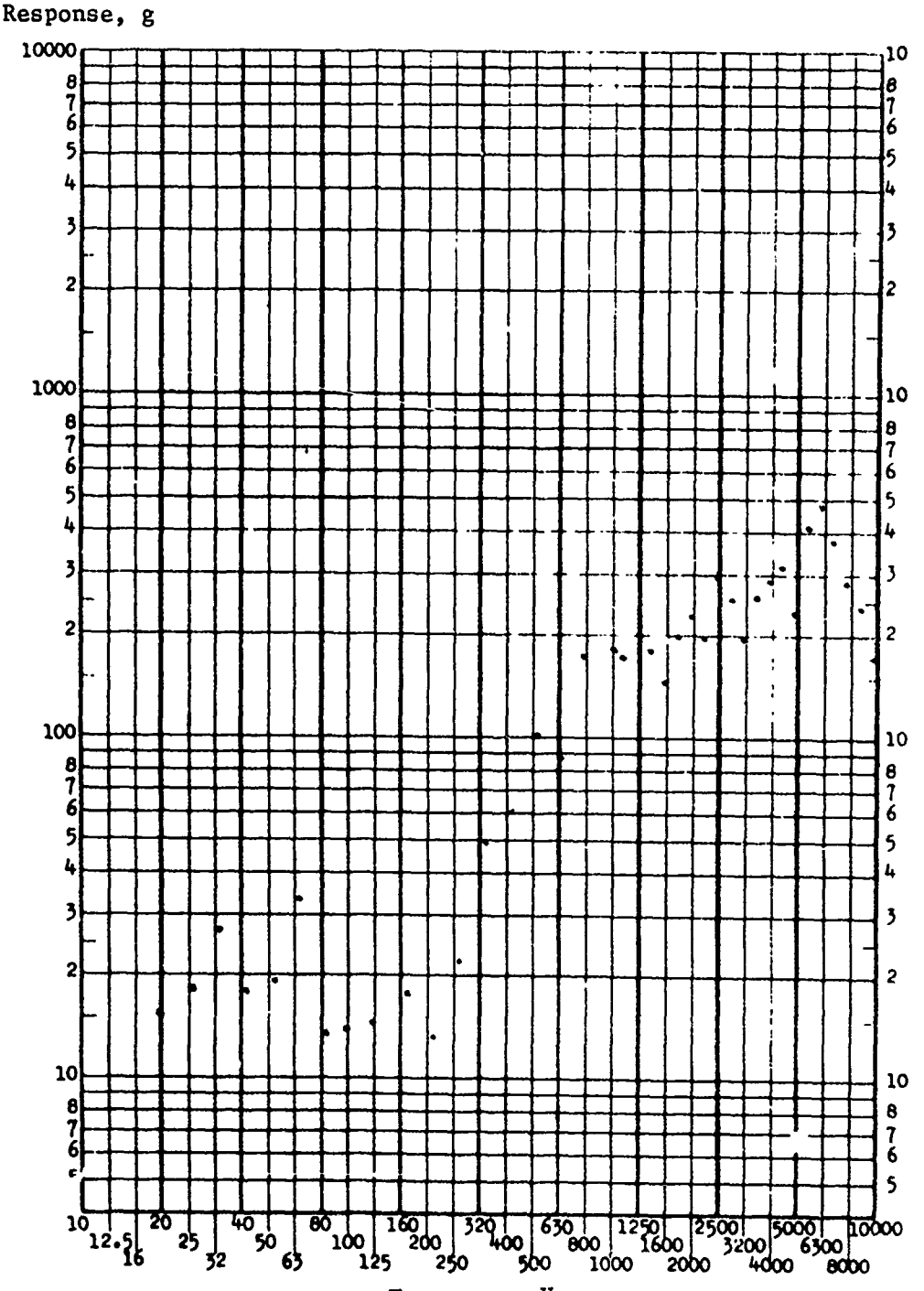
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 6 - Radial axis longeron near station 117

Figure 16 (cont)



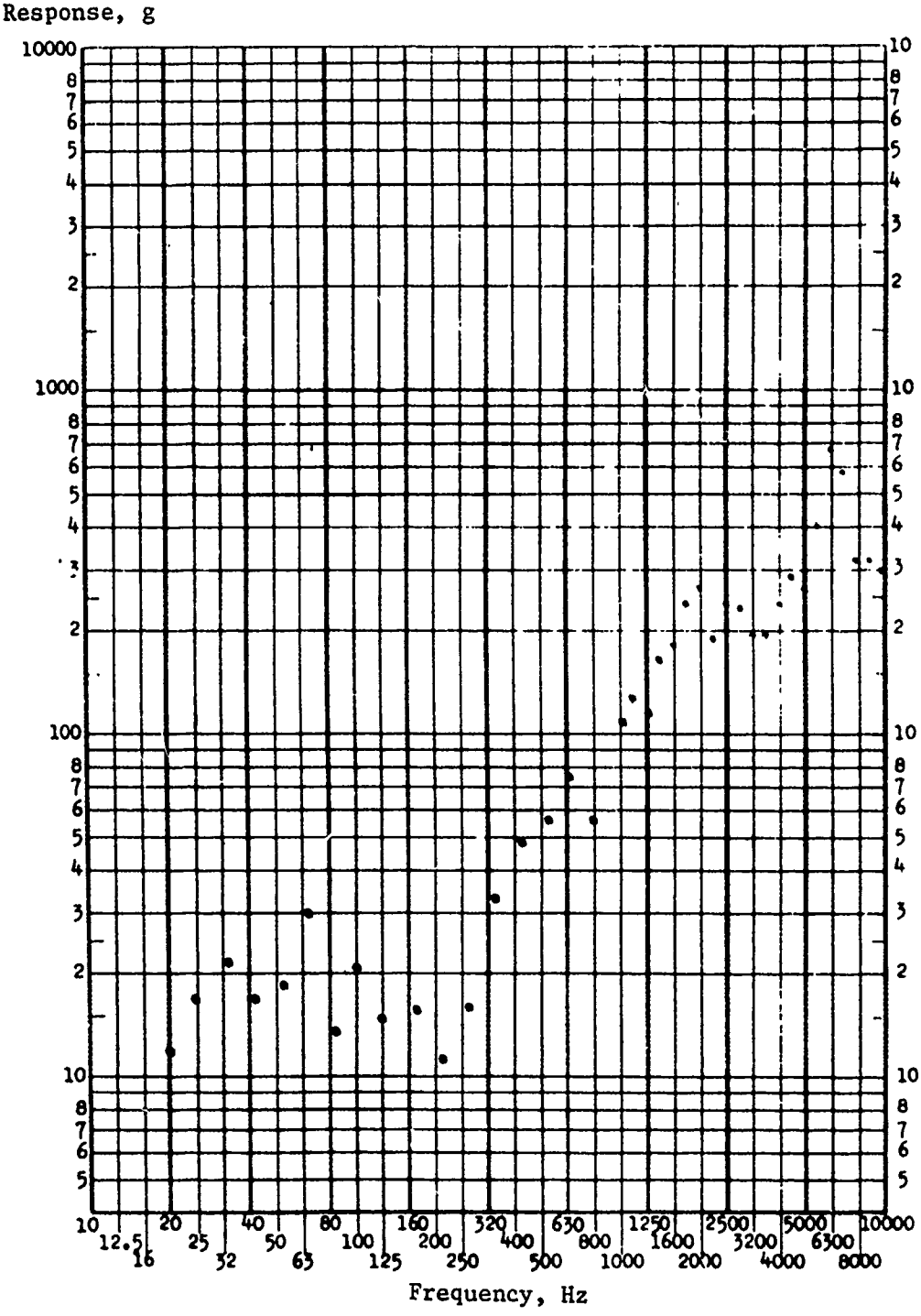
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 16 (cont)



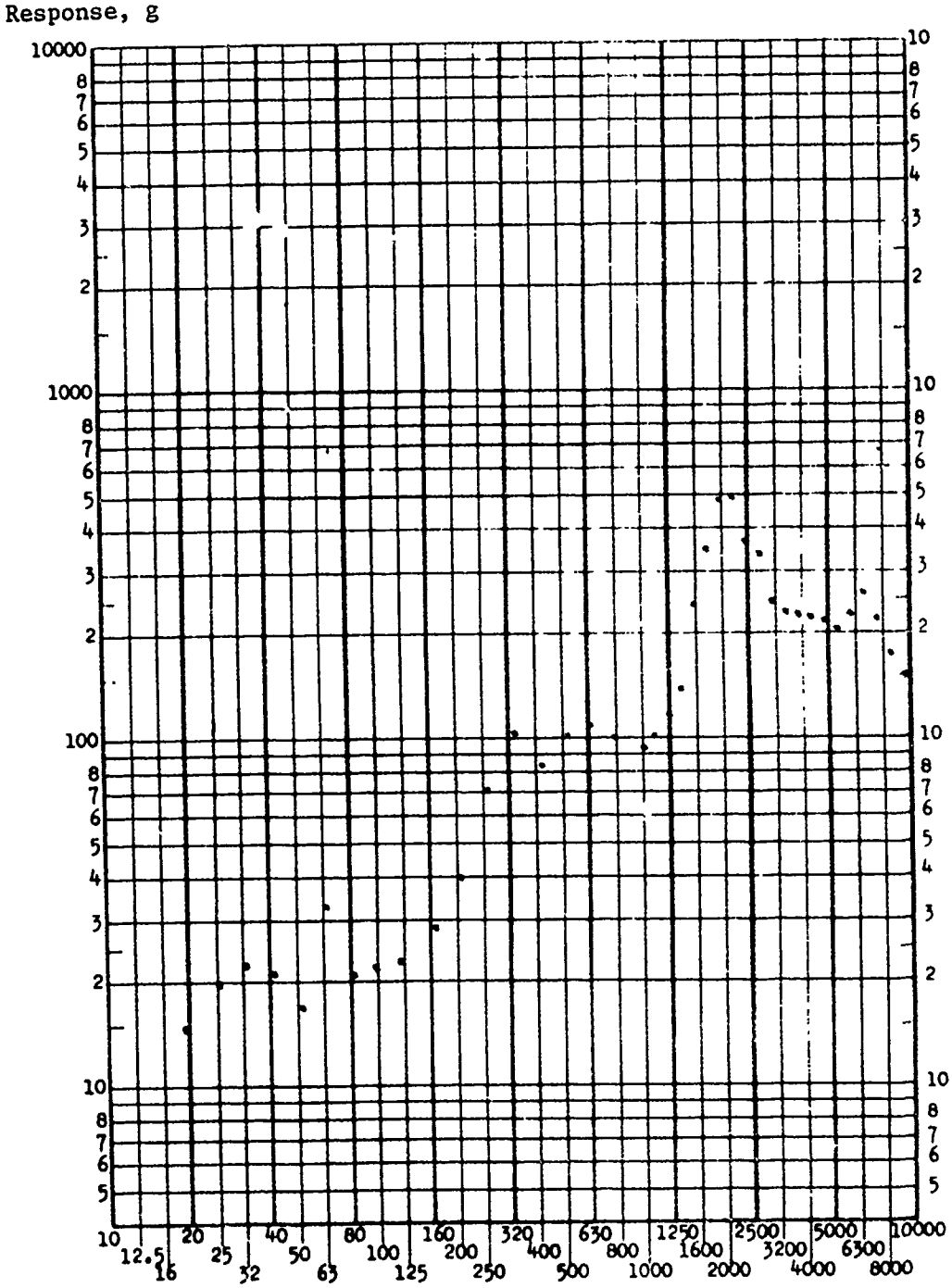
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 8 - Tangential axis longeron near station 77

Figure 16 (cont)



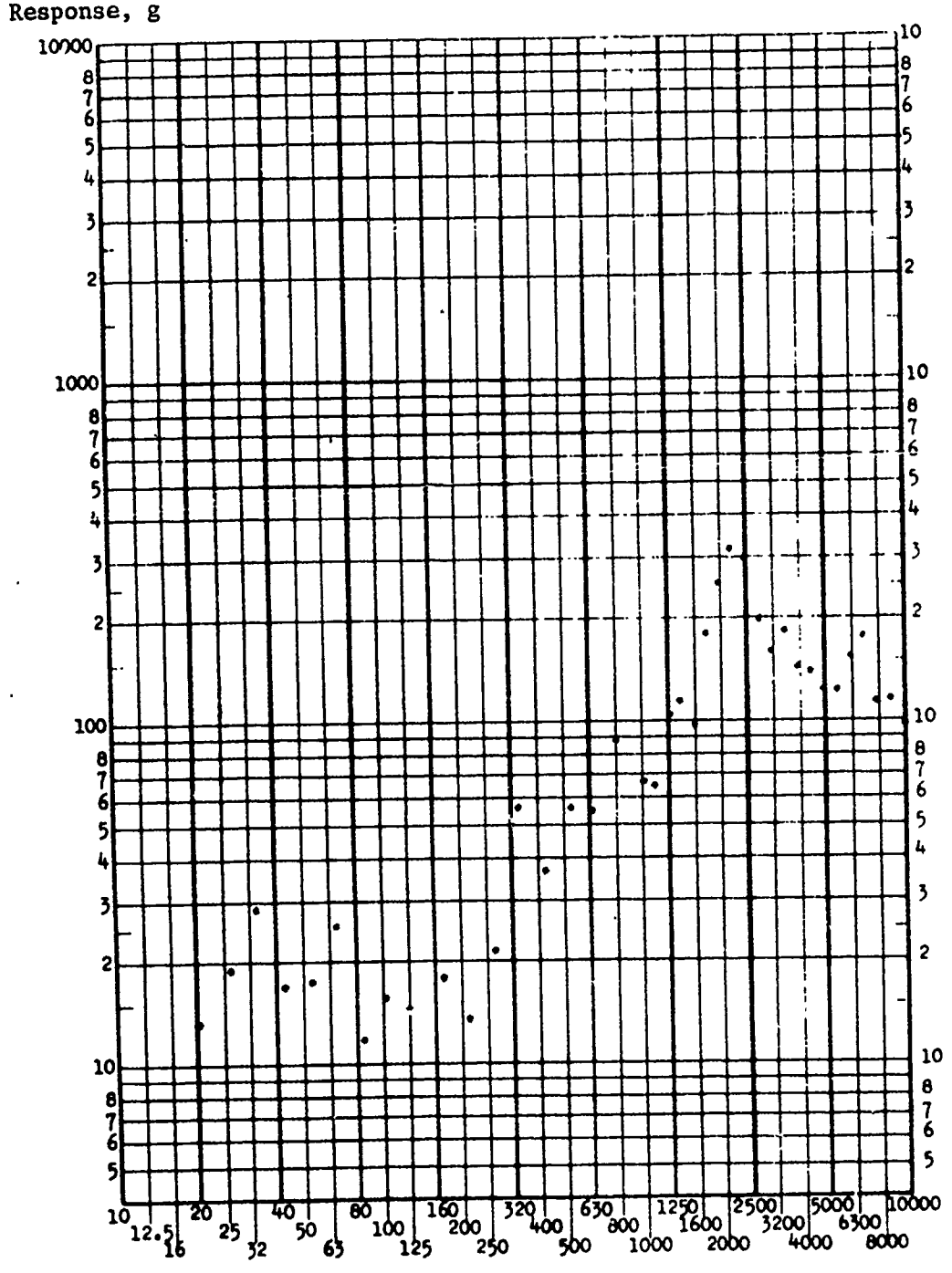
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 9 - Radial axis longeron near station 77

Figure 16 (cont)



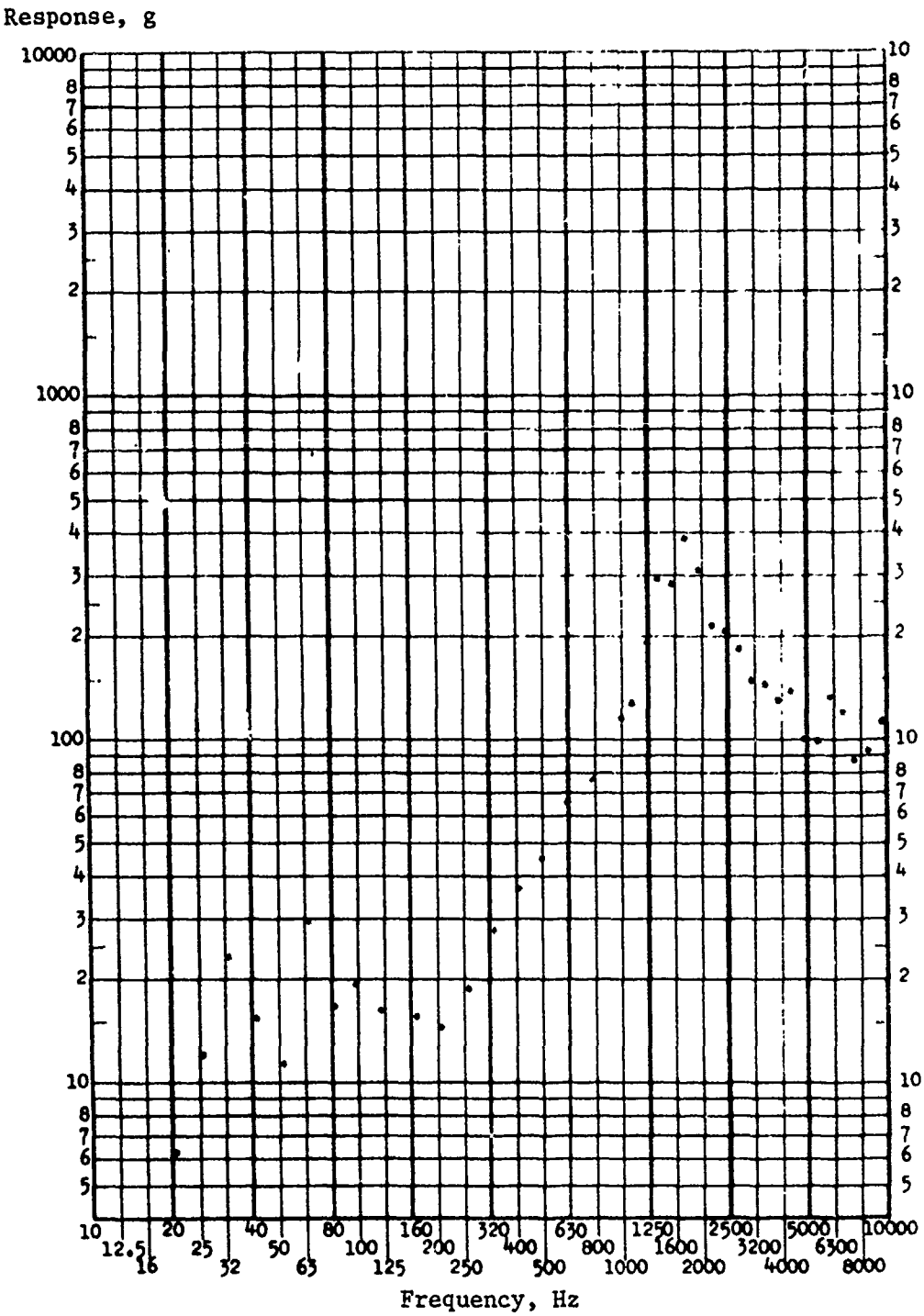
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 16 (cont)



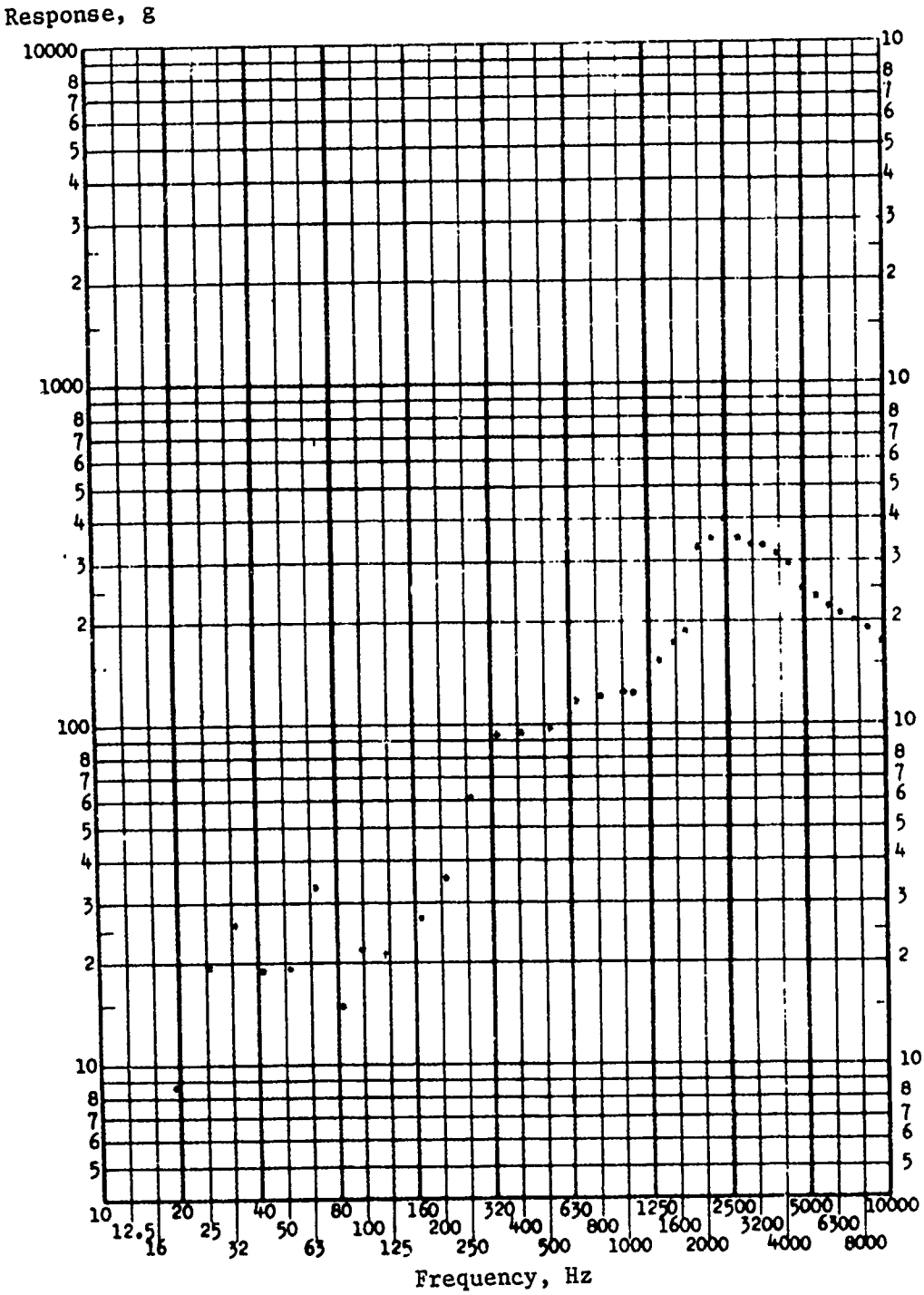
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 16 (cont)



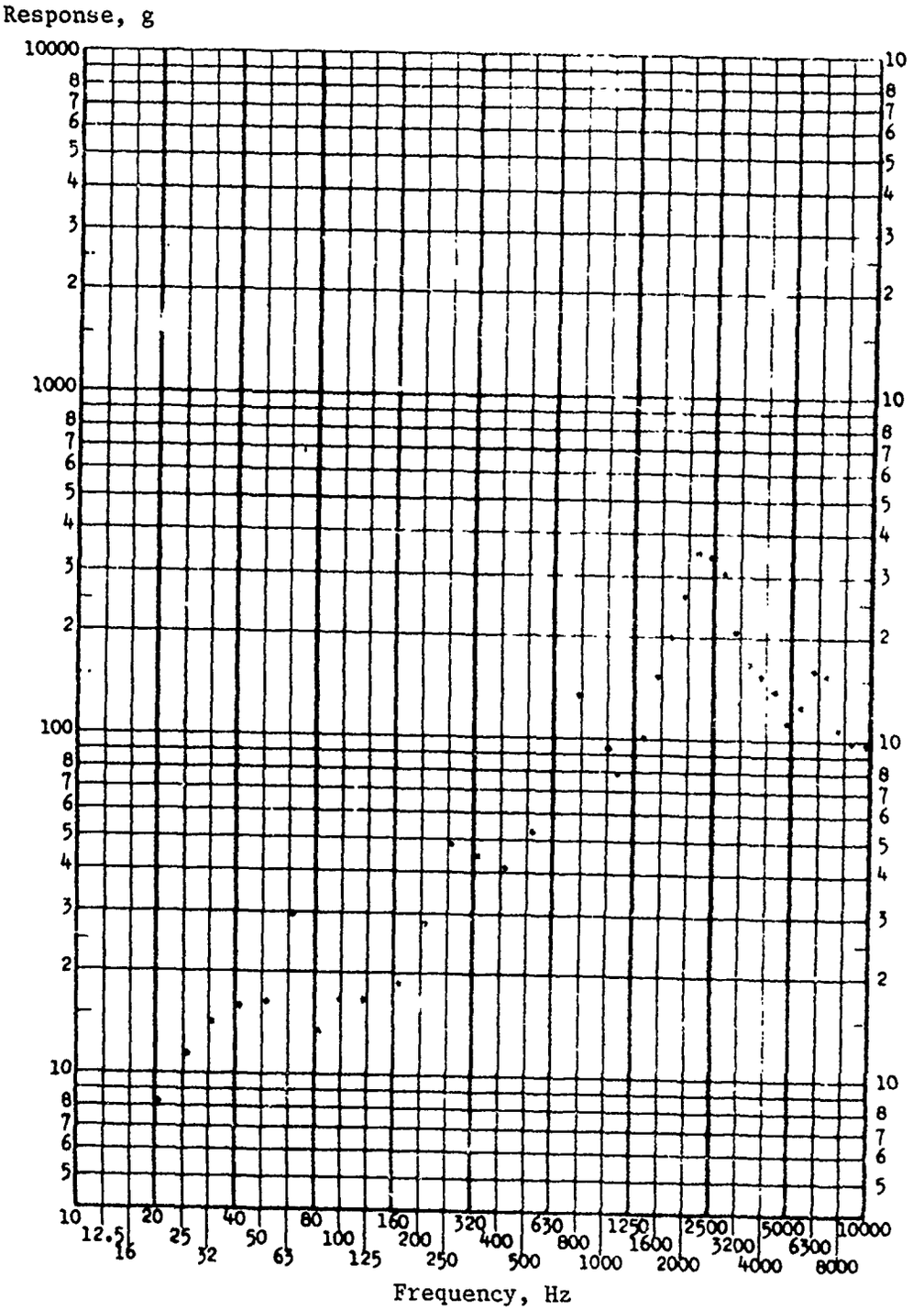
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 16 (cont)



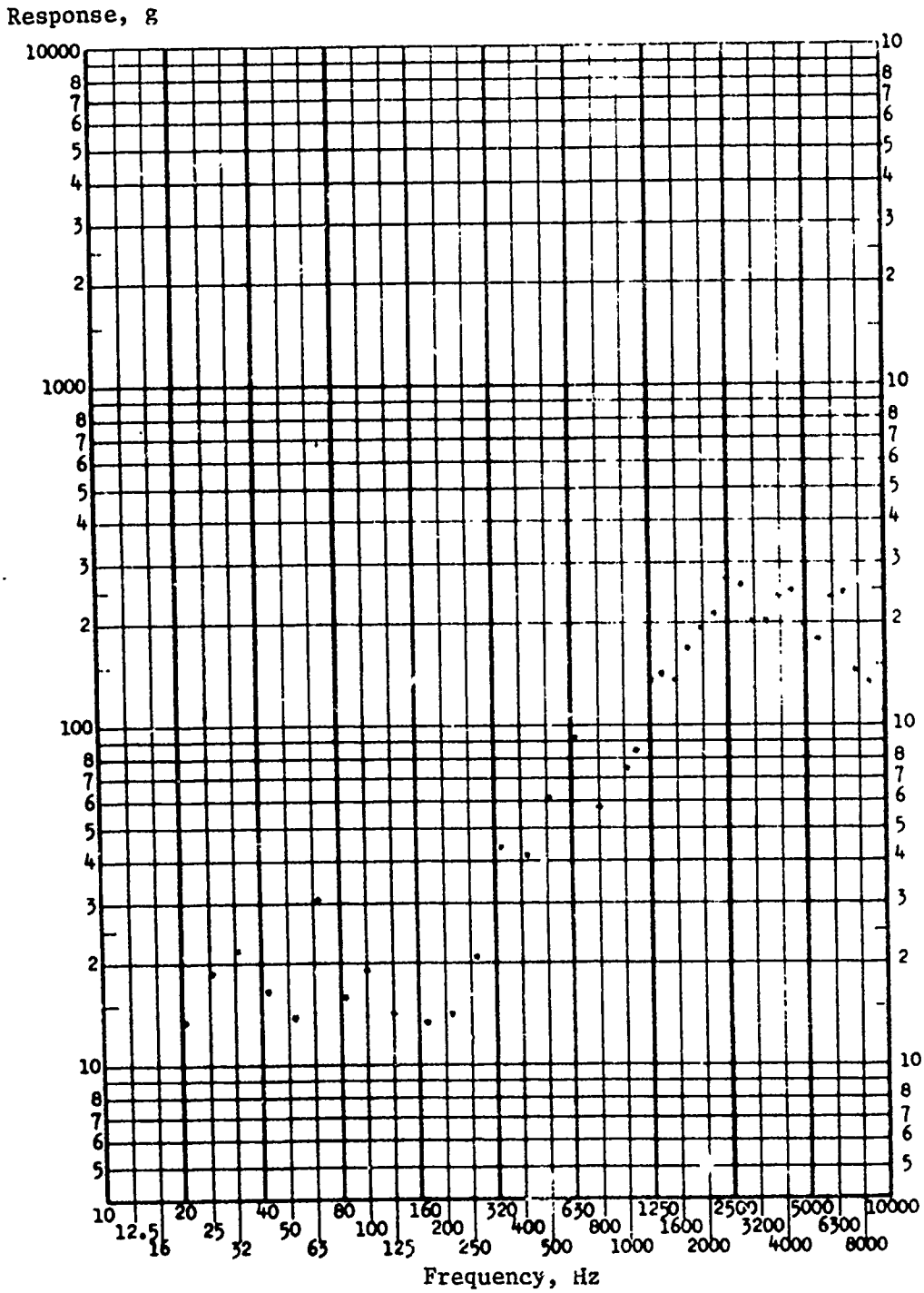
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 16 (cont)



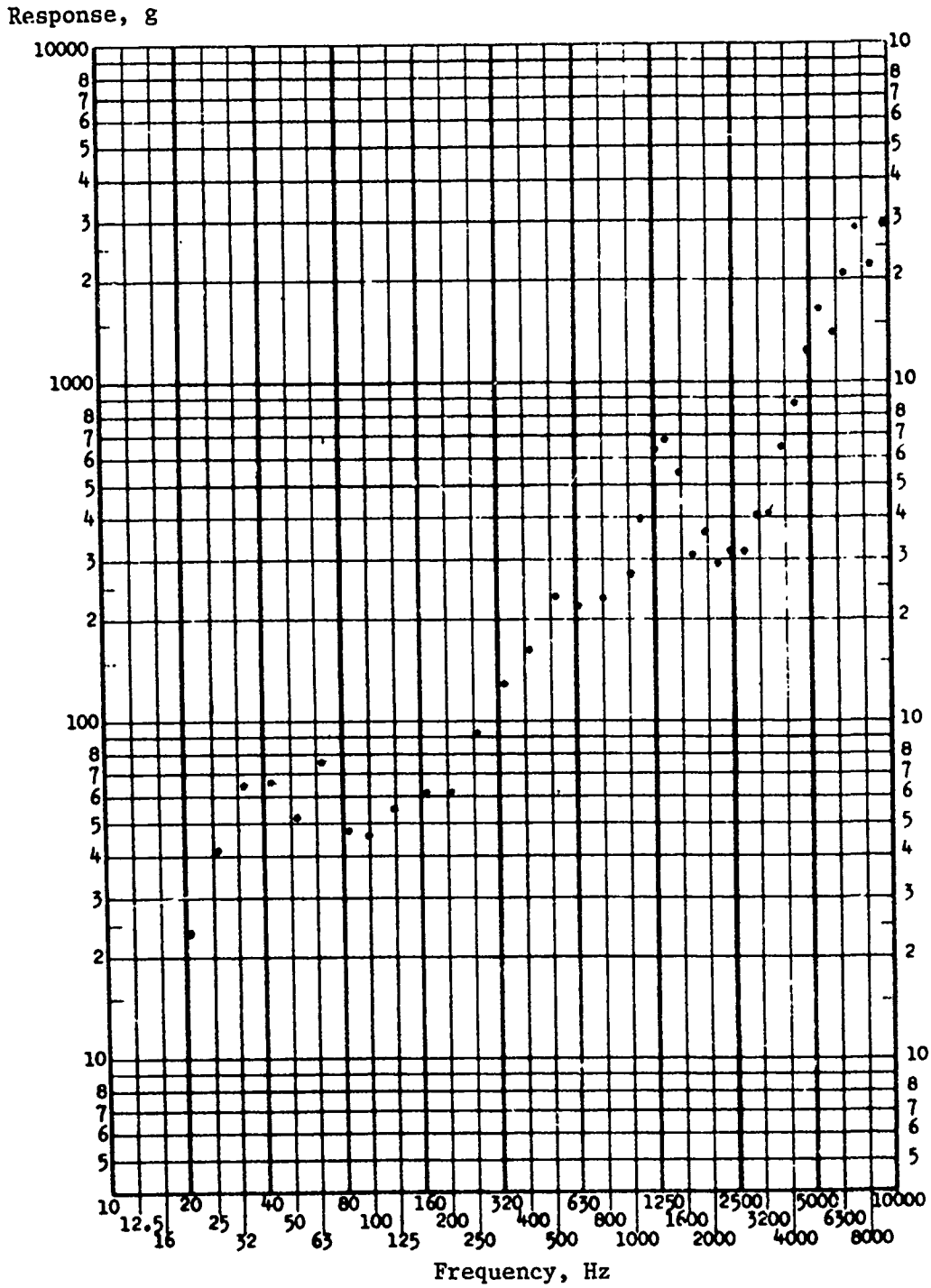
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 16 (cont)



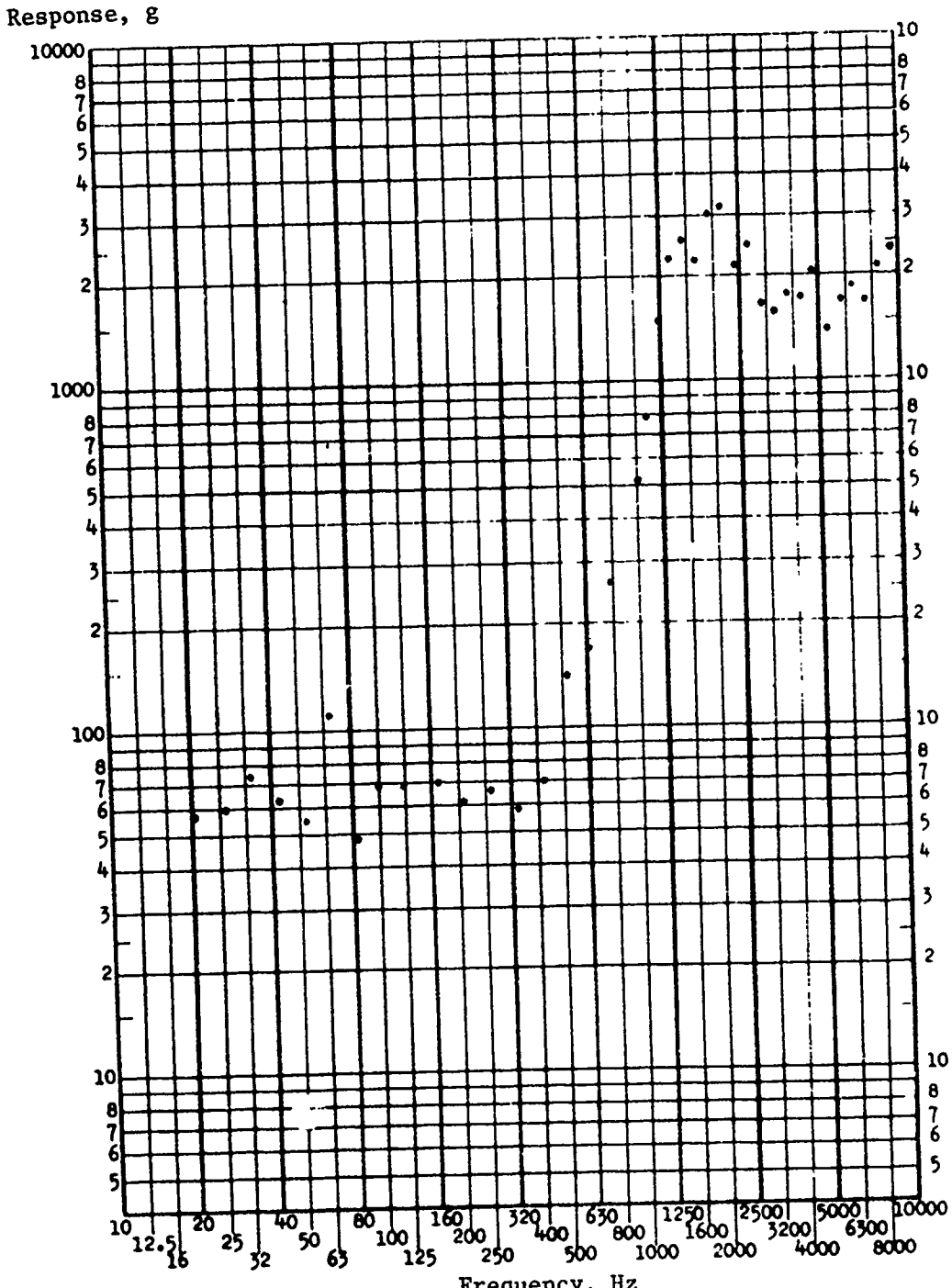
Bench Shock Test - Stage II/III Separation, Run 16
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 16 (concl)



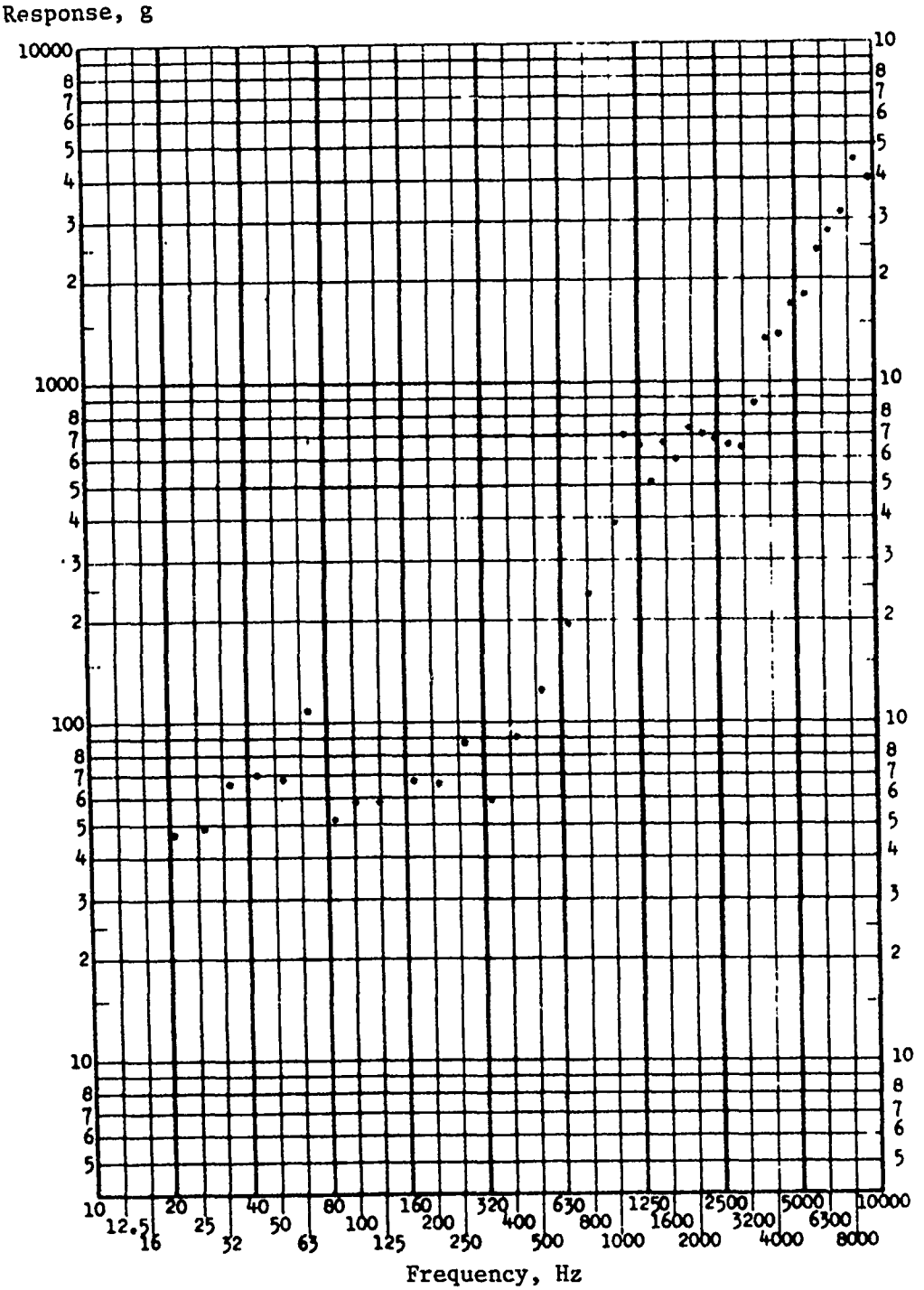
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 17 Run 17 Shock Response Spectrum



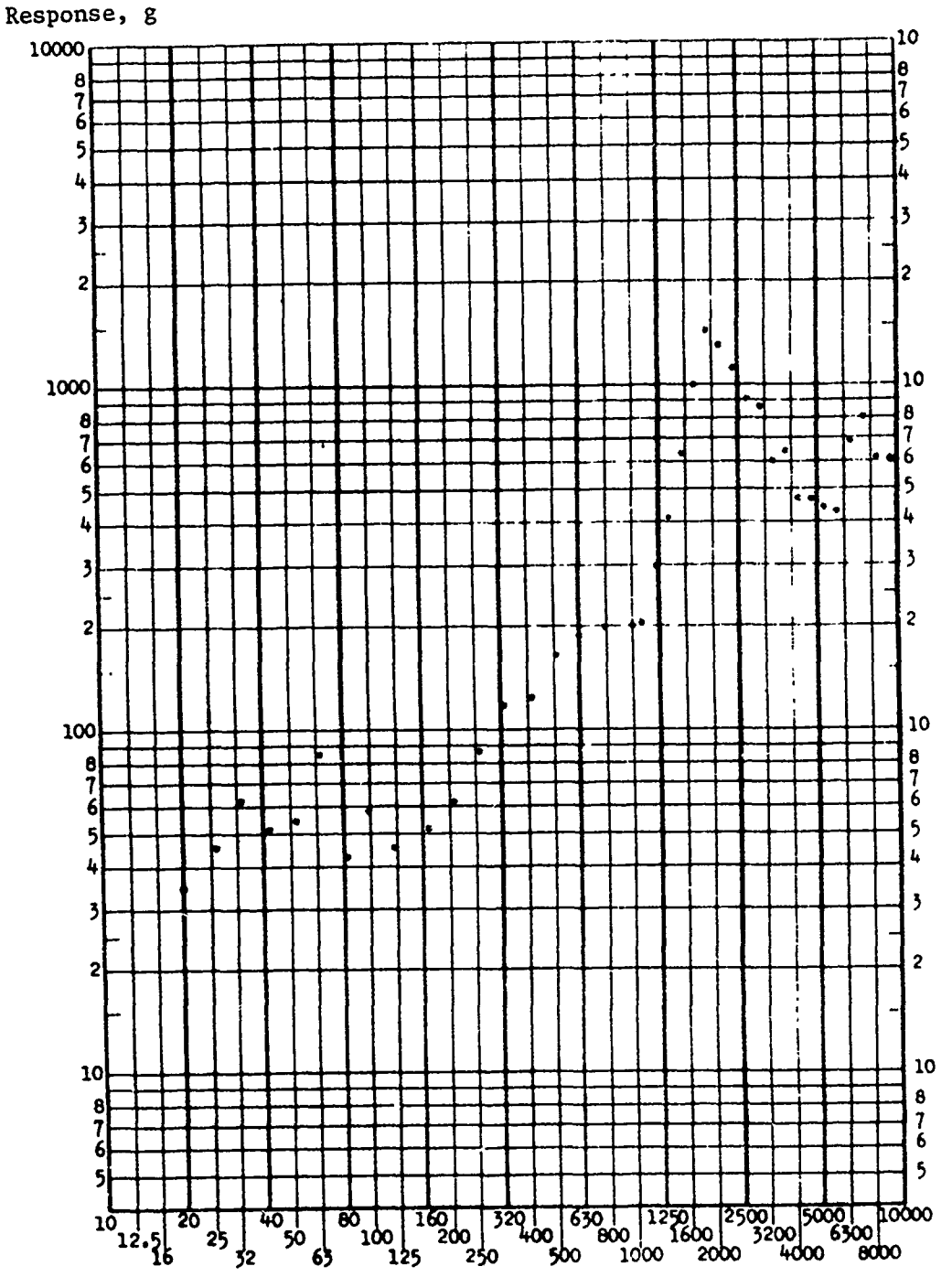
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 2 - Tangential axis longeron near station 133

Figure 17 (cont)



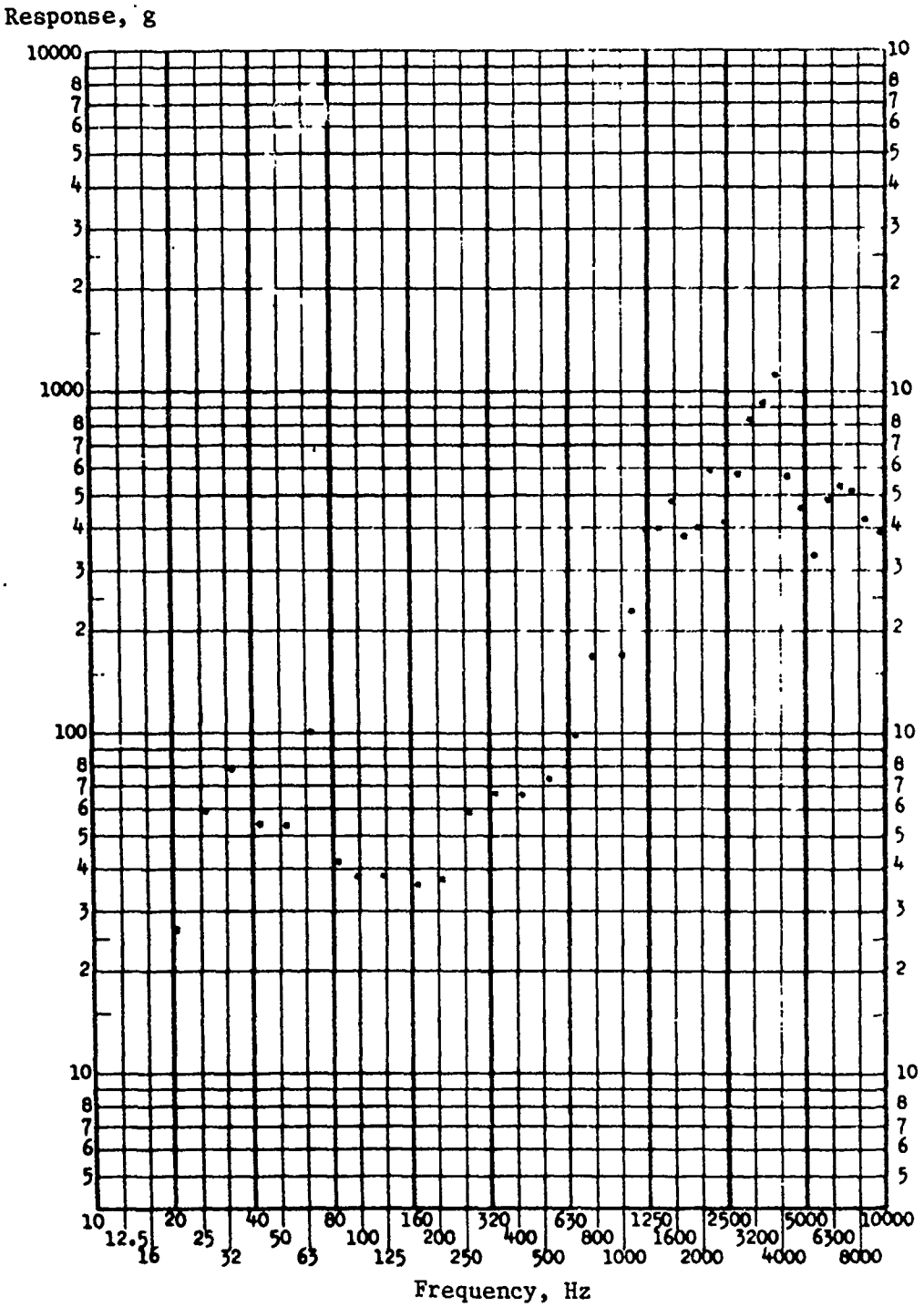
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 3 - Radial axis longeron near station 133

Figure 17 (cont)



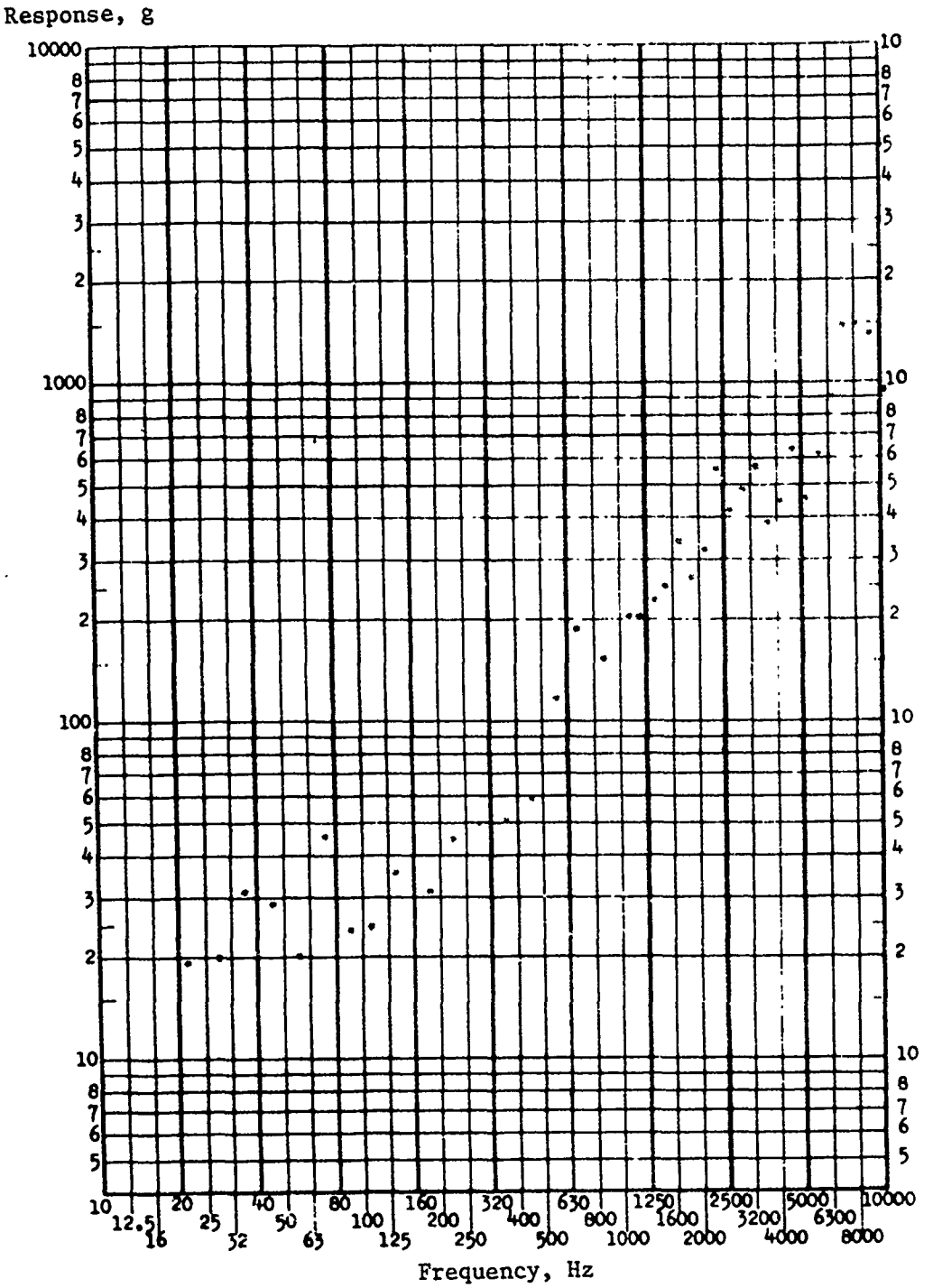
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 17 (cont)



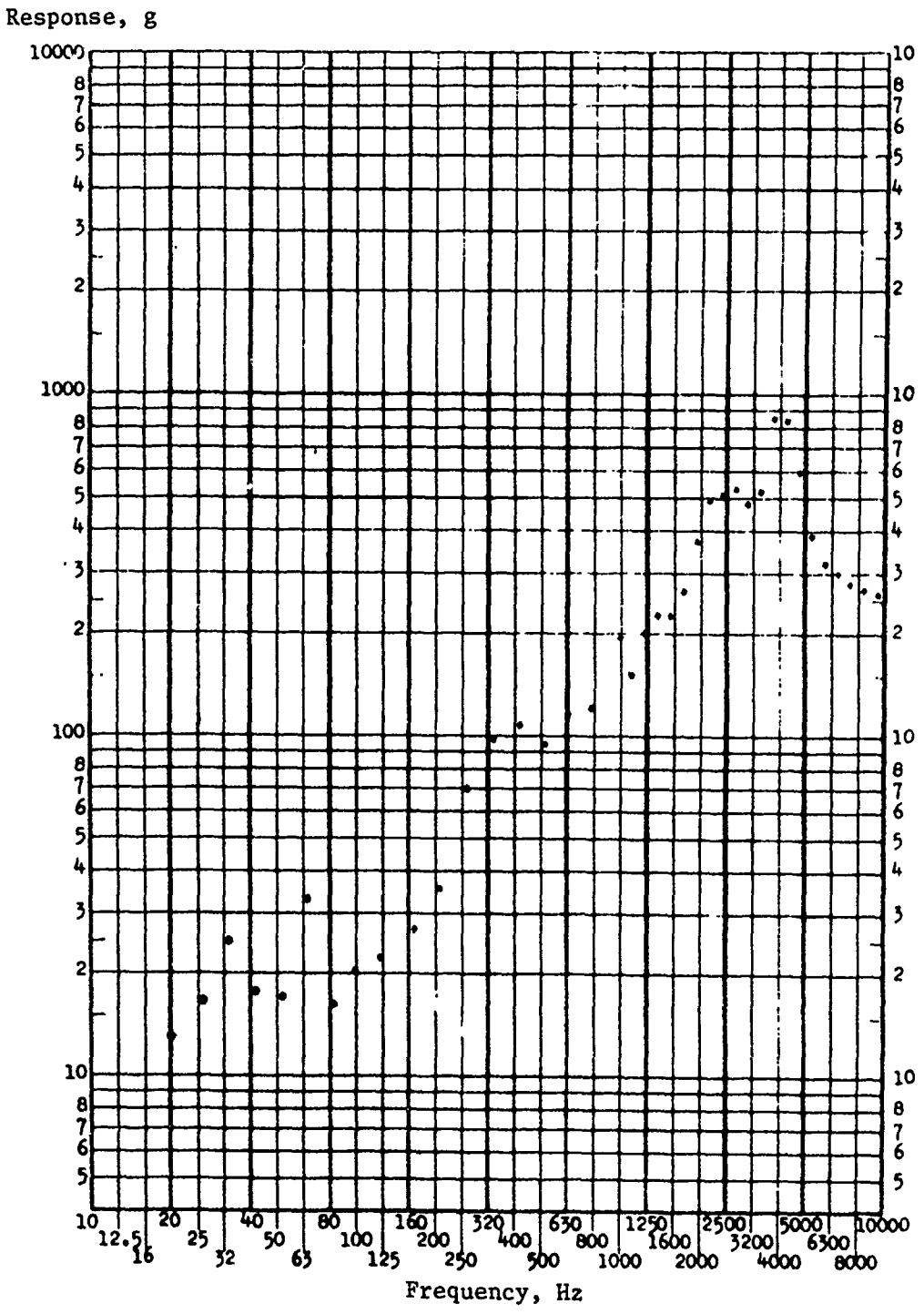
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 5 - Tangential axis longeron near station 117

Figure 17 (cont)



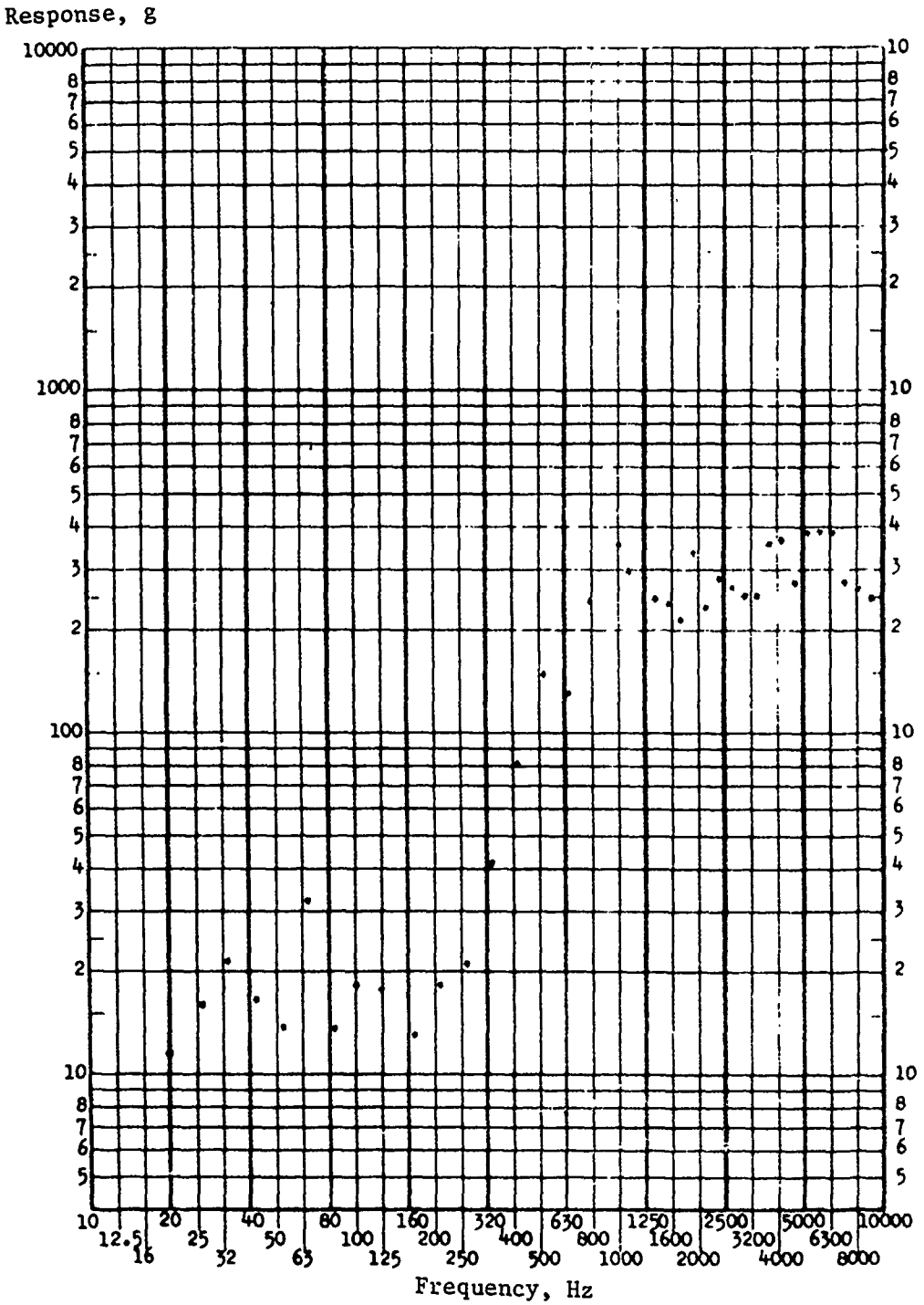
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 6 - Radial axis longeron near station 117

Figure 17 (cont)



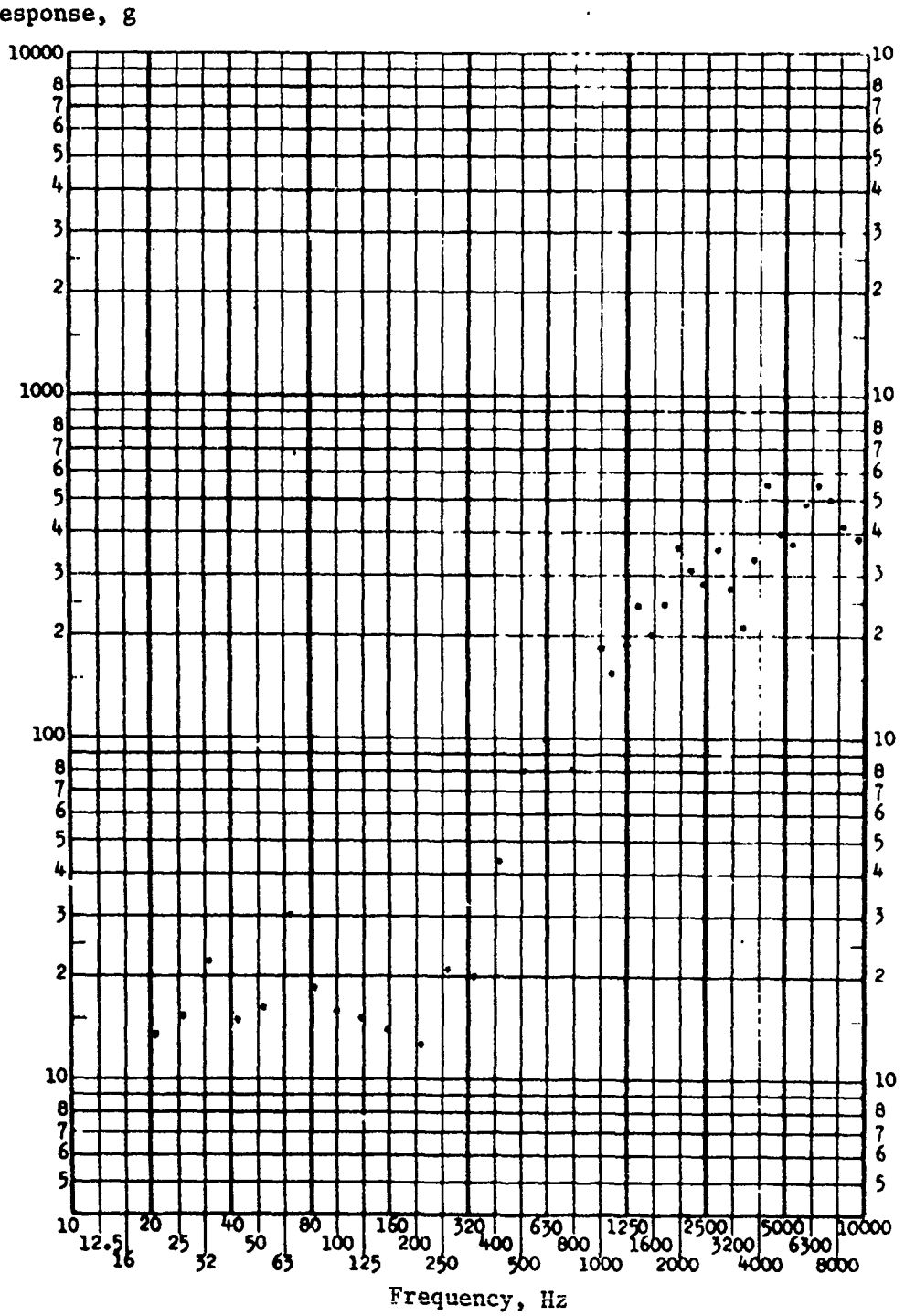
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 17 (cont)



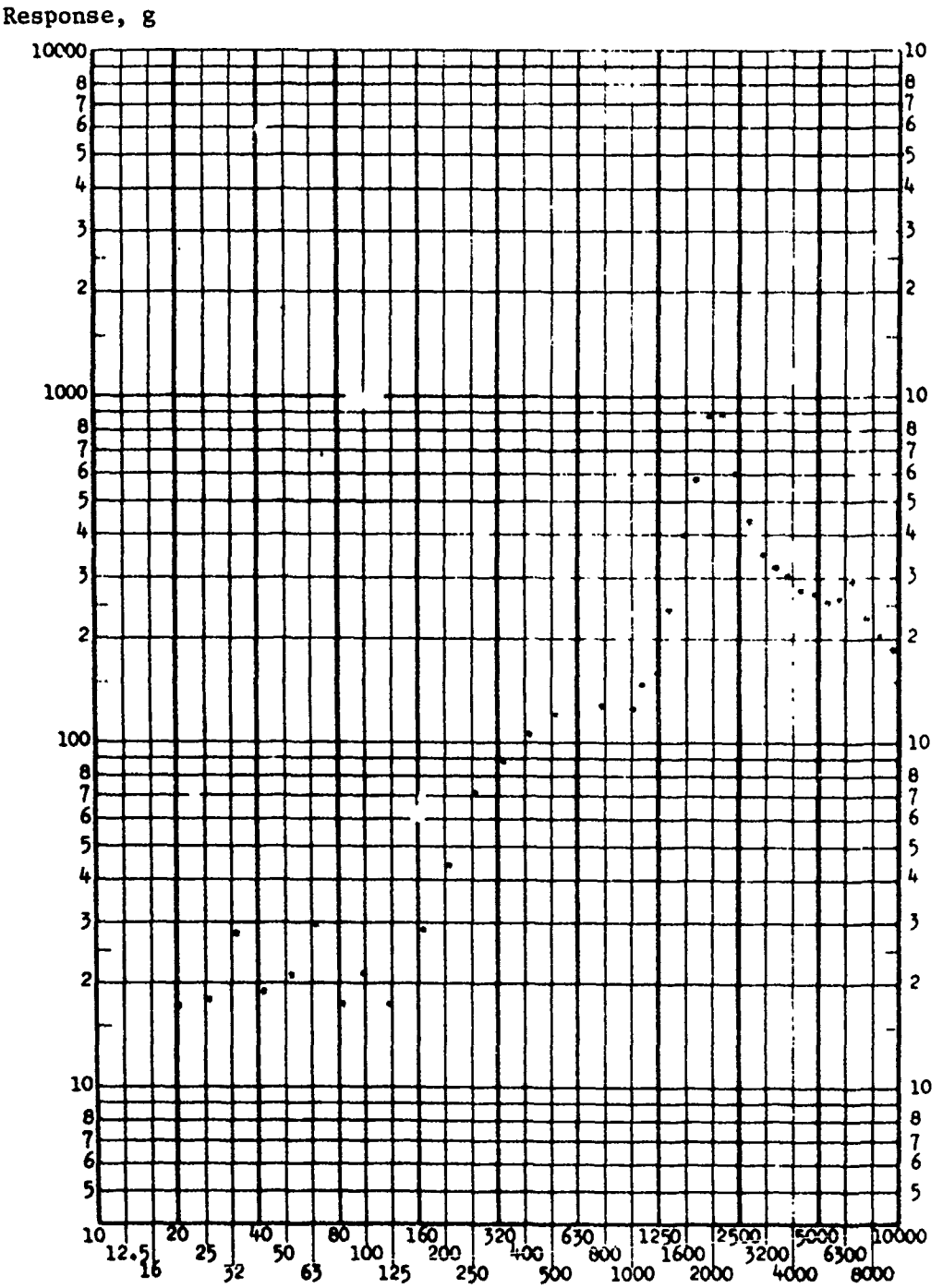
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 8 - Tangential axis longeron near station 77

Figure 17 (cont)



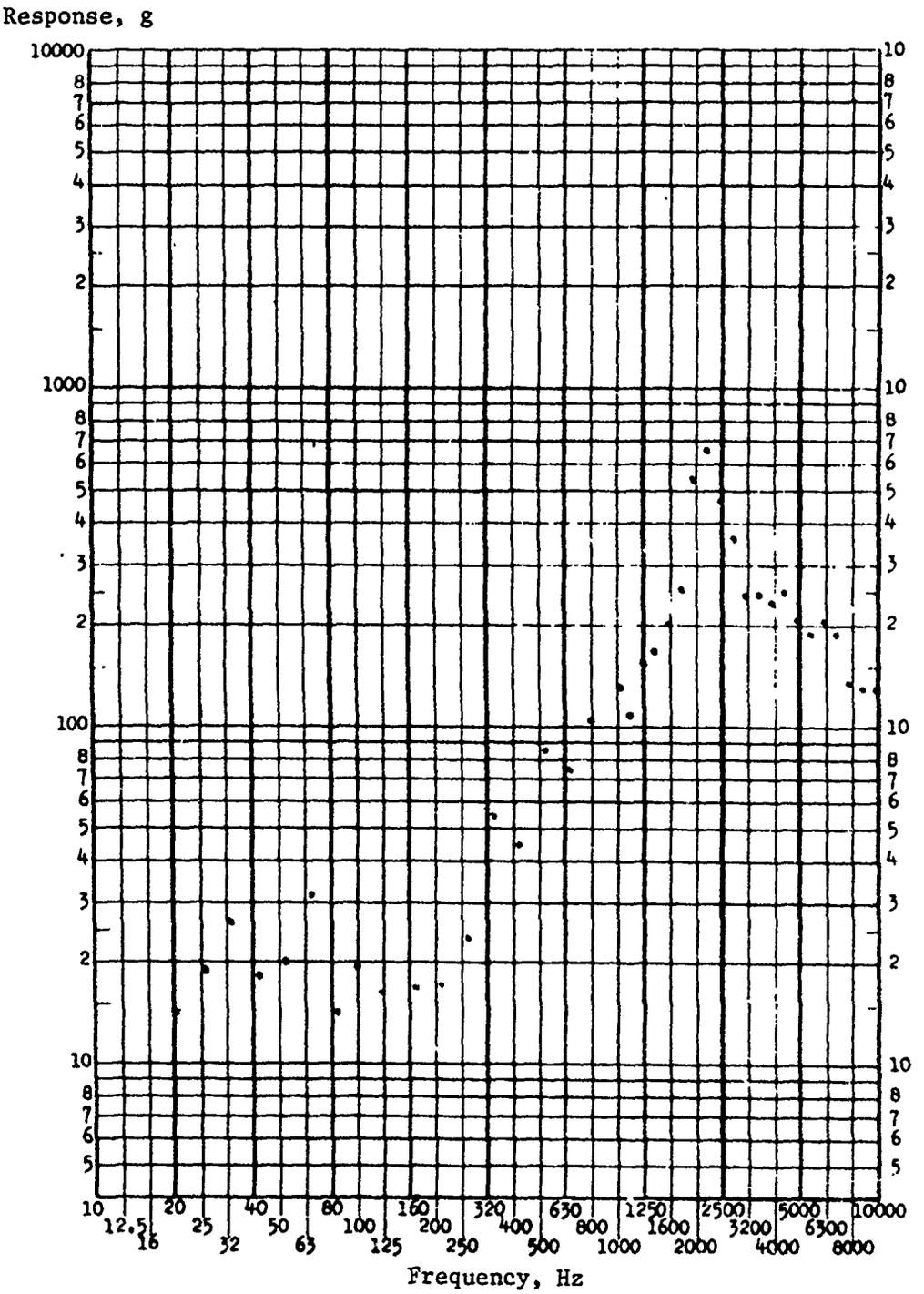
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 9 - Radial axis longeron near station 77

Figure 17 (cont.)



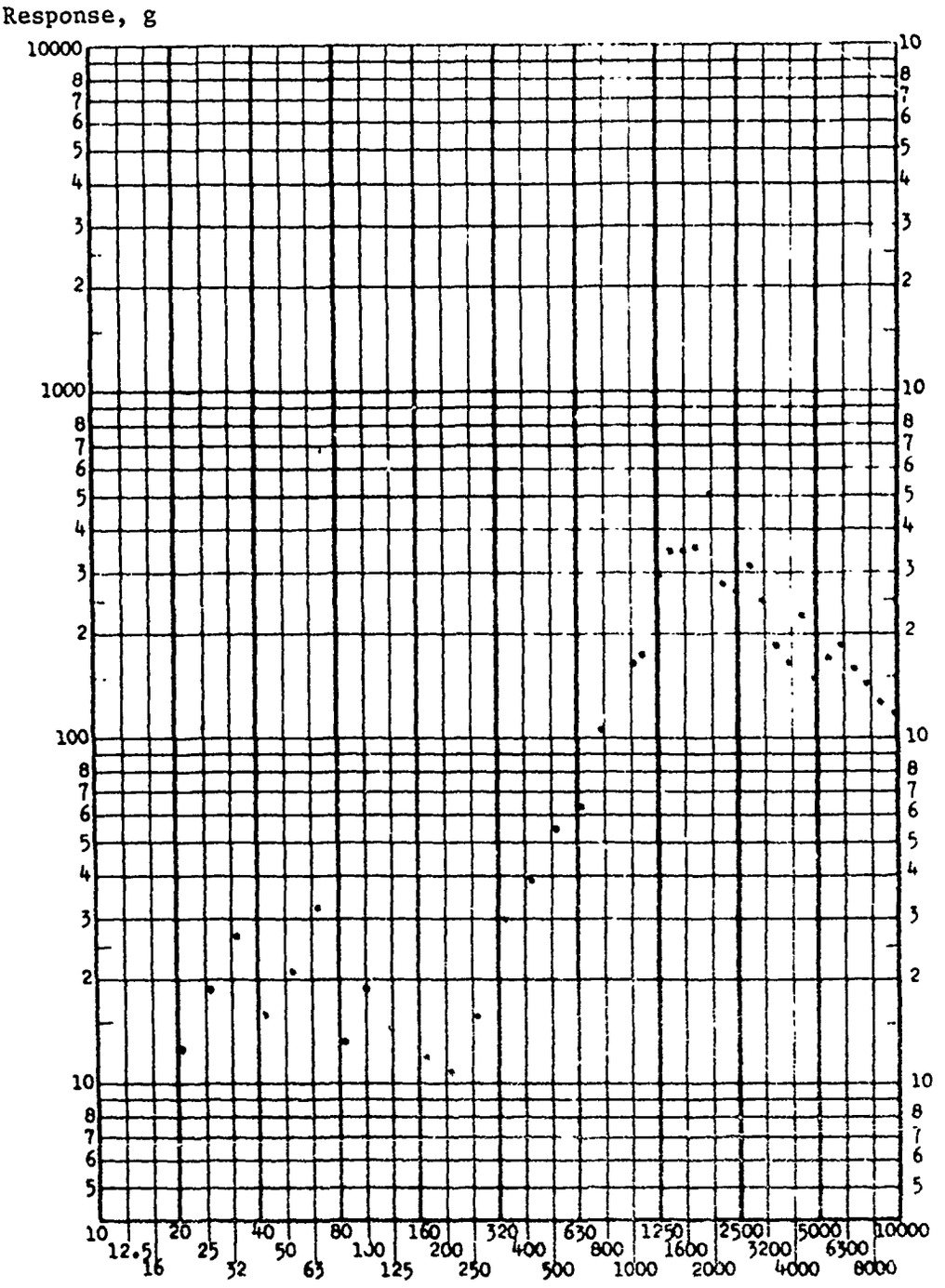
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 17 (cont)



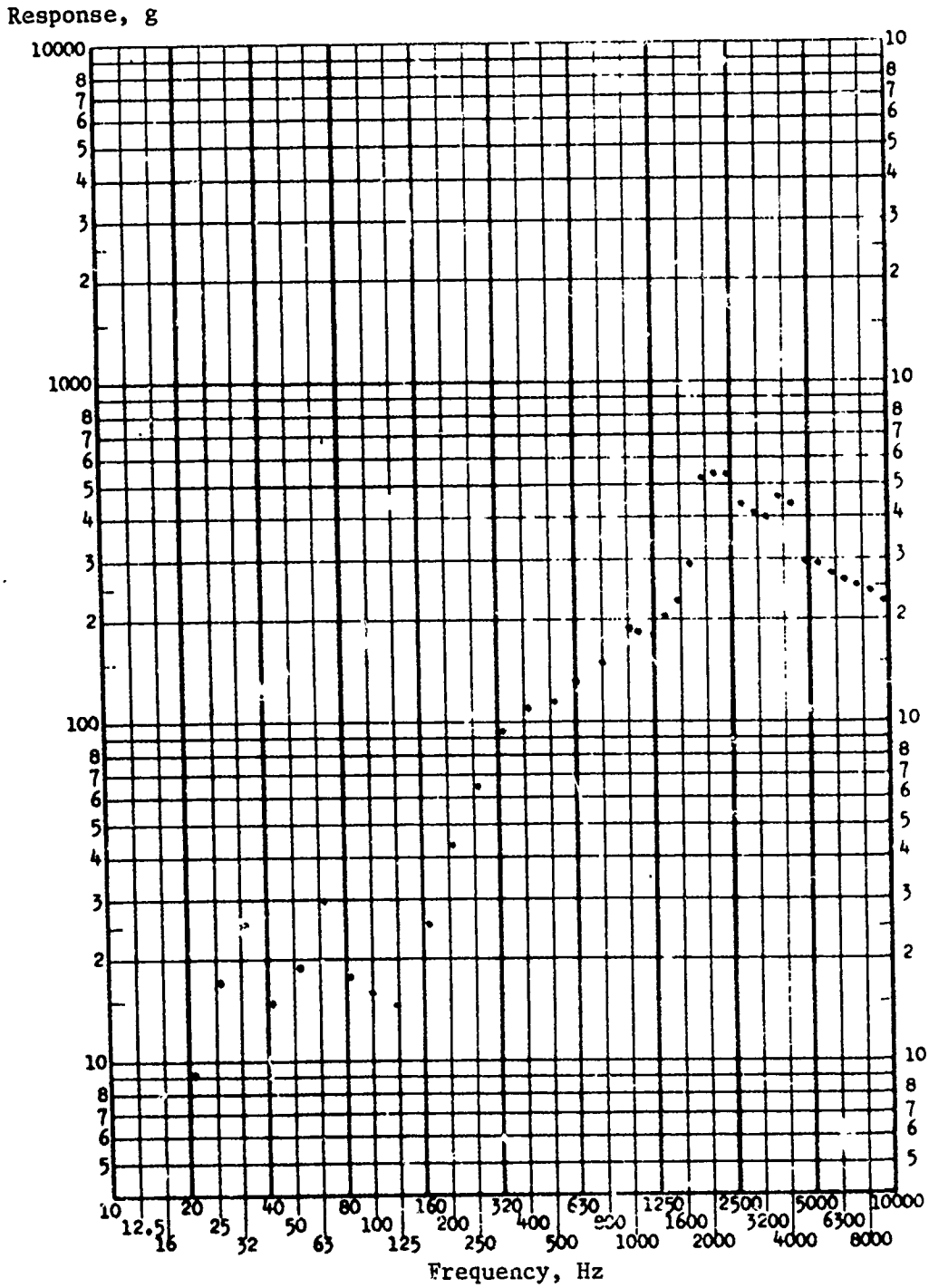
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 17 (cont)



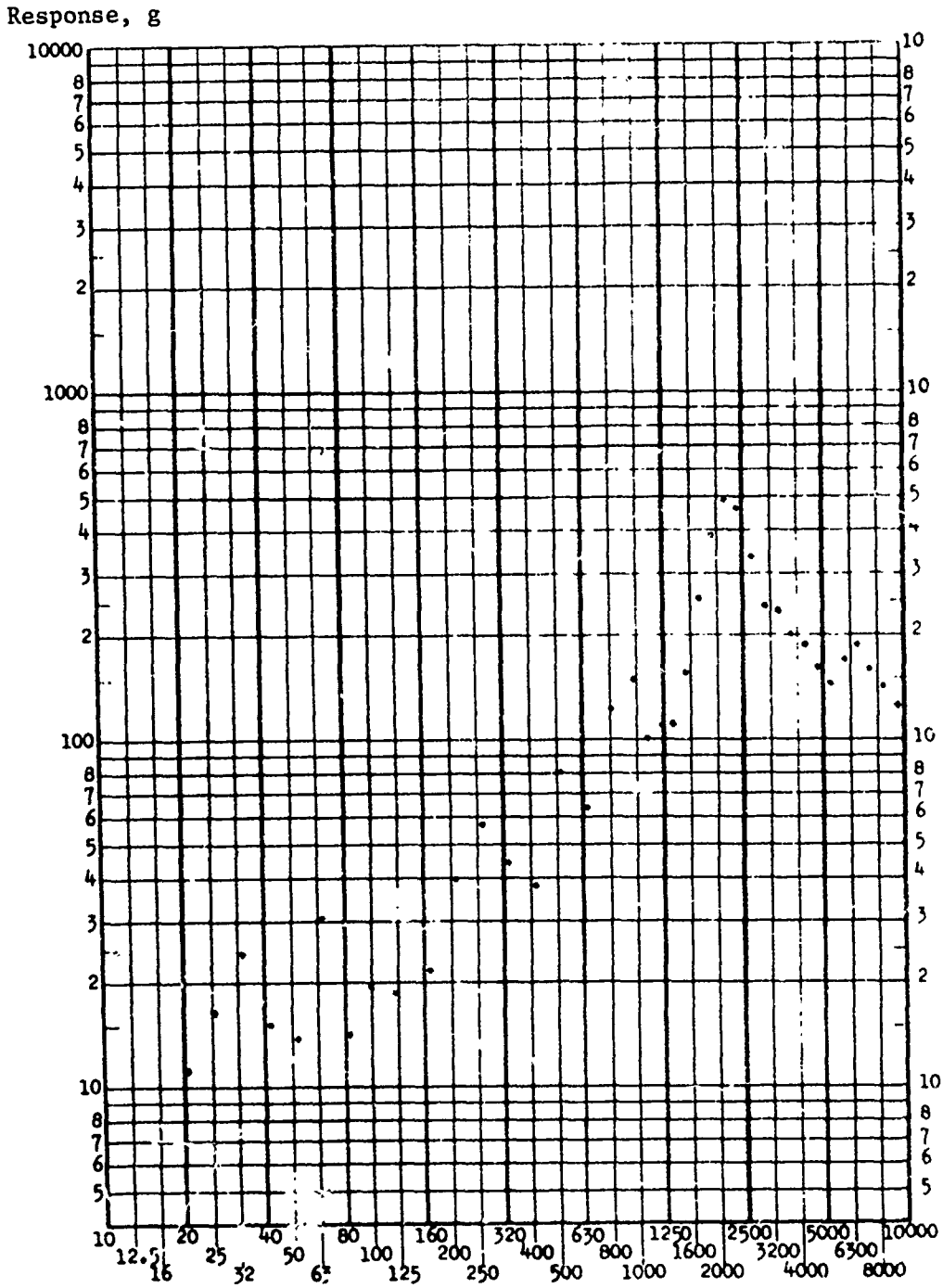
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 17 (cont)



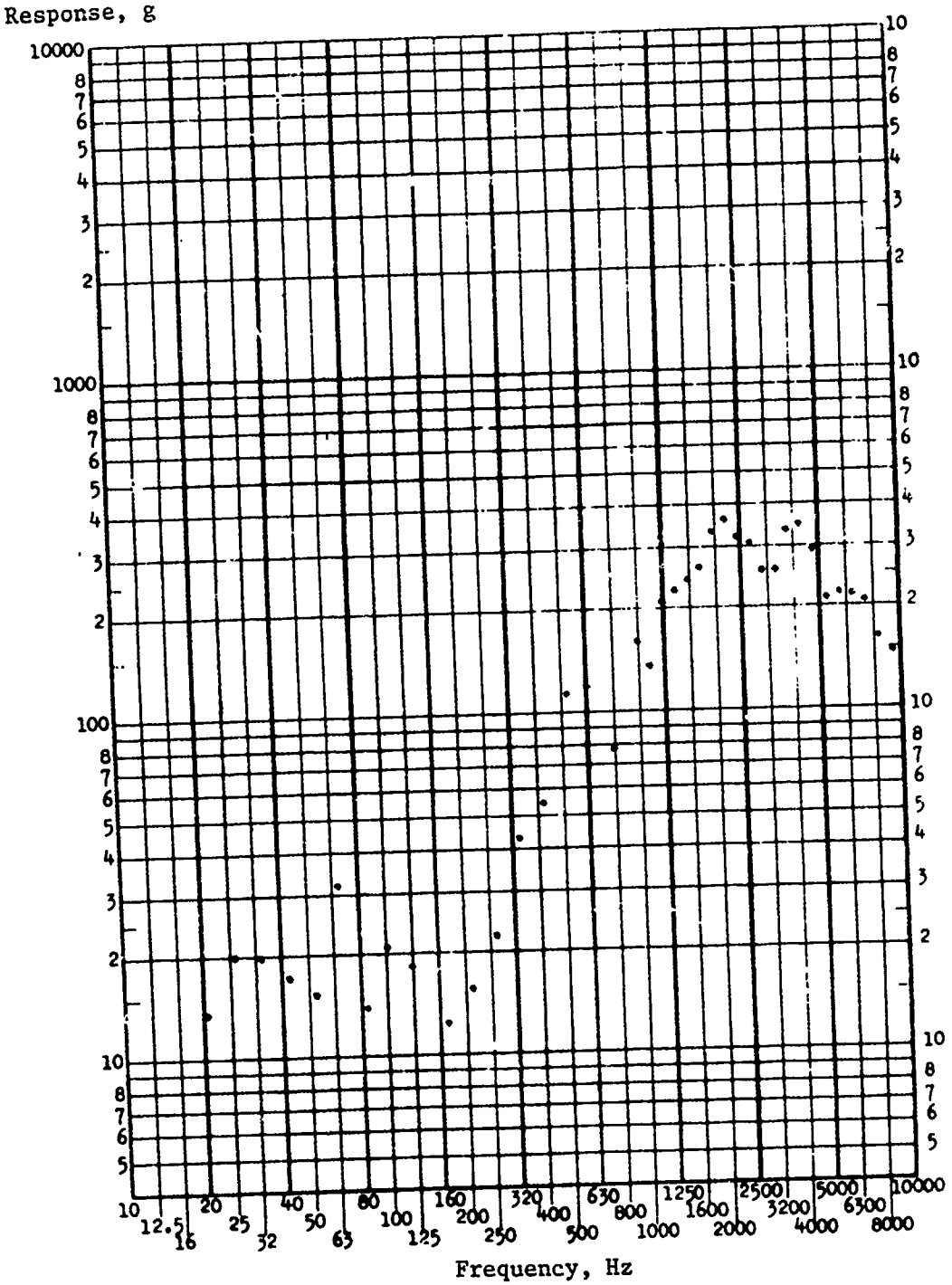
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 17 (cont)



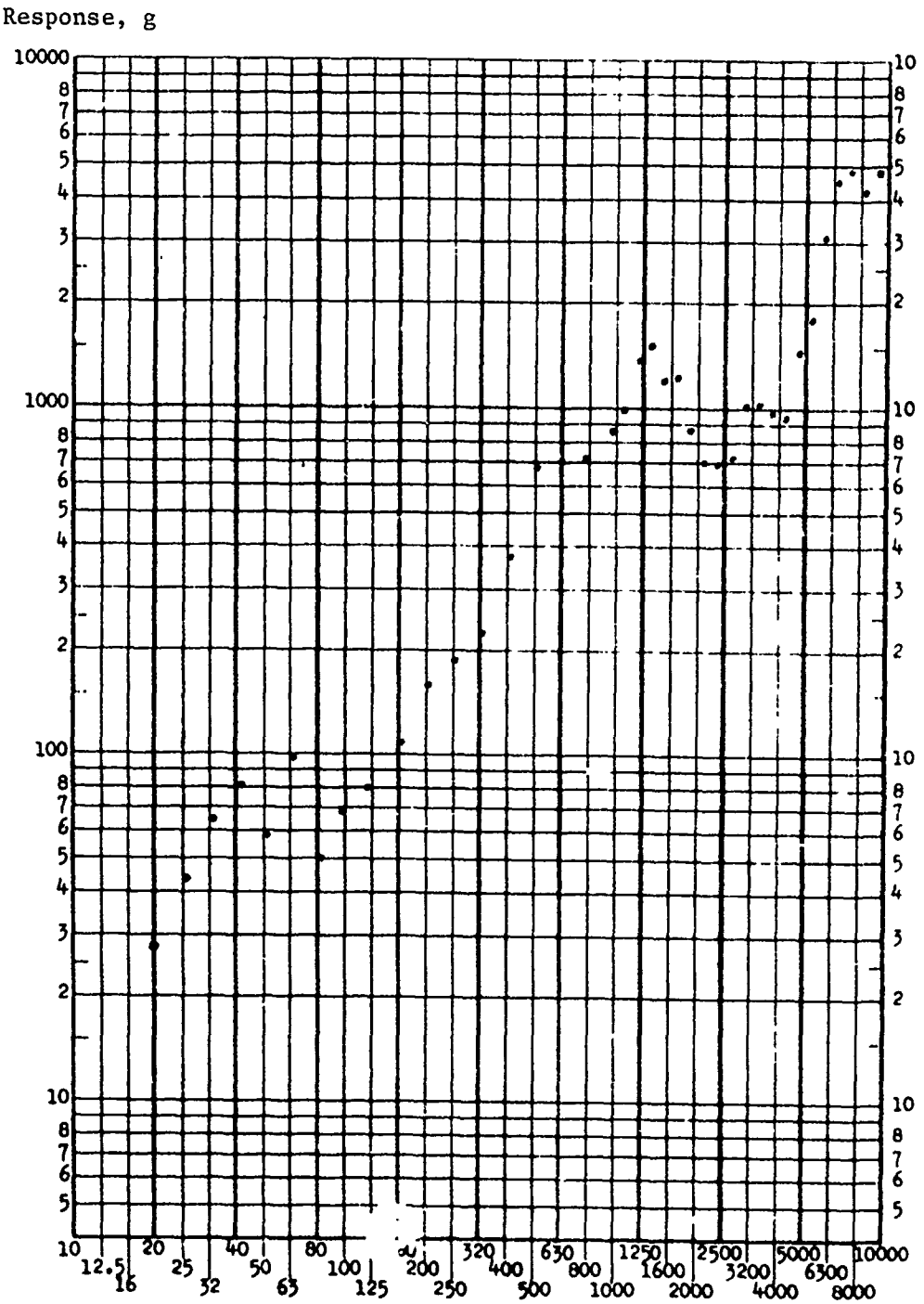
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 17 (cont)



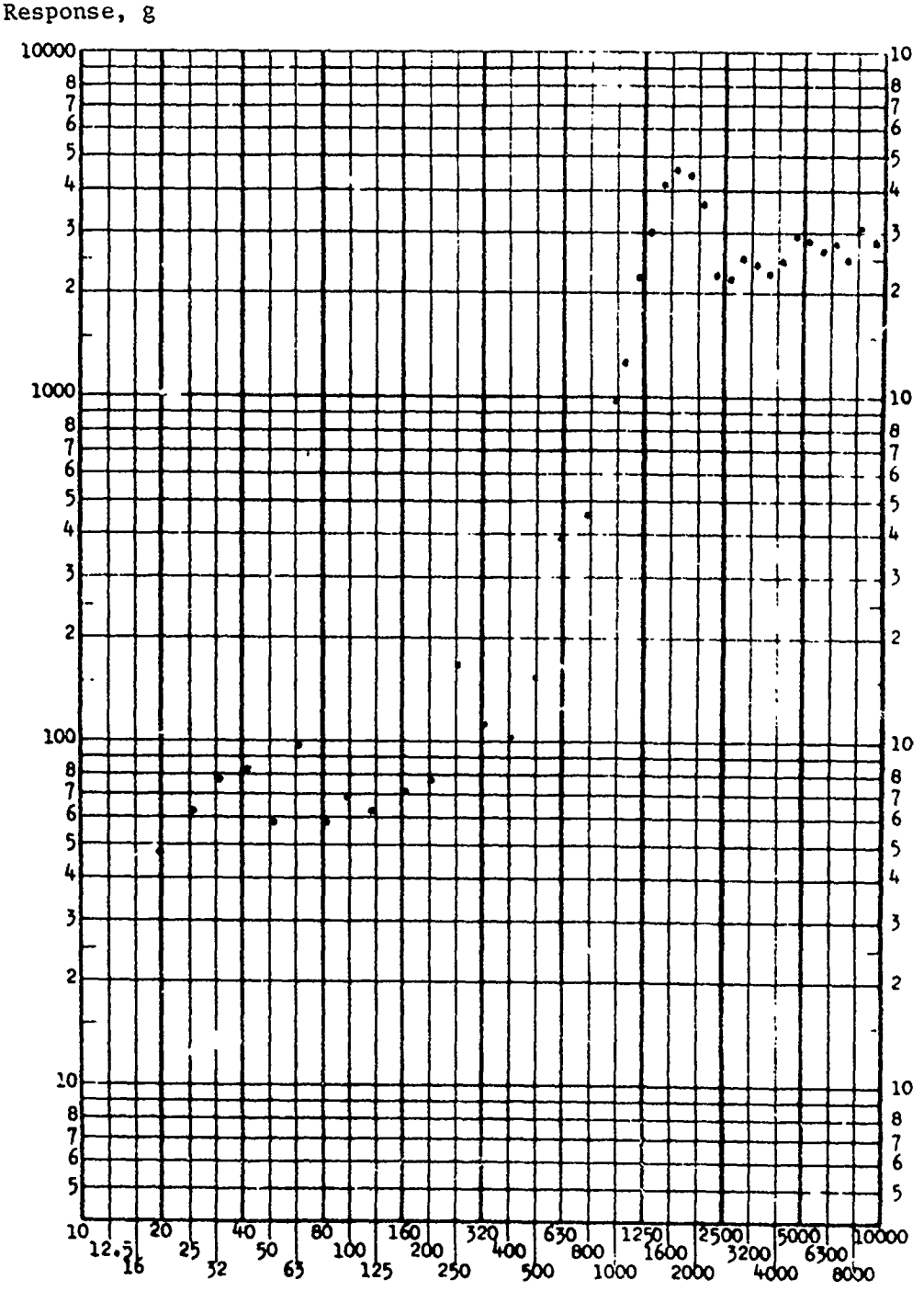
Bench Shock Test - Stage II/III Separation, Run 17
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 17 (concl)



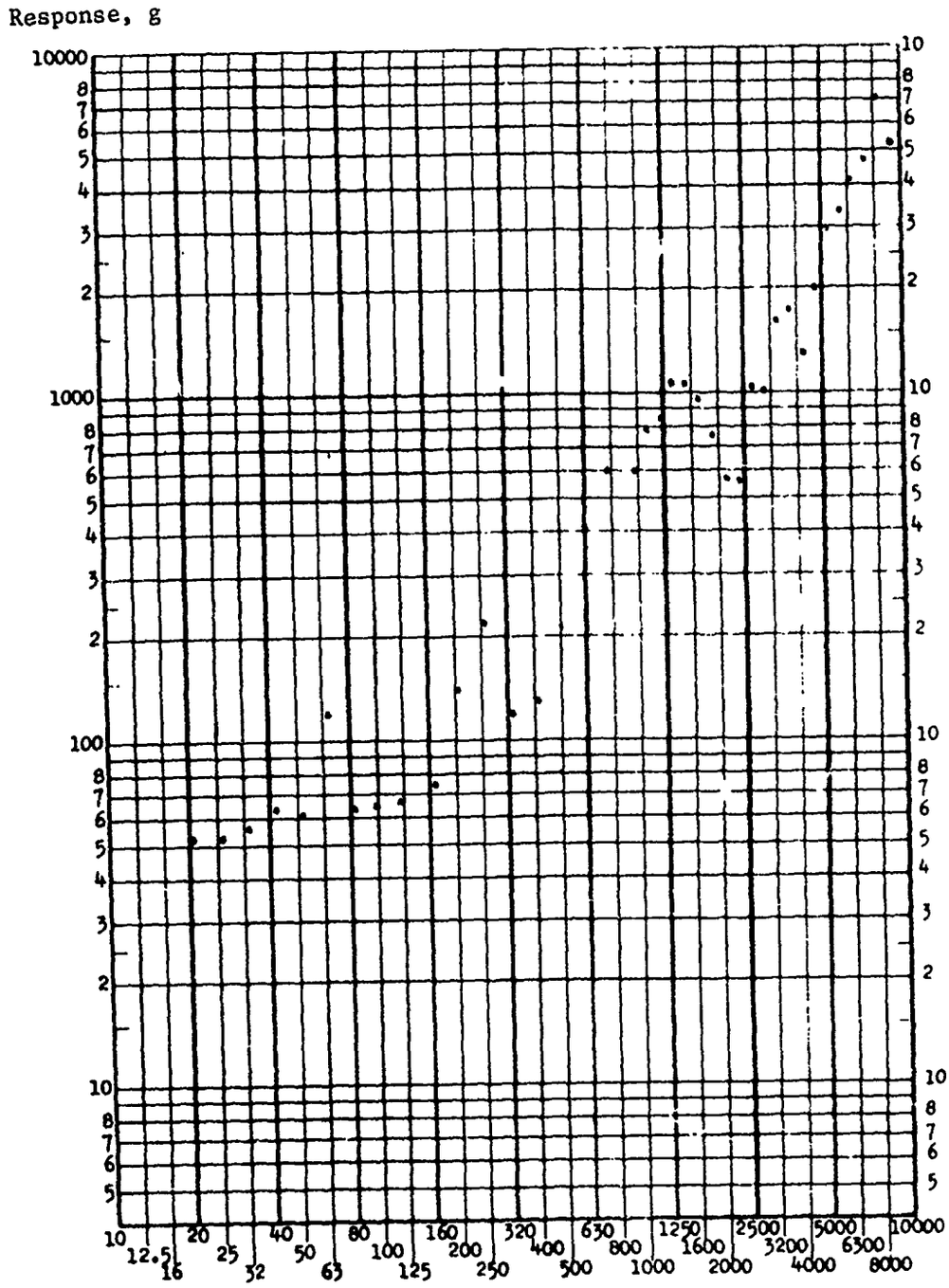
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 18 Run 18 Shock Response Spectrum



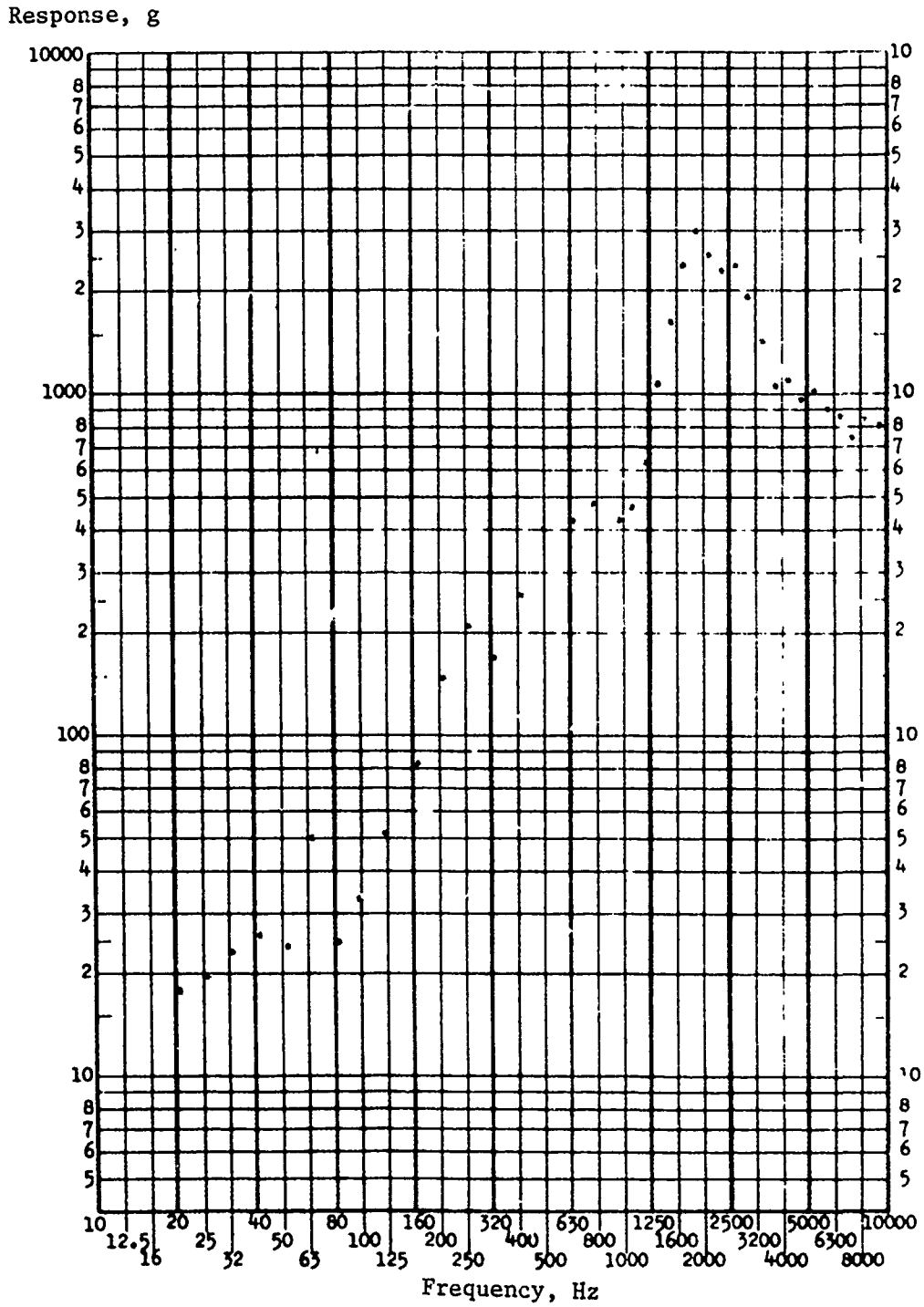
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 18 (cont)



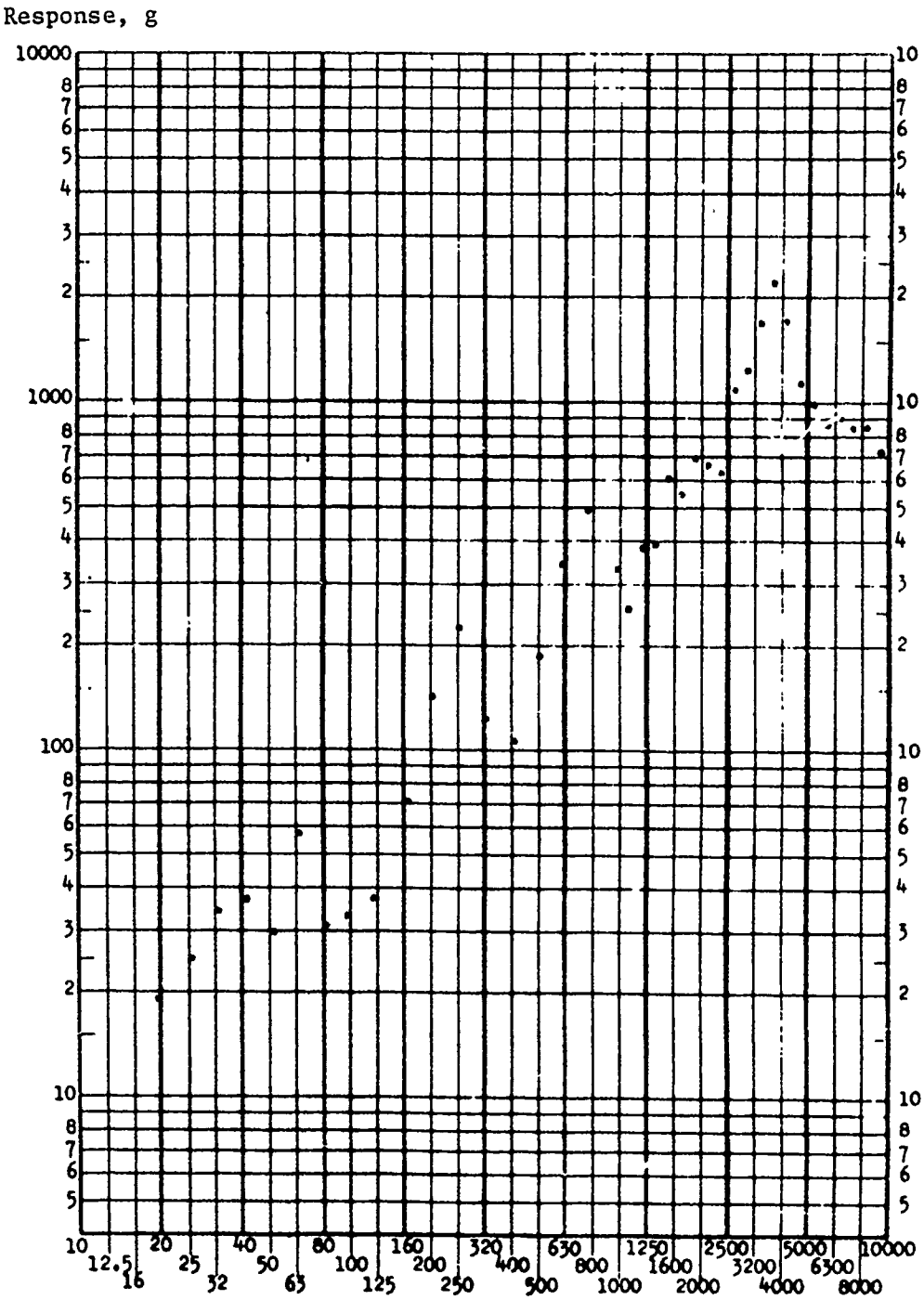
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 18 (cont)



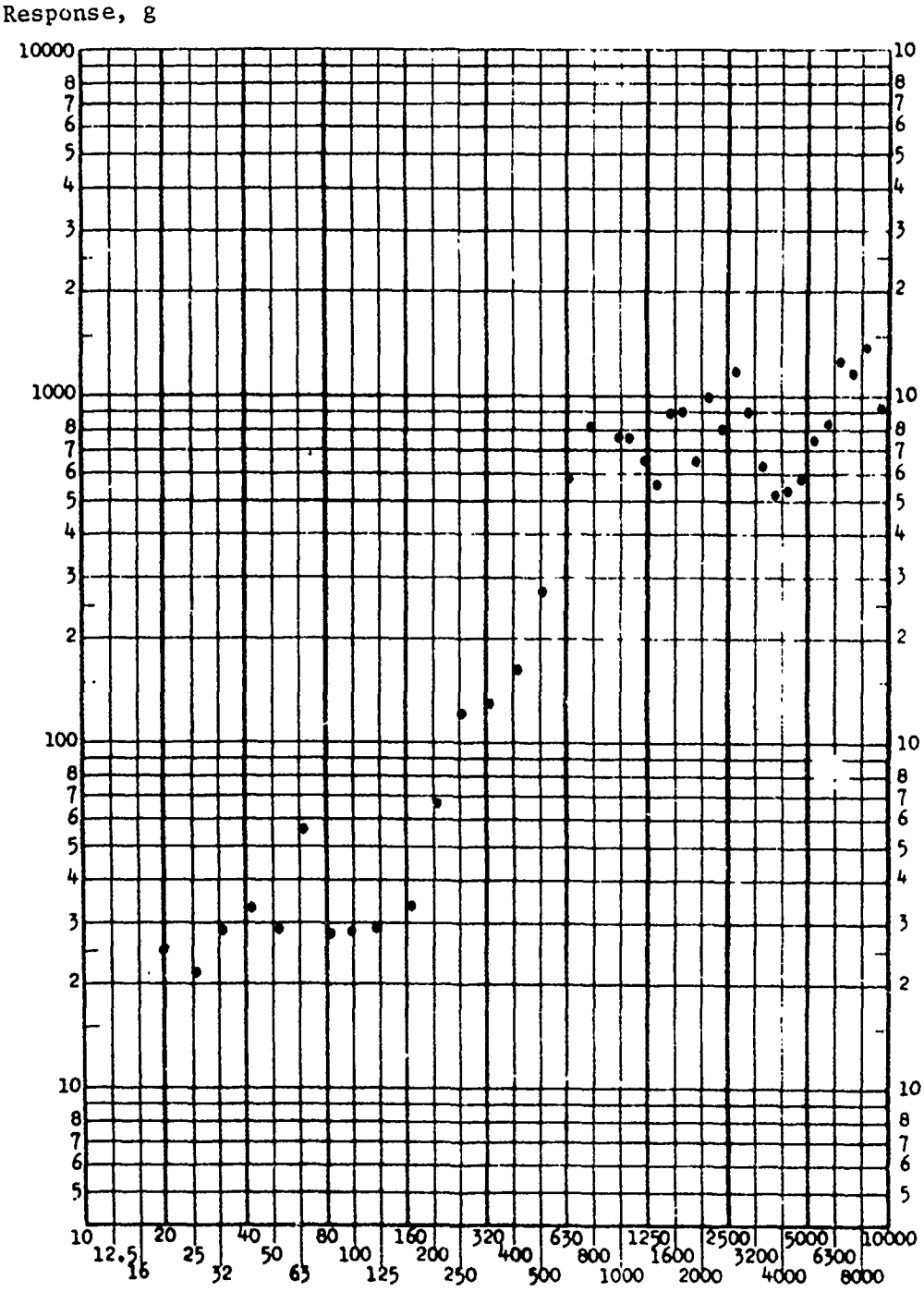
Bench Shock Test - Stage II/III Separation, Run 18__
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 18 (cont)



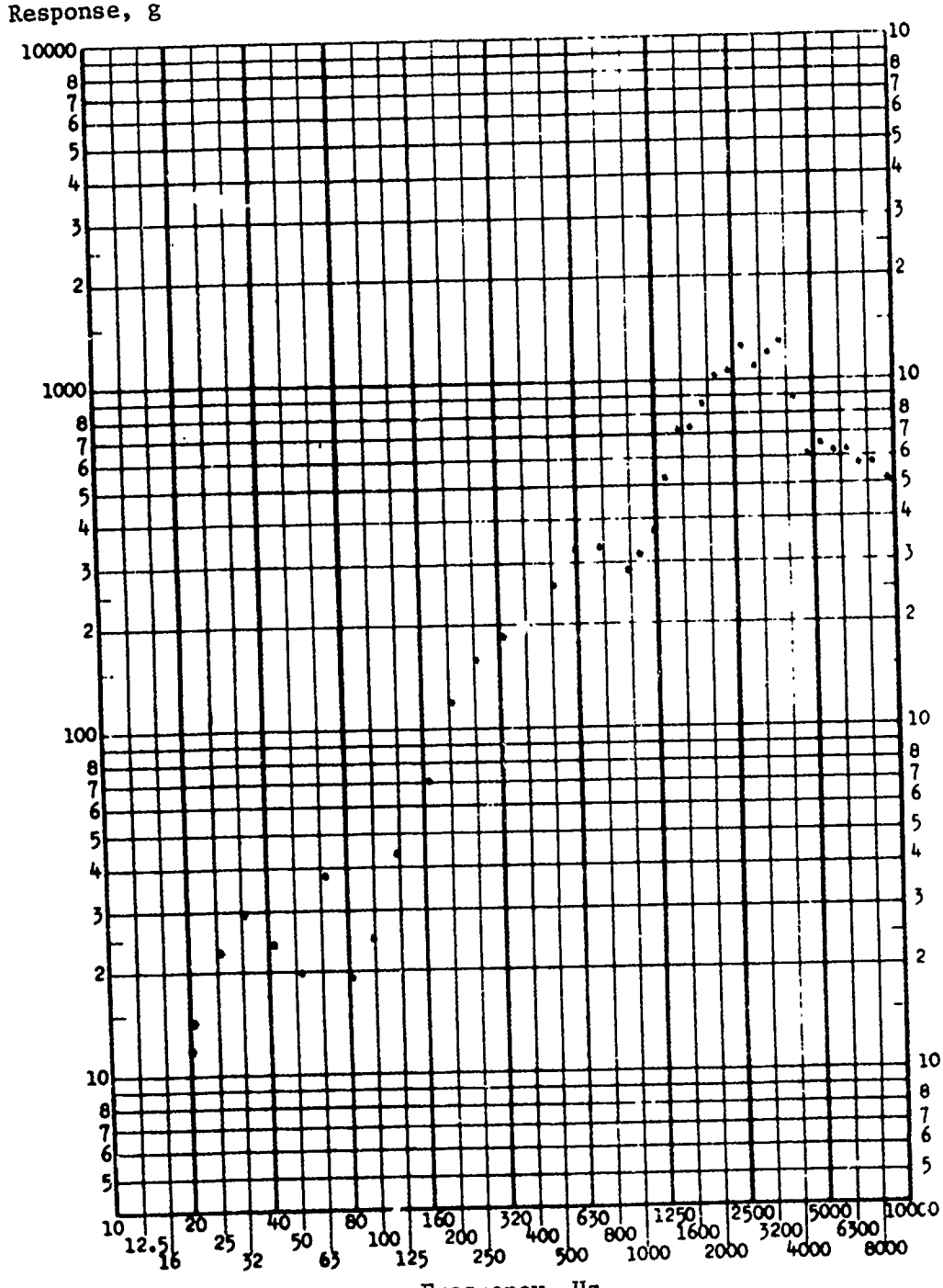
Bench Shock Test - Stage II/III Separation, Run 18
Measurement No. 5 - Tangential axis longeron near station 117

Figure 19 (cont)



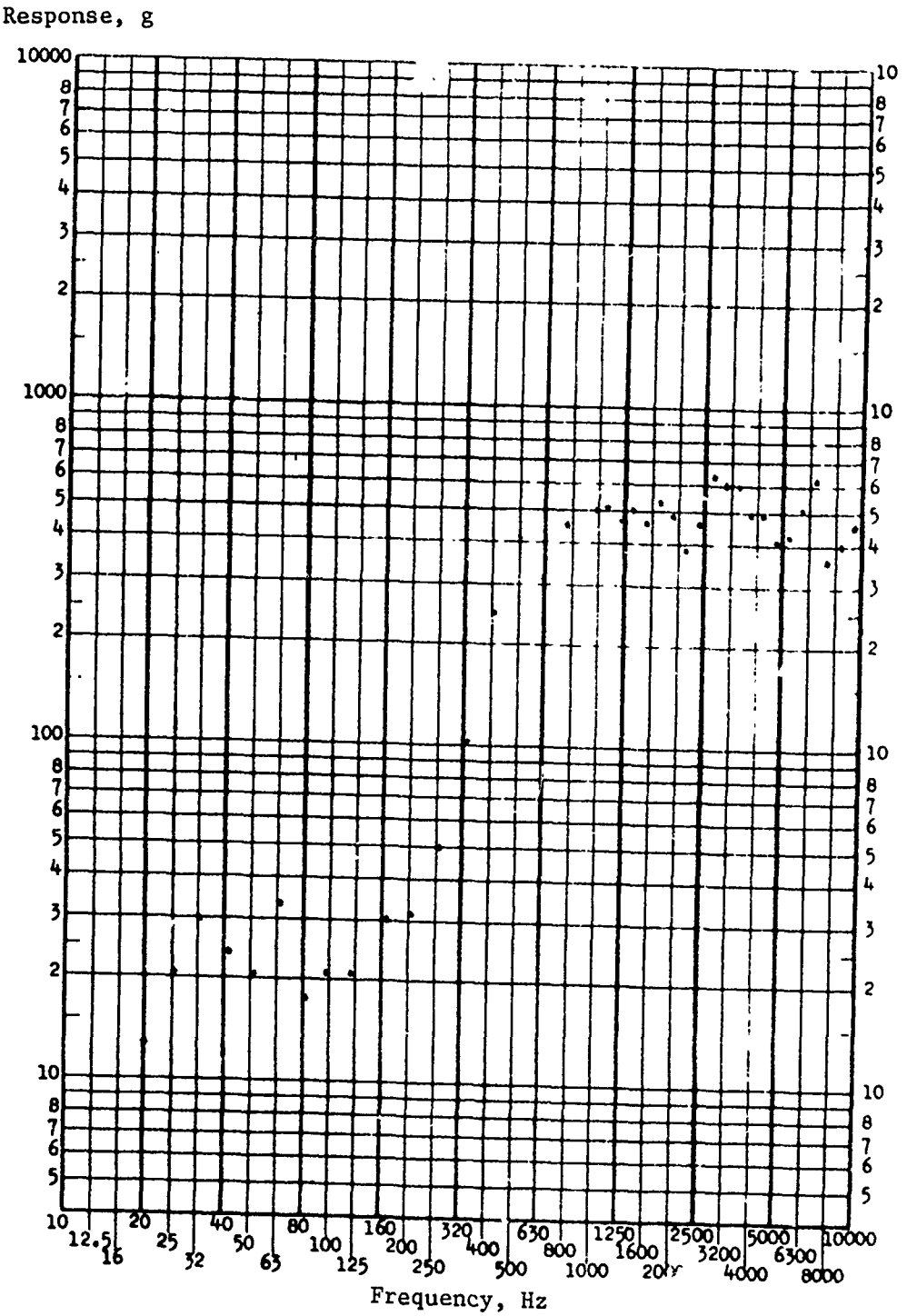
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 6 - Radial axis longeron near station 117

Figure 18 (cont)



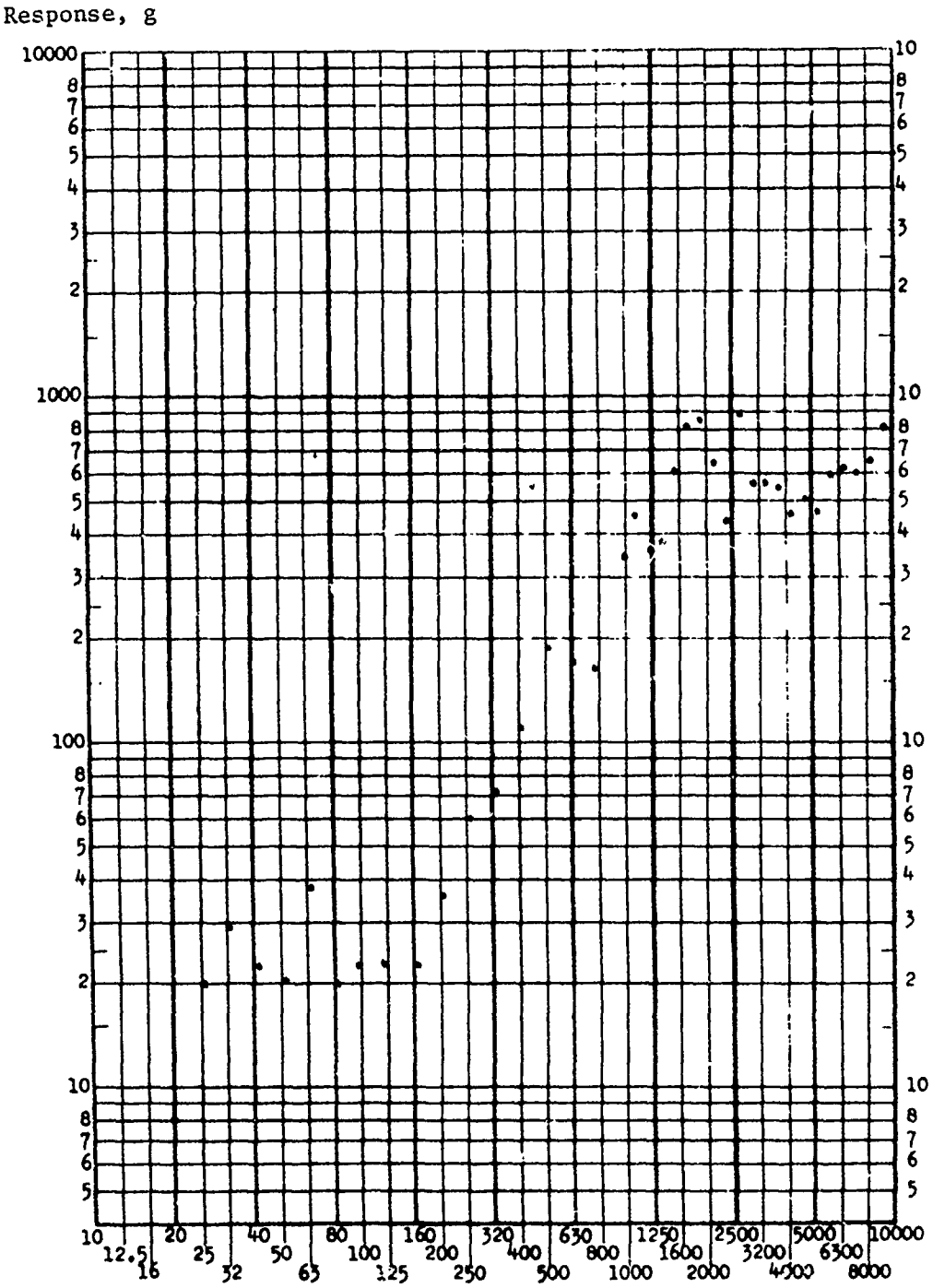
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 18 (cont)



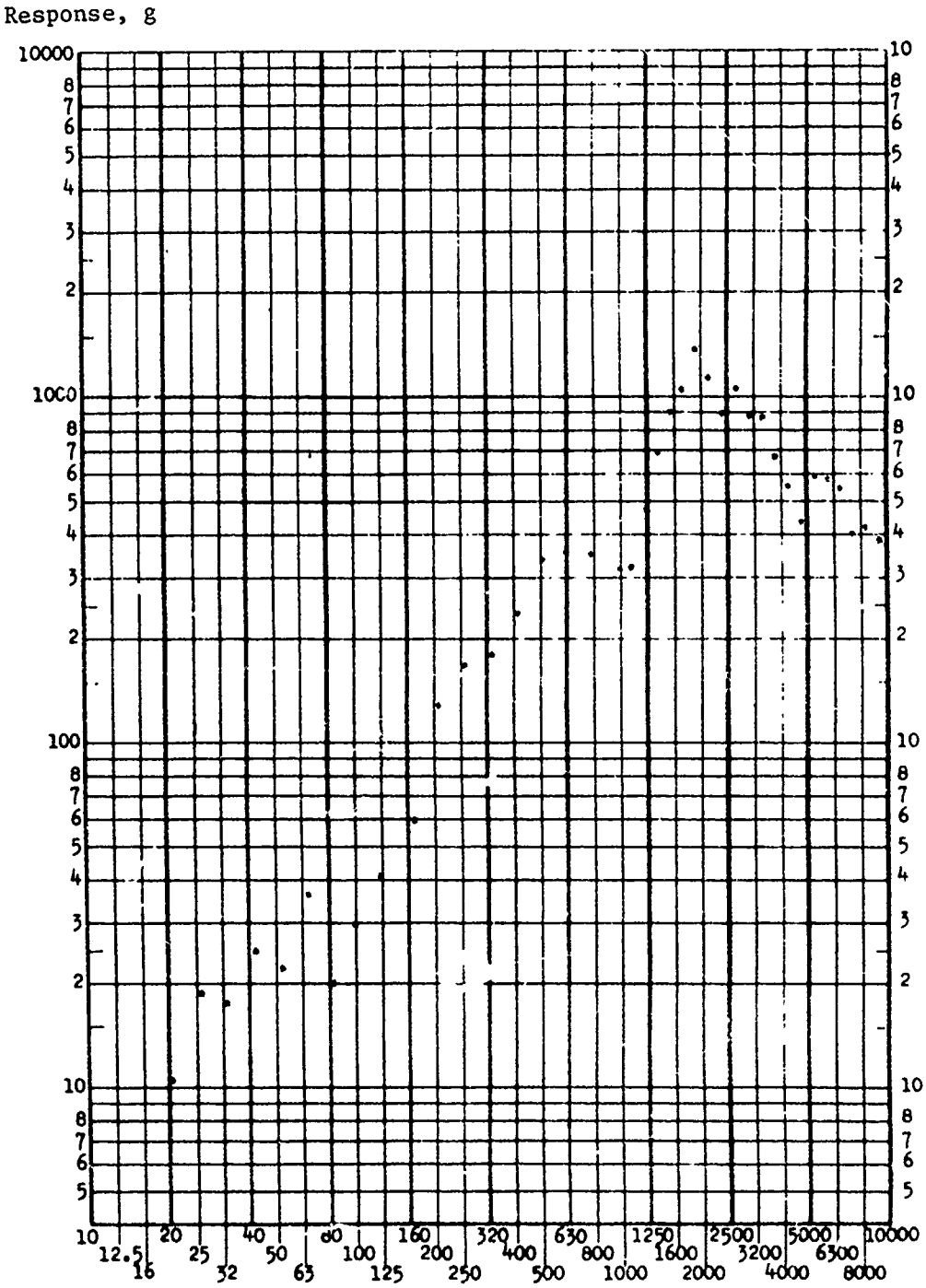
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 8 - Tangential axis longeron near station 77

Figure 18 (cont)



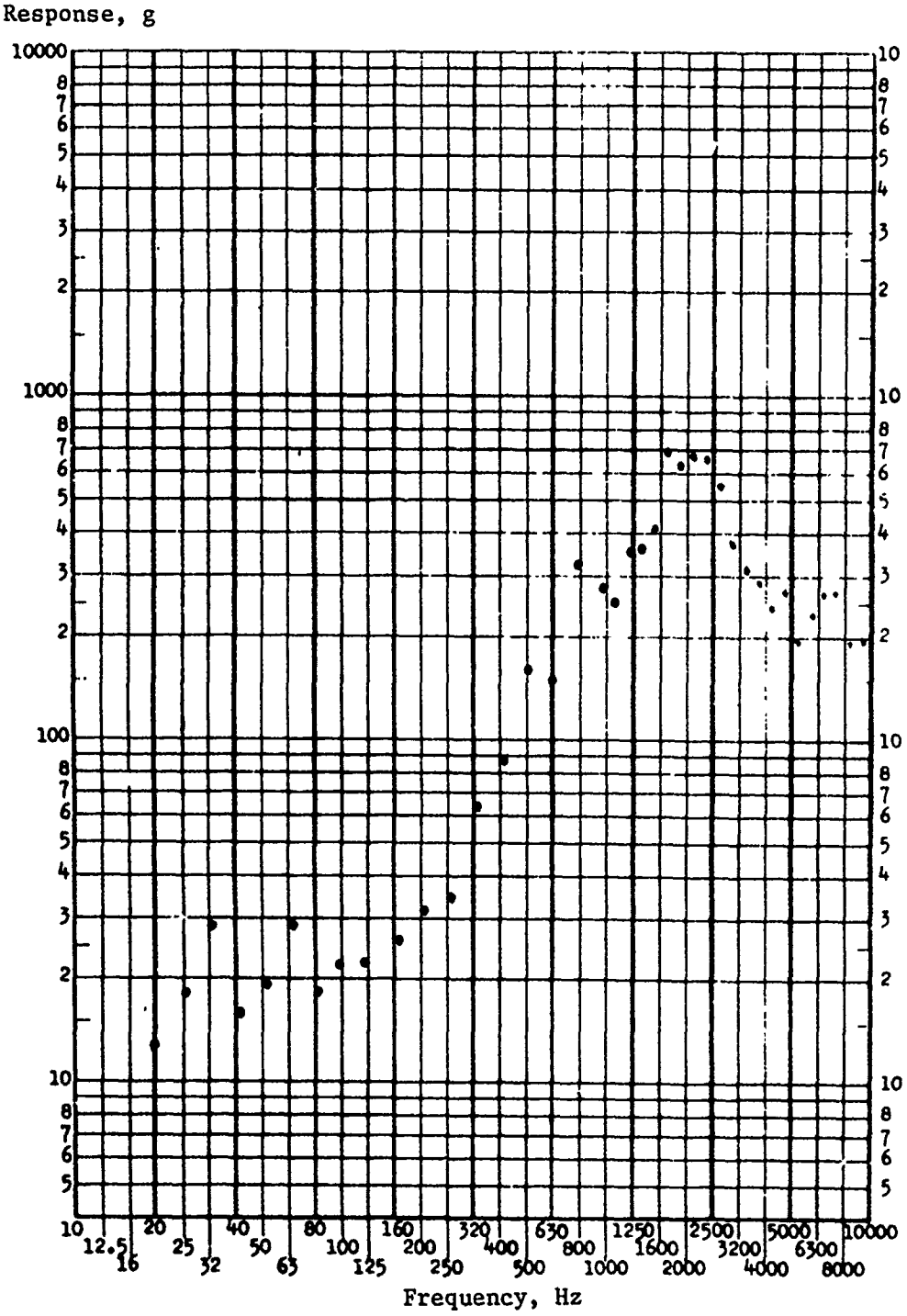
Bench Shock Test - Stage II/III Separation, Run 18 __
Measurement No. 9 - Radial axis longeron near station 77

Figure 18 (cont)



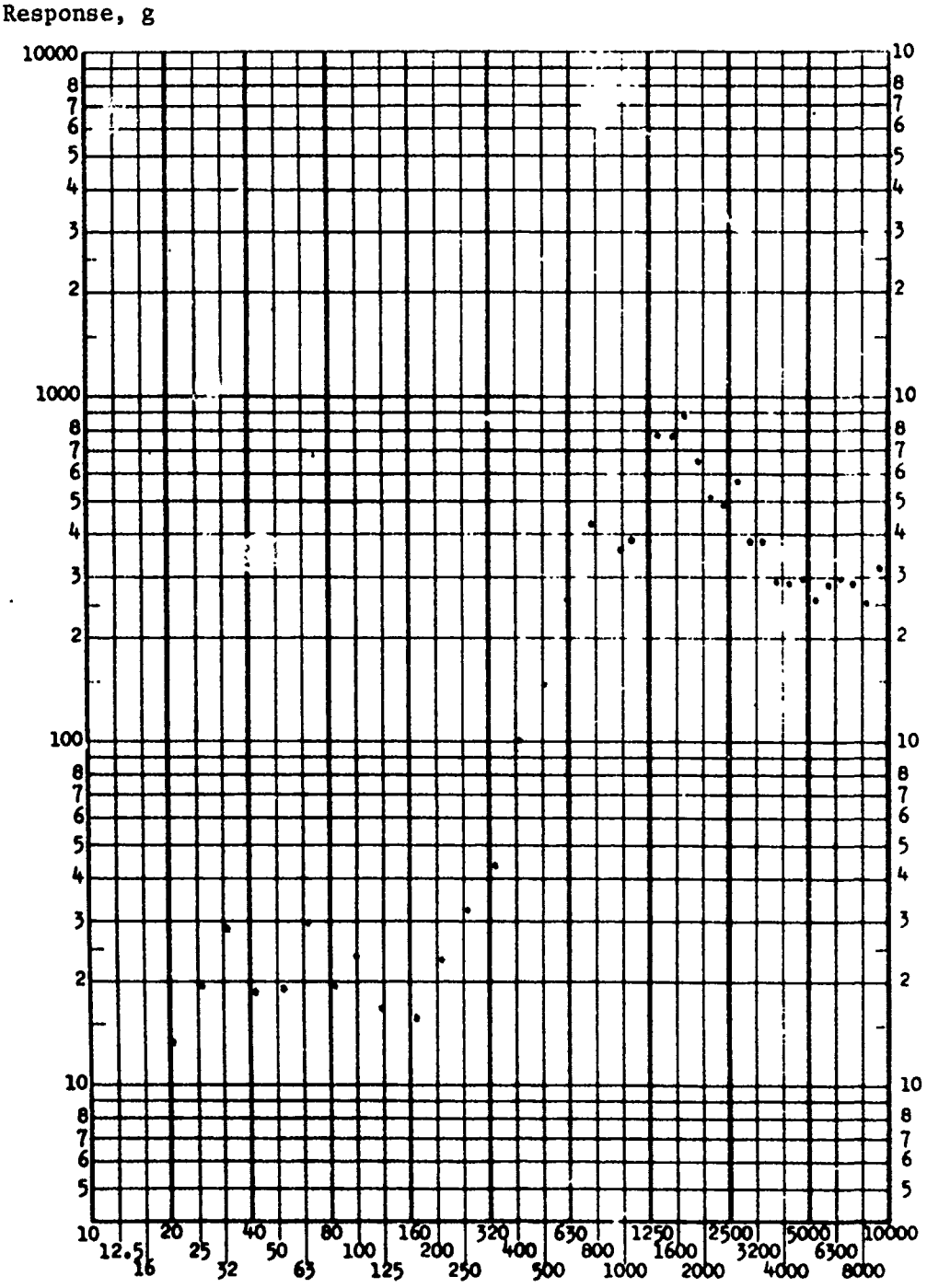
Bench Shock Test - Stage II/III Separation, Run 18
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 18 (cont)



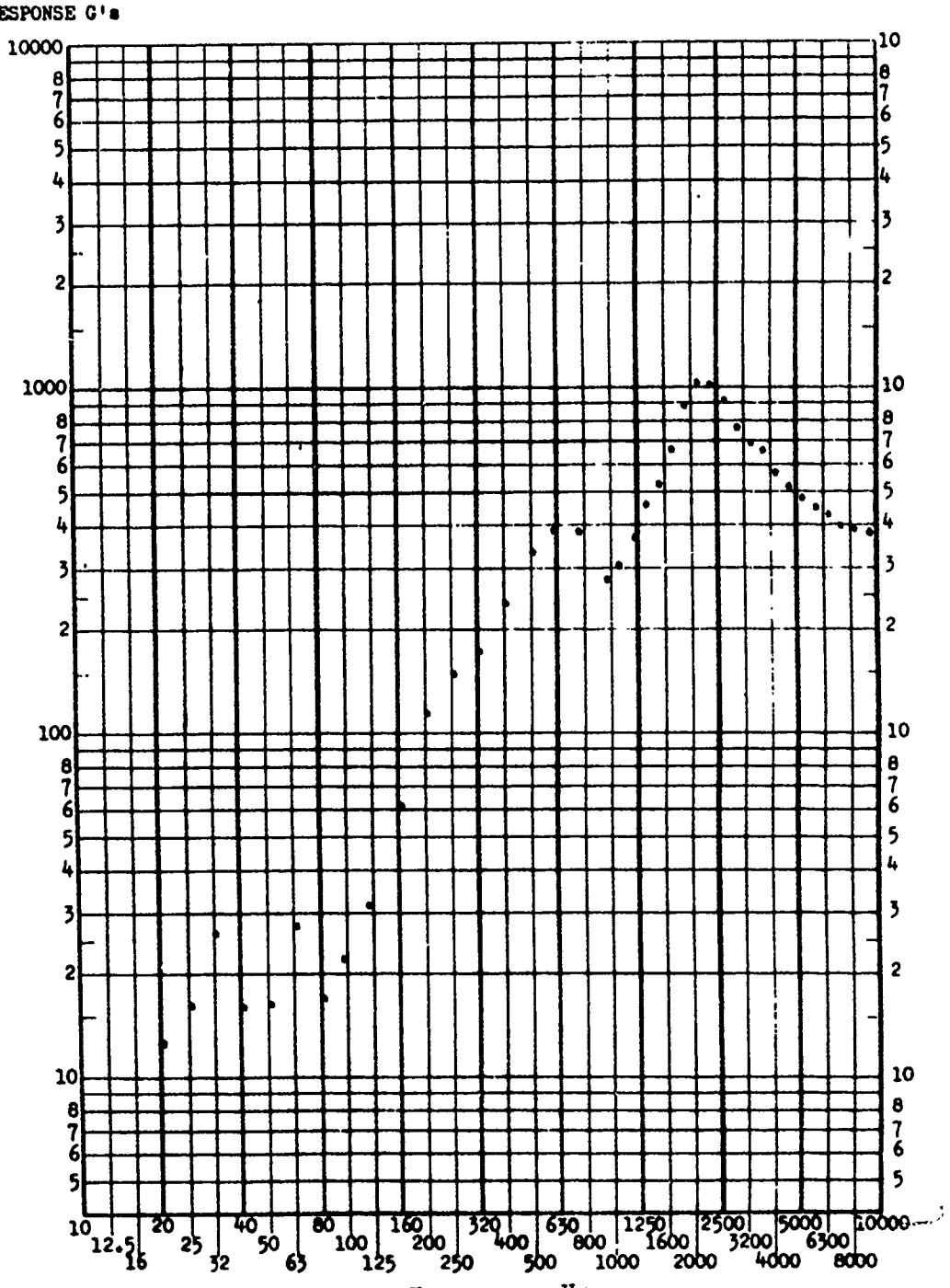
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 18 (cont)



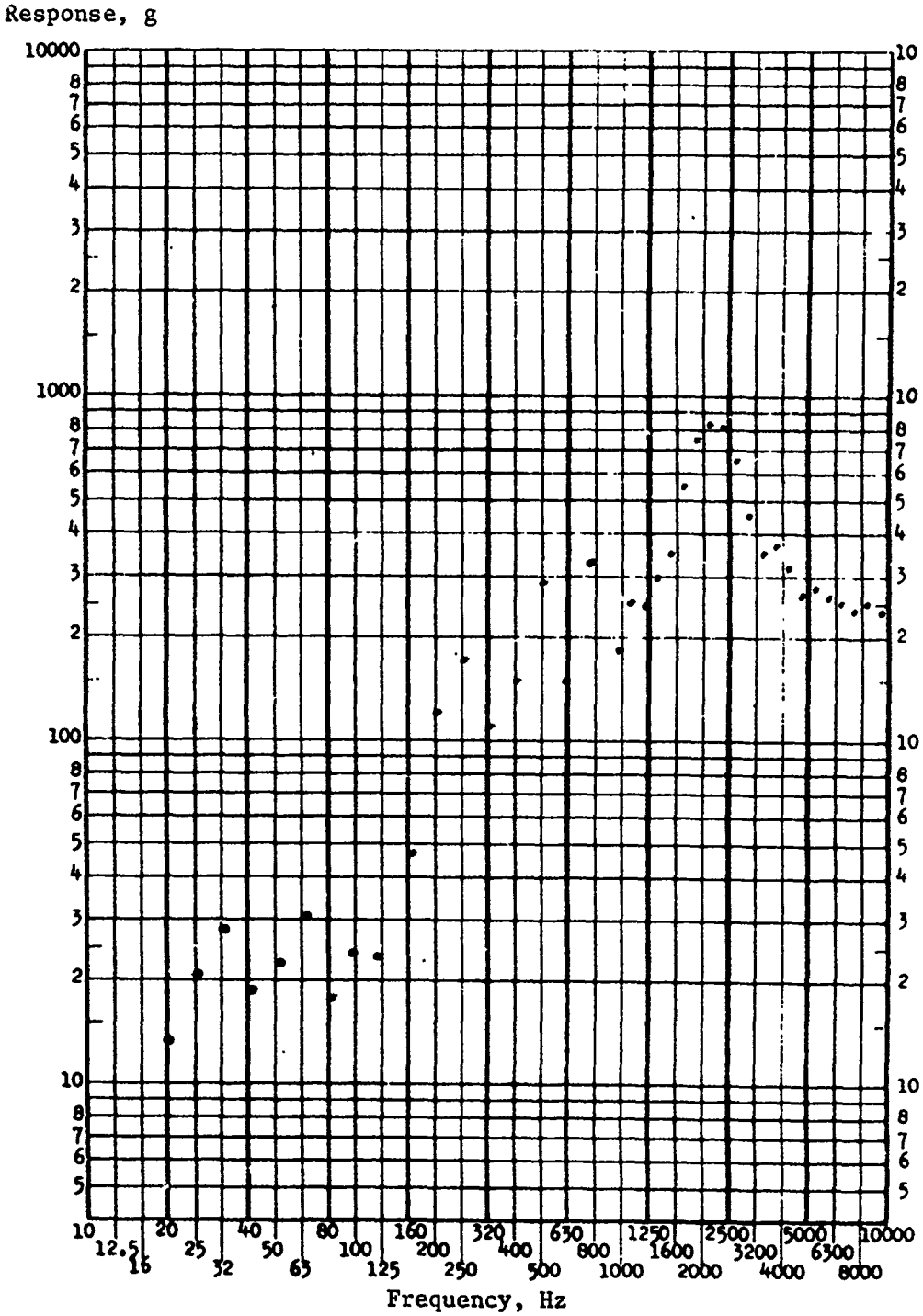
Bench Shock Test - Stage II/III Separation, Run 18
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 18 (cont)



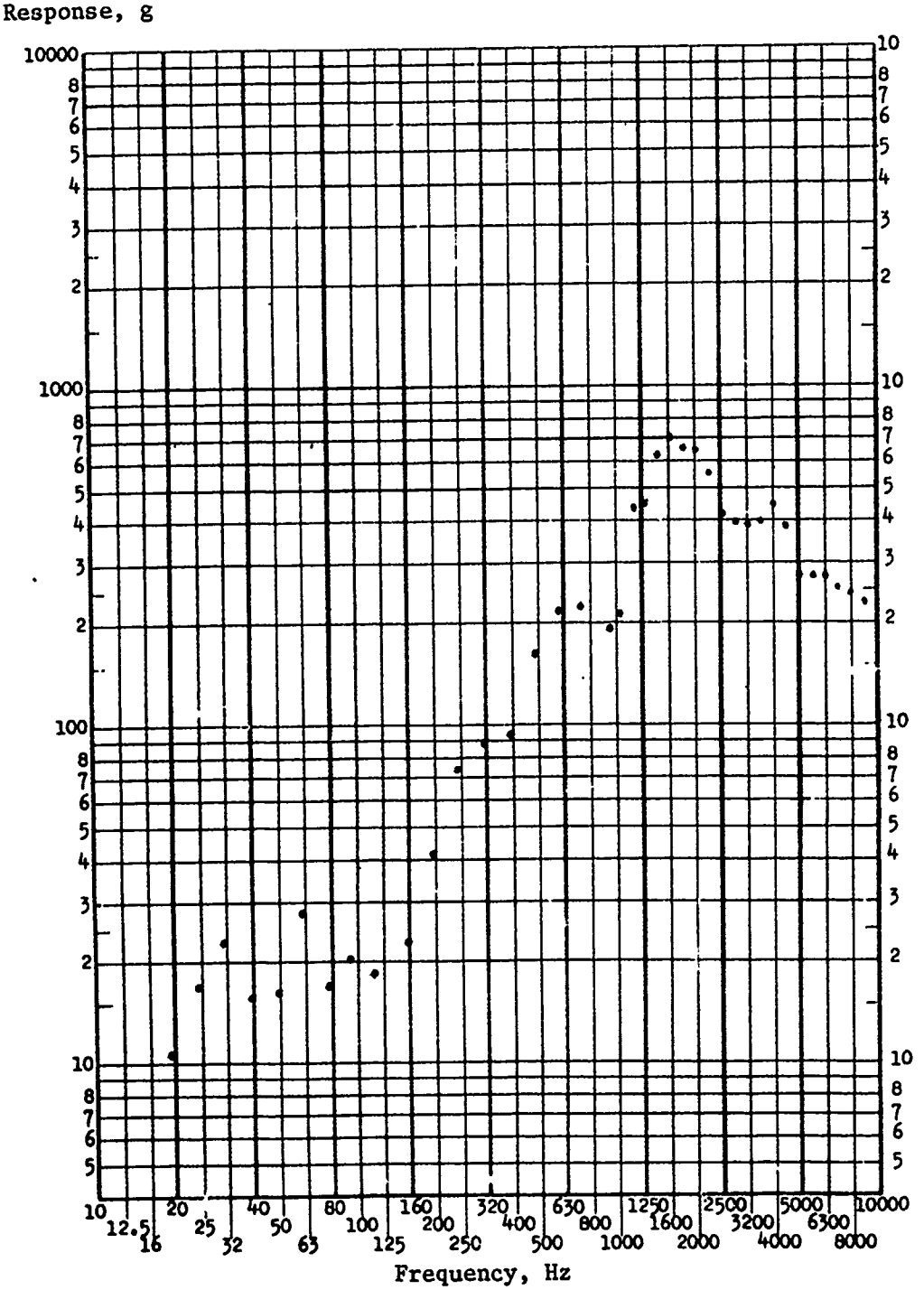
Bench Shock Test - Stage II/III Separation, Run 18 __
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 18 (cont)



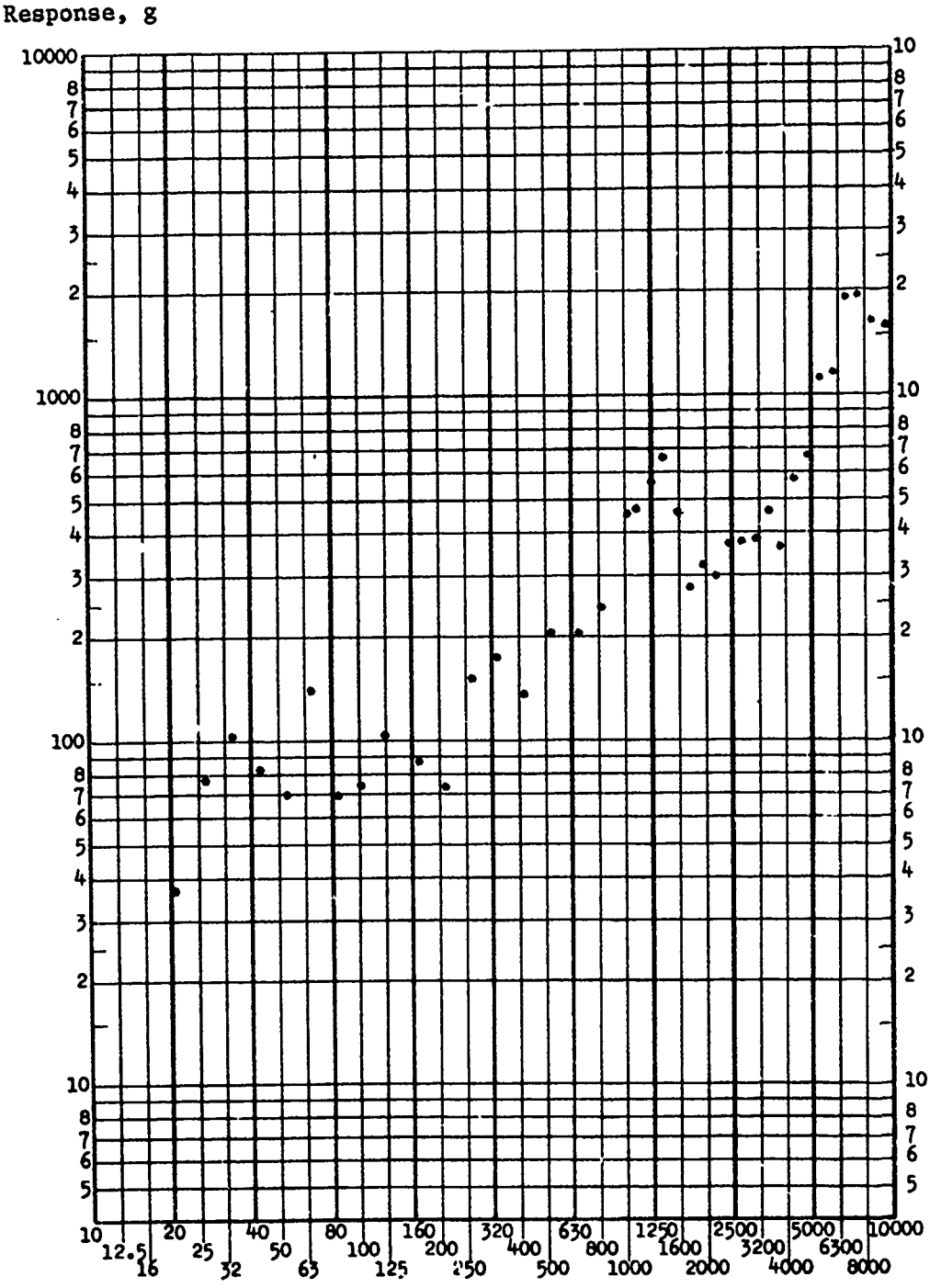
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 18 (cont)



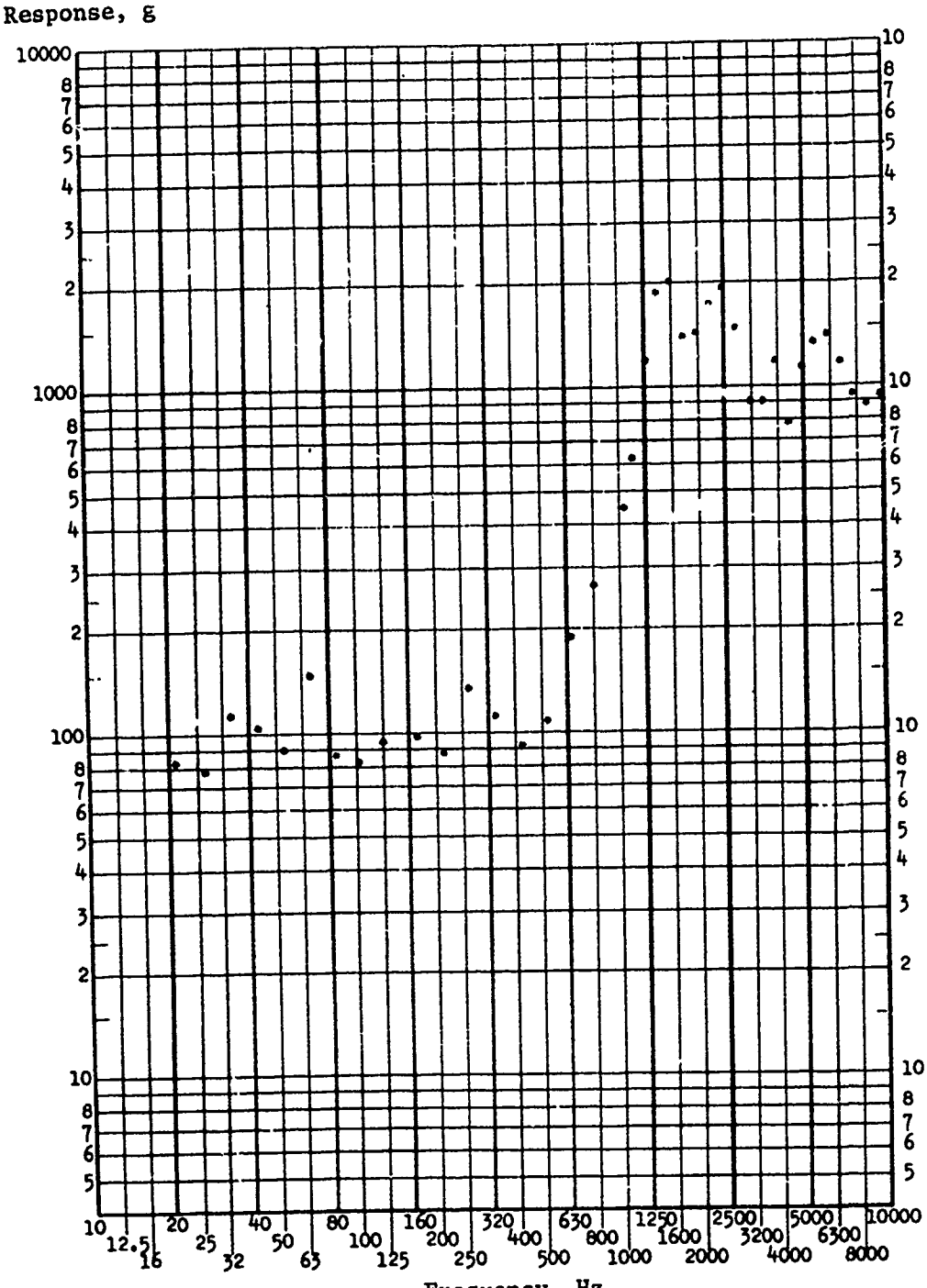
Bench Shock Test - Stage II/III Separation, Run 18 _
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 18 (concl)



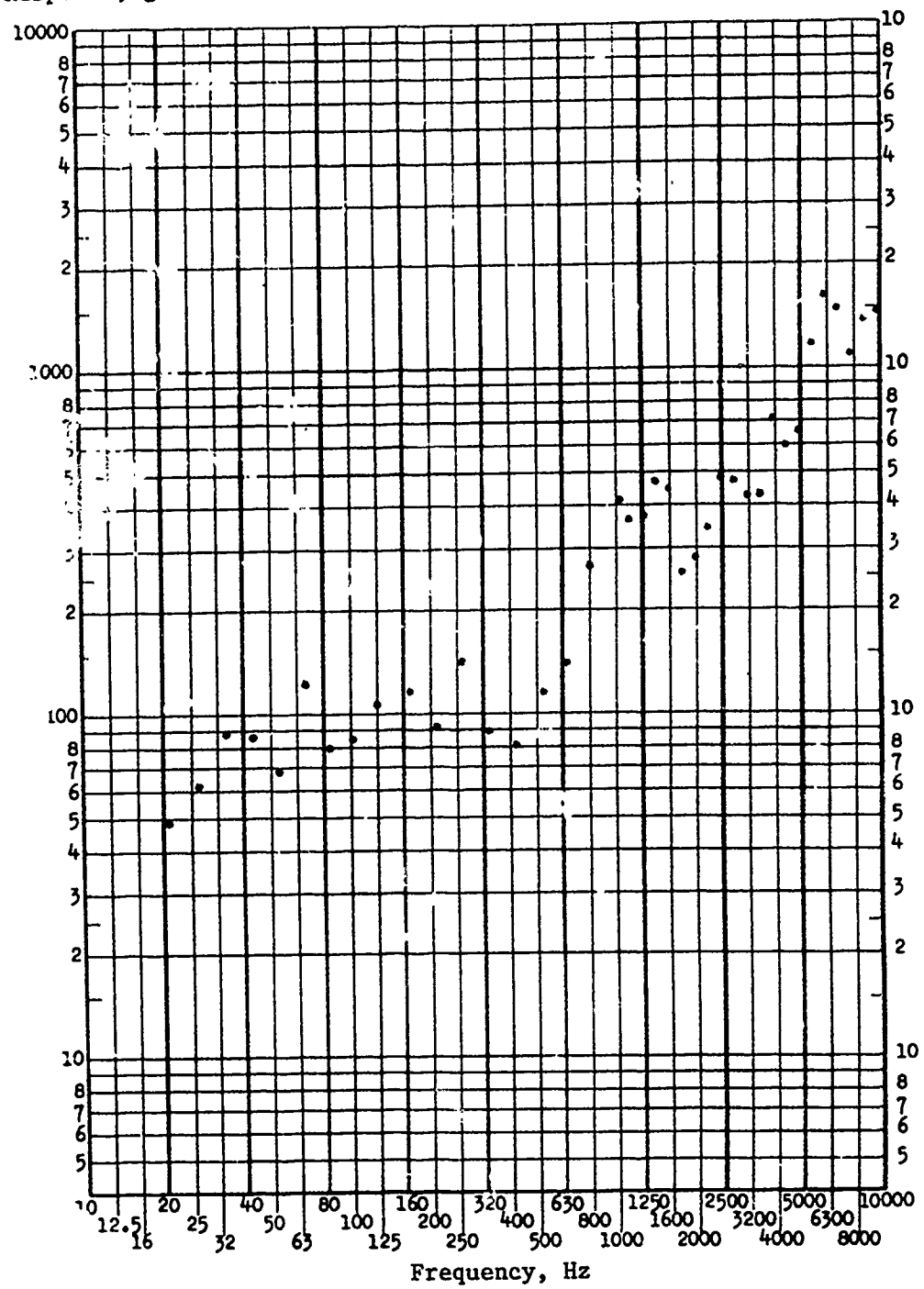
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 19 Run 19 Shock Response Spectrum



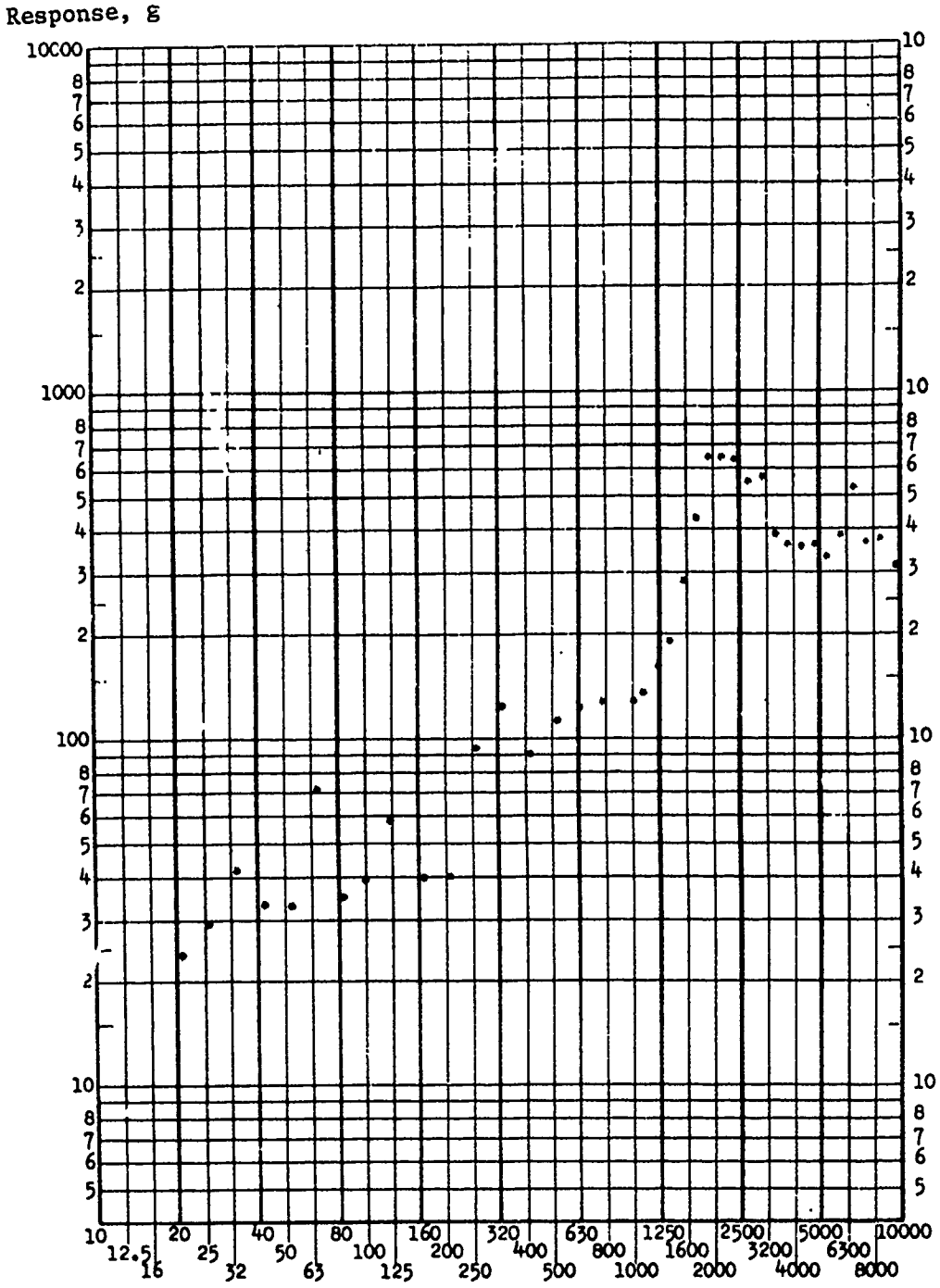
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 2 - Tangential axis longeron near station 133

Figure 19 (cont)



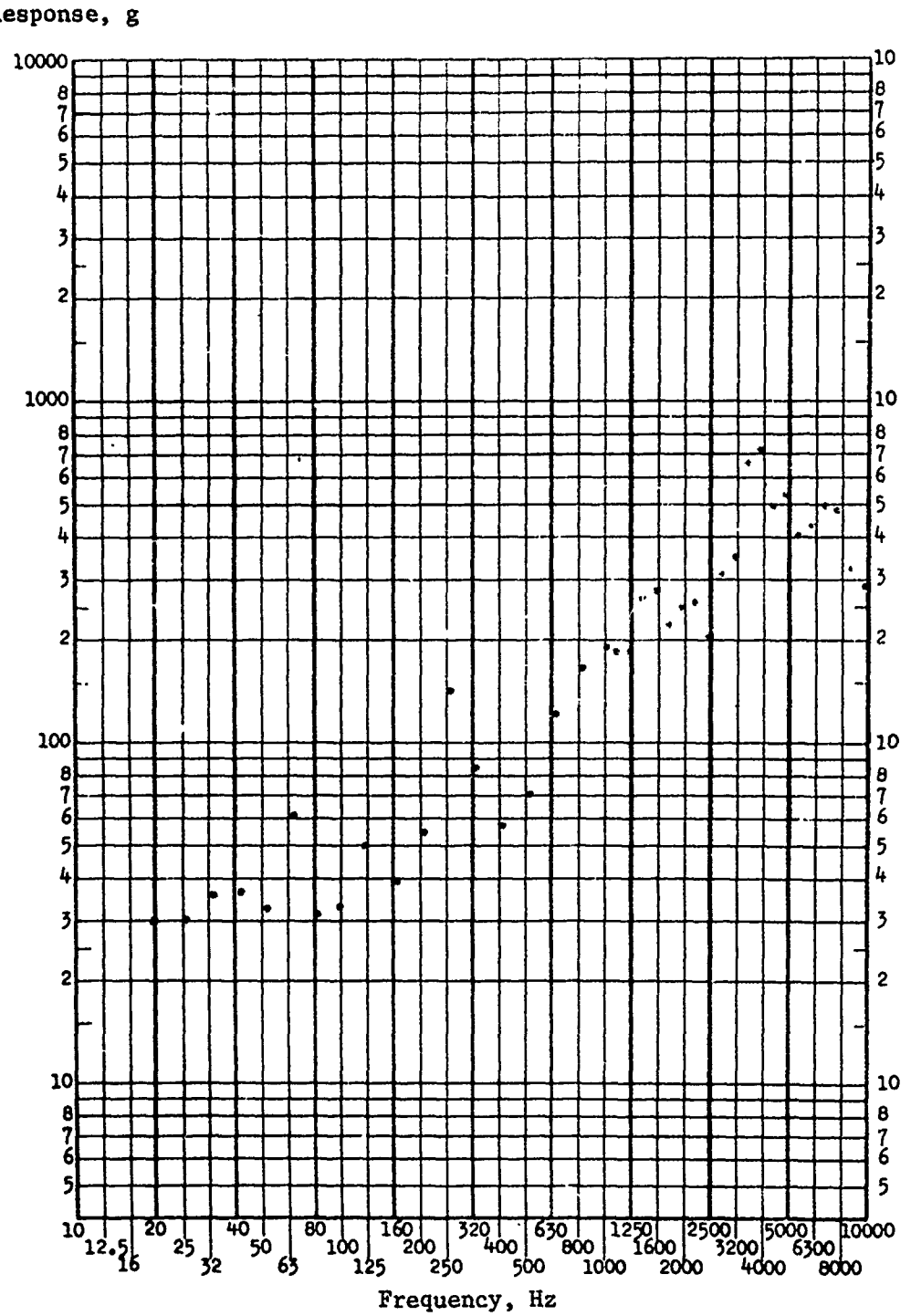
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 3 - Radial axis longeron near station 133

Figure 19 (cont)



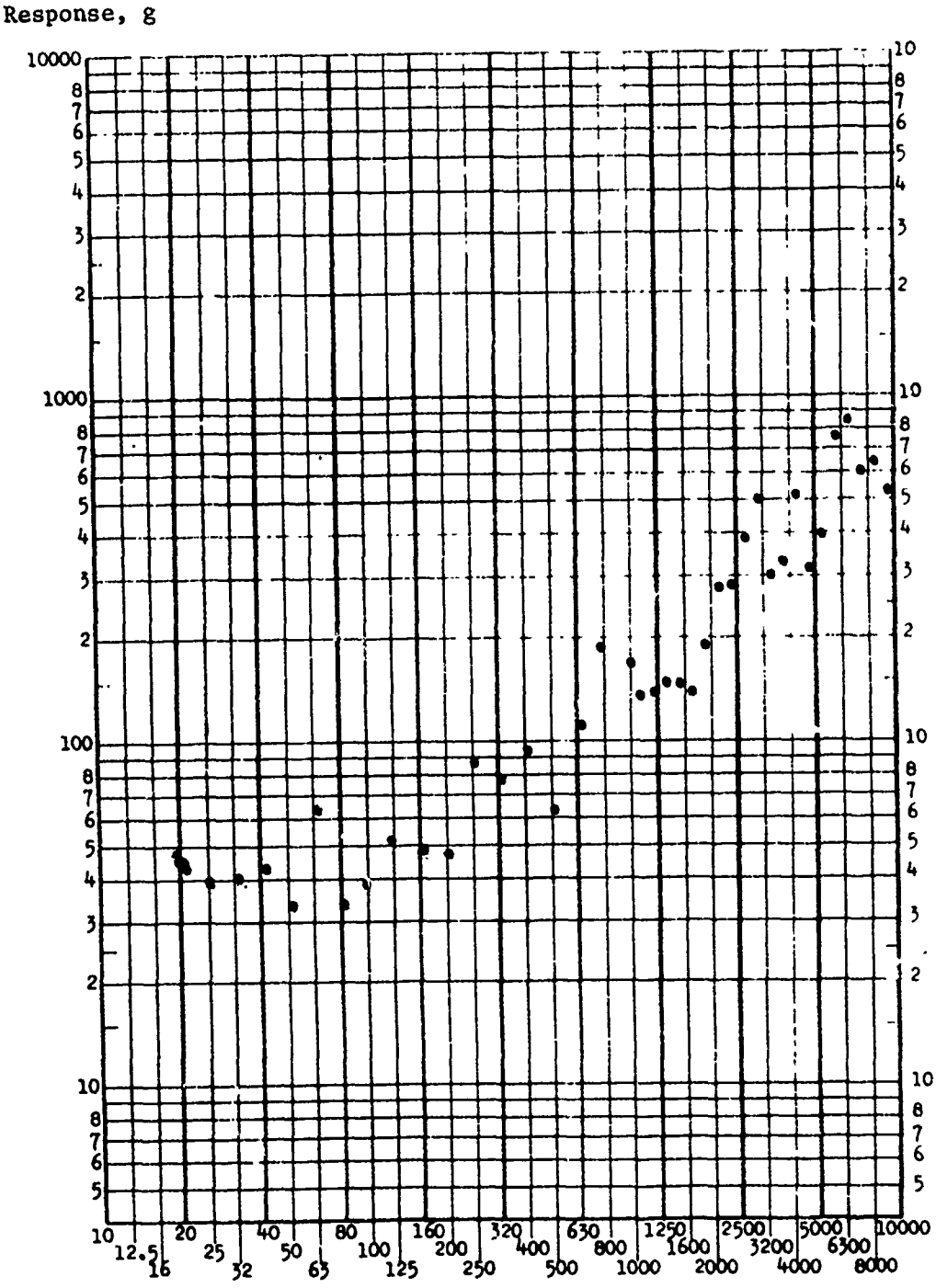
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 19 (cont)



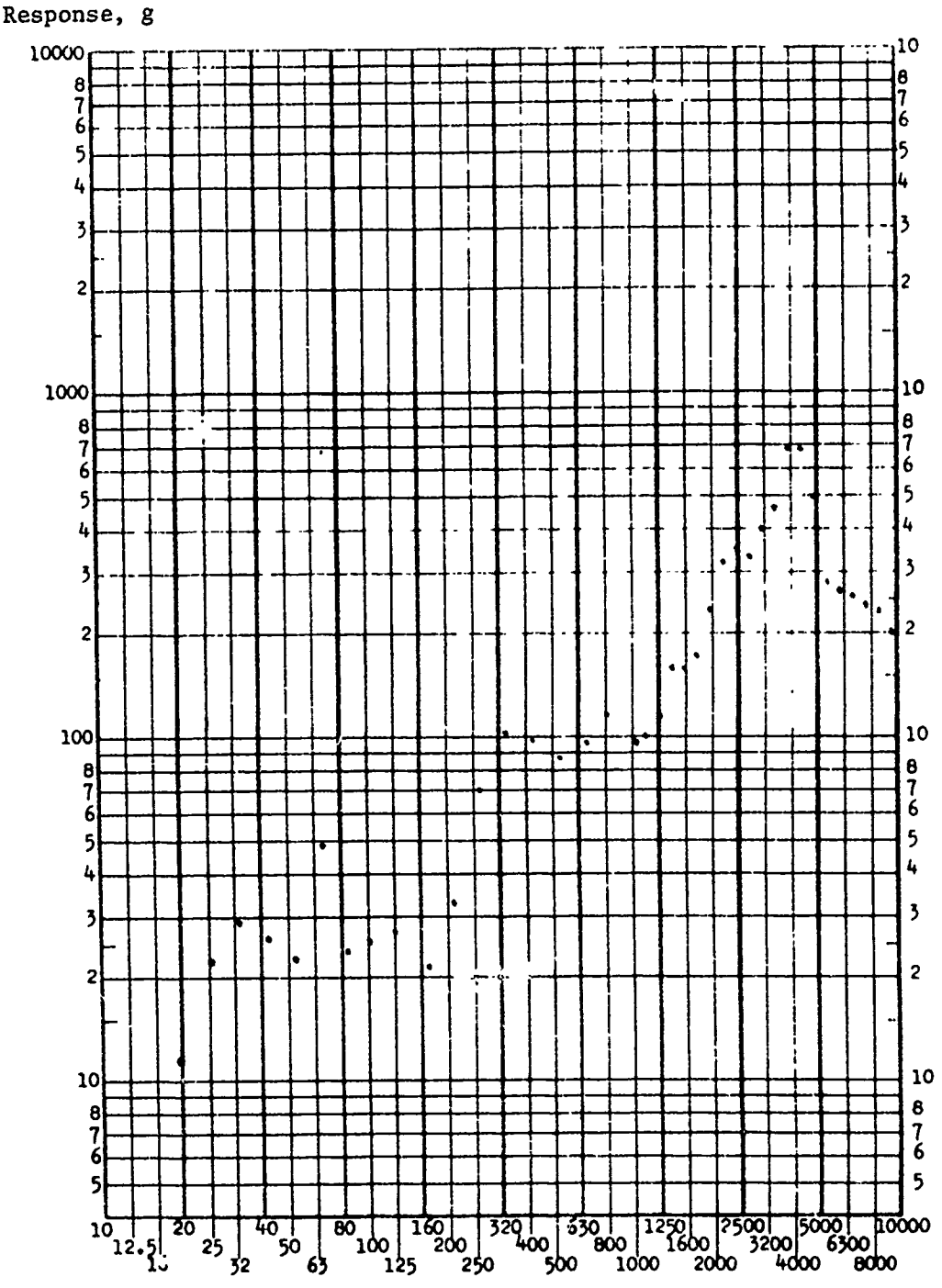
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 5 - Tangential axis longeron near station 117

Figure 19 (cont)



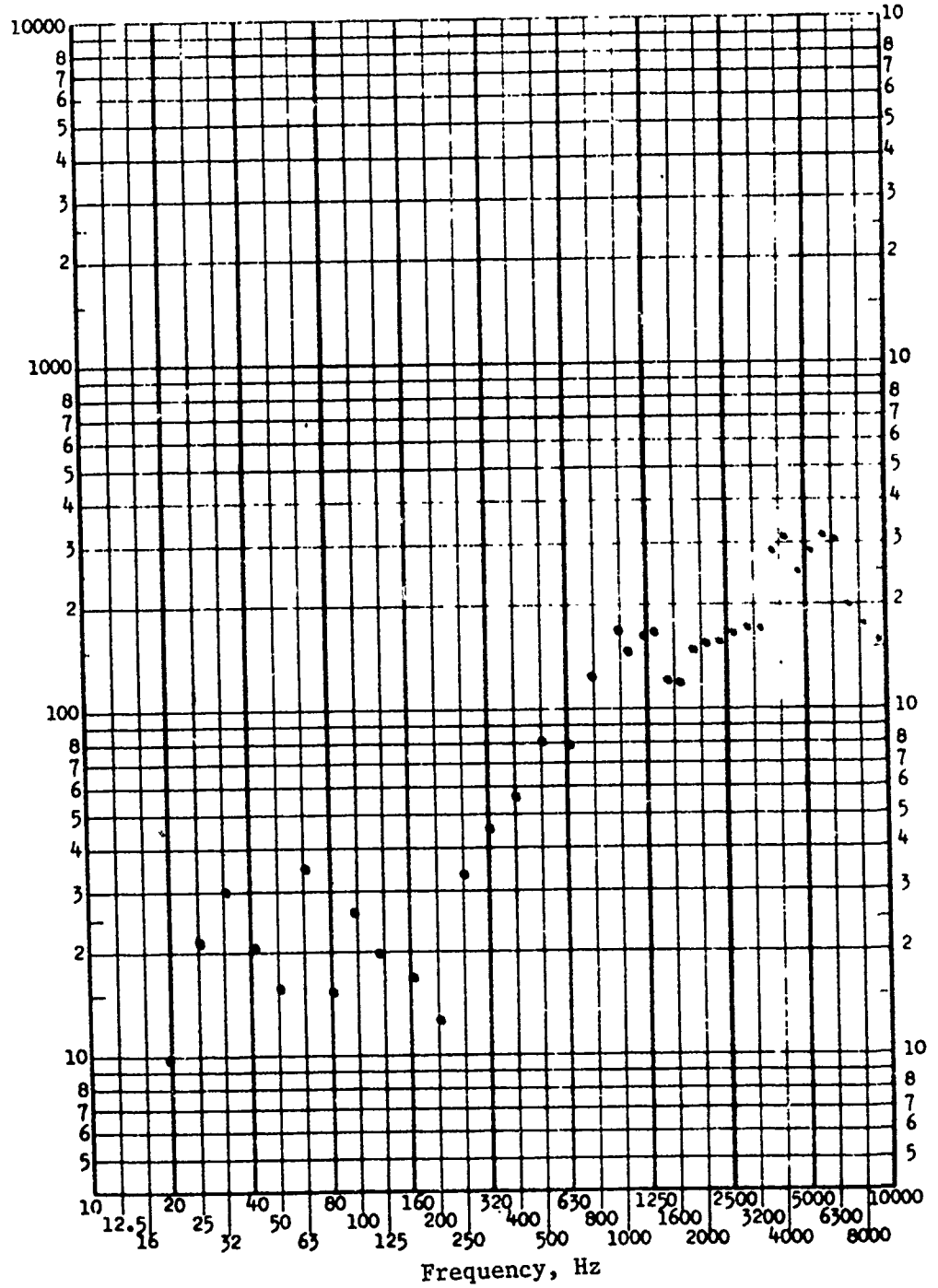
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 6 - Radial axis longeron near station 117

Figure 19 (cont)



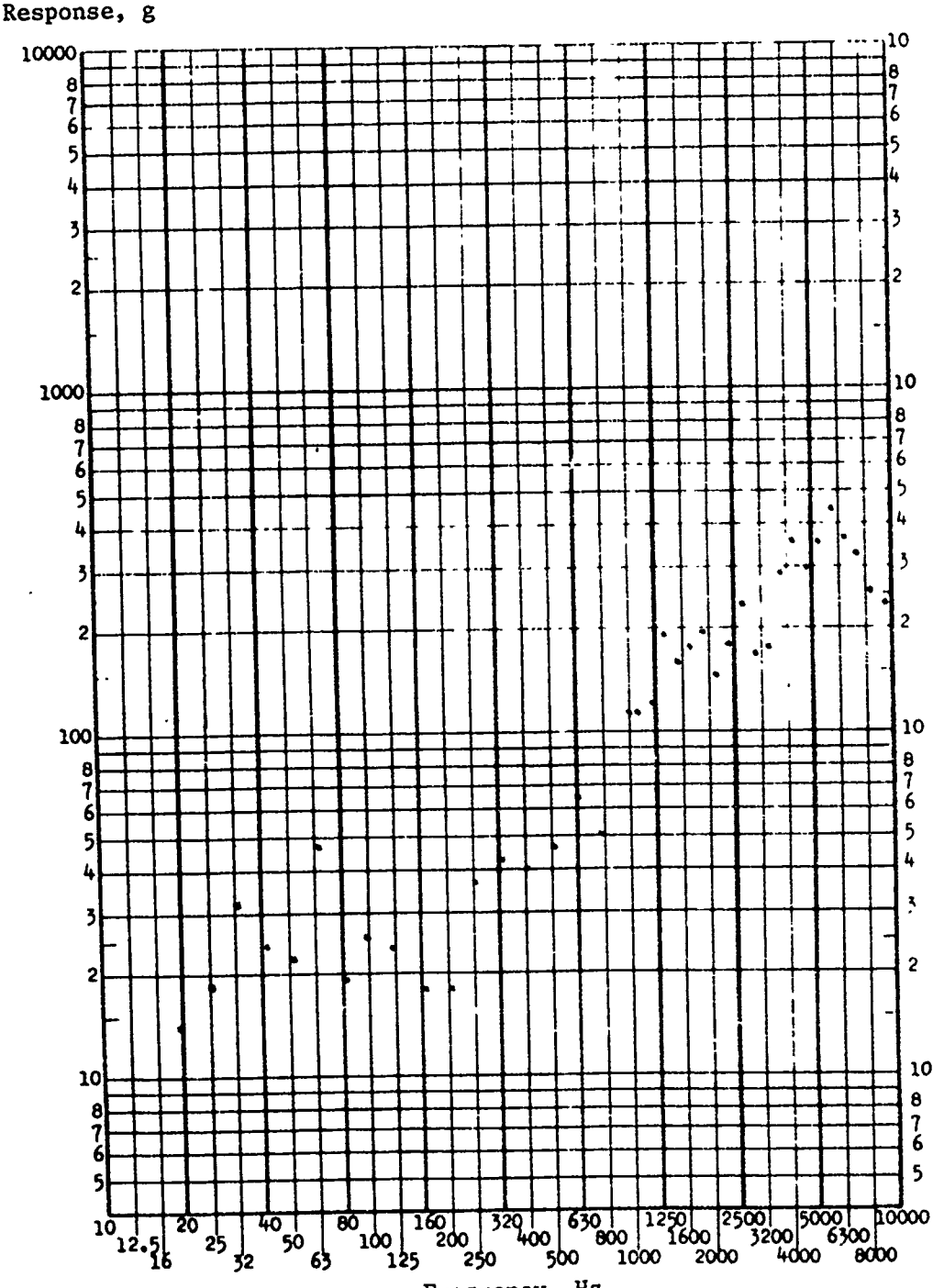
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 19 (cont)



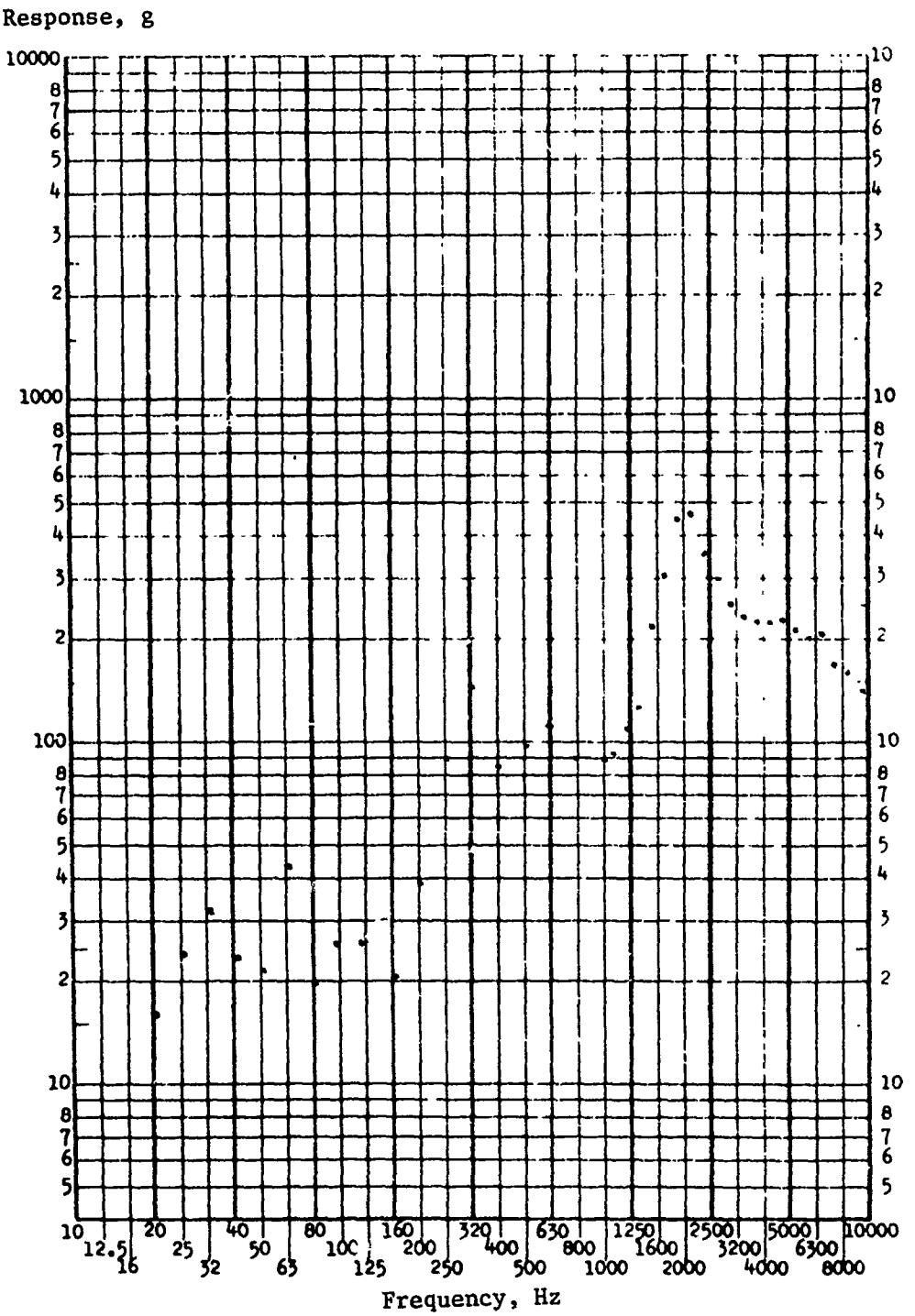
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 8 - Tangential axis longeron near station 77

Figure 19 (cont)



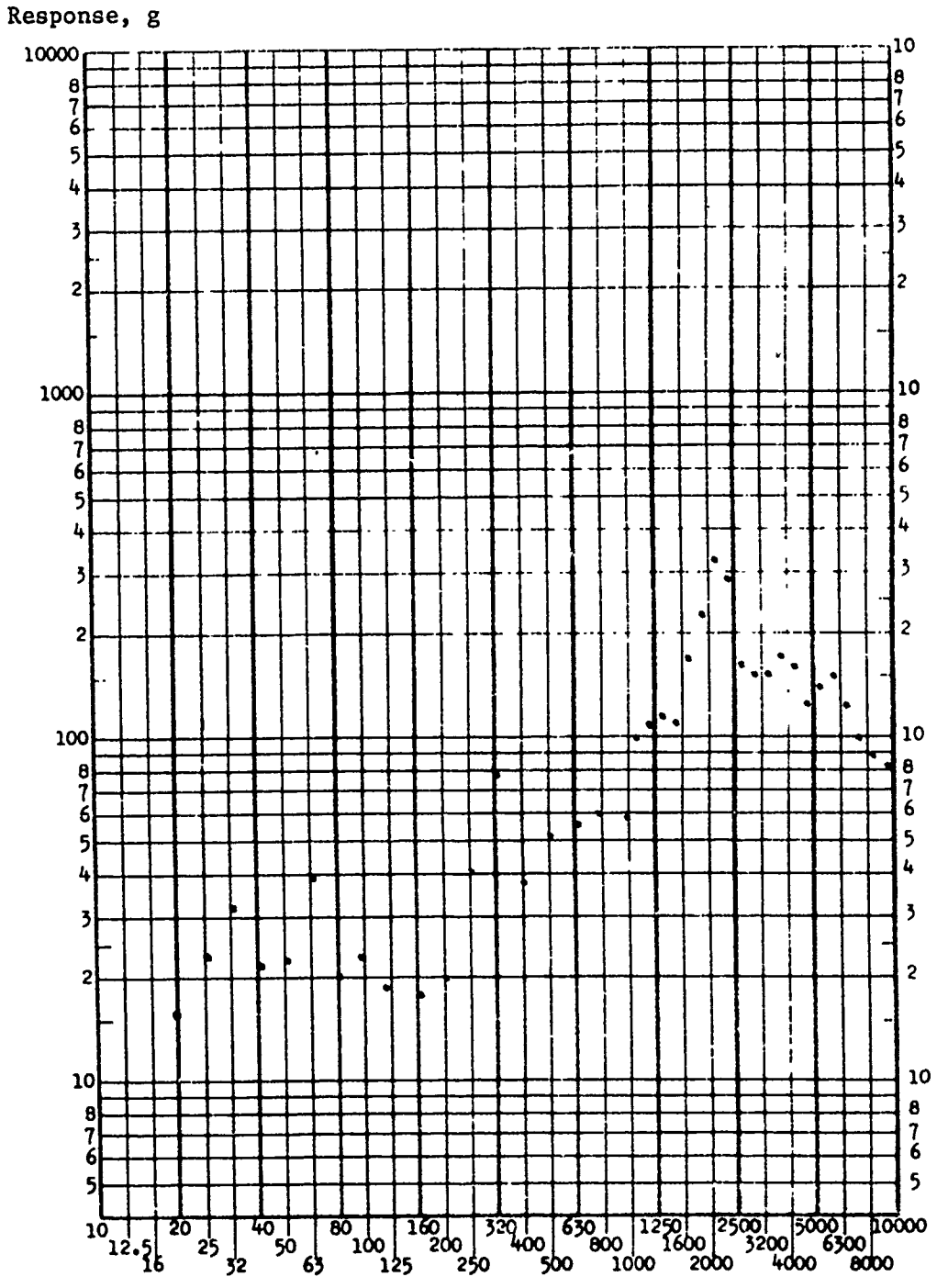
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 9 - Radial axis longeron near station 77

Figure 19 (cont)



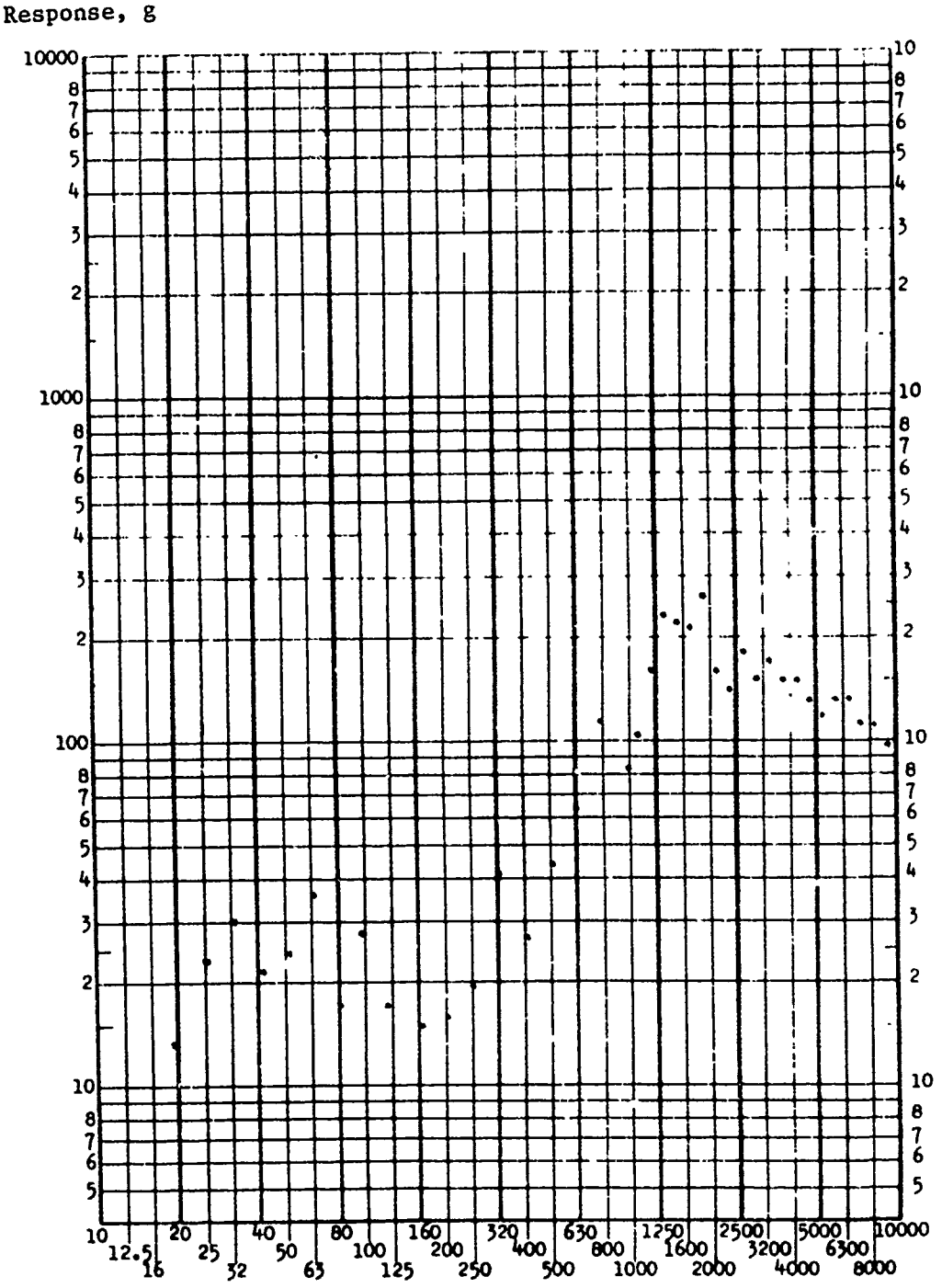
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 19 (cont)



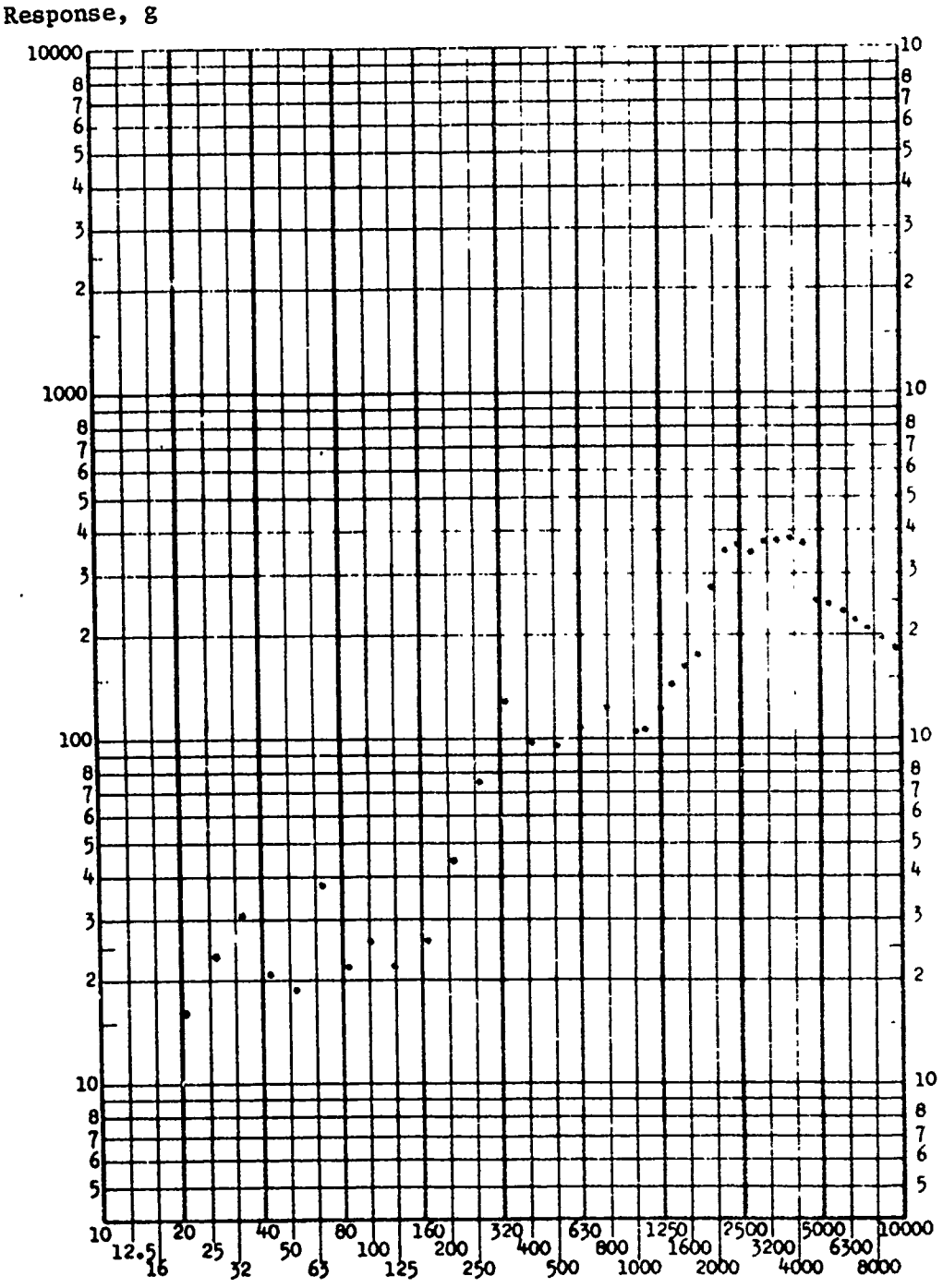
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 19 (cont)



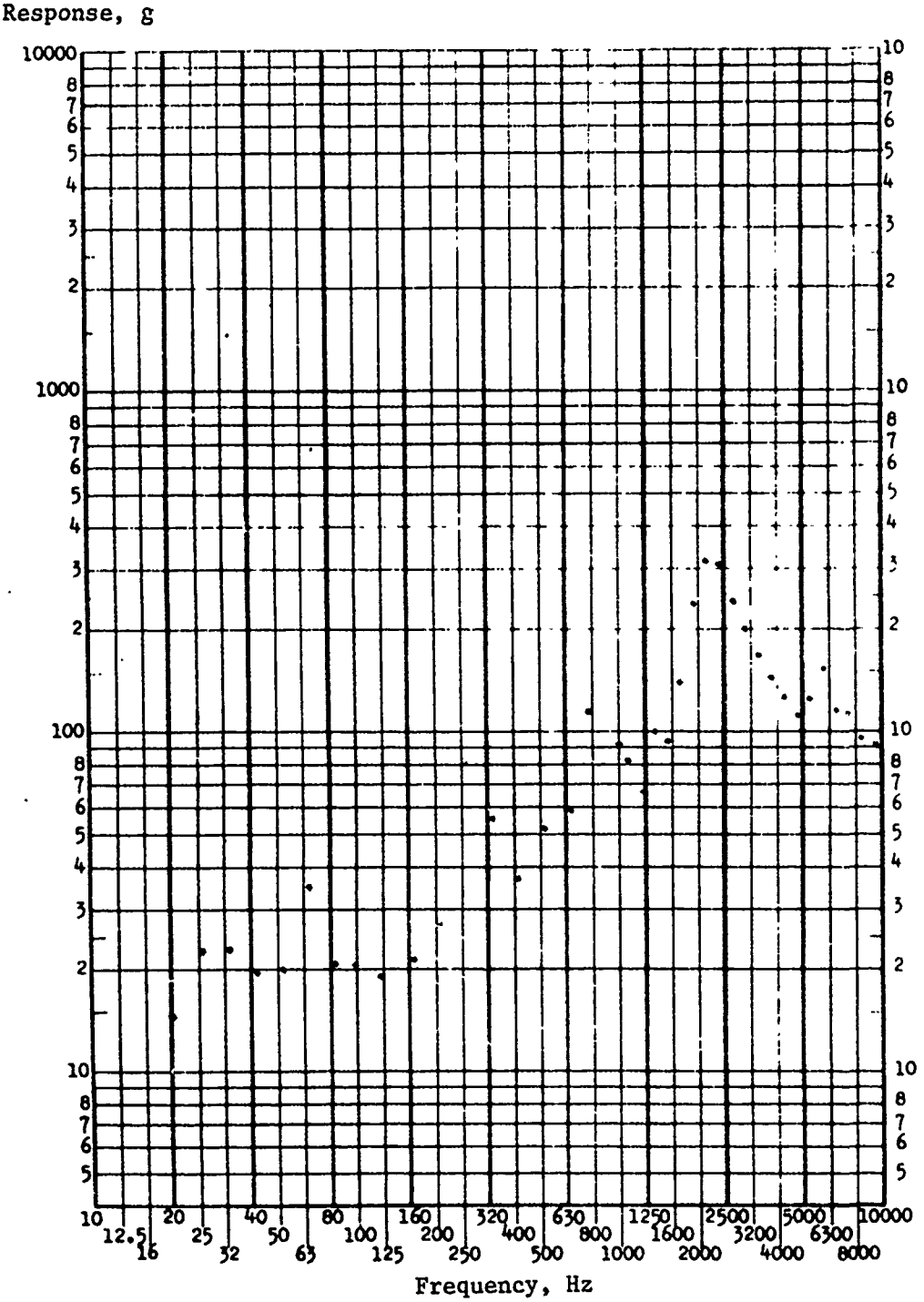
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 19 (cont)



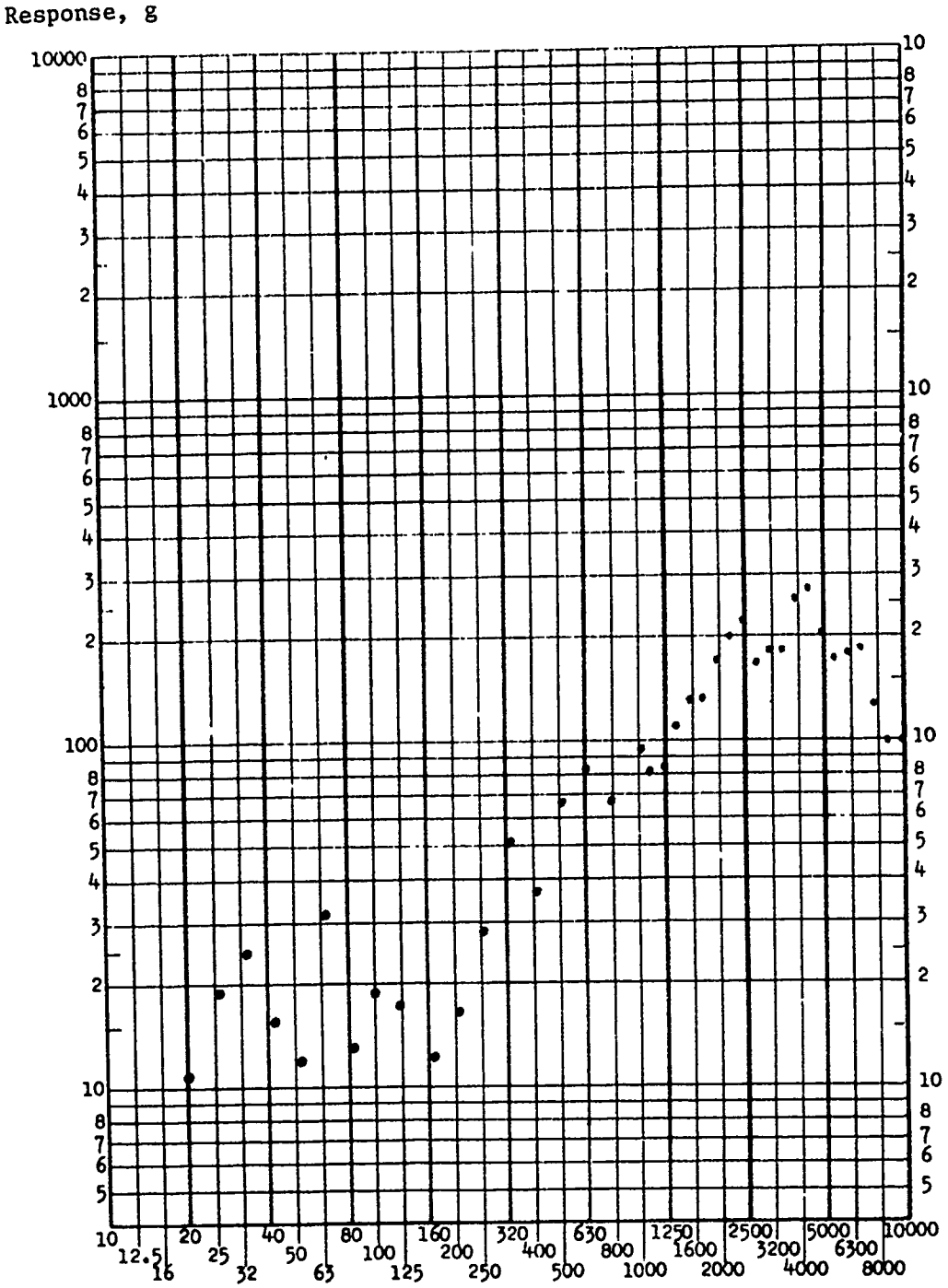
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 19 (cont)



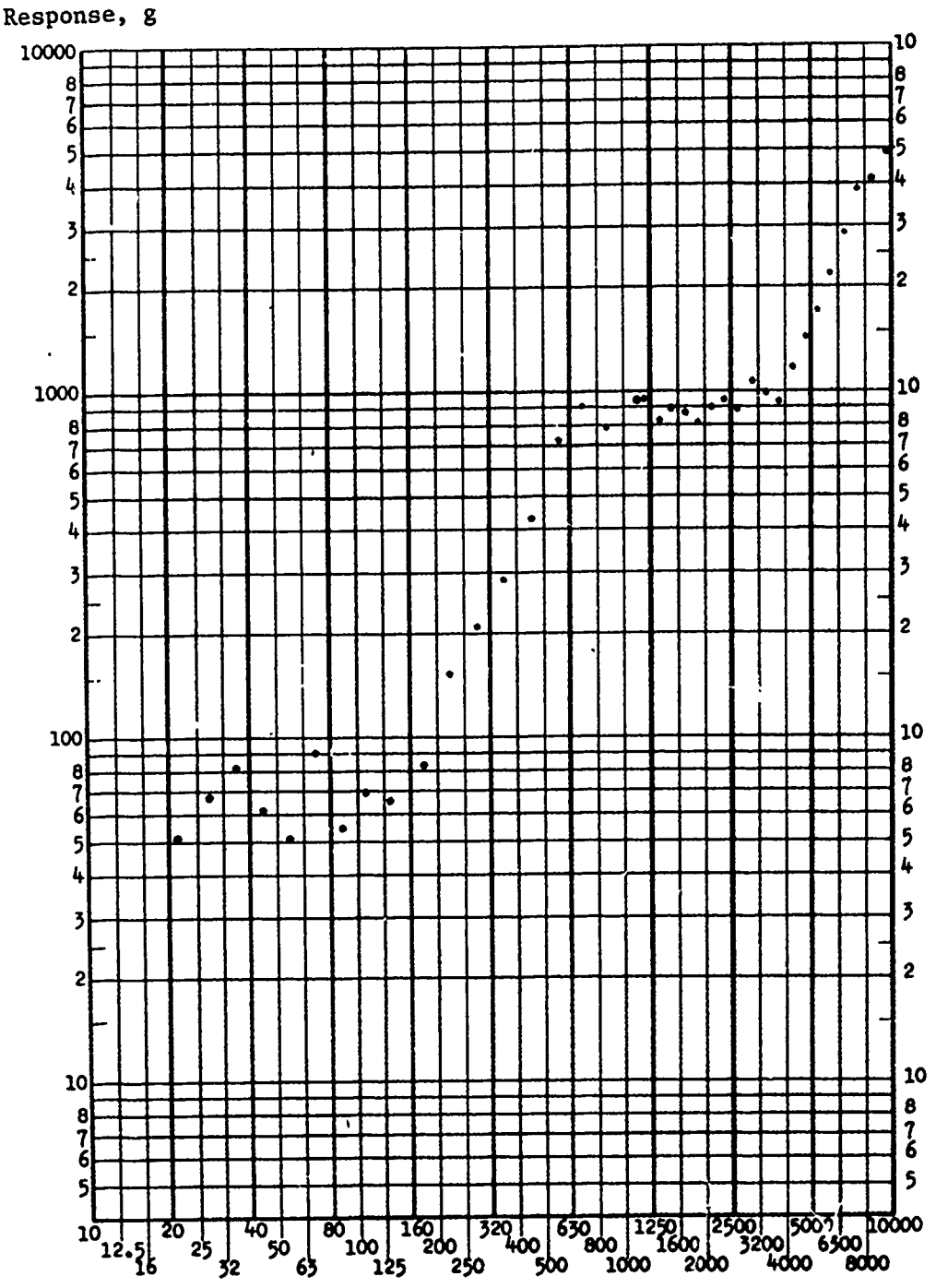
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 19 (cont)



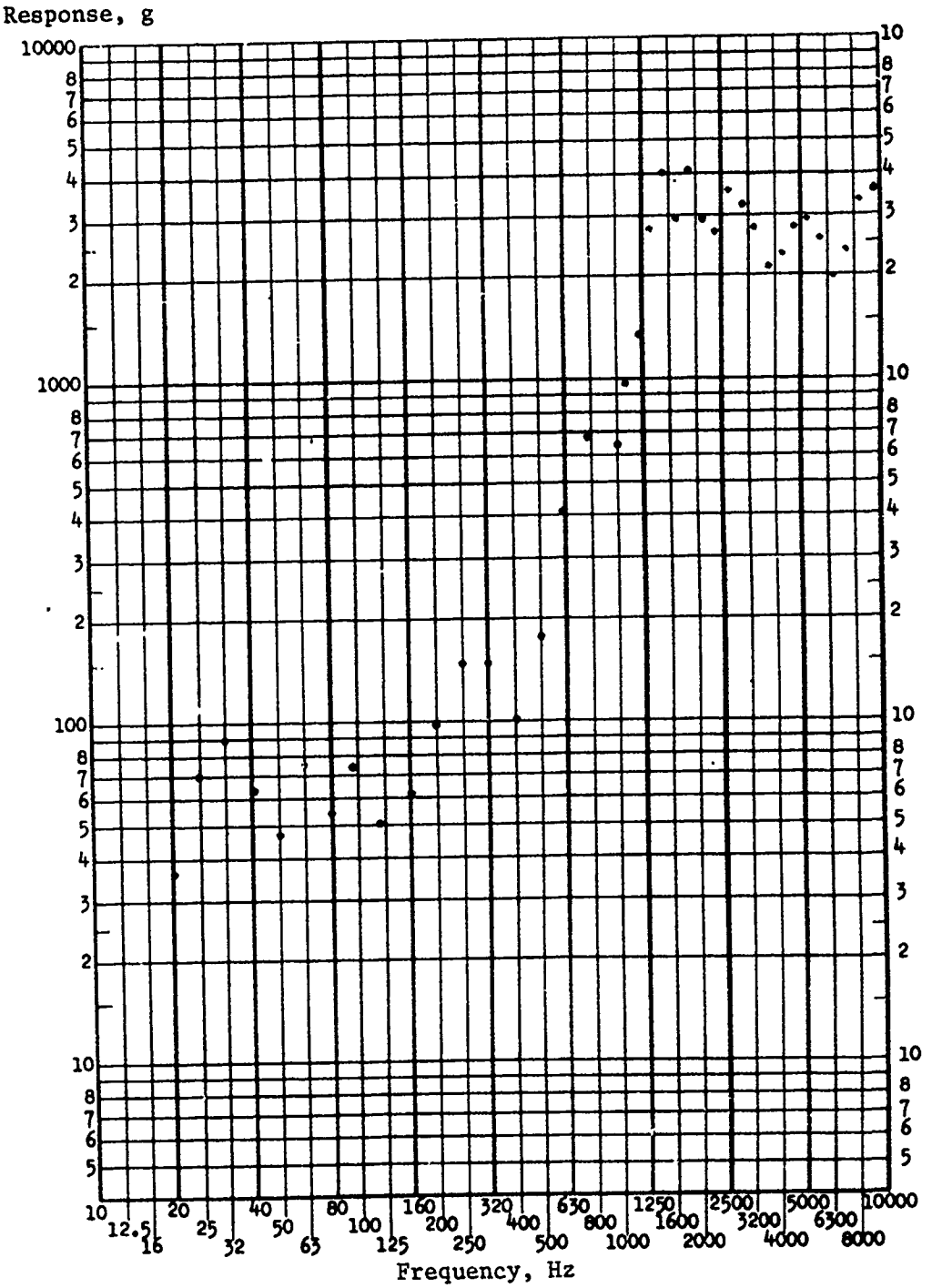
Bench Shock Test - Stage II/III Separation, Run 19
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 19 (concl)



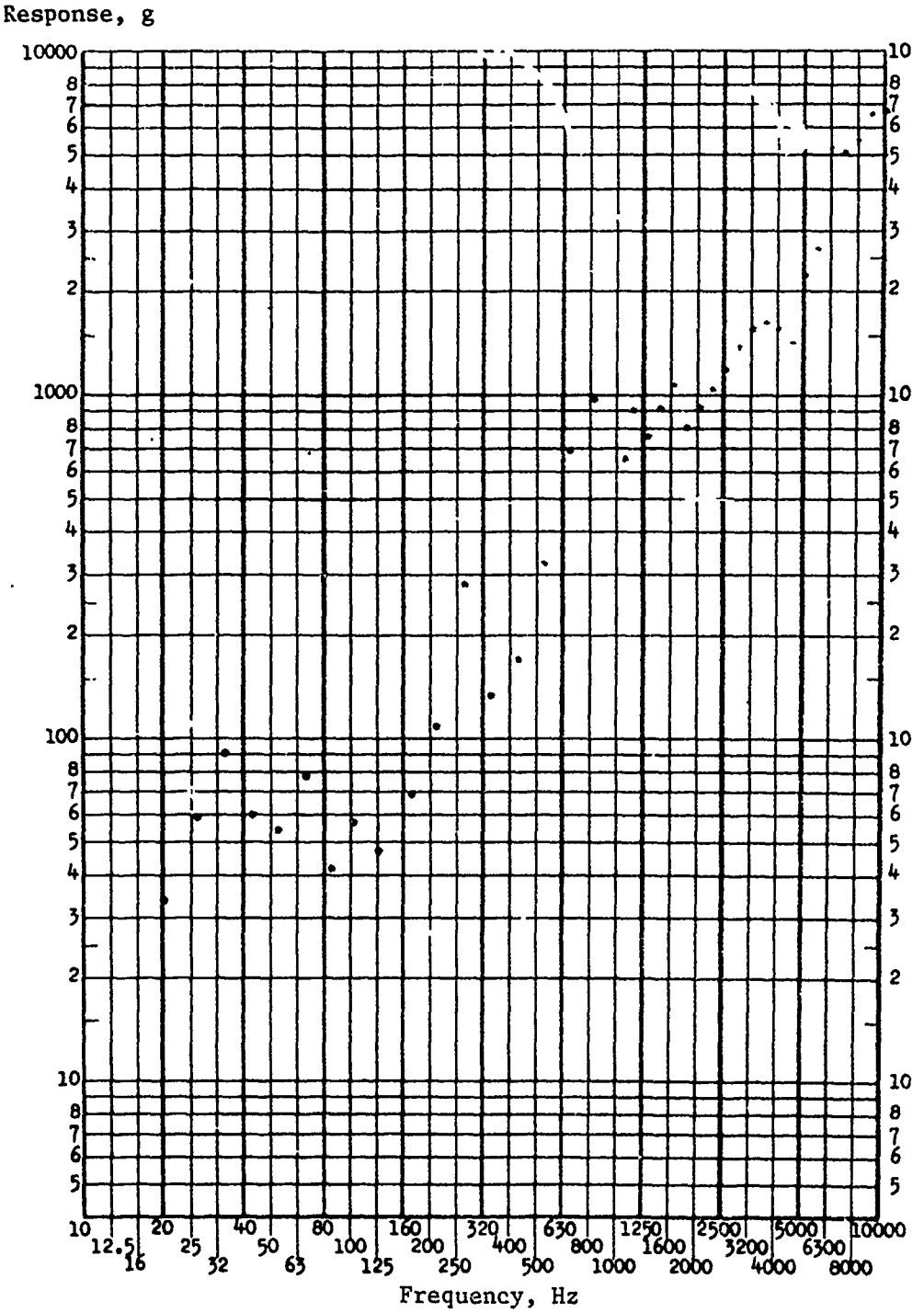
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 20 Run 20 Shock Response Spectrum



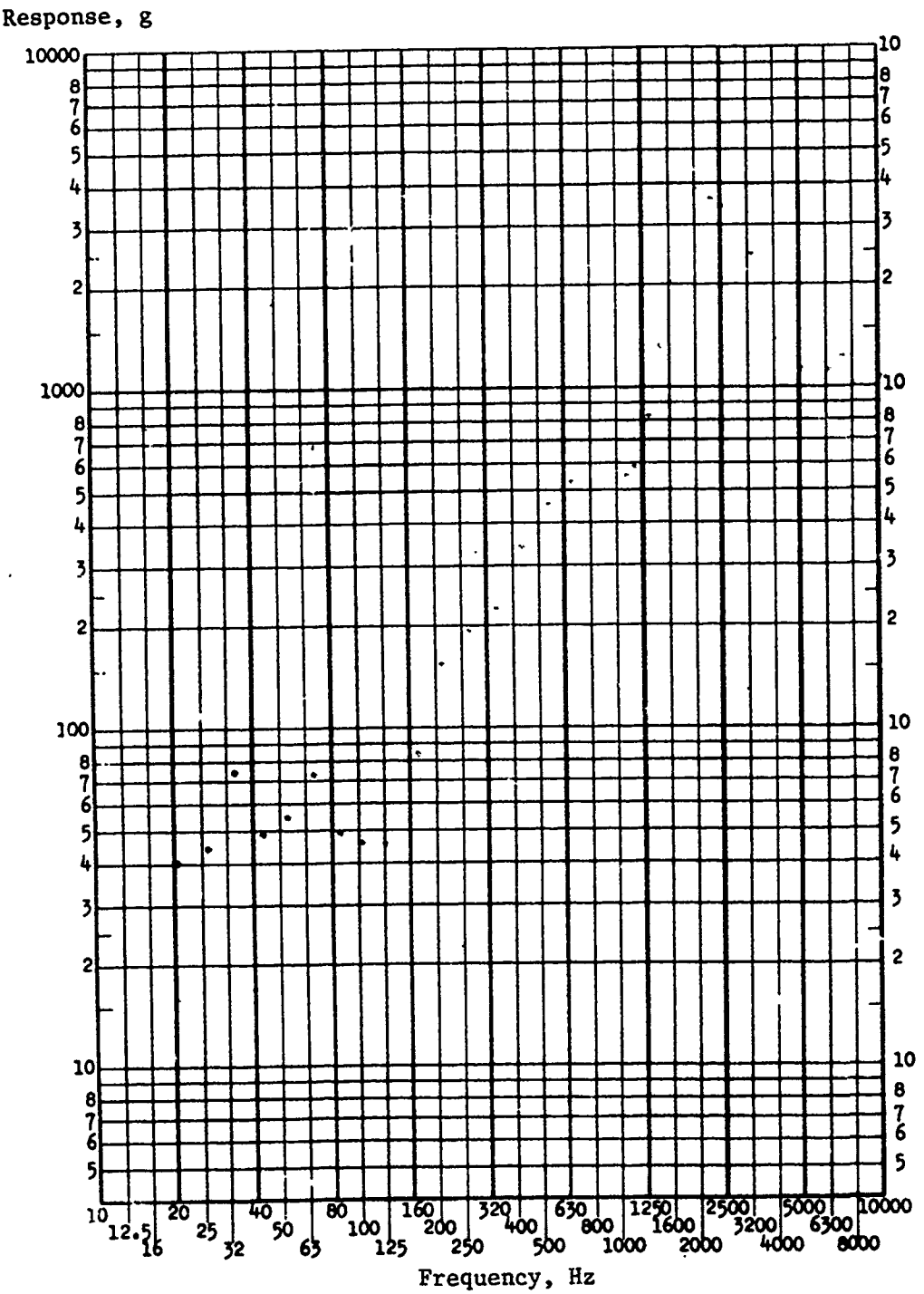
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 20 (cont)



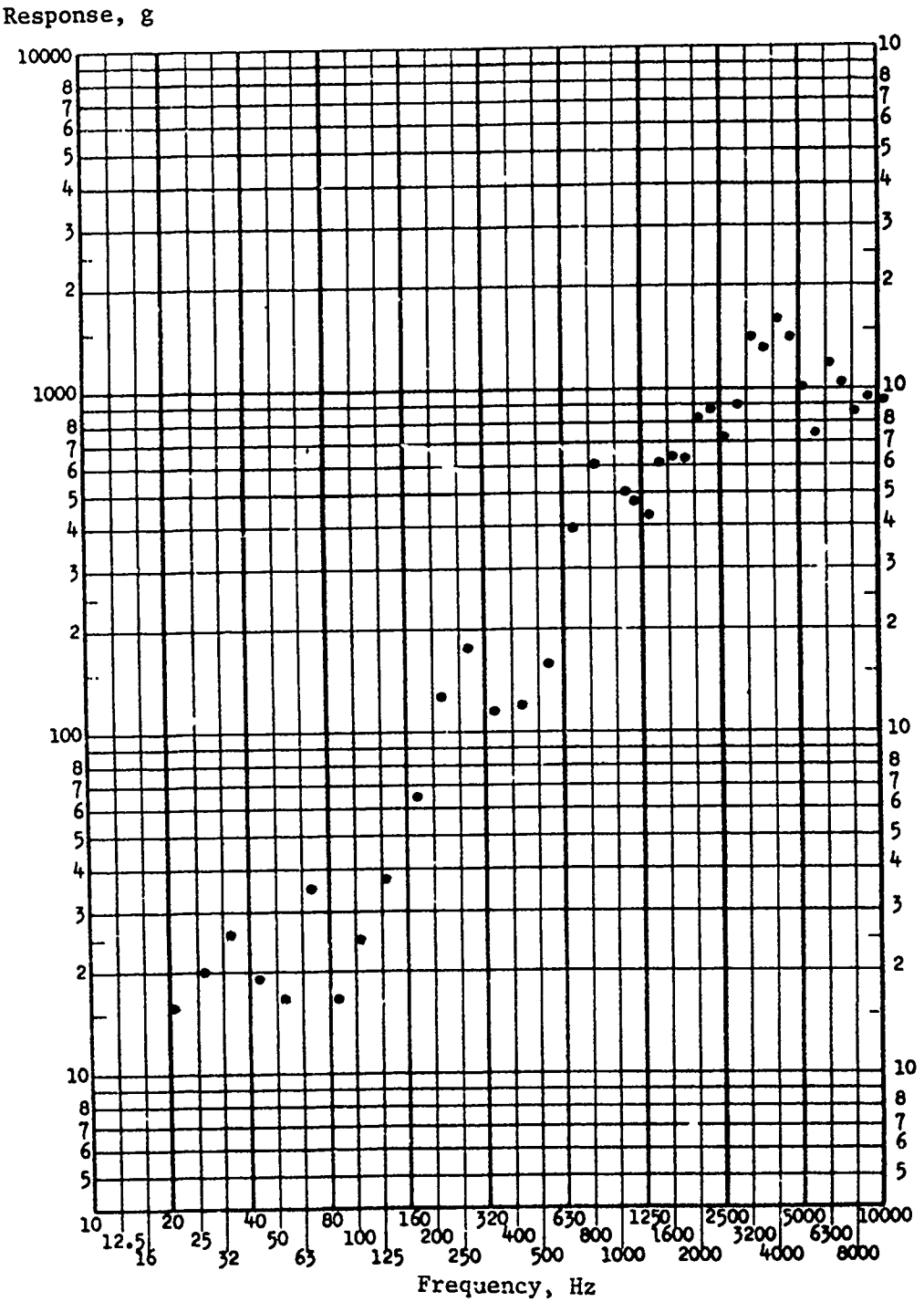
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 20 (cont)



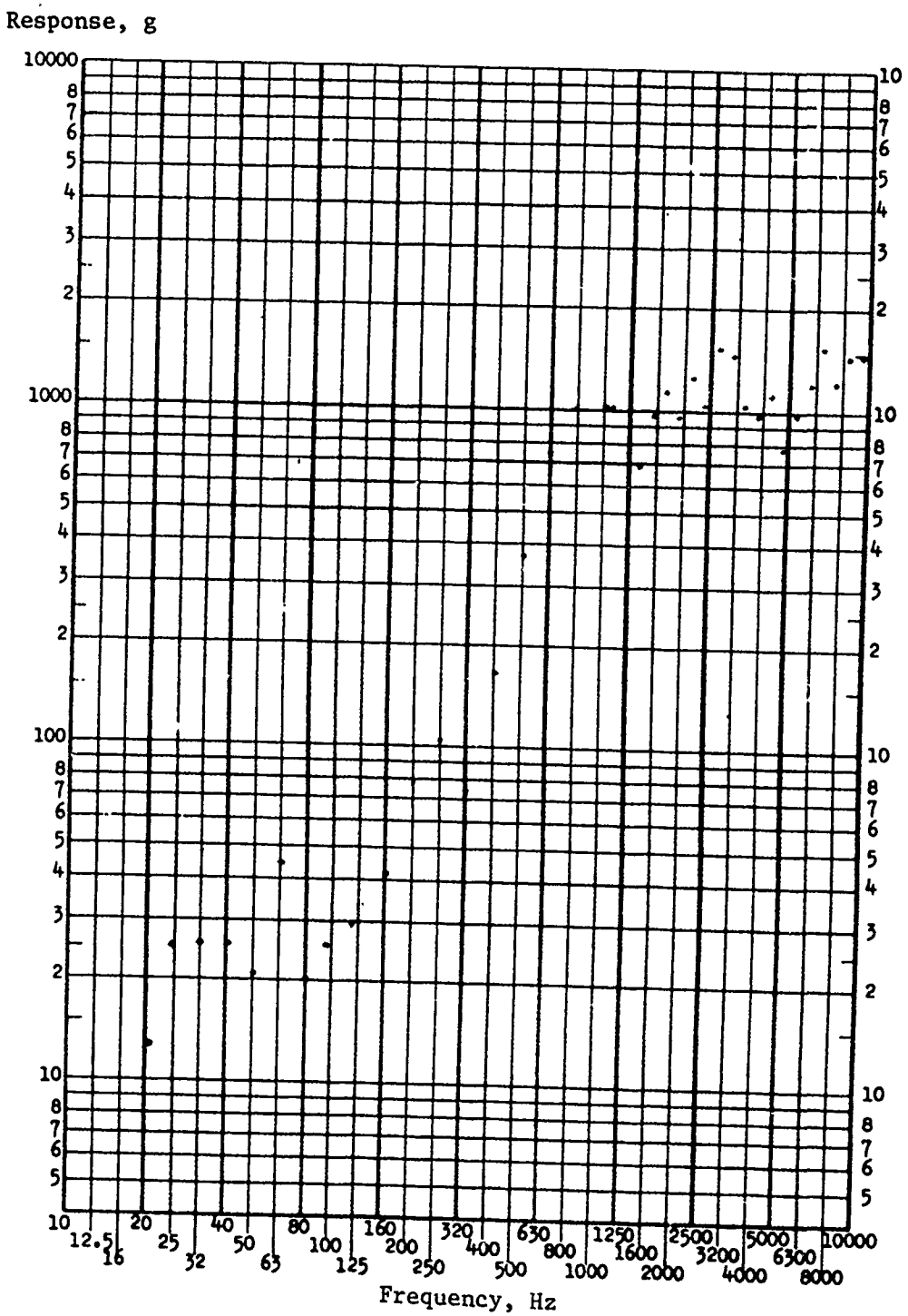
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 20 (cont)



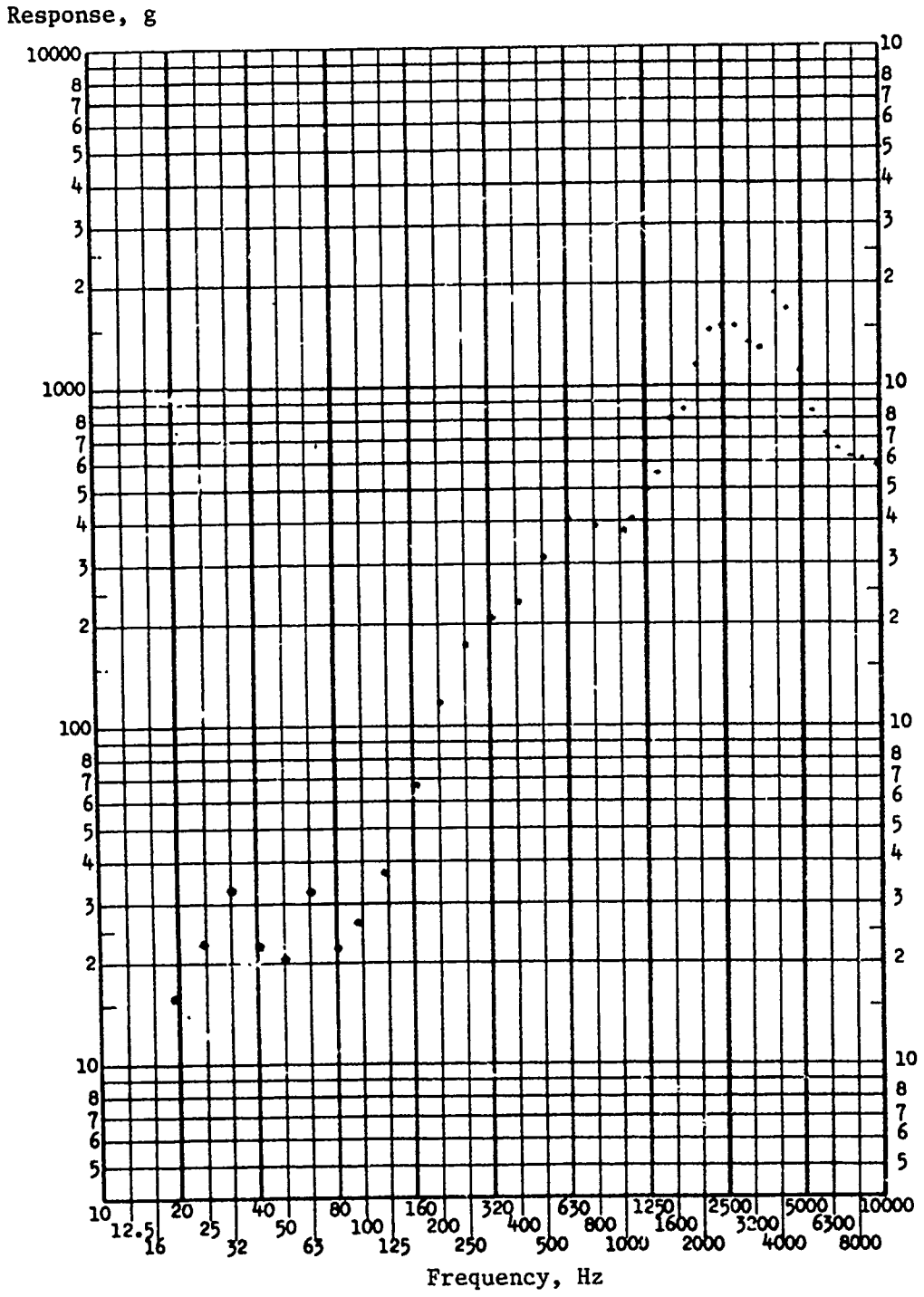
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 5 - Tangential axis longeron near station 117

Figure 20 (cont)



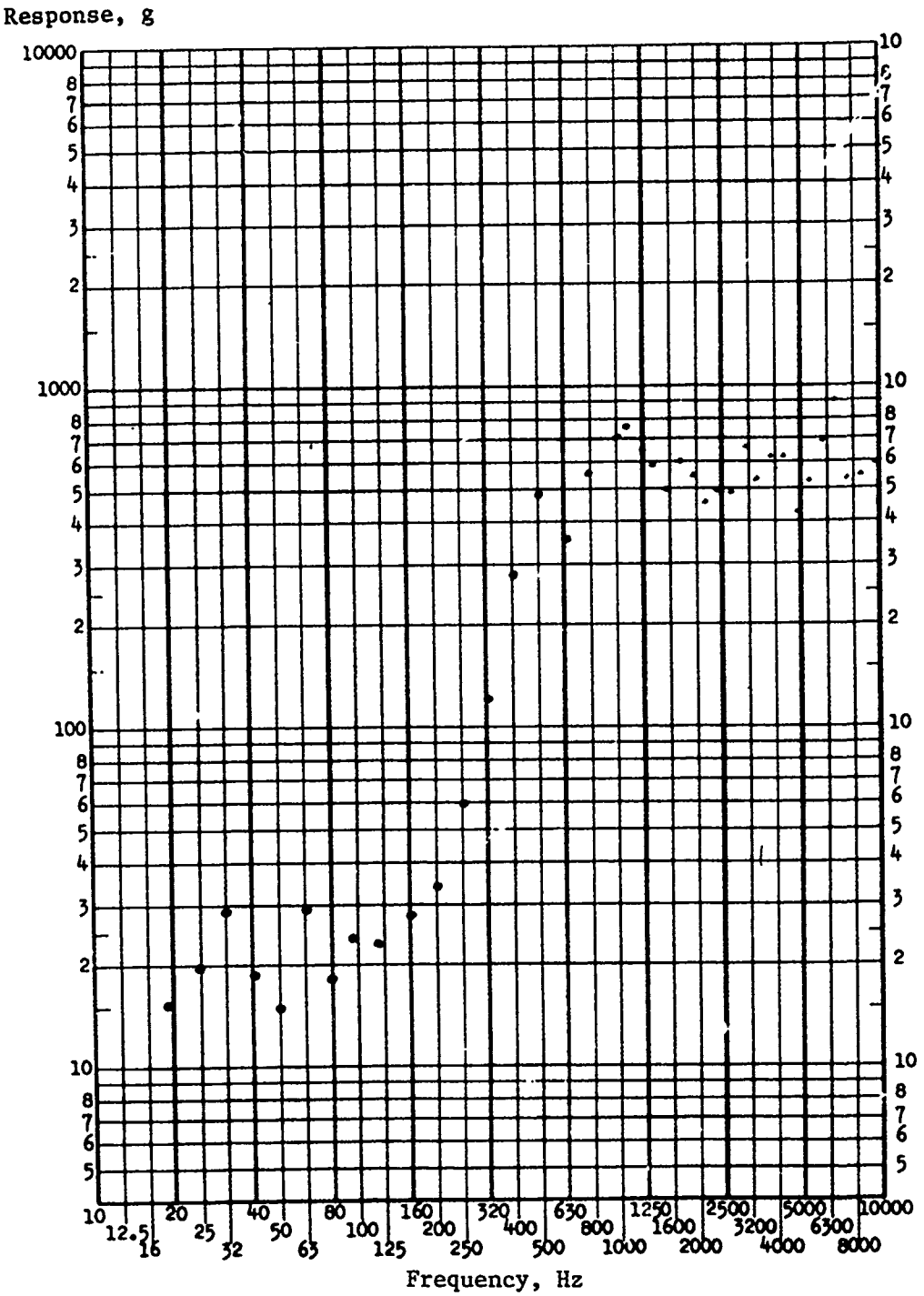
Bench Shock Test - Stage II/III Separation, Run 20
Measurement No. 6 - Radial axis longeron near station 117

Figure 20 (cont)



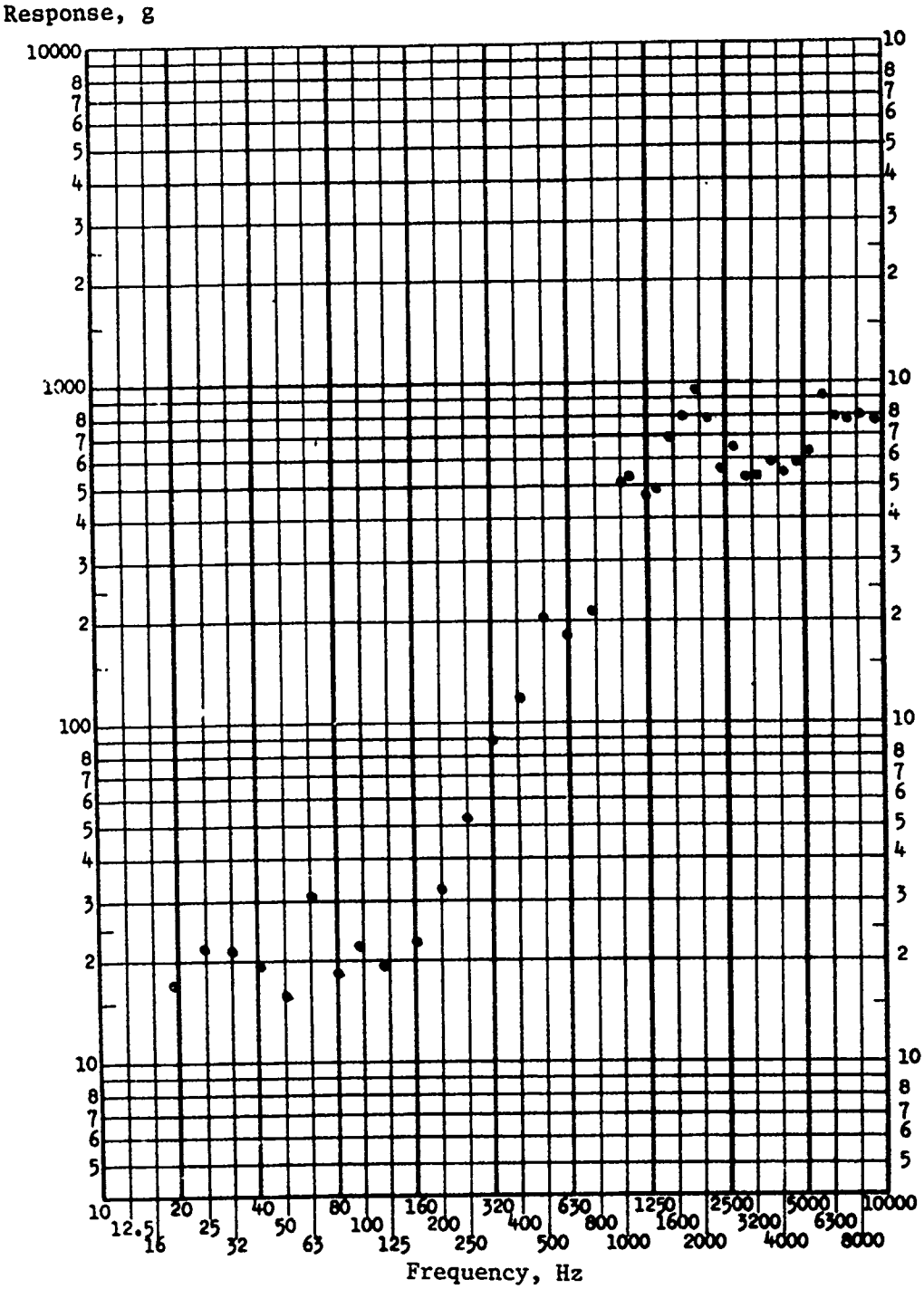
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 20 (cont)



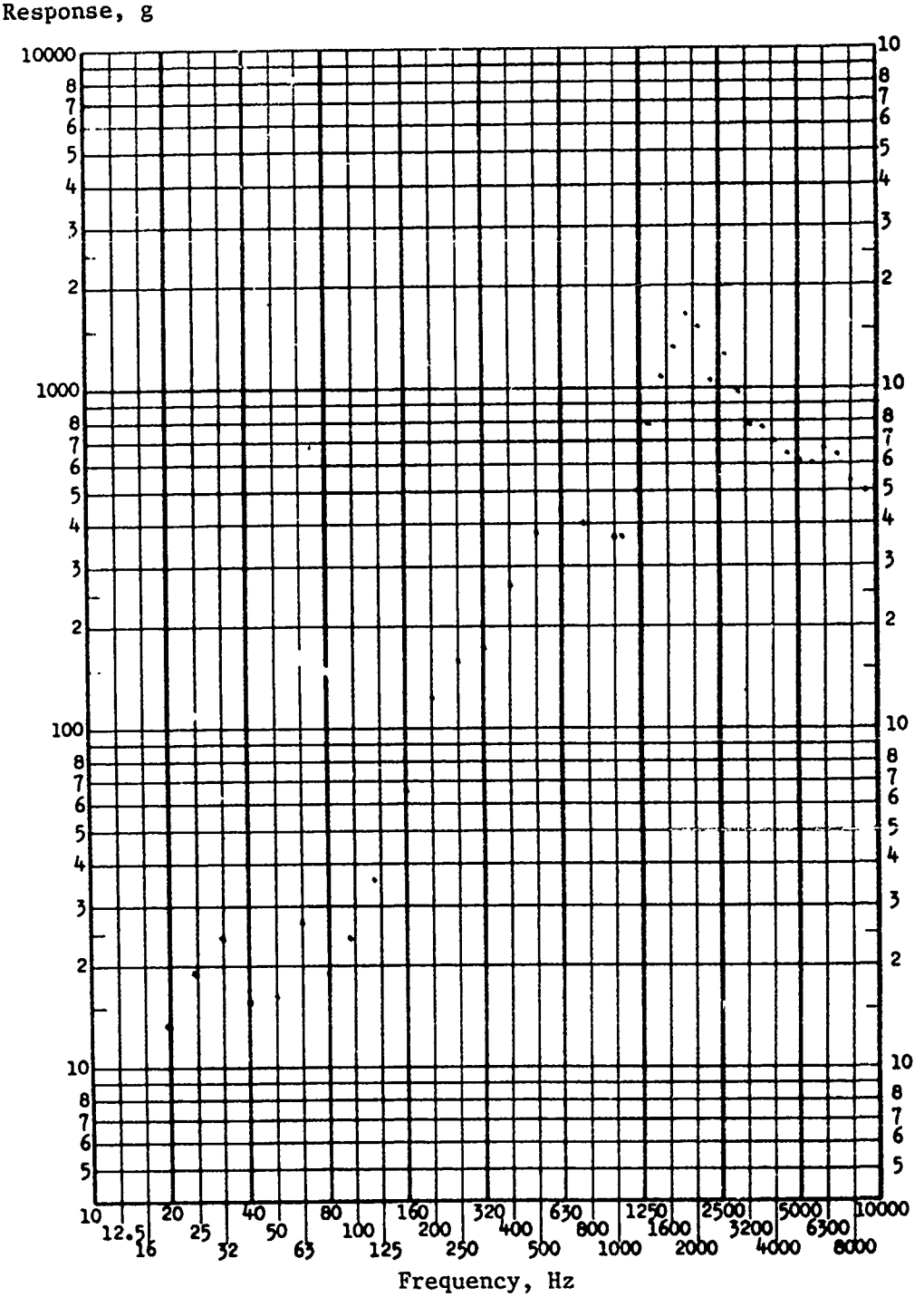
Bench Shock Test - Stage II/III Separation, Run 20_
Measurement No. 8 - Tangential axis longeron near station 77

Figure 20 (cont)



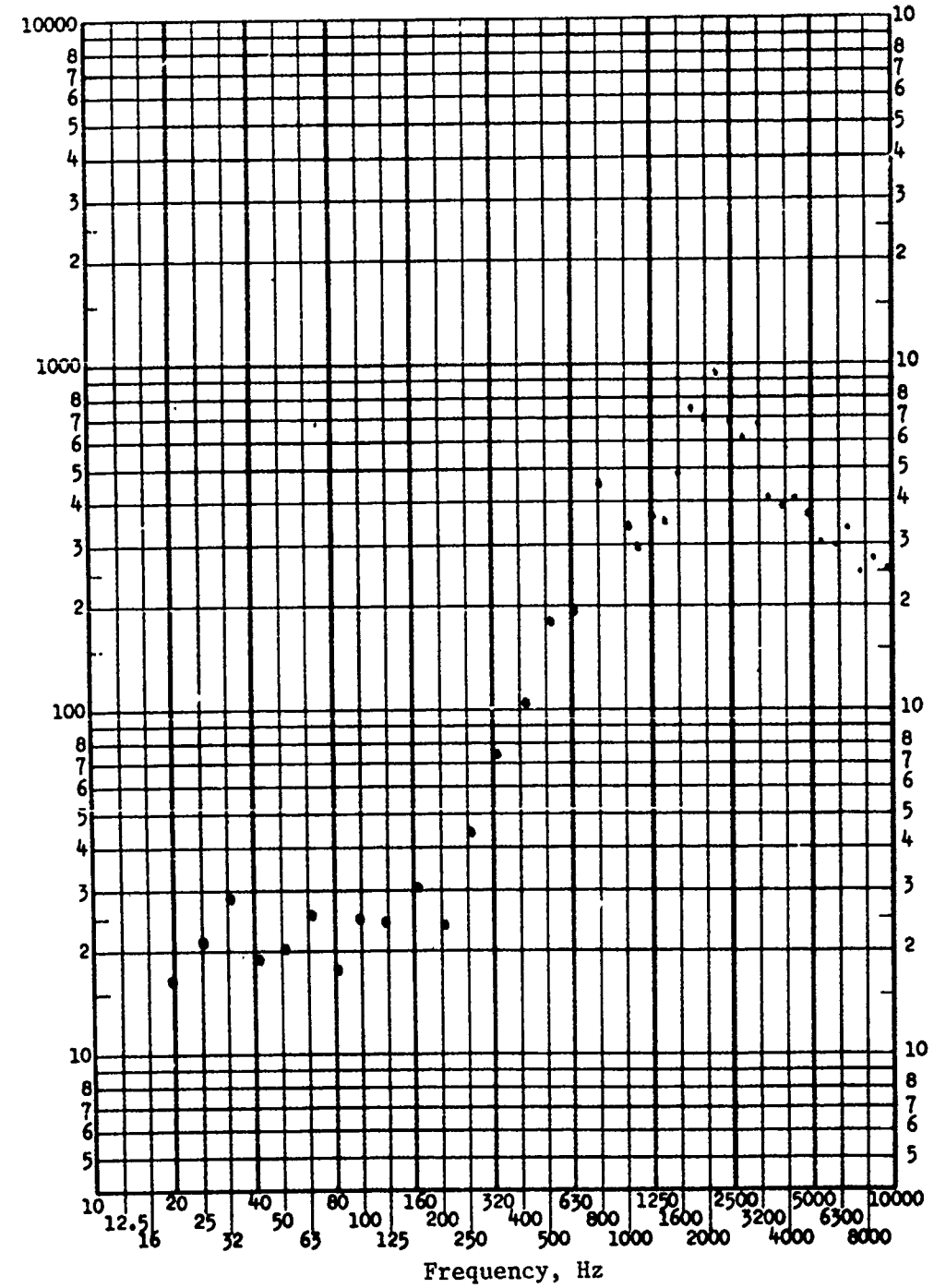
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 9 - Radial axis longeron near
station 77

Figure 20 (cont)



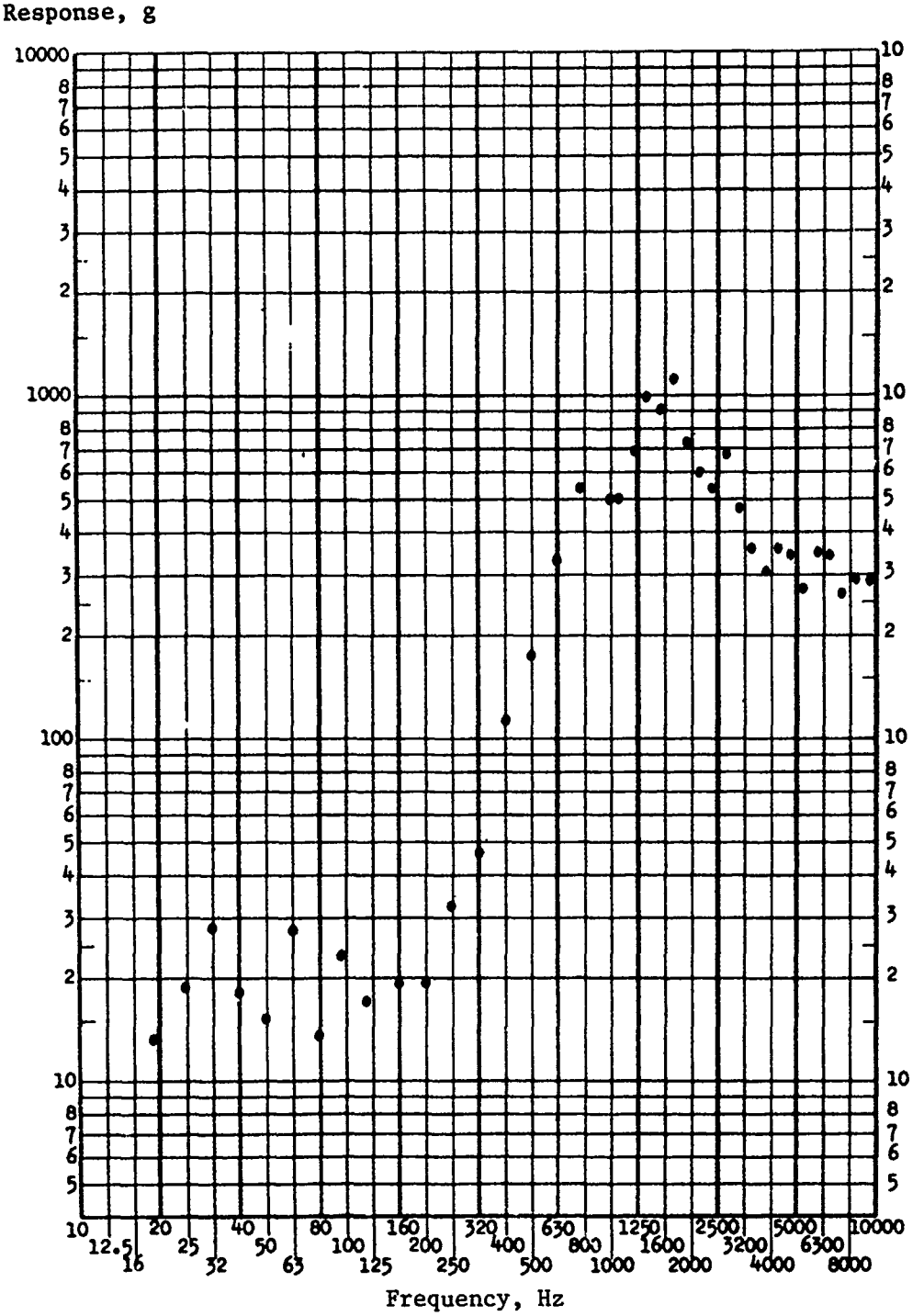
Bench Shock Test - Stage II/III Separation, Run 20
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 20 (cont)



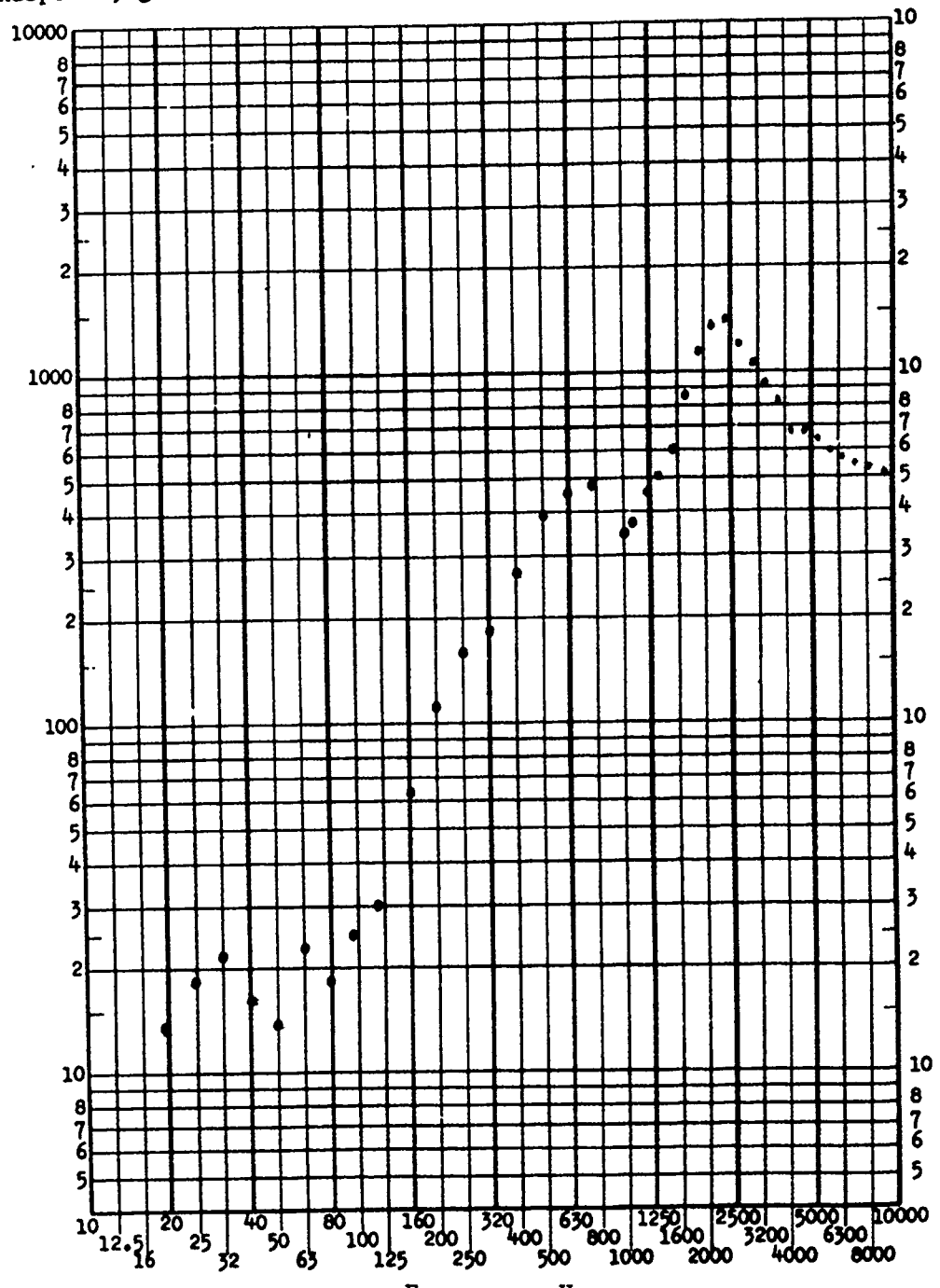
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 20 (cont)



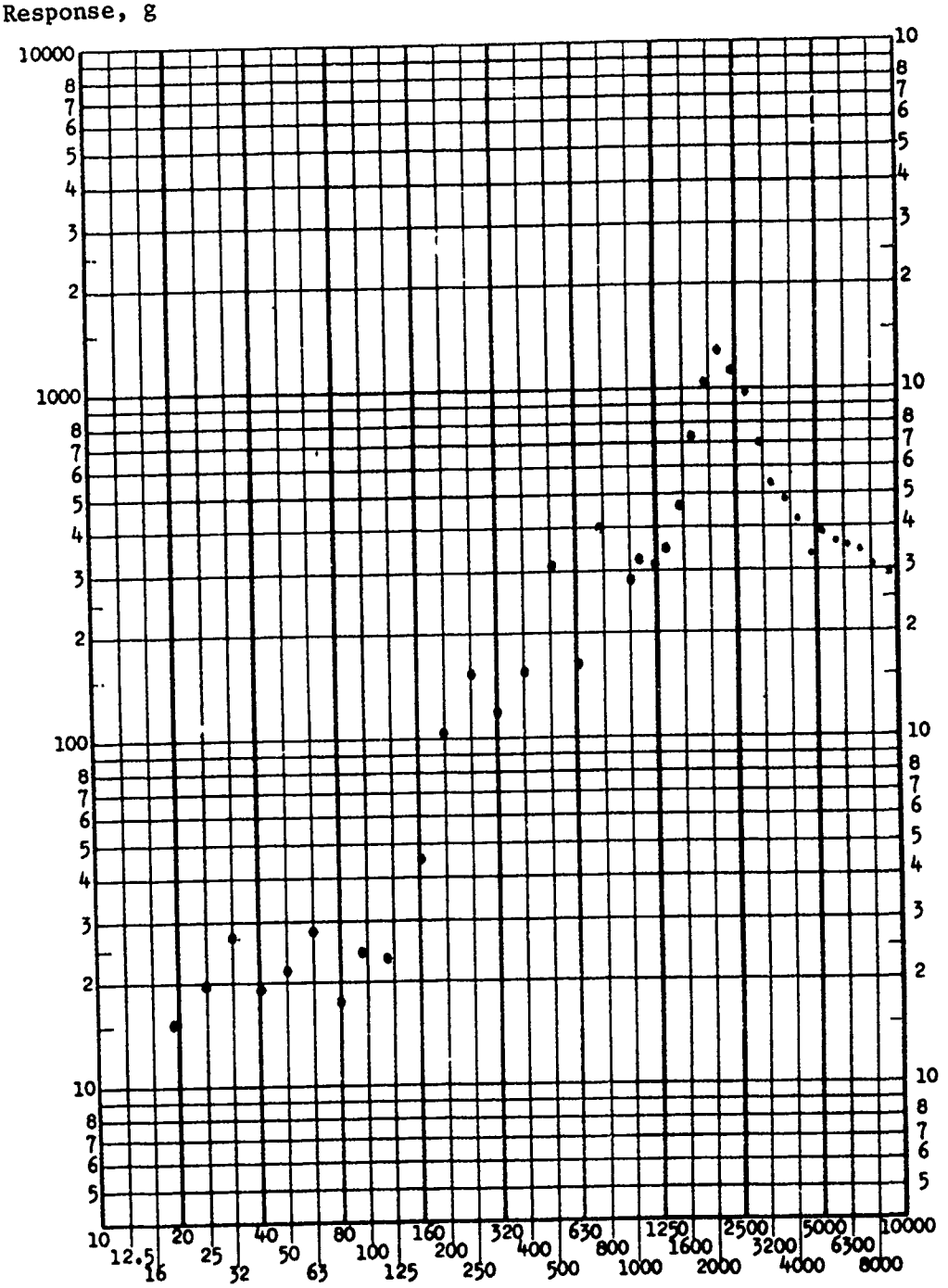
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 20 (cont)



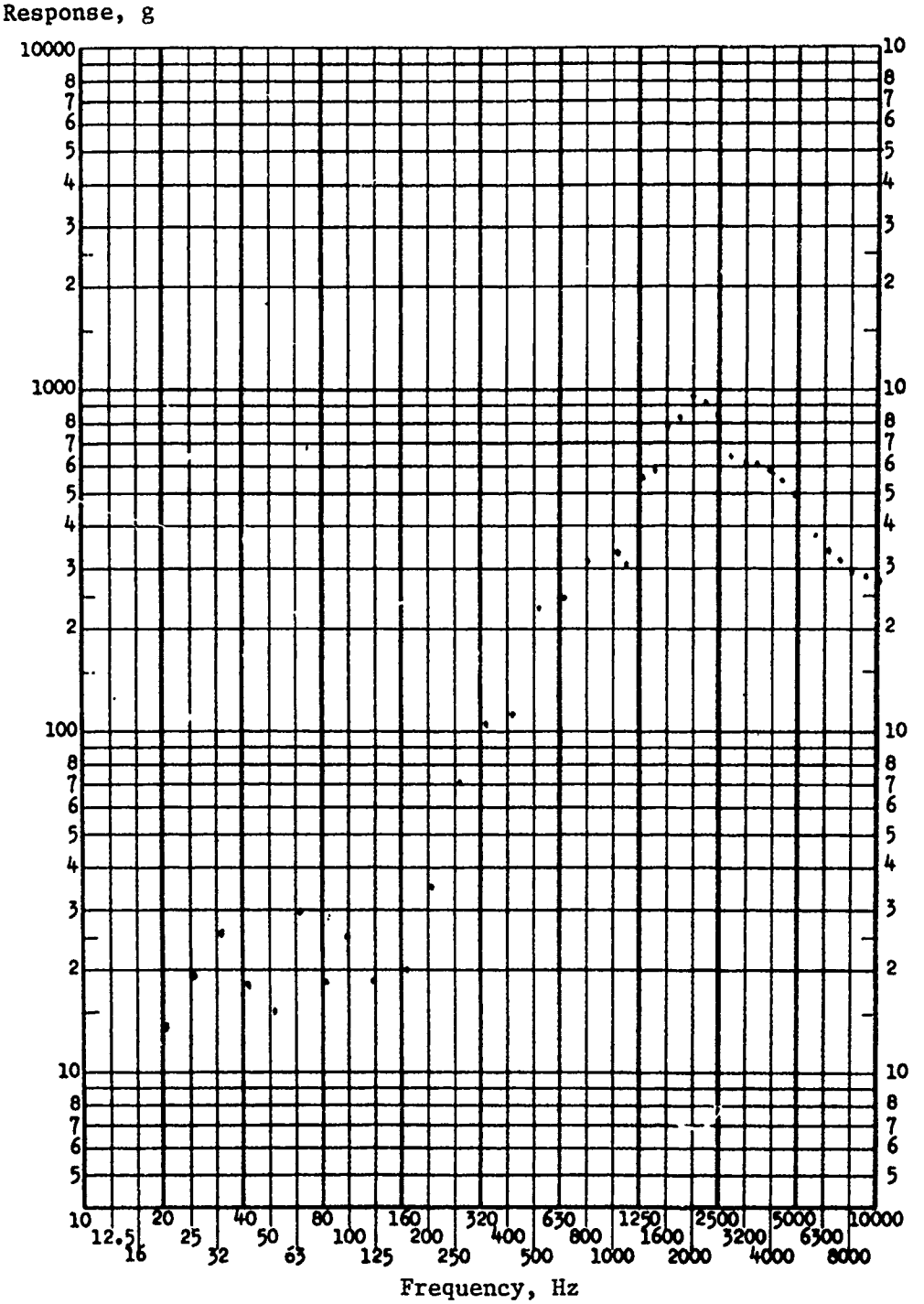
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 20 (cont)



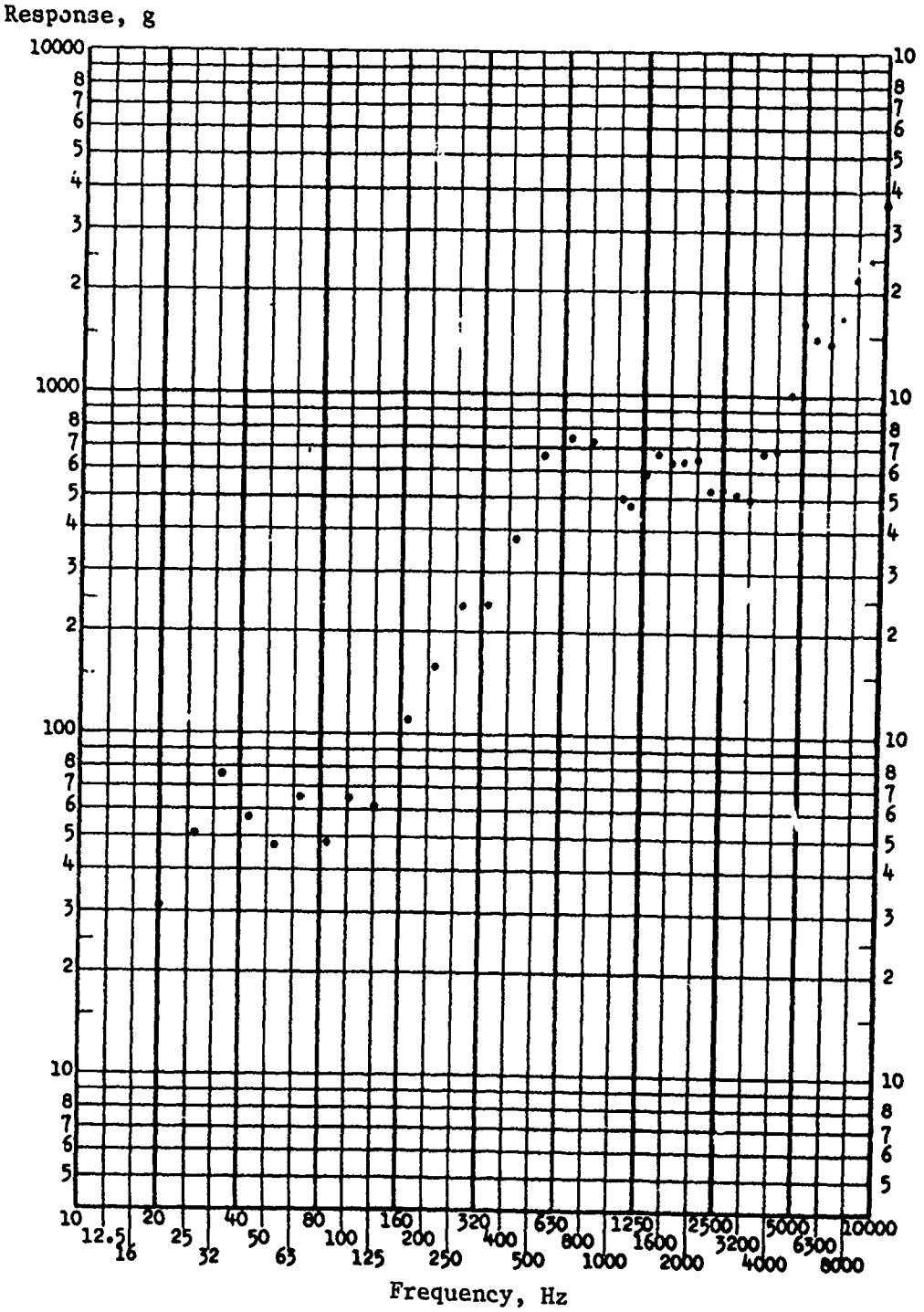
Bench Shock Test - Stage II/III Separation, Run 20 _
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 20 (cont)



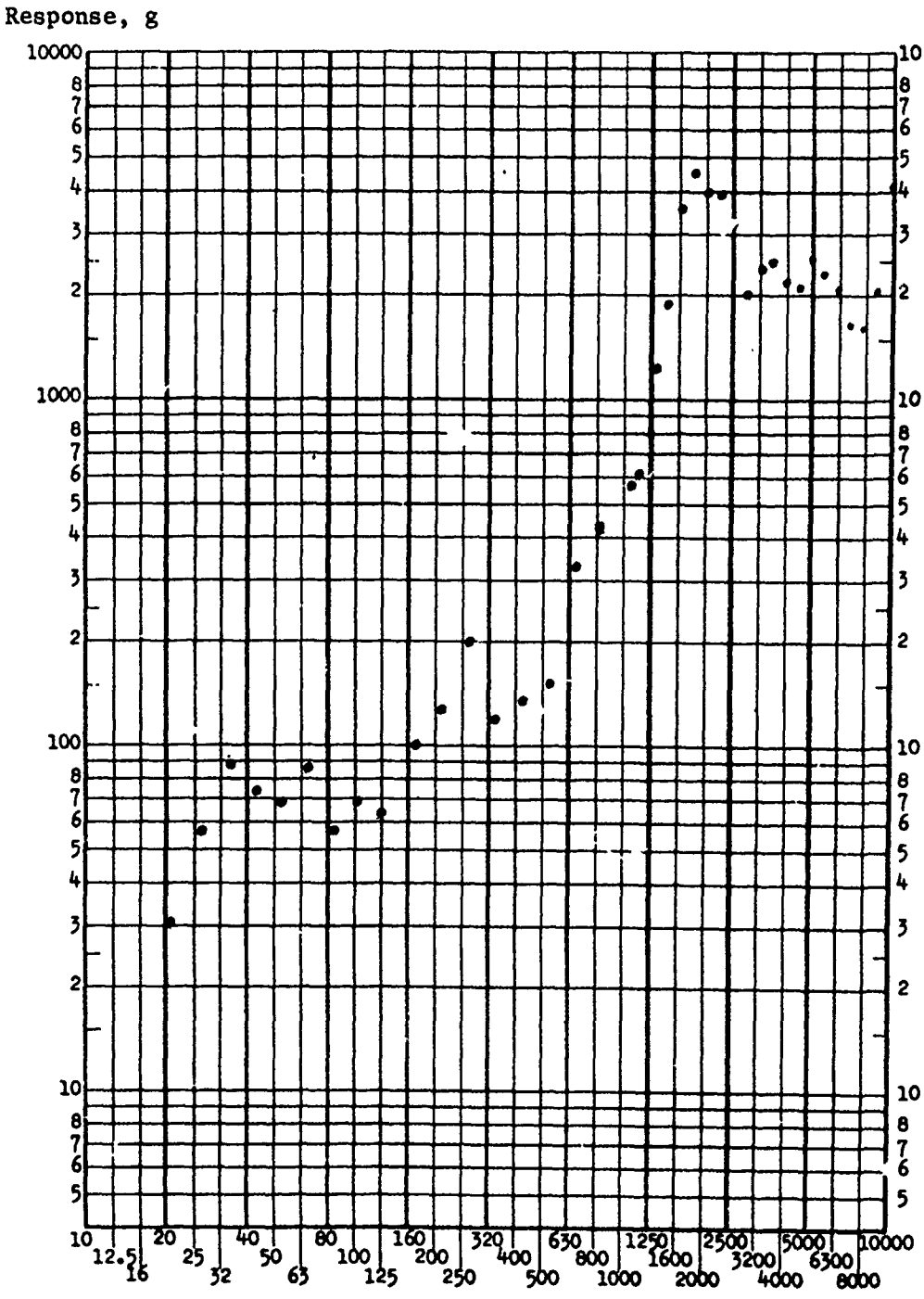
Bench Shock Test - Stage II/III Separation, Run 20
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 20 (concl)



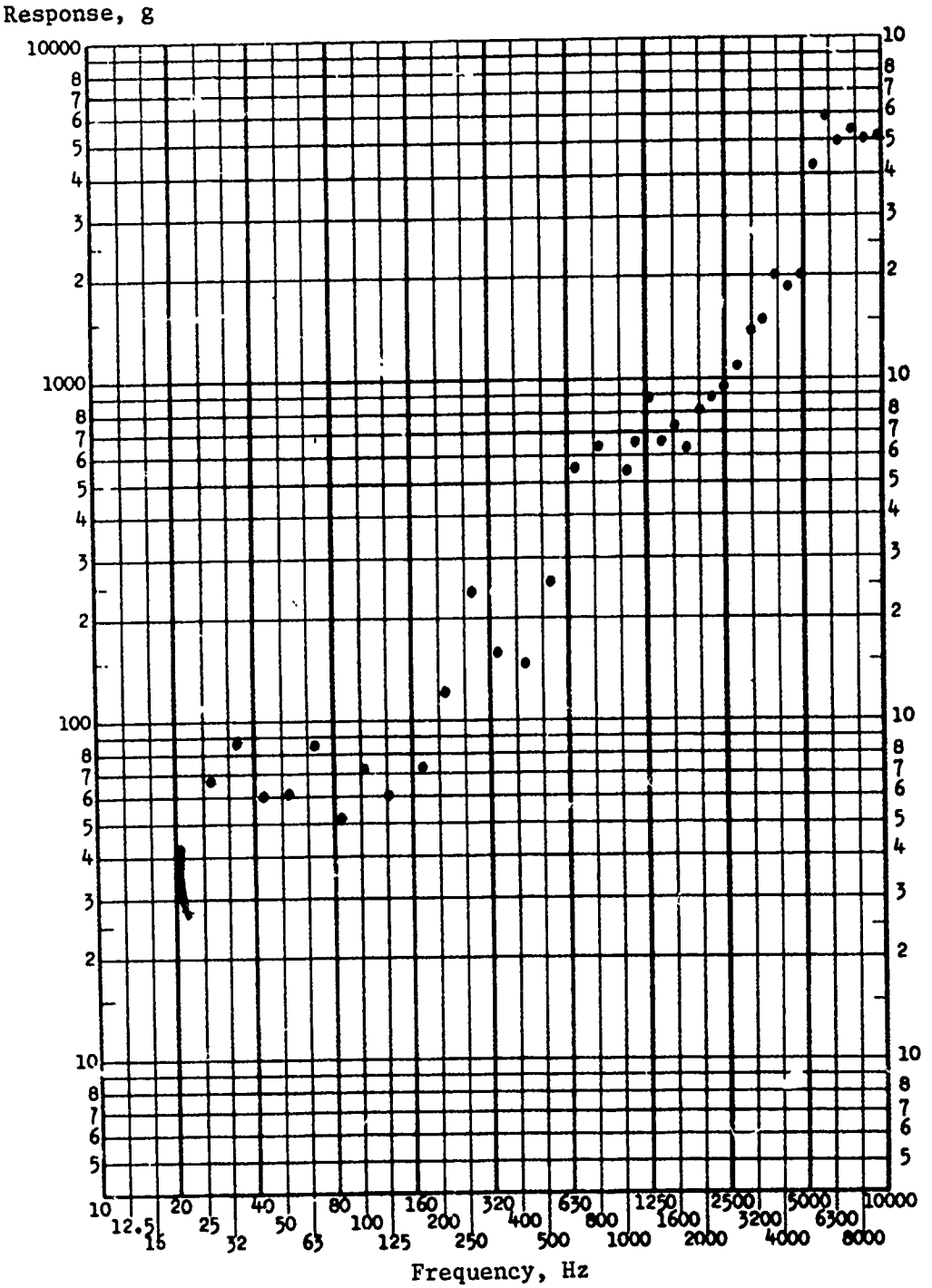
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 21 Run 21 Shock Response Spectrum



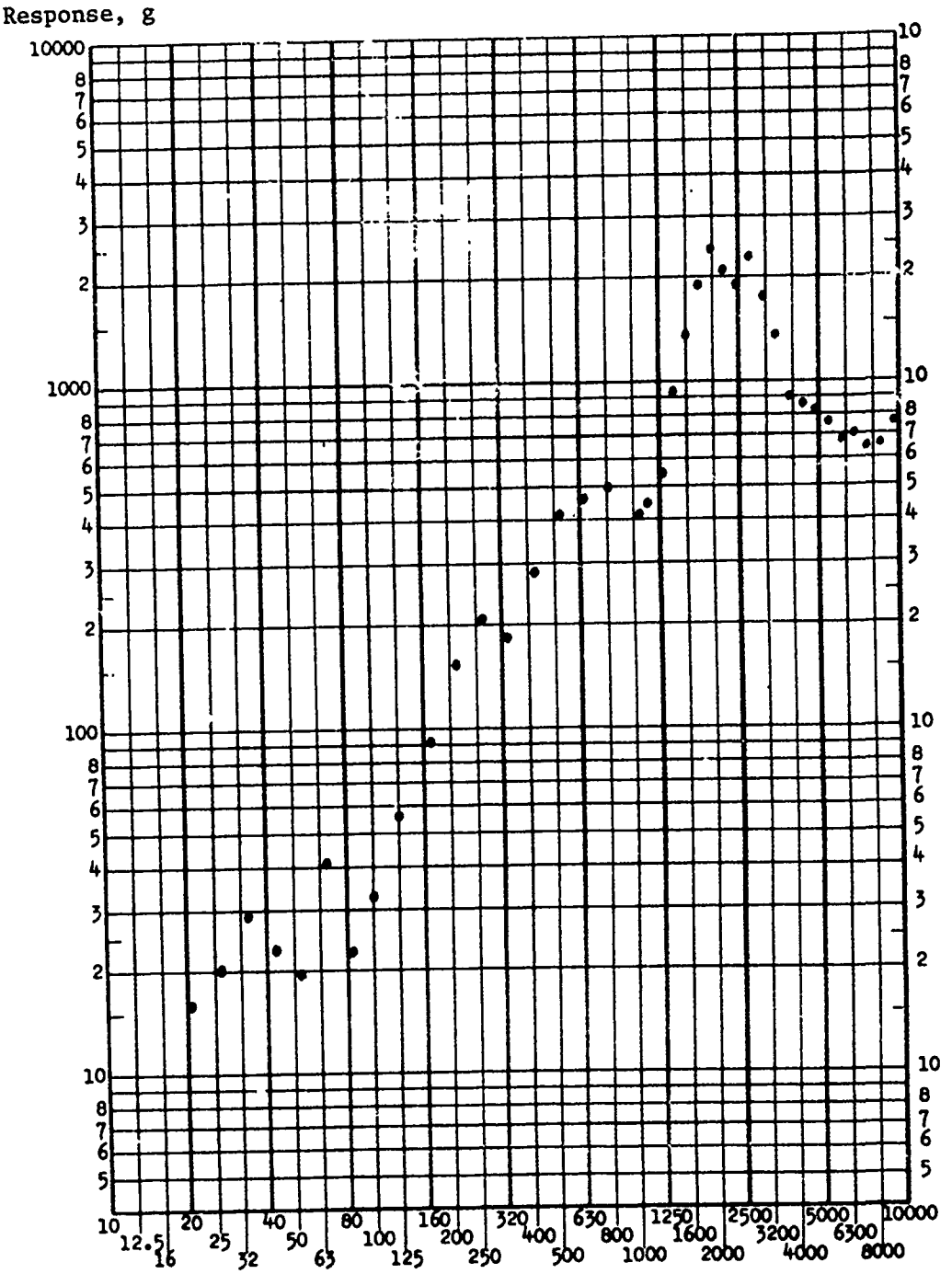
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 2 - Tangential axis longeron near station 133

Figure 21 (cont)



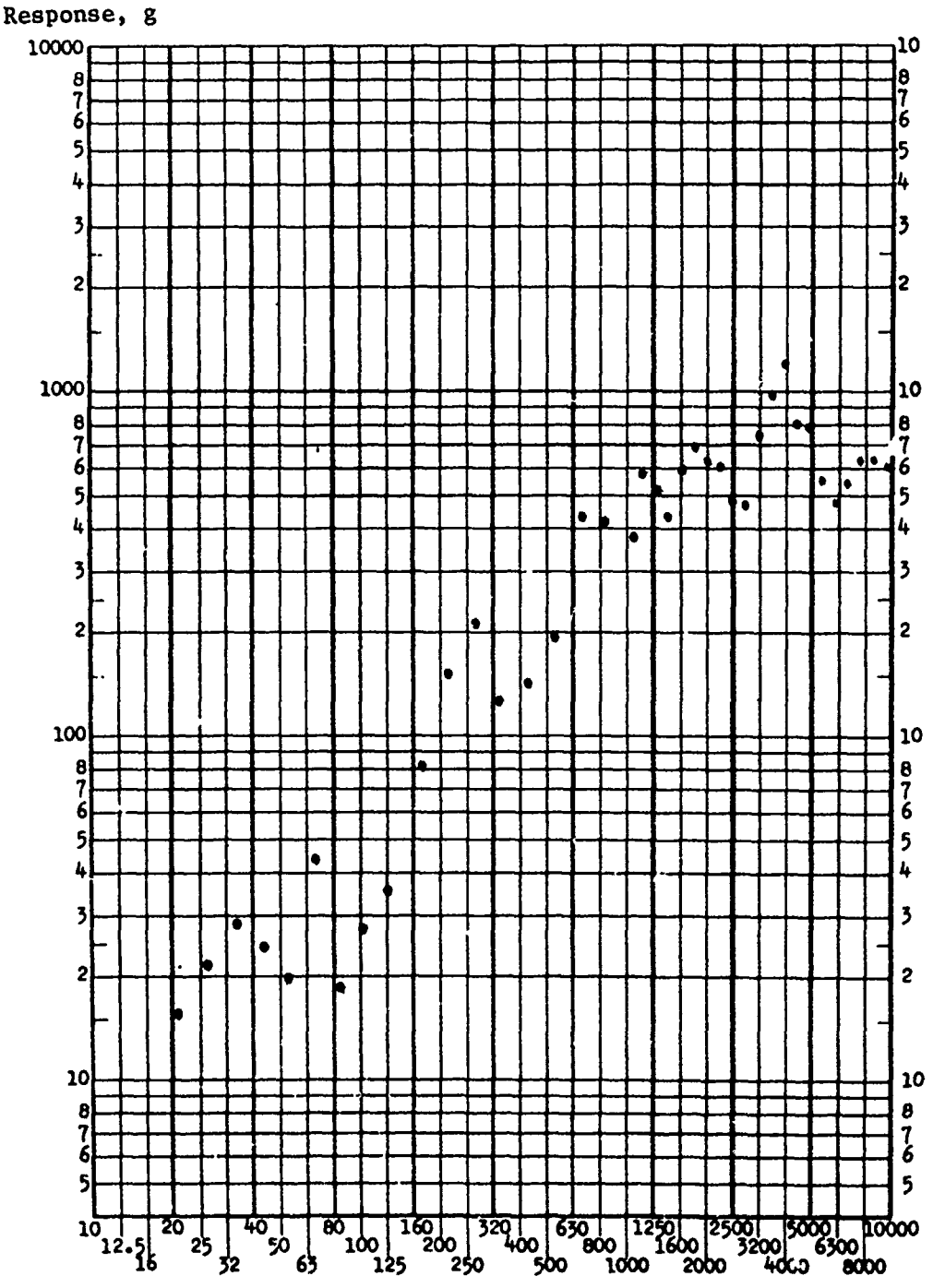
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 3 - Radial axis longeron near station 133

Figure 21 (cont)



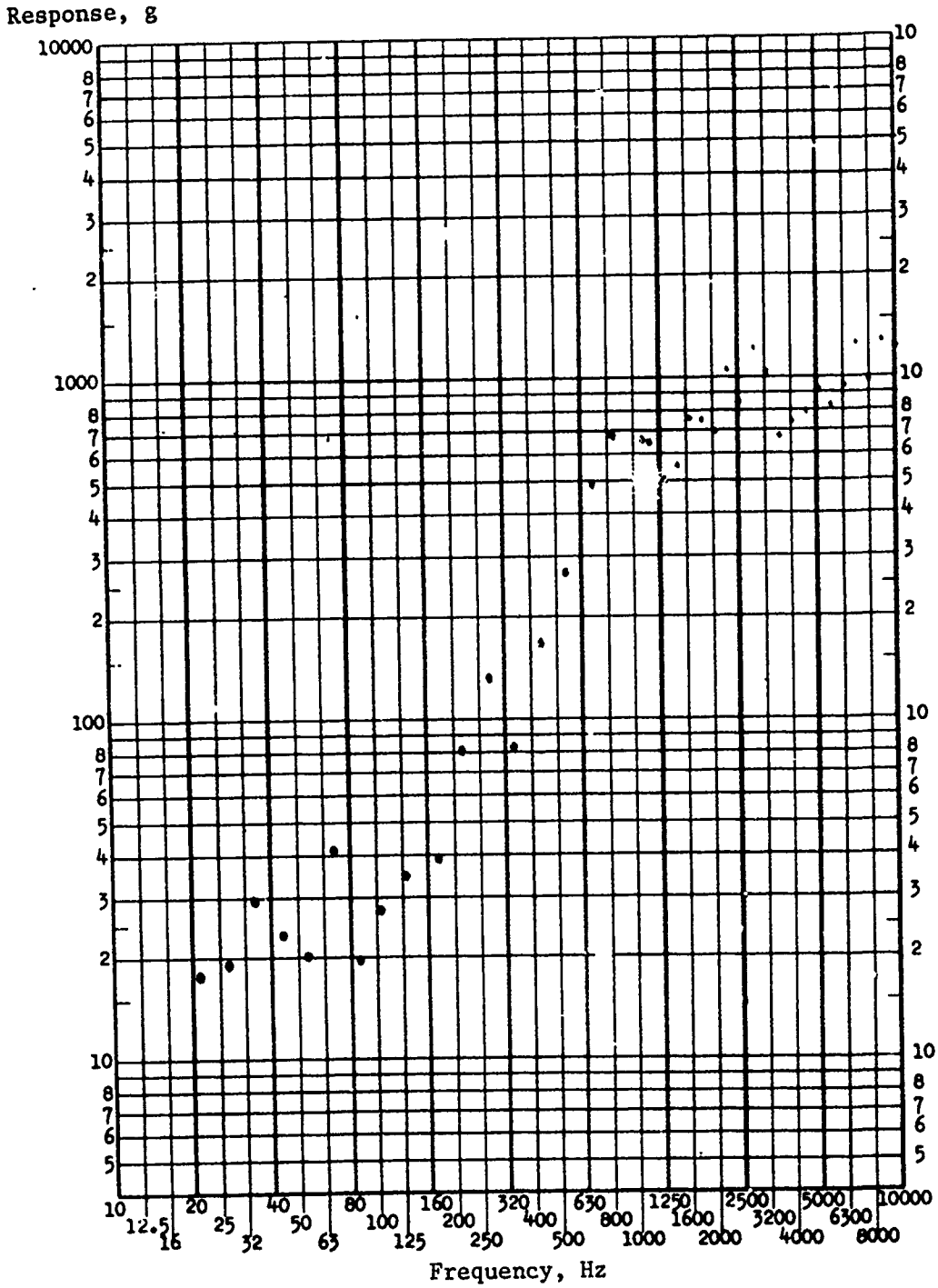
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 21 (cont)



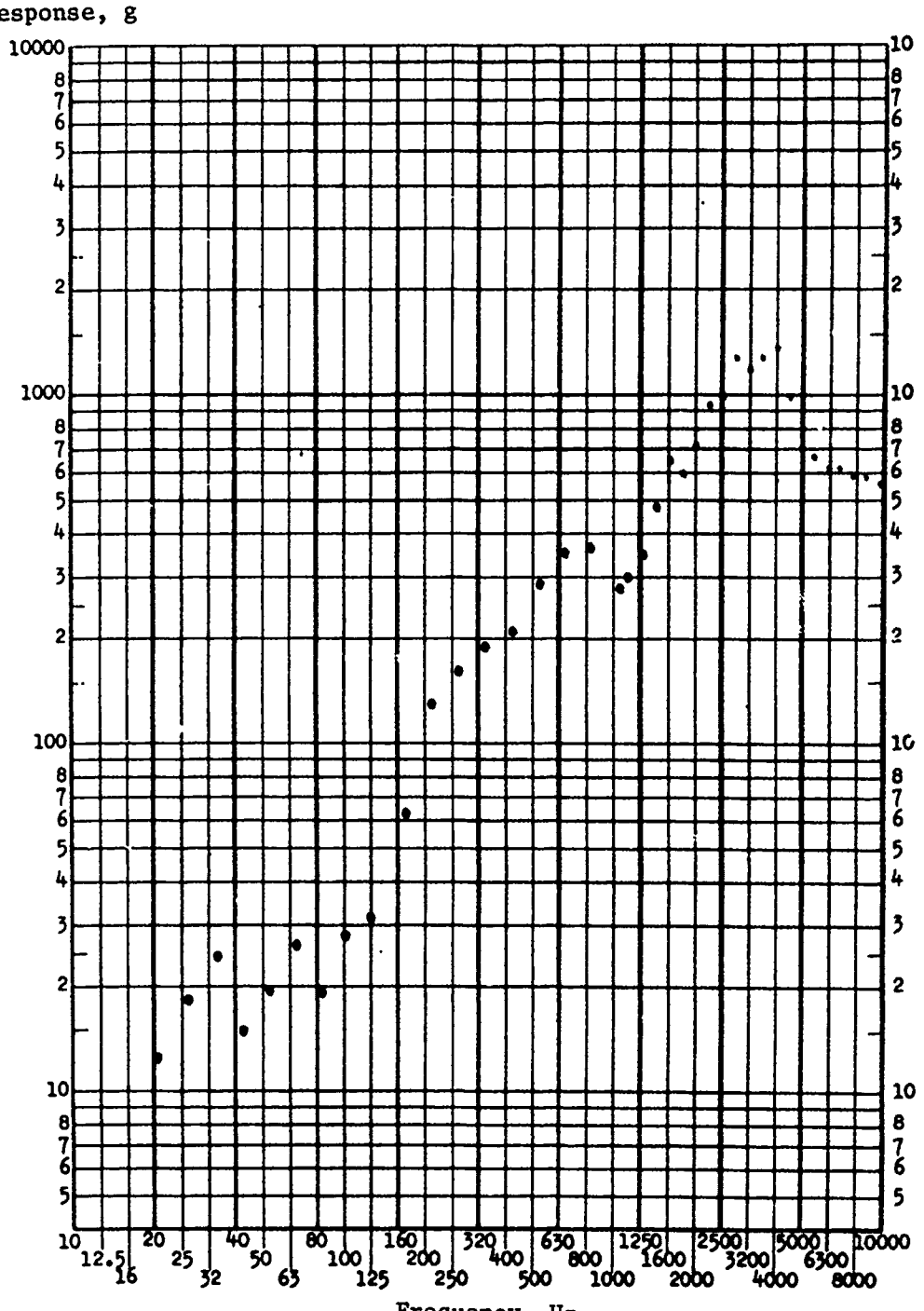
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 5 - Tangential axis longeron near station 117

Figure 21 (cont)



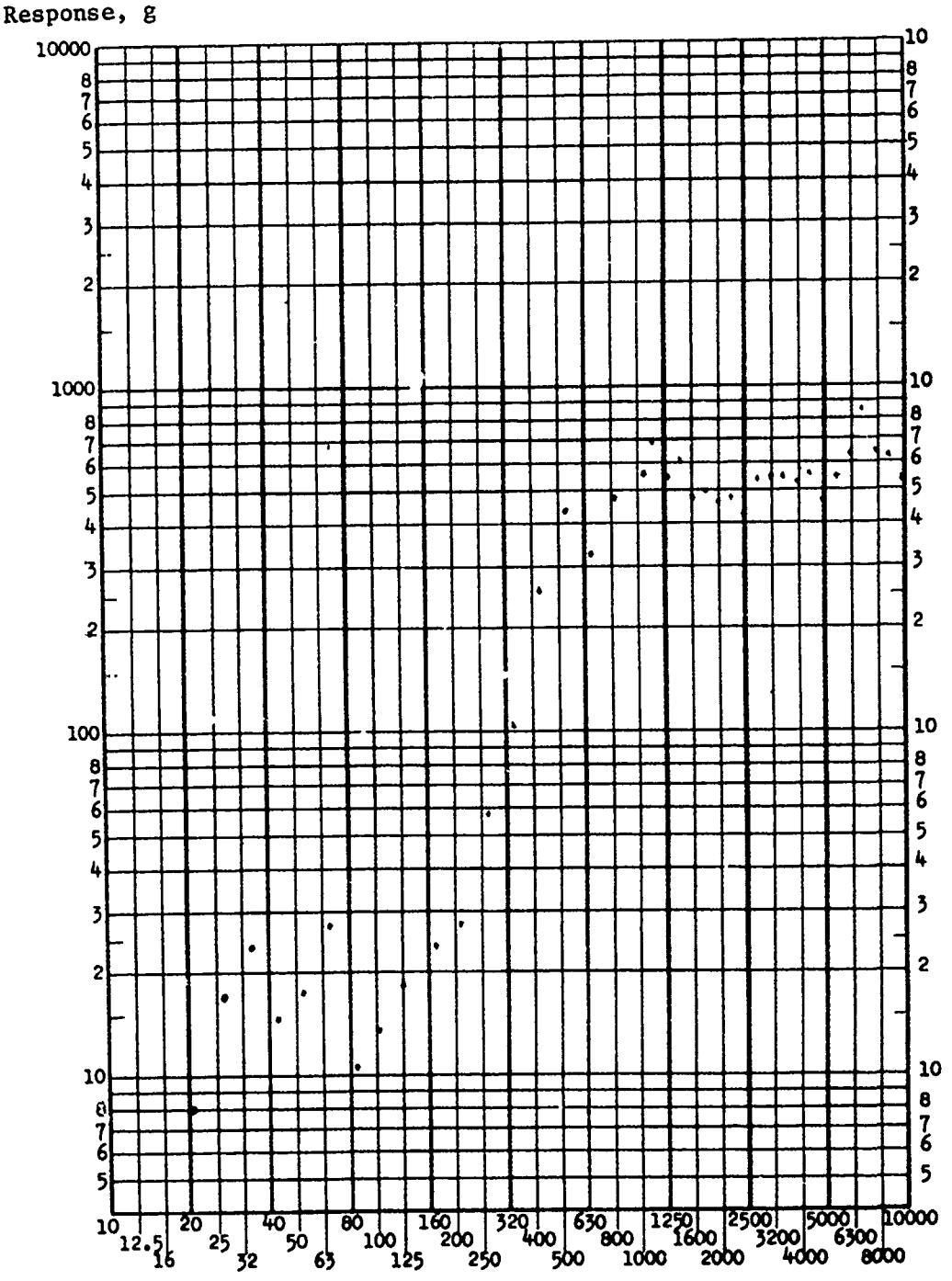
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 6 - Radial axis longeron near station 117

Figure 21 (cont)



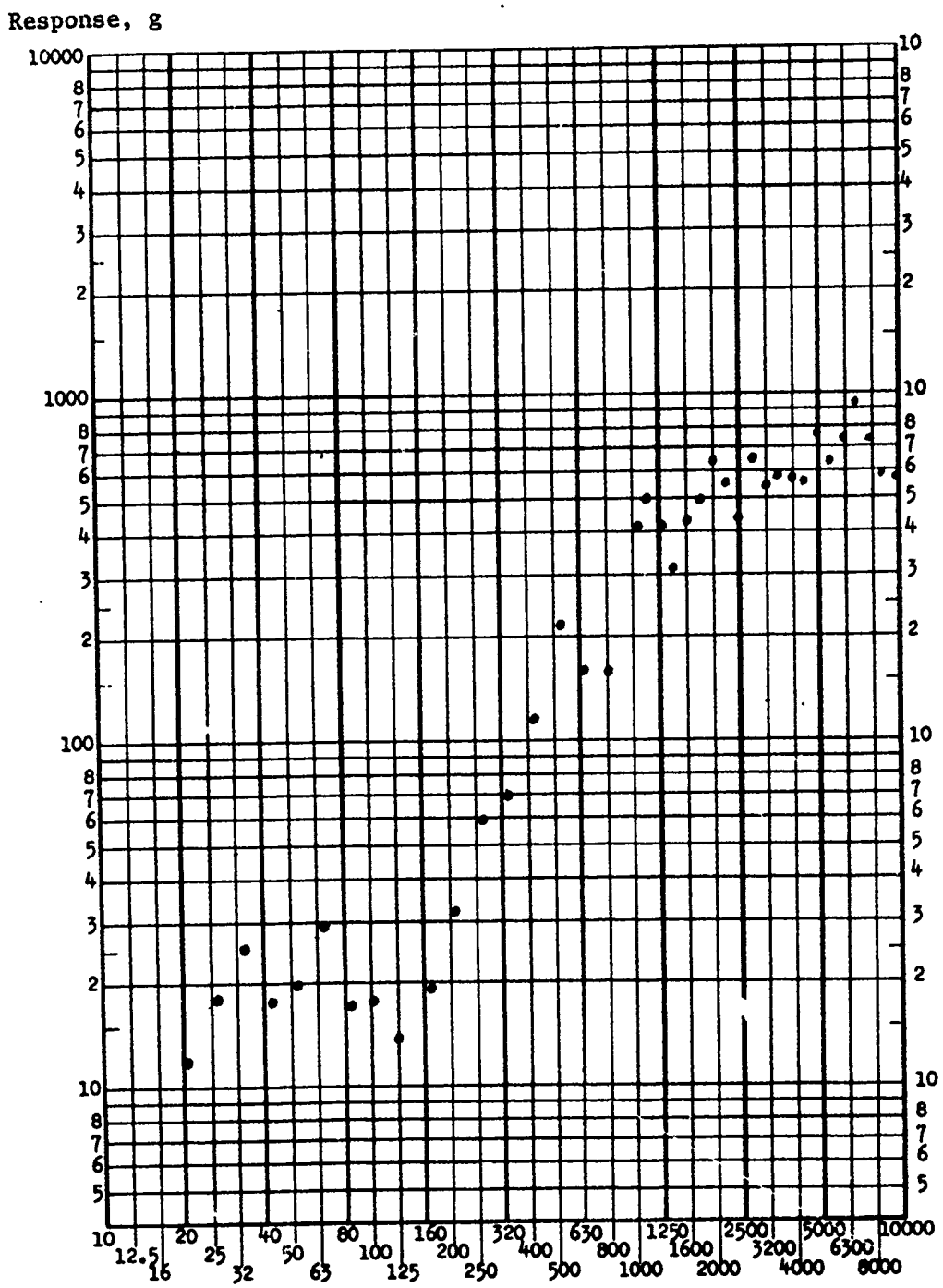
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 21 (cont)



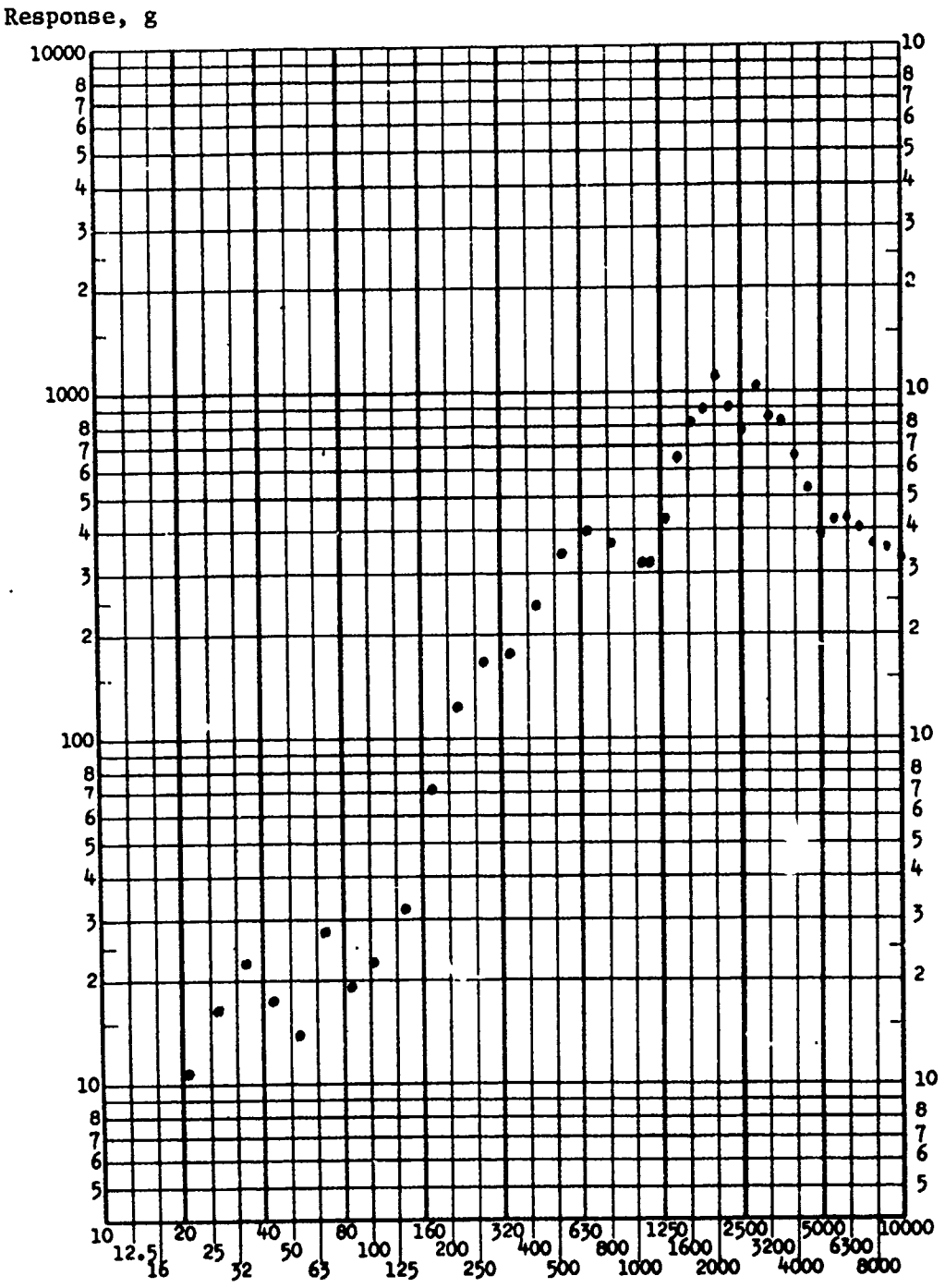
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 8 - Tangential axis longeron near station 77

Figure 21 (cont)



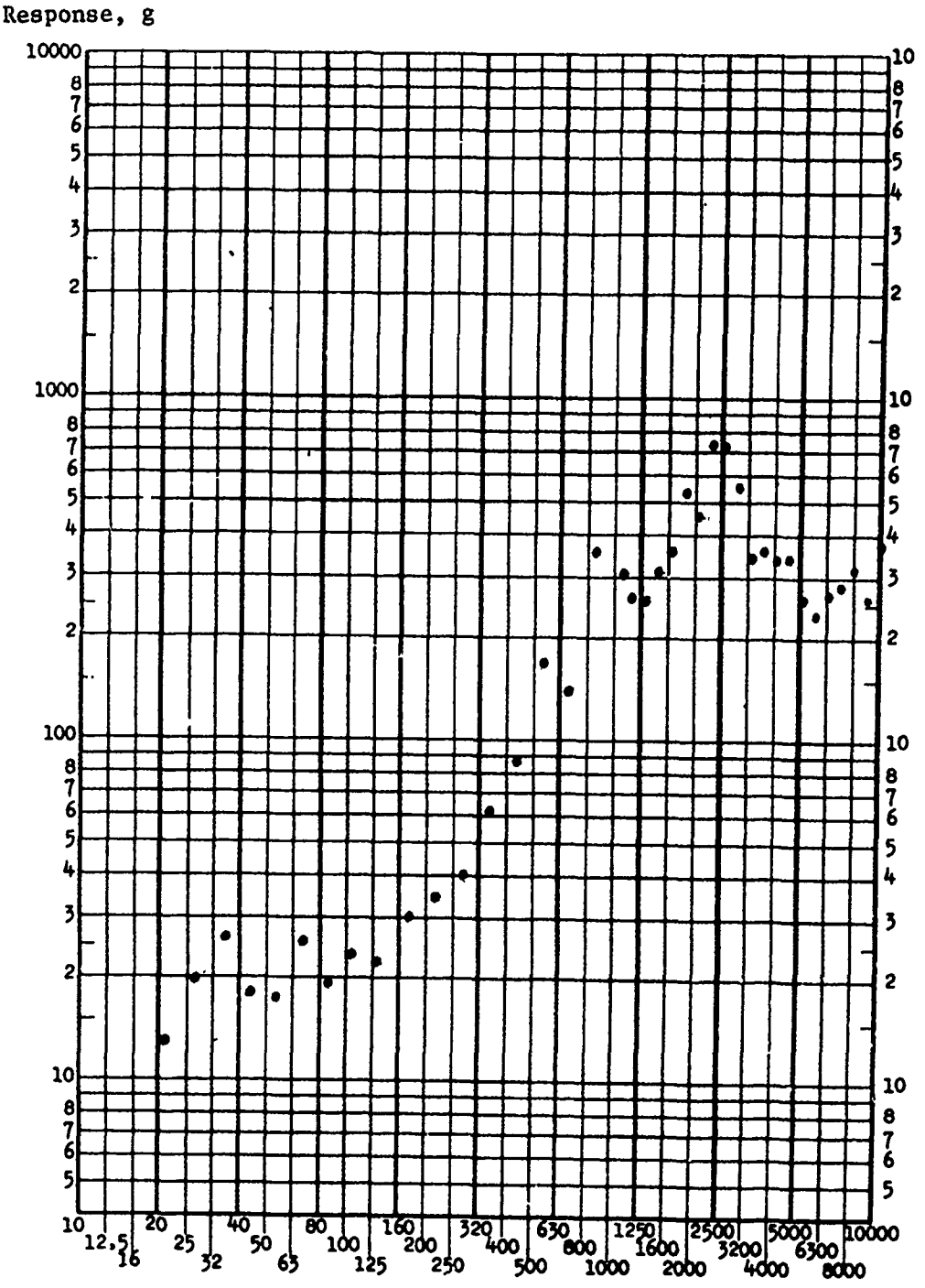
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 9 - Radial axis longeron near station 77

Figure 21 (cont)



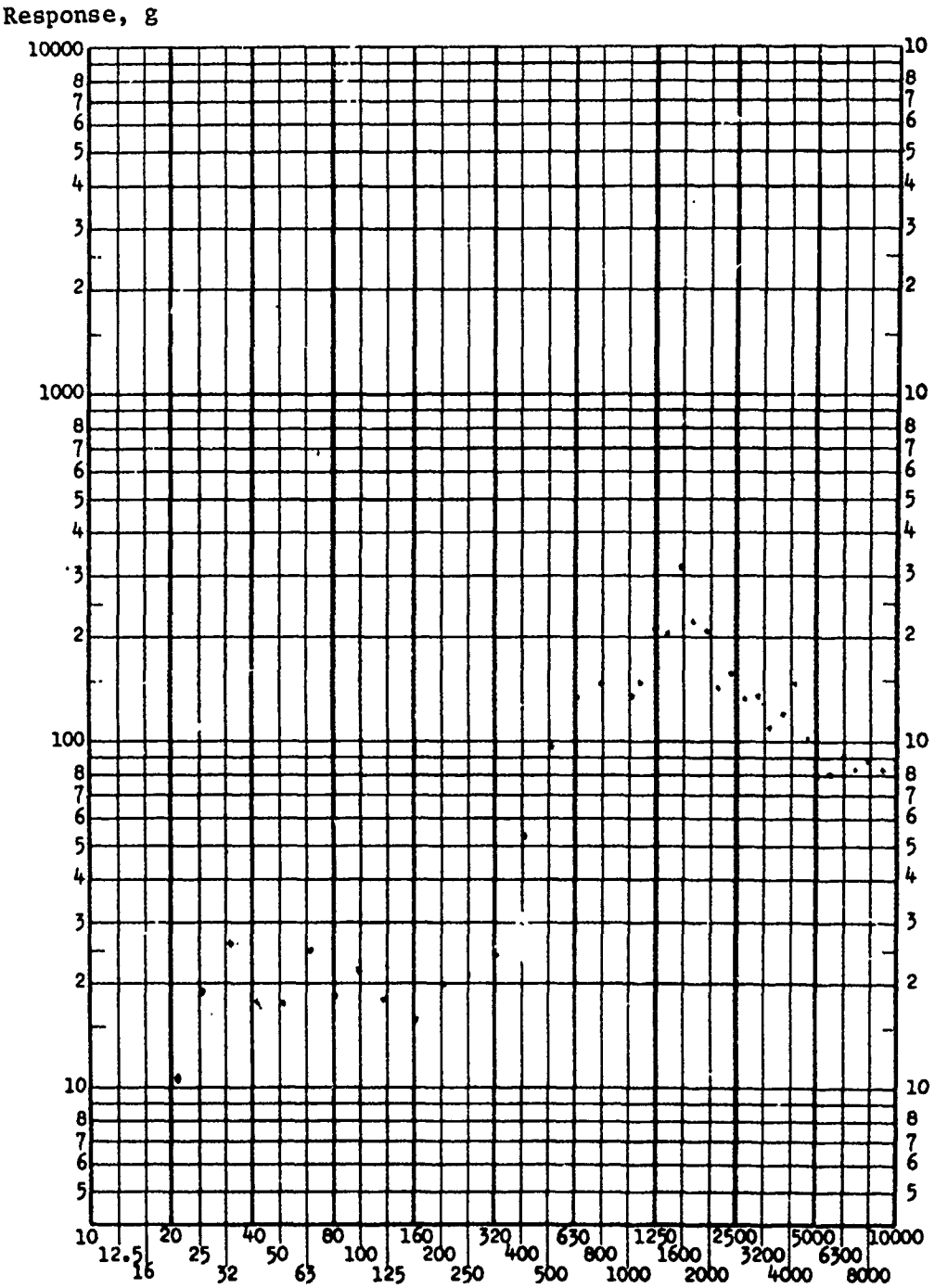
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 21 (cont)



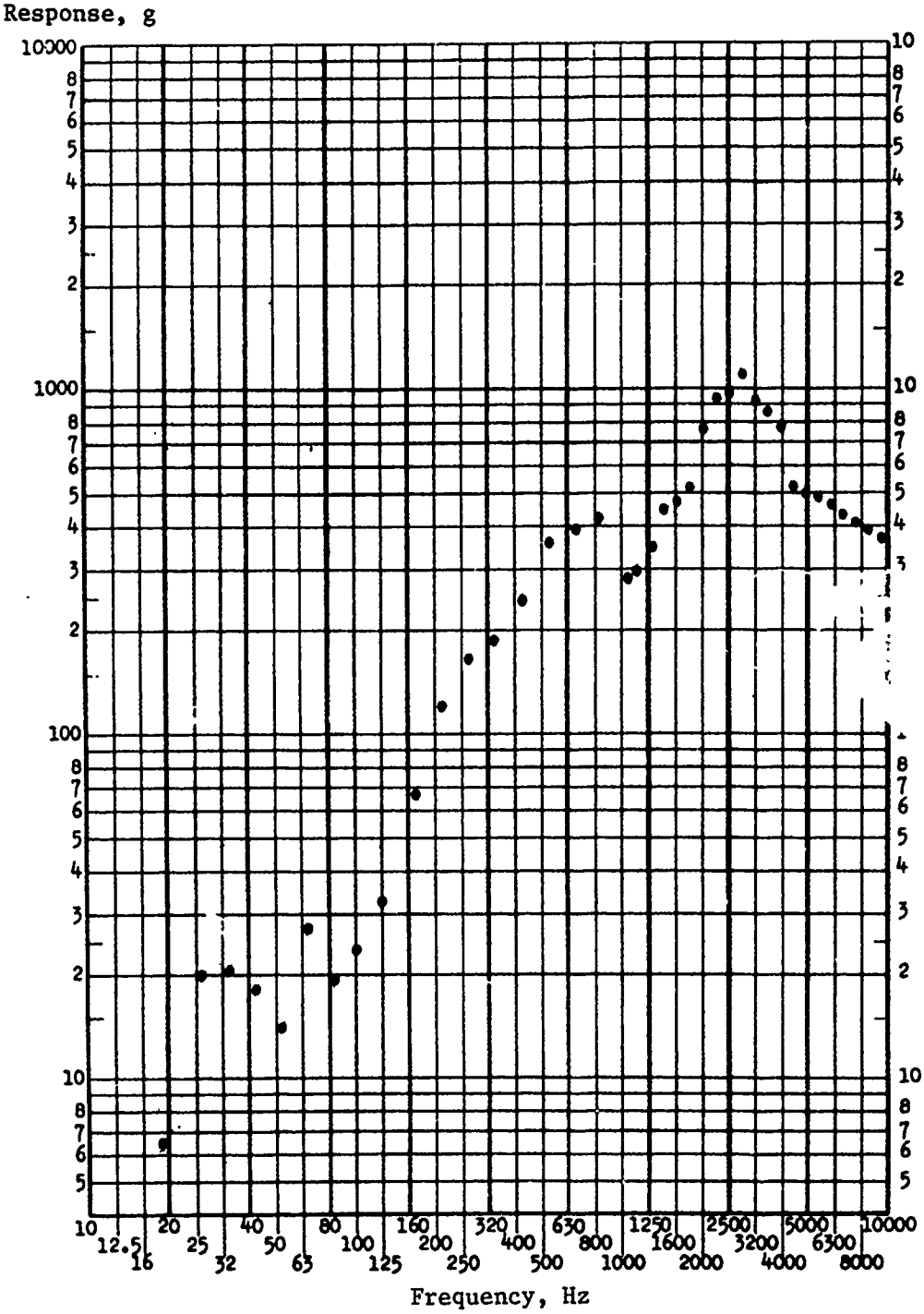
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 21 (cont)



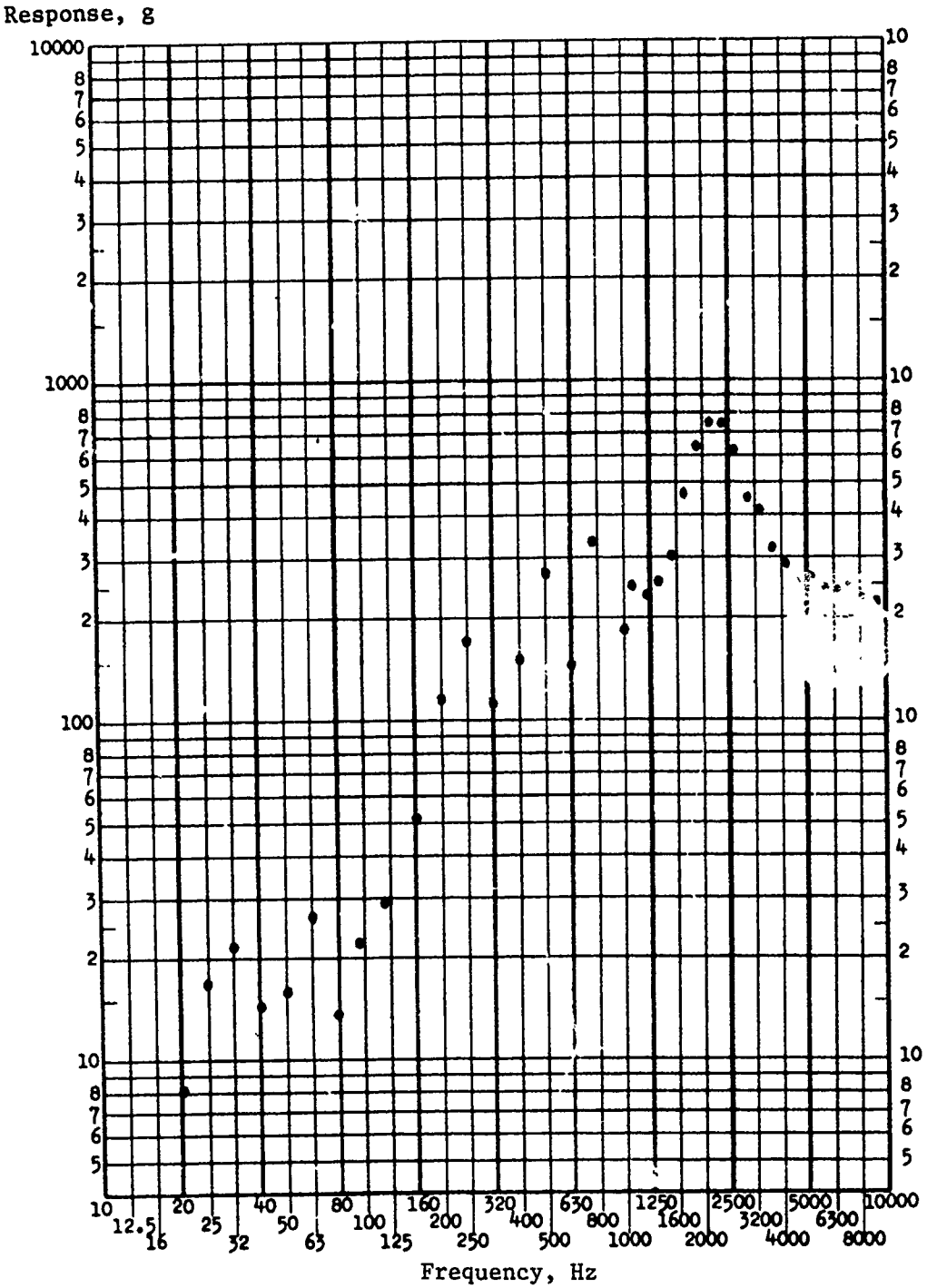
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 21 (cont)



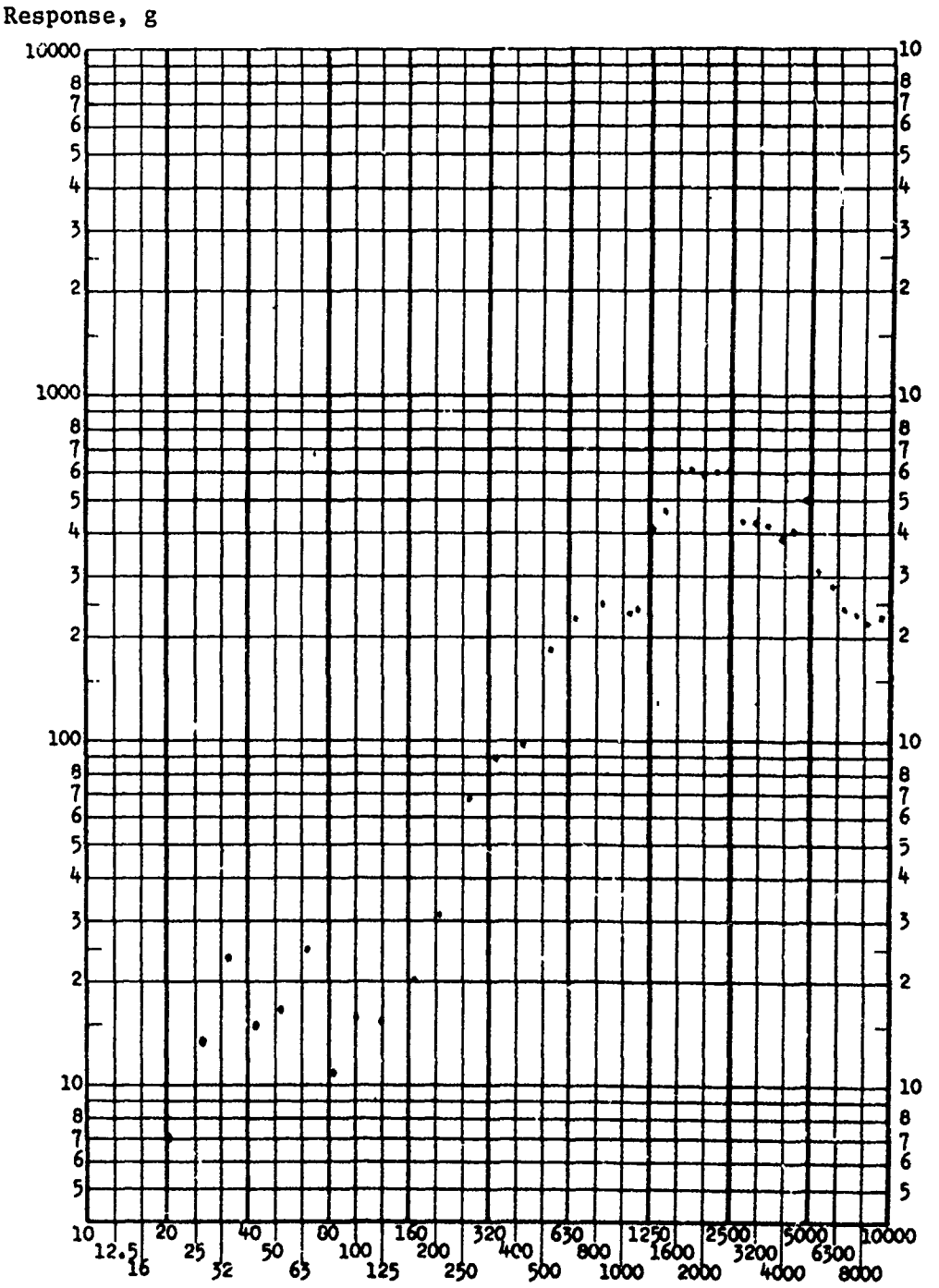
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 21 (cont)



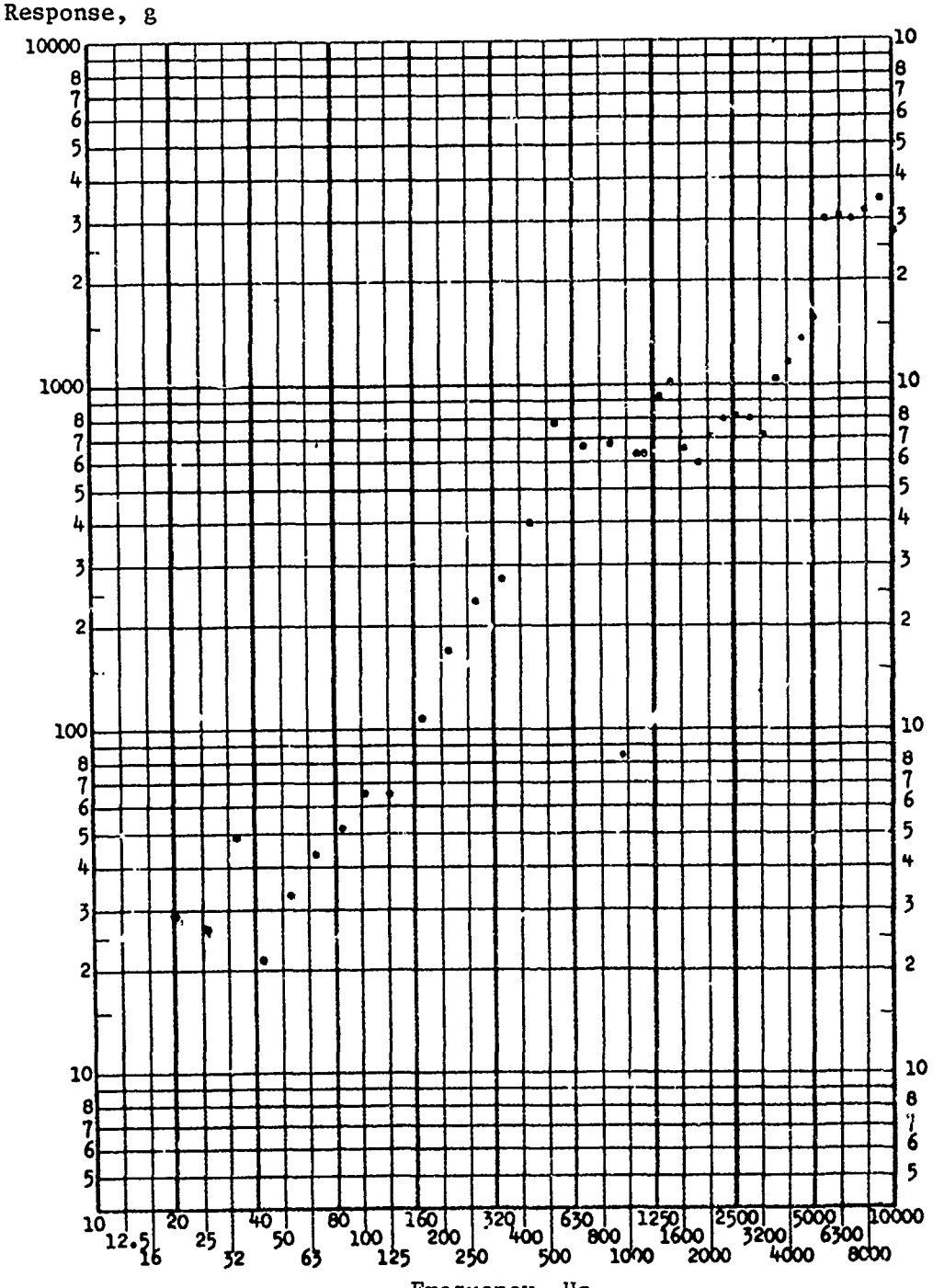
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 21 (cont)



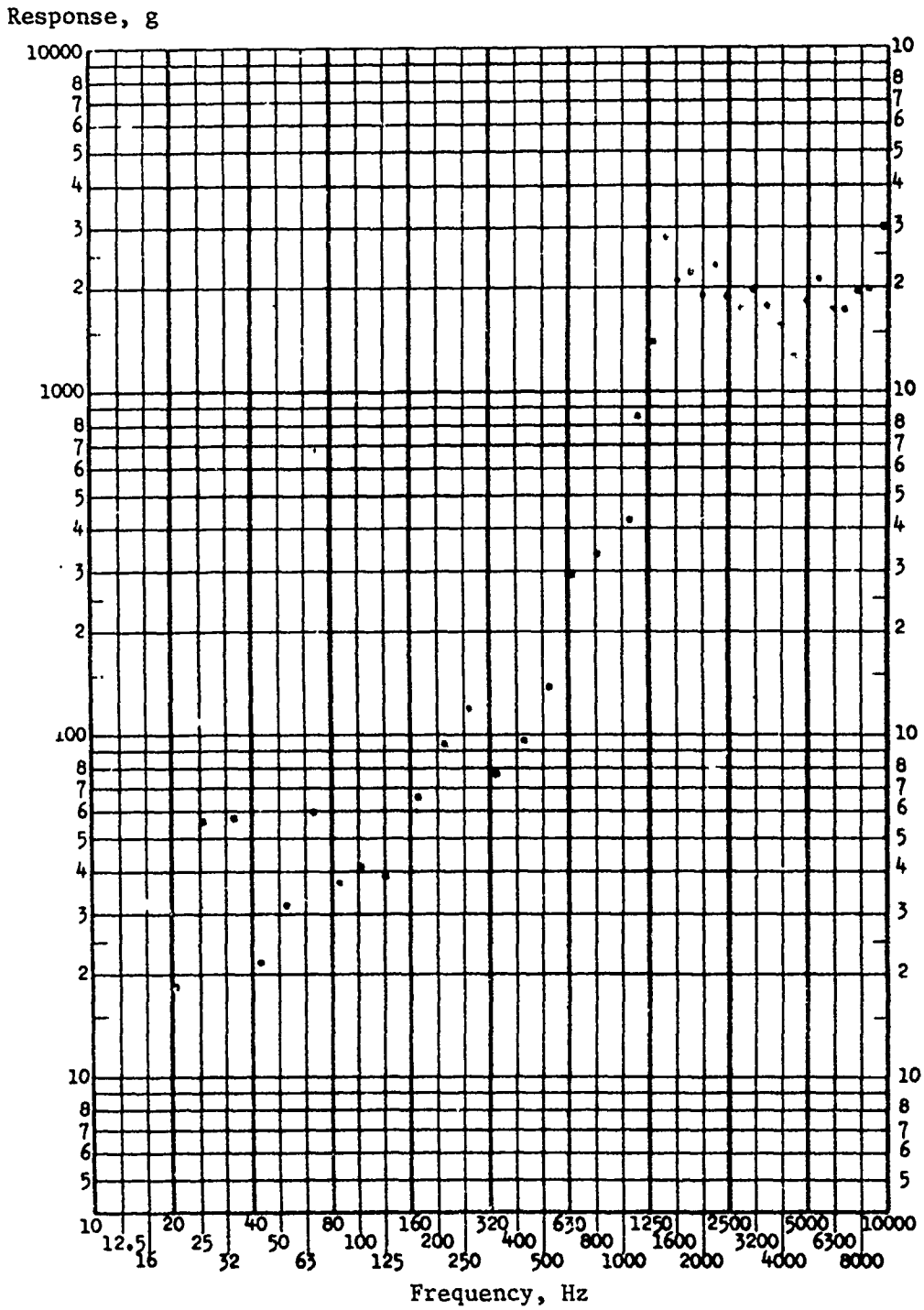
Bench Shock Test - Stage II/III Separation, Run 21
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 21 (concl)



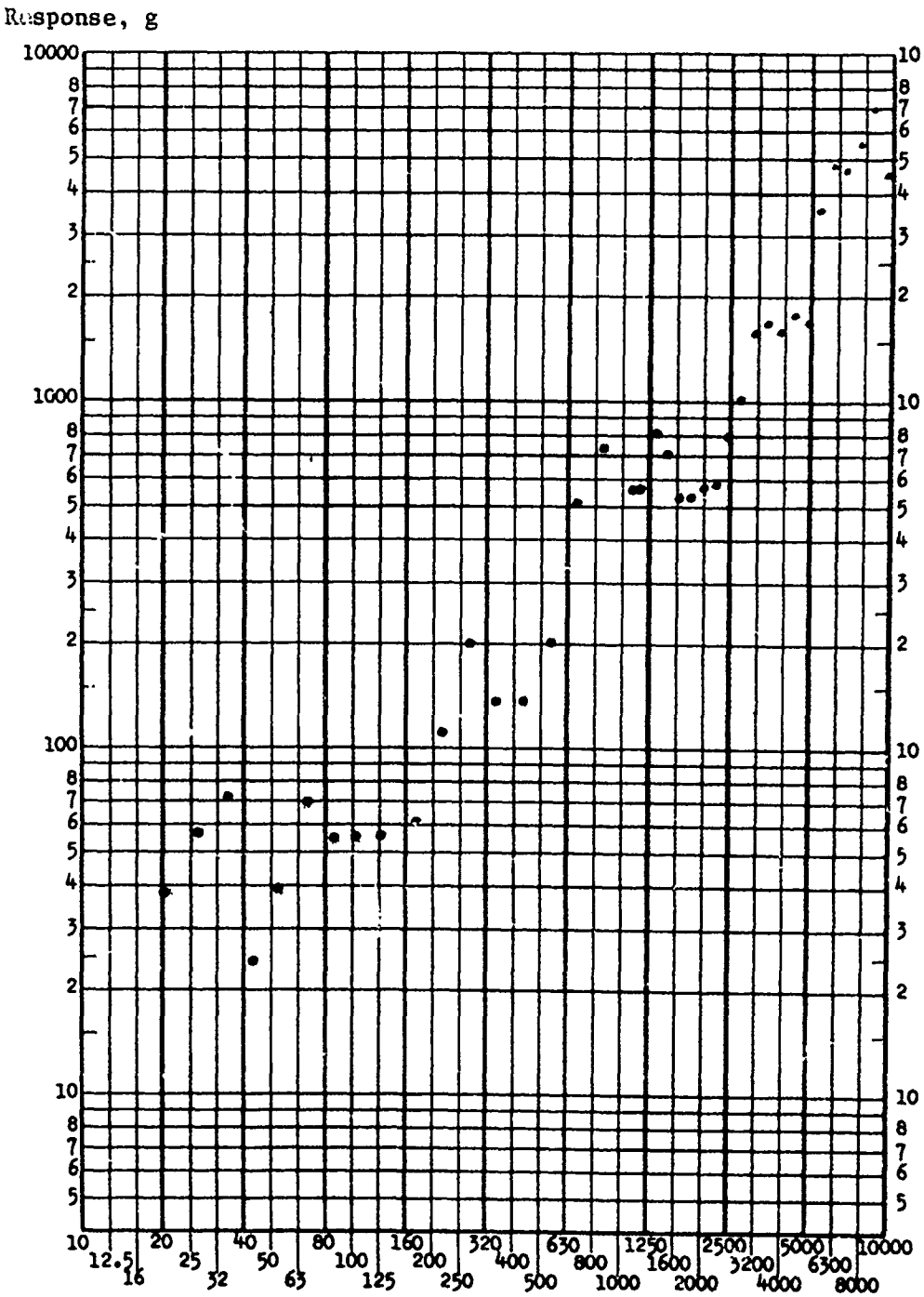
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 22 Run 22 Shock Response Spectrum



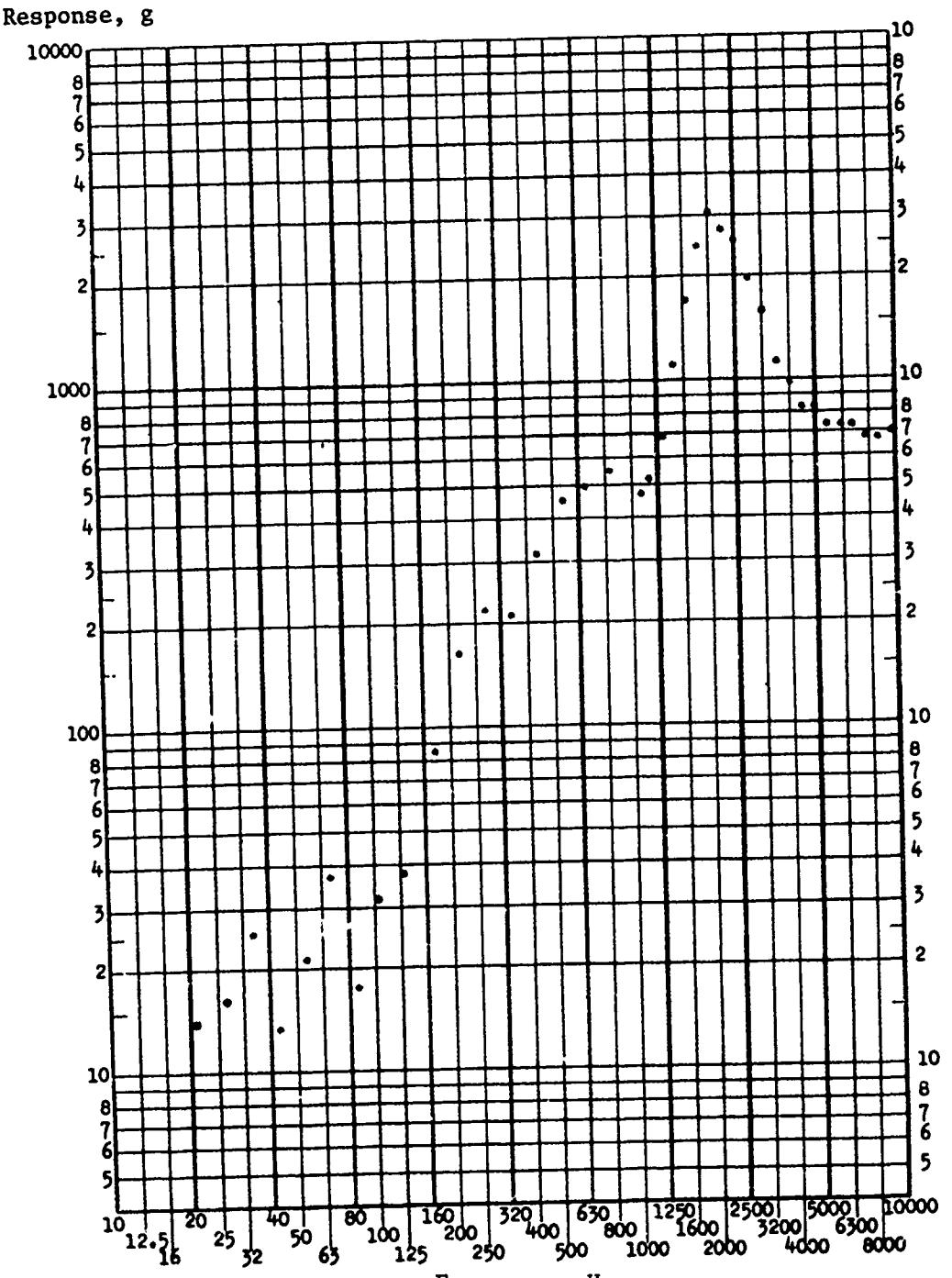
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 2 - Tangential axis longeron near station 133

Figure 22 (cont)



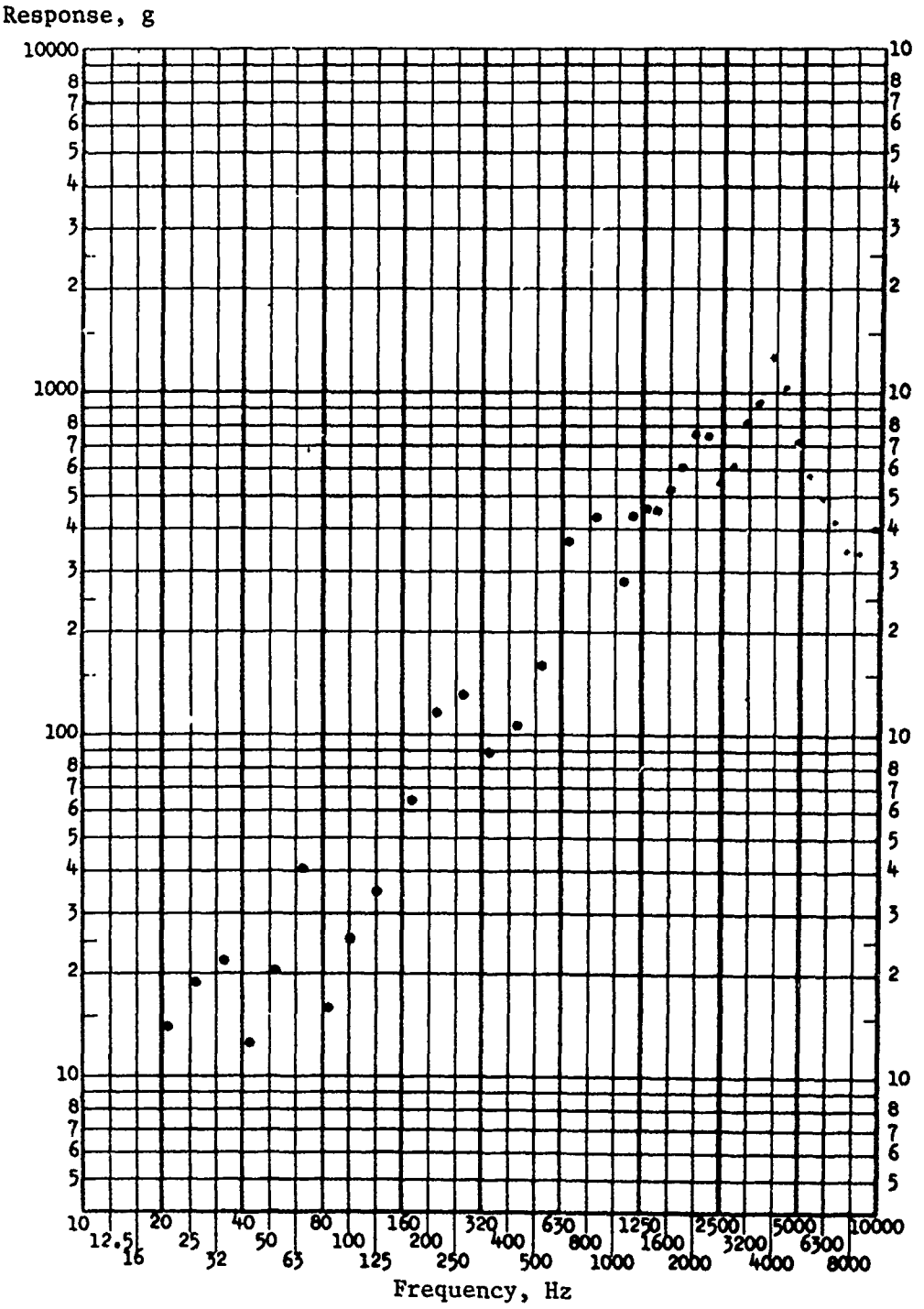
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 3 - Radial axis longeron near station 133

Figure 22 (cont)



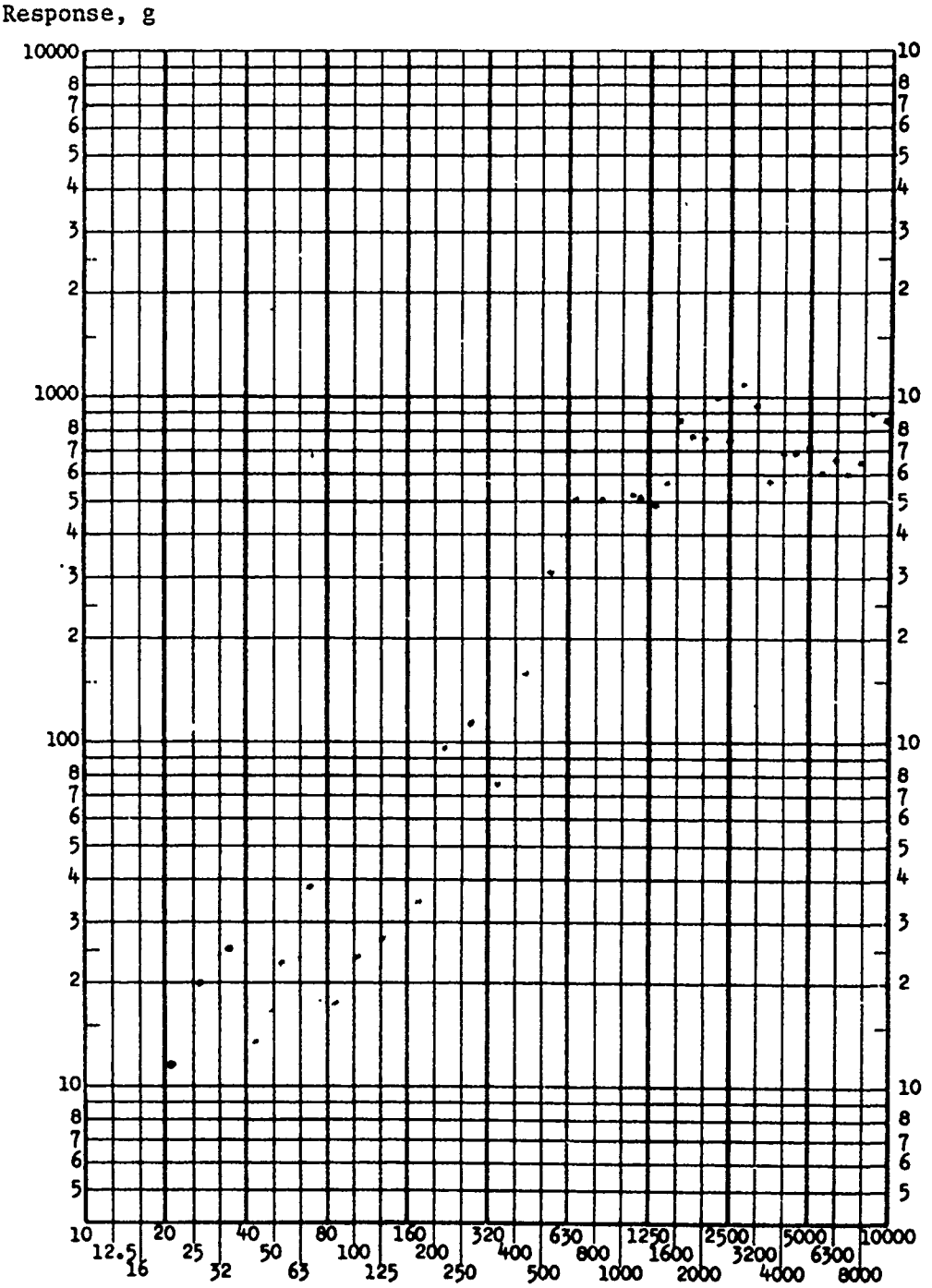
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 22 (cont)



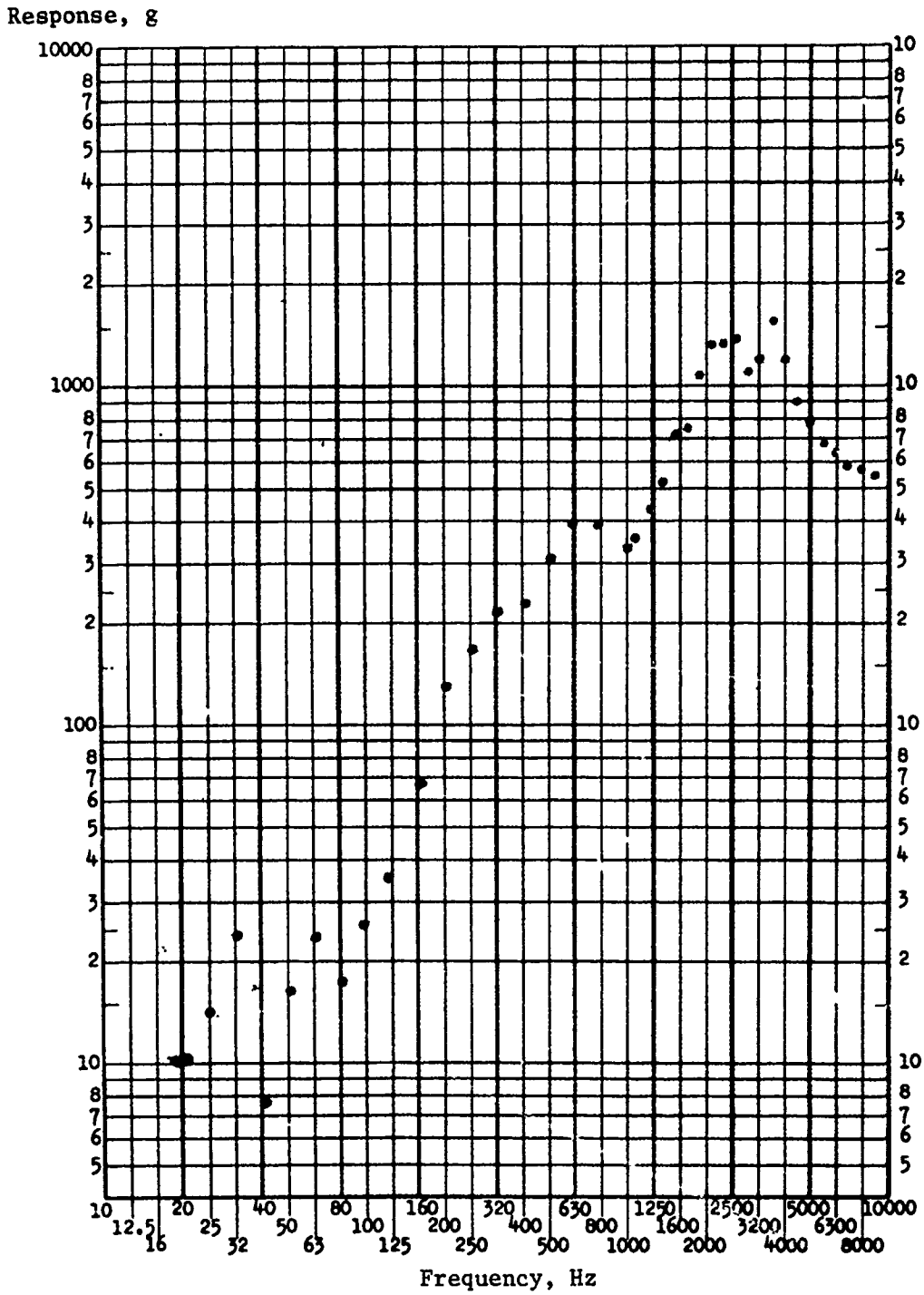
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 5 - Tangential axis longeron near station 117

Figure 22 (cont)



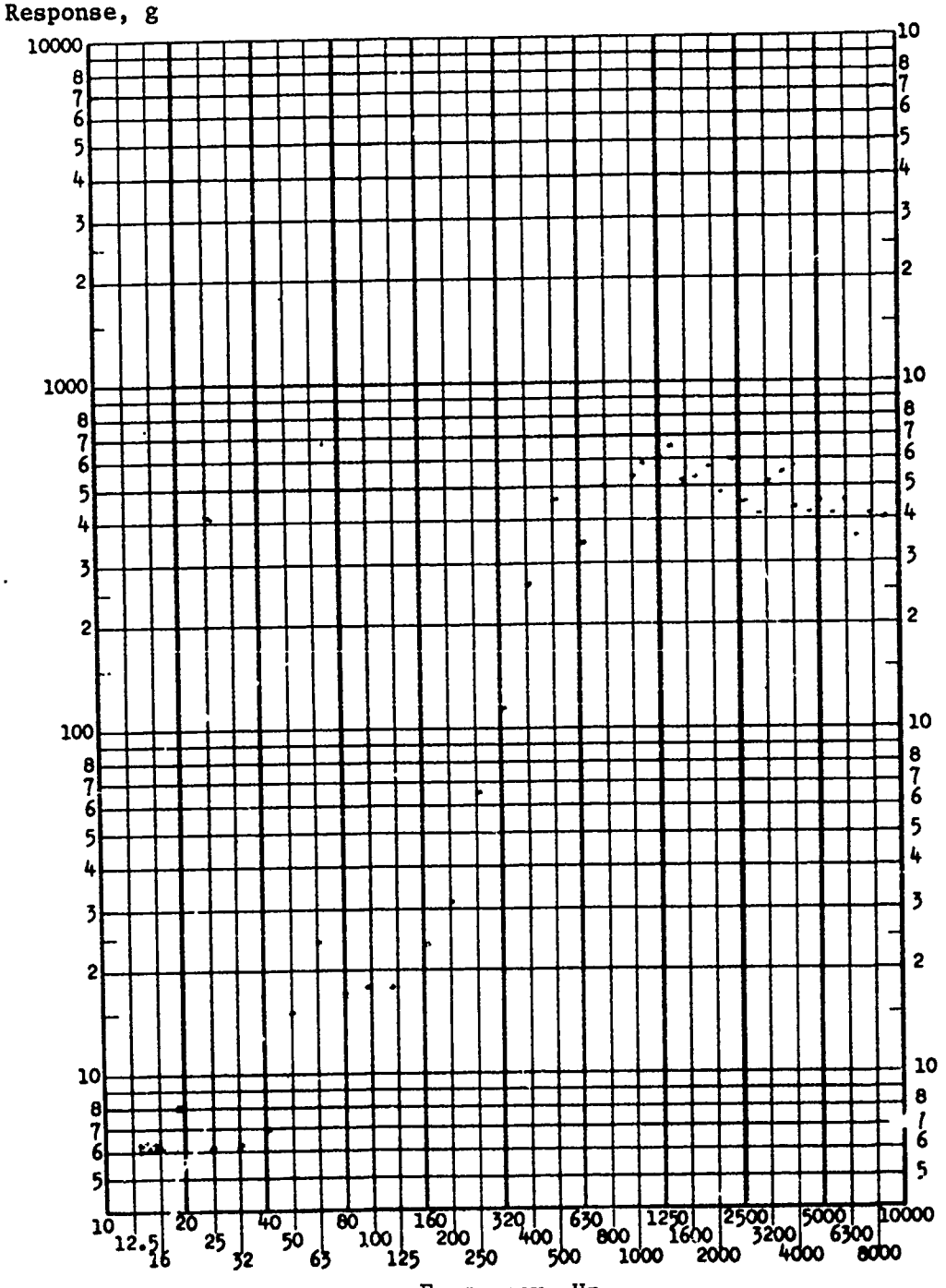
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 6 - Radial axis longeron near station 117

Figure 22 (cont)



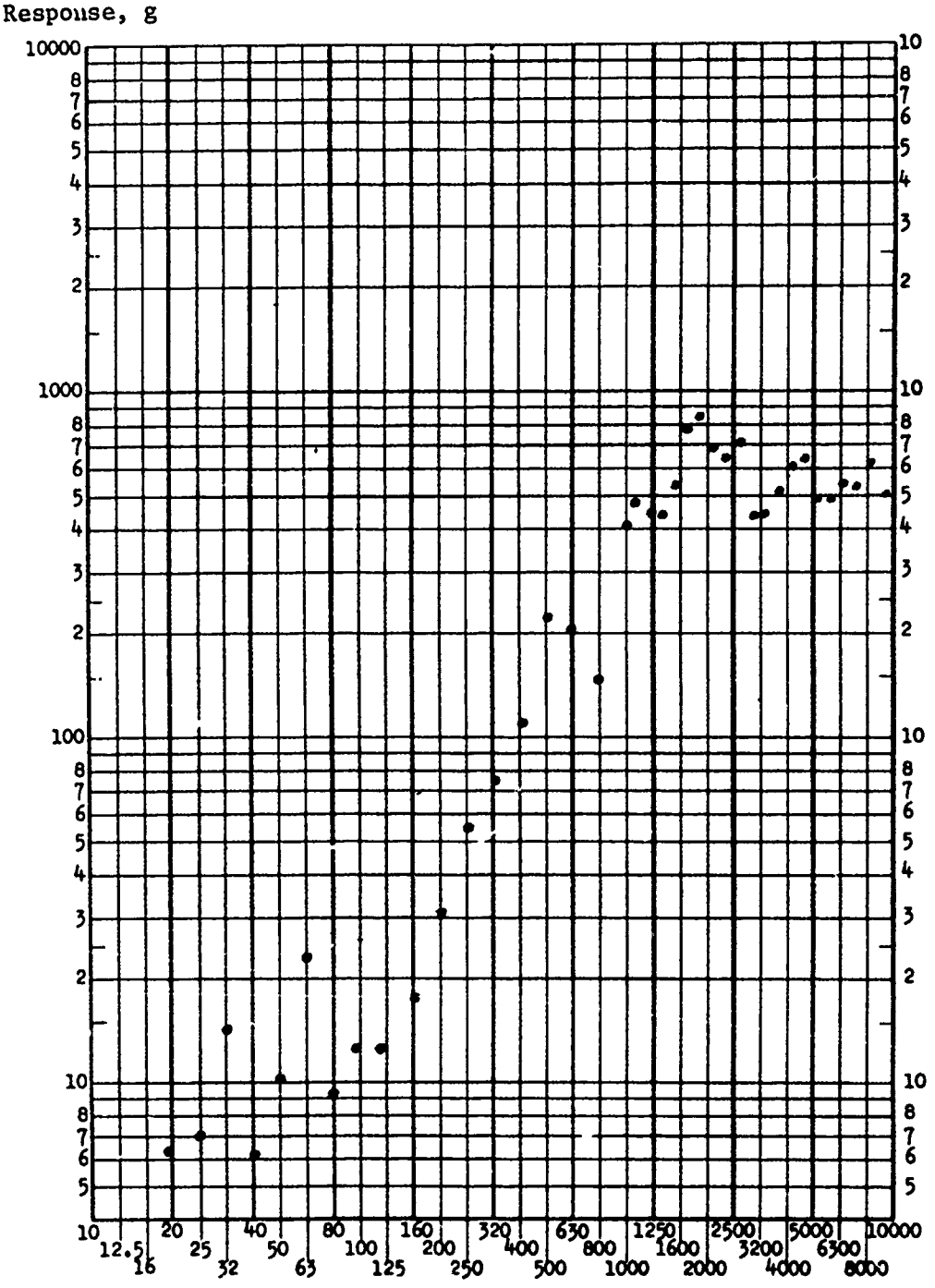
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 22 (cont)



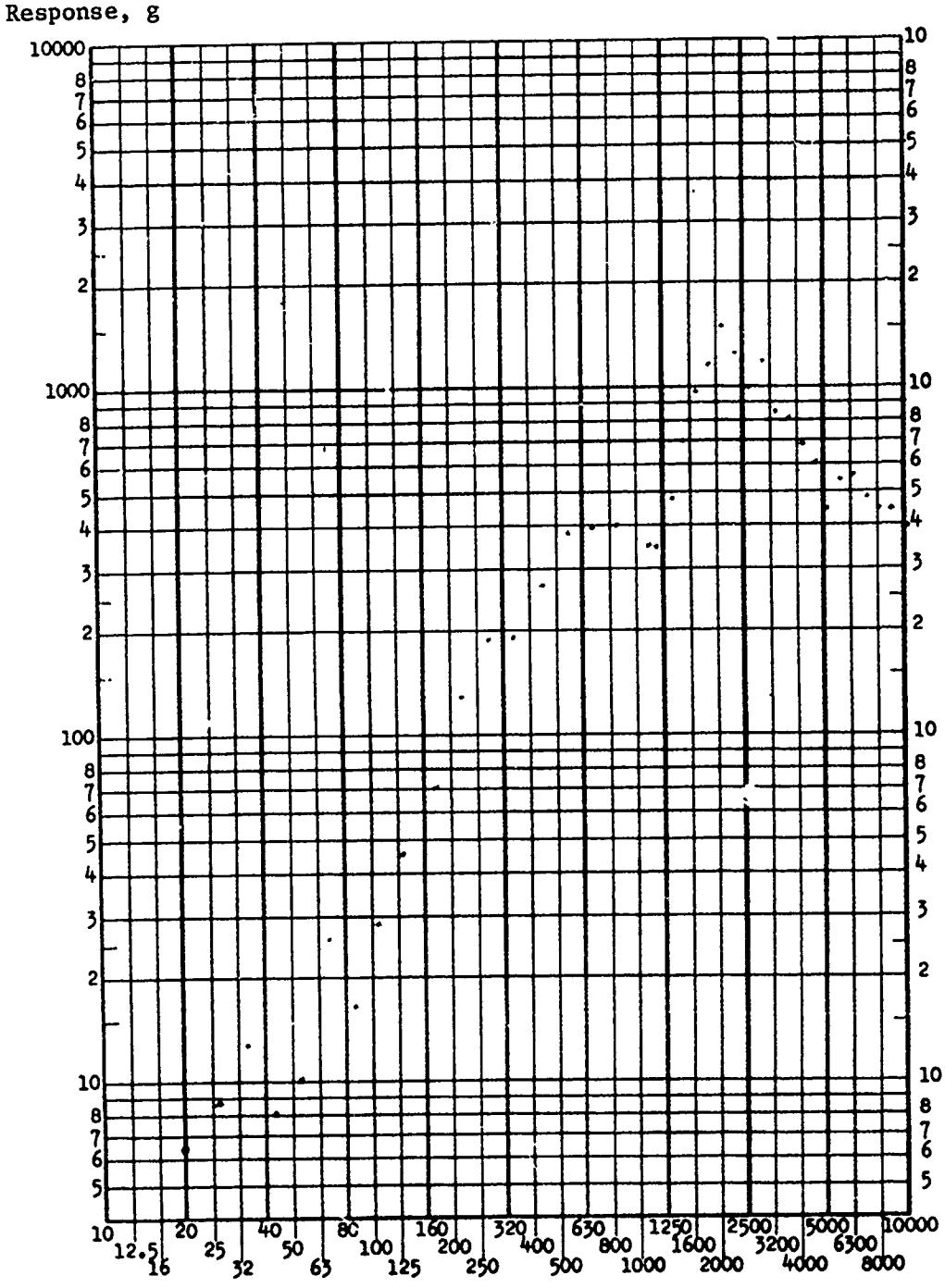
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 8 - Tangential axis longeron near station 77

Figure 22 (cont)



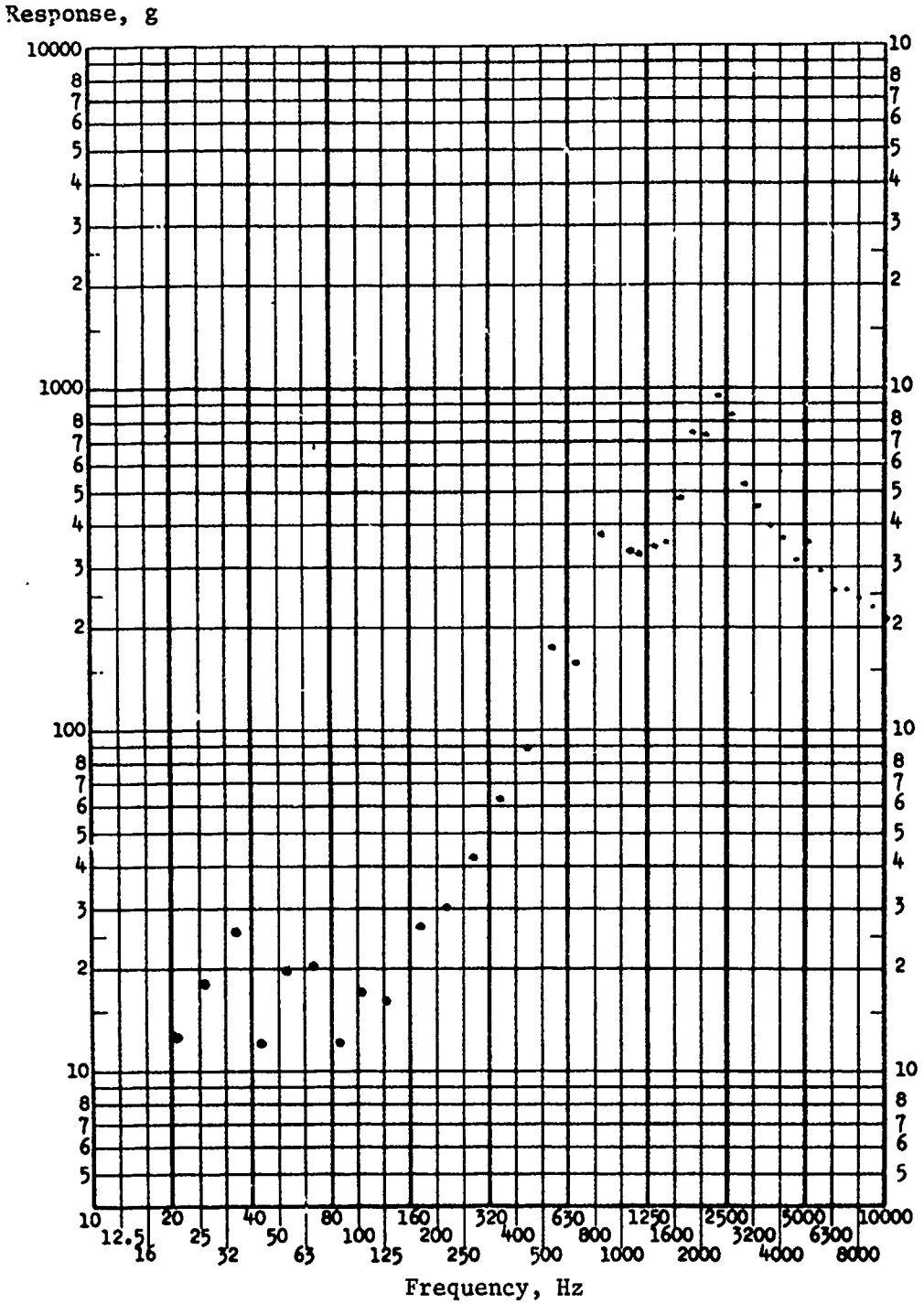
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 9 - Radial axis longeron near station 77

Figure 22 (cont)



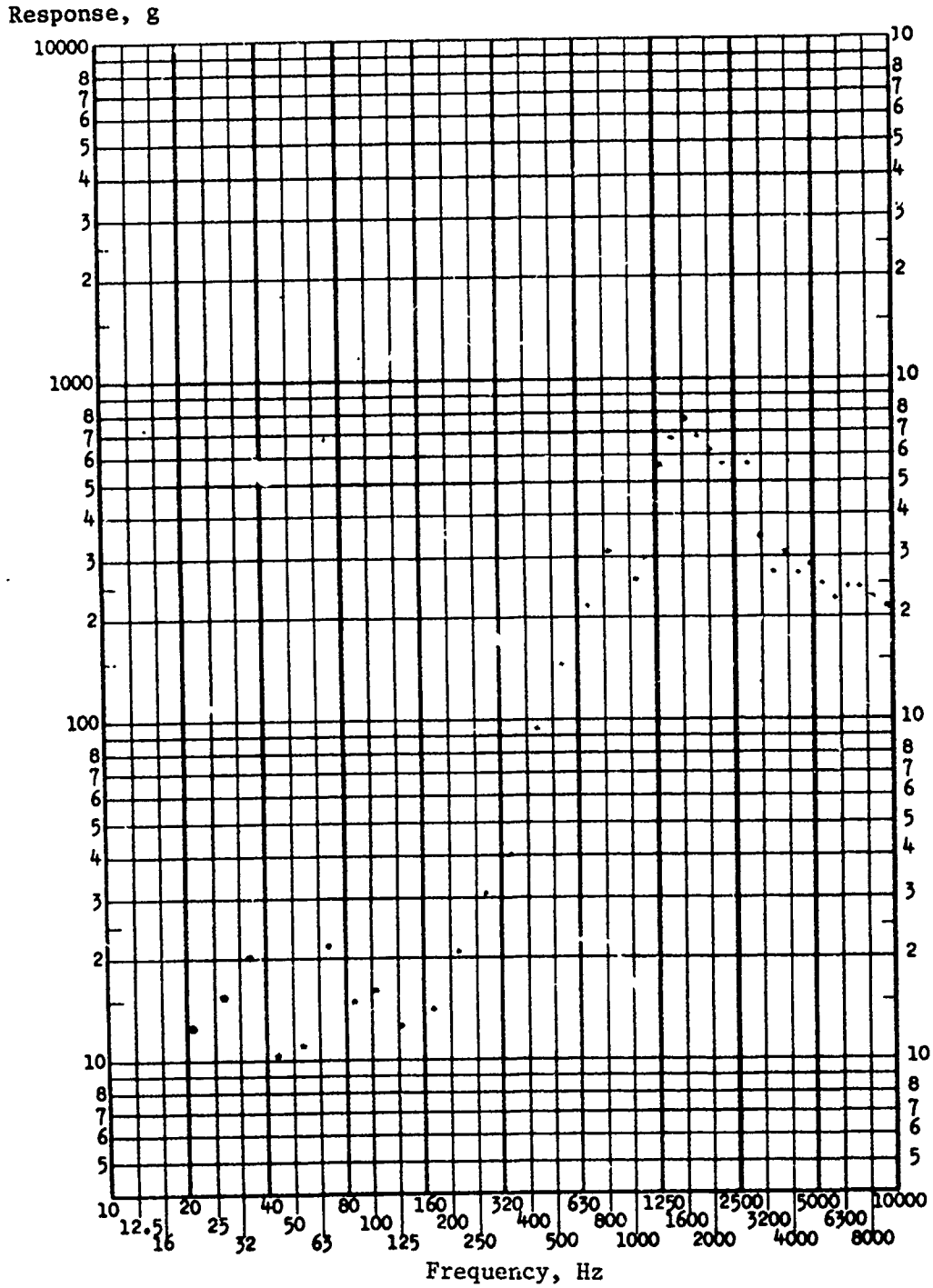
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 22 (cont)



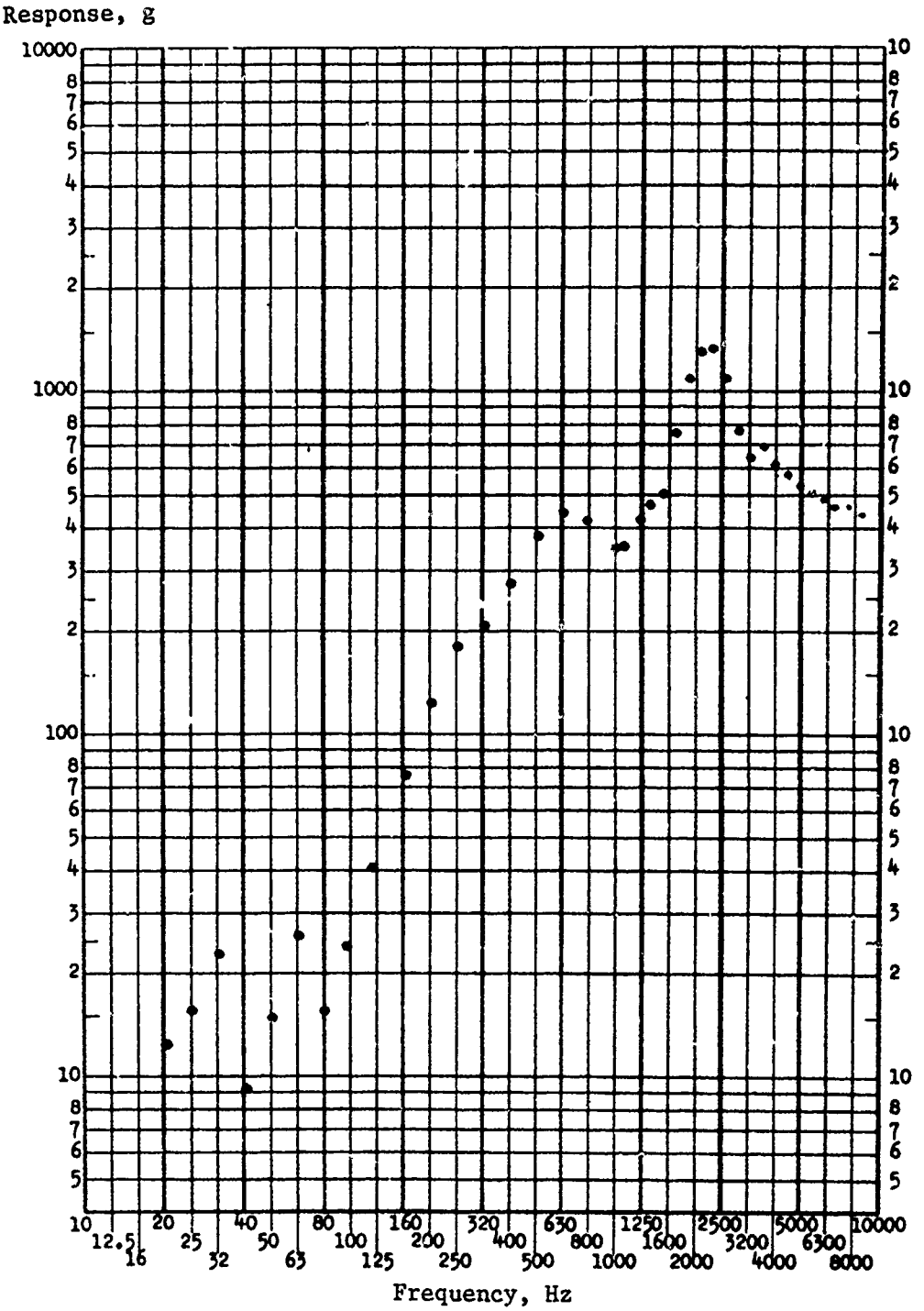
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 22 (cont)



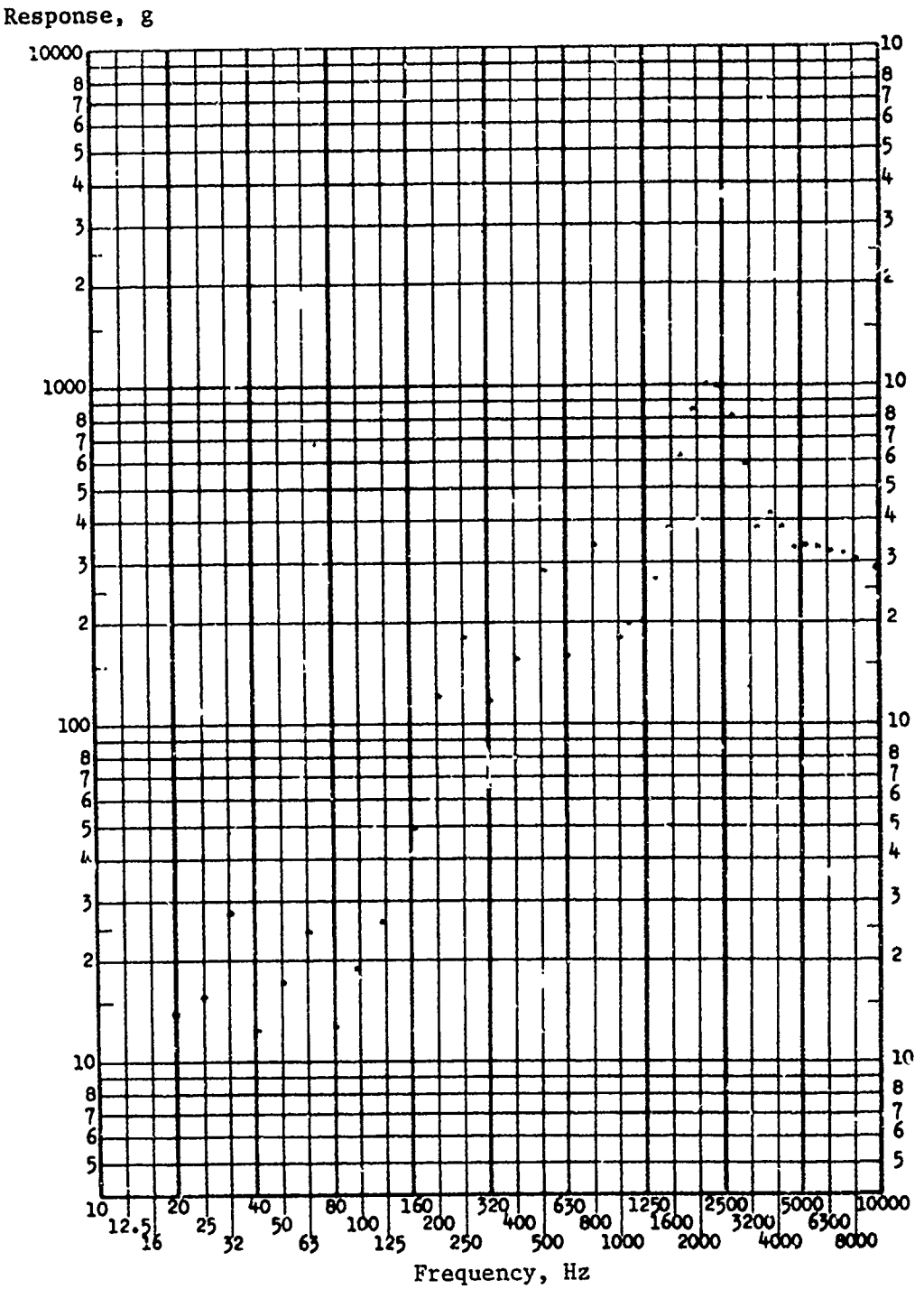
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 22 (cont)



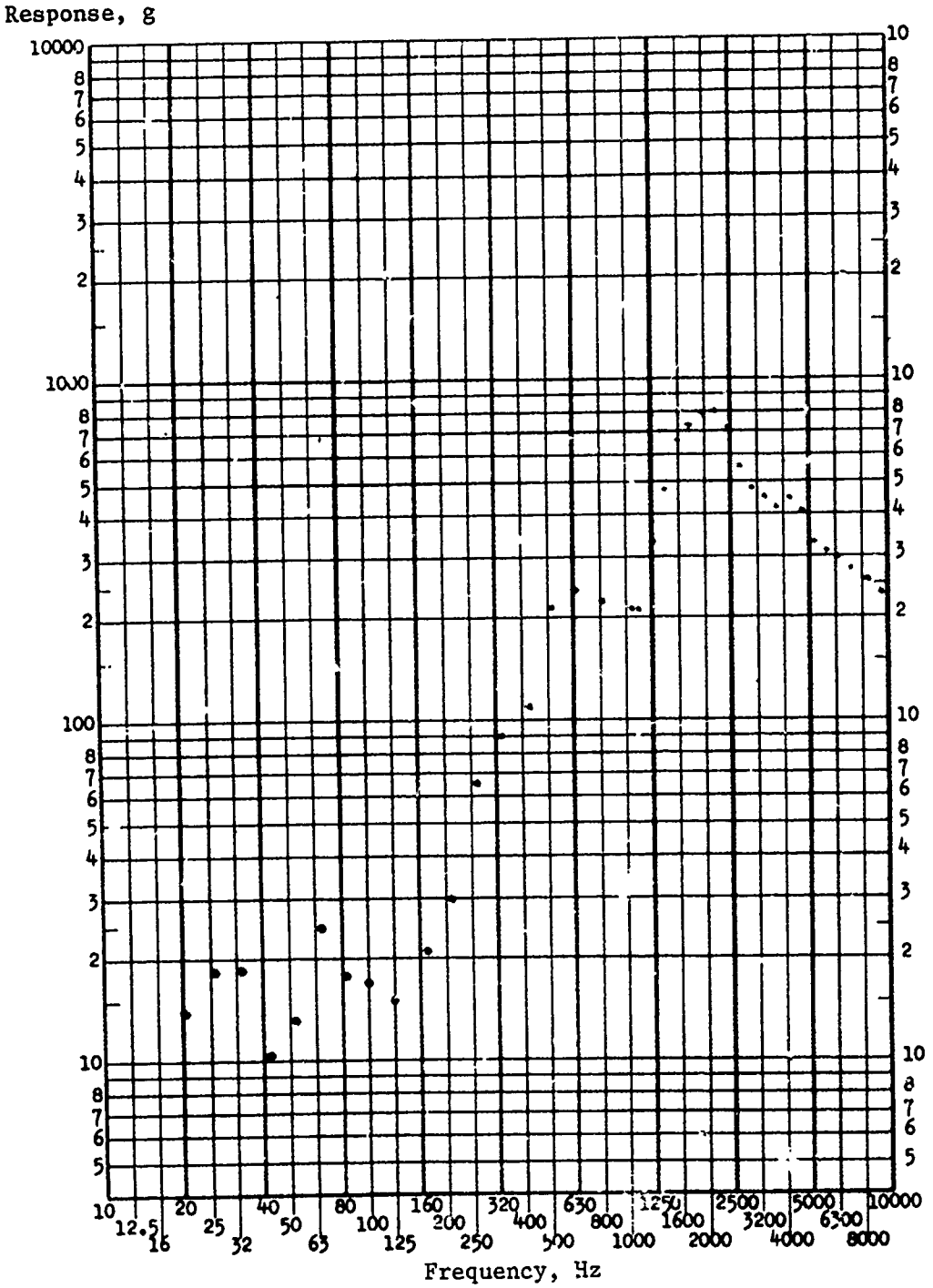
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 22 (cont)



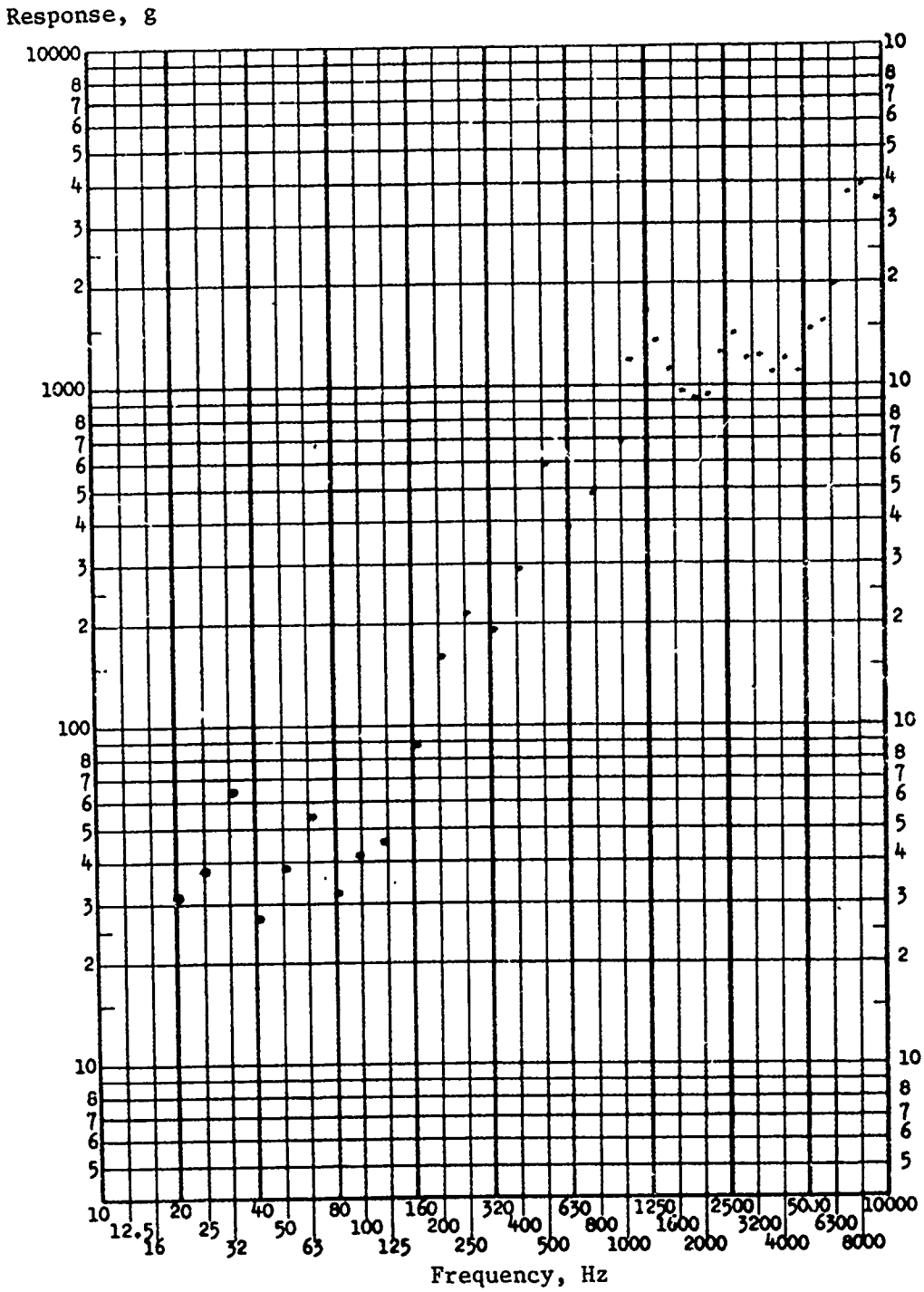
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 14 - Lateral axis cruss top near longeron attach point

Figure 22 (cont)



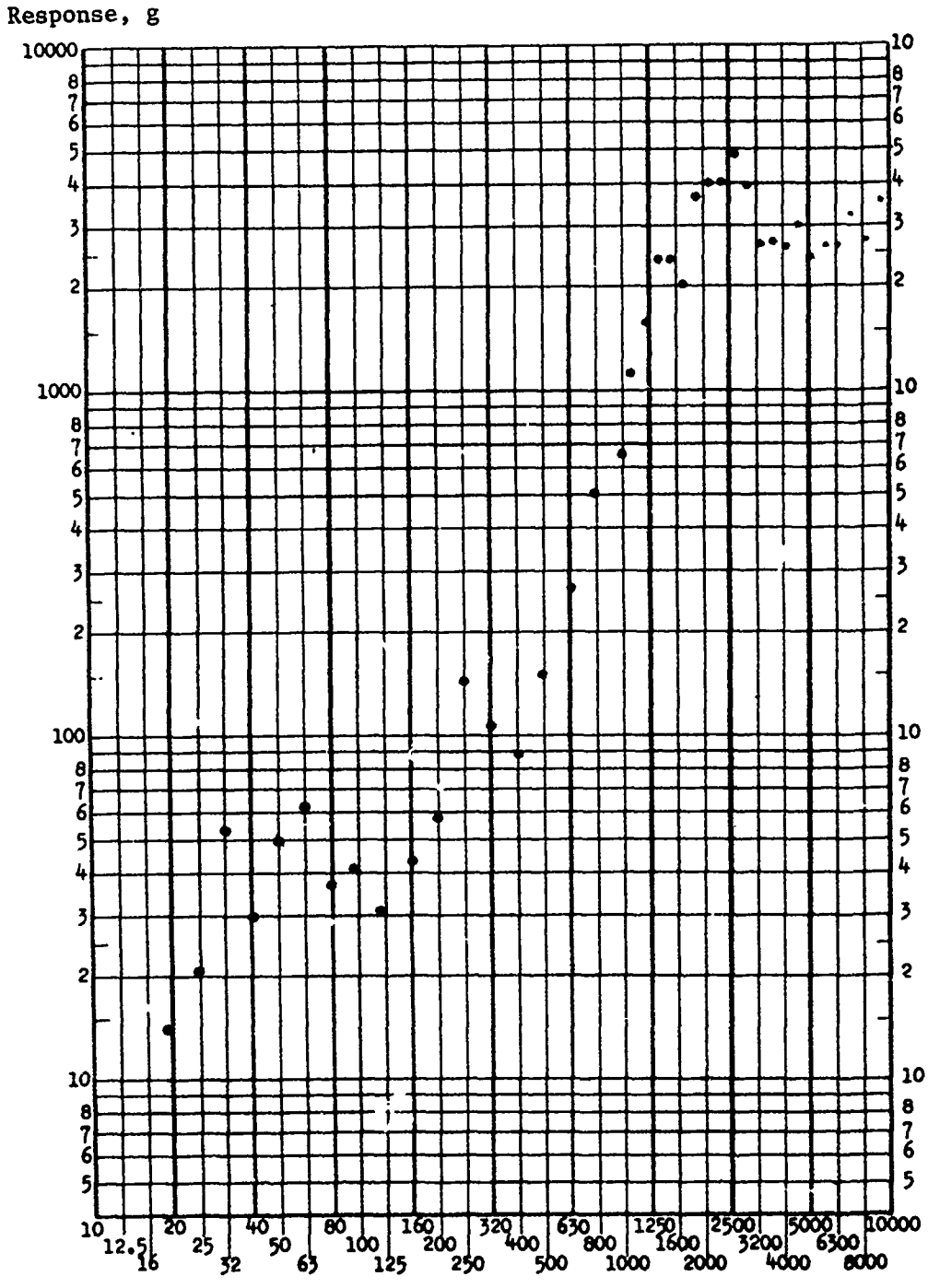
Bench Shock Test - Stage II/III Separation, Run 22
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 22 (concl)



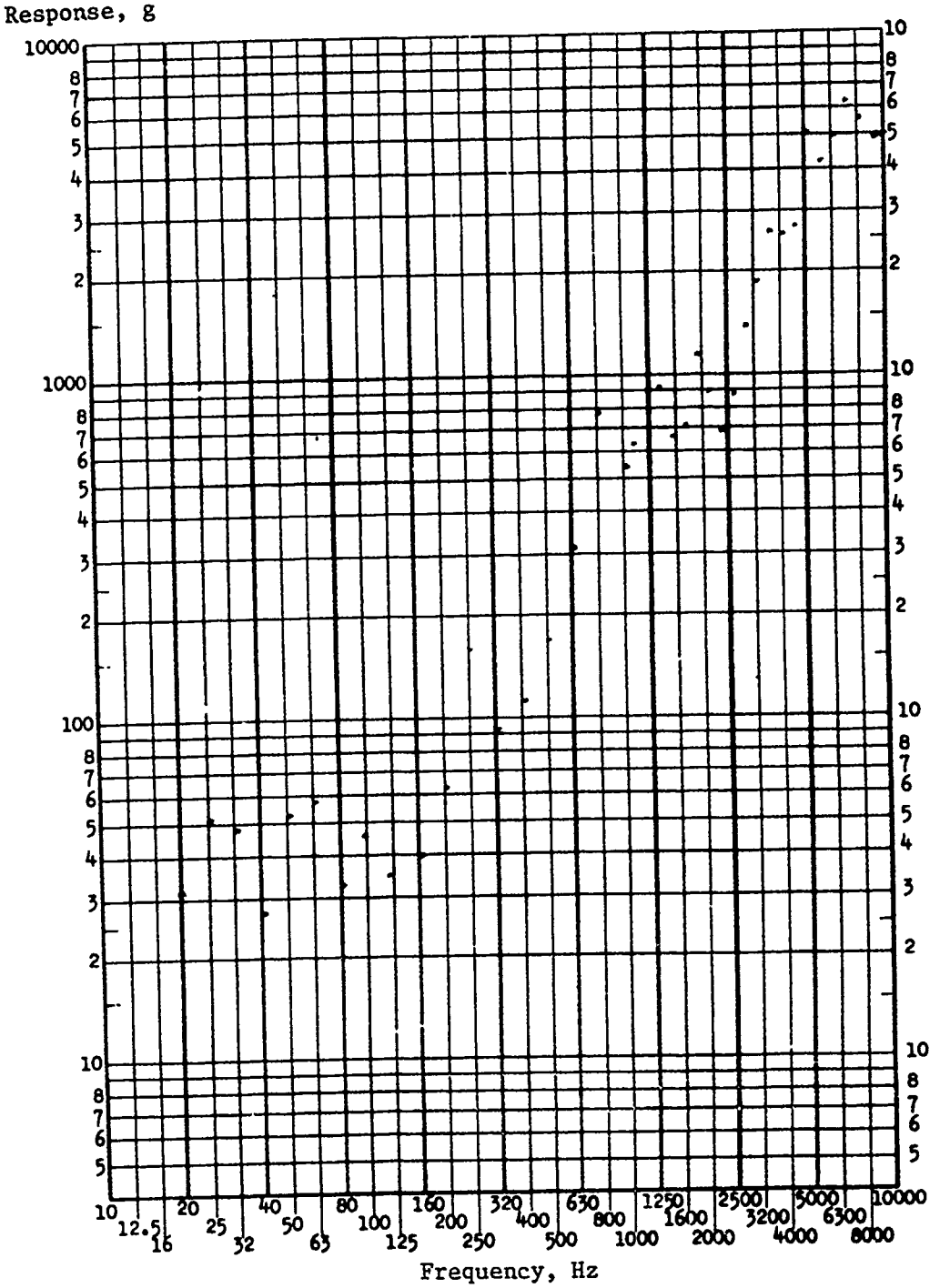
Bench Shock Test - Stage II/III Separation, Run 23
Measurement No. 1 - Longitudinal axis longeron near station 133

Figure 23 Run 23 Shock Response Spectrum



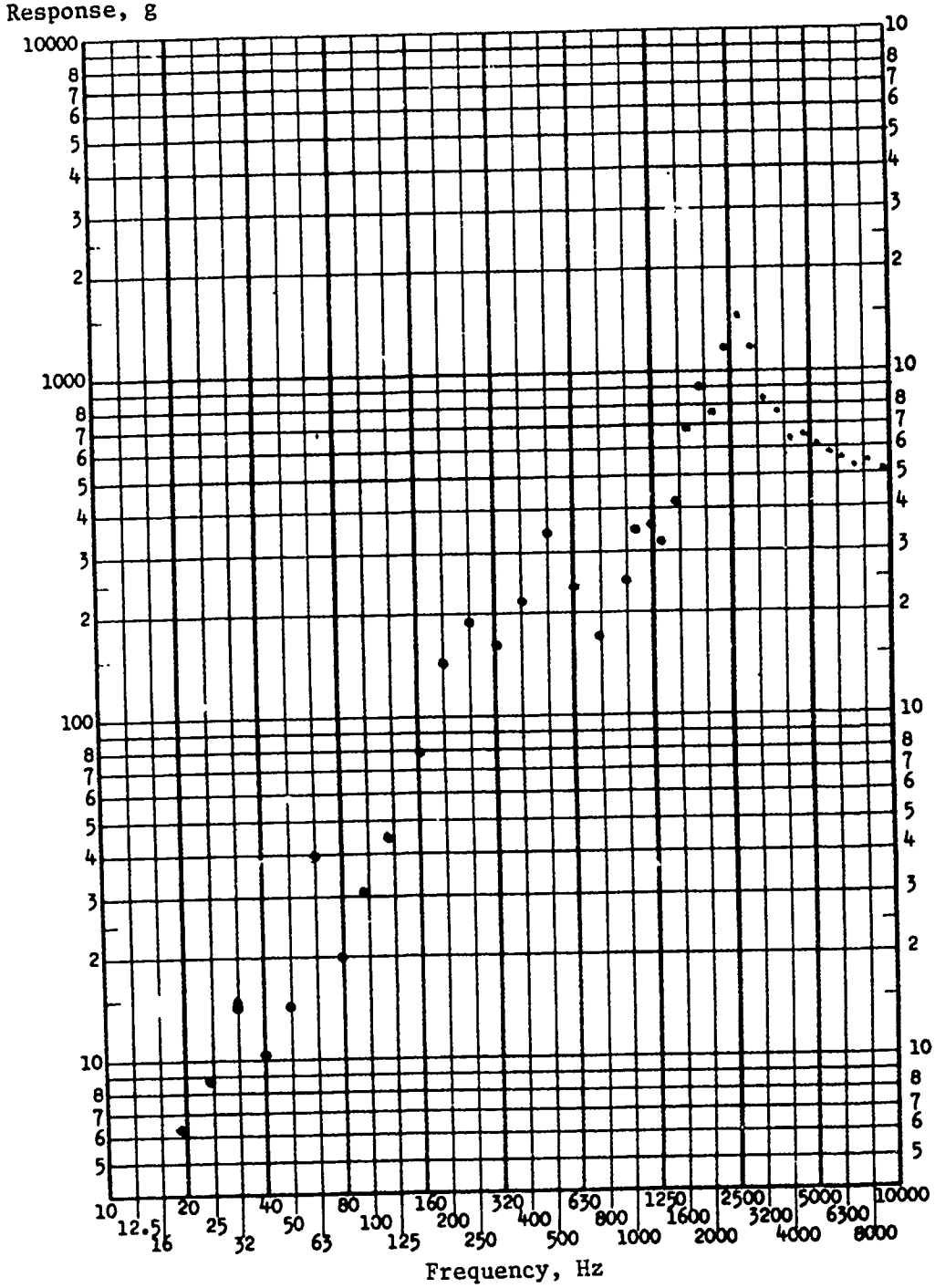
Bench Shock Test - Stage II/III Separation, Run 23 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 23 (cont)



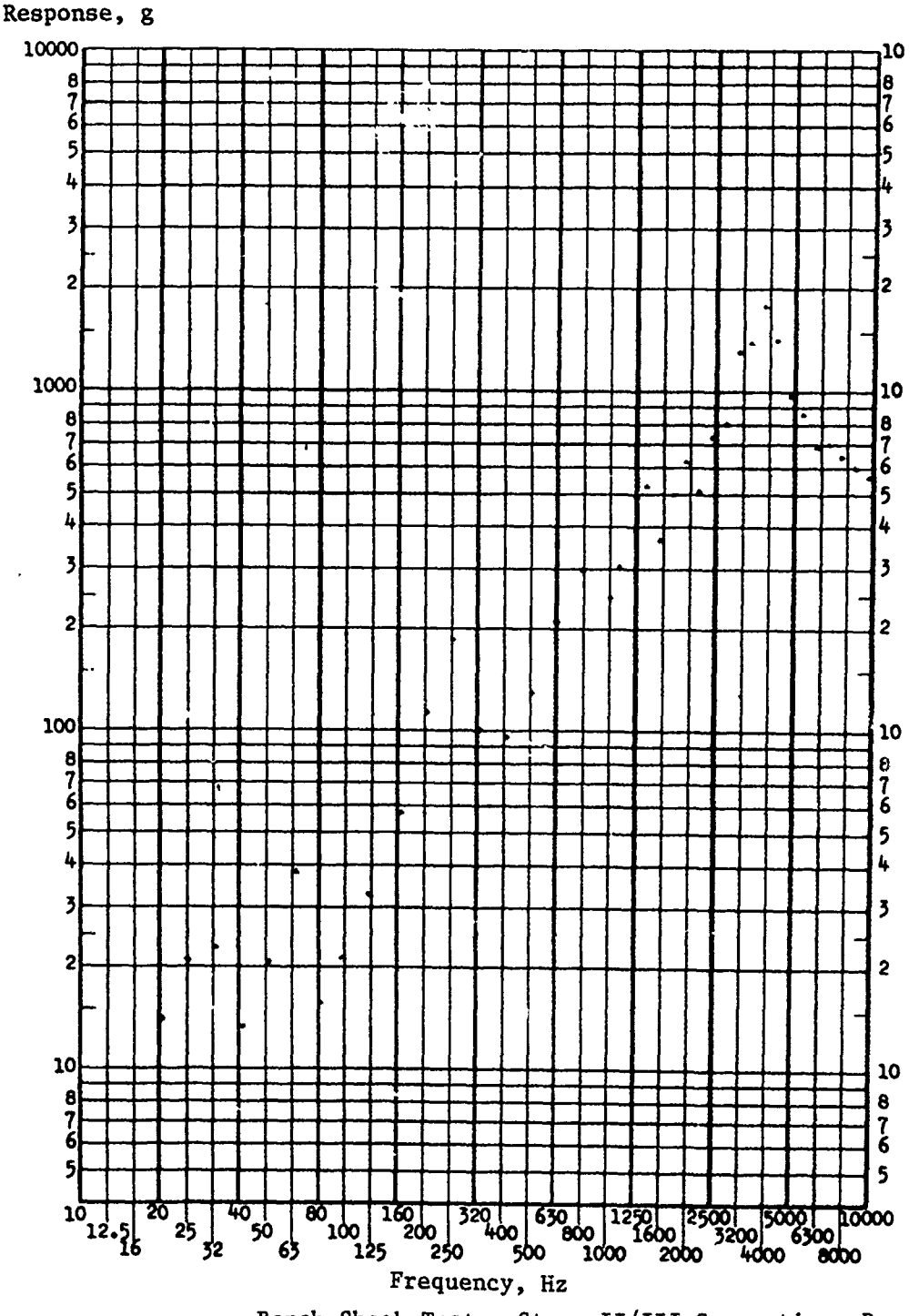
Bench Shock Test - Stage II/III Separation, Run 23 _ Measurement No. 3 - Radial axis longeron near station 133

Figure 23 (cont)



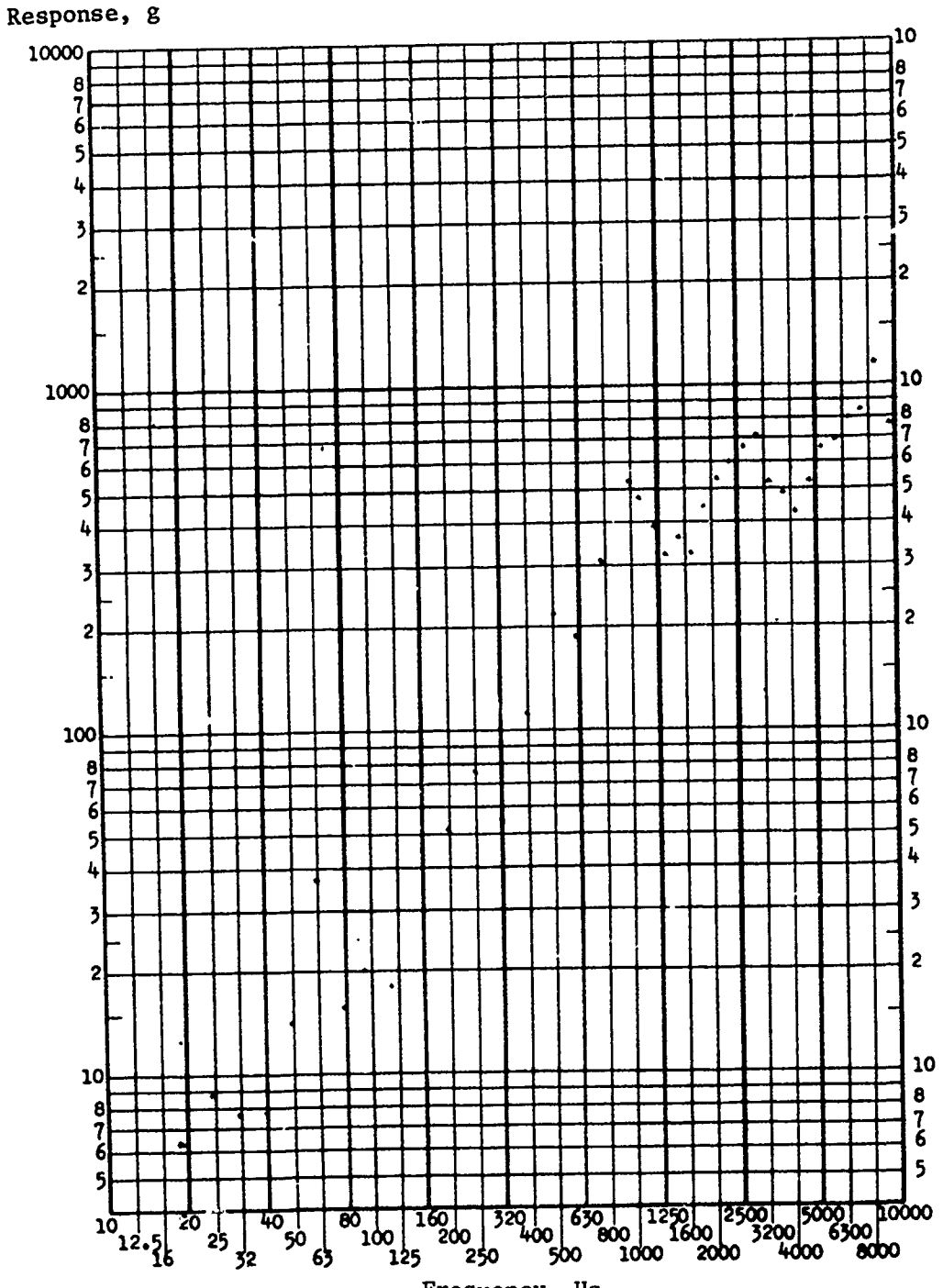
Bench Shock Test - Stage II/III Separation, Run 23 _ Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 23 (cont)



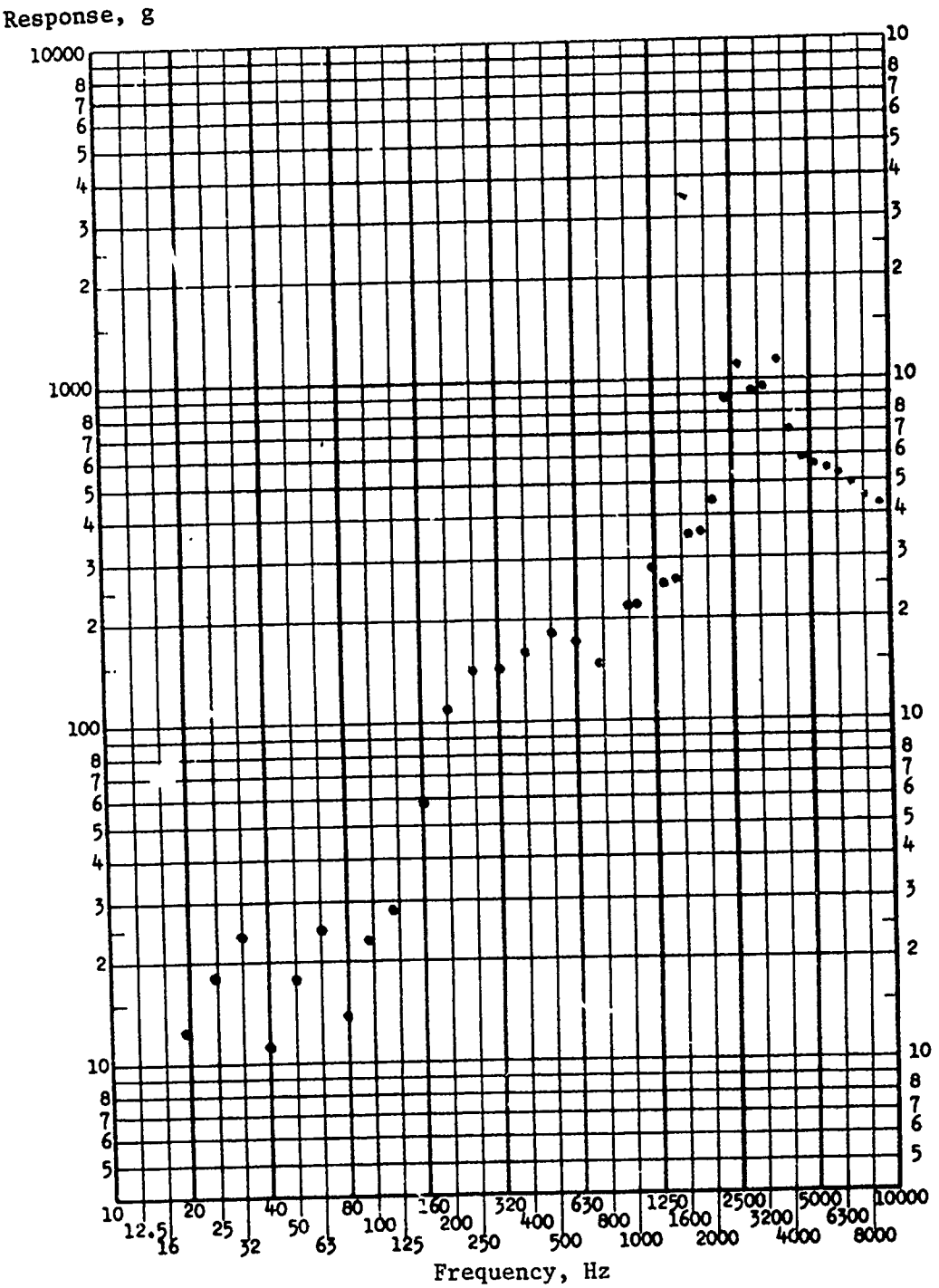
Bench Shock Test - Stage II/III Separation, Run 23 _
Measurement No. 5 - Tangential axis longeron near
station 117

Figure 23 (cont)



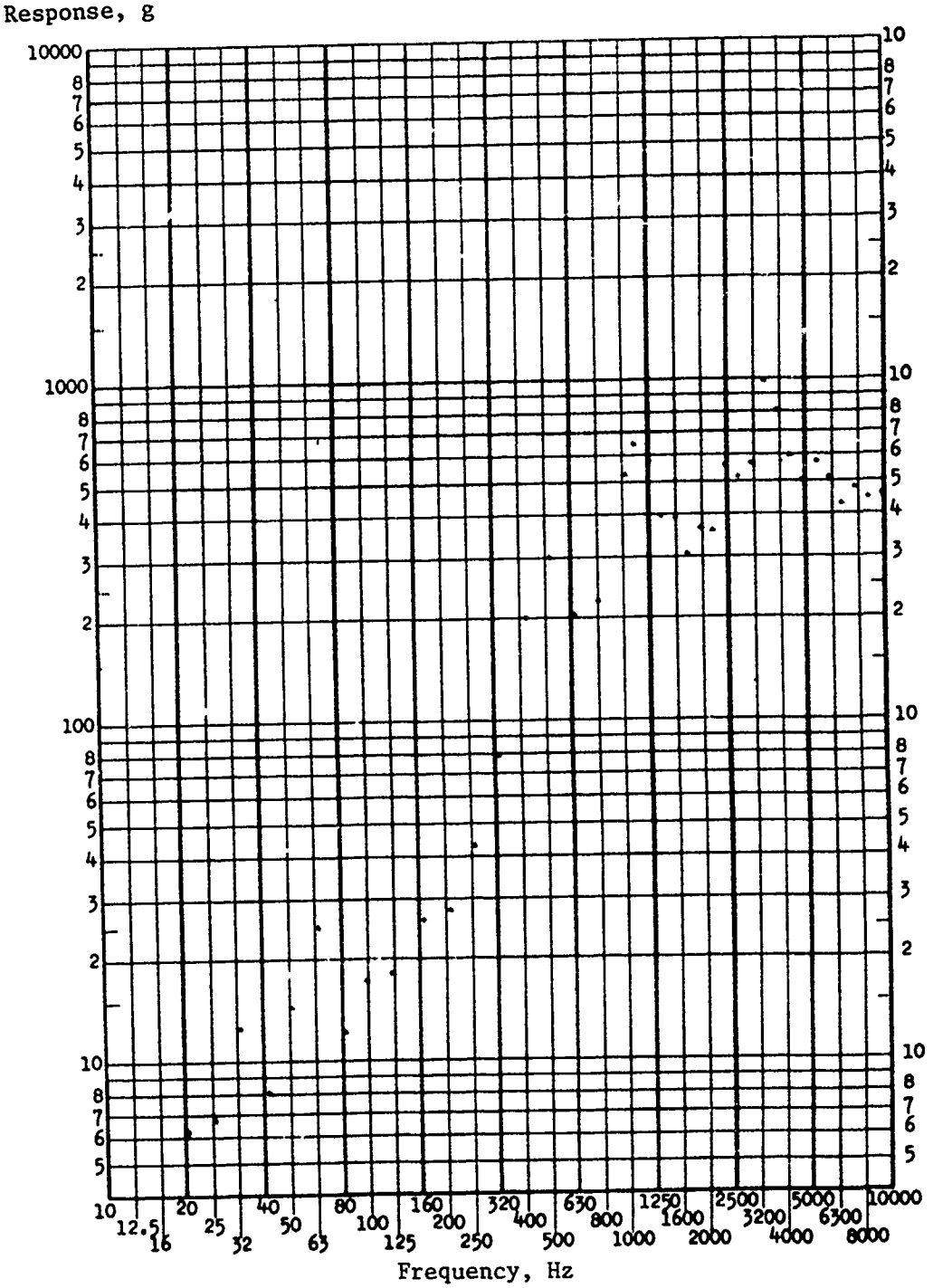
Bench Shock Test - Stage II/III Separation, Run 23 _
Measurement No. 6 - Radial axis longeron near station 117

Figure 23 (cont)



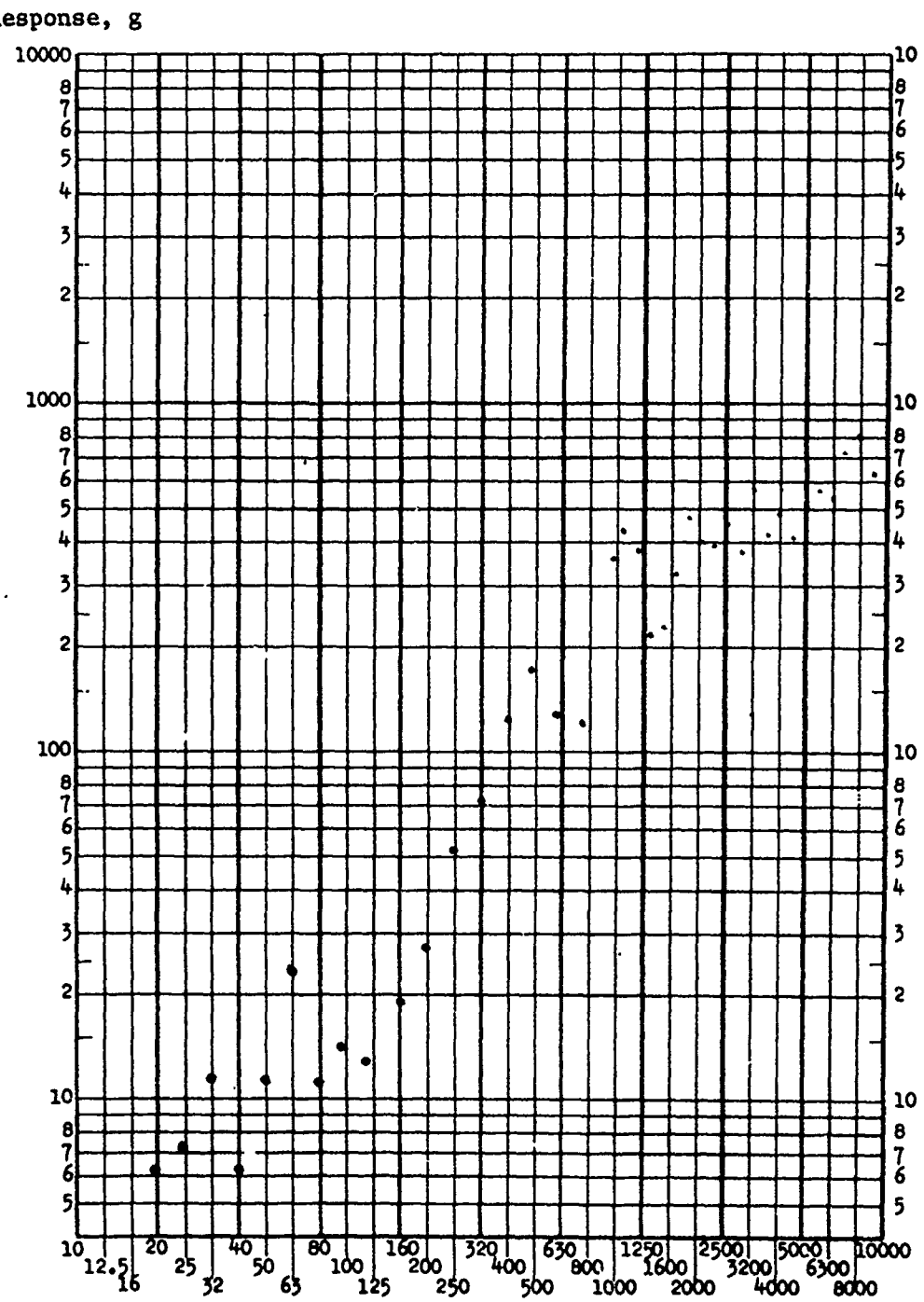
Bench Shock Test - Stage II/III Separation, Run 23_
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 23 (cont)



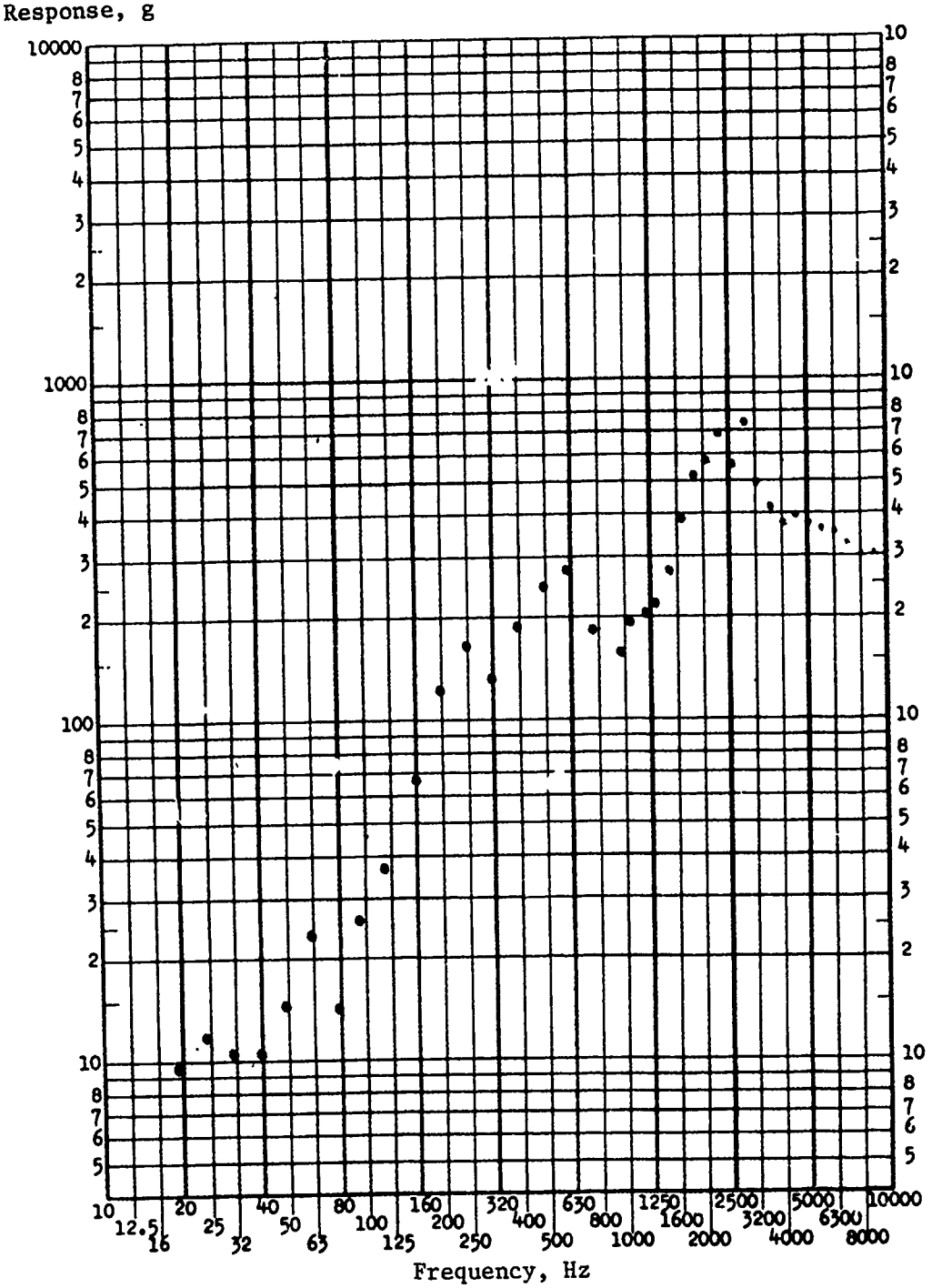
Bench Shock Test - Stage II/III Separation, Run 23_
Measurement No. 8 - Tangential axis longeron near station 77

Figure 23 (cont)



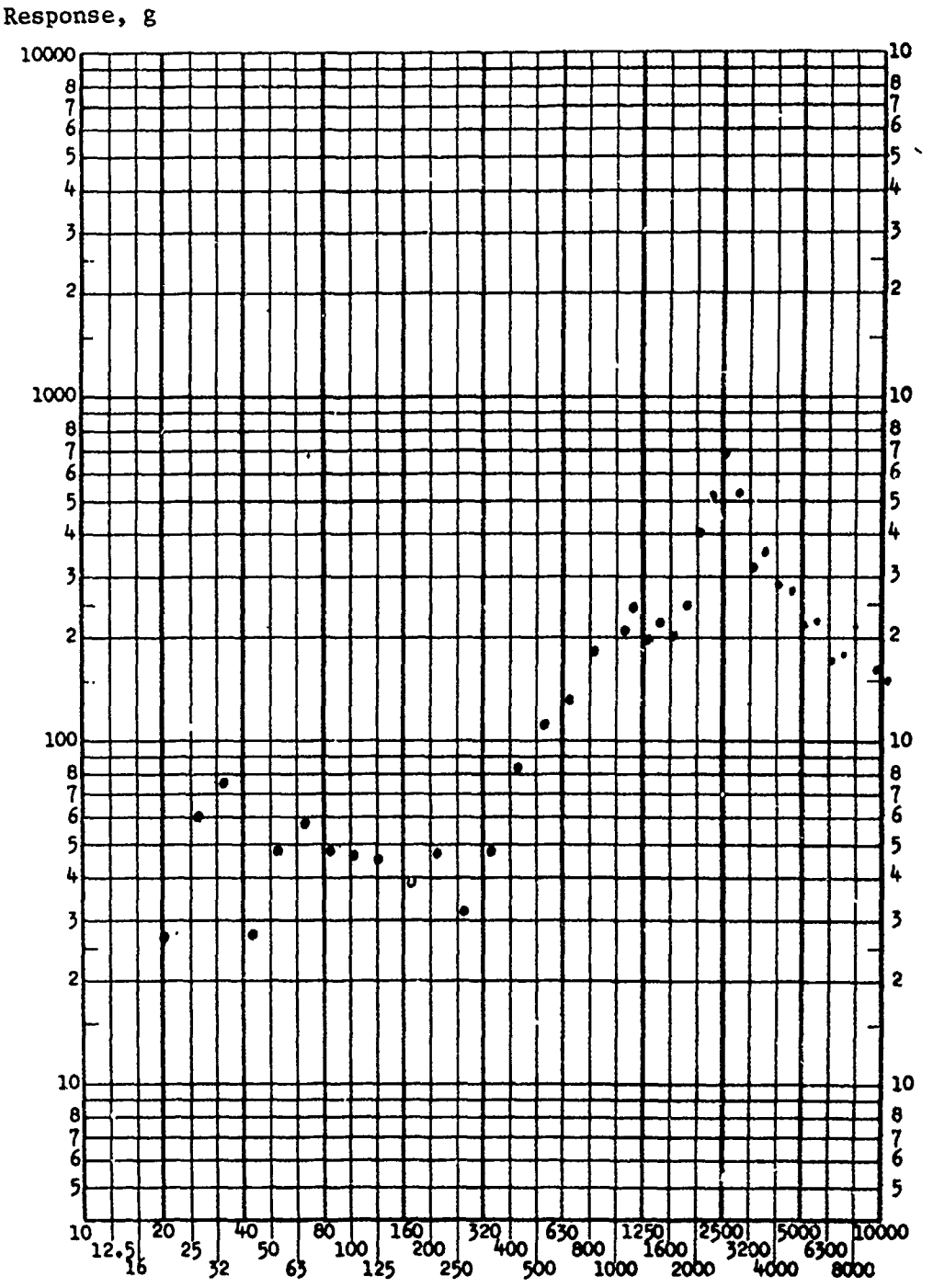
Bench Shock Test - Stage II/III Separation, Run 23_
Measurement No. 9 - Radial axis longeron near station 77

Figure 23 (cont)



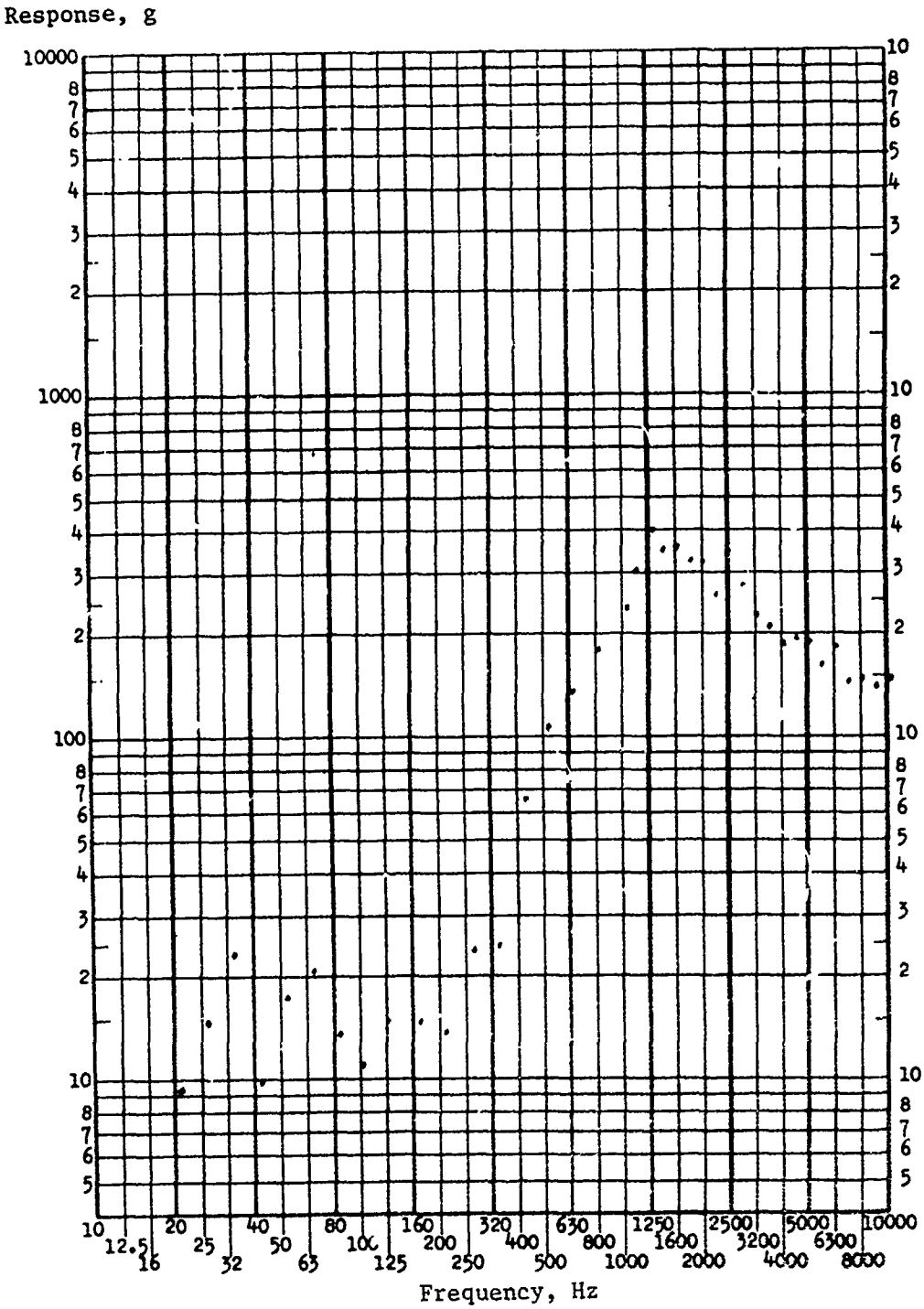
Bench Shock Test - Stage II/III Separation, Run 23
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 23 (cont)



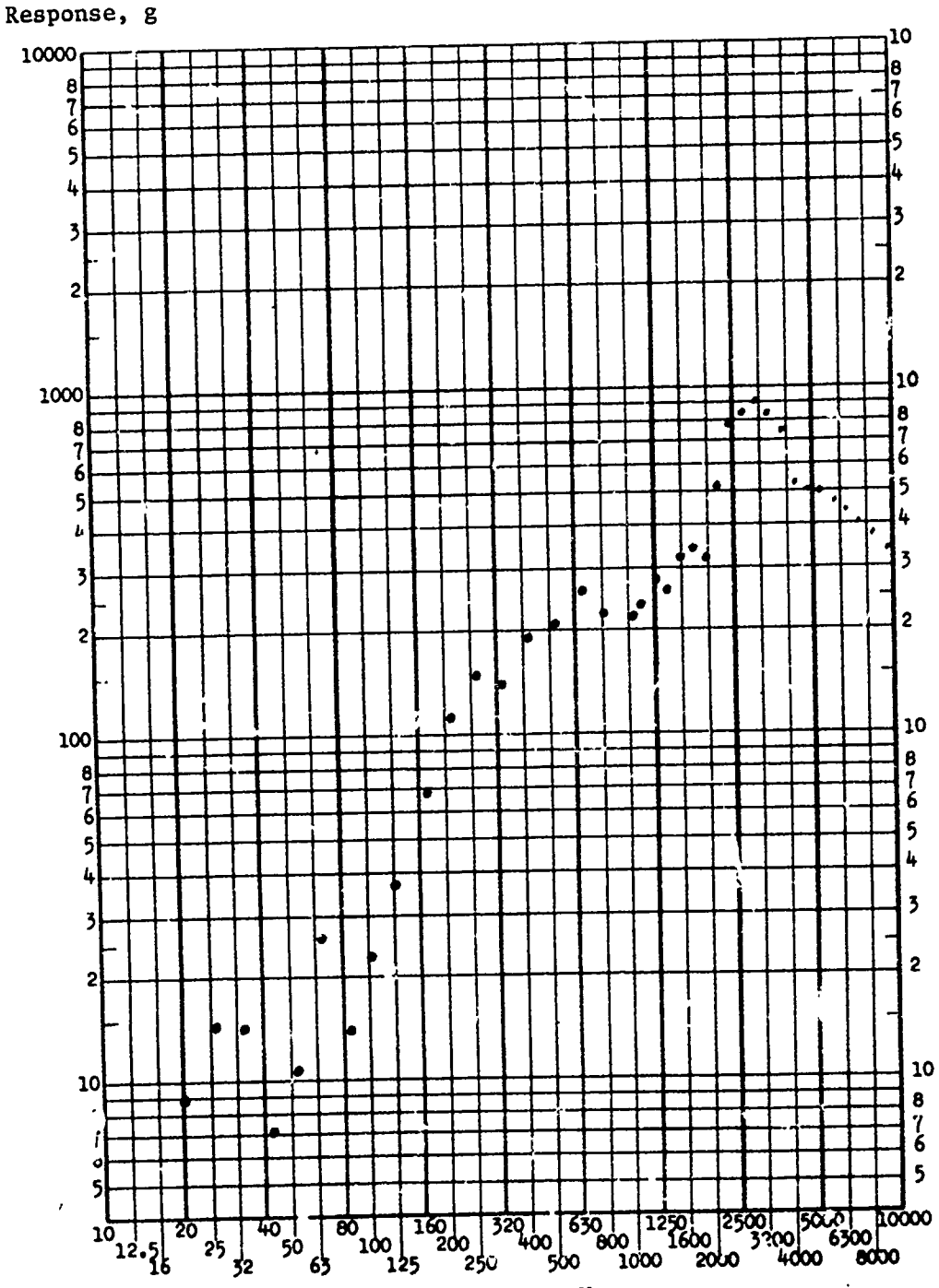
Bench Shock Test - Stage II/III Separation, Run 23
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 23 (cont)



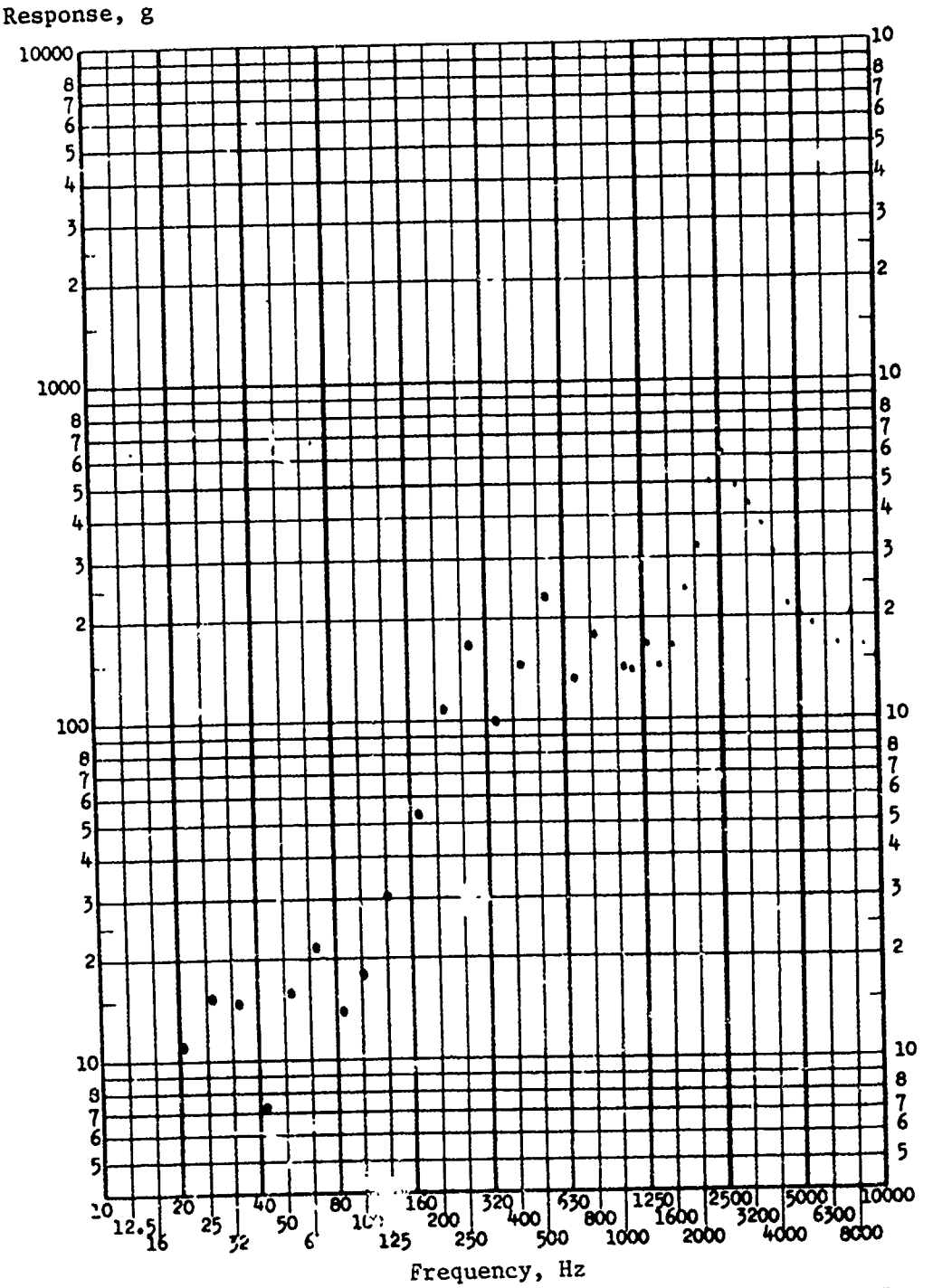
Bench Shock Test - Stage II/III Separation, Run 23
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 23 (cont)



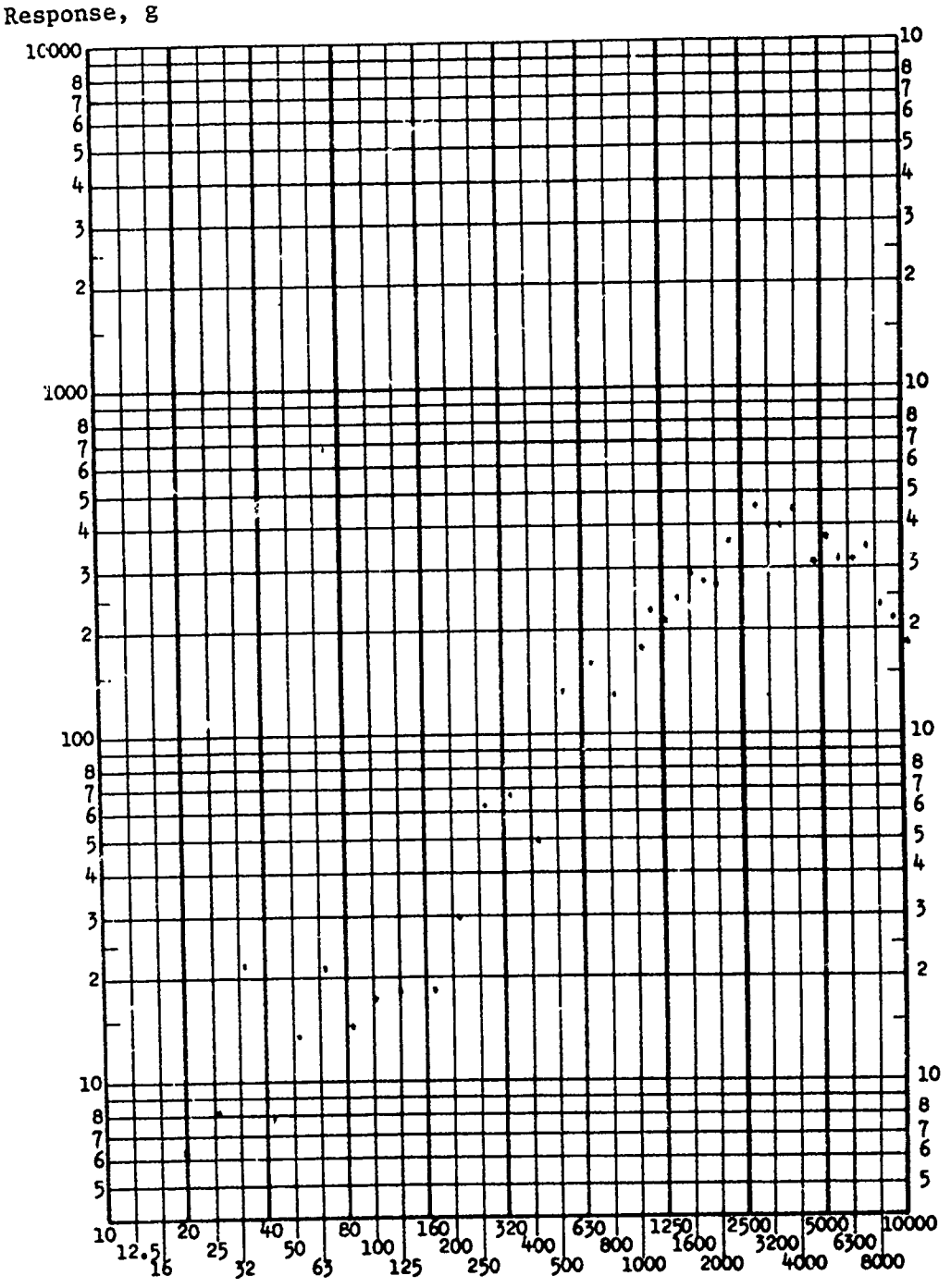
Bench Shock Test - Stage II/III Separation, Run 23 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 23 (cont)



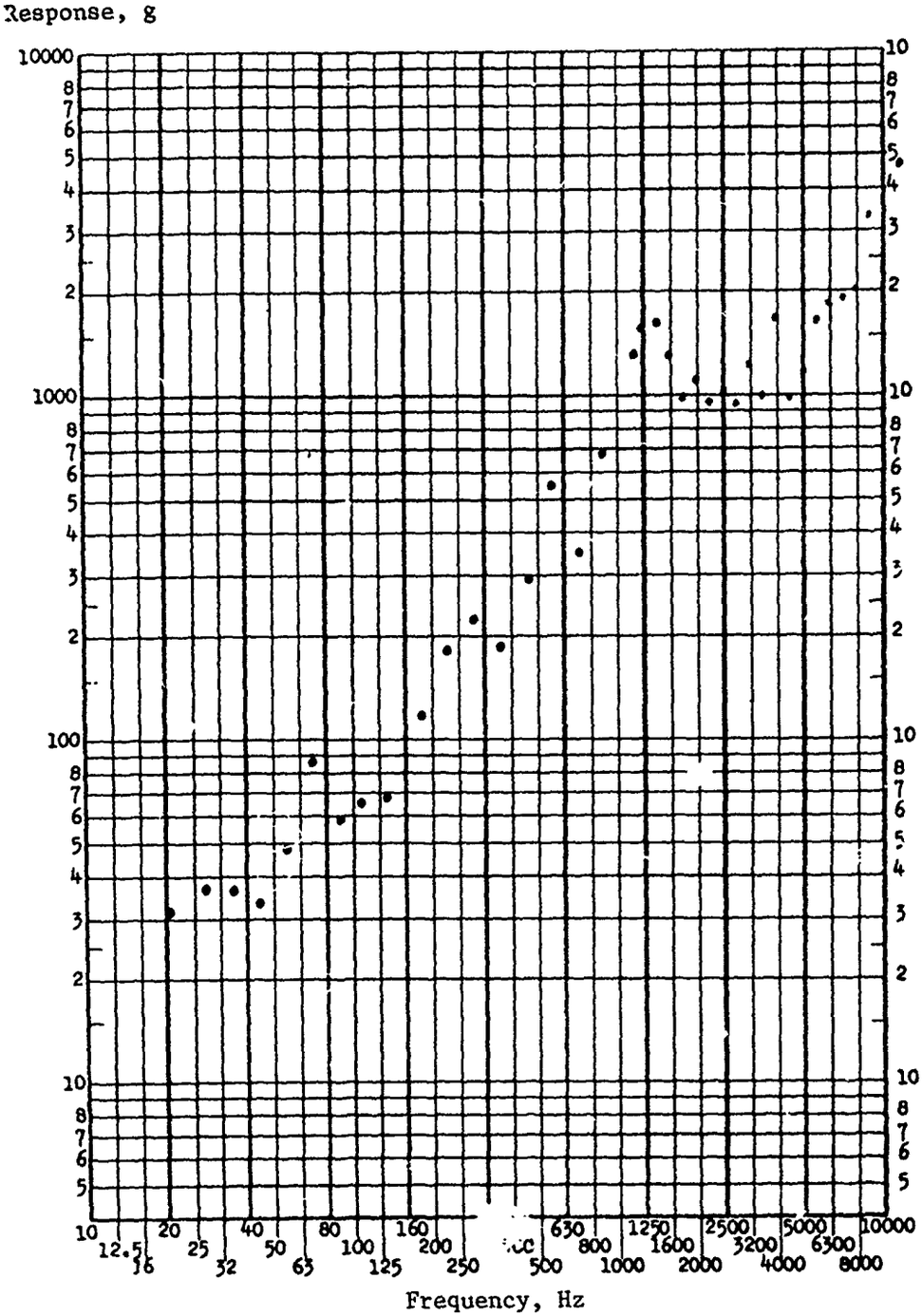
Bench Shock Test - Stage II/III Separation, Run 23 _
Measurement No. 14 - Lateral axis truss top near
longeron attach point

Figure 23 (cont)



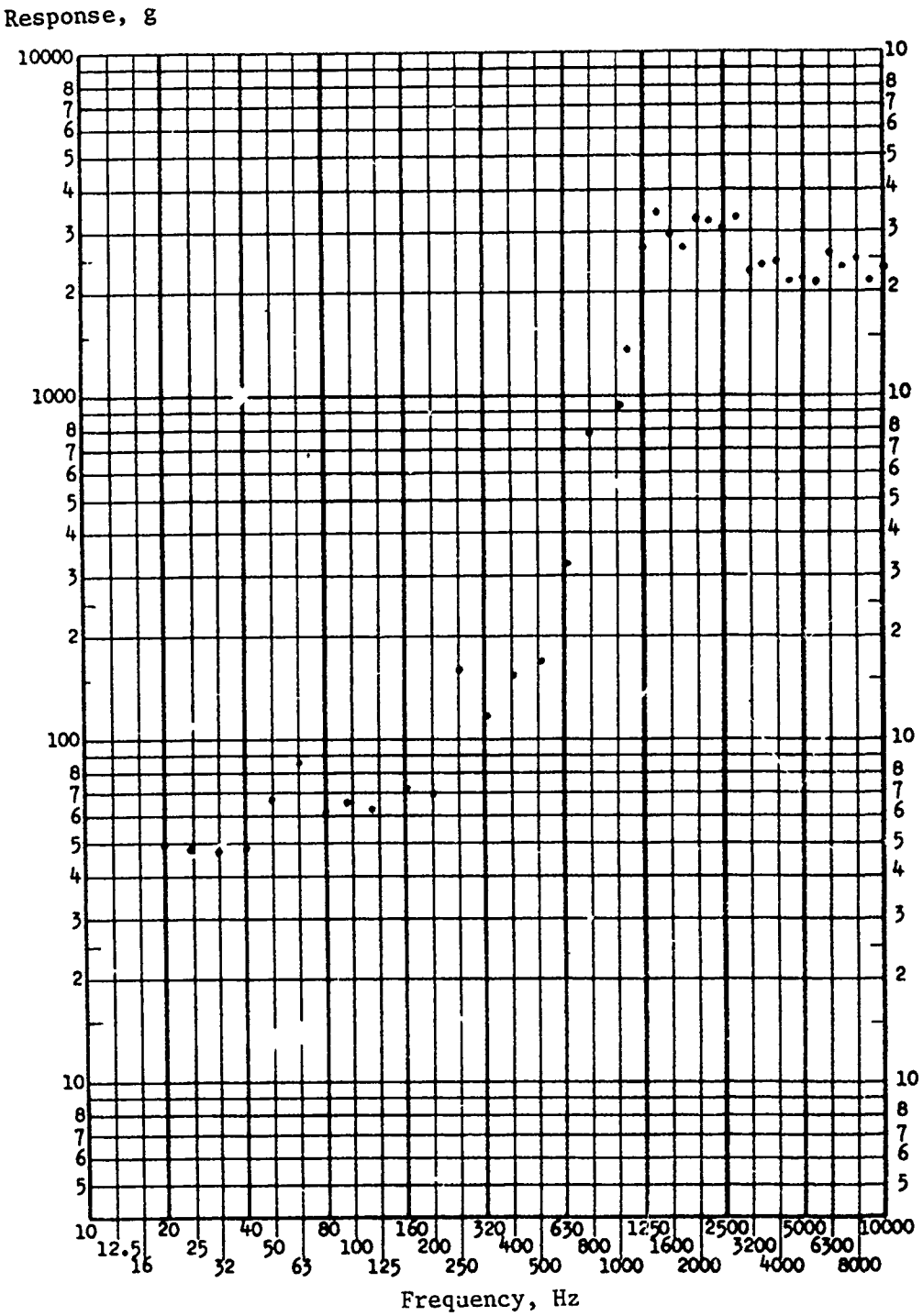
Bench Shock Test - Stage II/III Separation, Run 23
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 23 (concl)



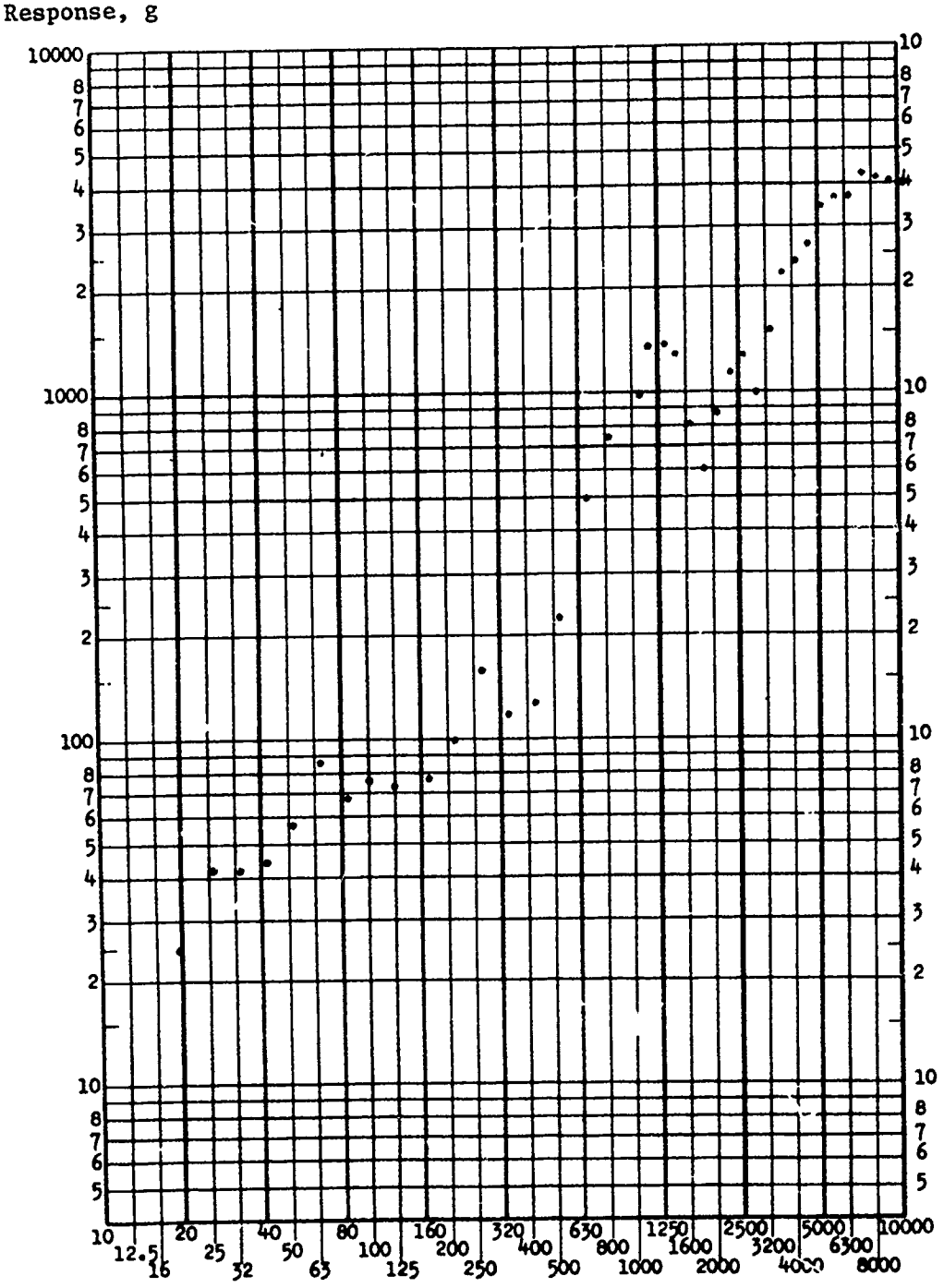
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 24 Run 24 Shock Response Spectrum



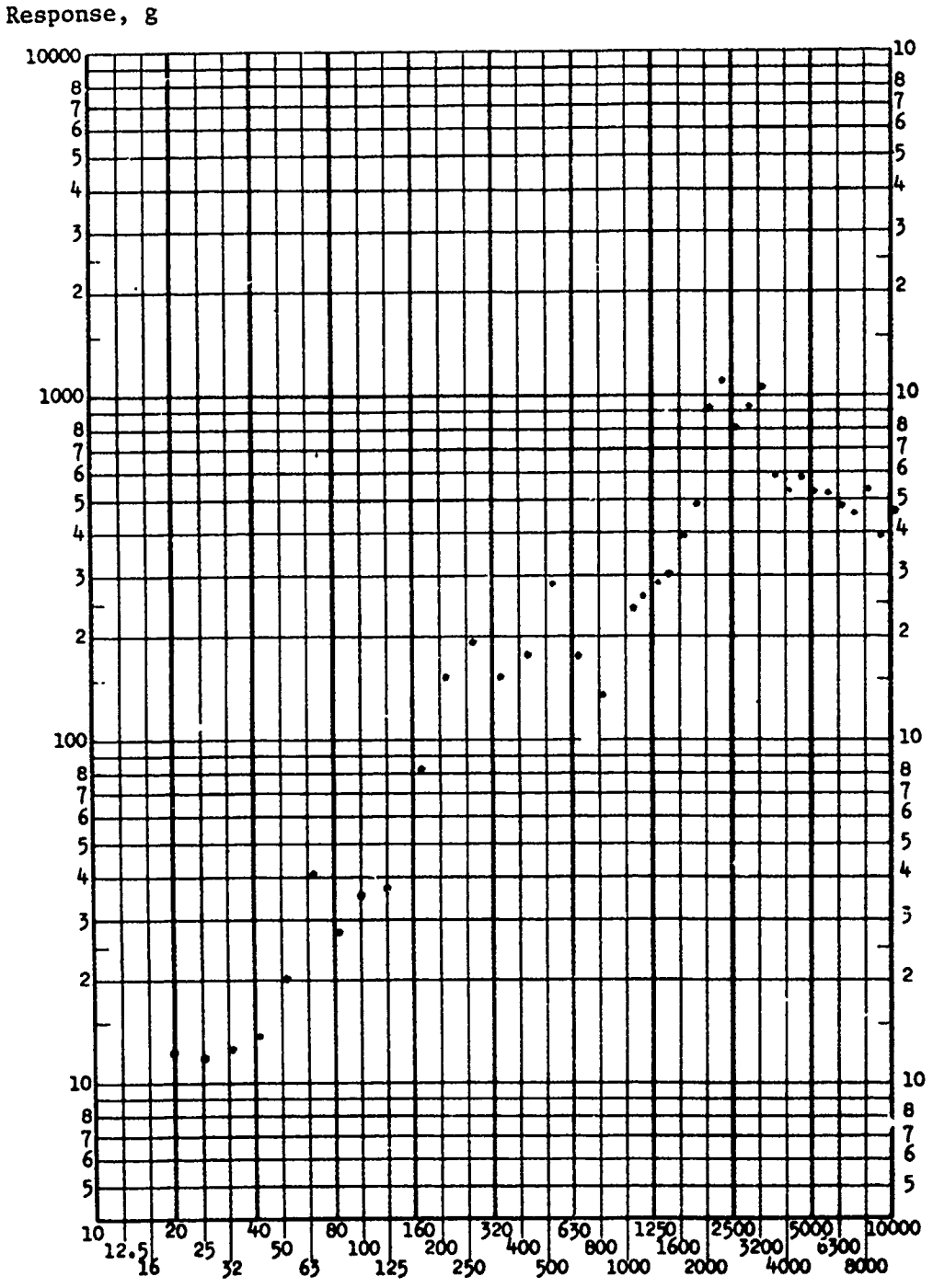
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 2 - Tangential axis longeron near station 133

Figure 24 (cont)



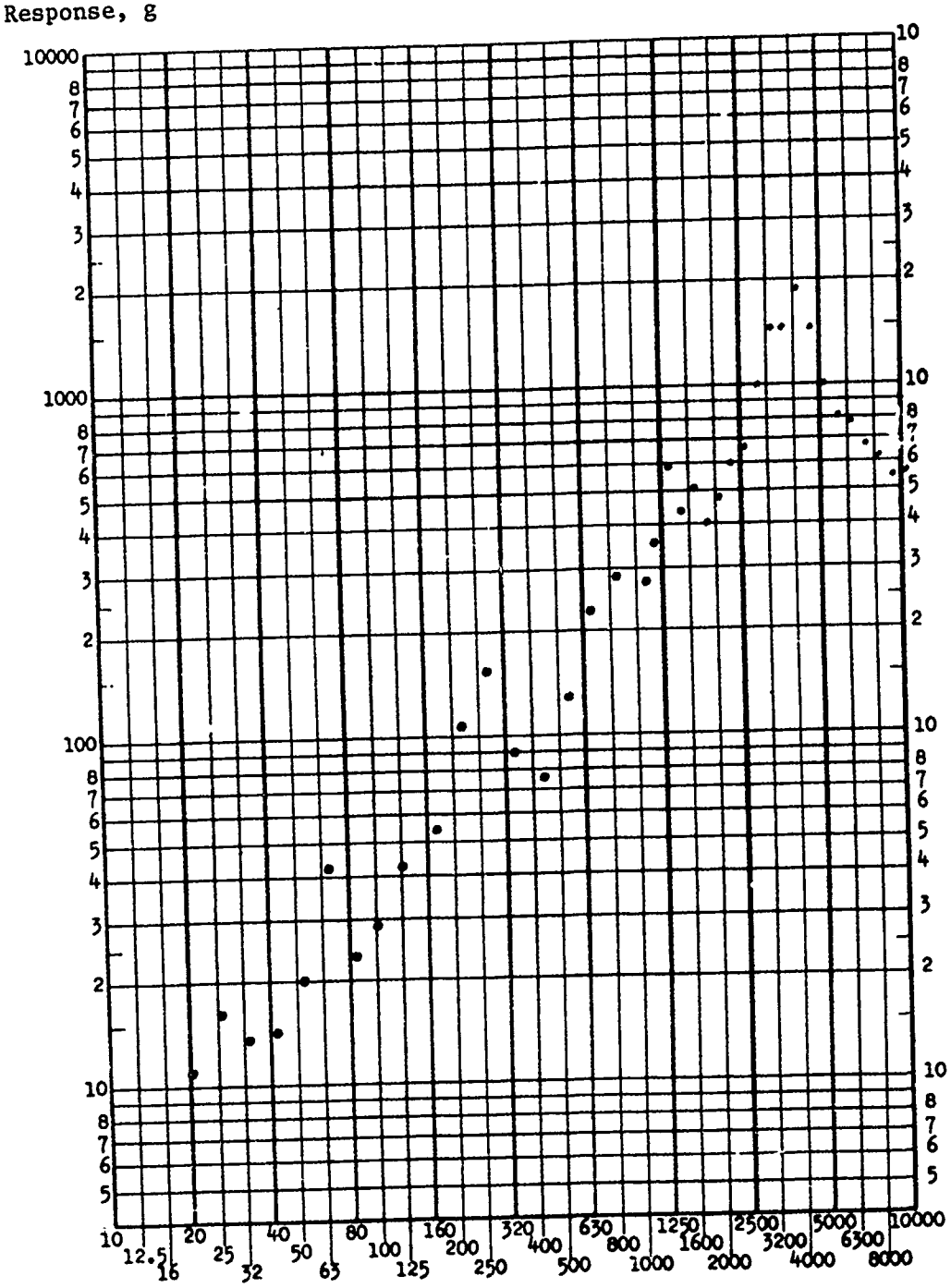
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 3 - Radial axis longeron near station 133

Figure 24 (cont)



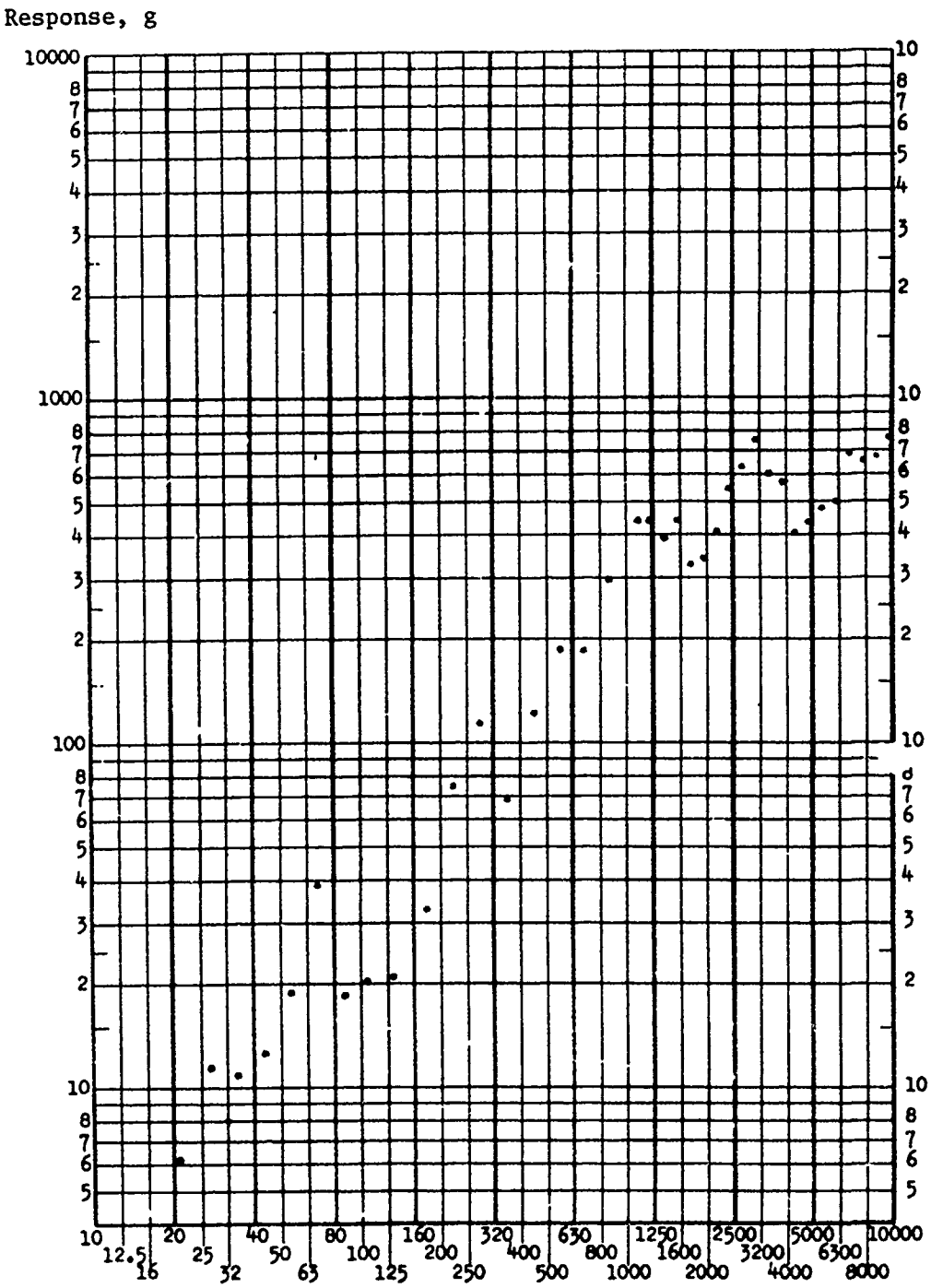
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 24 (cont)



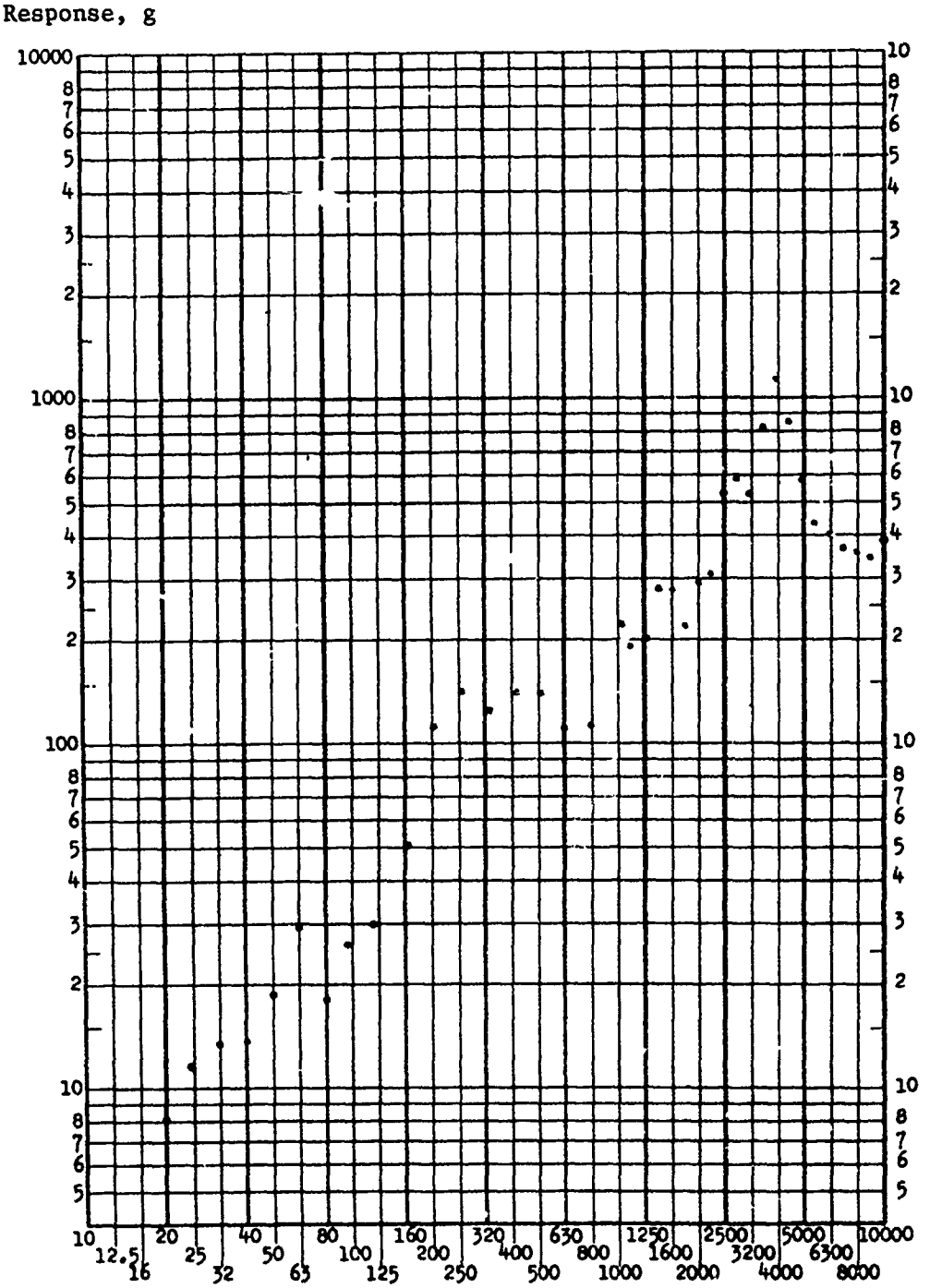
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 5 - Tangential axis longeron near station 117

Figure 24 (cont)



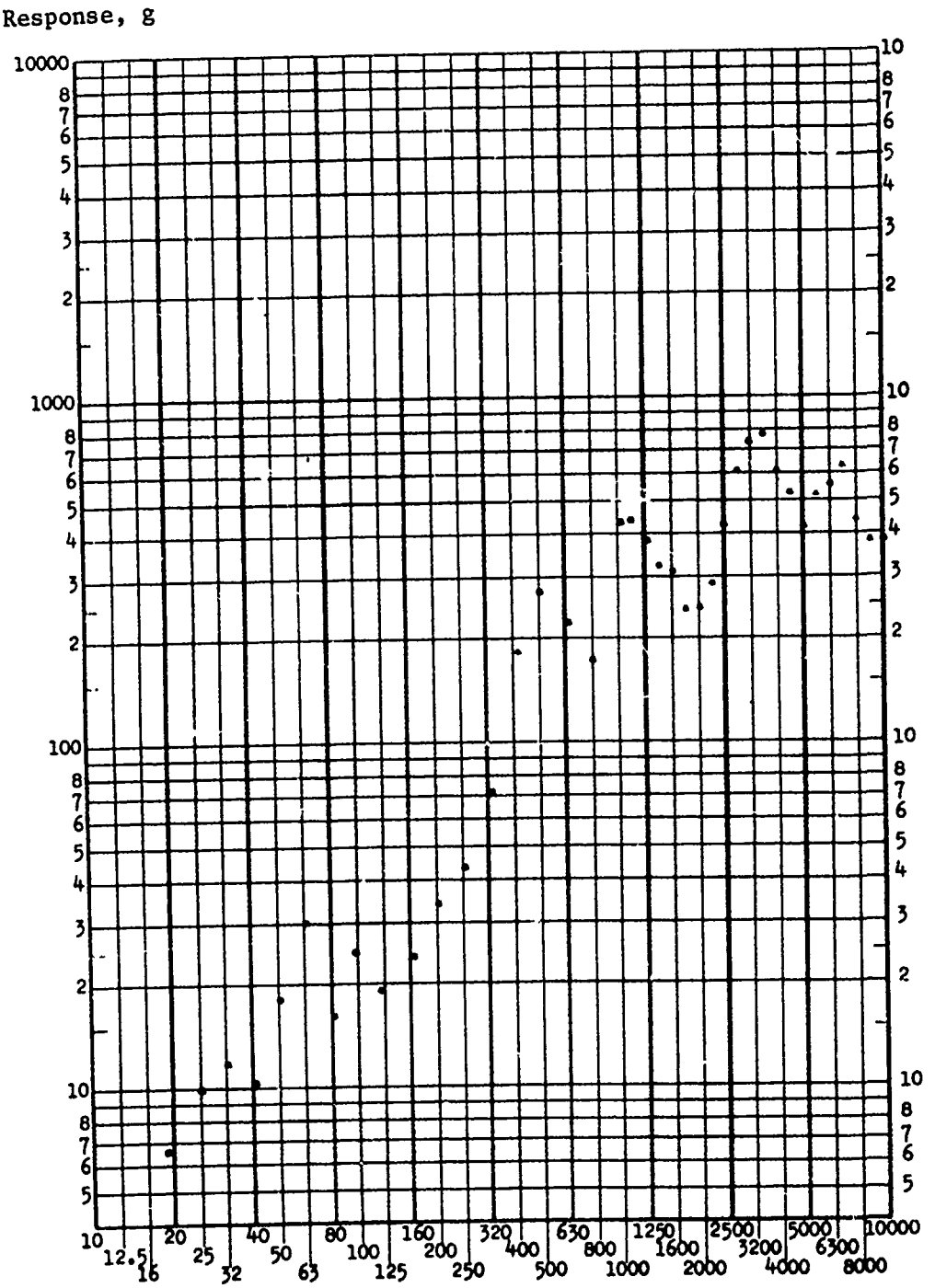
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 6 - Radial axis longeron near station 117

Figure 24 (cont)



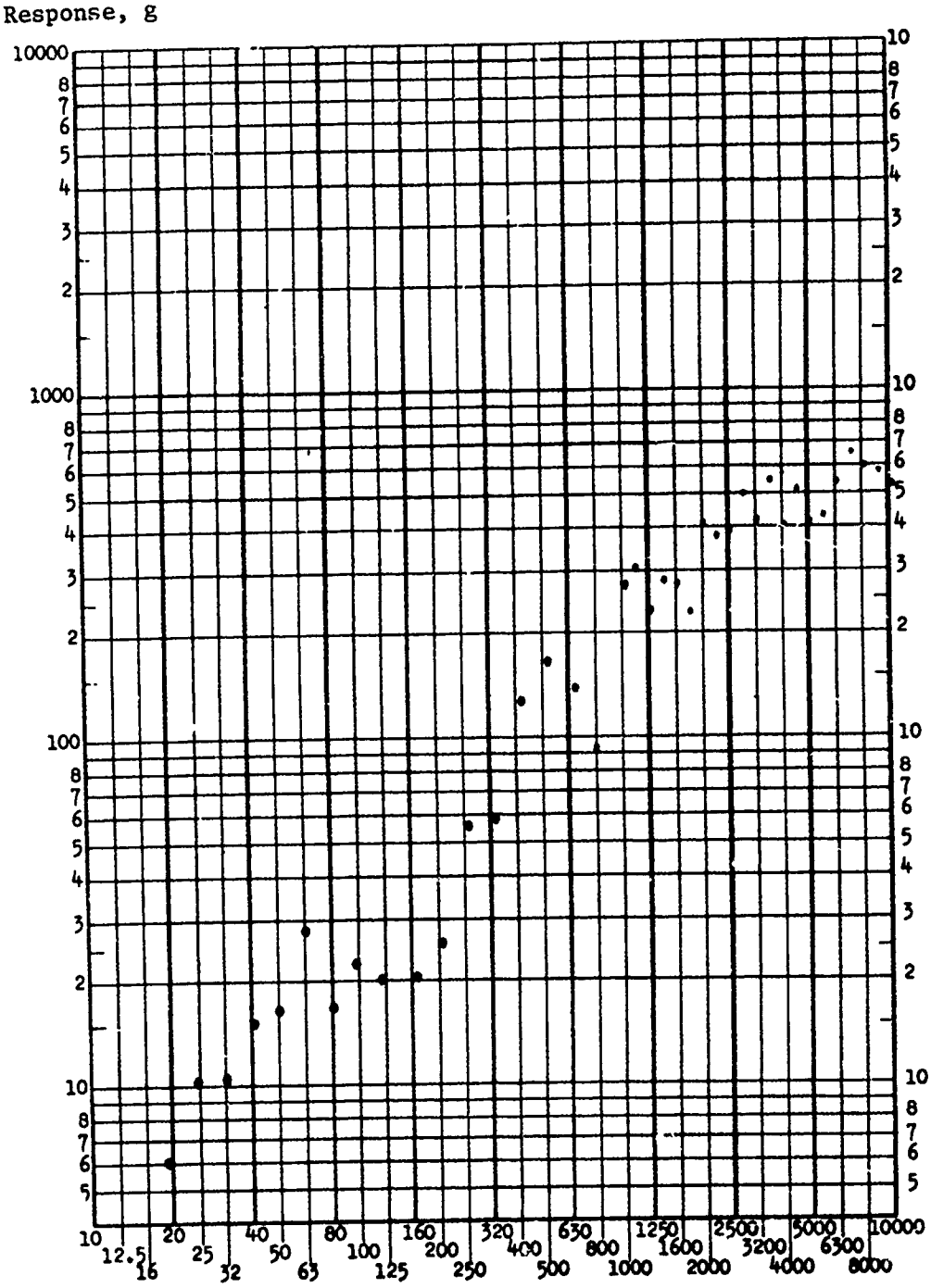
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 24 (cont)



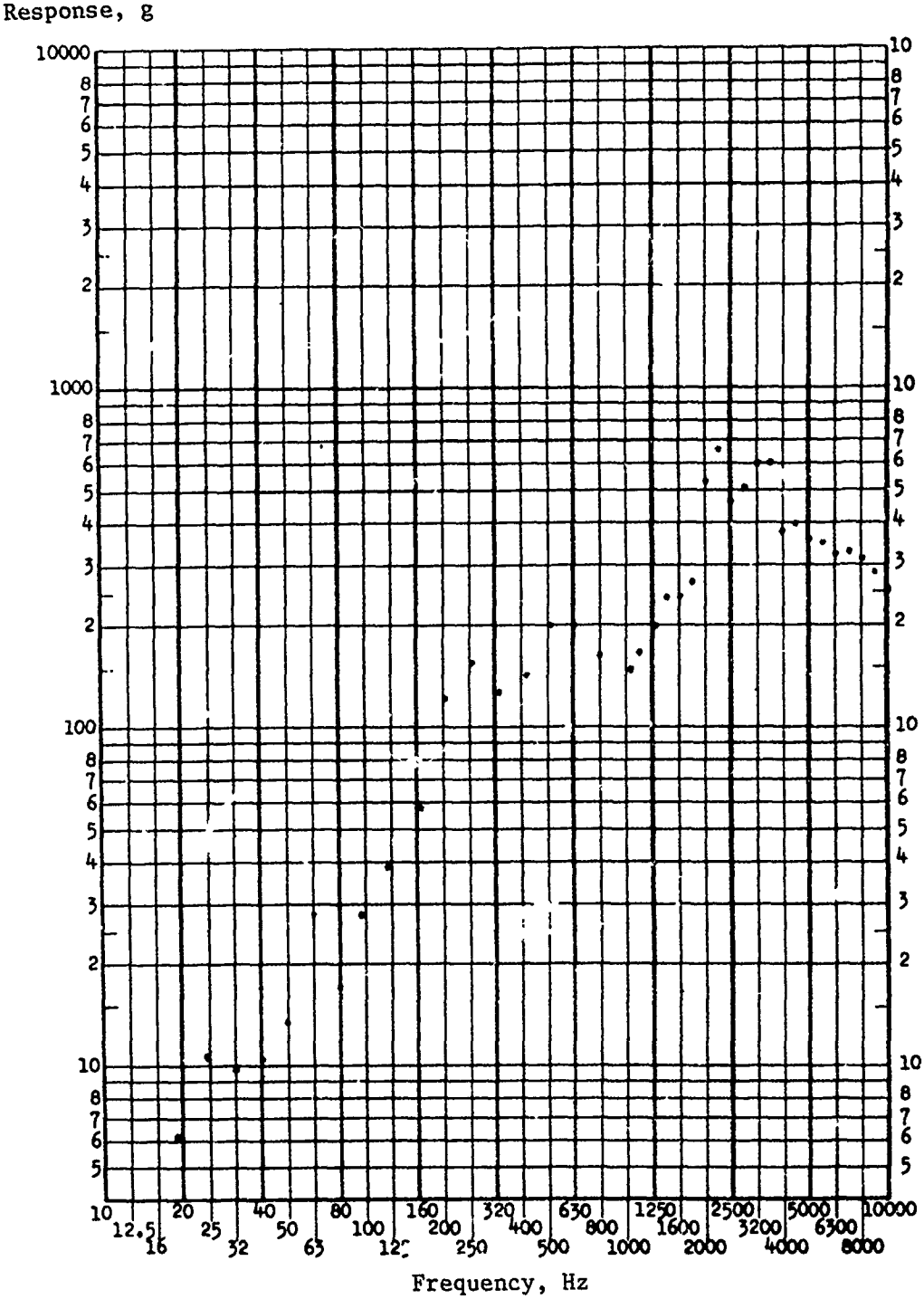
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 8 - Tangential axis longeron near station 77

Figure 24 (cont)



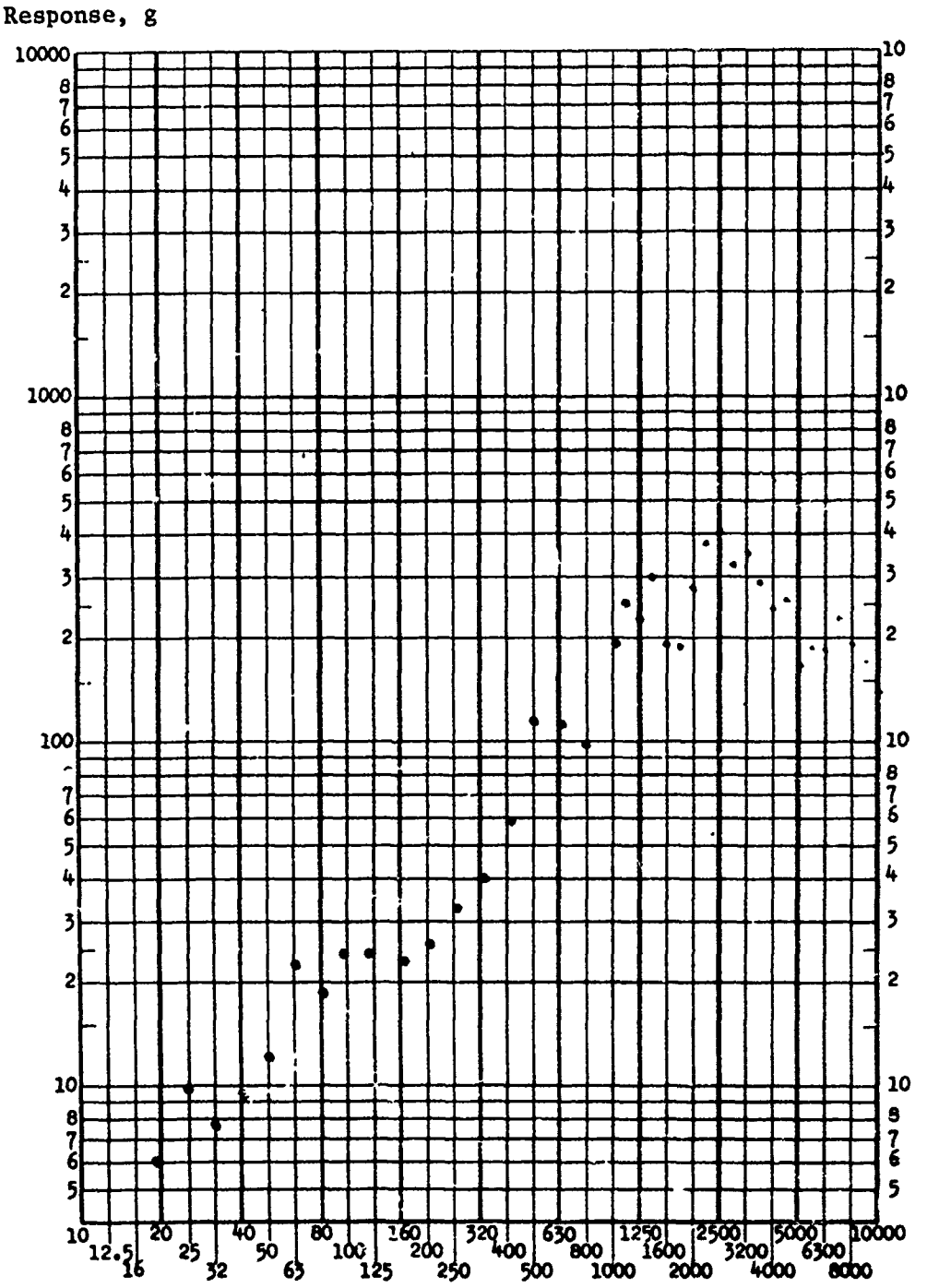
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 9 - Radial axis longeron near station 77

Figure 24 (cont)



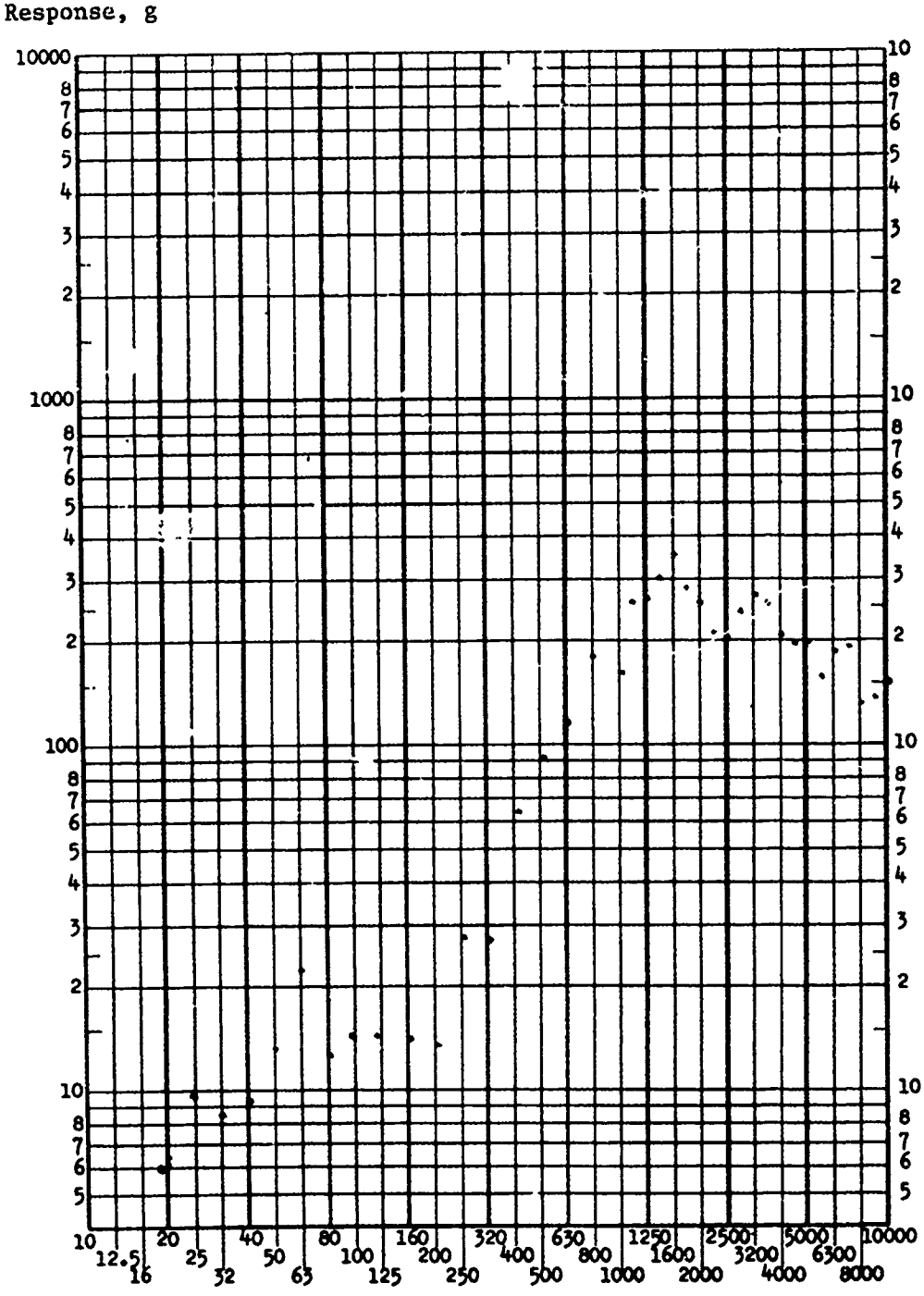
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 24 (cont)



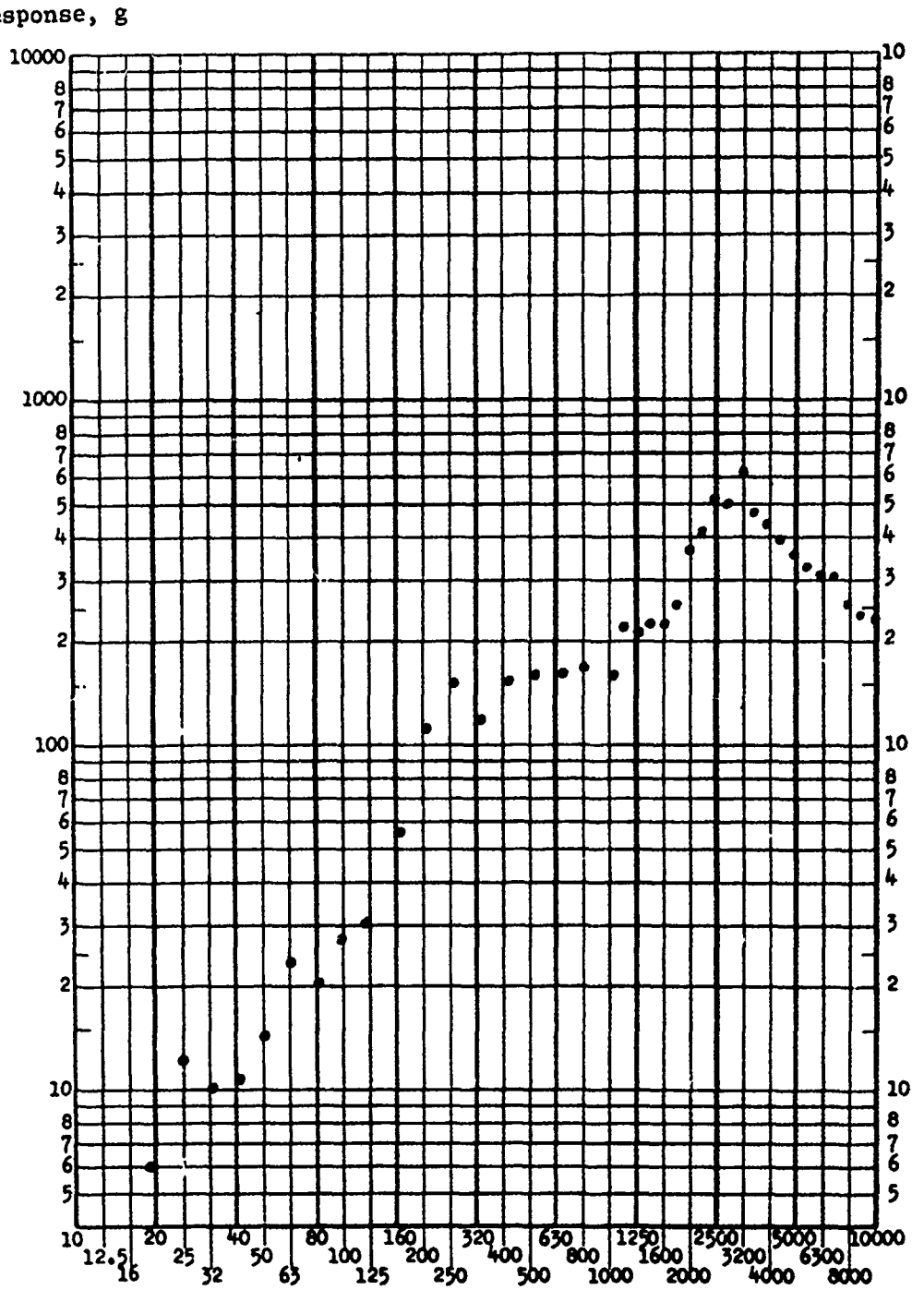
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 24 (cont)



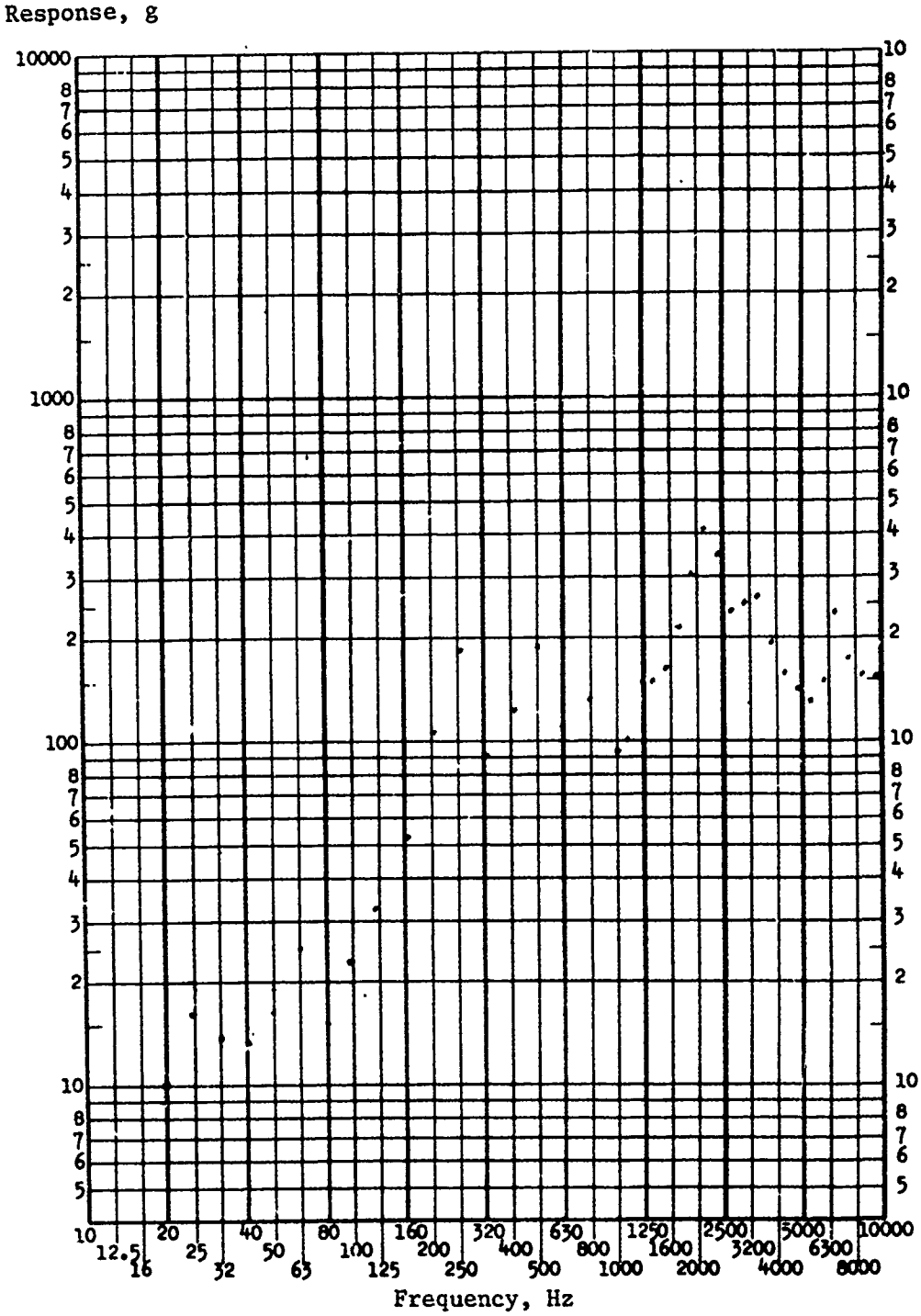
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 24 (cont)



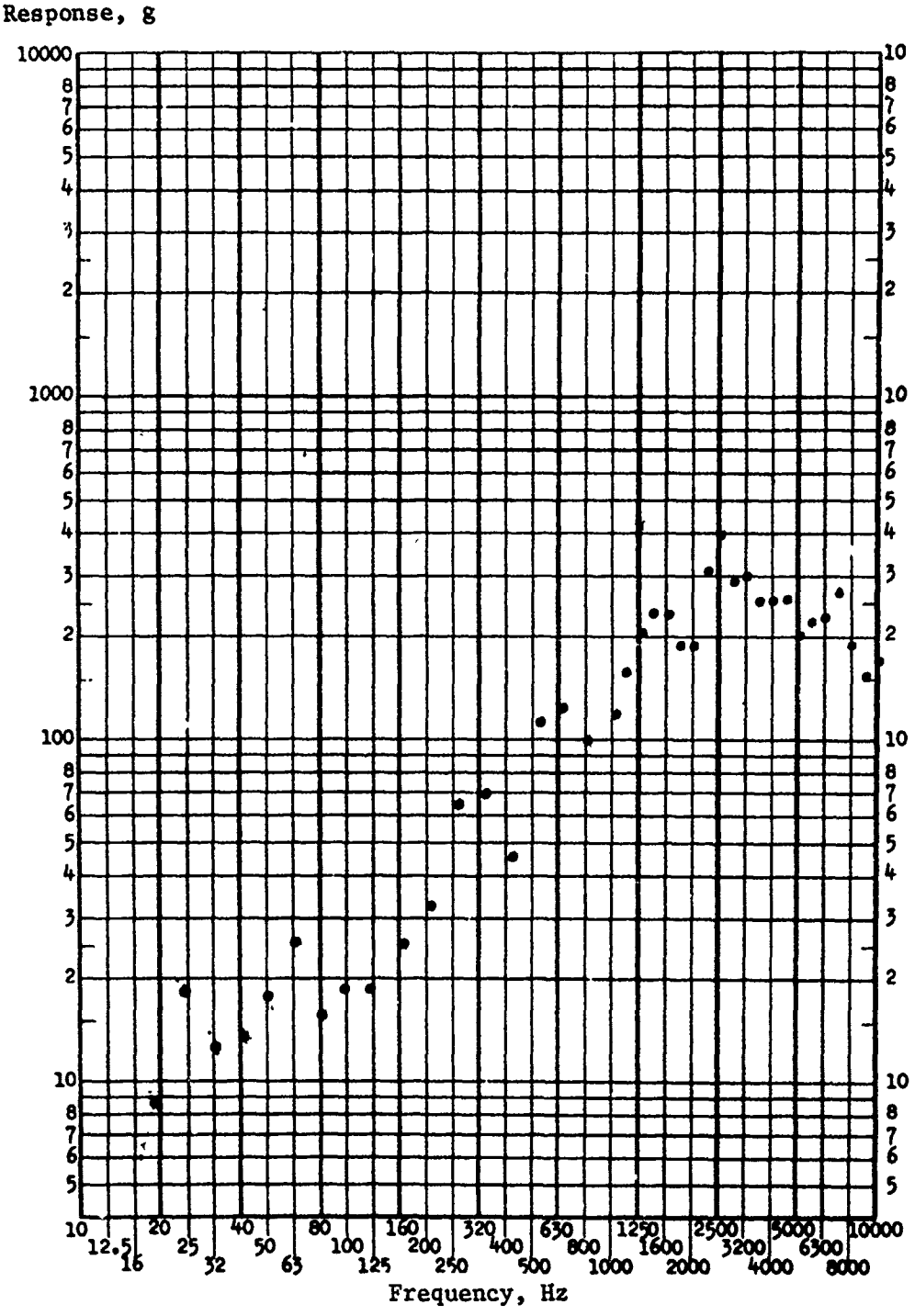
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 24 (cont)



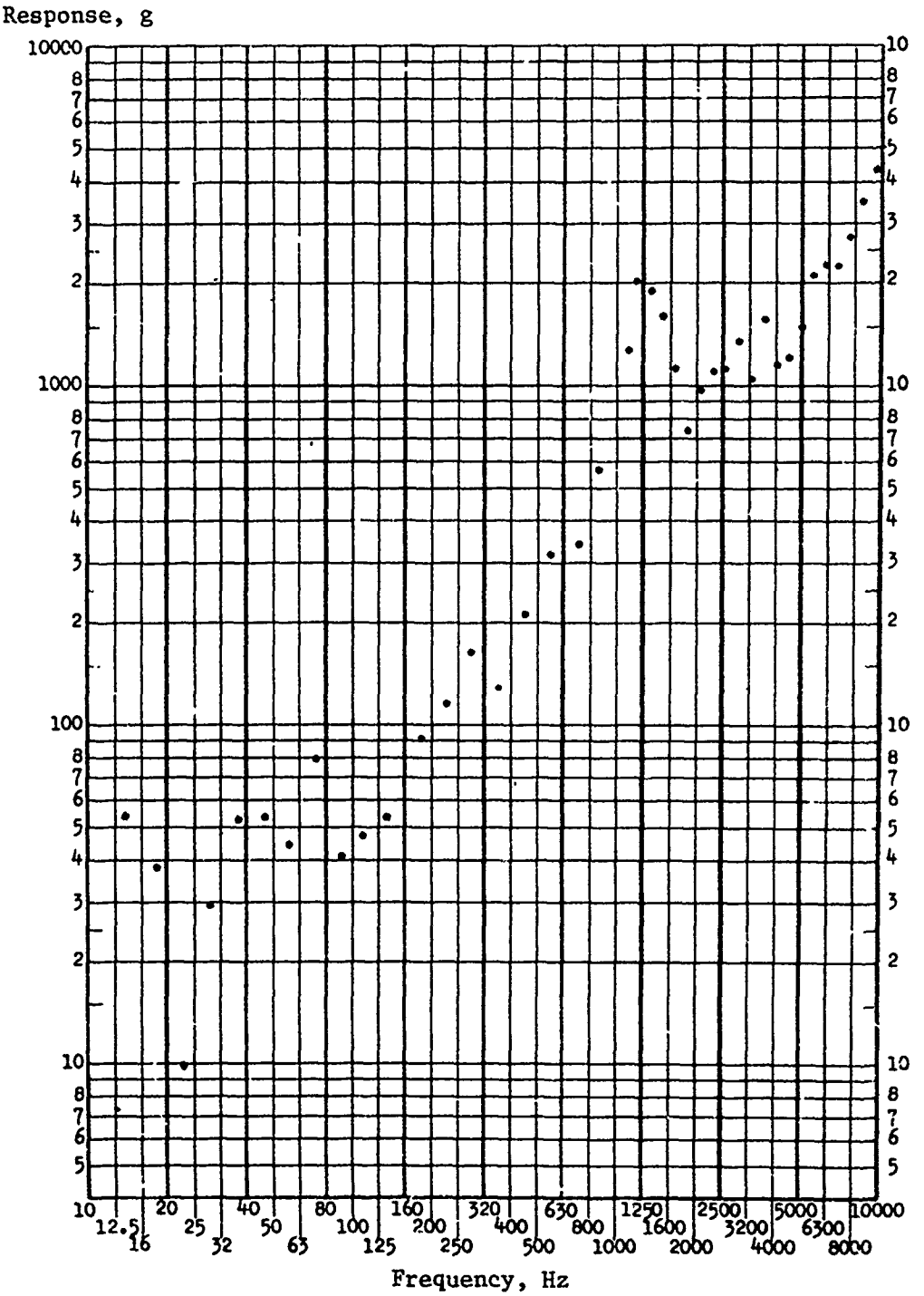
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 24 (cont)



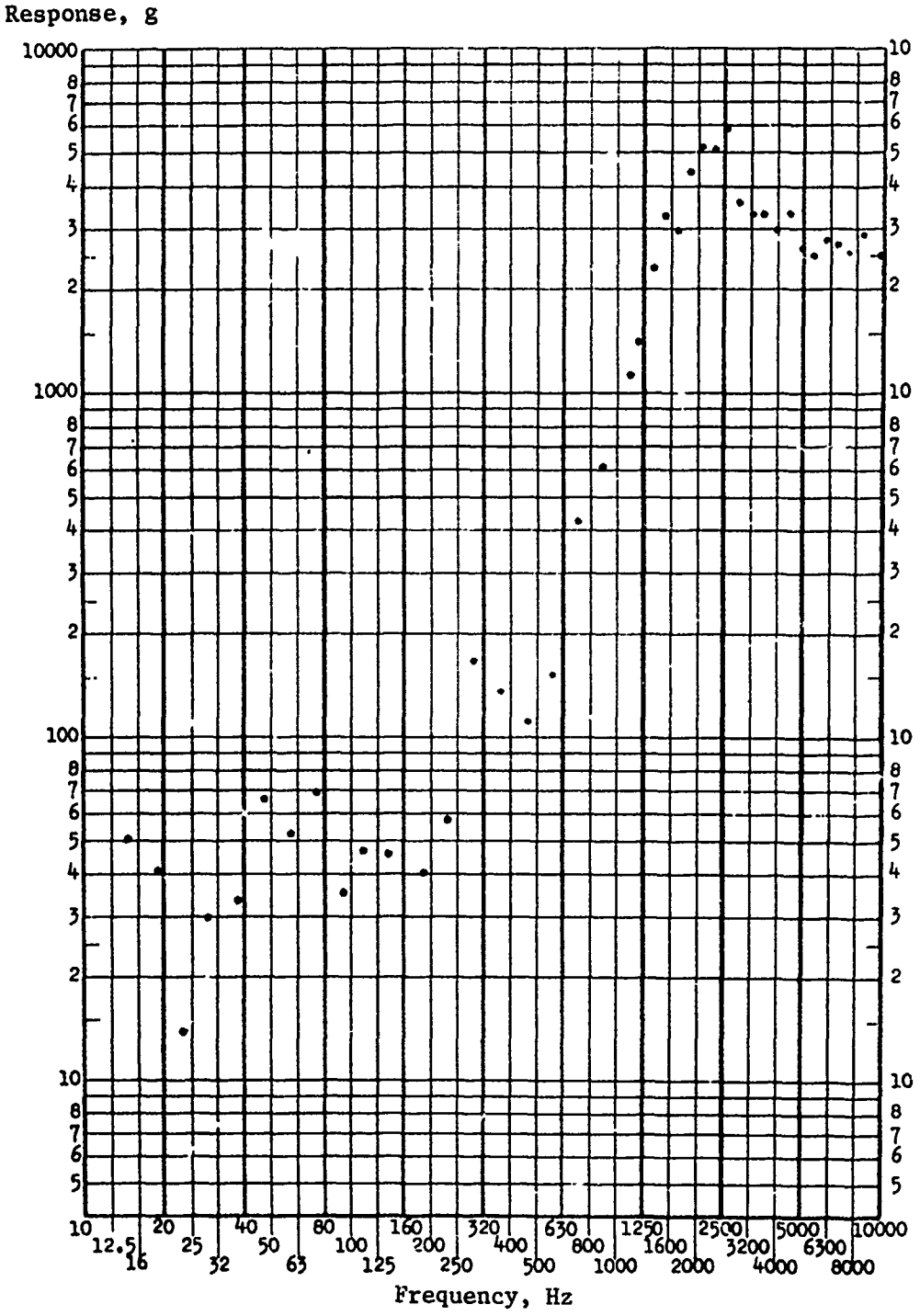
Bench Shock Test - Stage II/III Separation, Run 24
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 24 (concl)



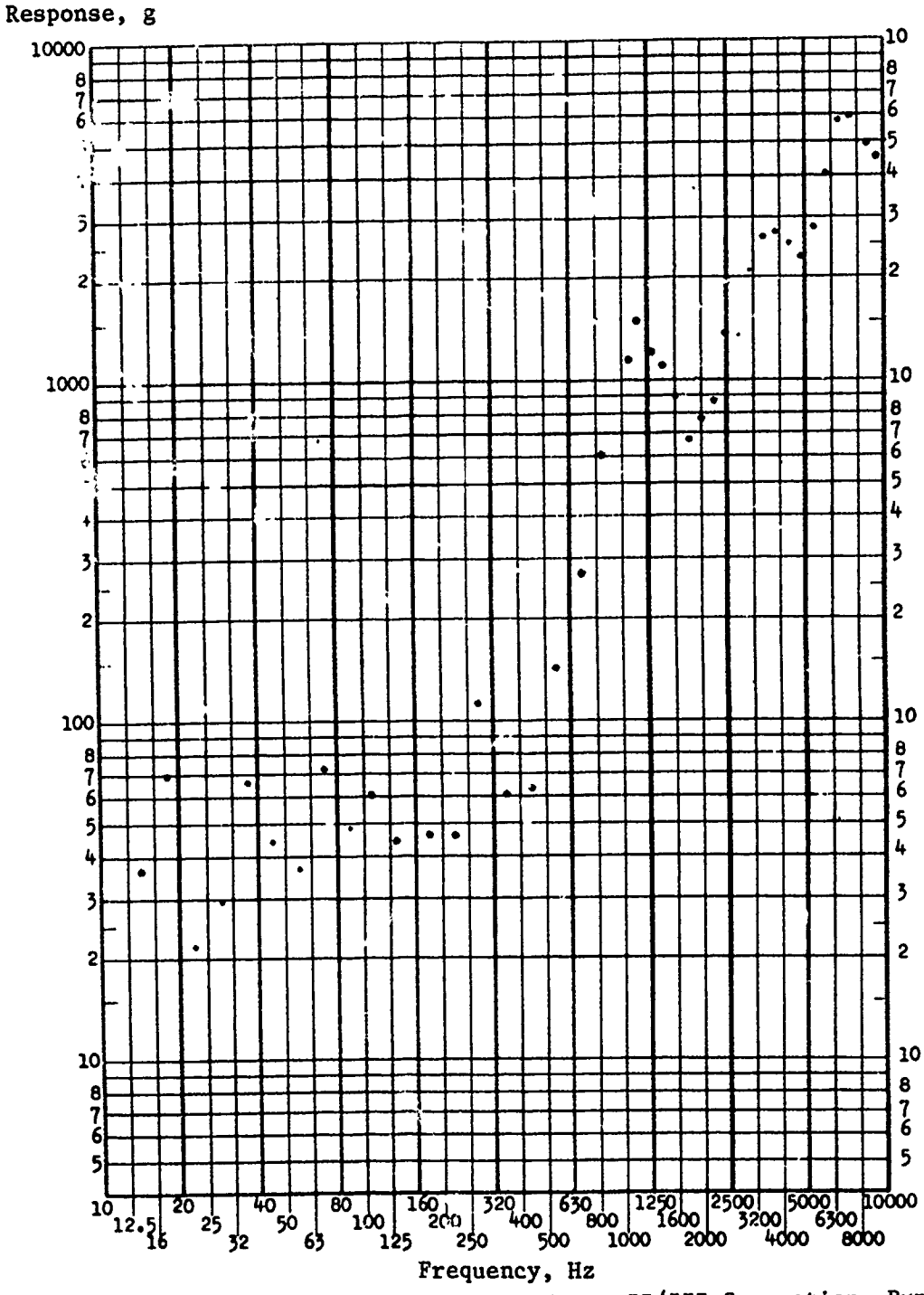
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 25 Run 25 Shock Response Spectrum



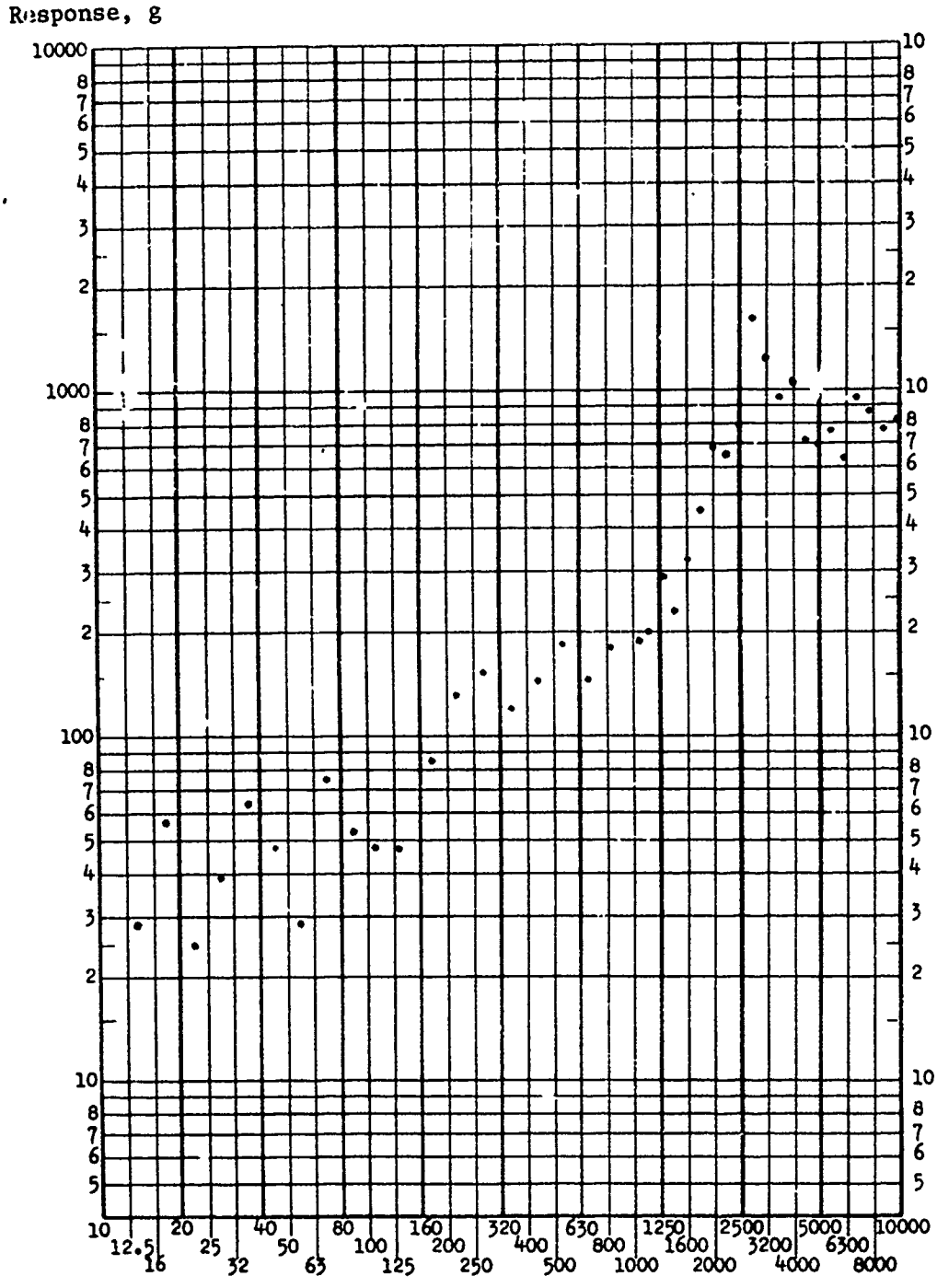
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 2 - Tangential axis longeron near station 133

Figure 25 (cont)



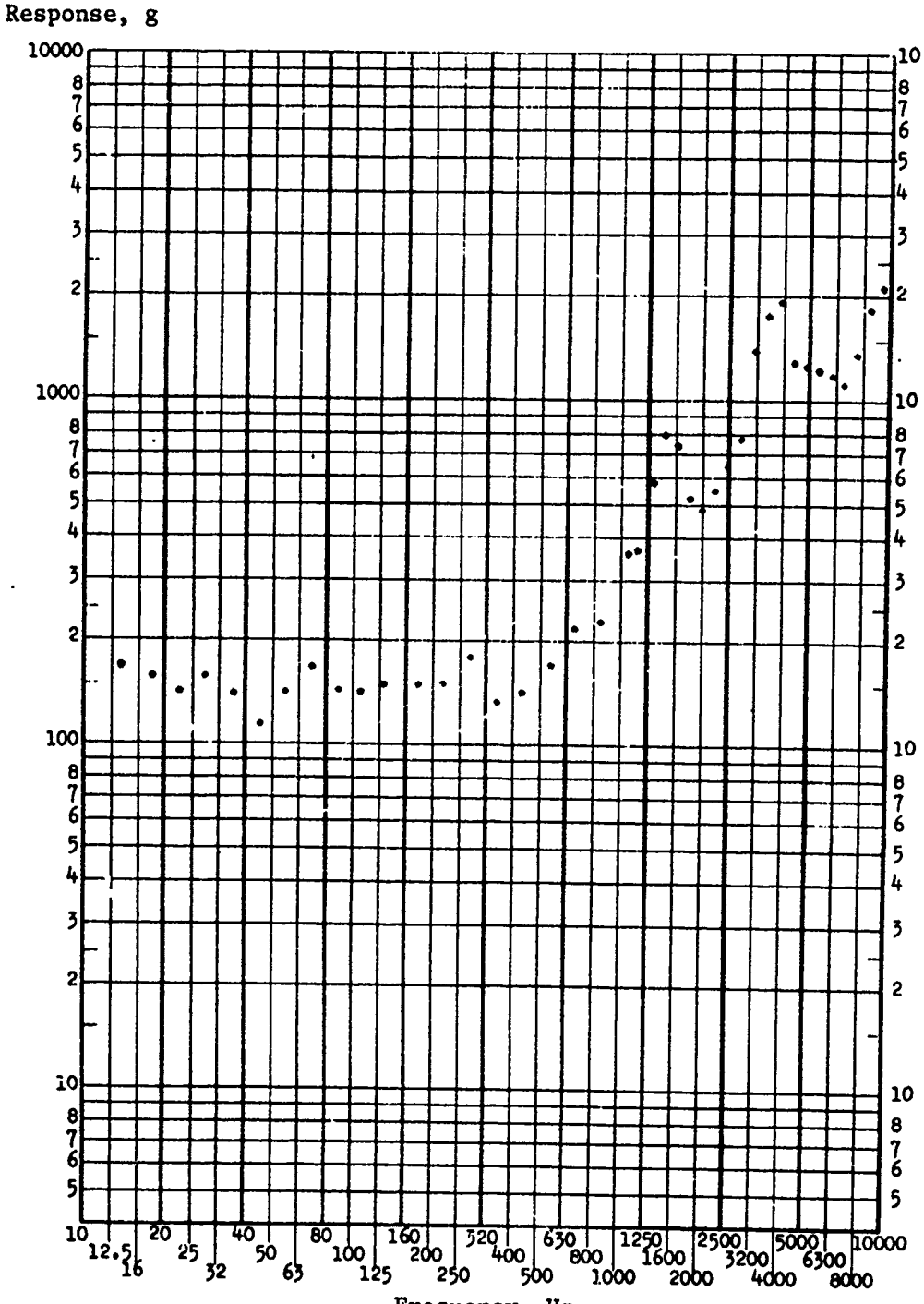
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 3 - Radial axis longeron near station 133

Figure 25 (cont)



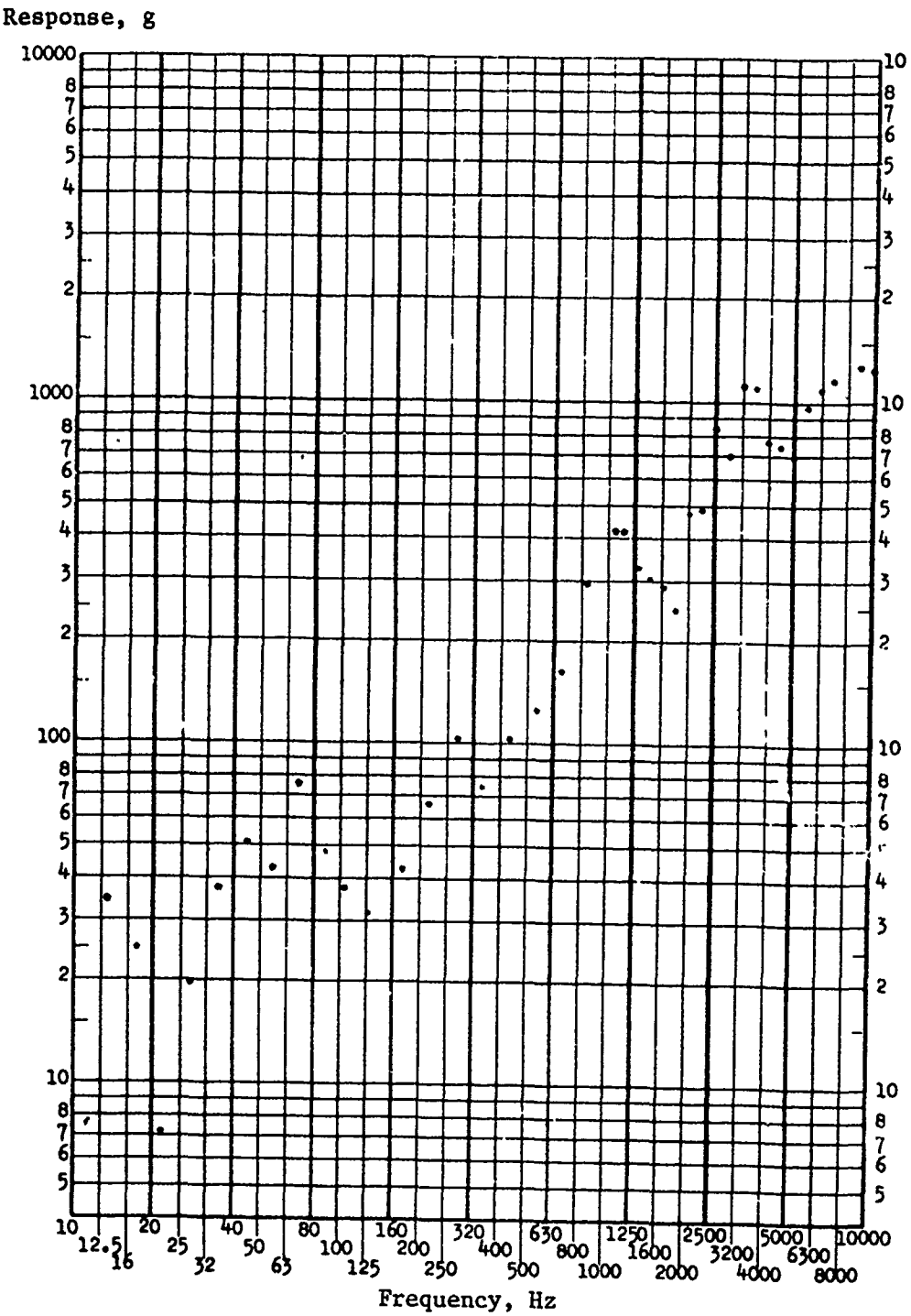
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 25 (cont)



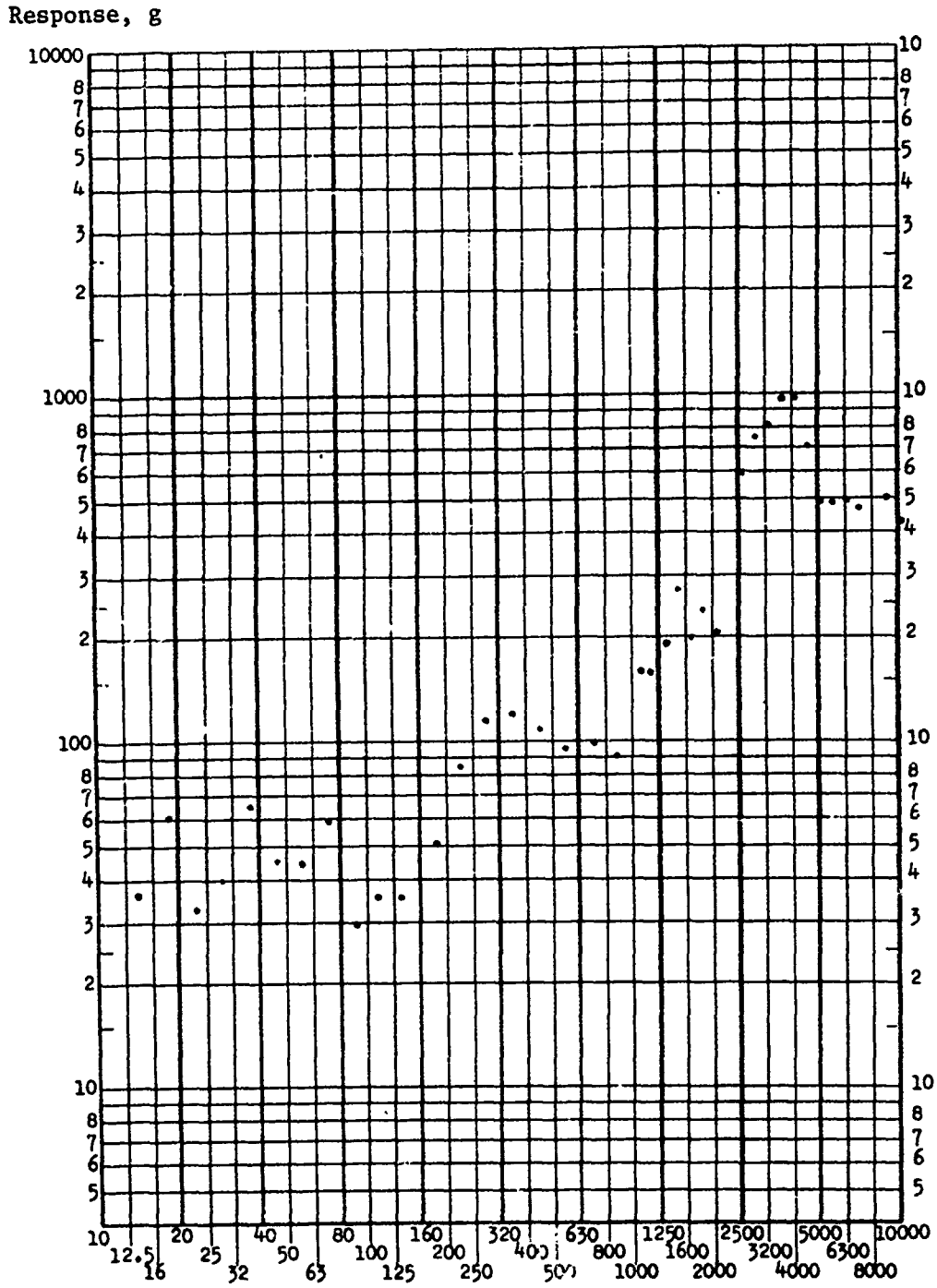
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 5 - Tangential axis longeron near station 117

Figure 25 (cont)



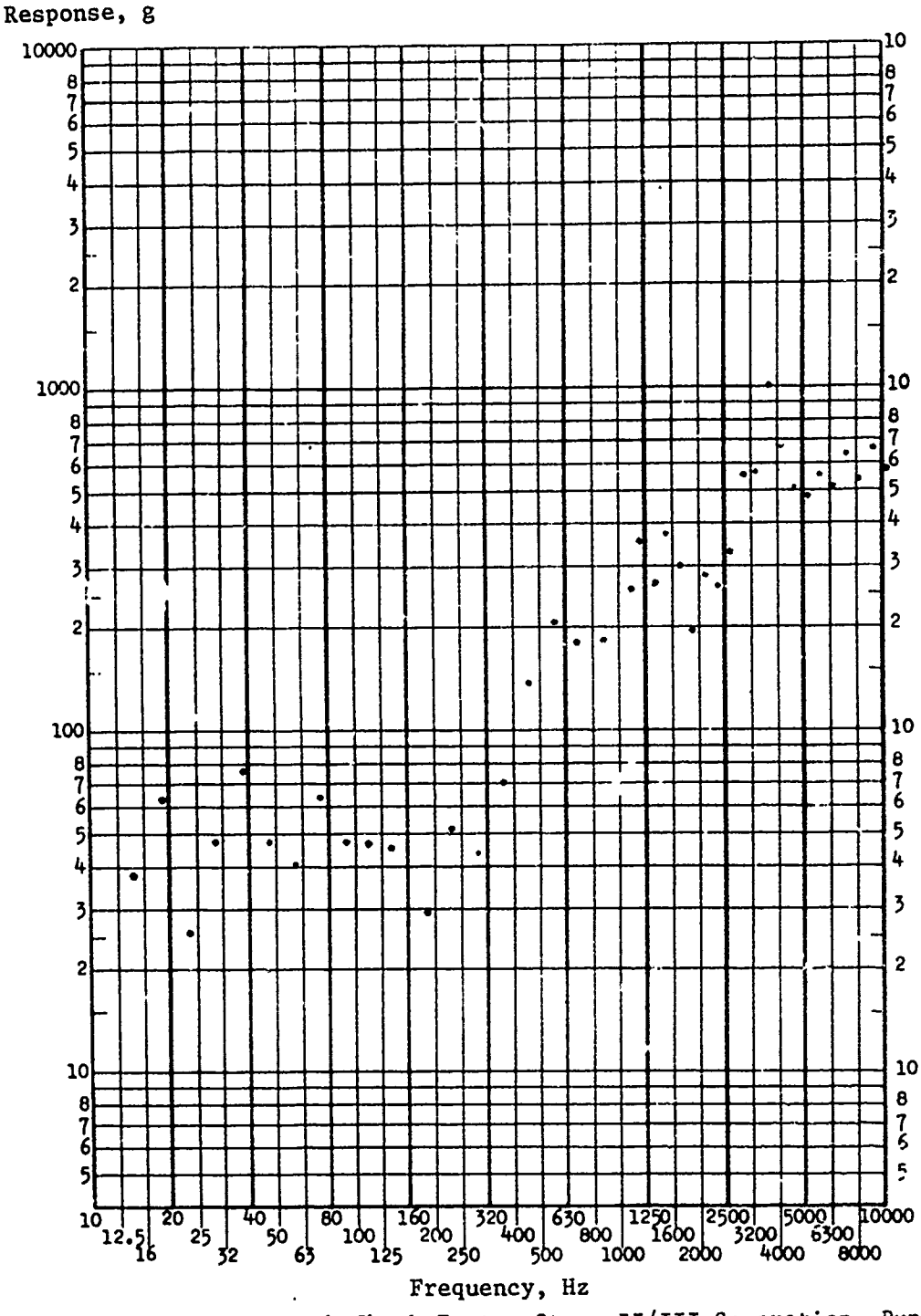
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 6 - Radial axis longeron near station 117

Figure 25 (cont)



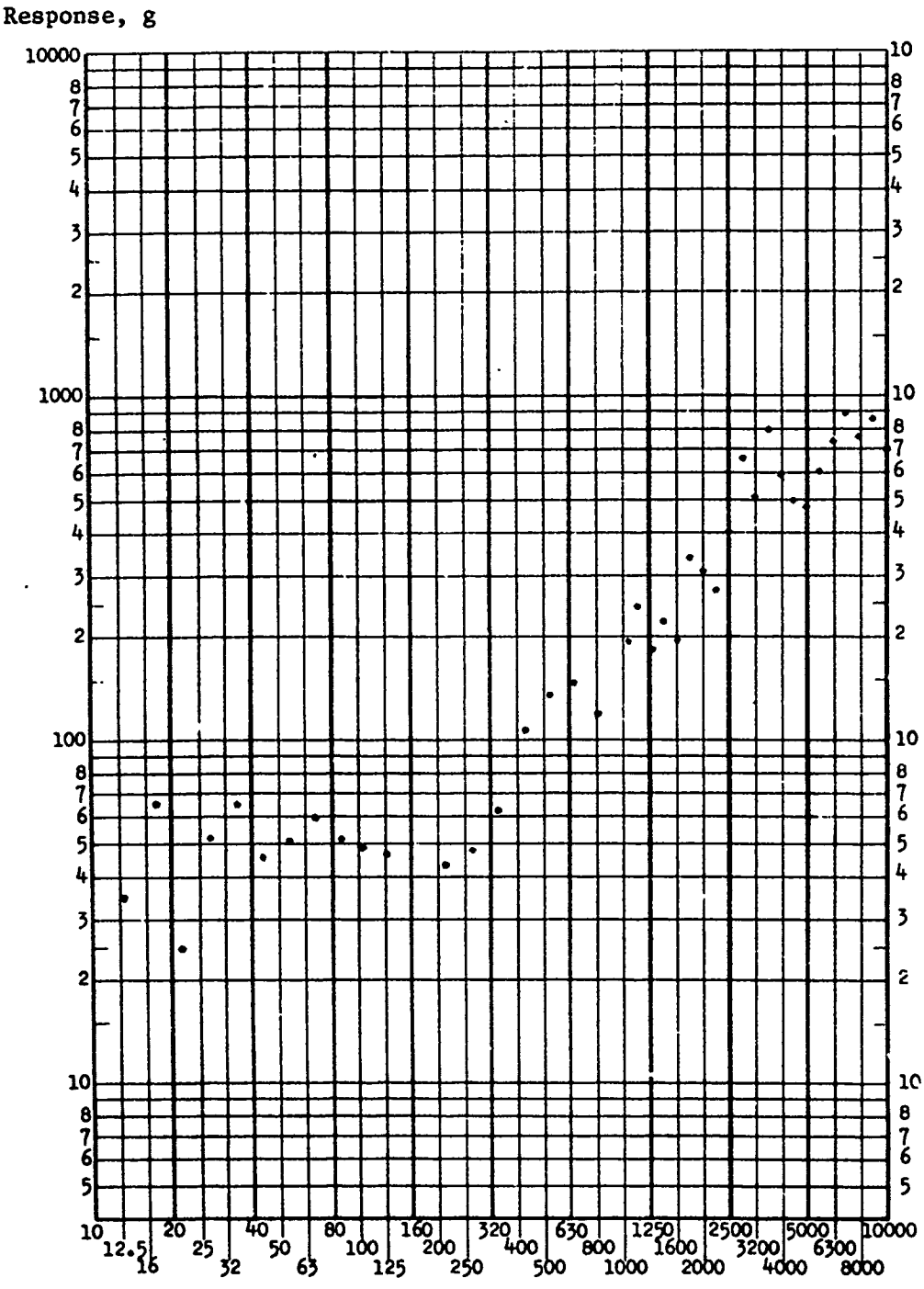
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 25 (cont)



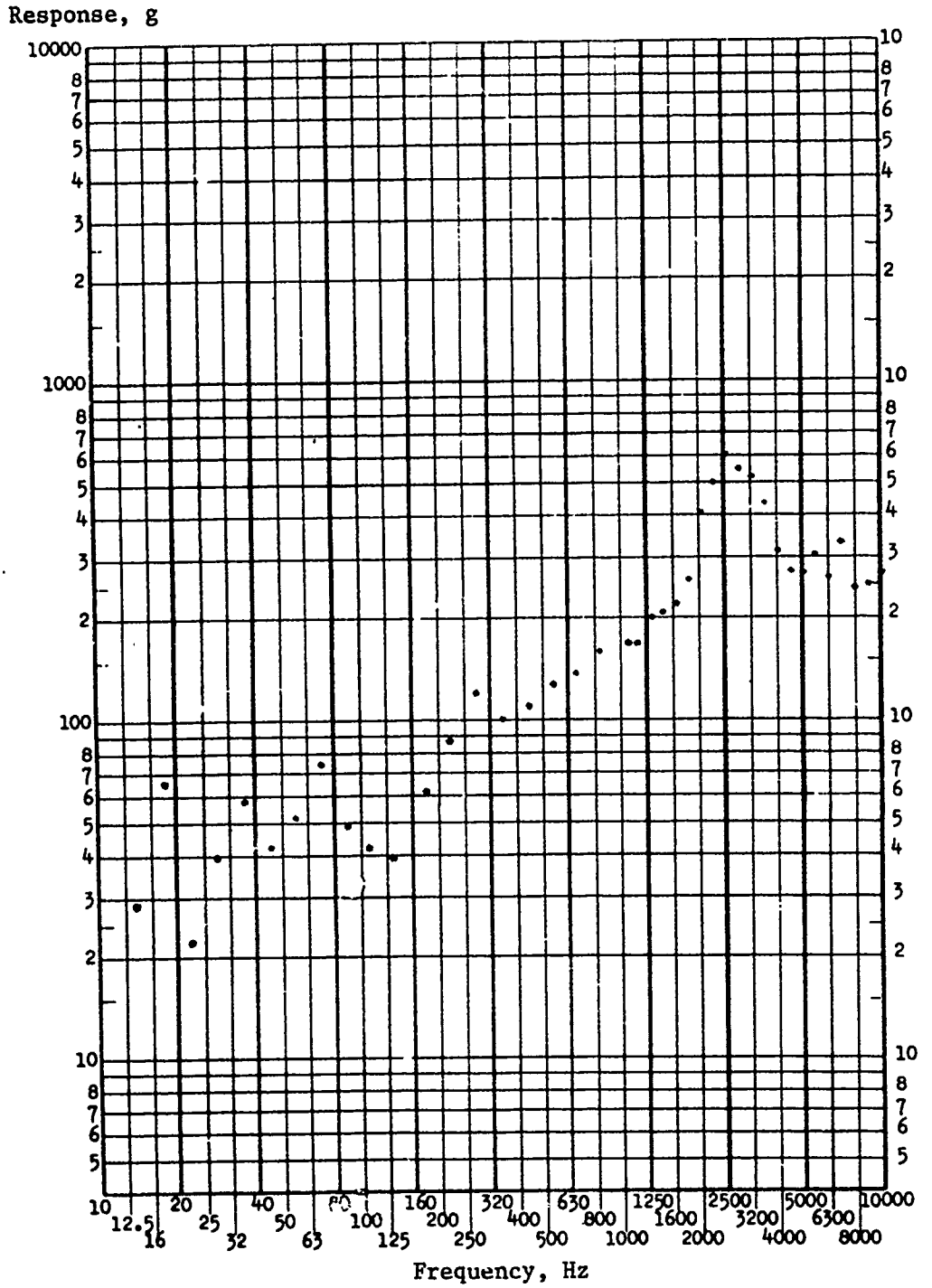
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 8 - Tangential axis longeron near station 77

Figure 25 (cont)



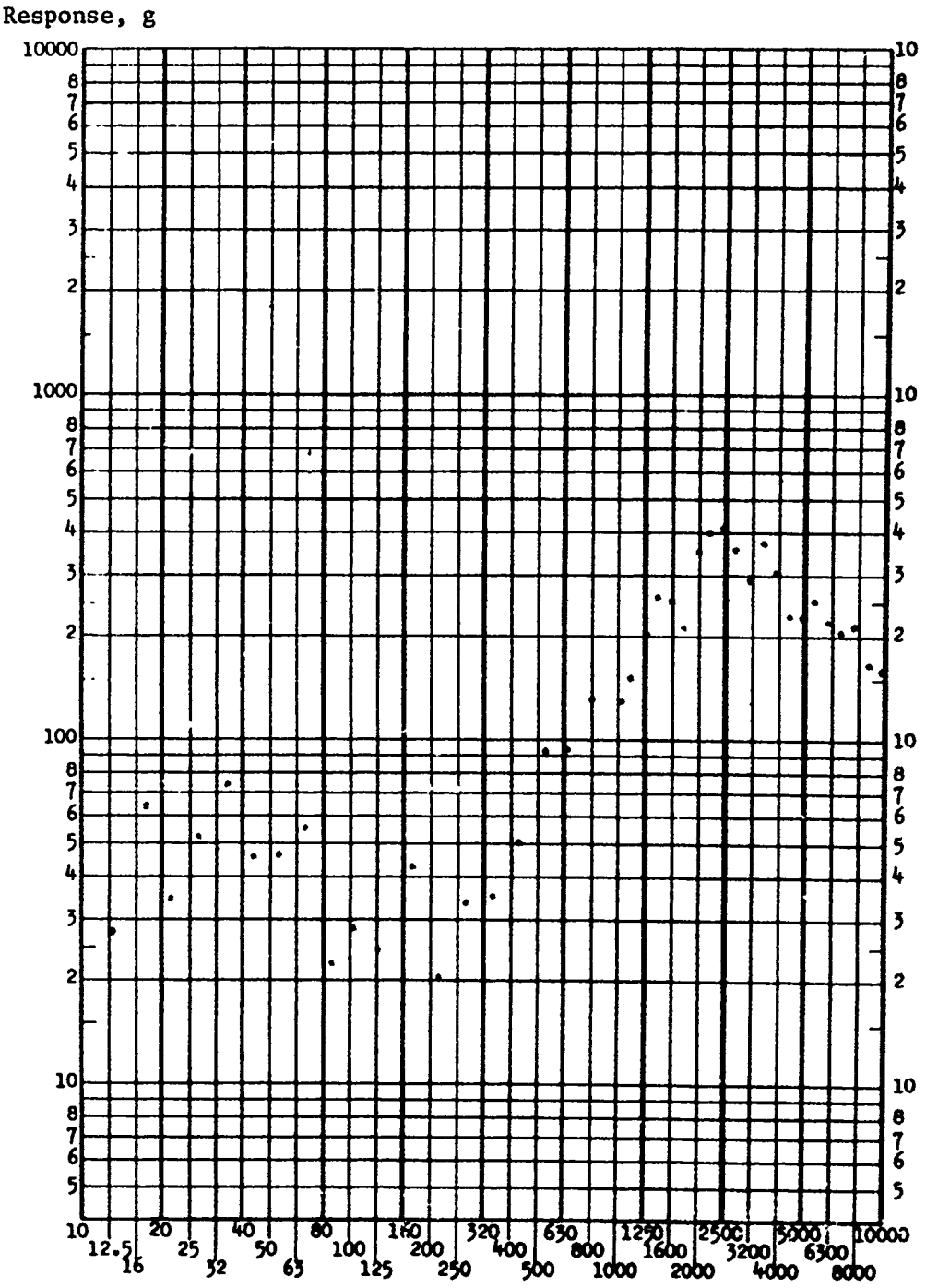
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 9 - Radial axis longeron near station 77

Figure 25 (cont)



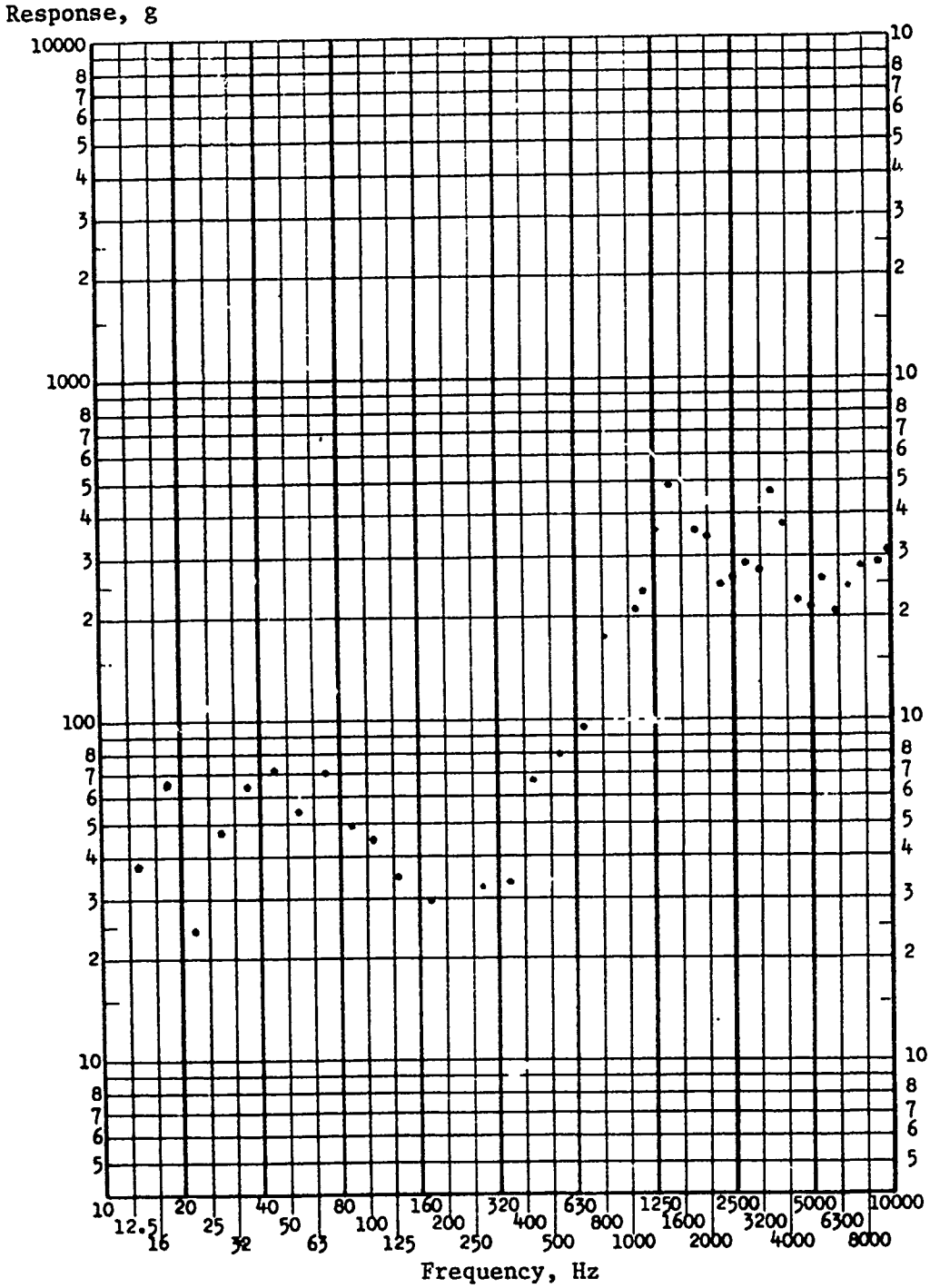
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 25 (cont)



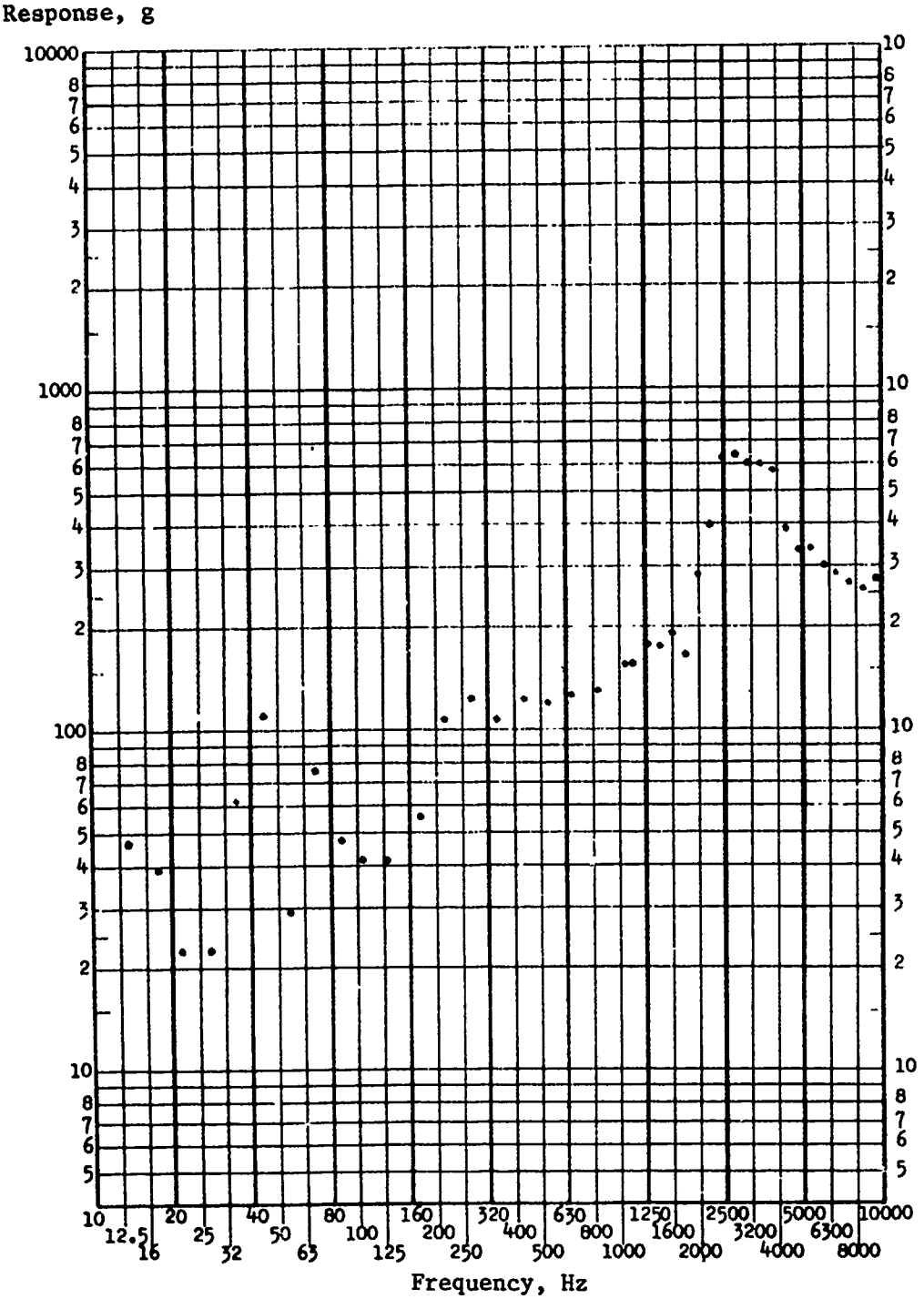
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 25 (cont)



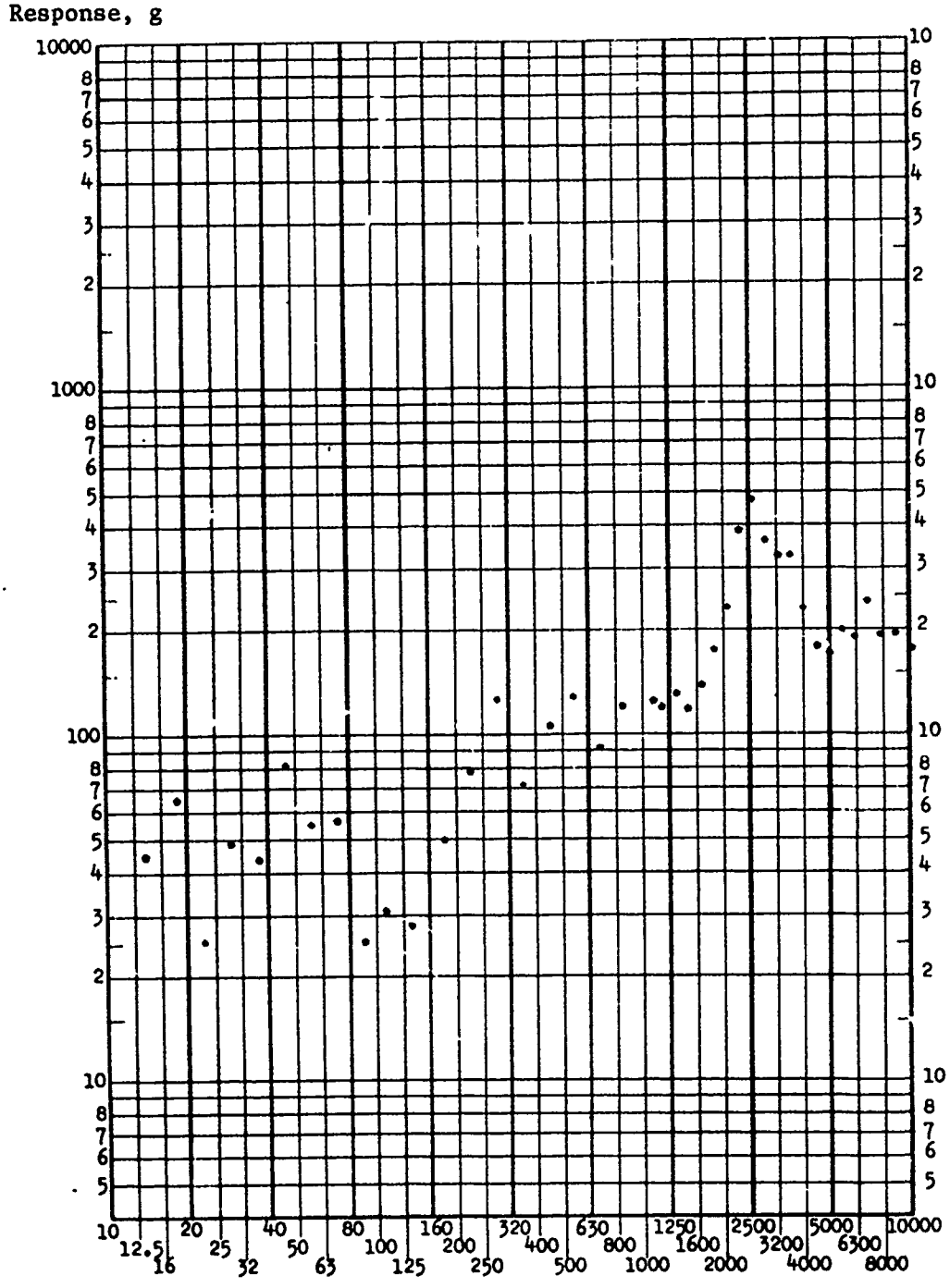
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 25 (cont)



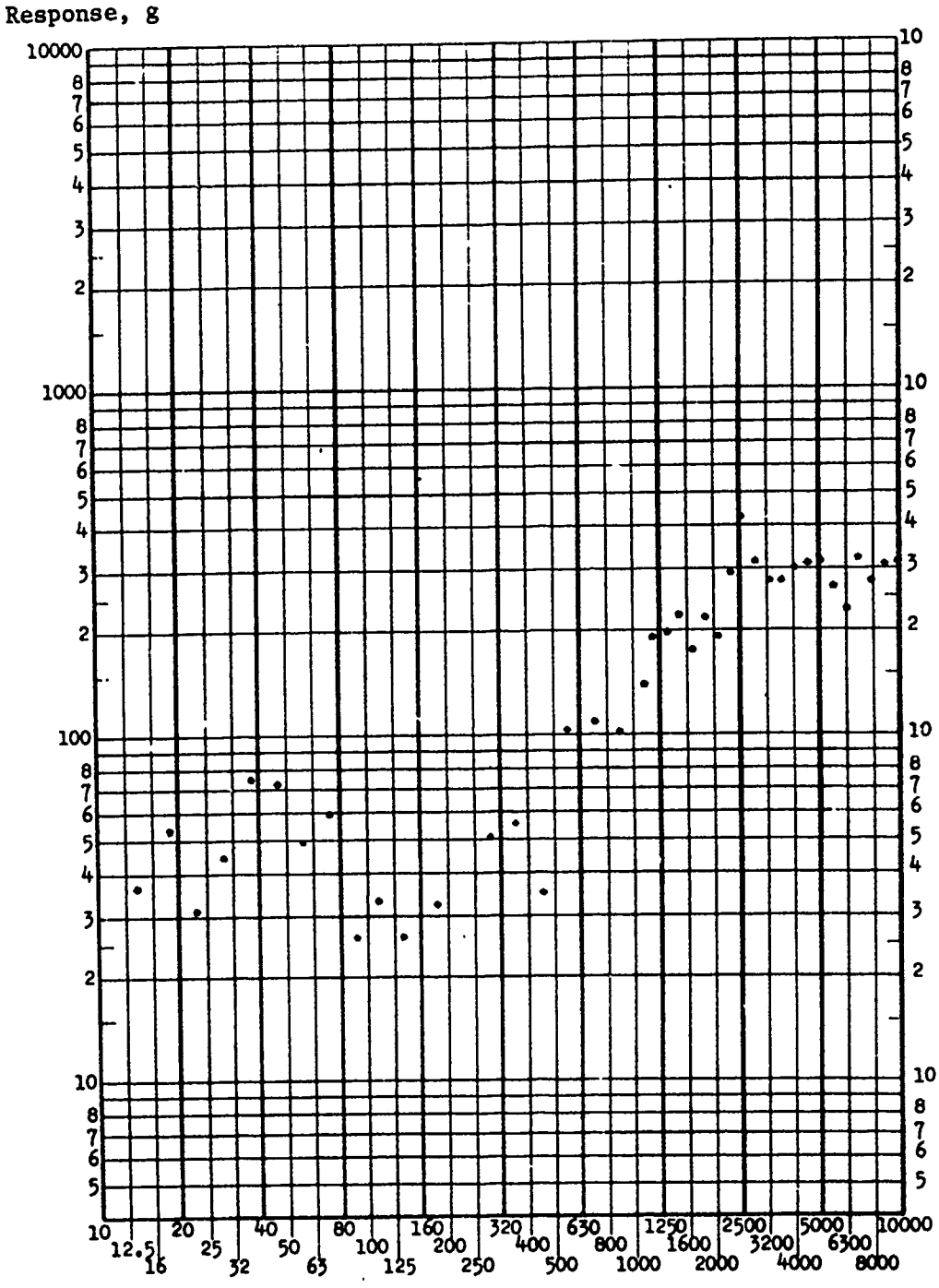
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 25 (cont)



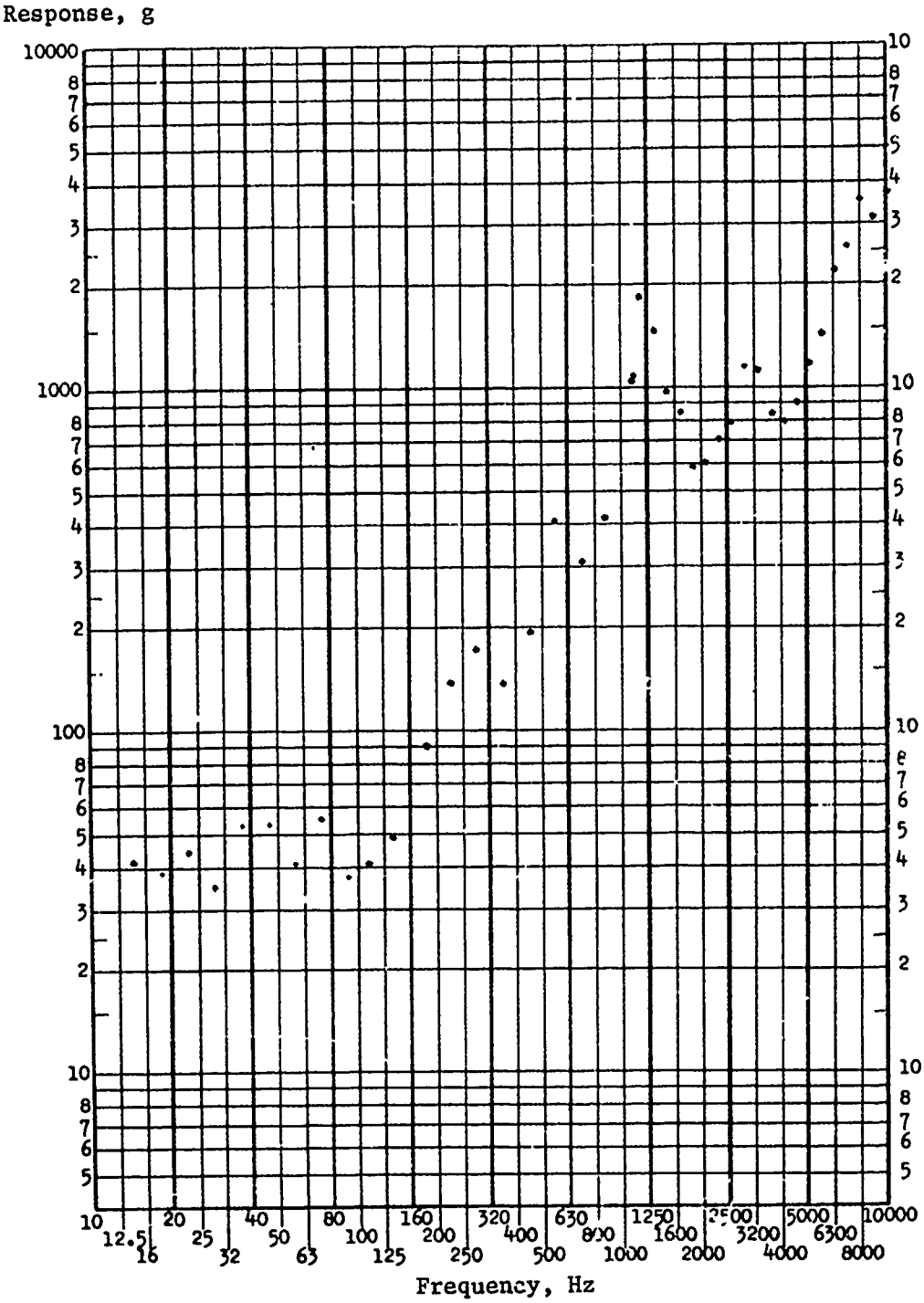
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 25 (cont)



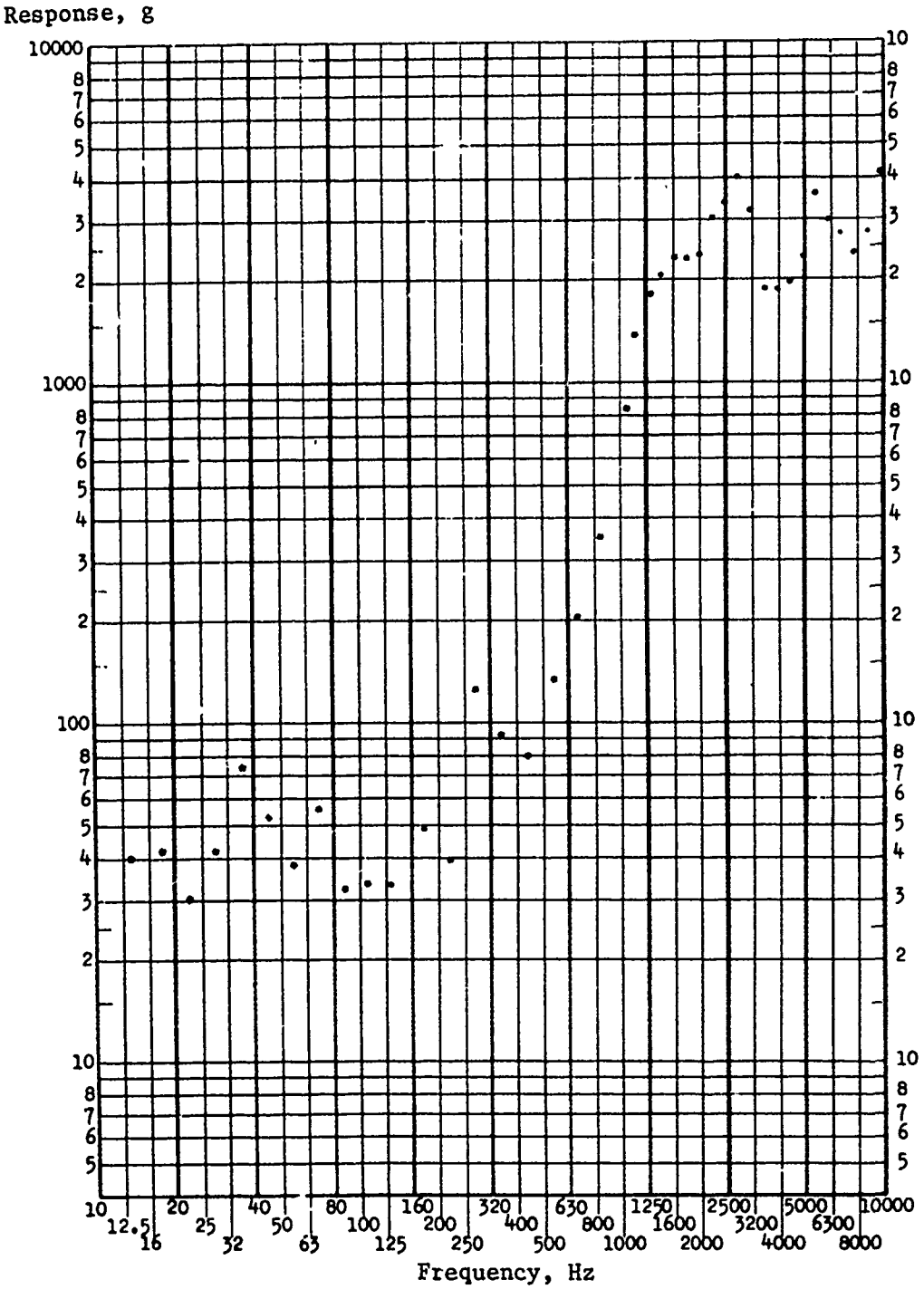
Bench Shock Test - Stage II/III Separation, Run 25
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 25 (concl)



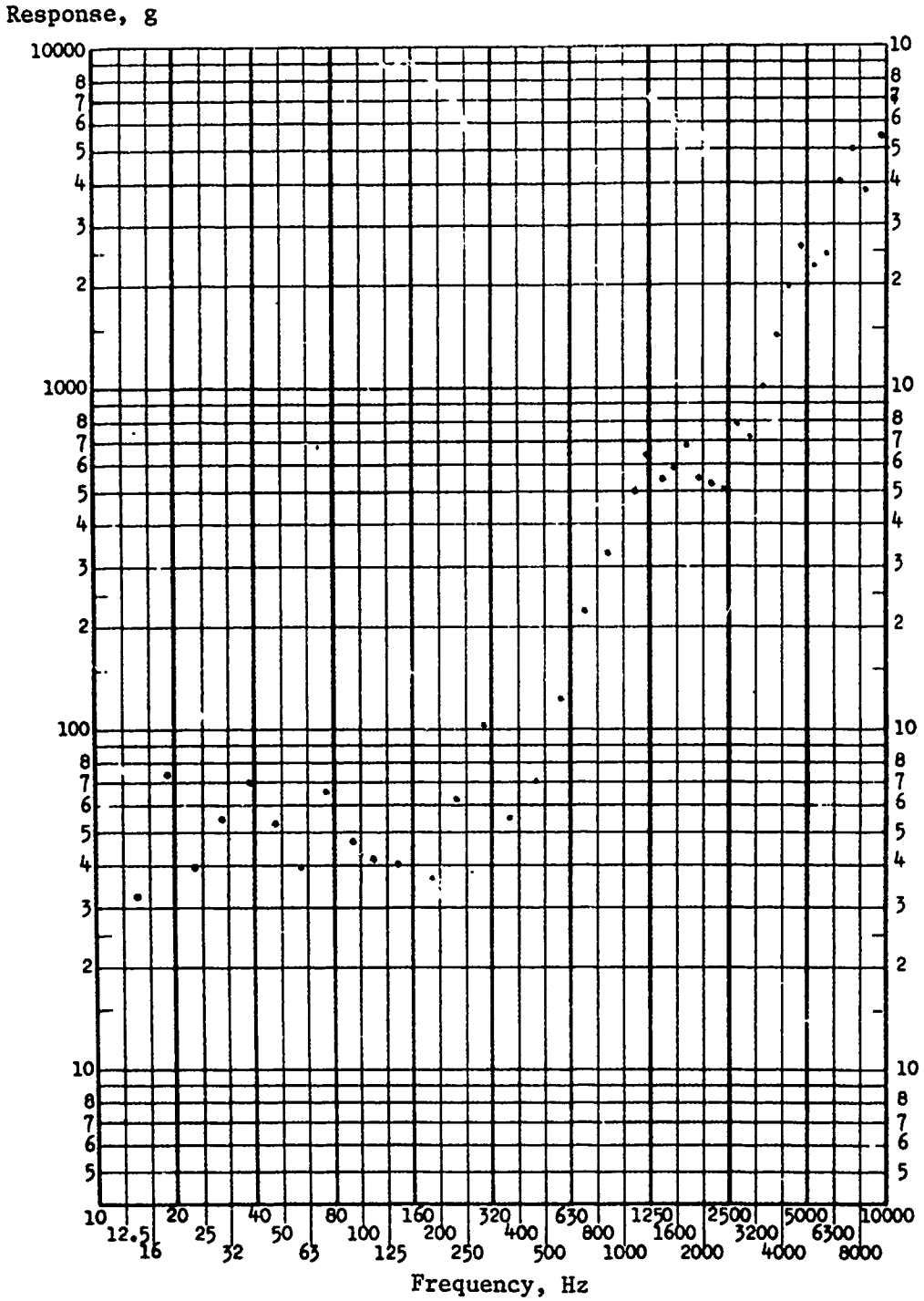
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 26 Run 26 Shock Response Spectrum



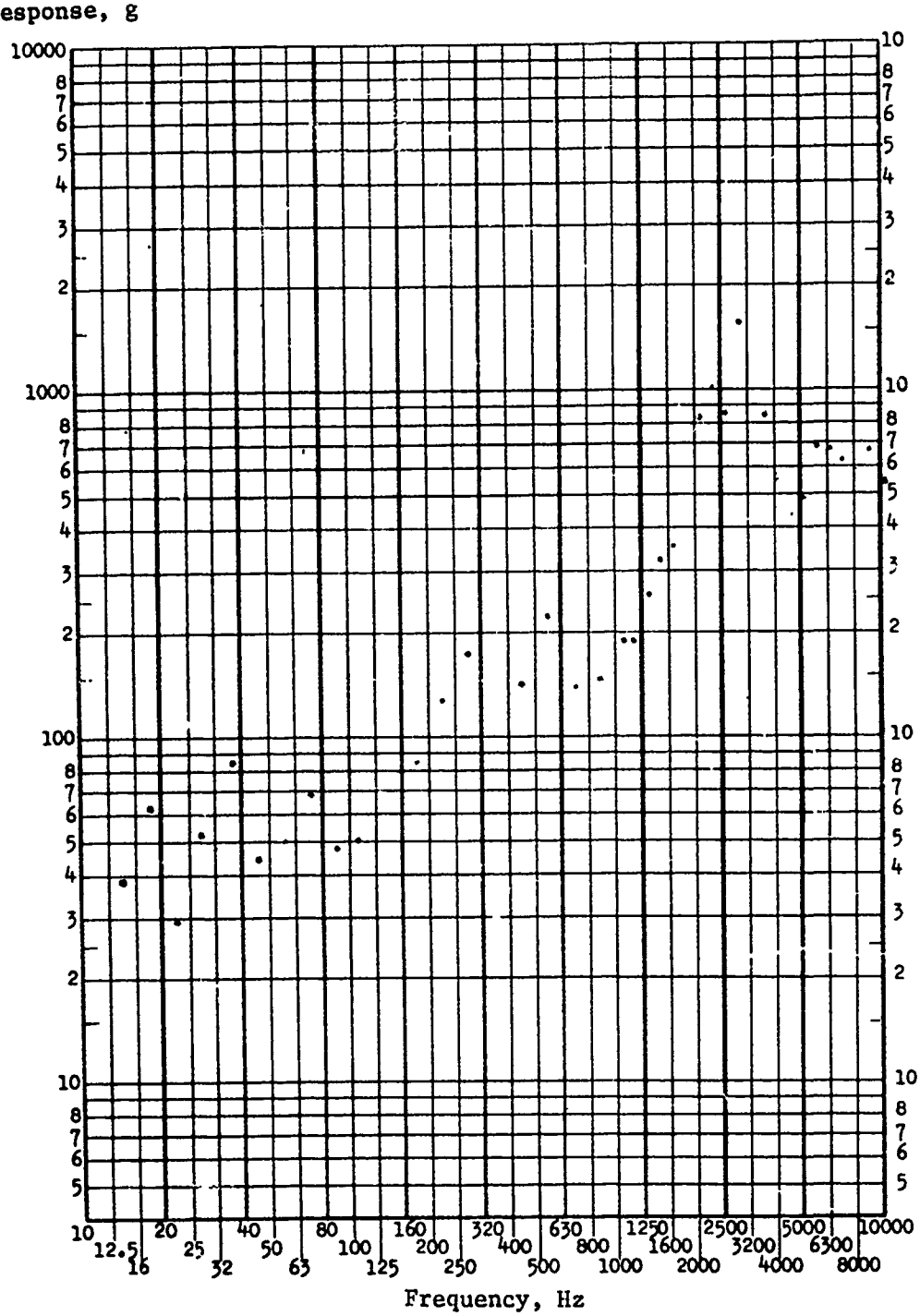
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 2 - Tangential axis longeron near station 133

Figure 26 (cont)



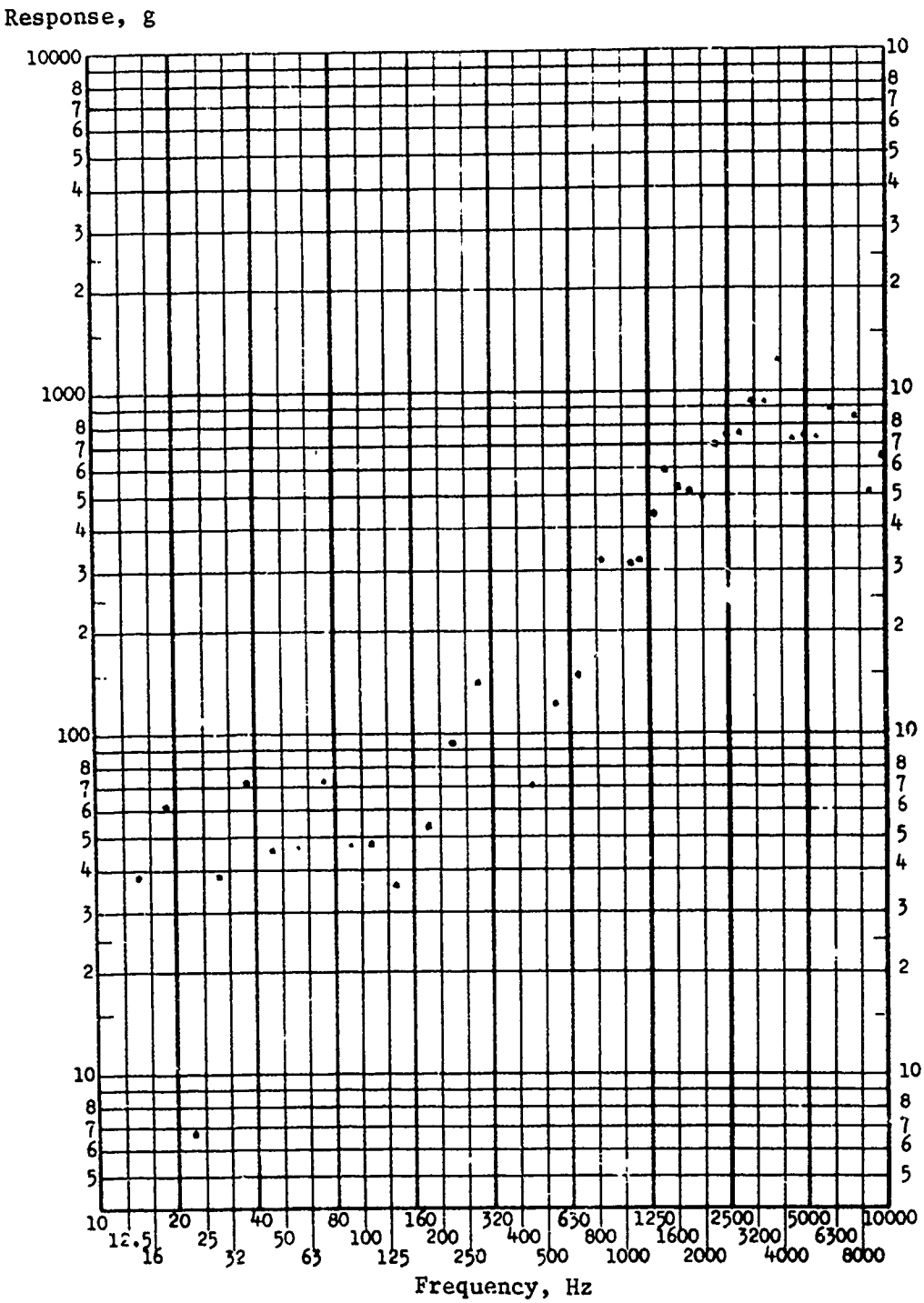
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 3 - Radial axis longeron near station 133

Figure 26 (cont)



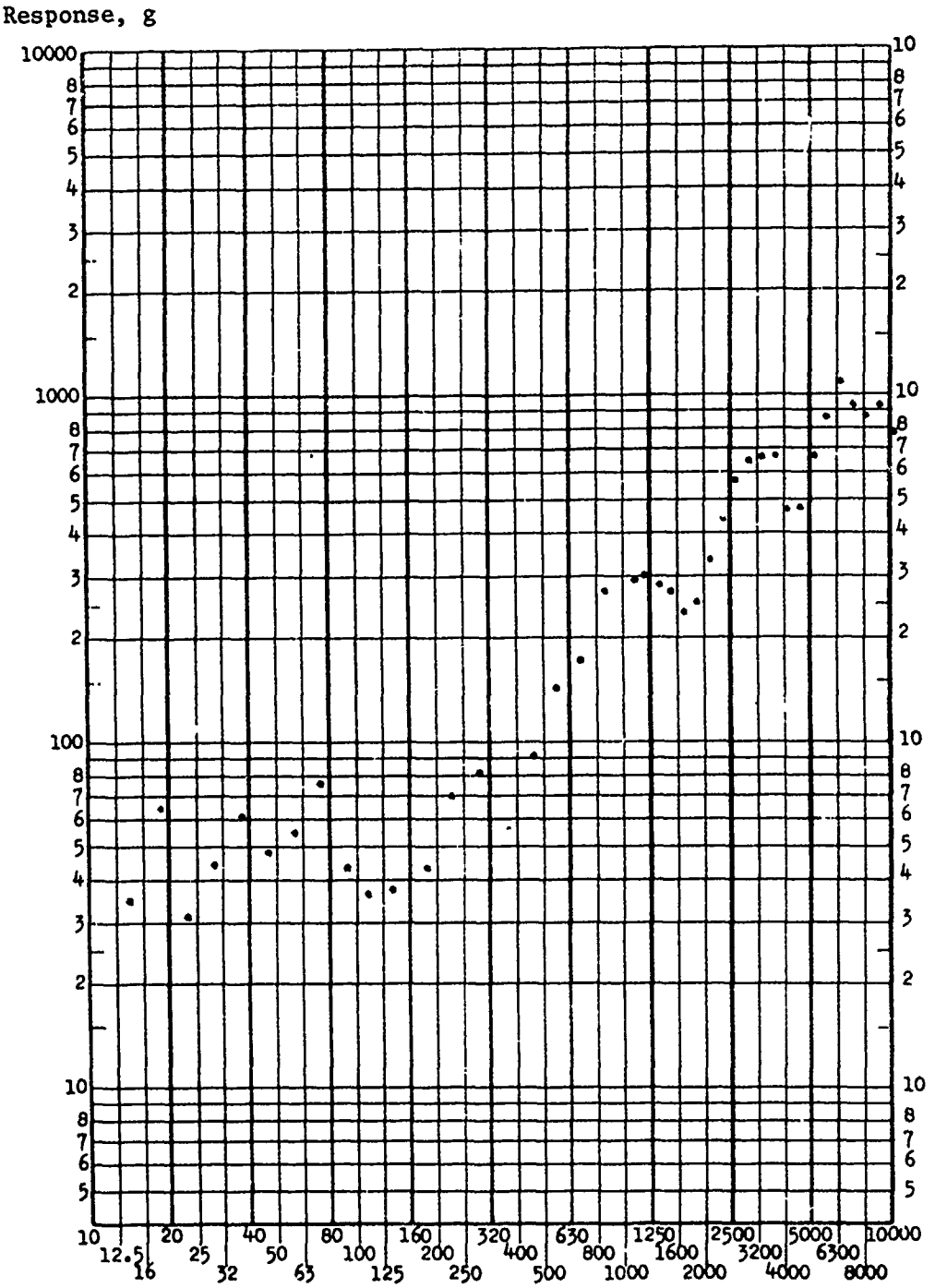
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 26 (cont)



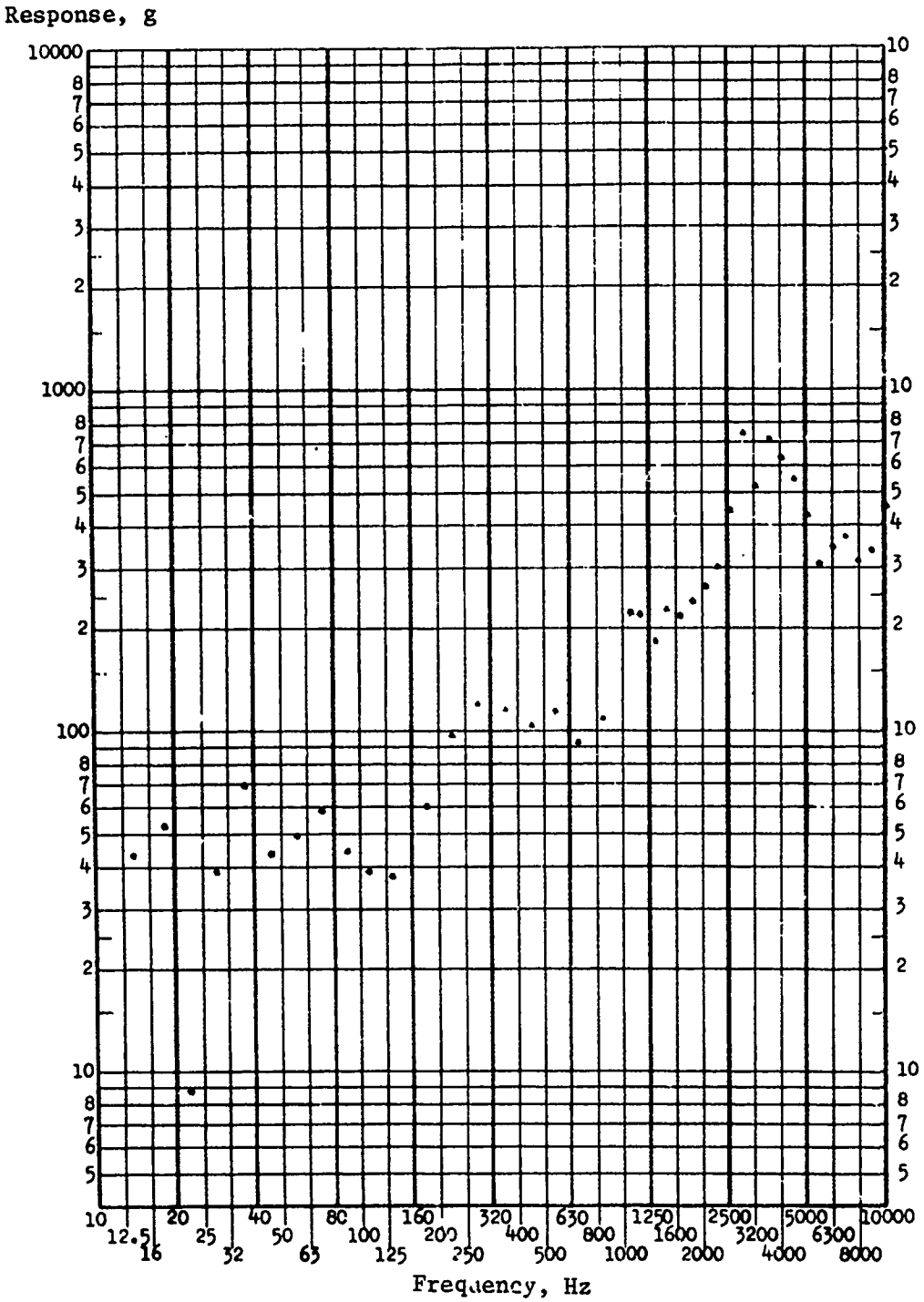
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 5 - Tangential axis longeron near station 117

Figure 26 (cont)



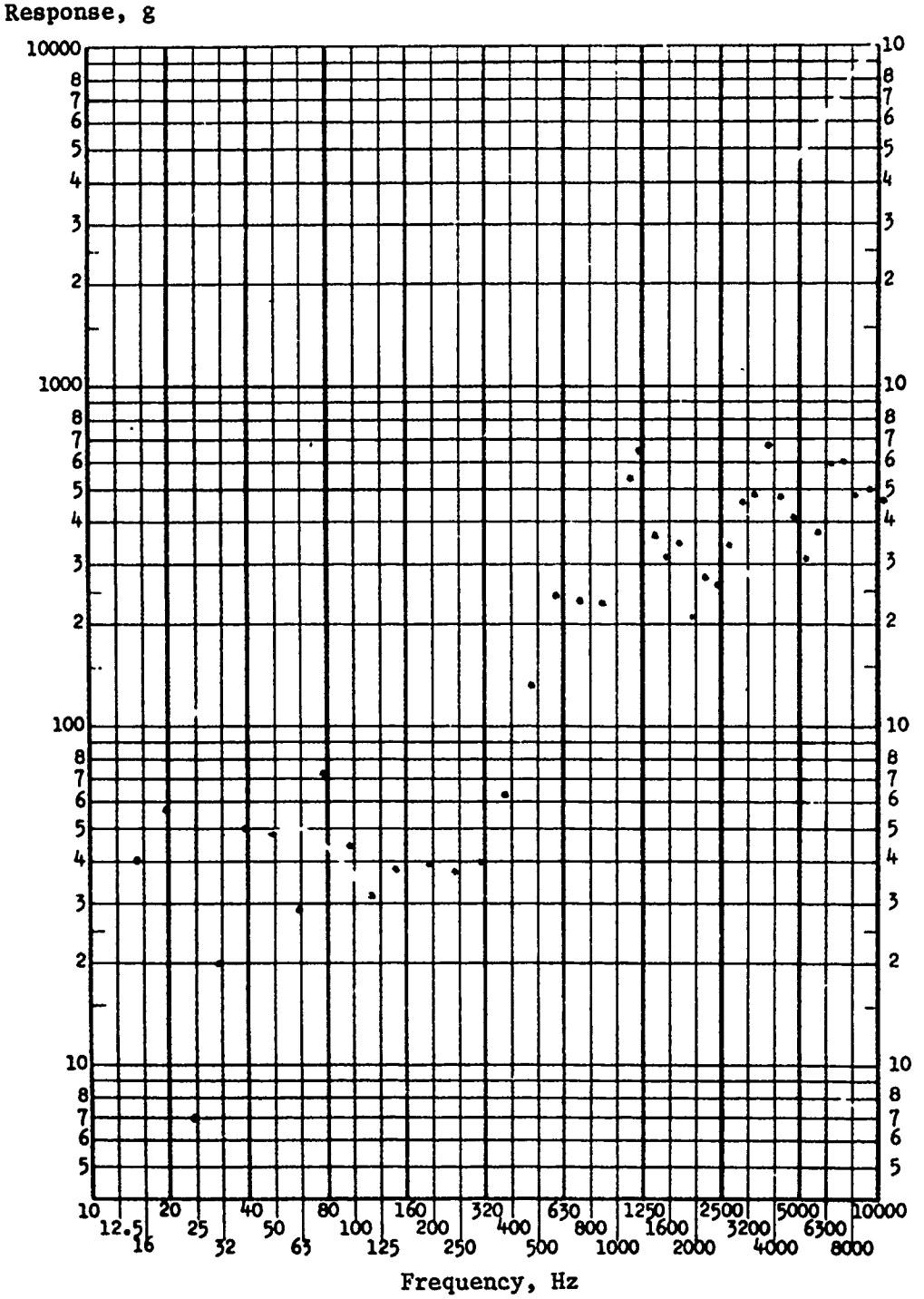
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 6 - Radial axis longeron near station 117

Figure 26 (cont)



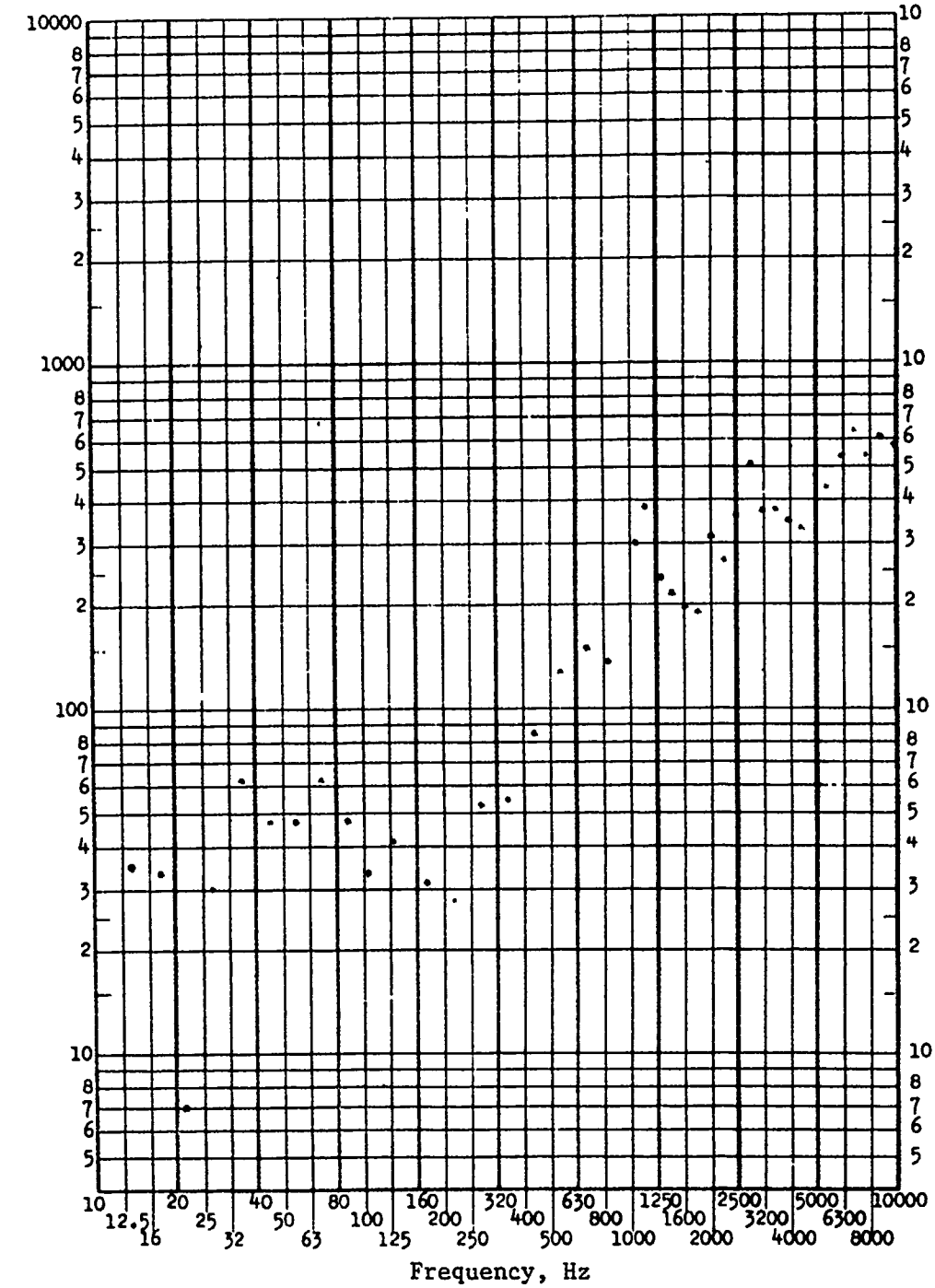
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 26 (cont)



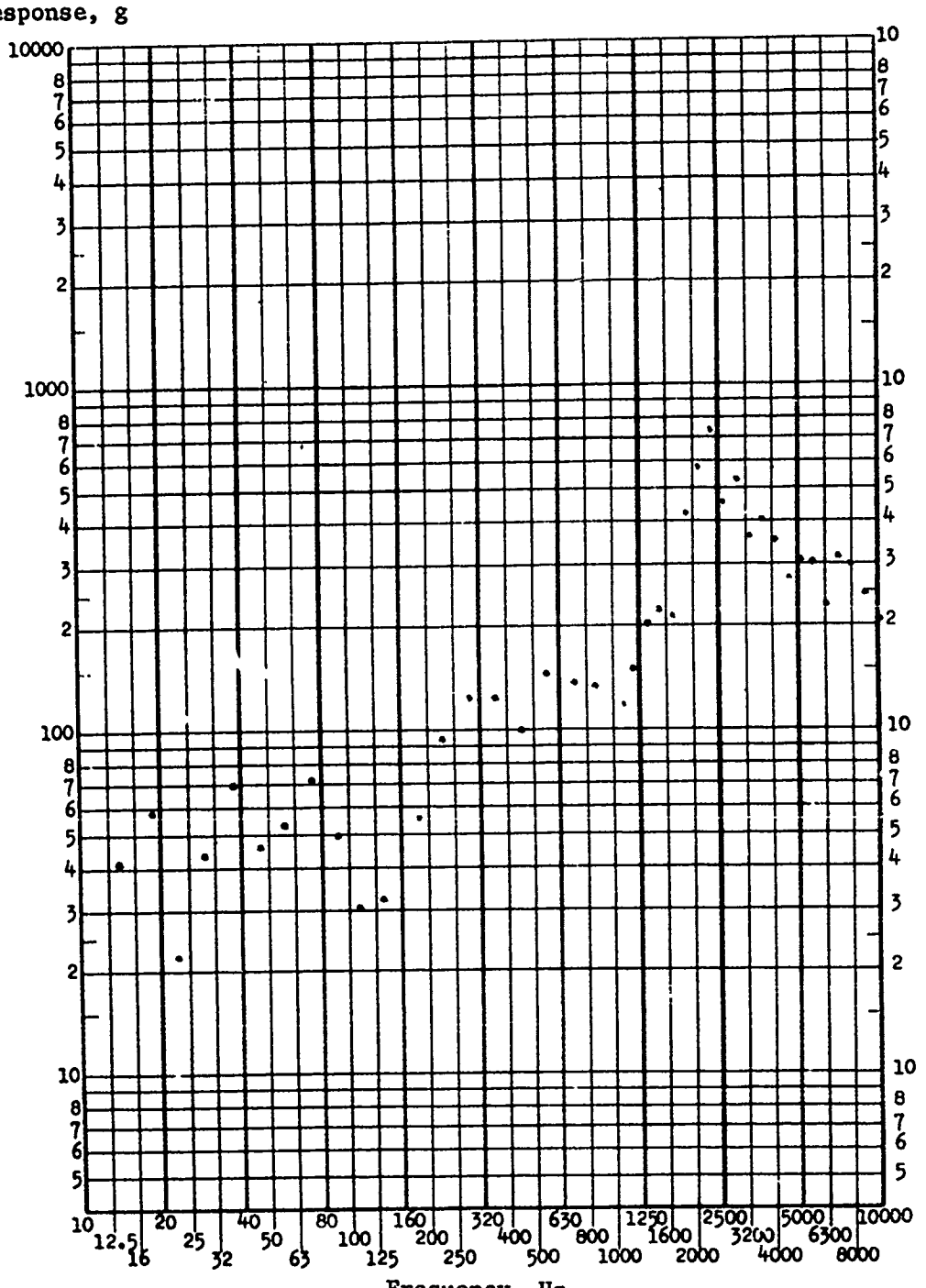
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 8 - Tangential axis longeron near station 77

Figure 26 (cont)



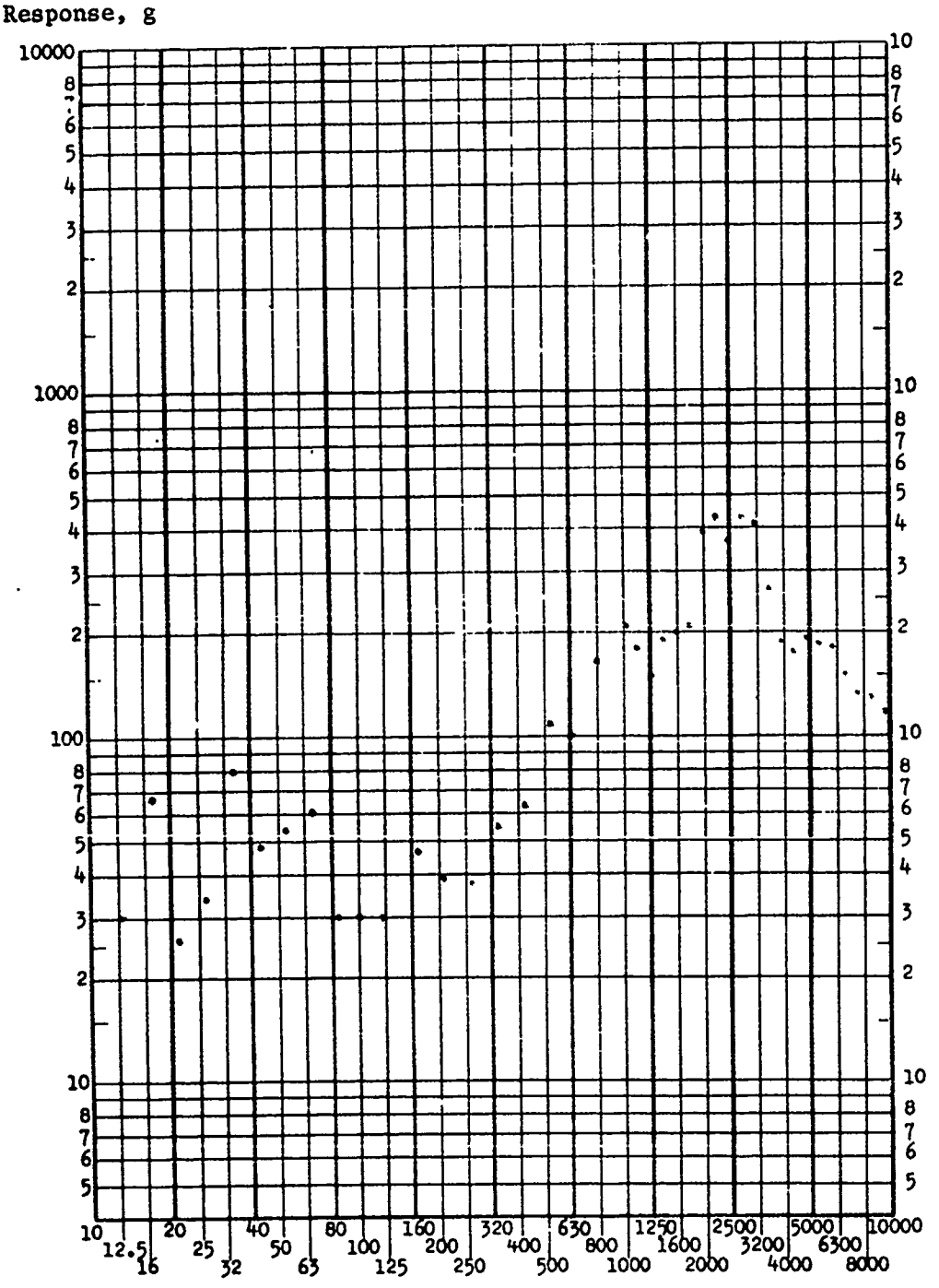
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 9 - Radial axis longeron near station 77

Figure 26 (cont)



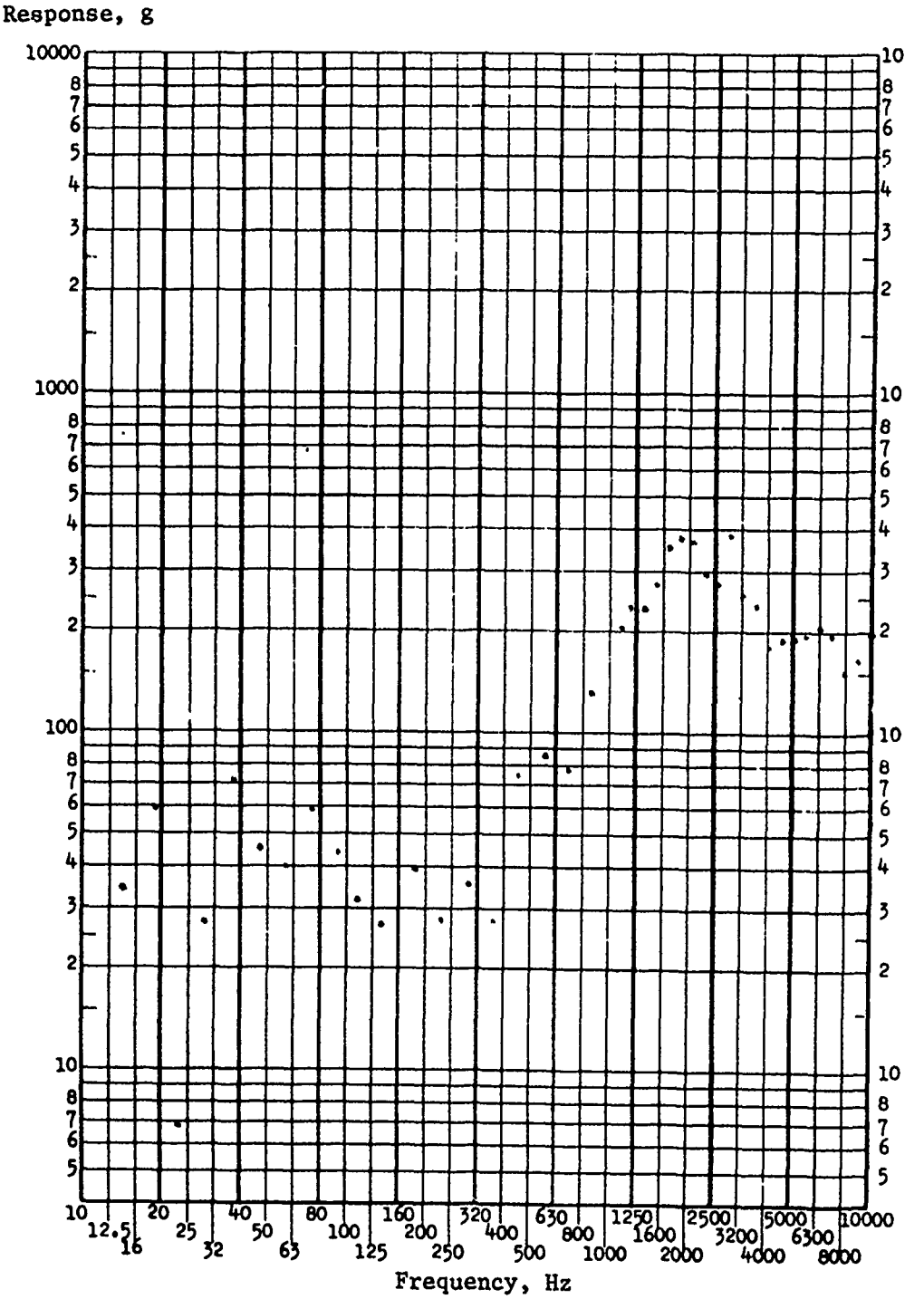
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 26 (cont)



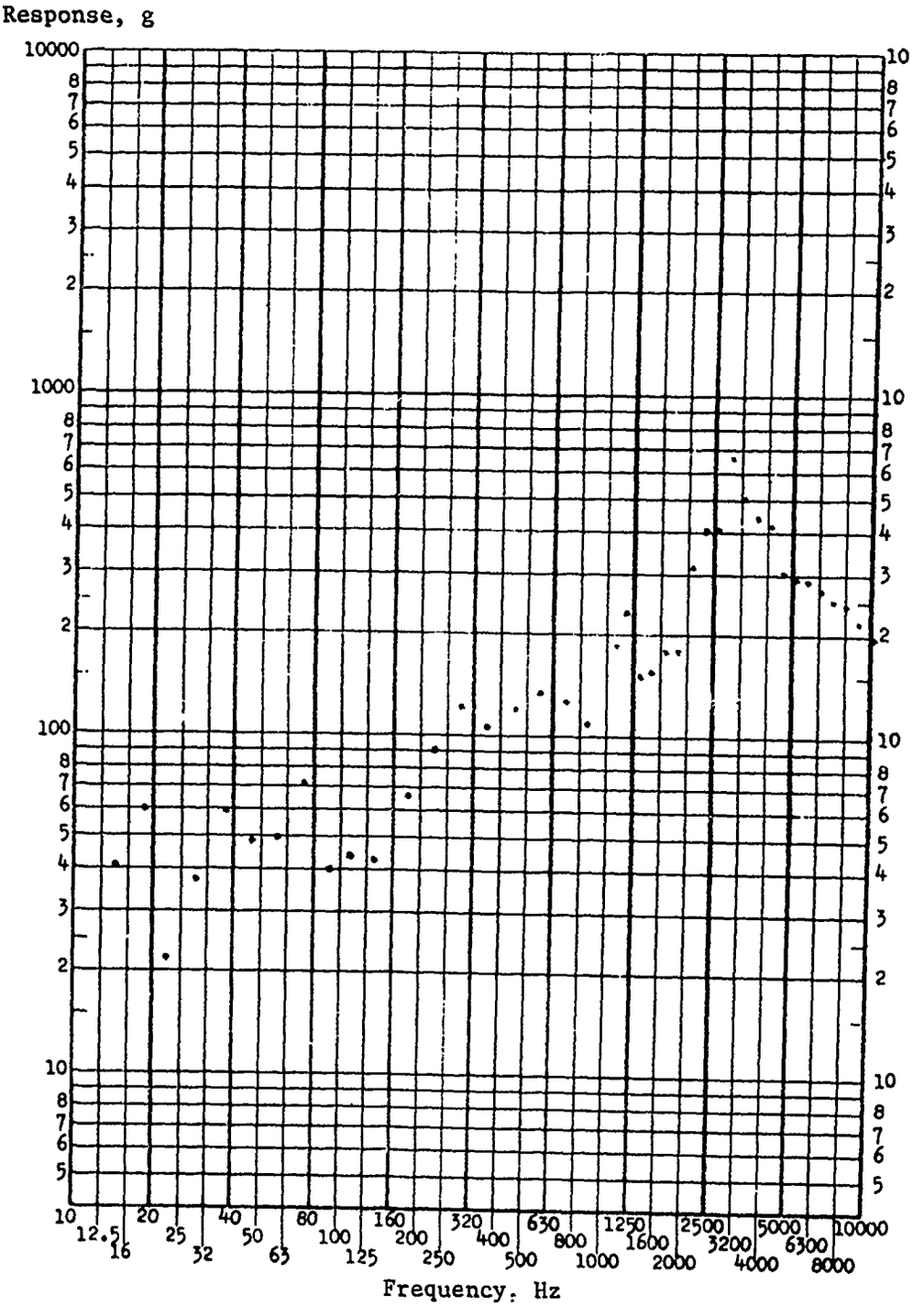
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 26 (cont)



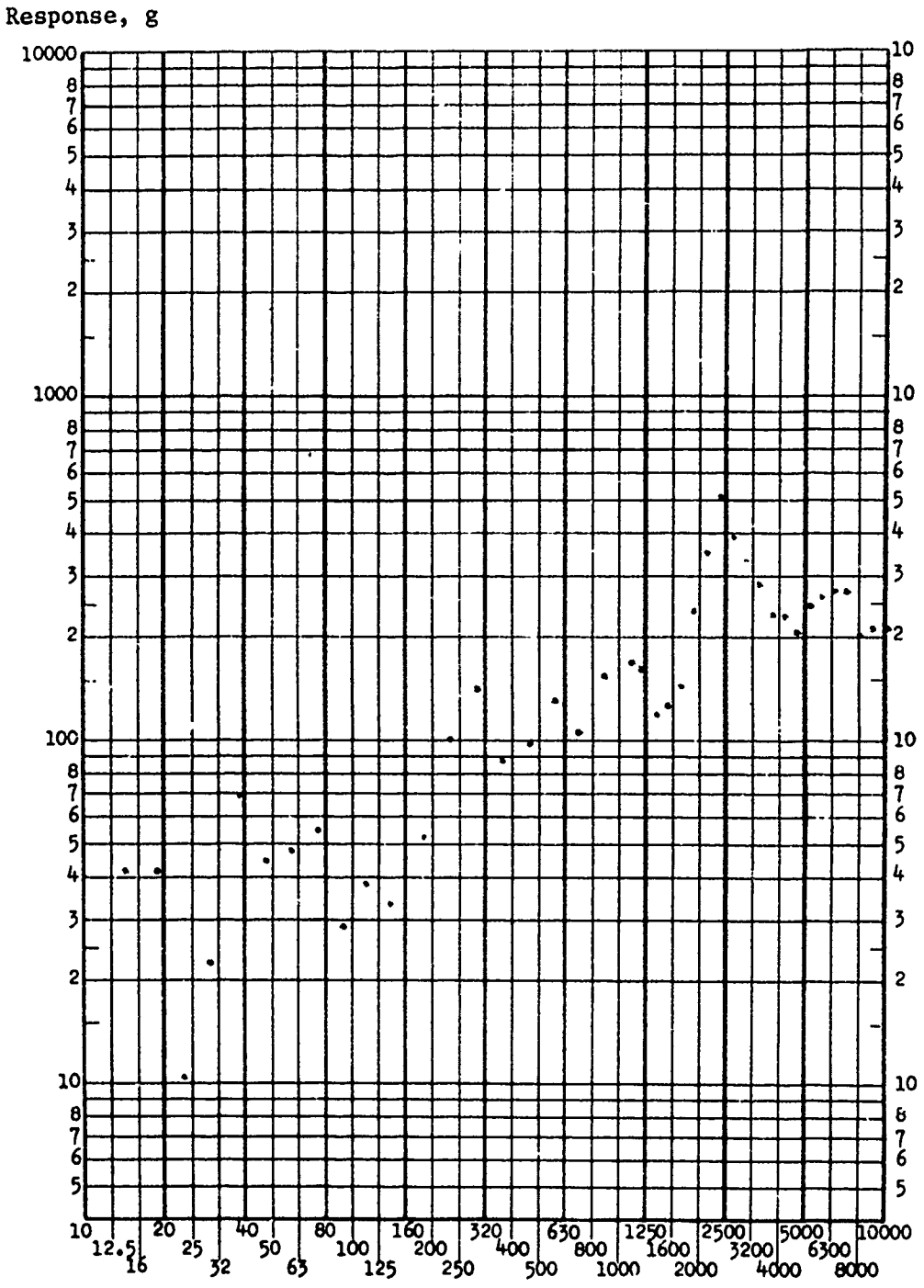
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 26 (cont)



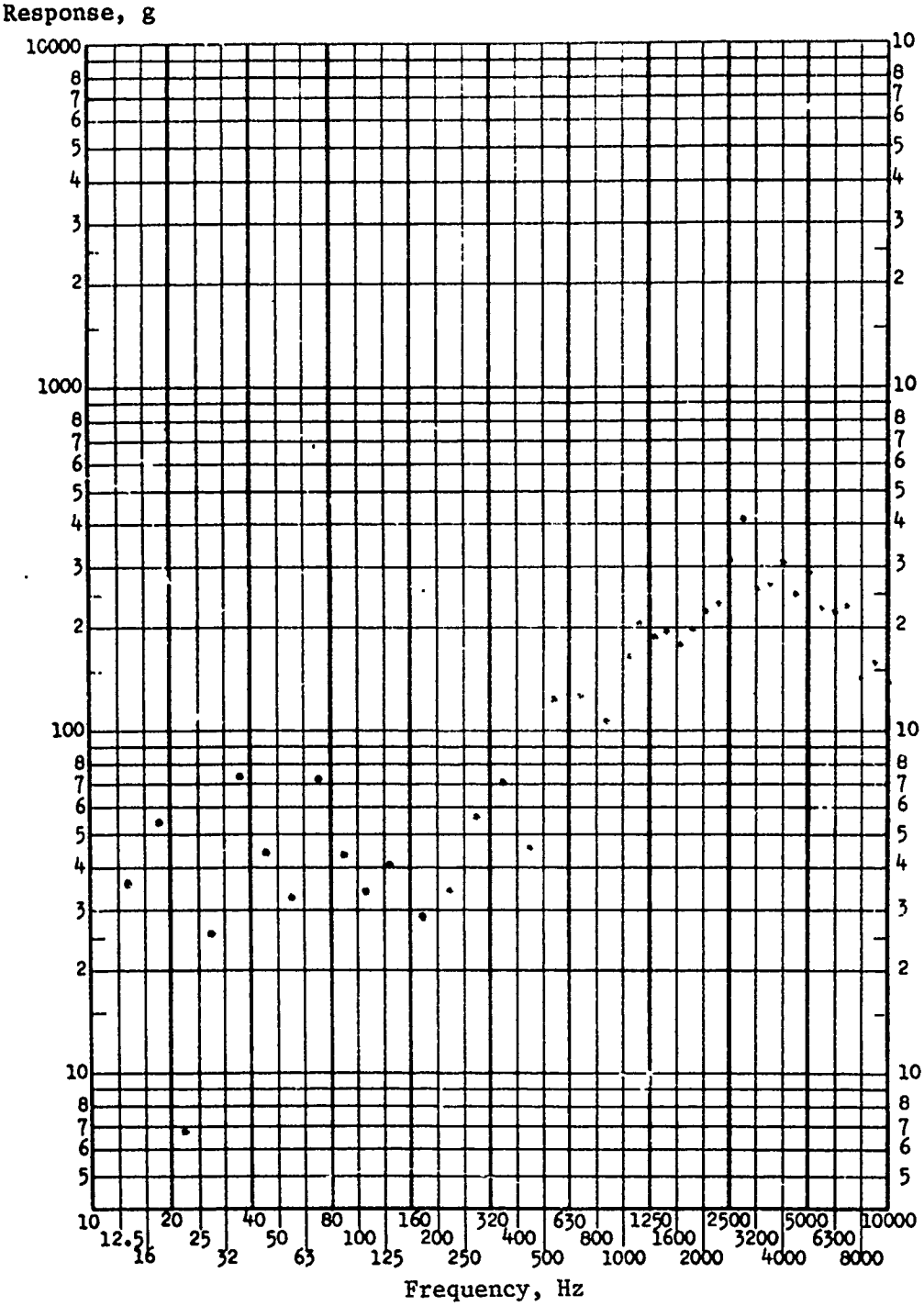
Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 26 (cont)



Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 26 (cont)



Bench Shock Test - Stage II/III Separation, Run 26
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 26 (concl)

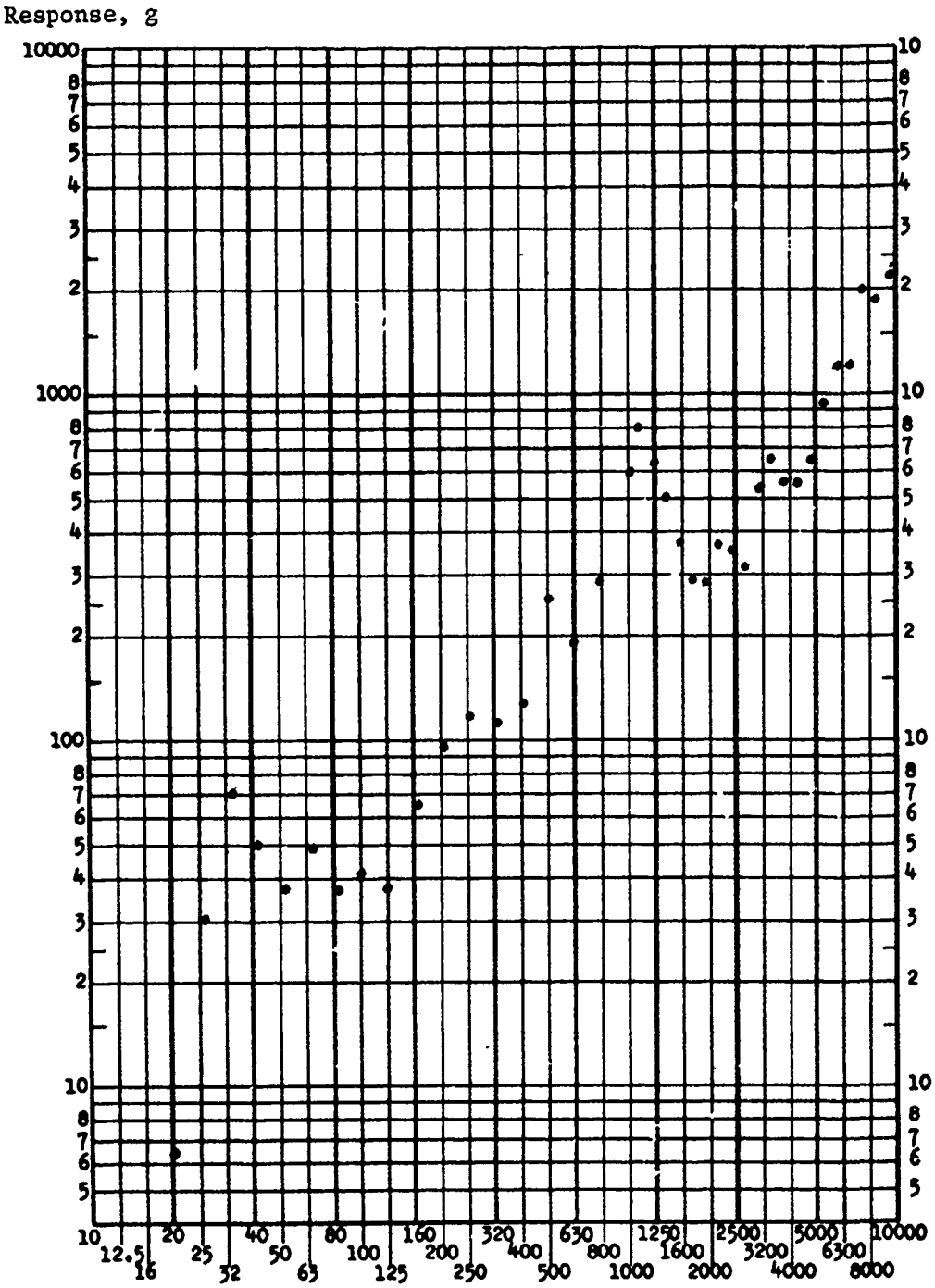
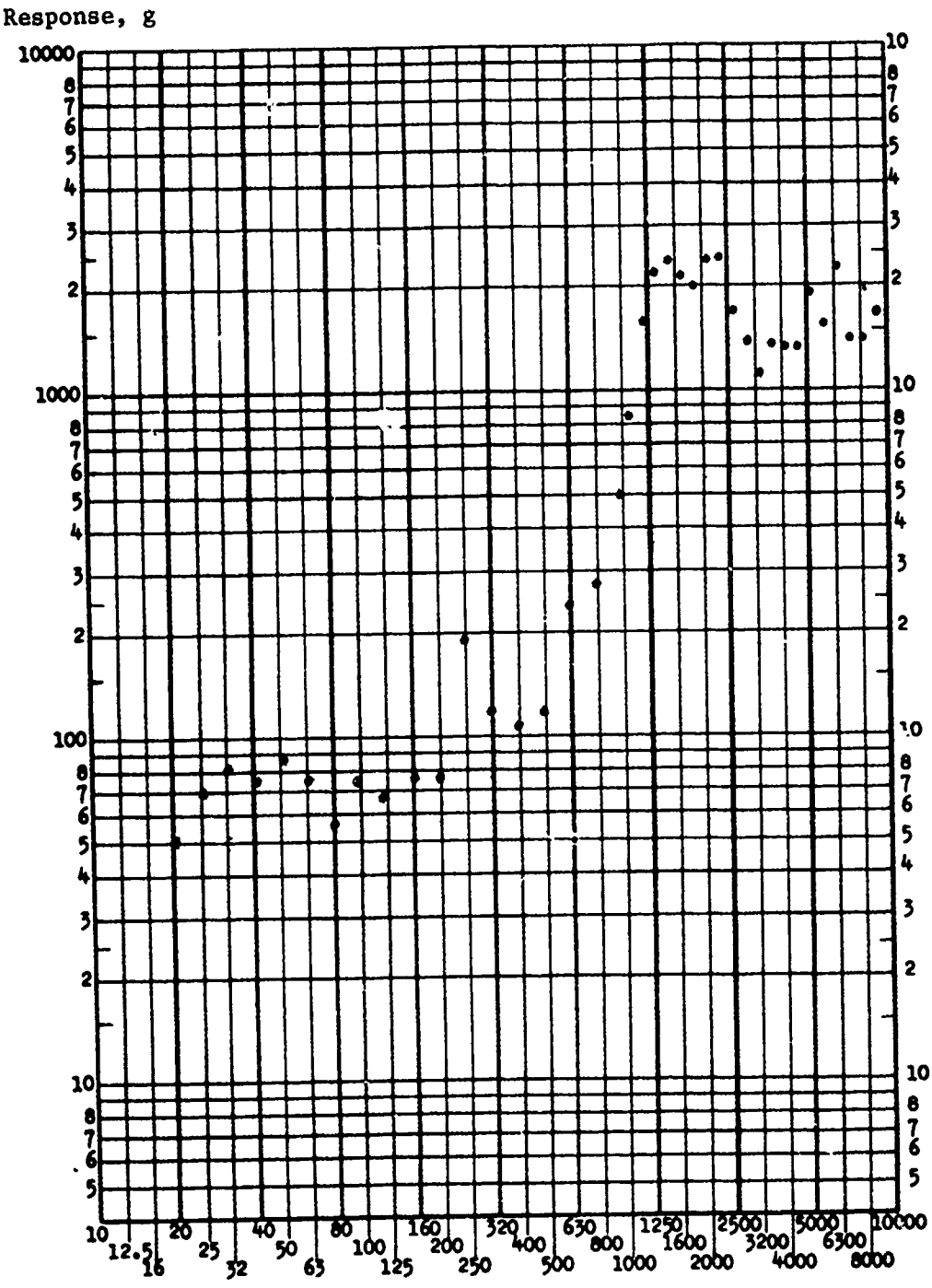
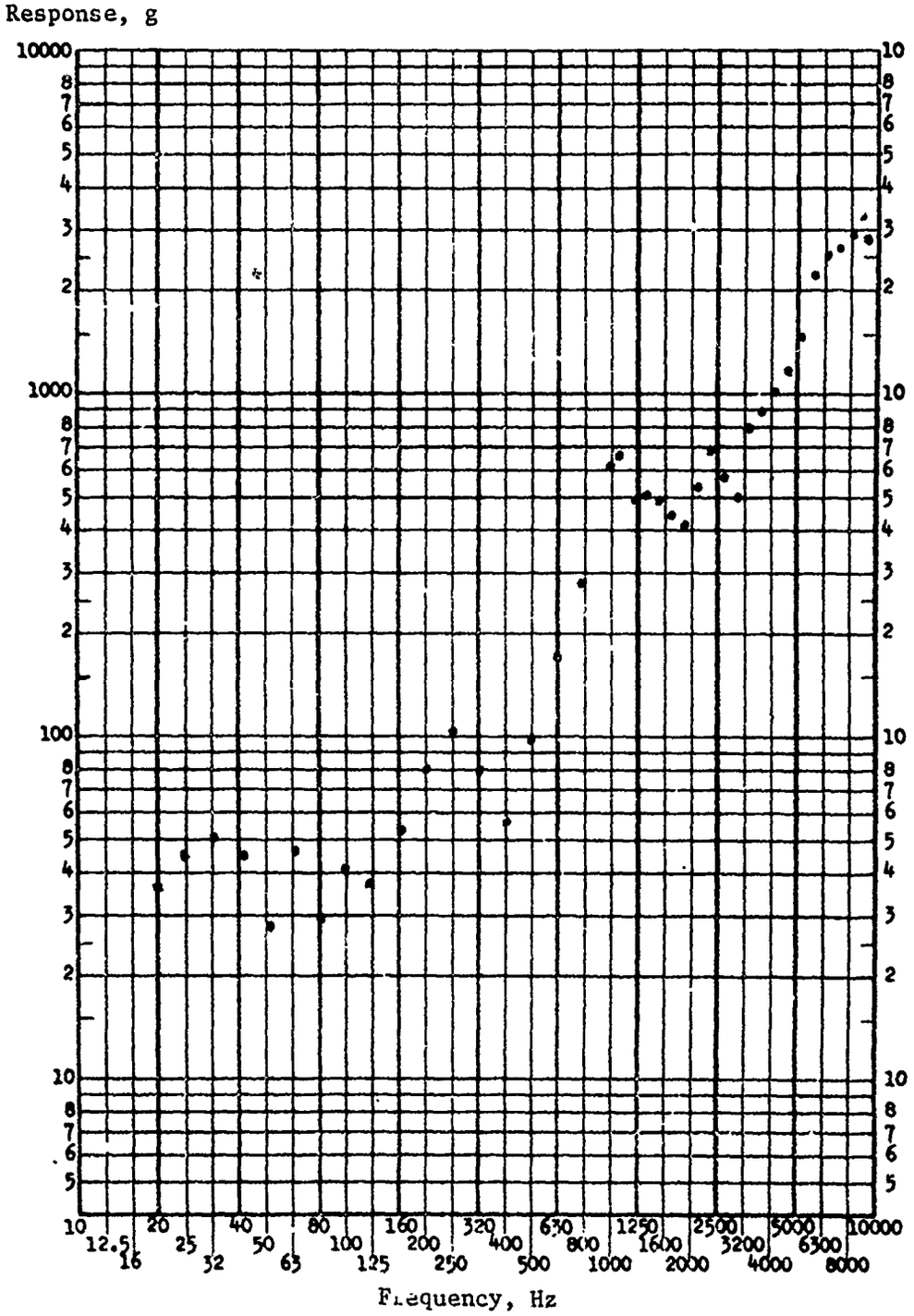


Figure 27 Run 27 Shock Response Spectrum



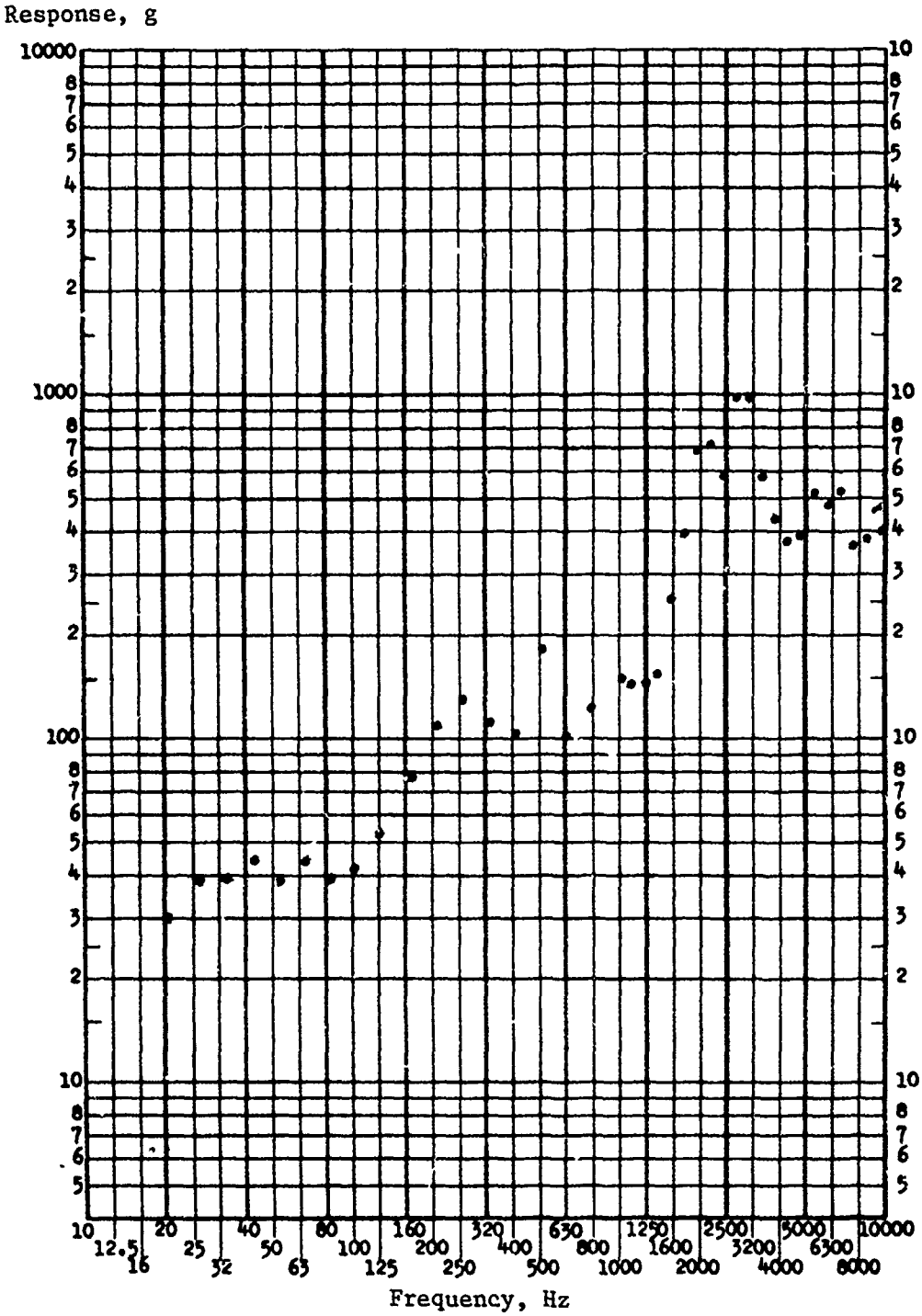
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 27 (cont)



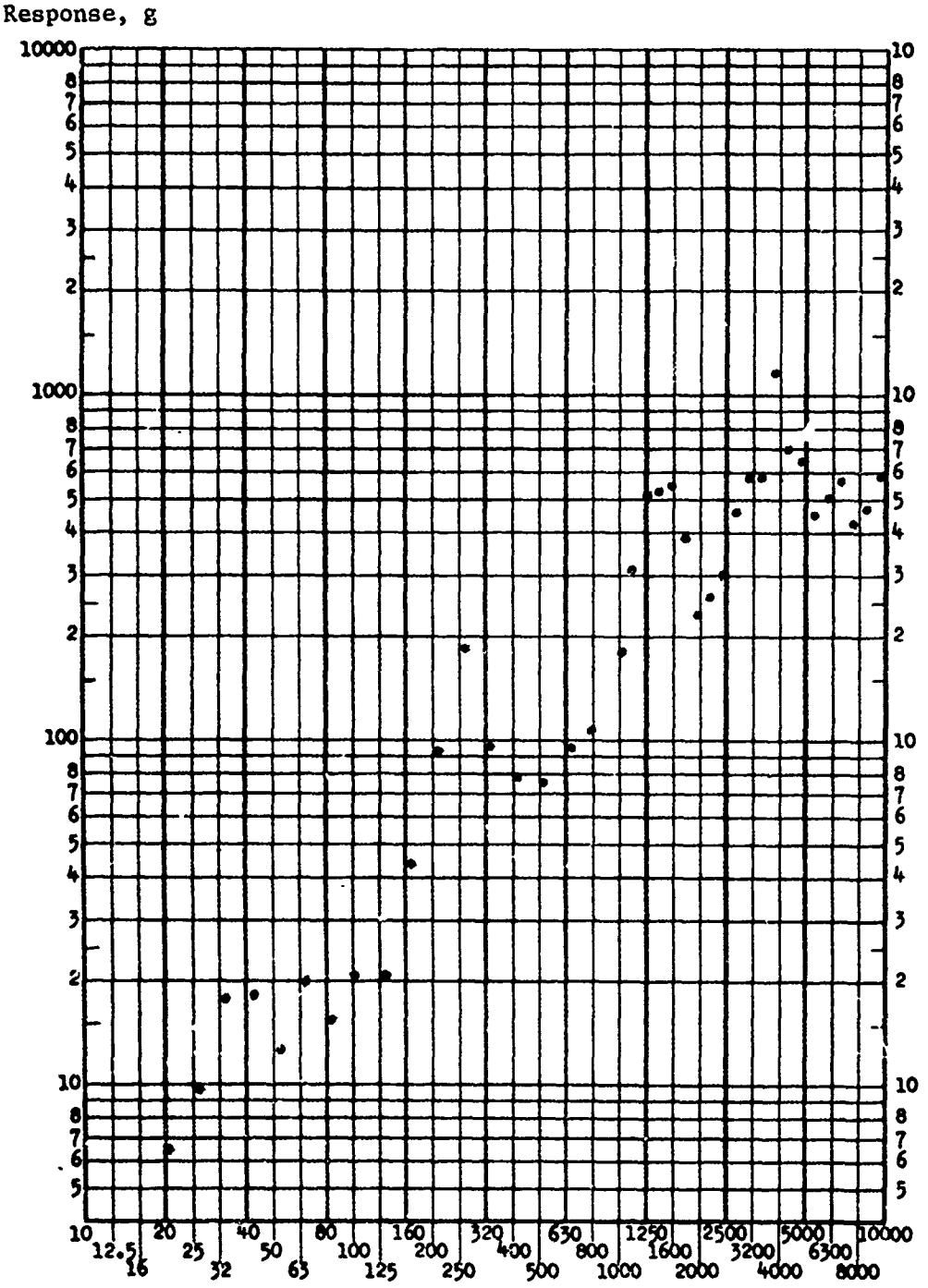
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 27 (cont)



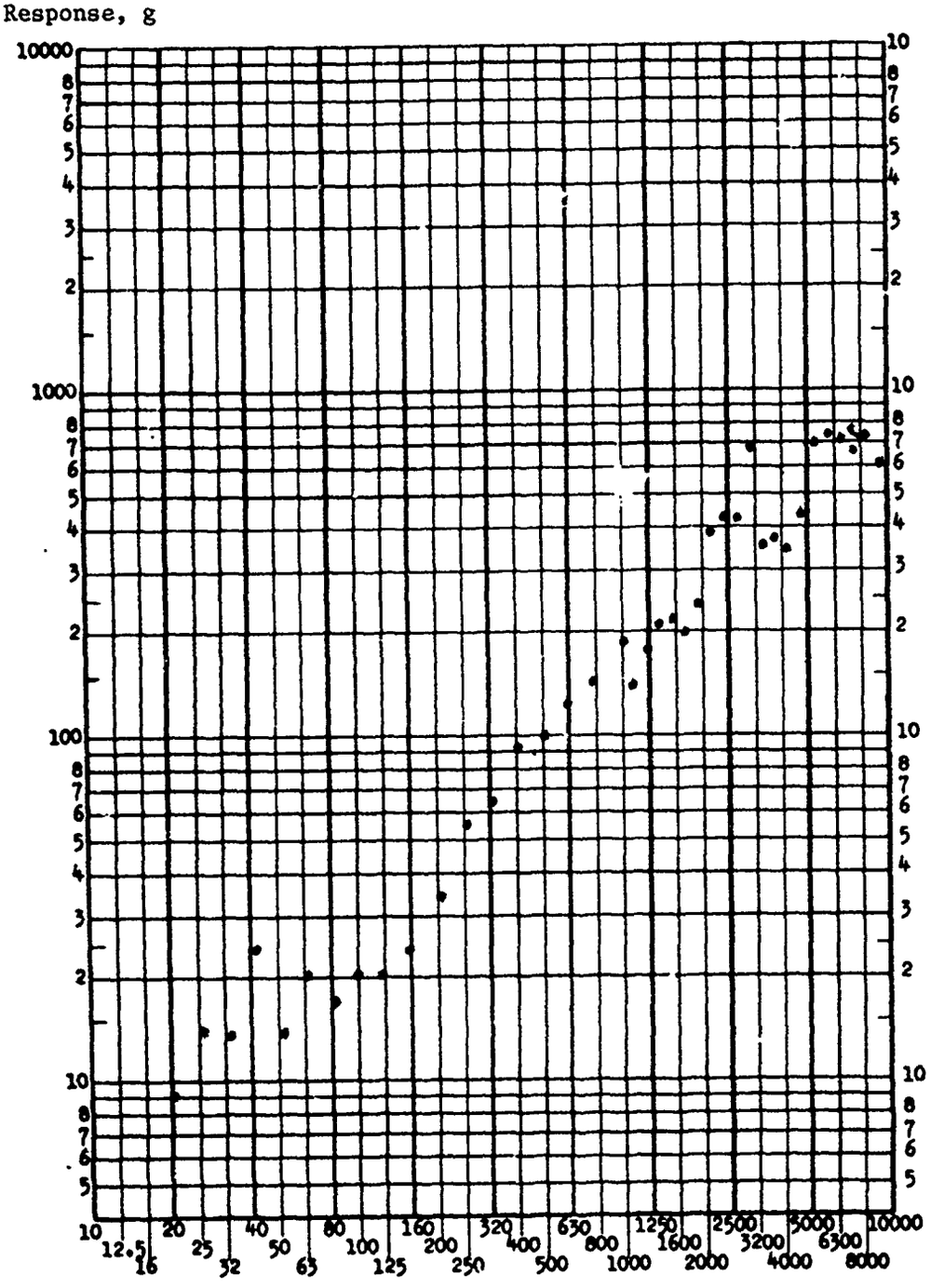
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 27 (cont)



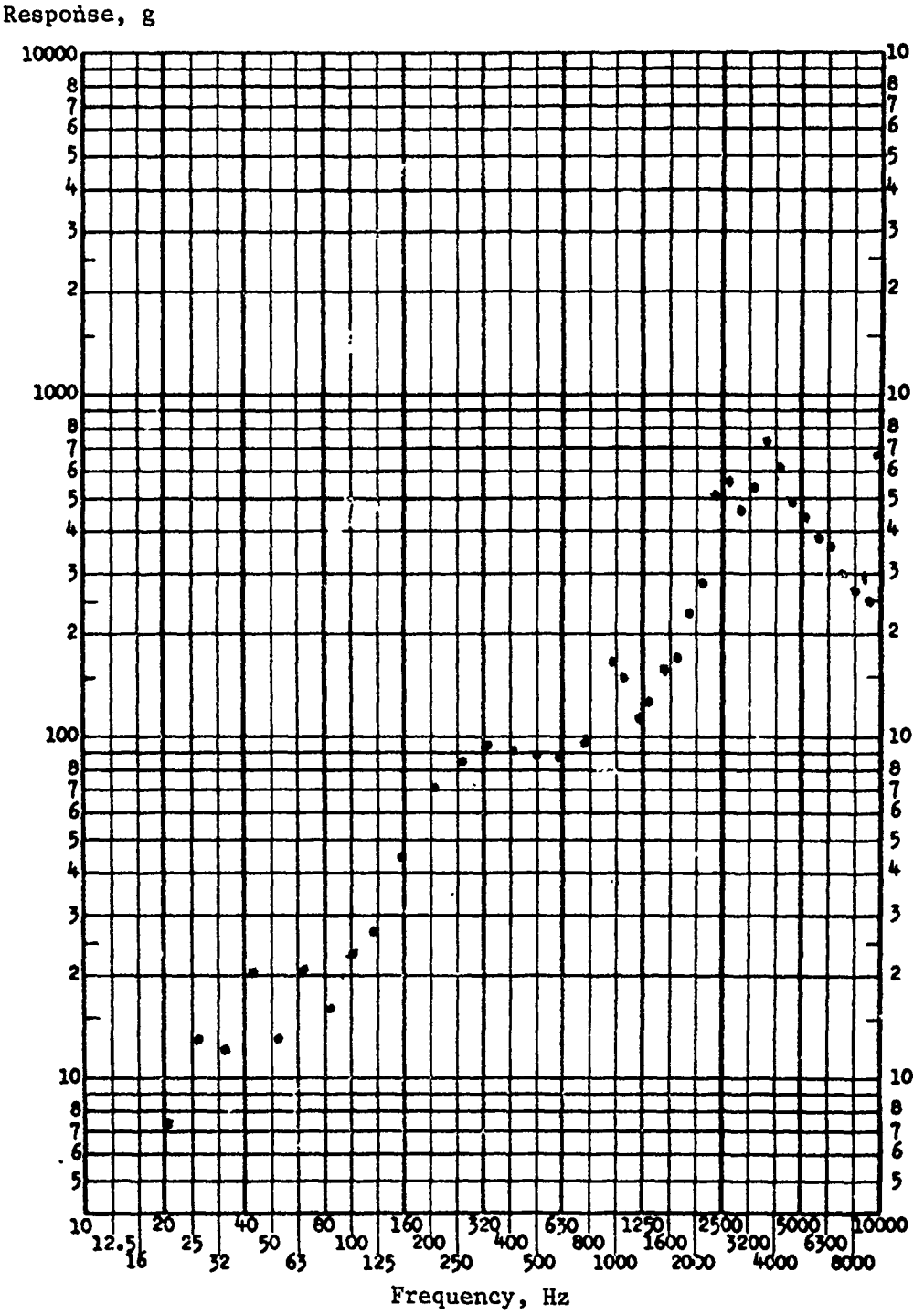
Bench Shock Test - Stage II/III Separation, Run 27
Measurement No. 5 - Tangential axis longeron near station 117

Figure 27 (cont)



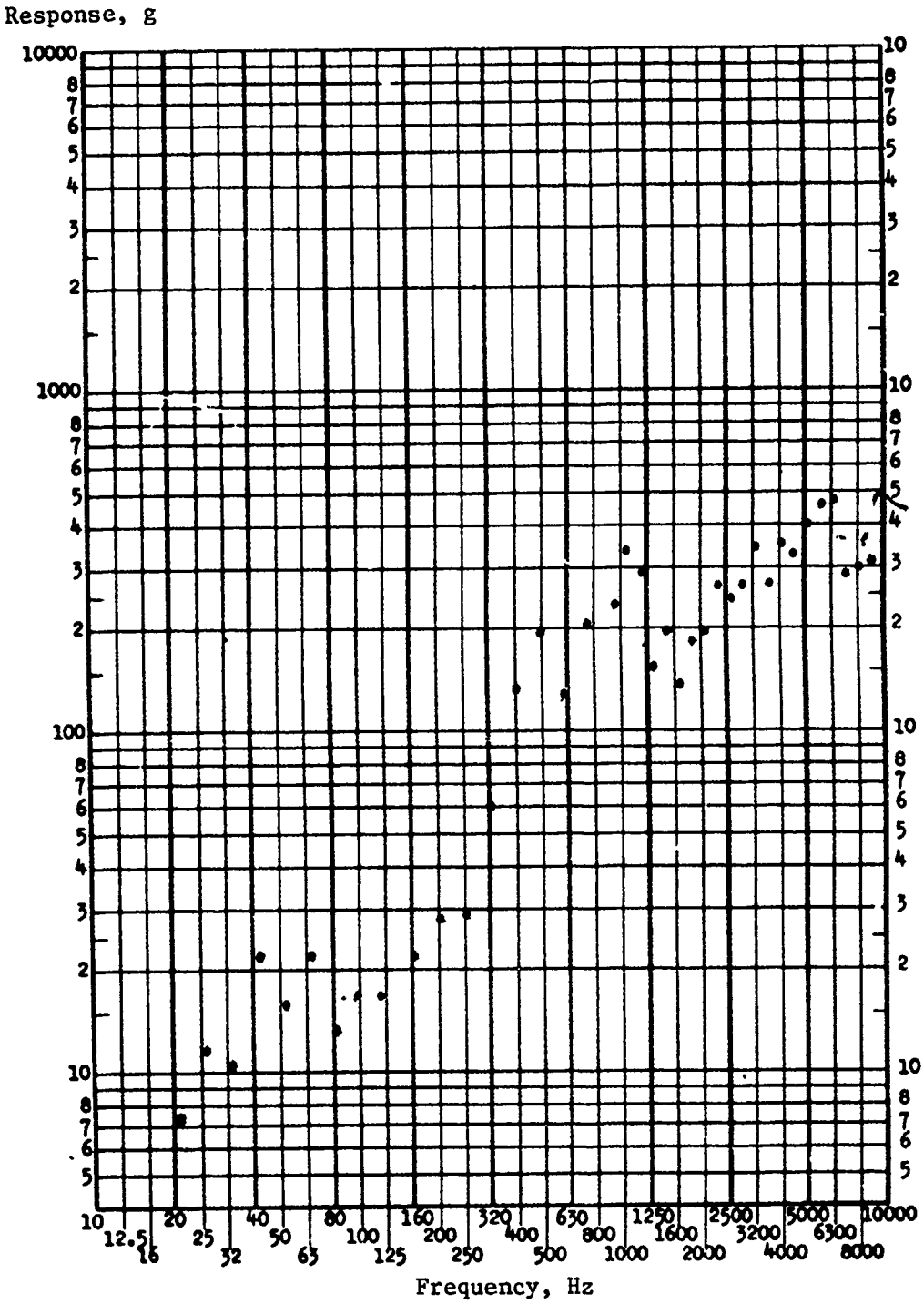
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 6 - Radial axis longeron near
station 117

Figure 27 (cont)



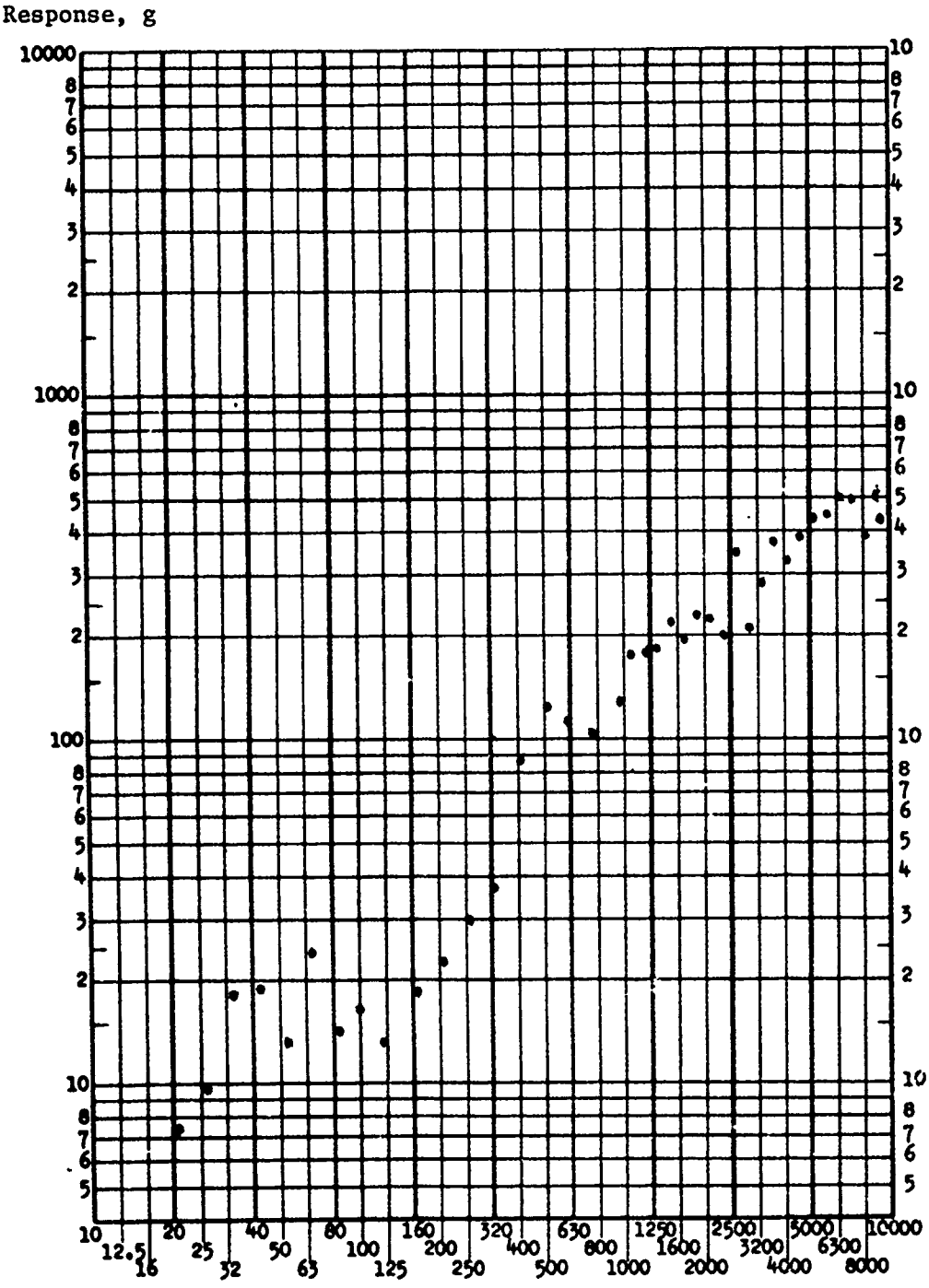
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 27 (cont)



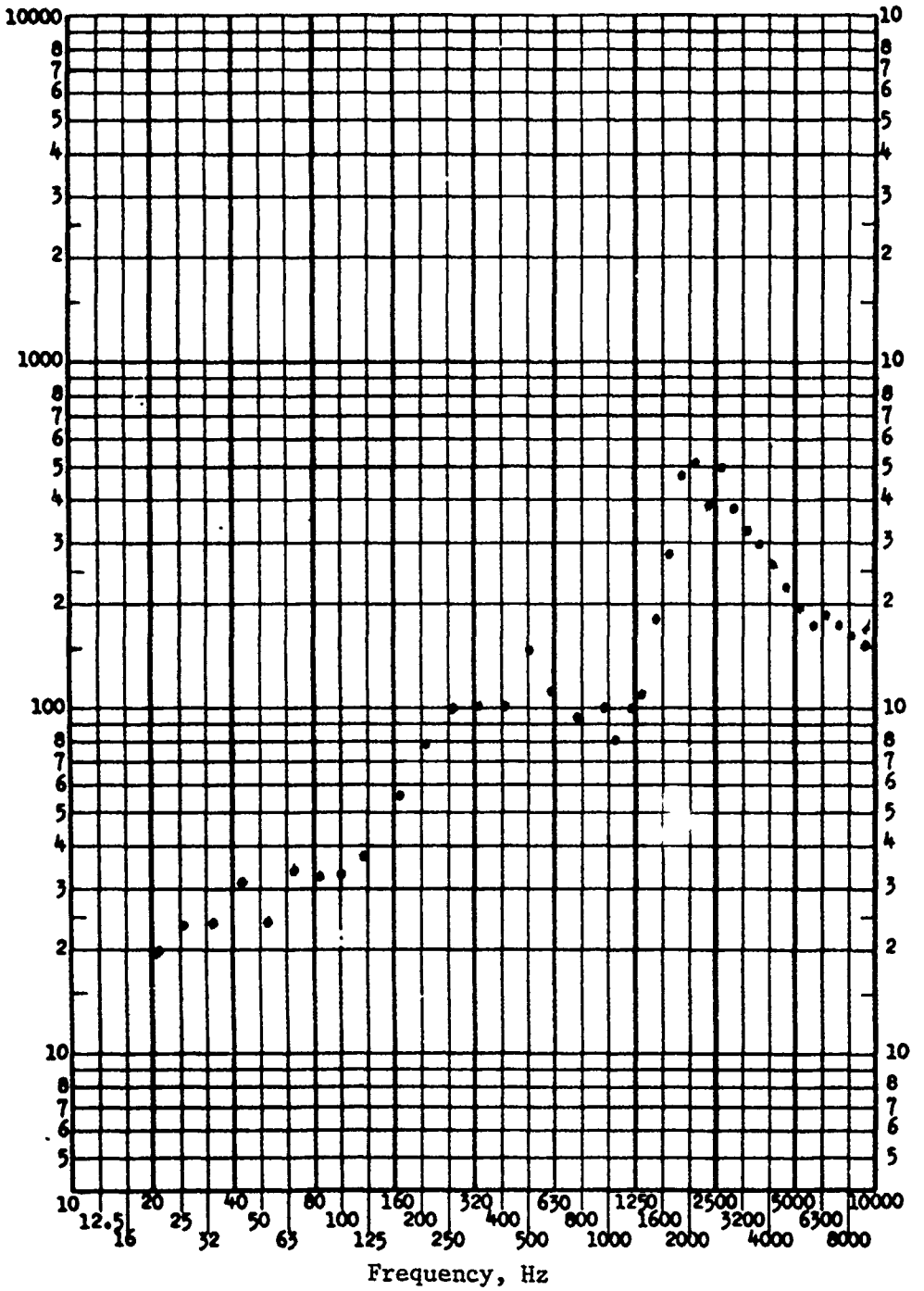
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 8 - Tangential axis longeron near station 77

Figure 27 (cont)



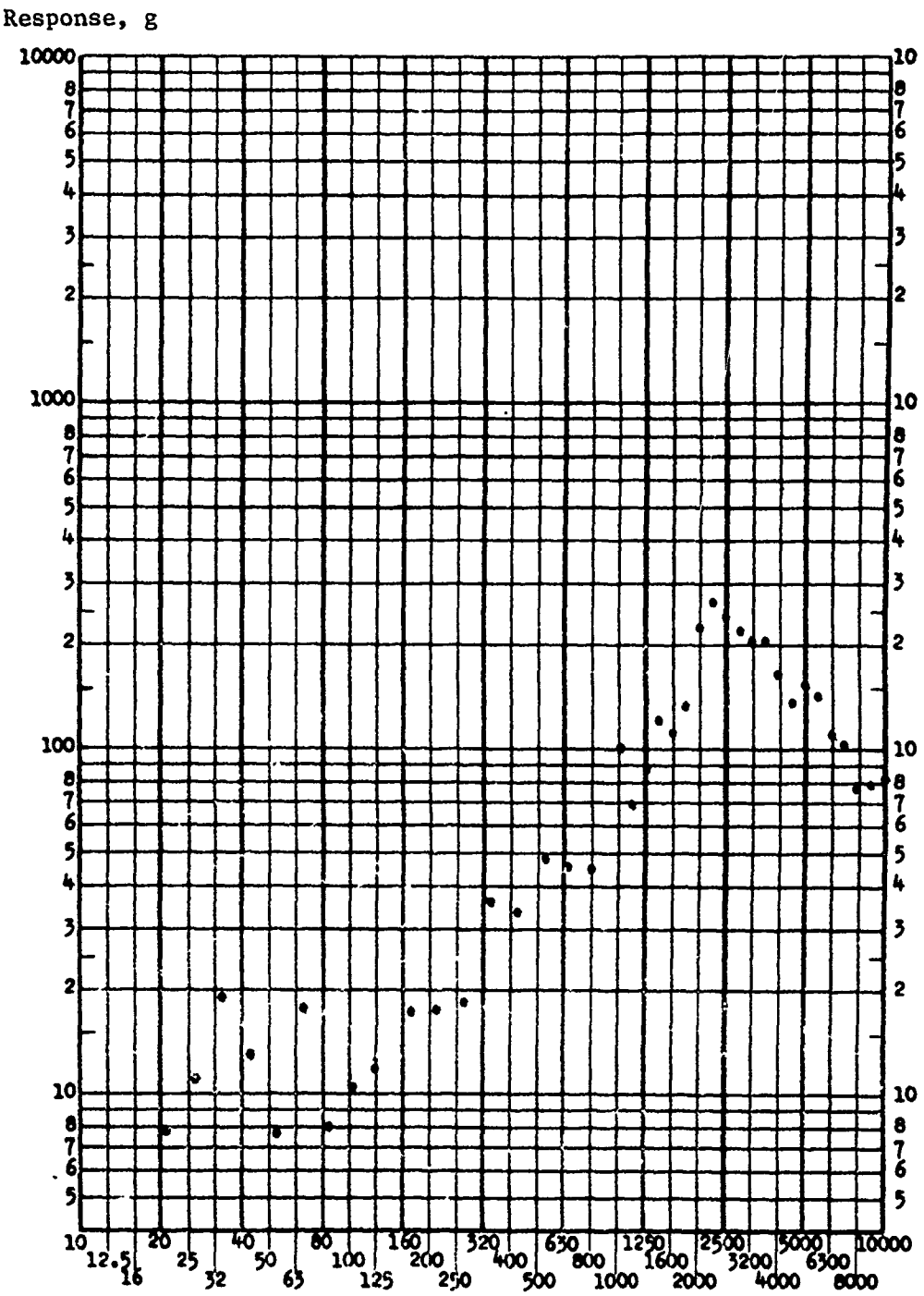
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 9 - Radial axis longeron near station 77

Figure 27 (cont)



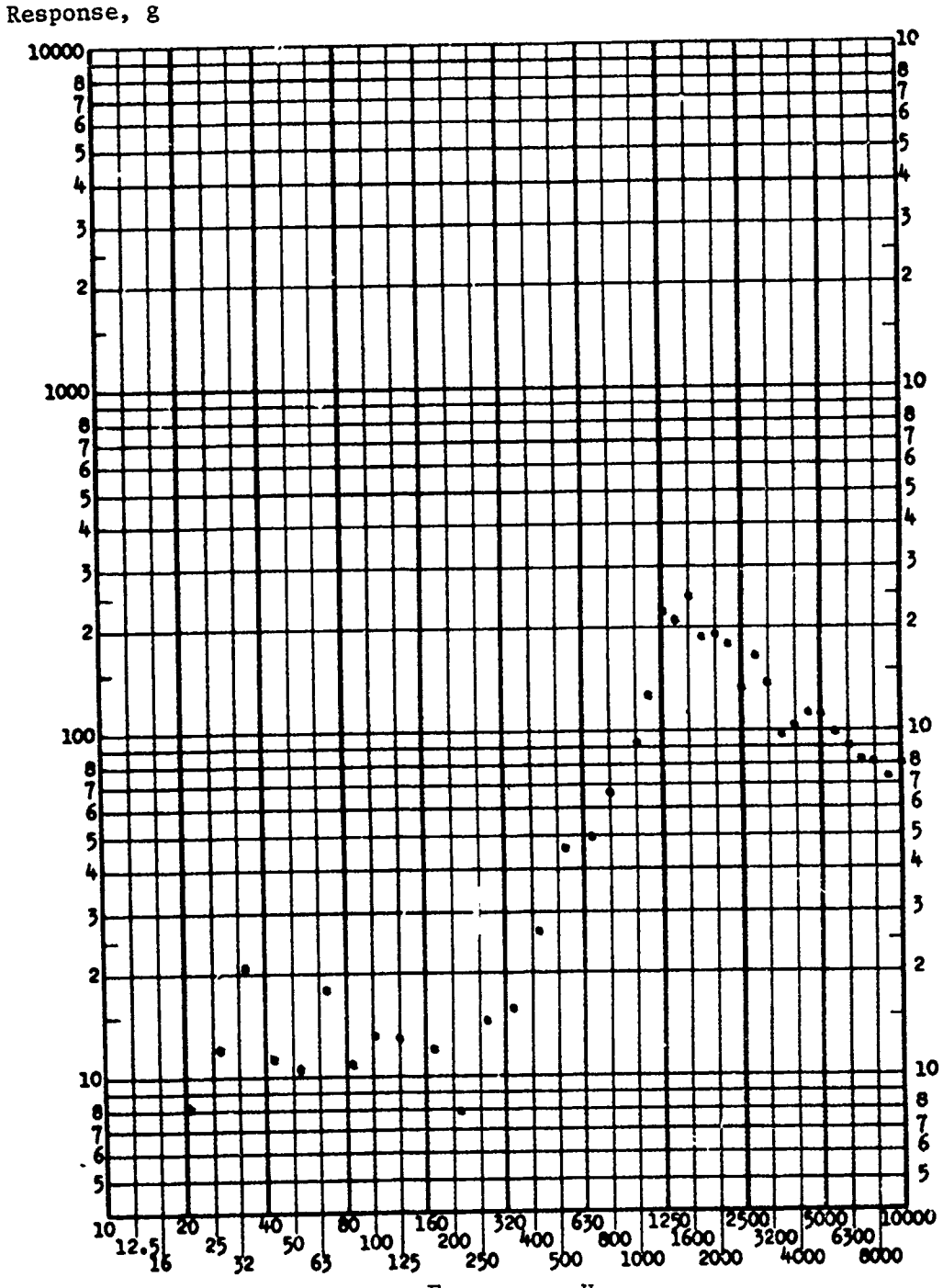
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 27 (cont)



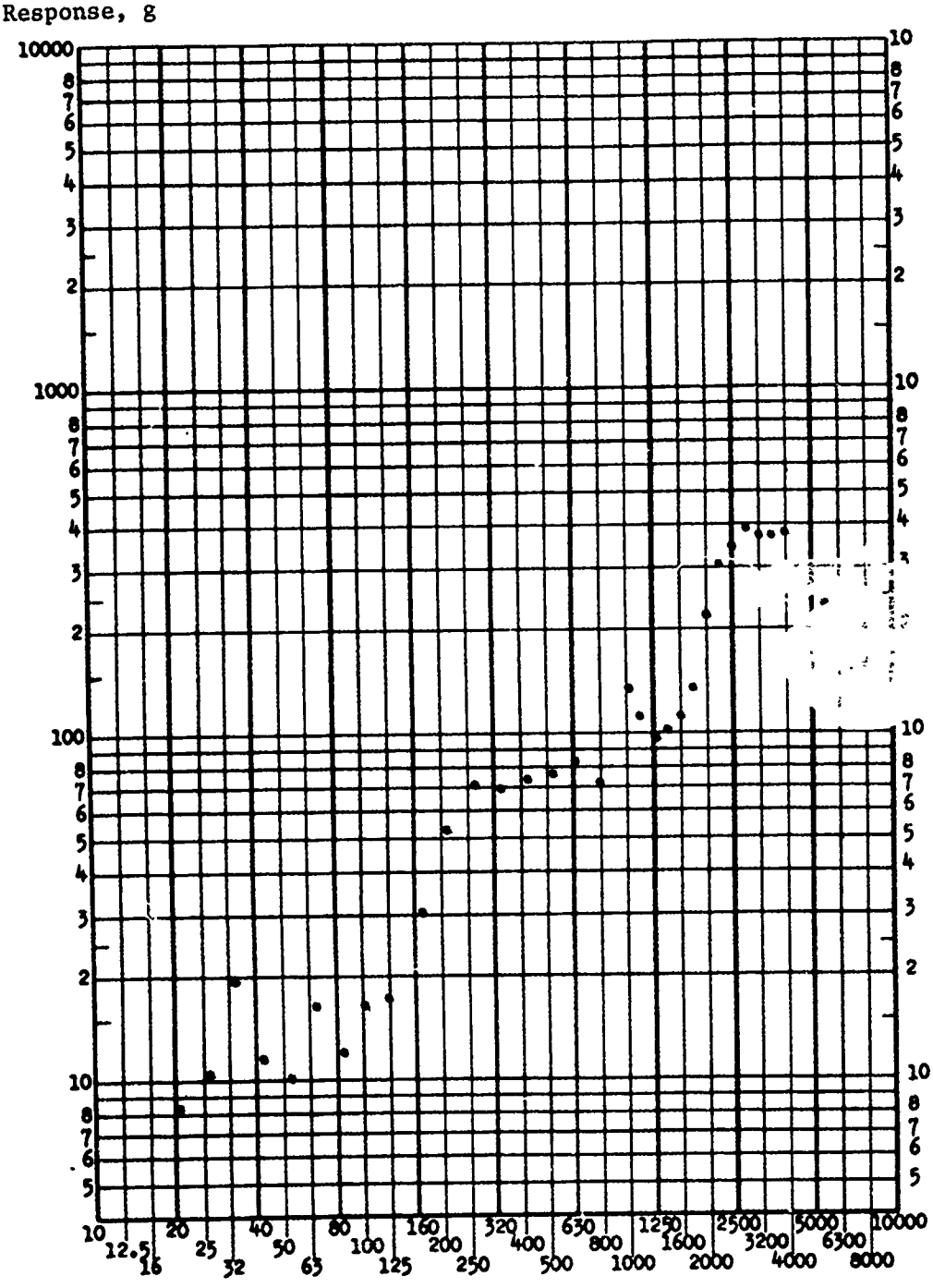
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 27 (cont)



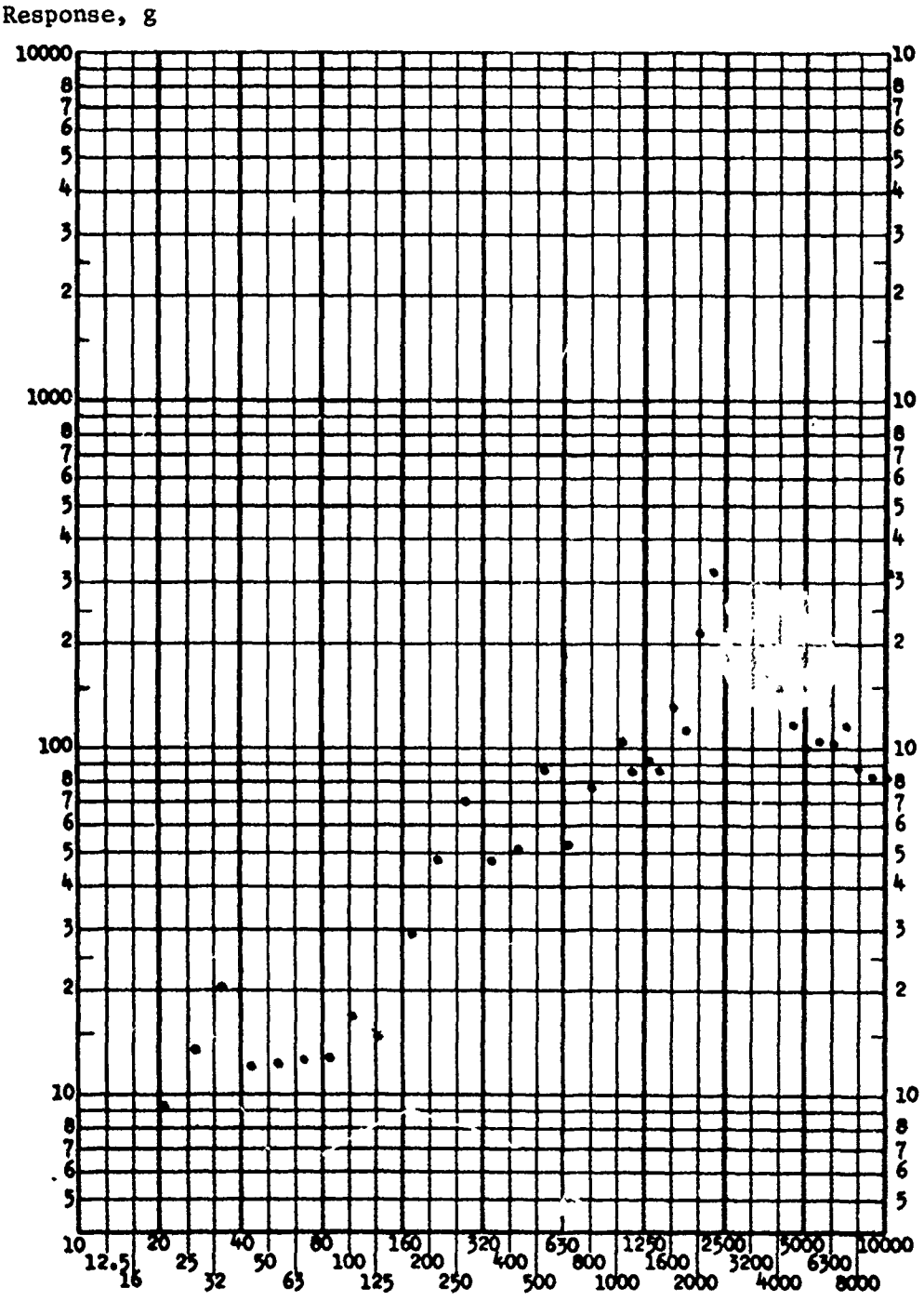
Bench Shock Test - Stage II/III Separation, Run 27
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 27 (cont)



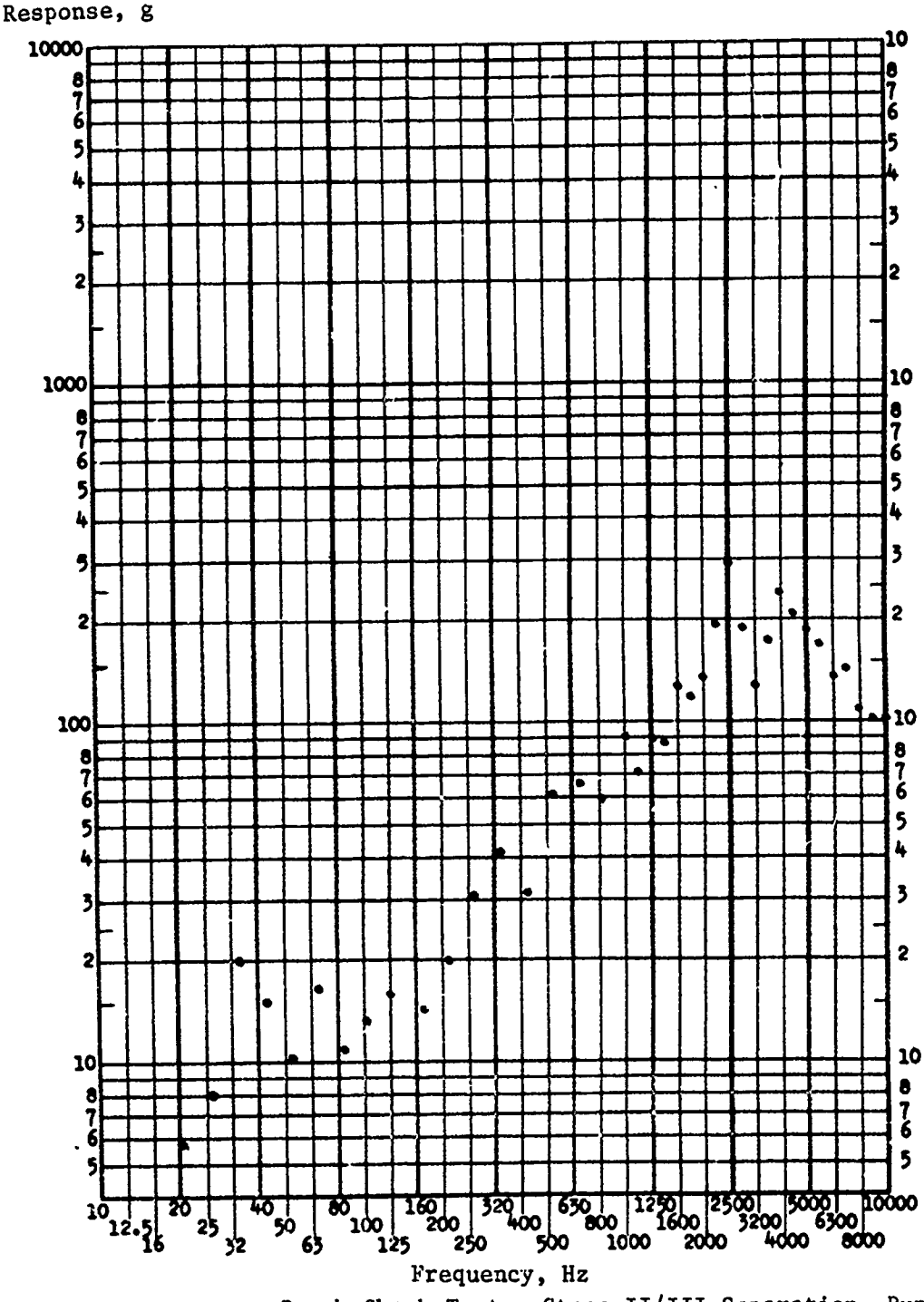
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 27 (cont)



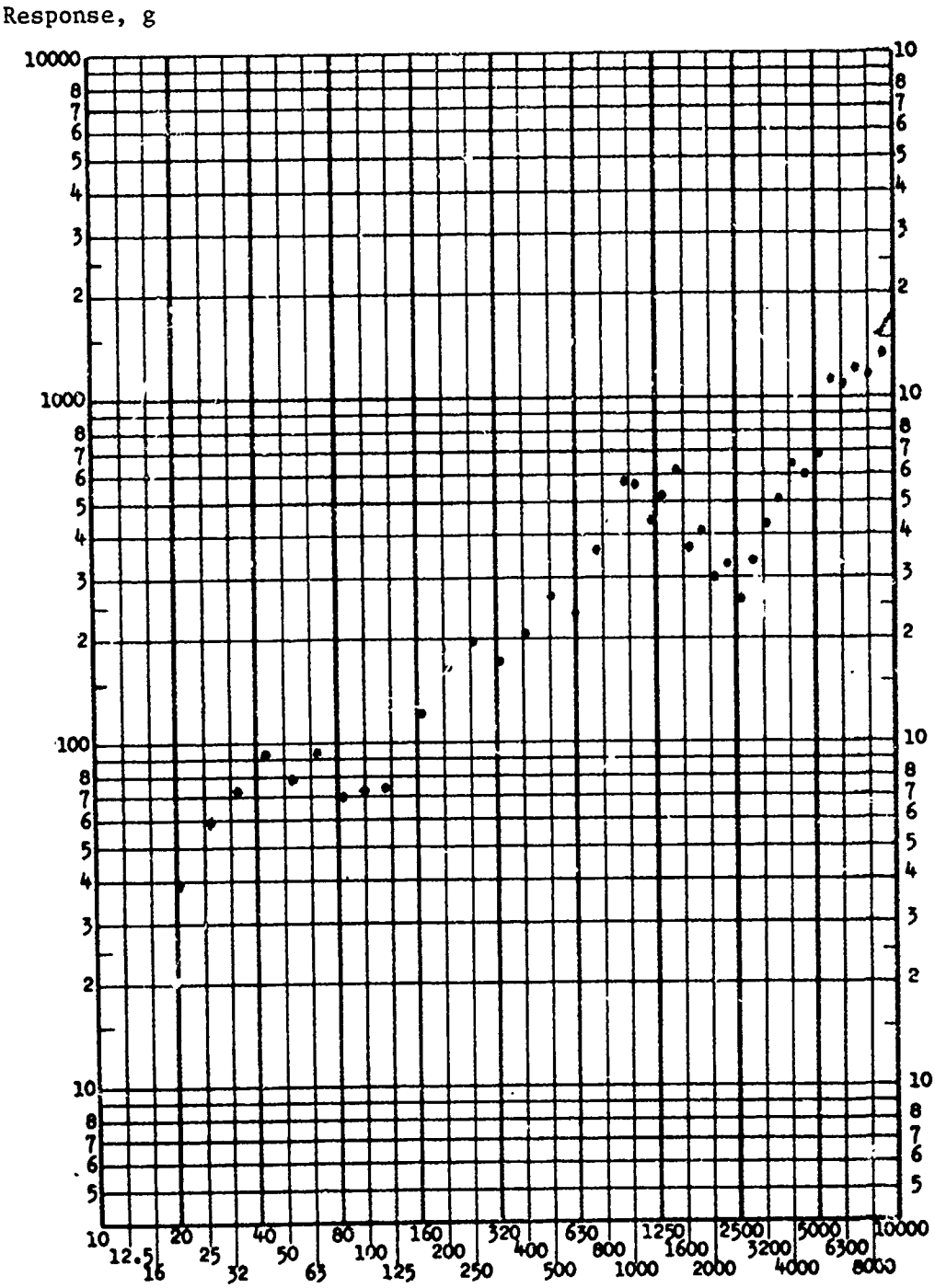
Bench Shock Test - Stage II/III Separation, Run 27
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 27 (cont)



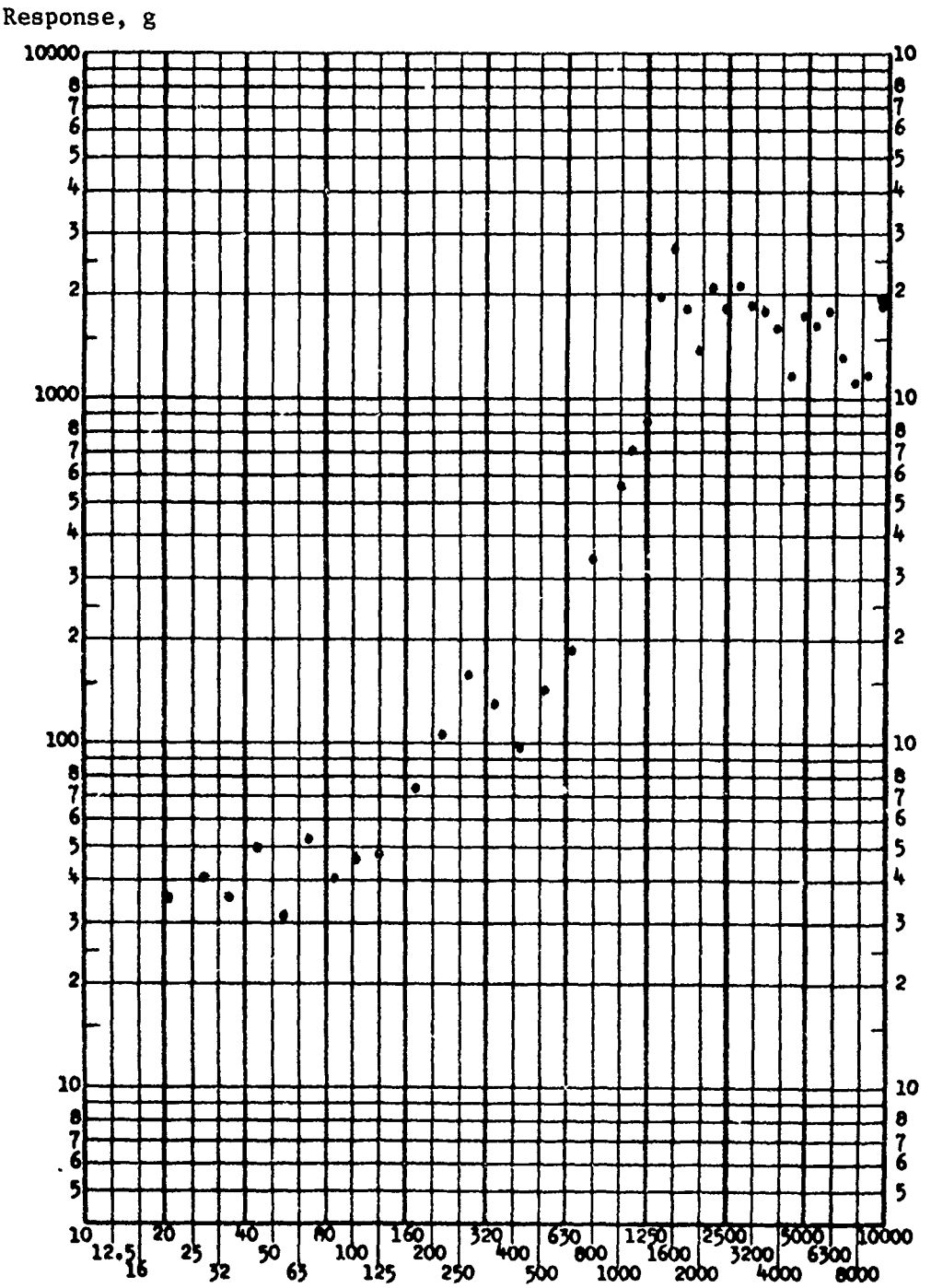
Bench Shock Test - Stage II/III Separation, Run 27 _
Measurement No. 15 - Lateral axis truss top near
longeron attach point

Figure 27 (concl)



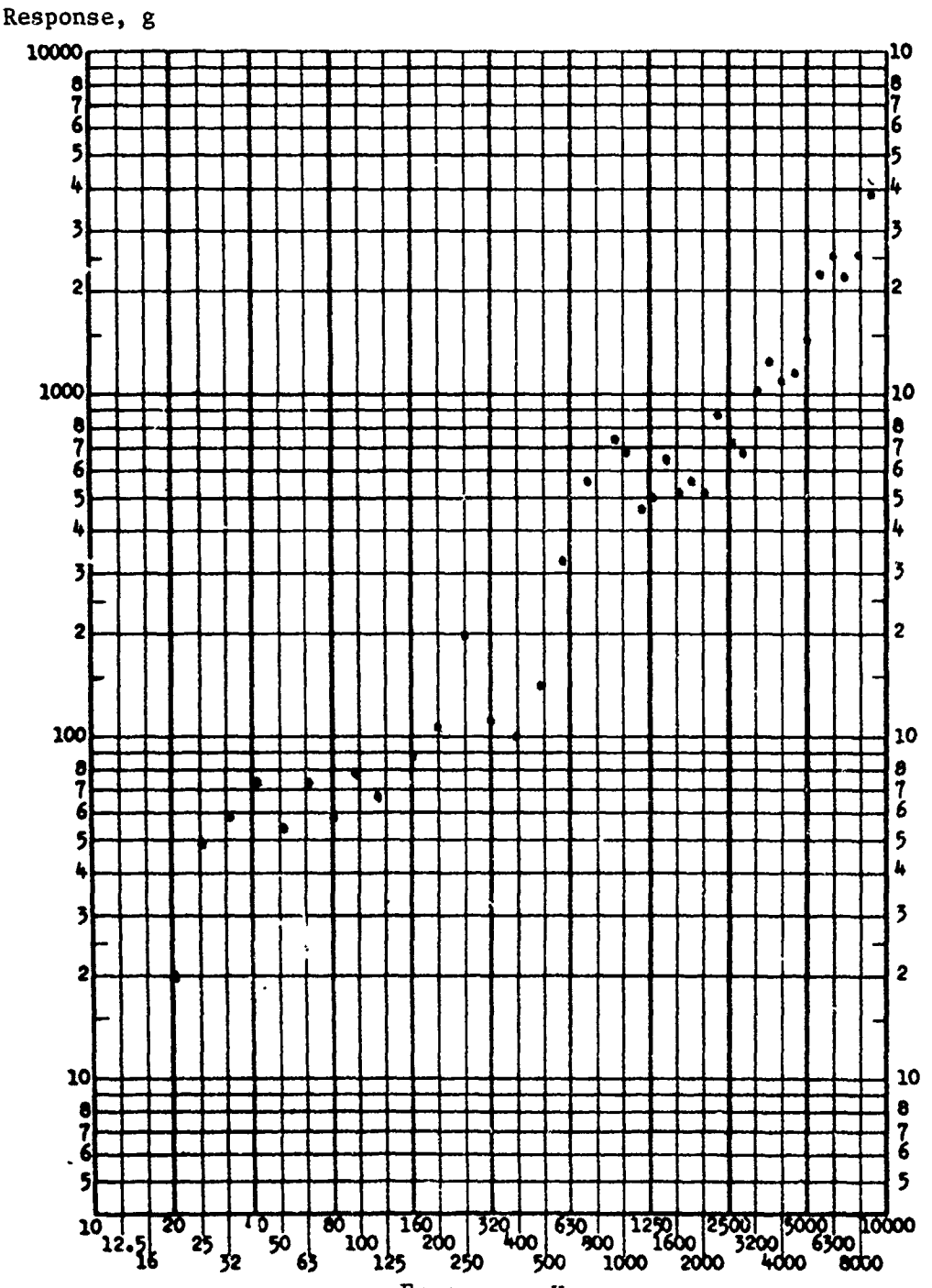
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 28 Run 28 Shock Response Spectrum



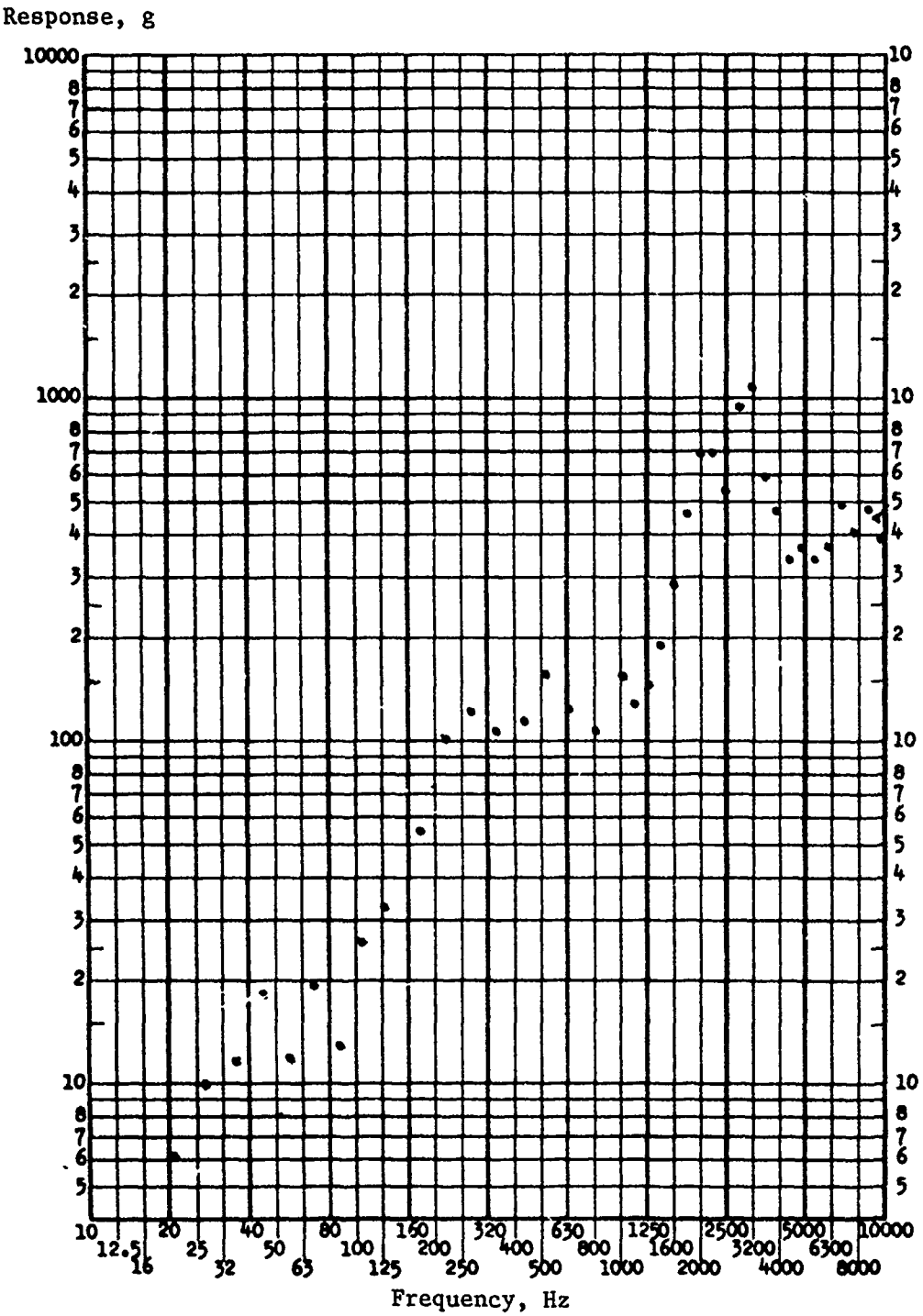
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 2 - Tangential axis longeron near station 133

Figure 28 (cont)



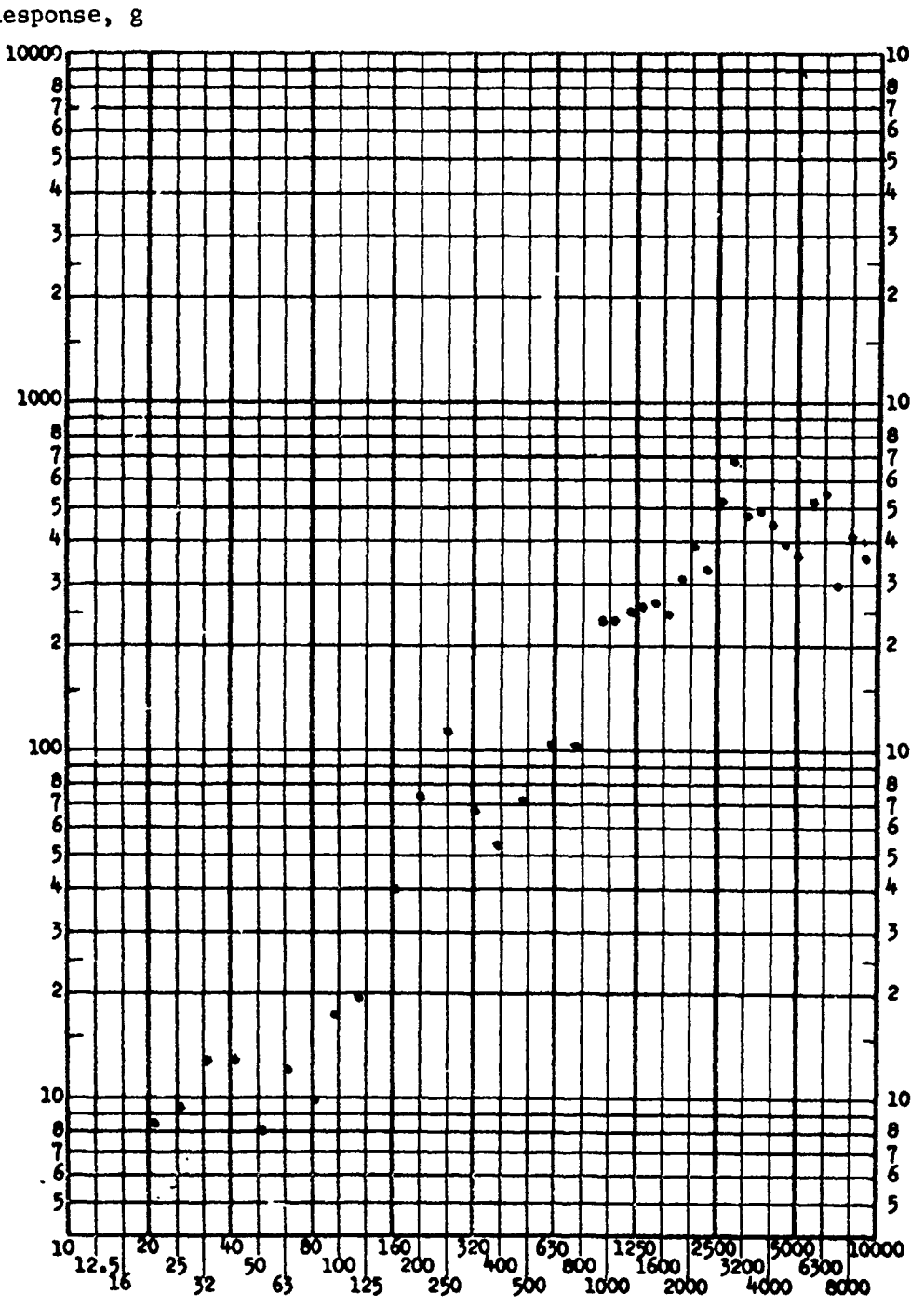
Bench Shock Test - Stage II/III Separation, Run 28 __
Measurement No. 3 - Radial axis longeron near
station 133

Figure 28 (cont)



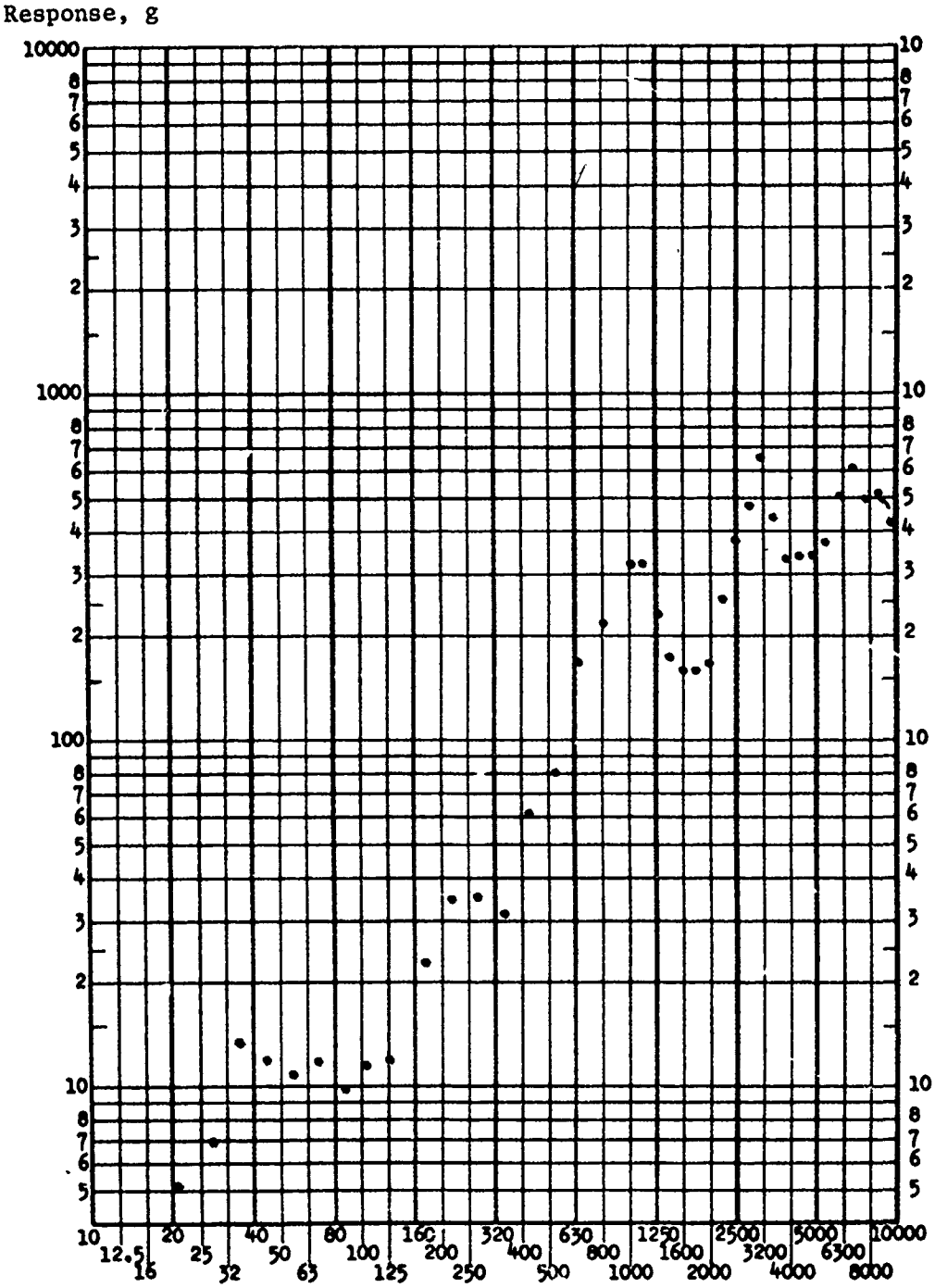
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 28 (cont)



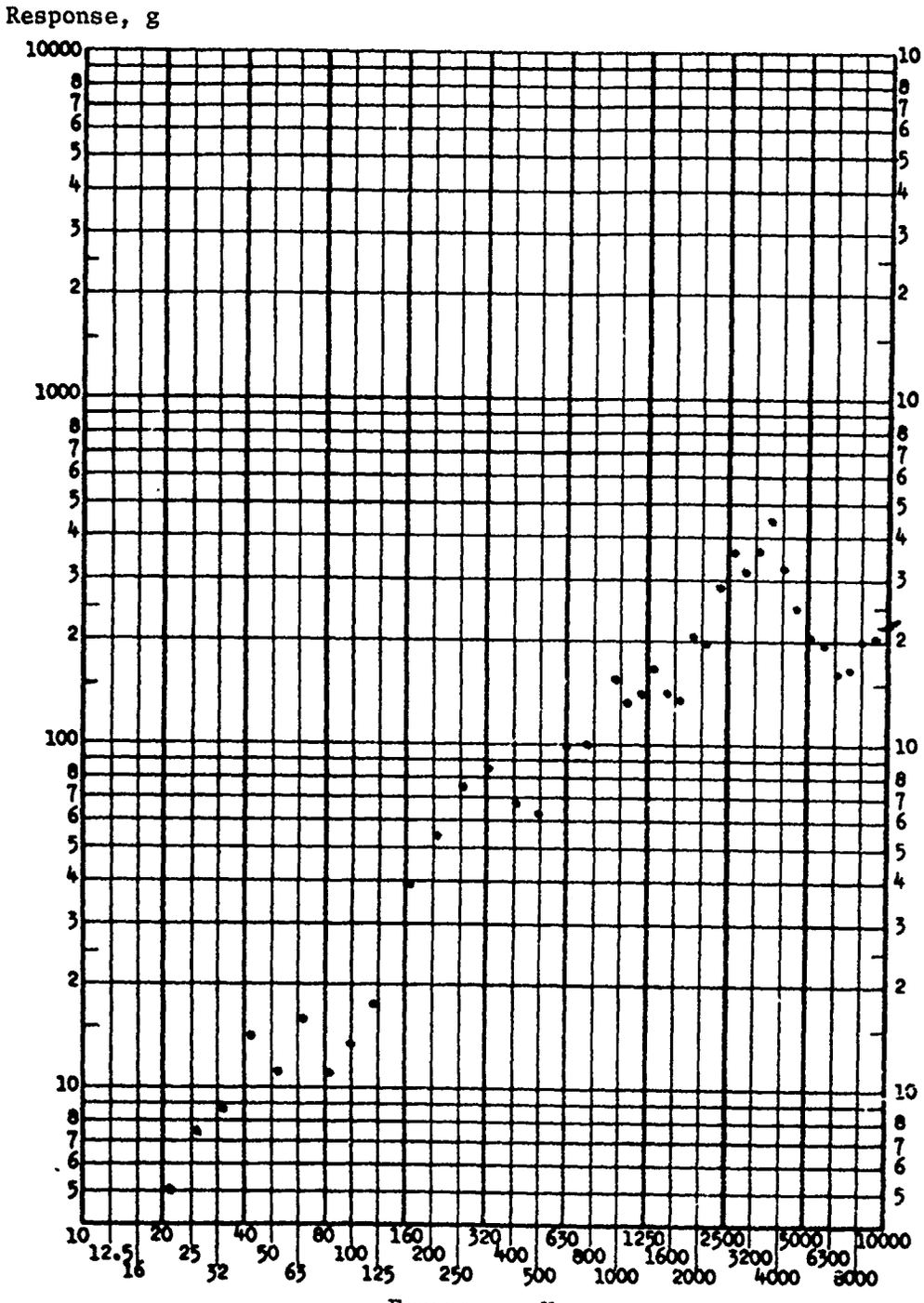
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 5 - Tangential axis longeron near station 117

Figure 28 (cont)



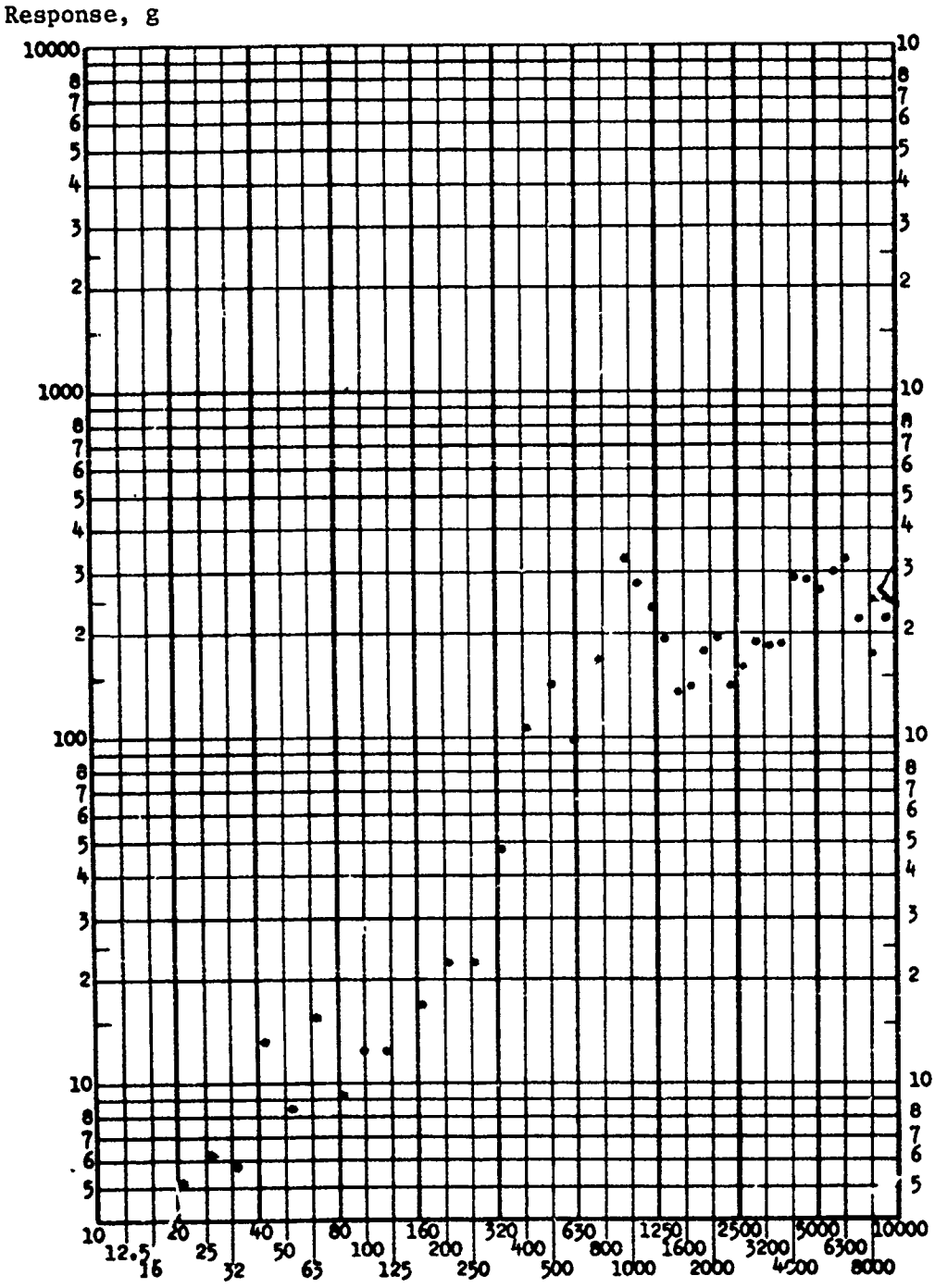
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 6 - Radial axis longeron near station 117

Figure 28 (cont)



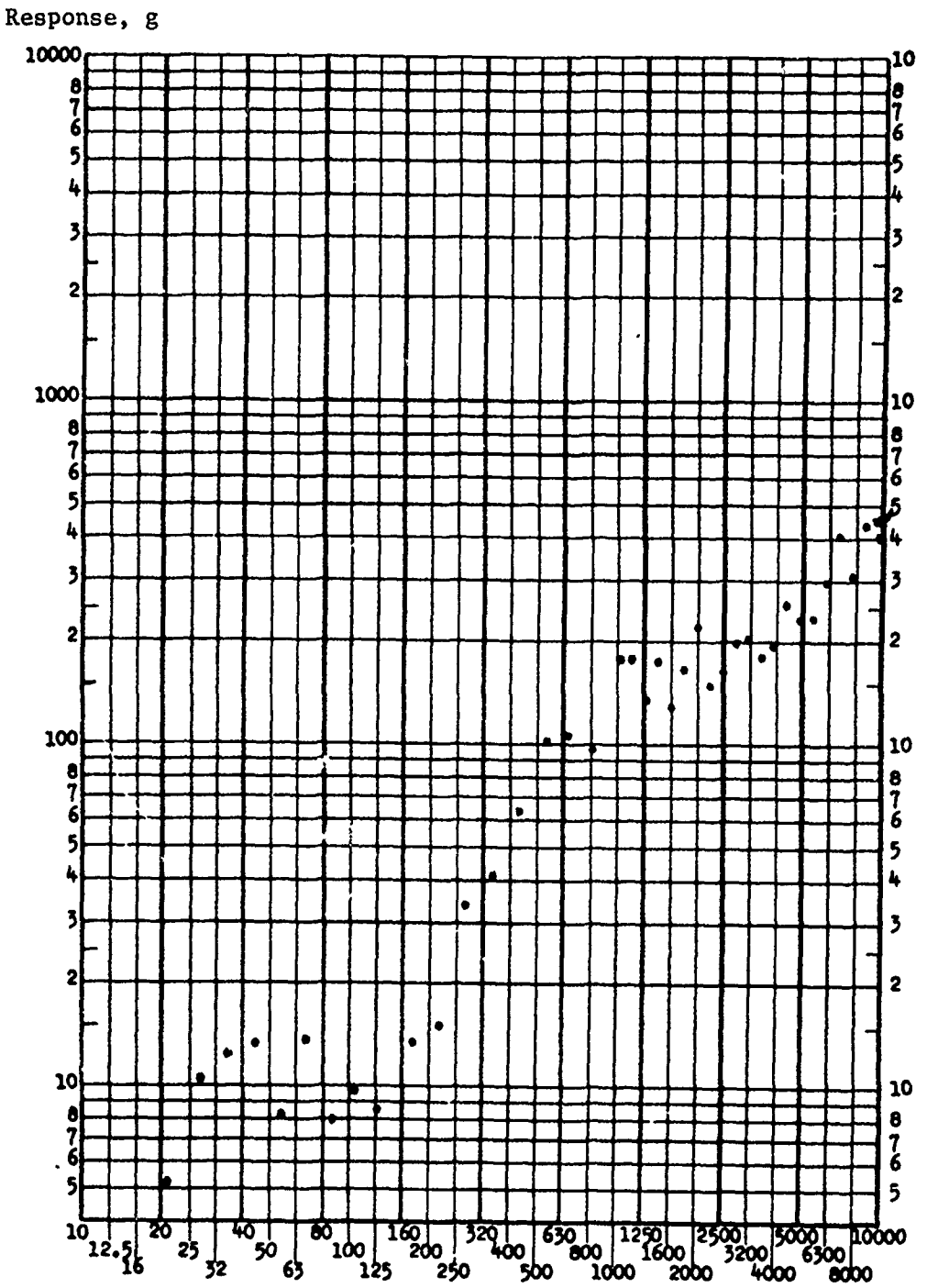
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 28 (cont)



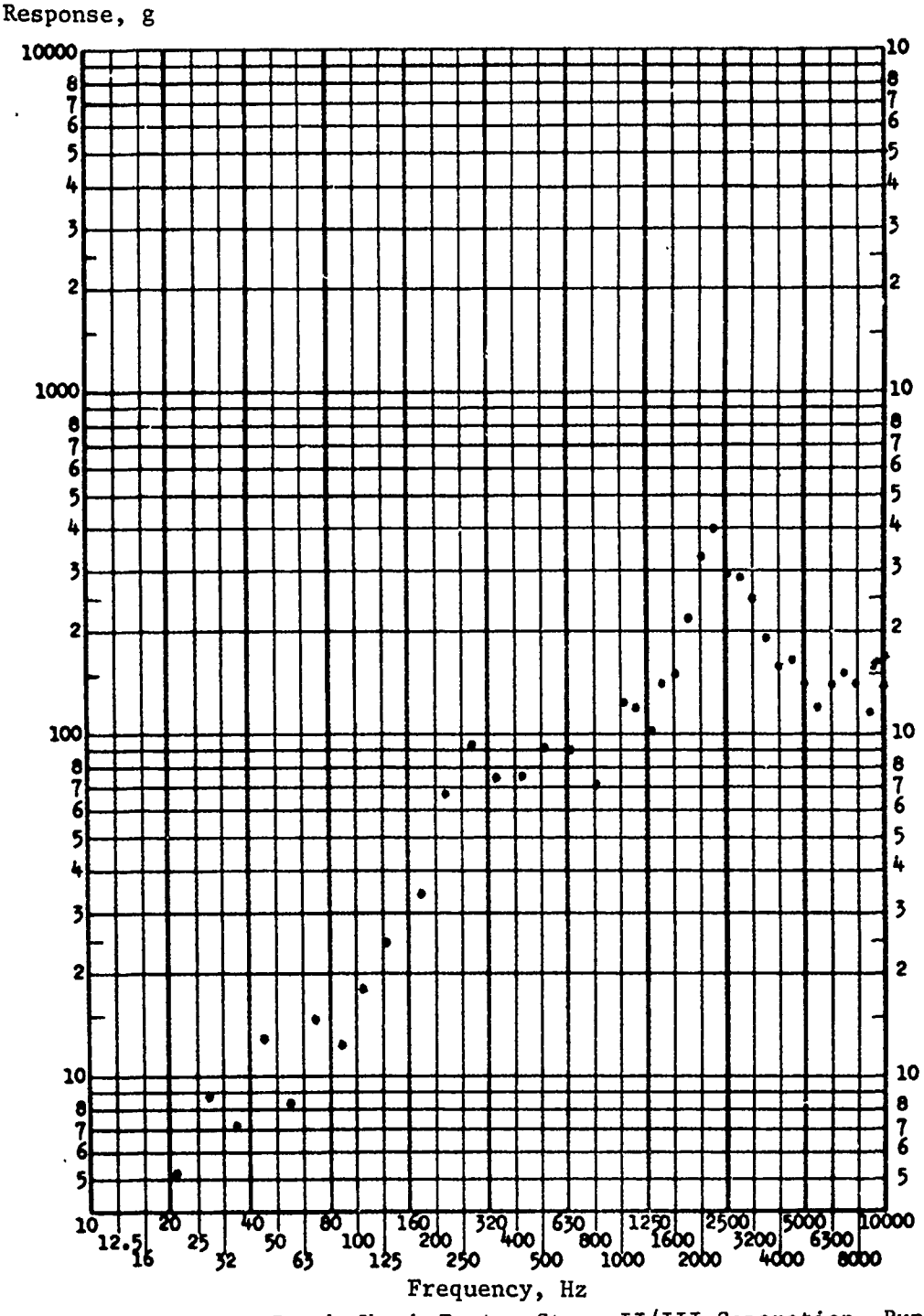
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 8 - Tangential axis longeron near station 77

Figure 28 (cont)



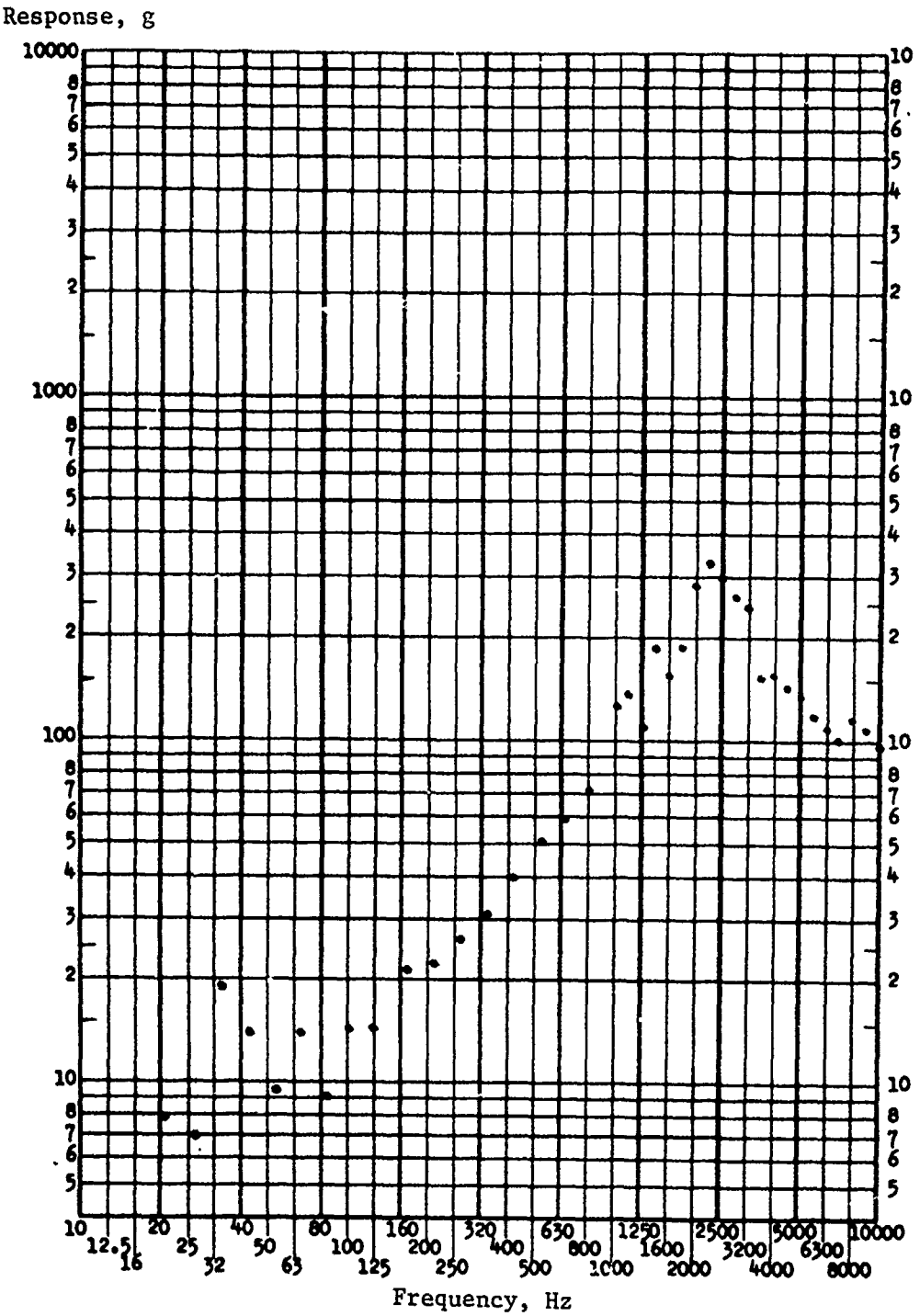
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 9 - Radial axis longeron near station 77

Figure 28 (cont)



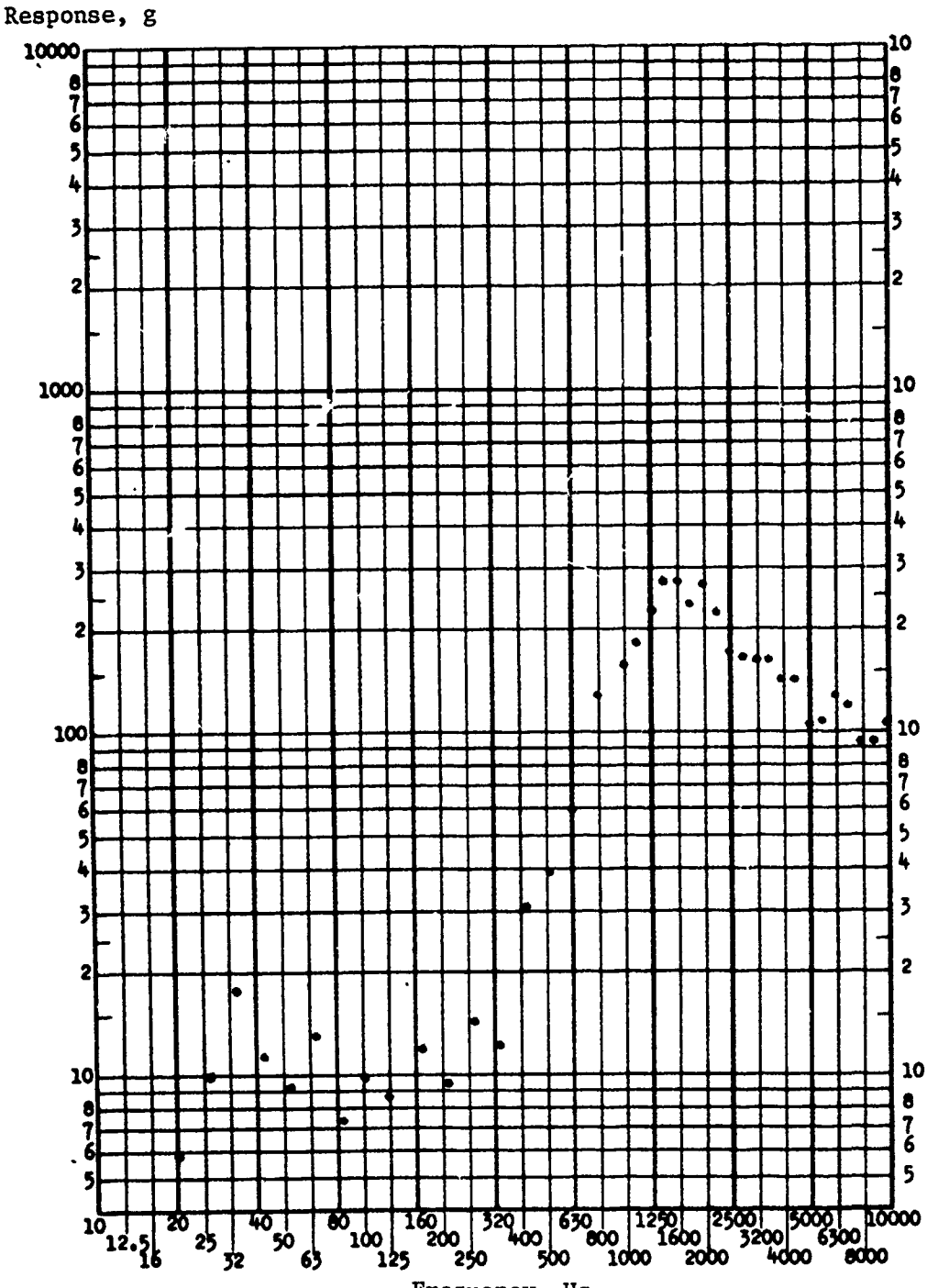
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 28 (cont)



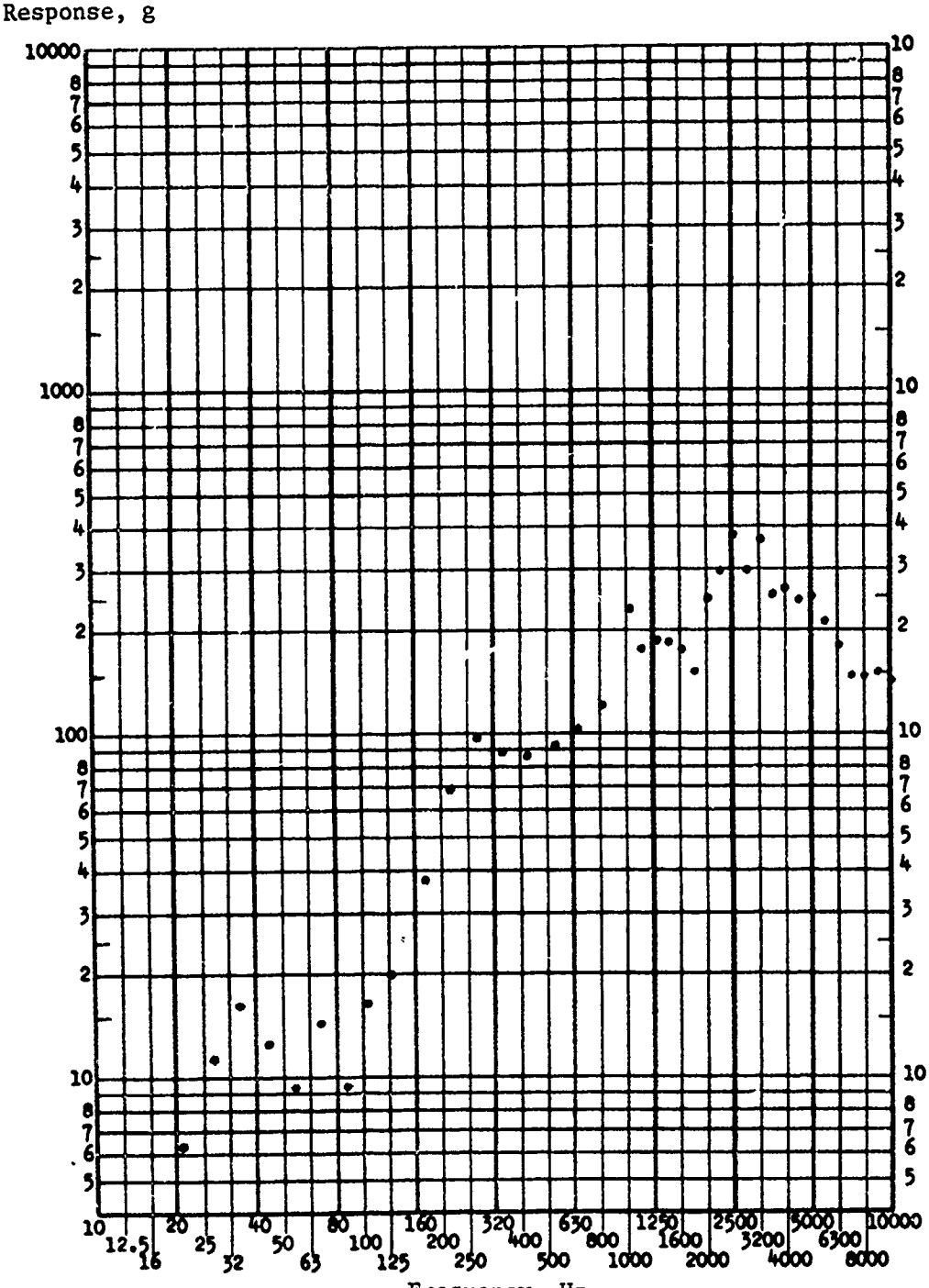
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 28 (cont)



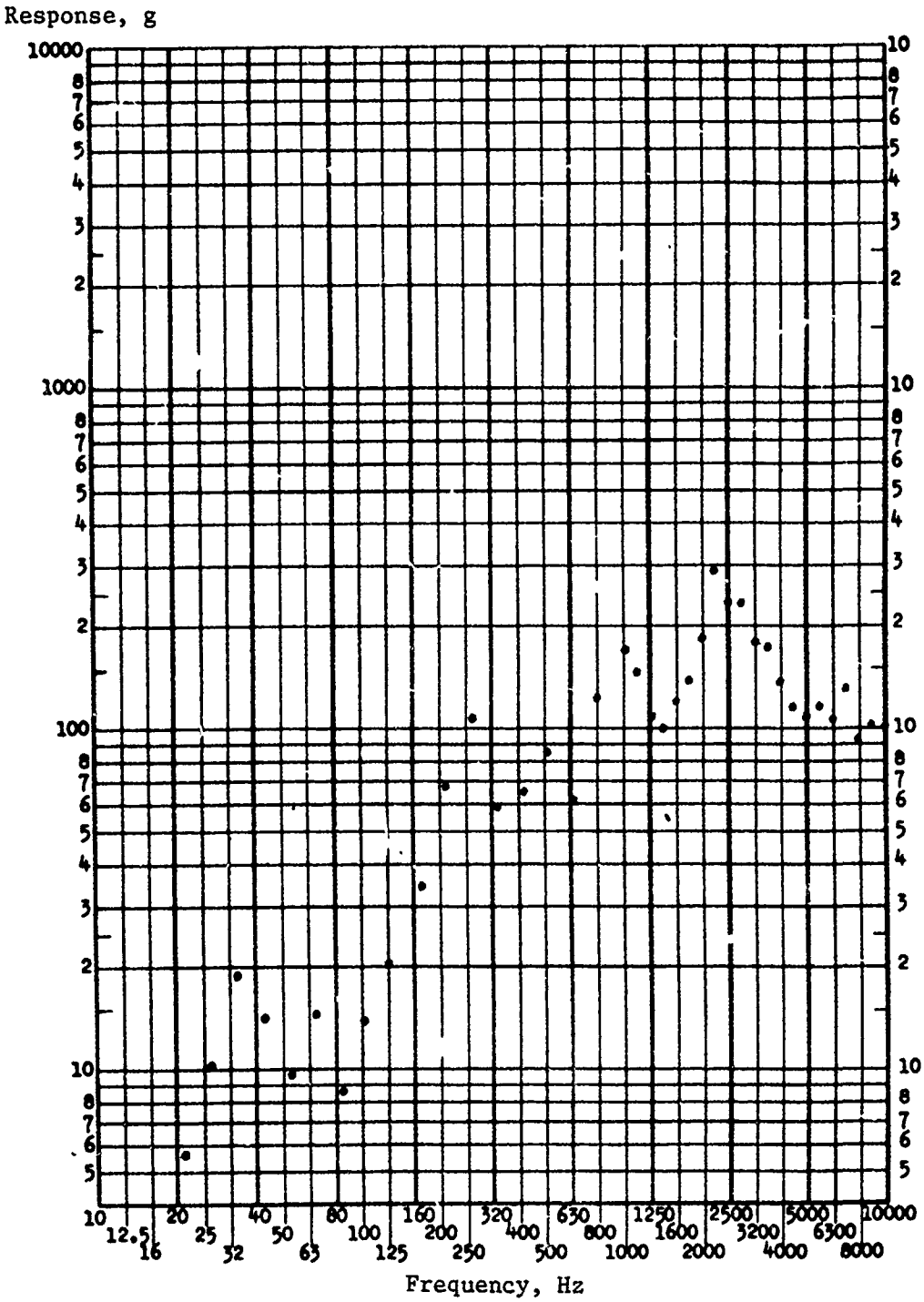
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 28 (cont)



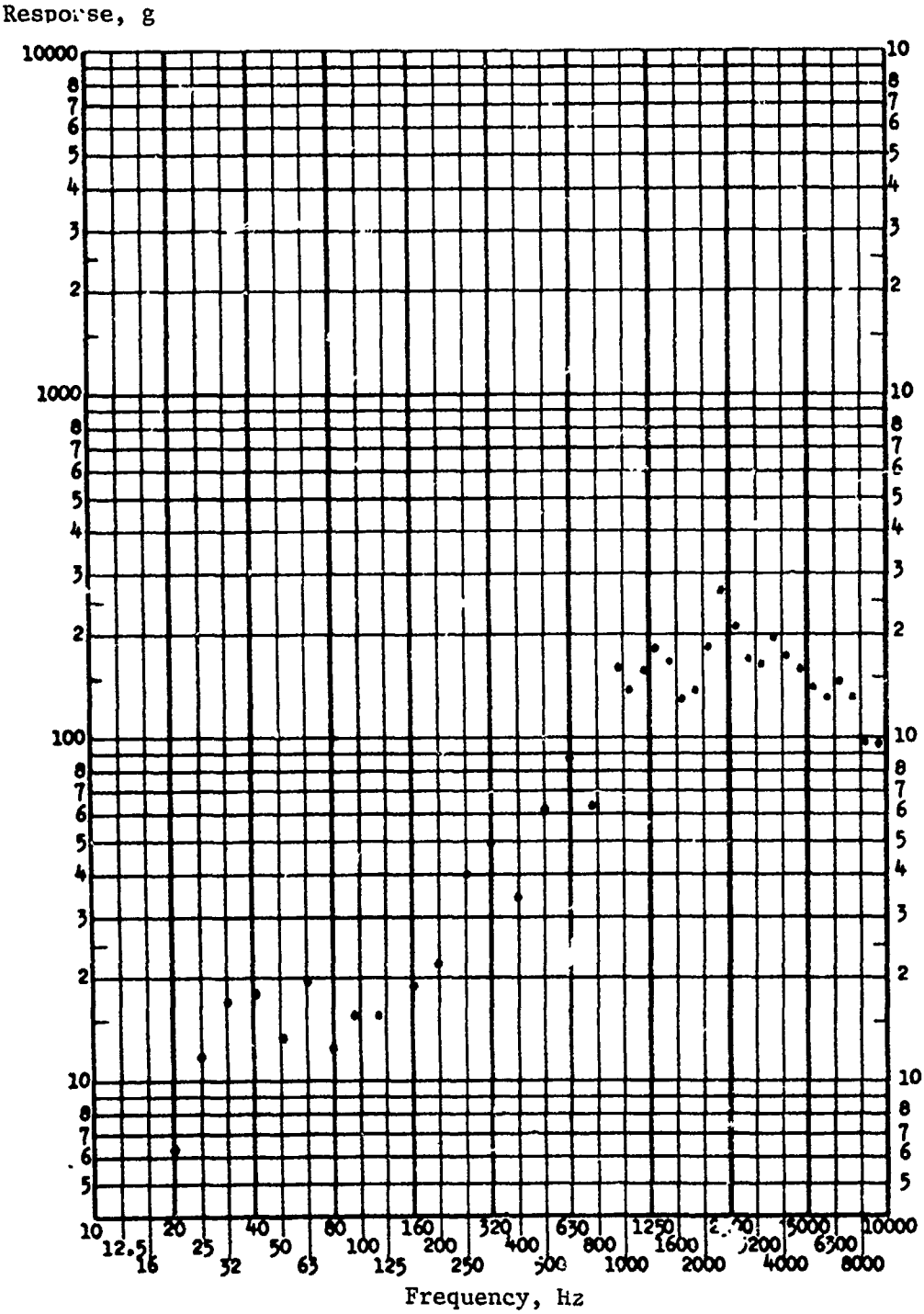
Bench Shock Test - Stage II/III Separation, Run 28 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 23 (cont)



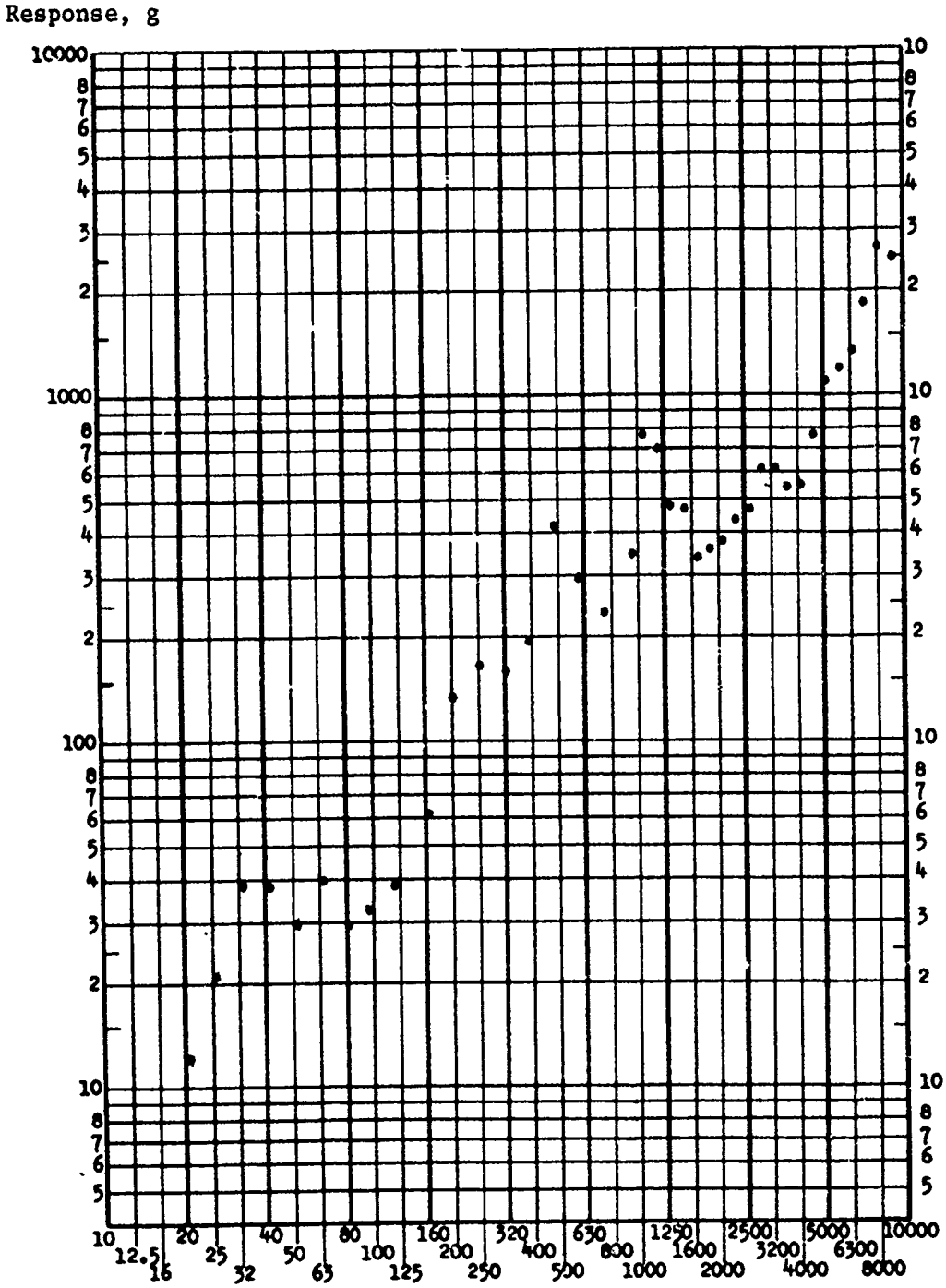
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 28 (cont)



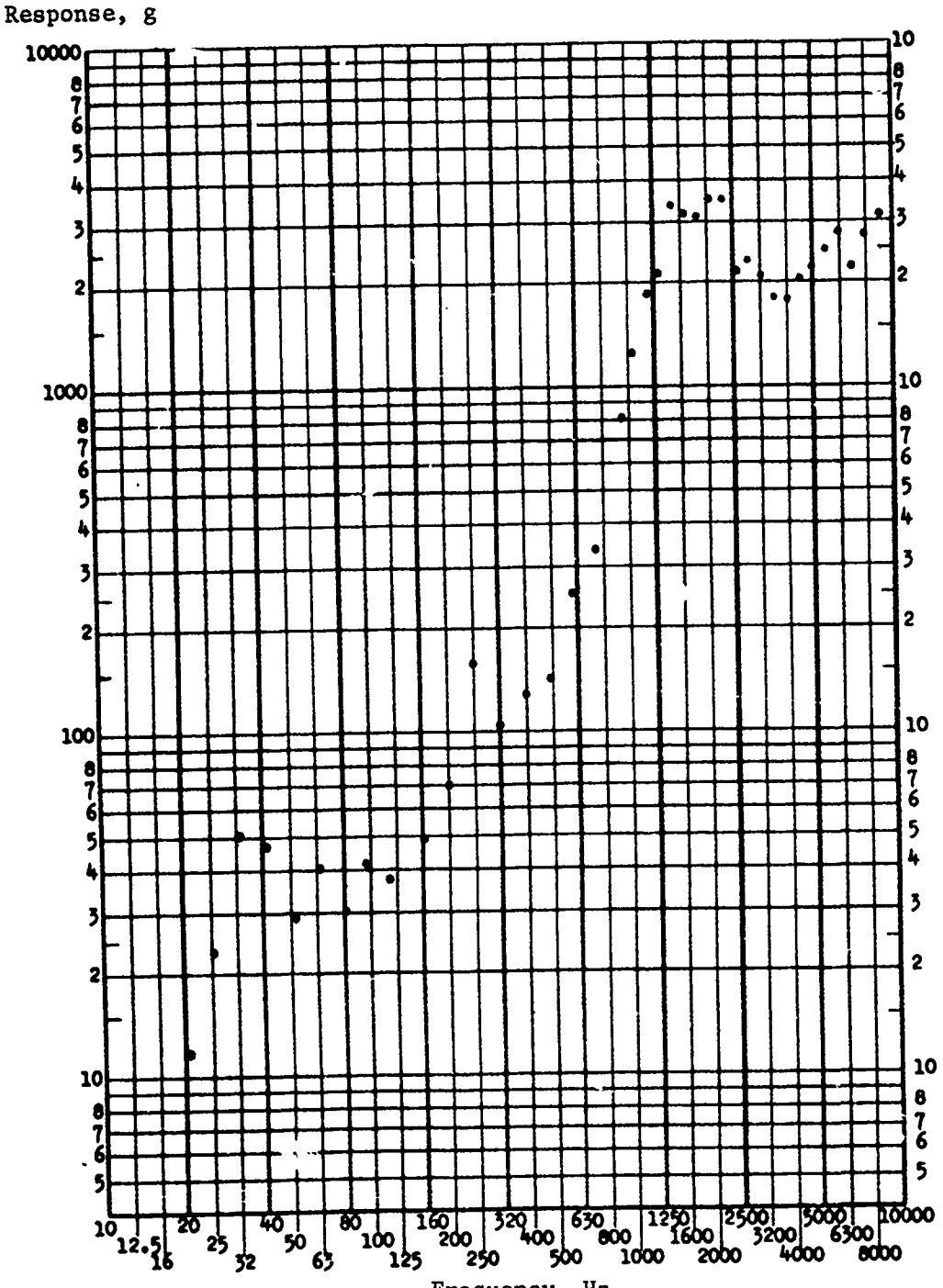
Bench Shock Test - Stage II/III Separation, Run 28
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 28 (concl)



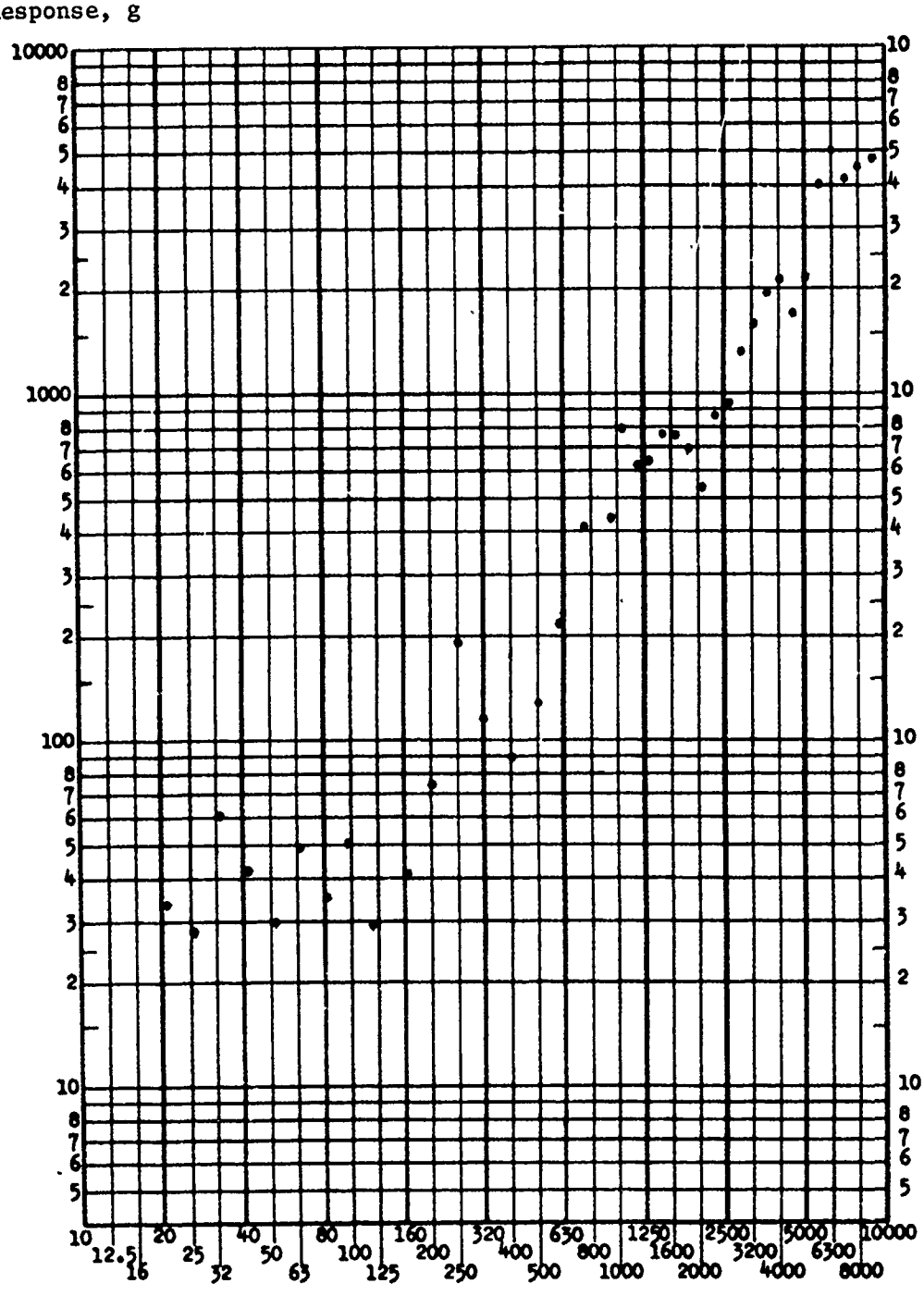
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 29 Run 29 Shock Response Spectrum



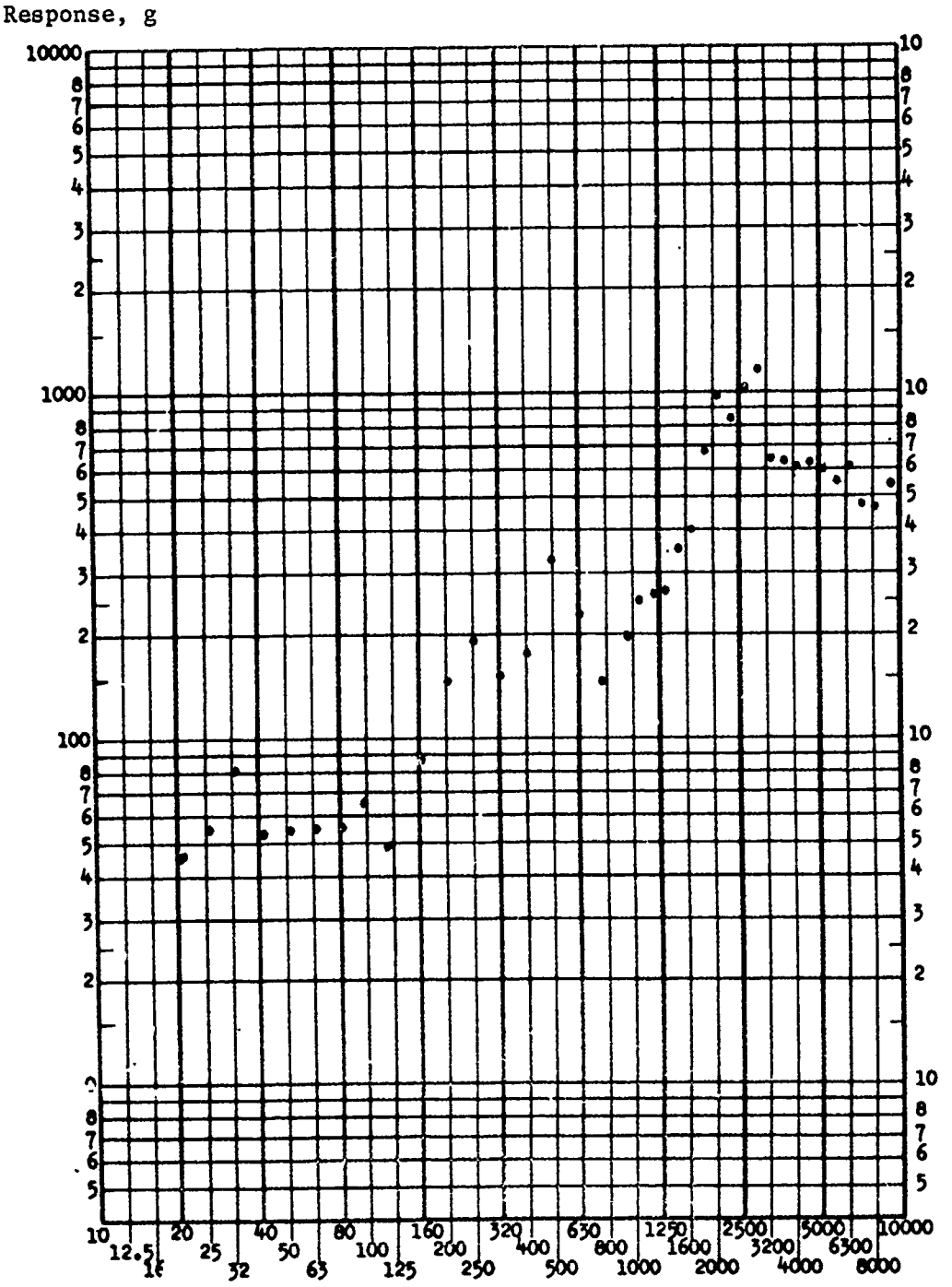
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 2 - Tangential axis longeron near station 133

Figure 29 (cont)



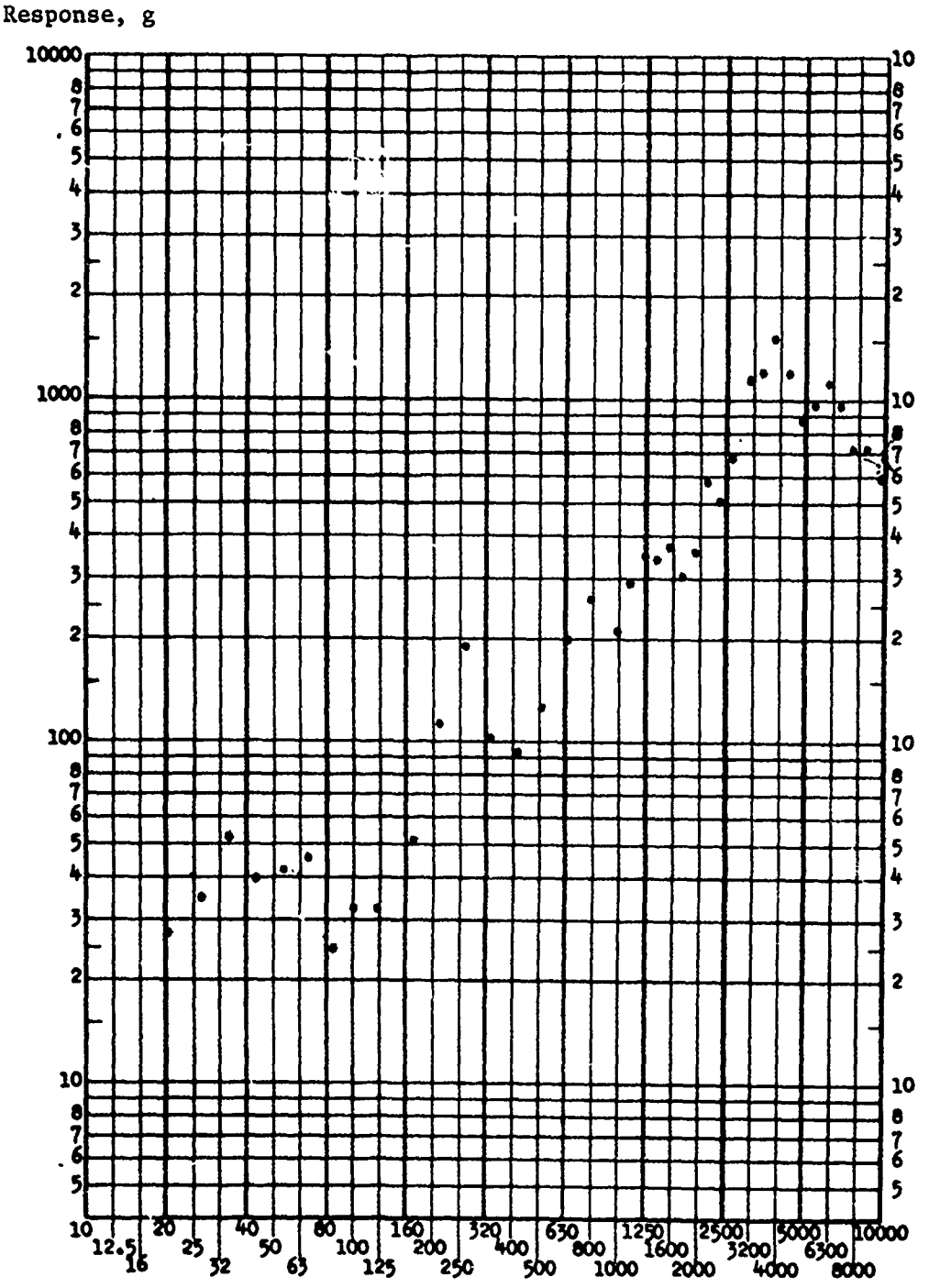
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 3 - Radial axis longeron near station 133

Figure 29 (cont)



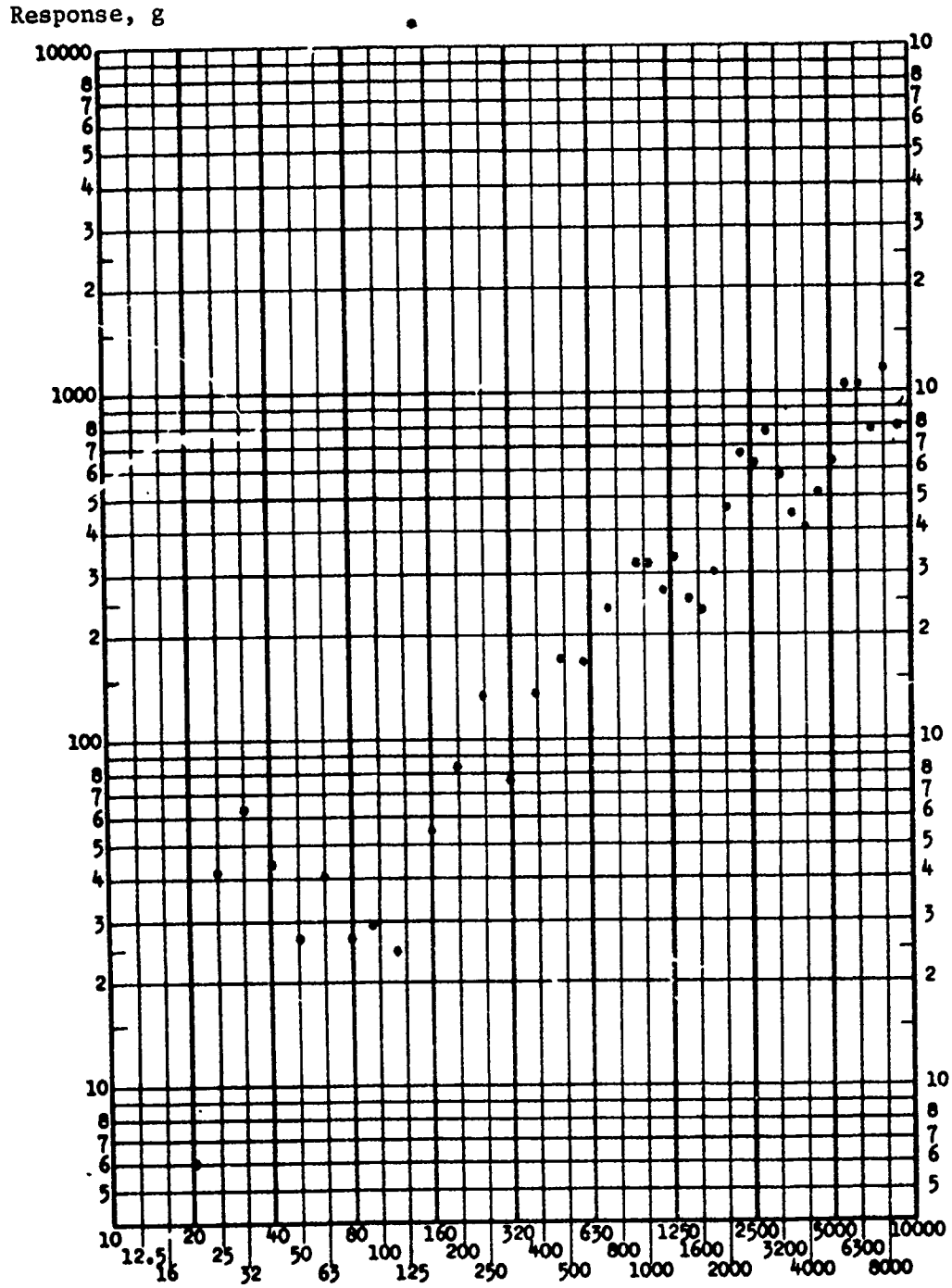
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 29 (cont)



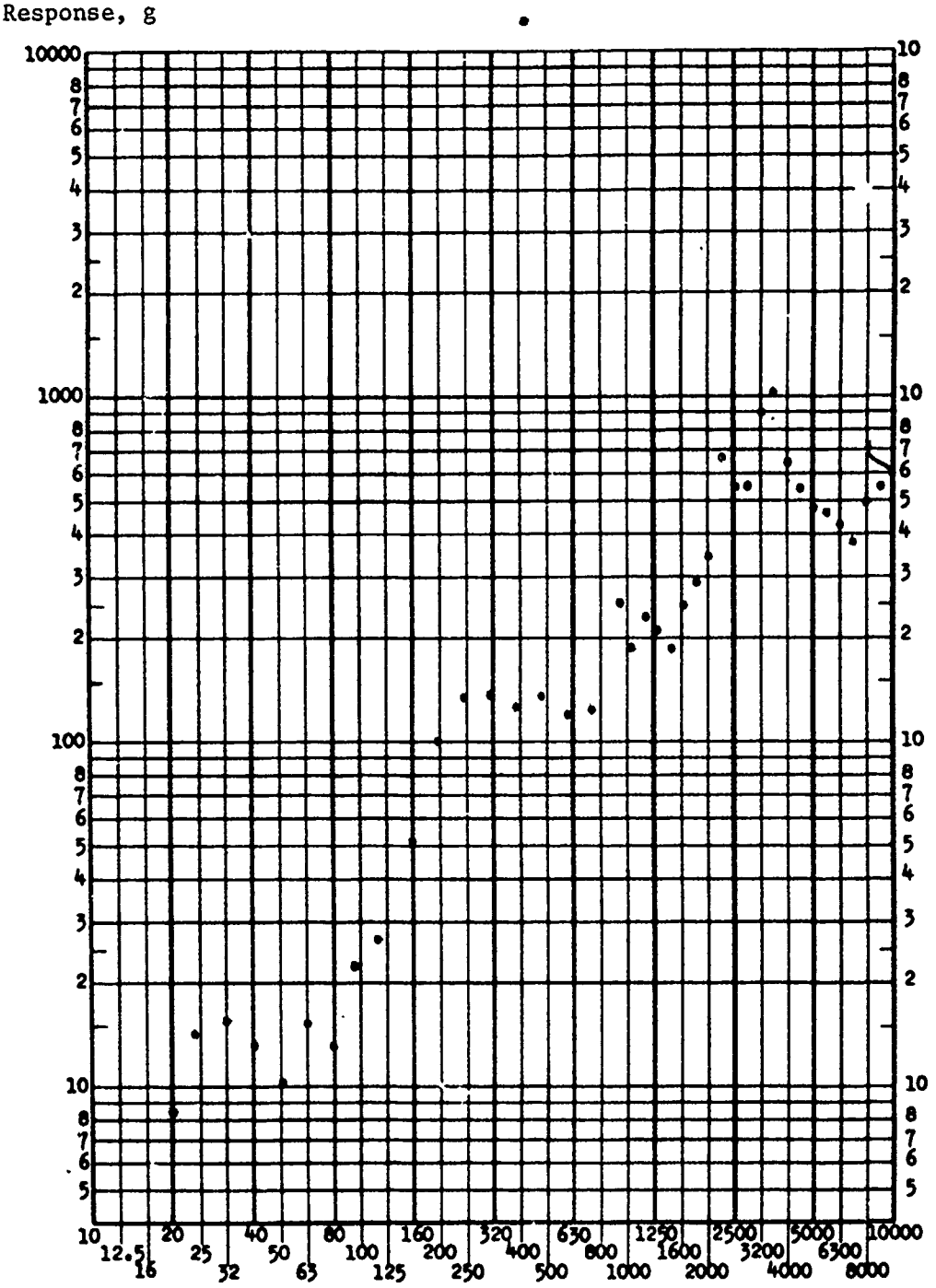
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 5 - Tangential axis longeron near station 117

Figure 29 (cont)



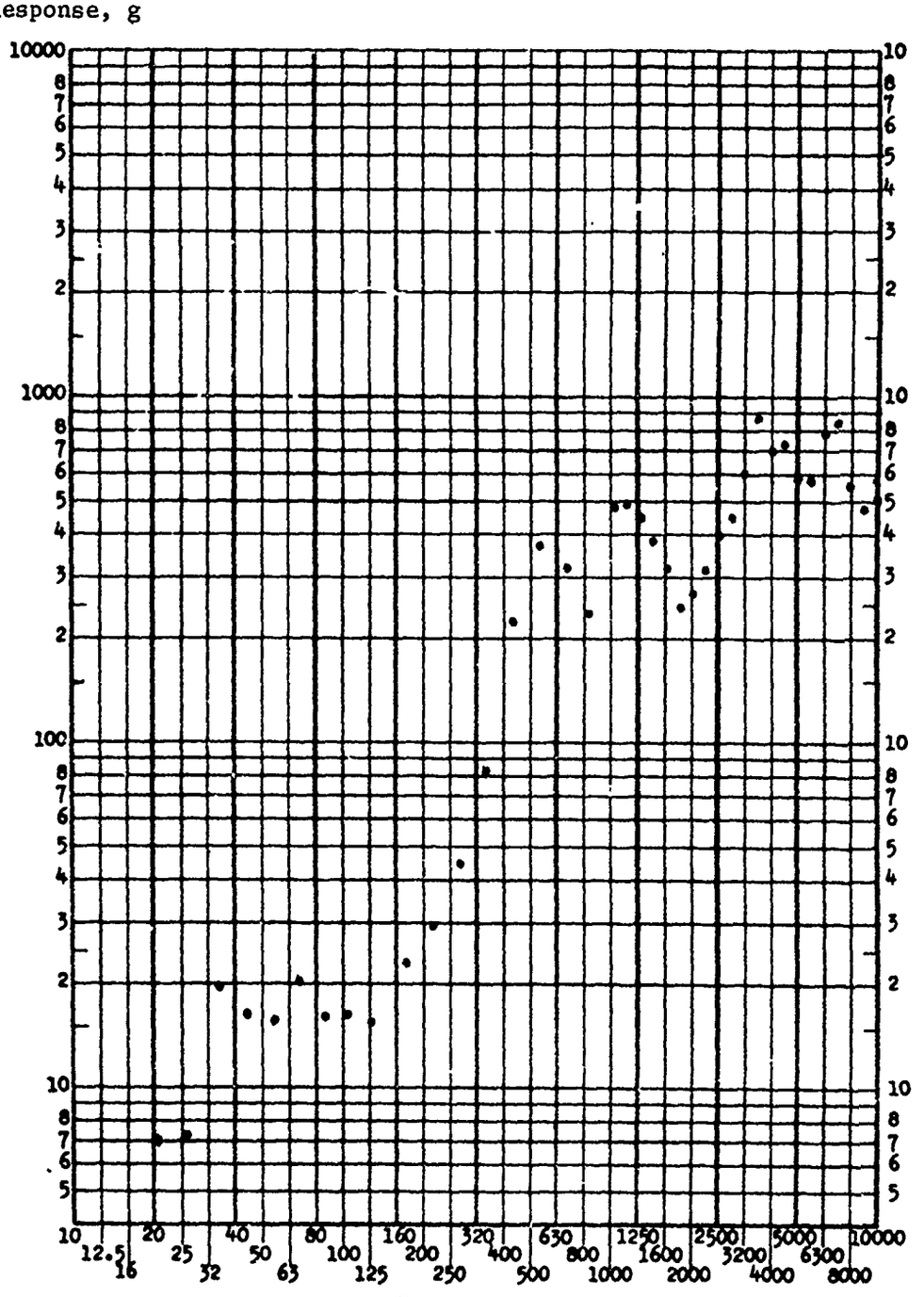
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 6 - Radial axis longeron near station 117

Figure 29 (cont)



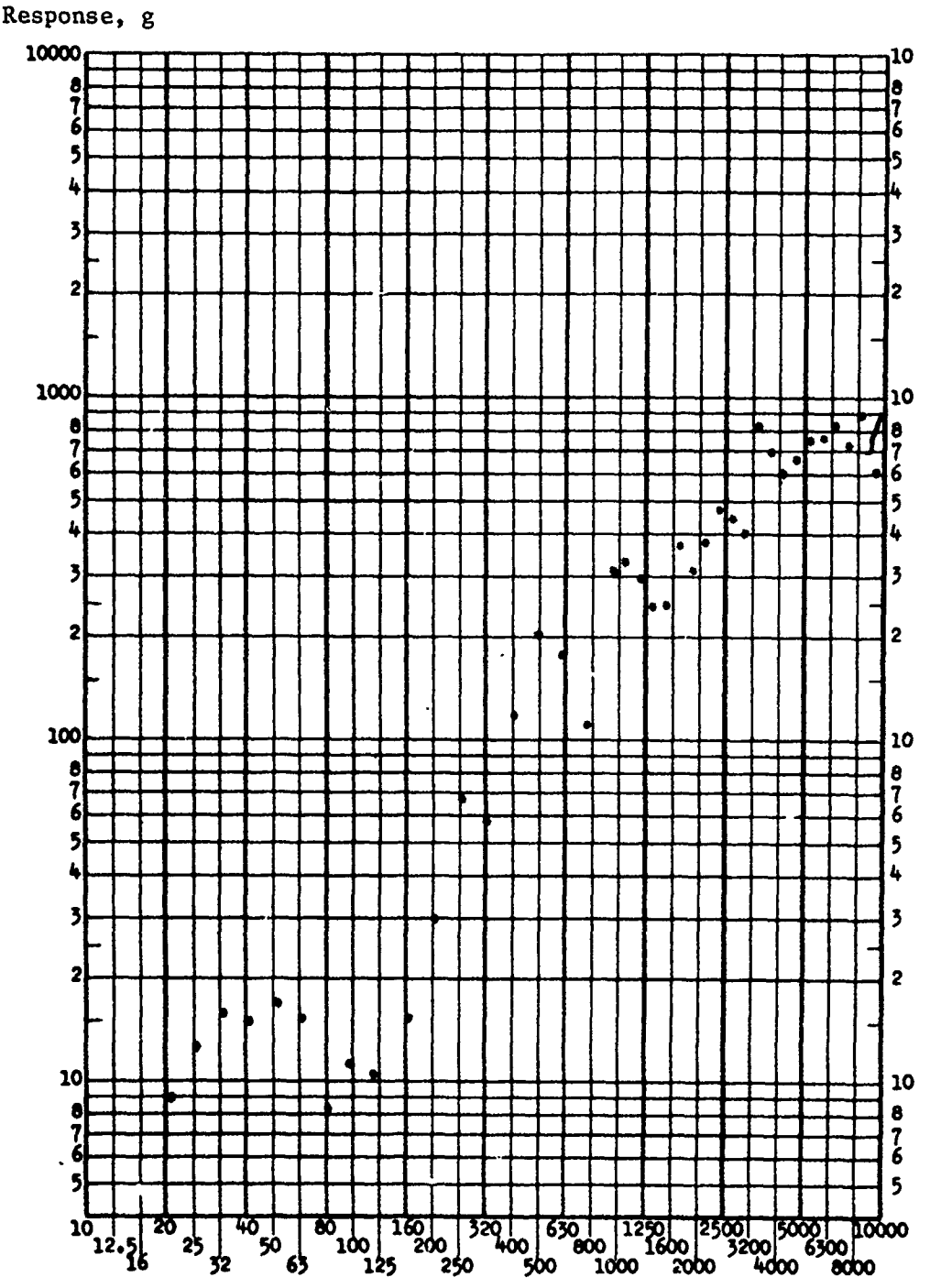
Bench Shock Test - Stage II/III Separation, Run 29 _
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 29 (cont)



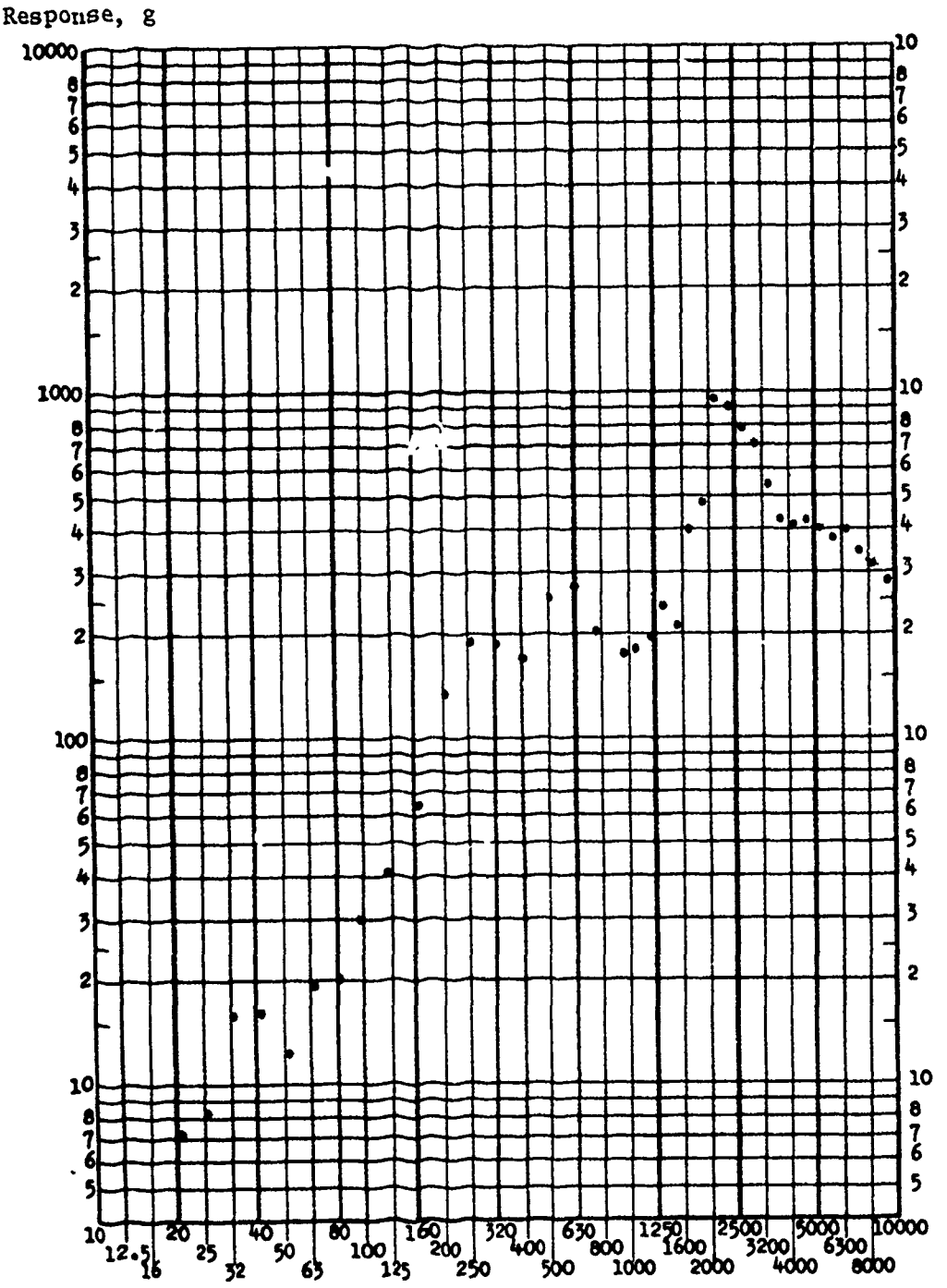
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 8 - Tangential axis longeron near station 77

Figure 29 (cont)



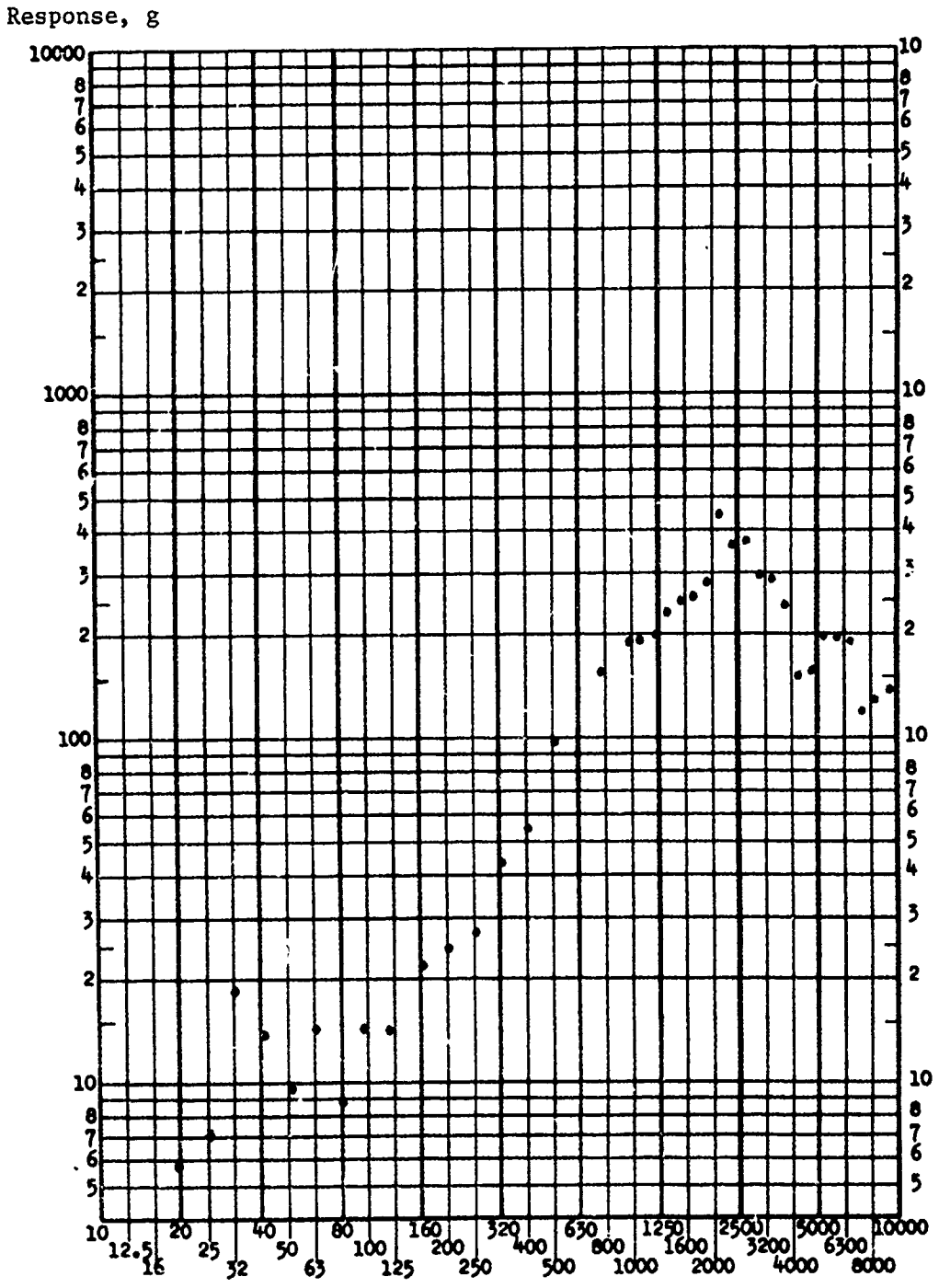
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 9 - Radial axis longeron near station 77

Figure 29 (cont)



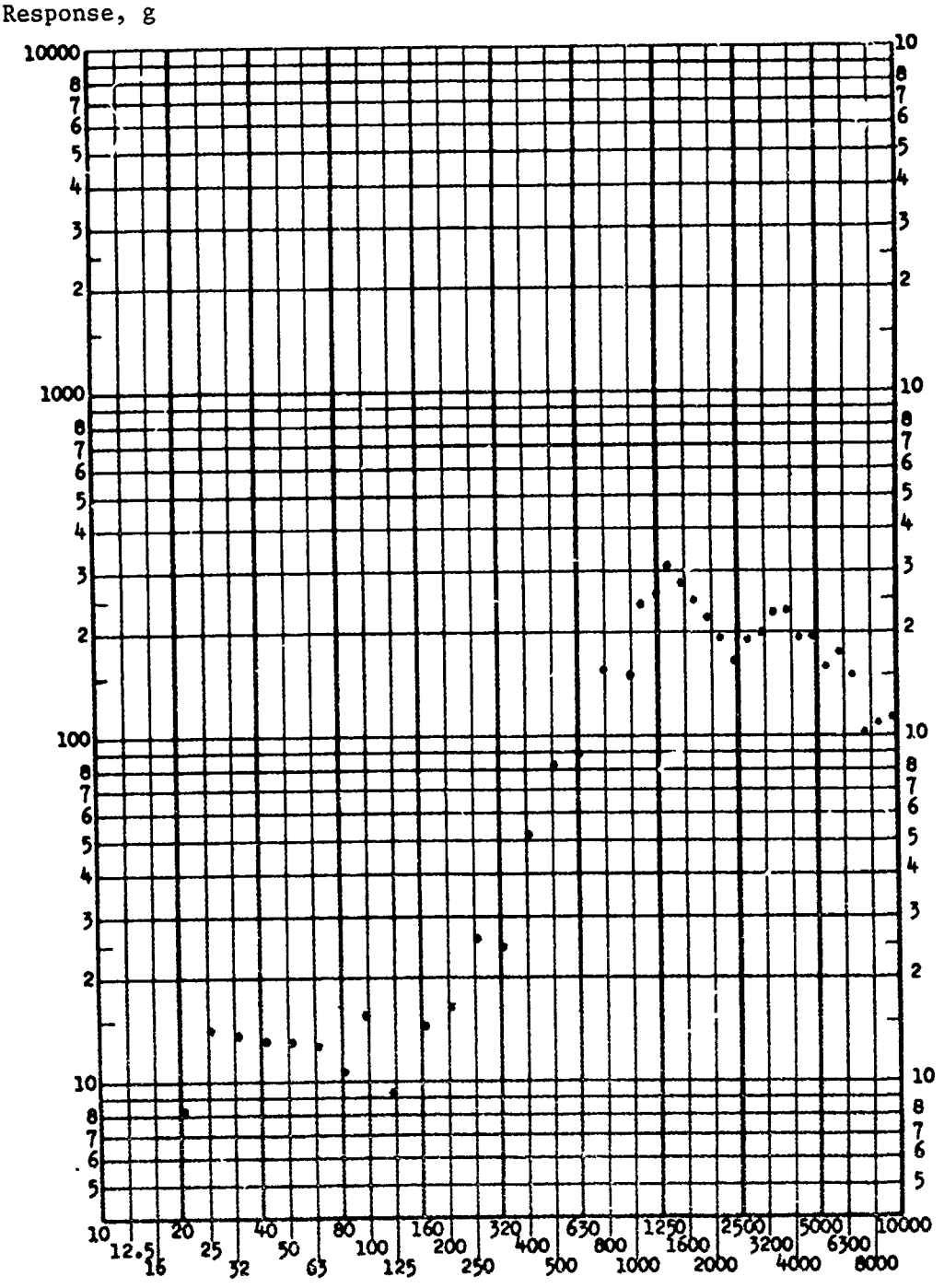
Bench Shock Test - Stage II/III Separation, Run 29 _
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 29 (cont)



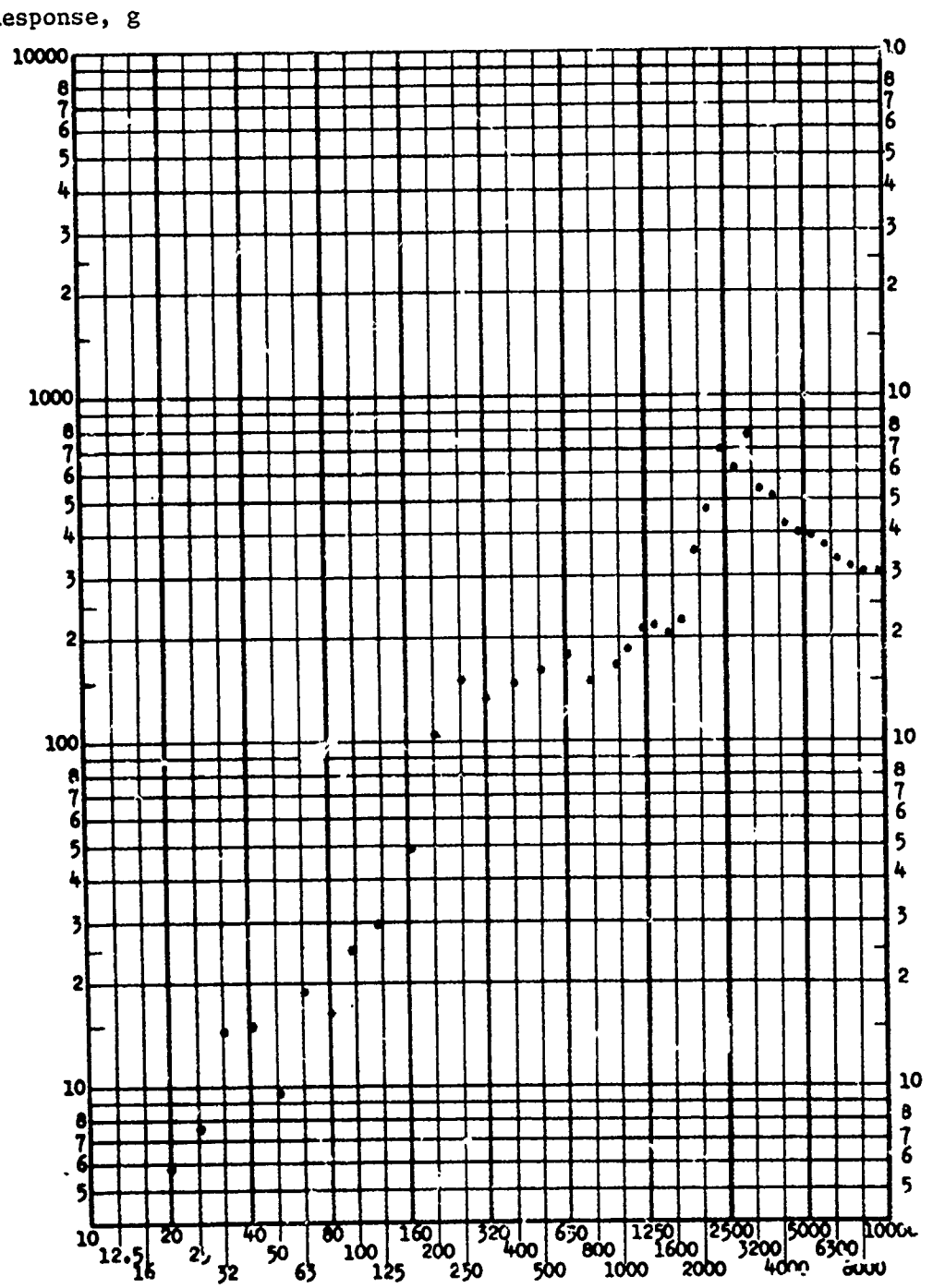
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 29 (cont)



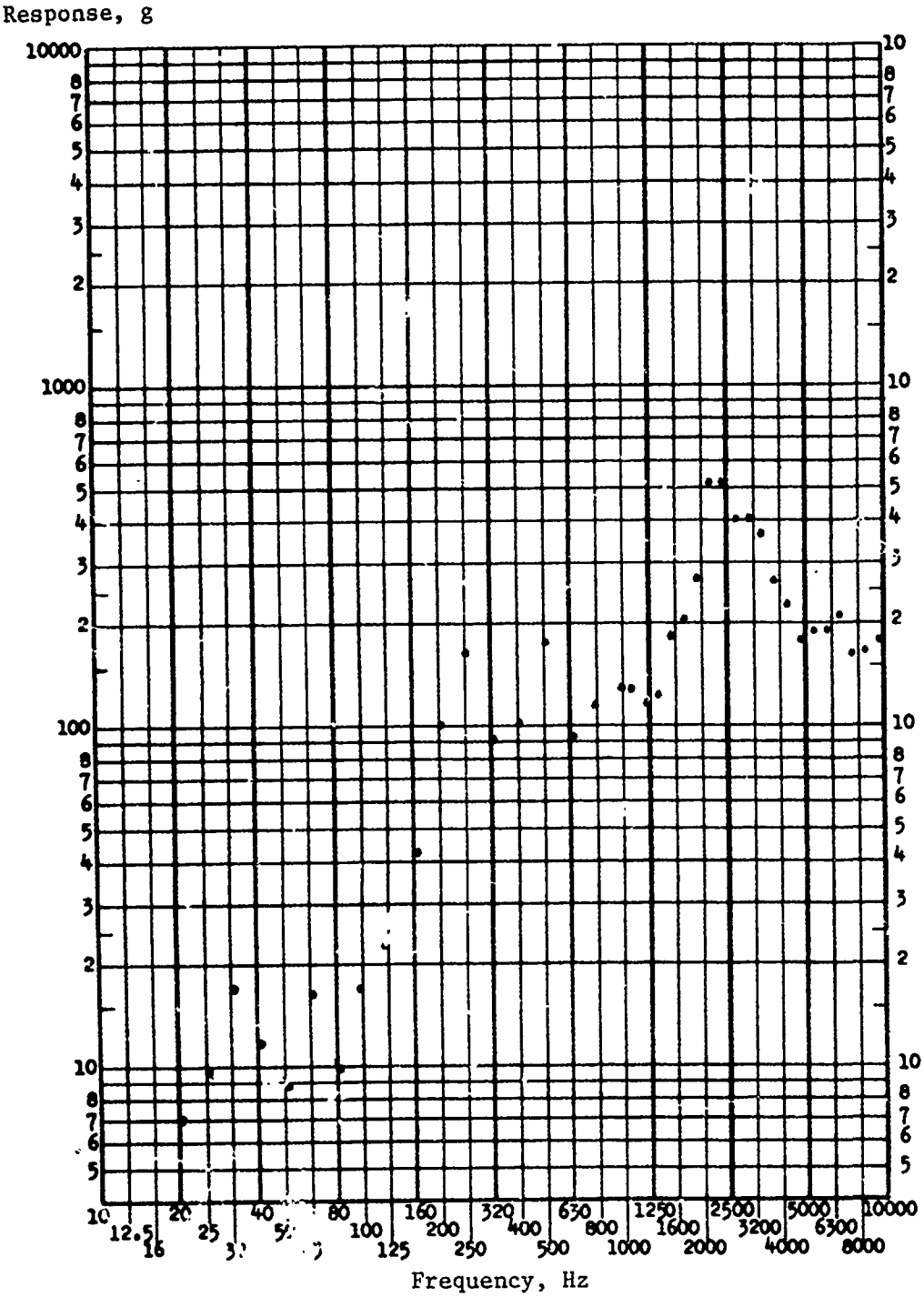
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 29 (cont)



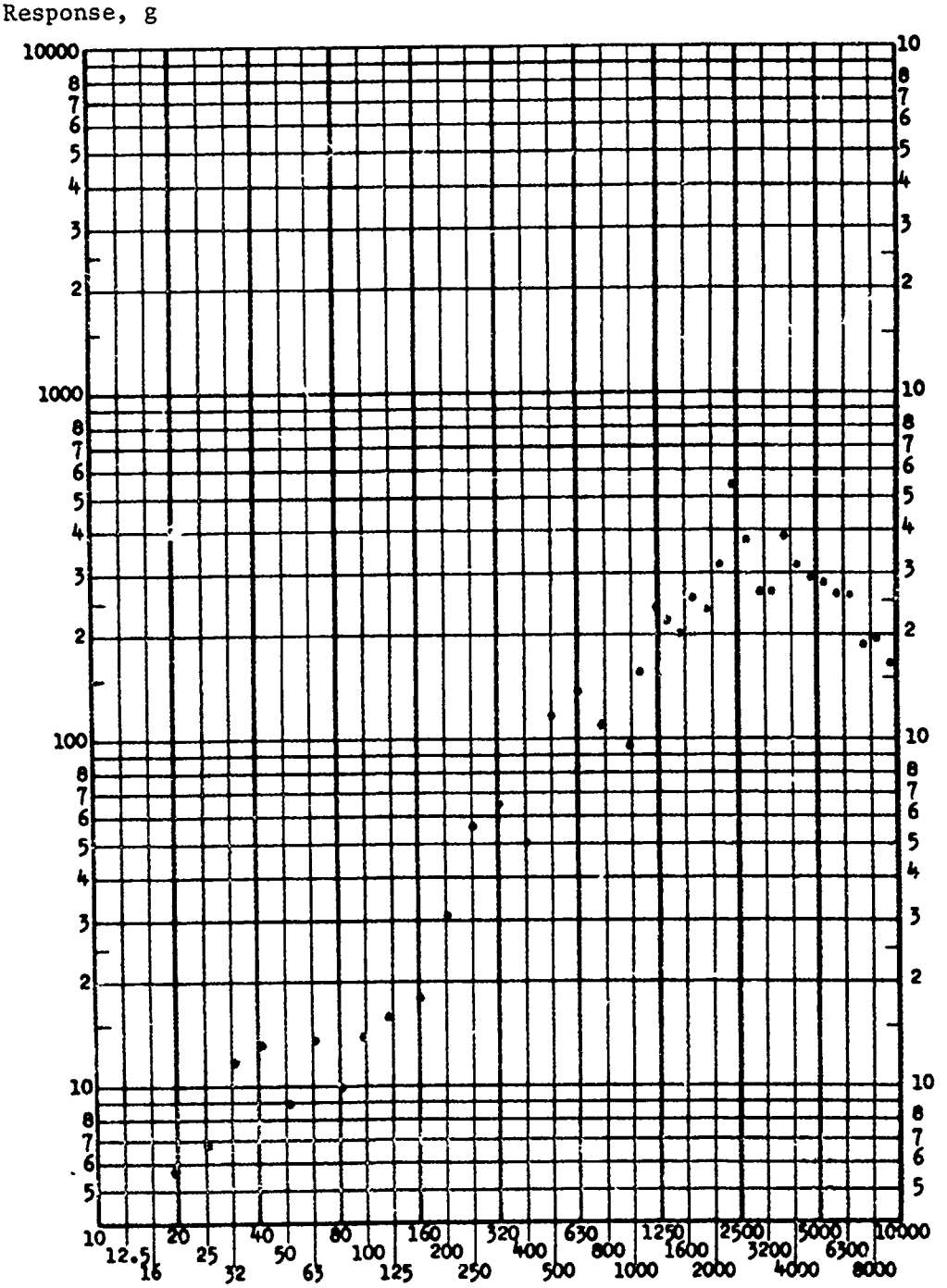
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 29 (cont)



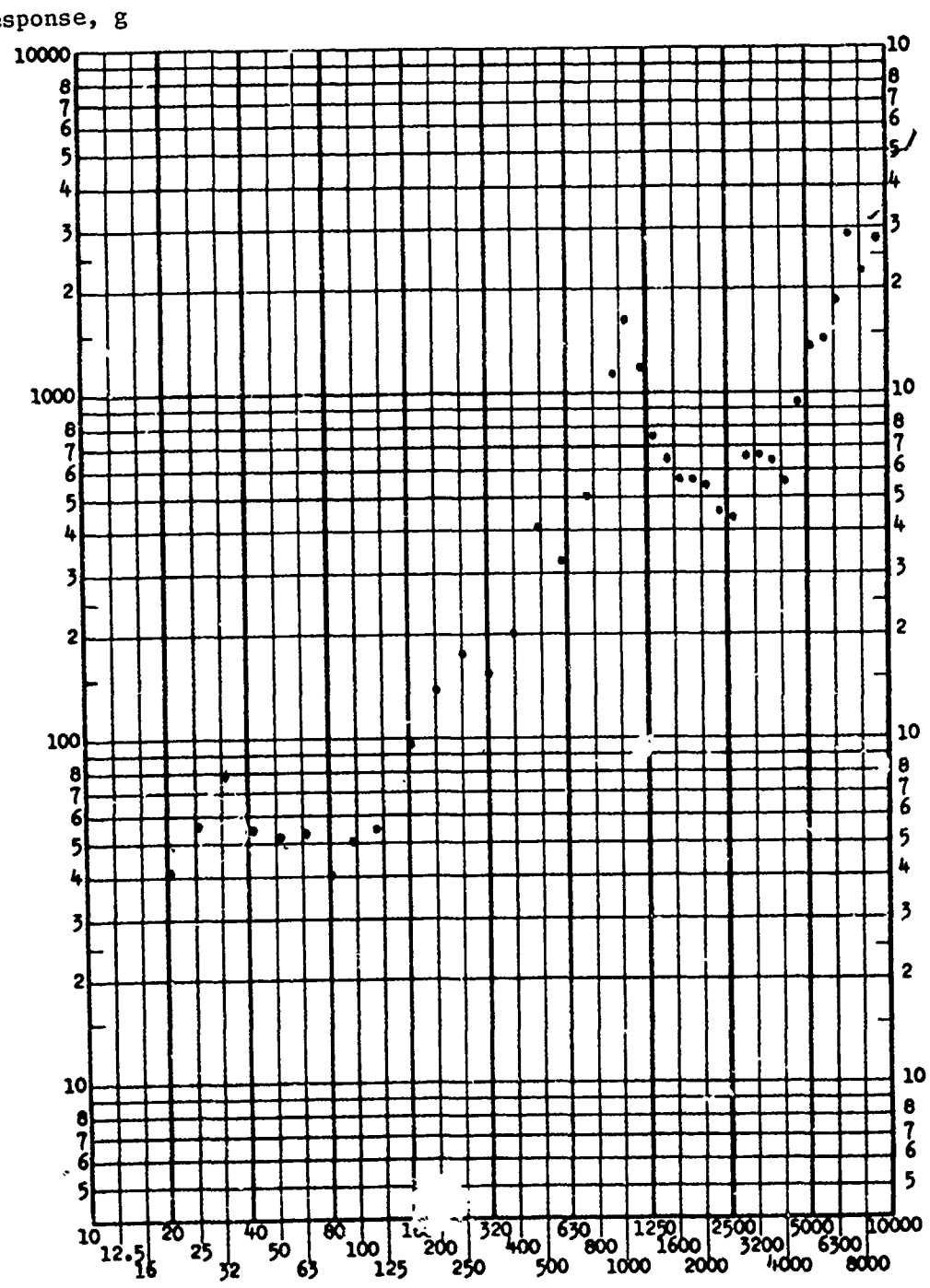
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 29 (cont)



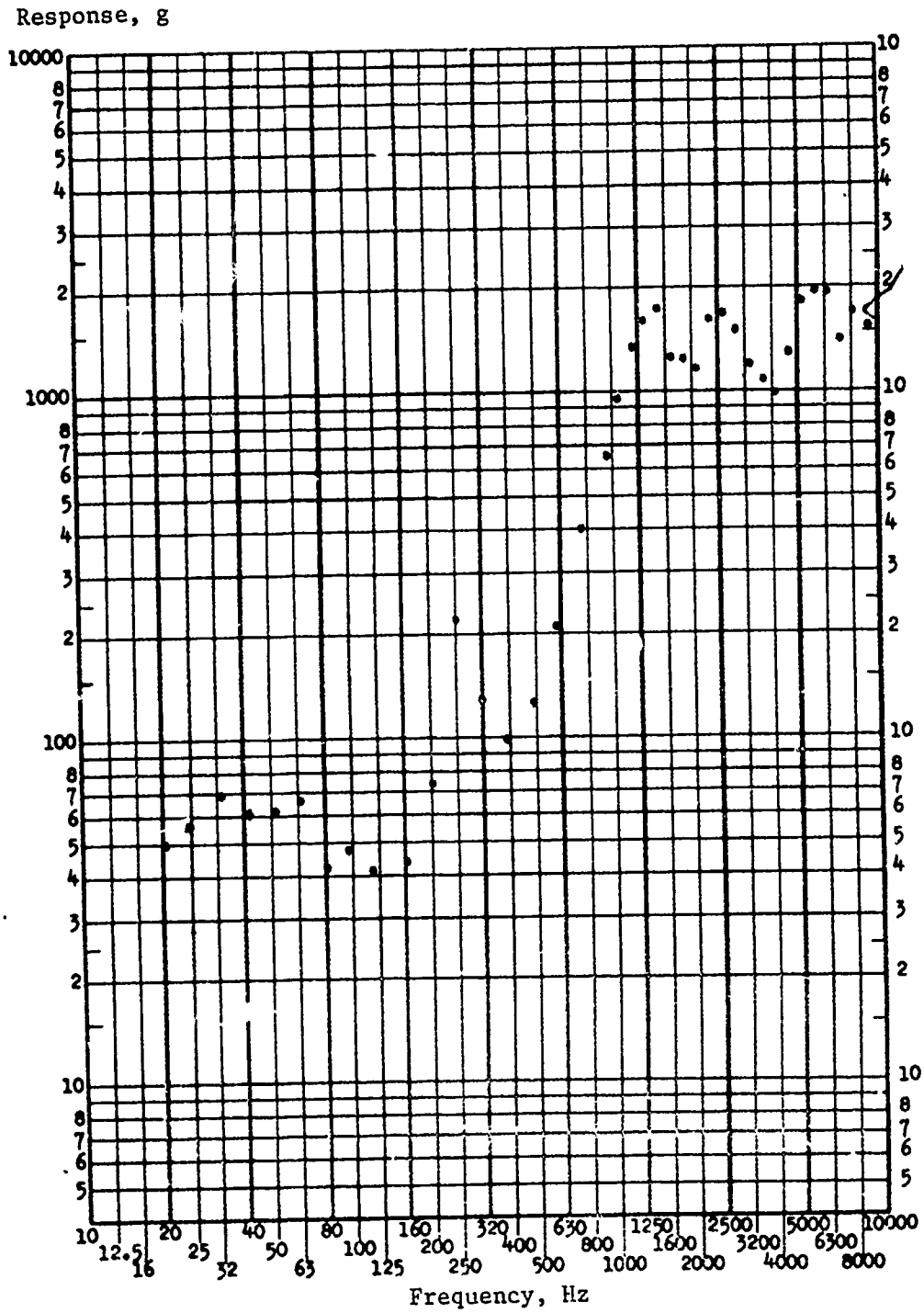
Bench Shock Test - Stage II/III Separation, Run 29
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 29 (concl)



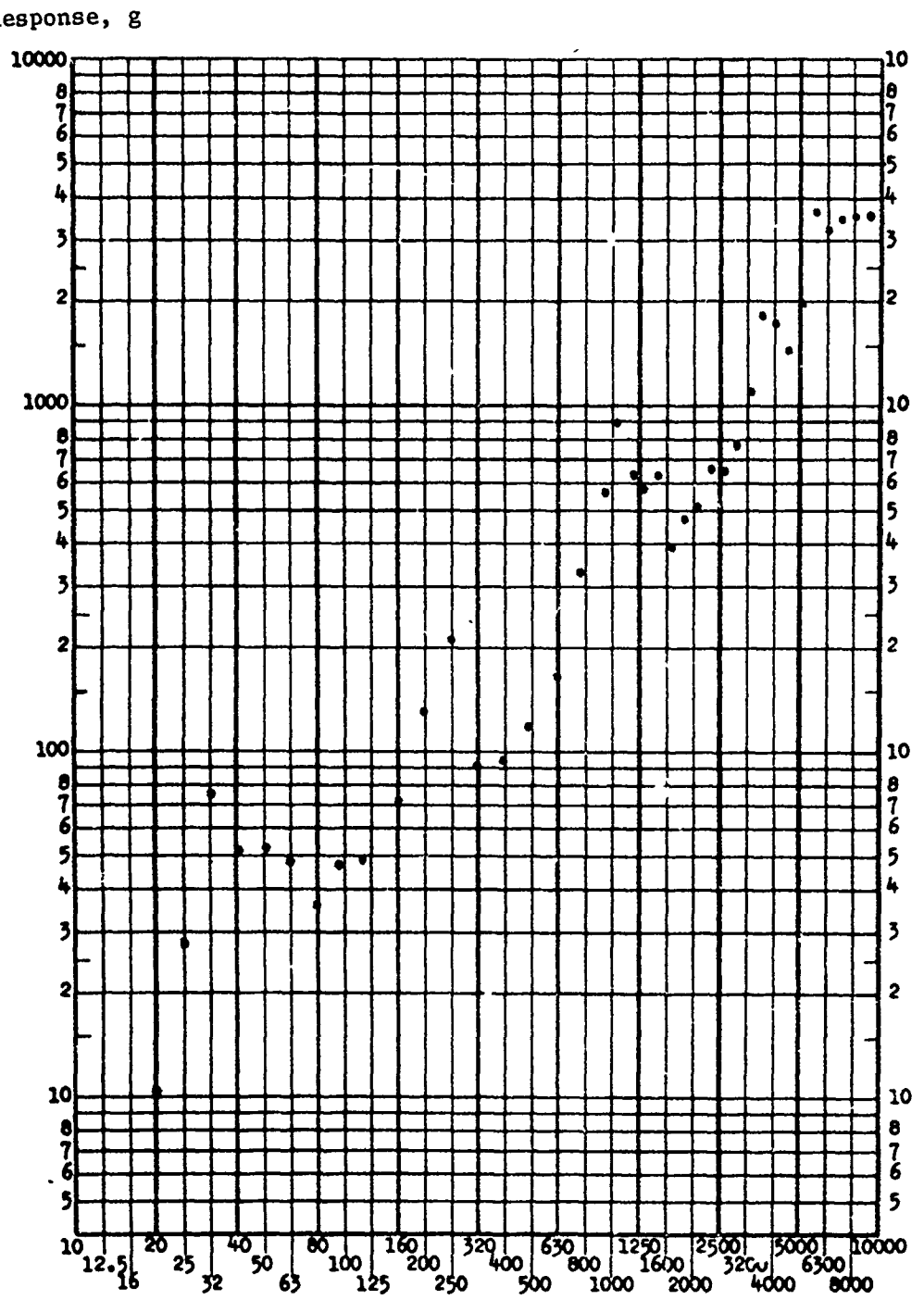
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 30 Run 30 Shock Response Spectrum



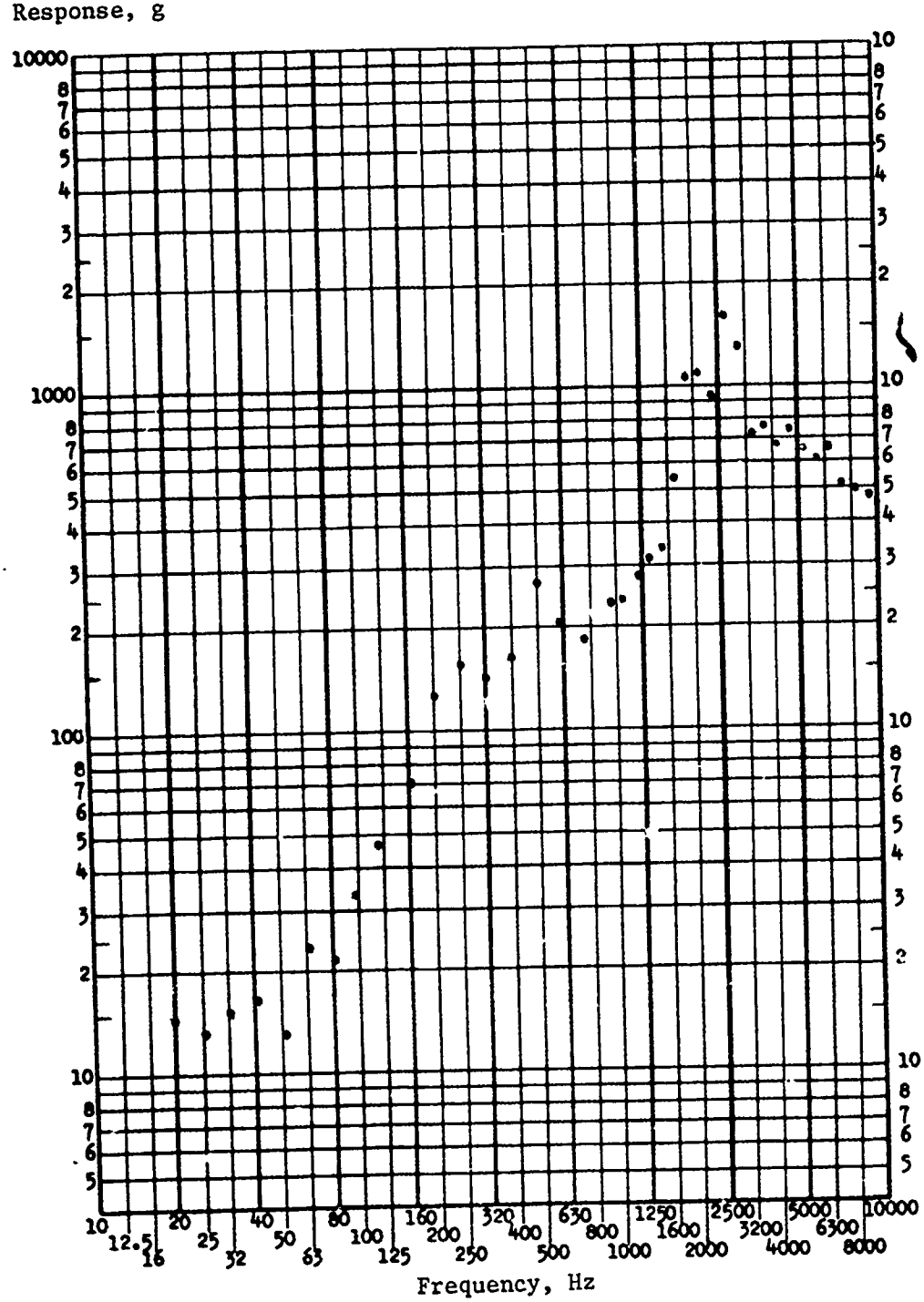
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 2 - Tangential axis longeron near station 133

Figure 30 (cont)



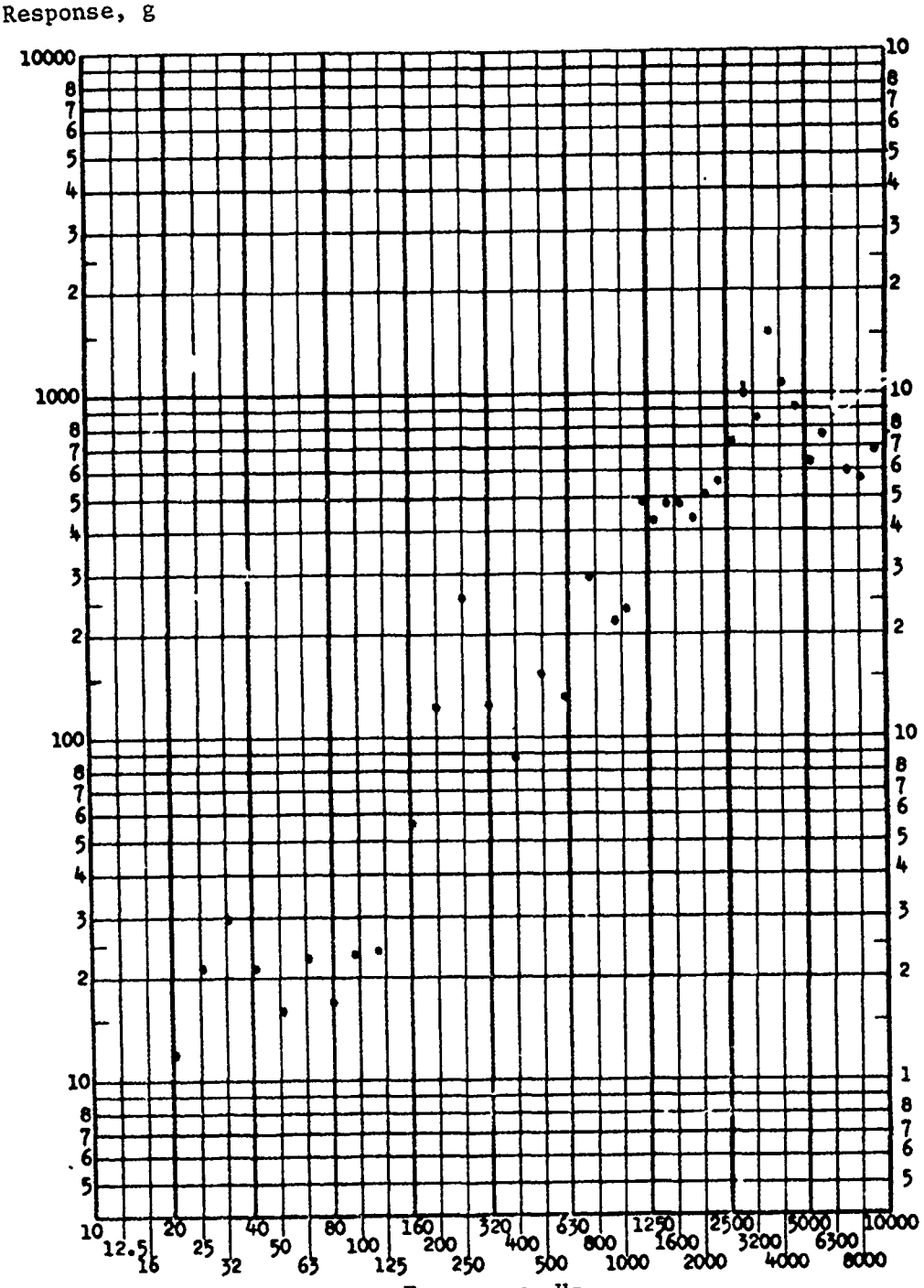
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 3 - Radial axis longeron near station 133

Figure 30 (cont)



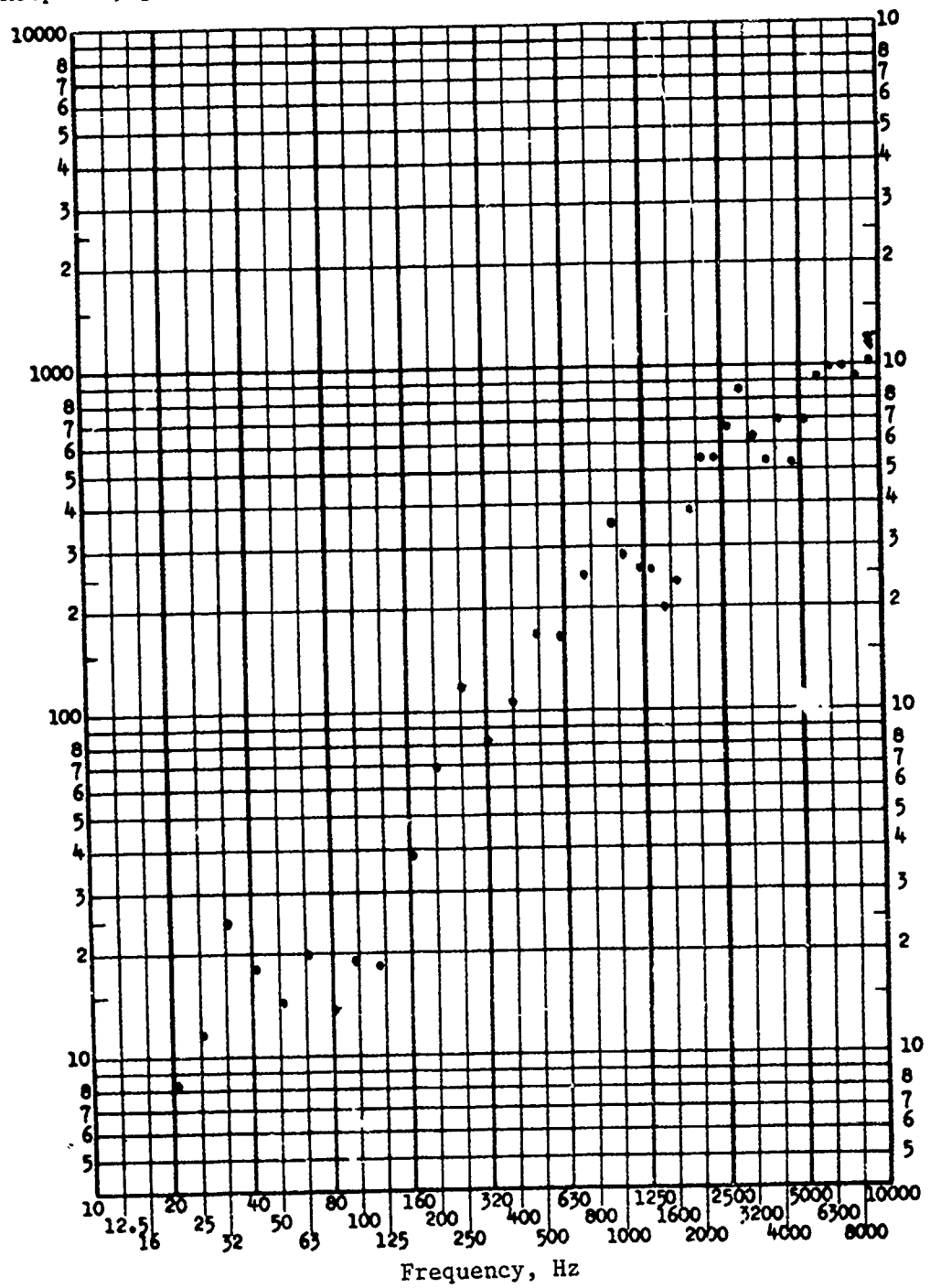
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 30 (cont)



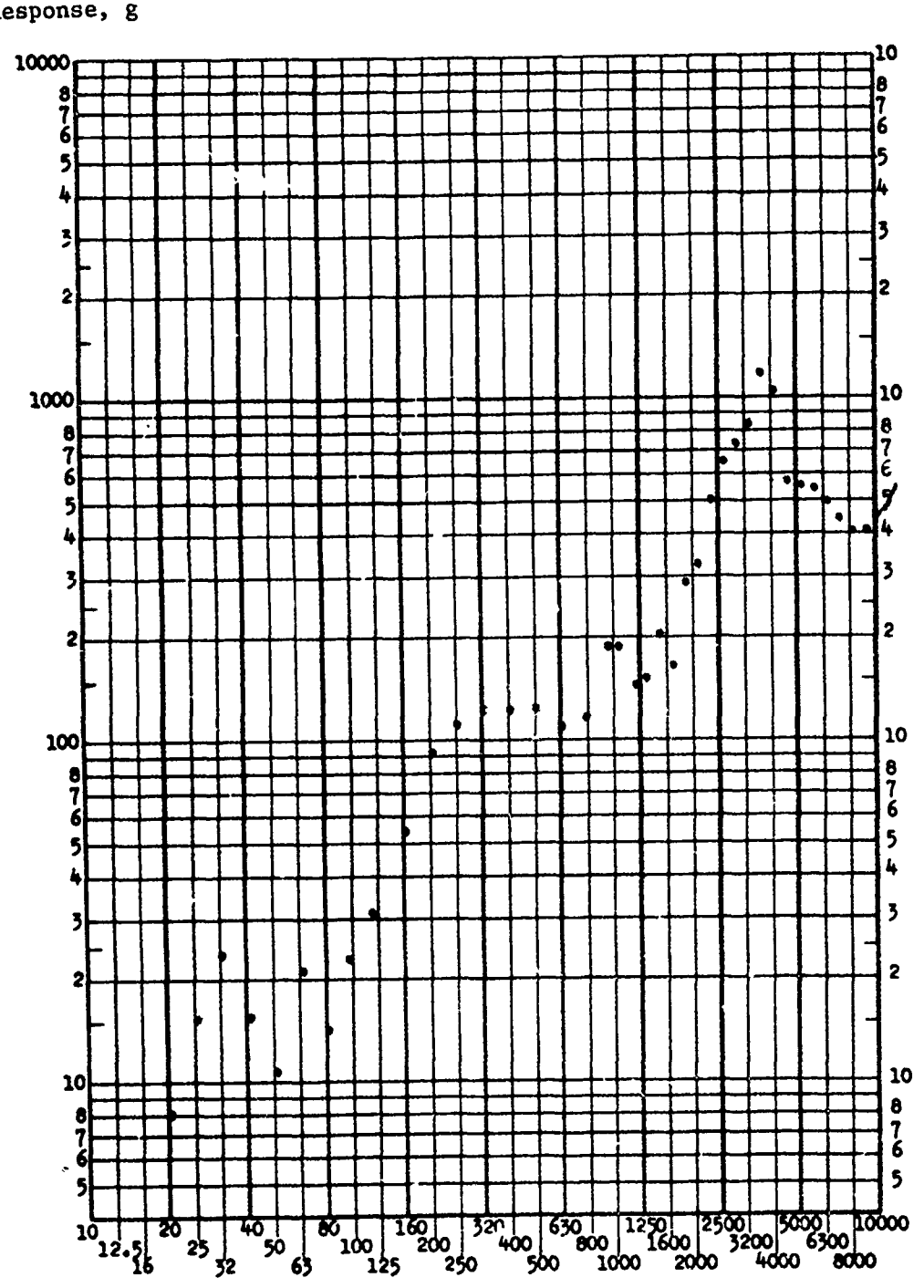
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 5 - Tangential axis longeron near station 117

Figure 30 (cont)



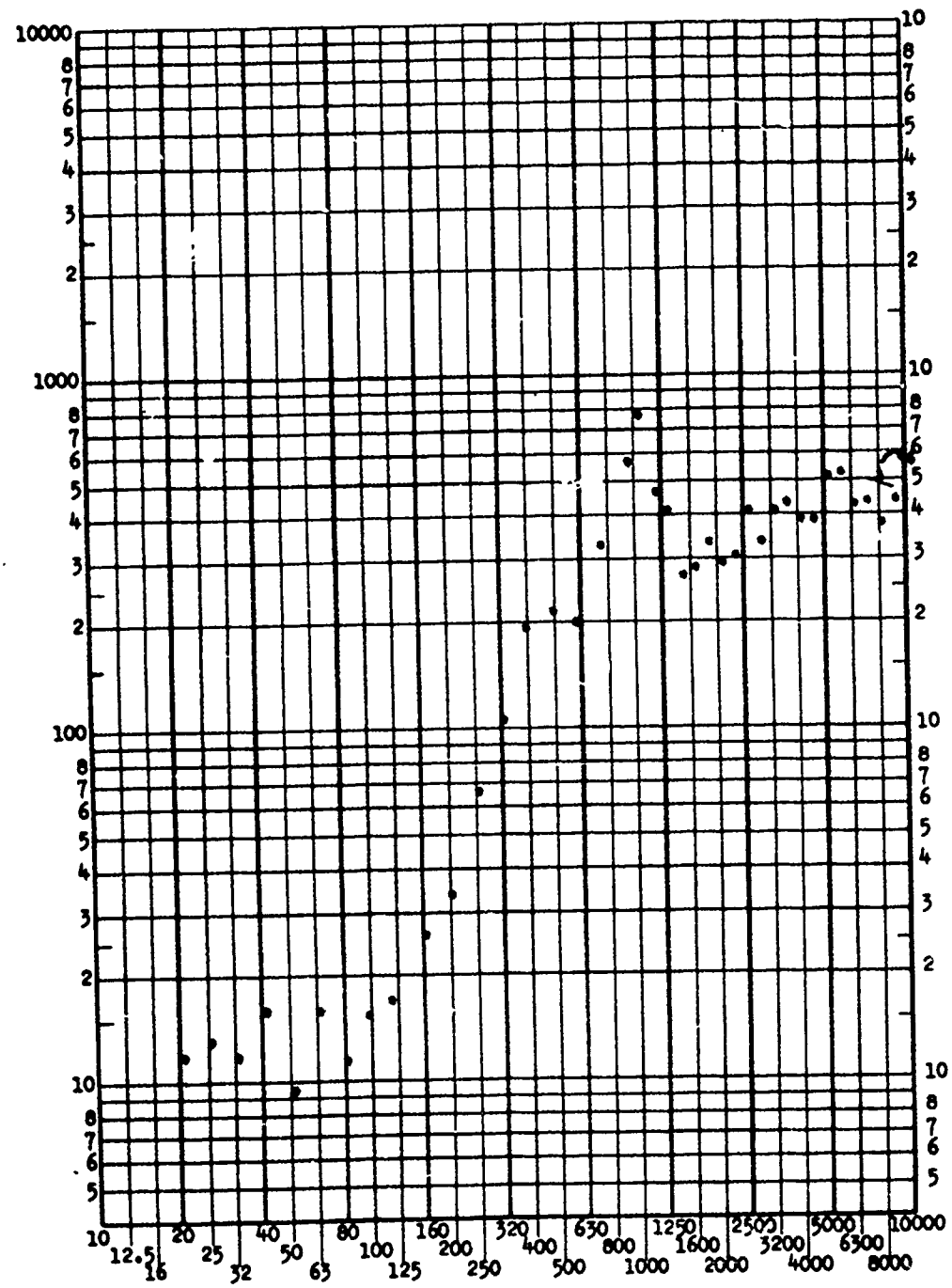
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 6 - Radial axis longeron near station 117

Figure 30 (cont)



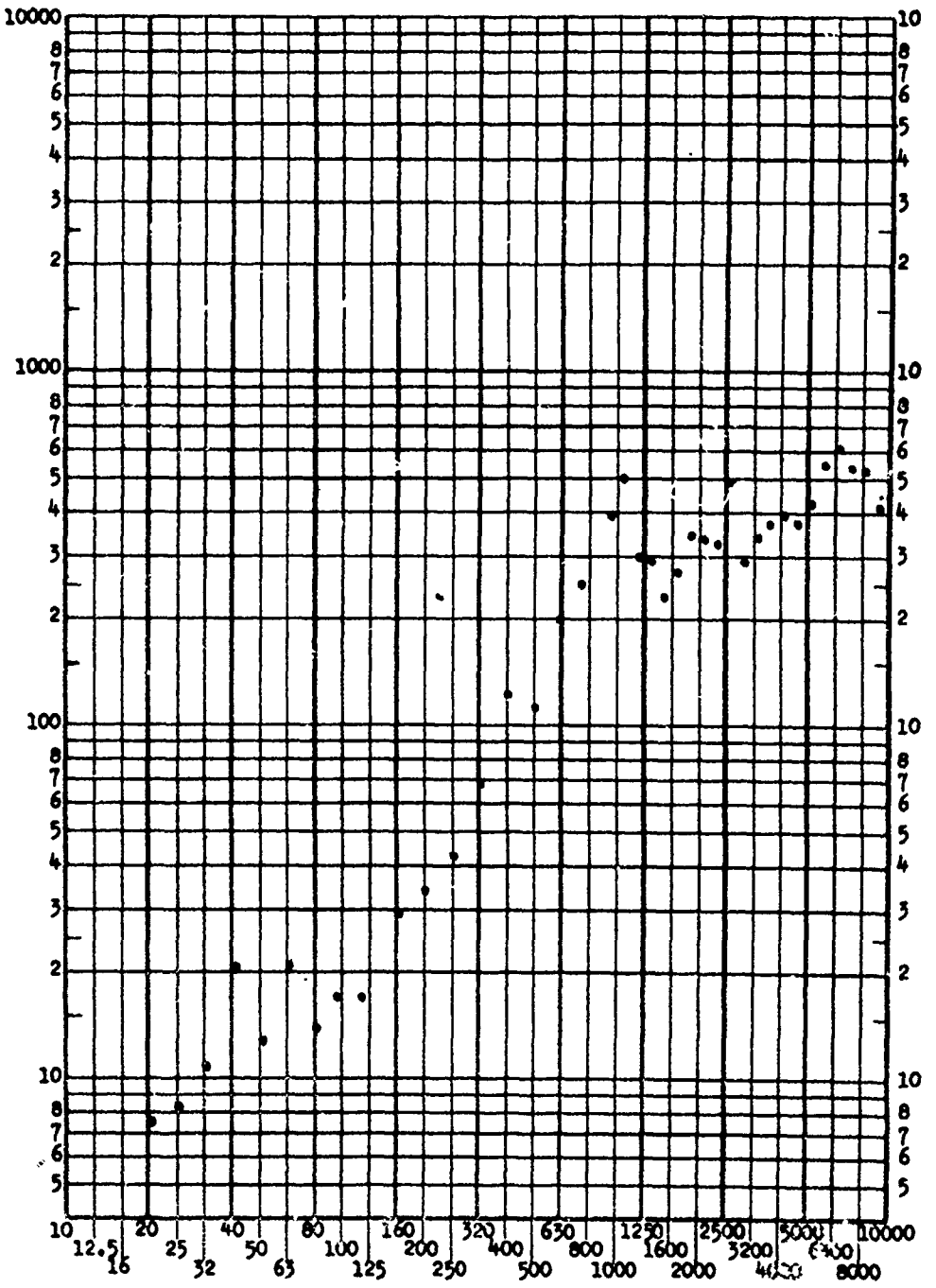
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 30 (cont)



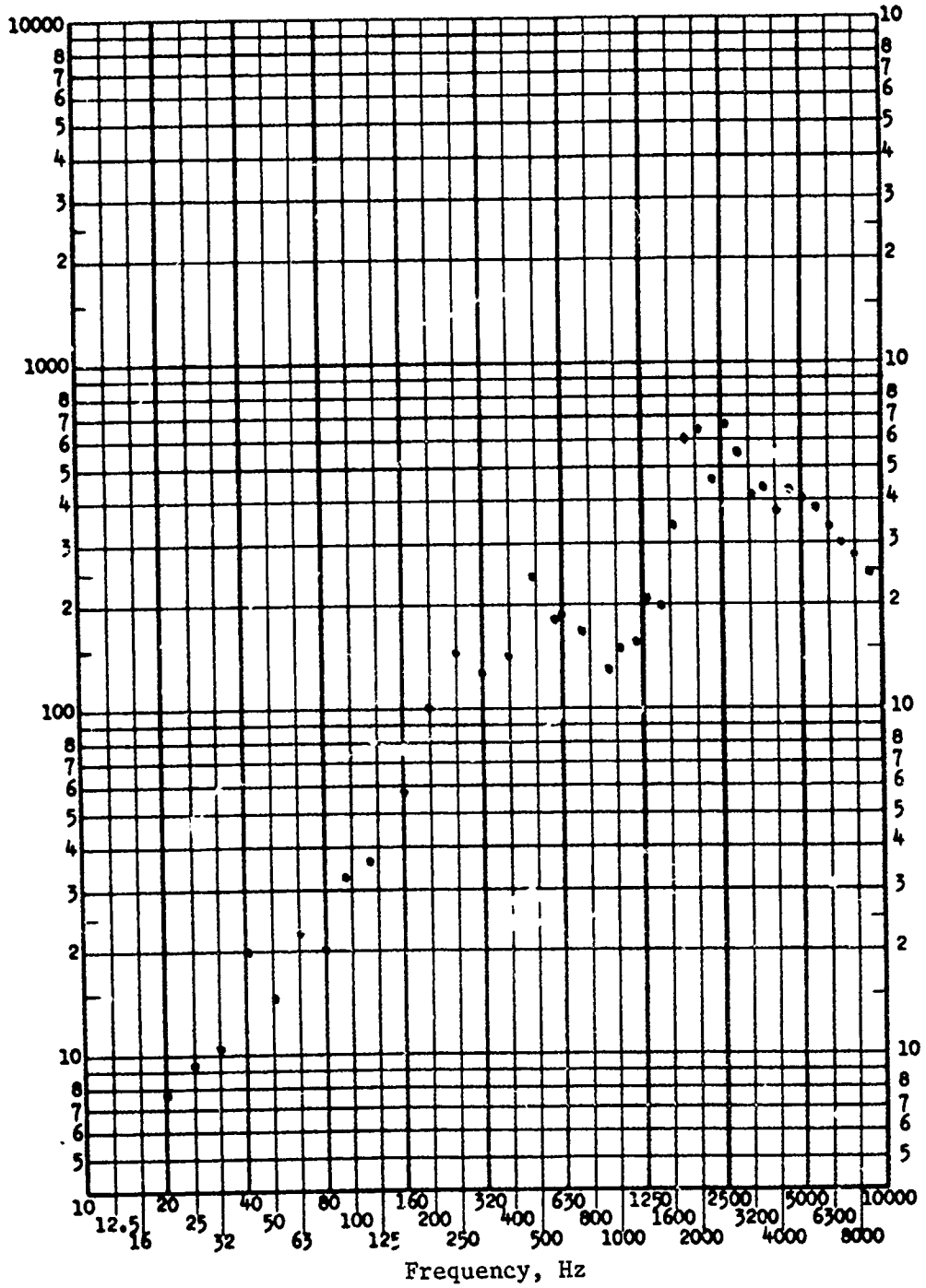
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 8 - Tangential axis longeron near station 77

Figure 30 (cont)



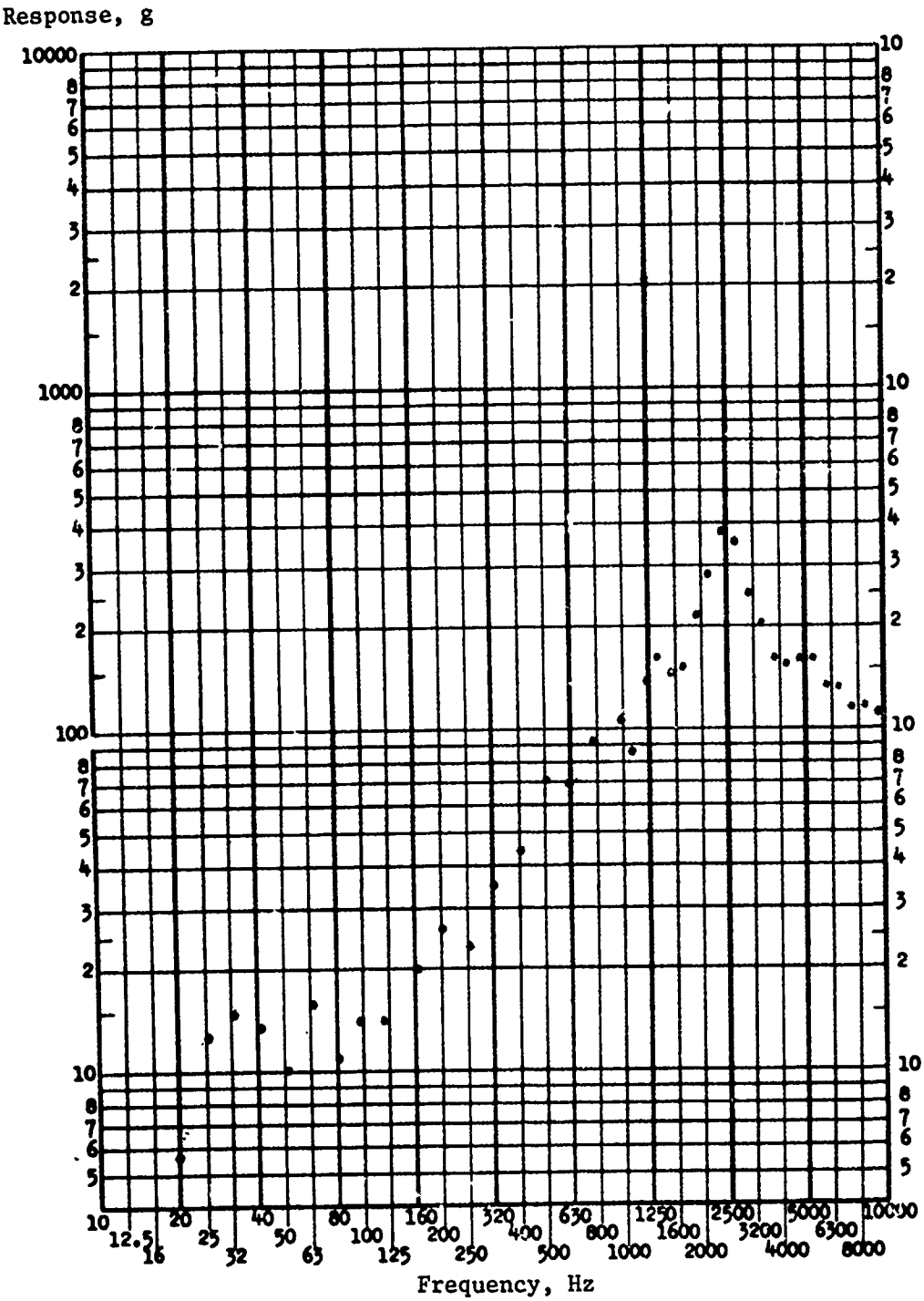
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 9 - Radial axis longeron near station 77

Figure 30 (cont)



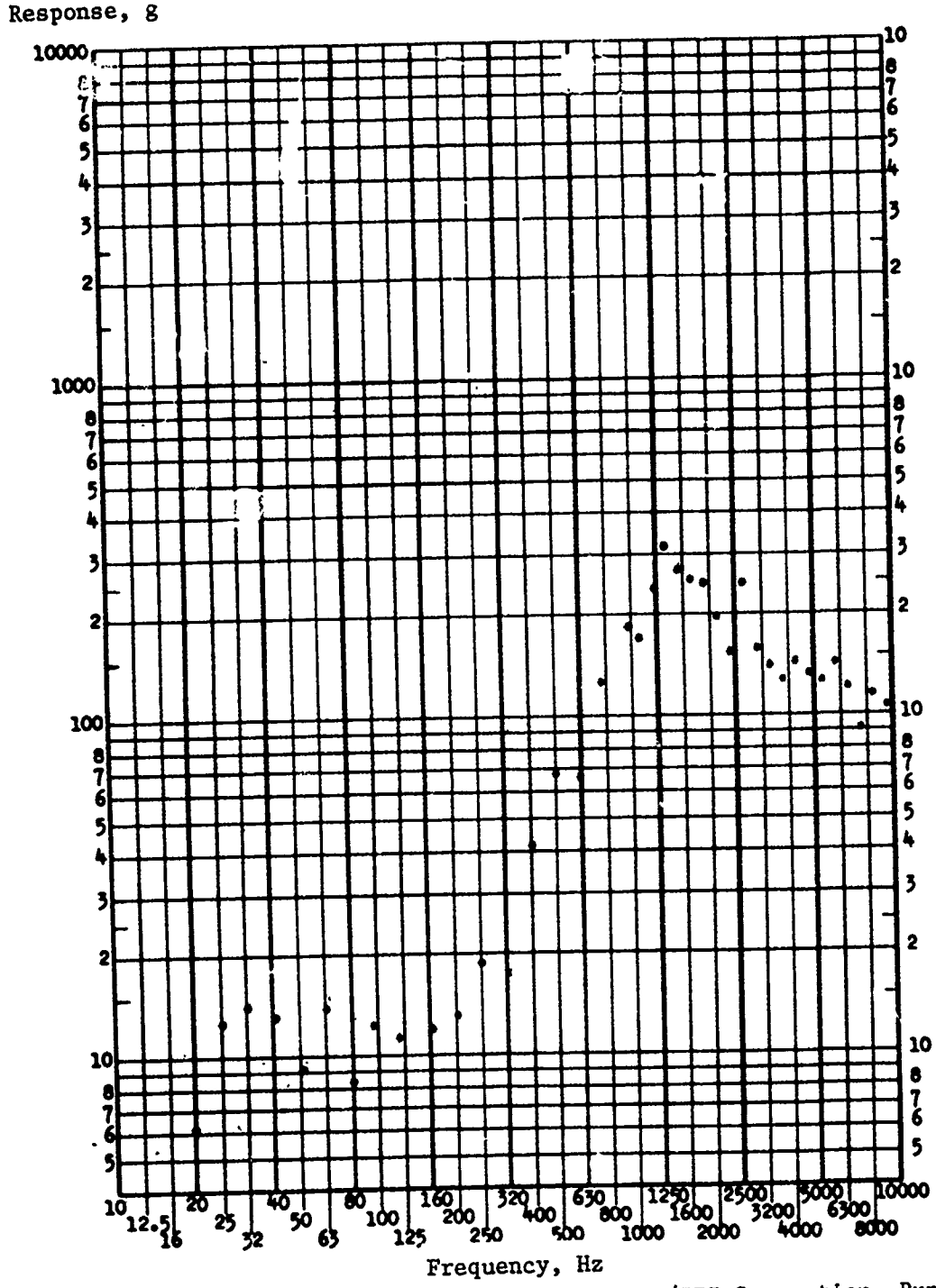
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 30 (cont)



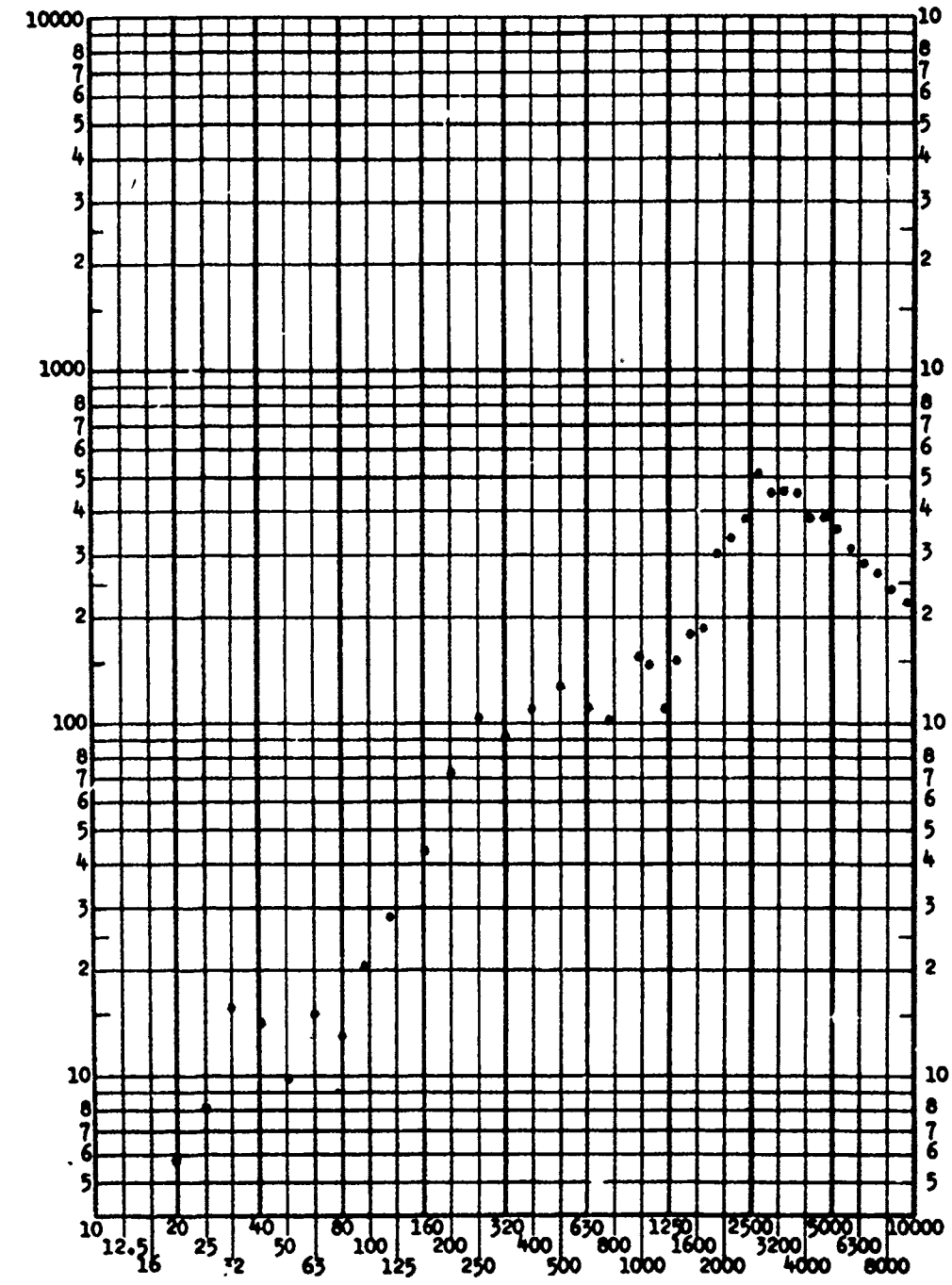
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 30 (cont)



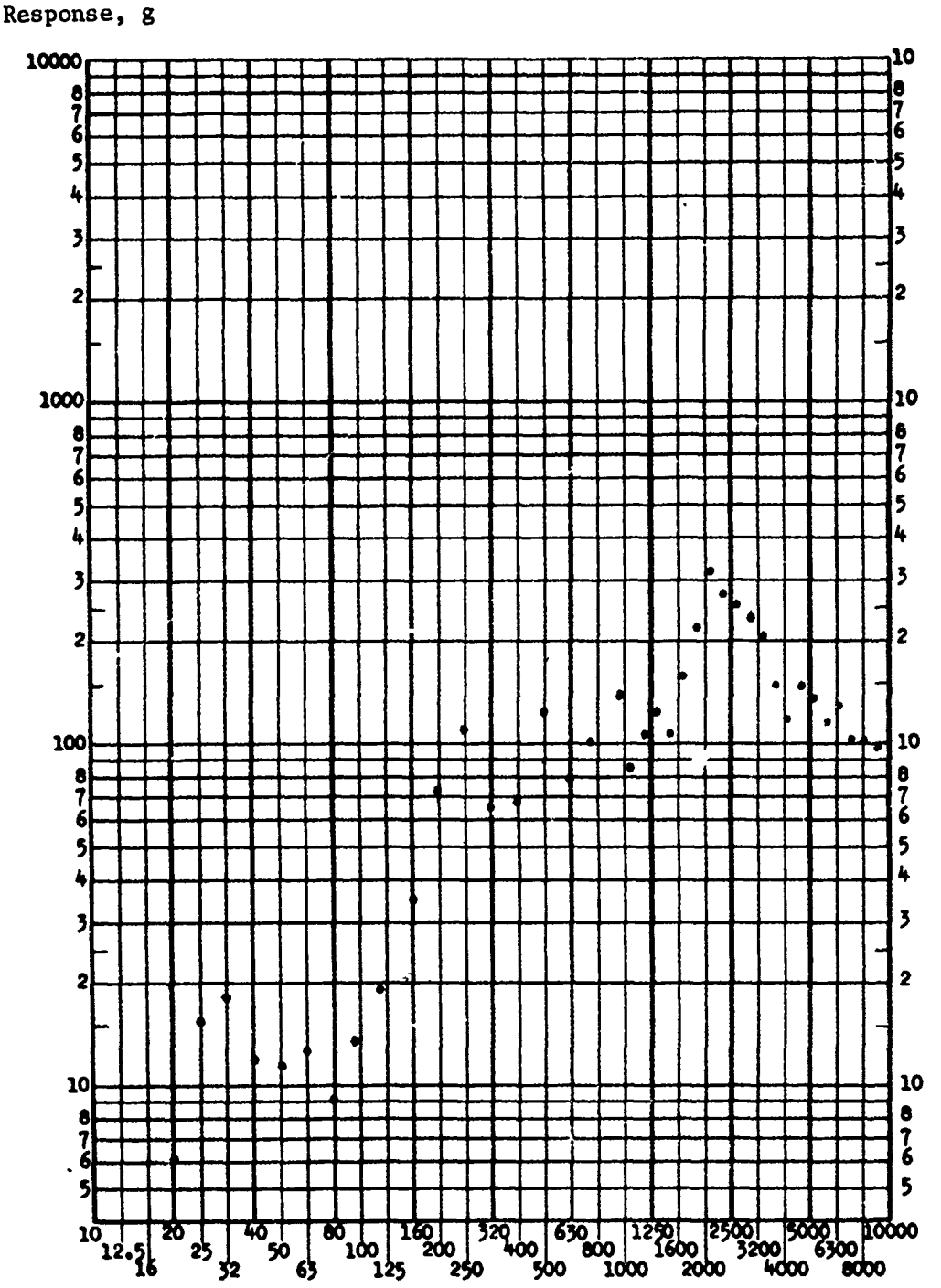
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 30 (cont)



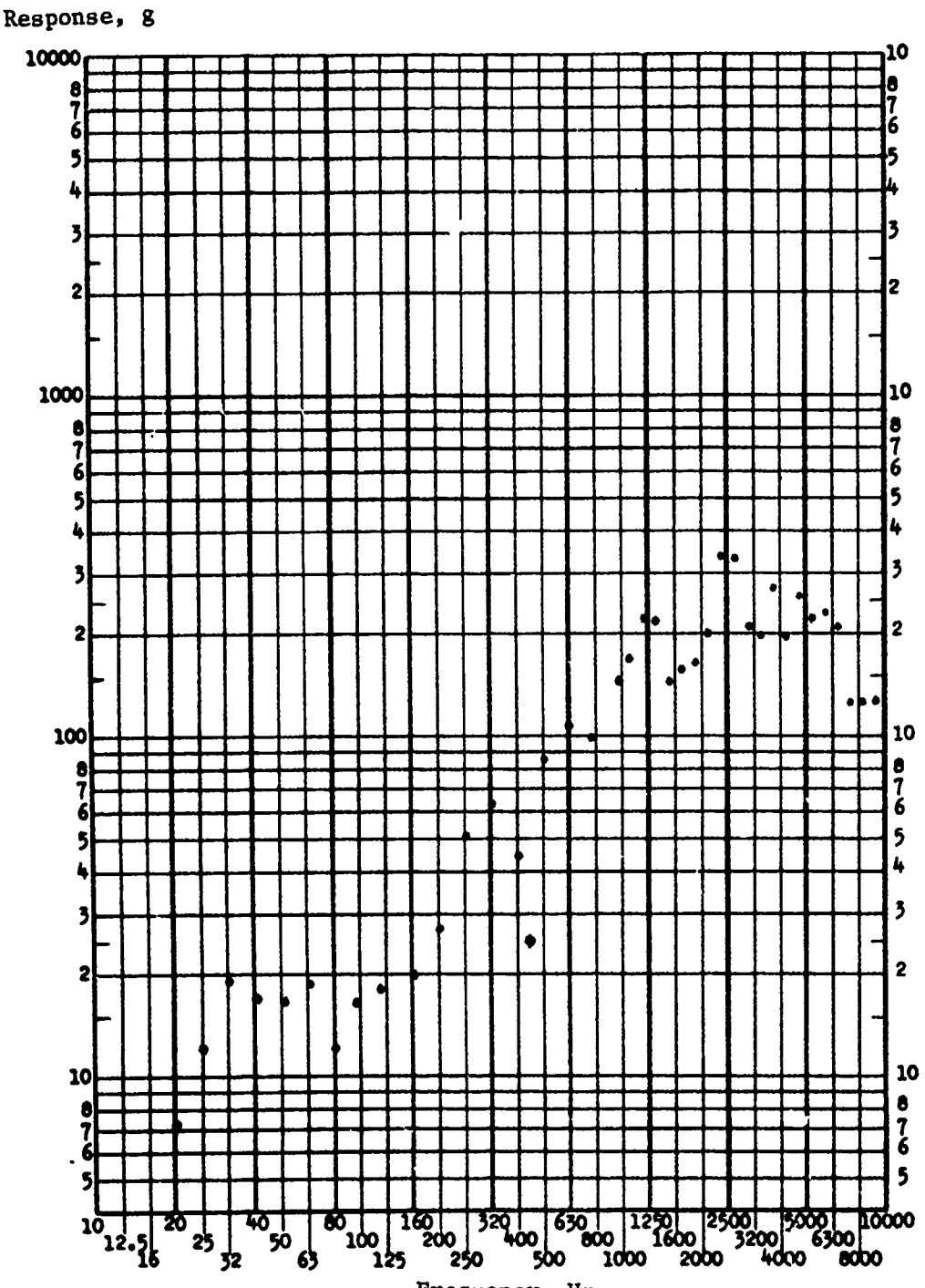
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 30 (cont)



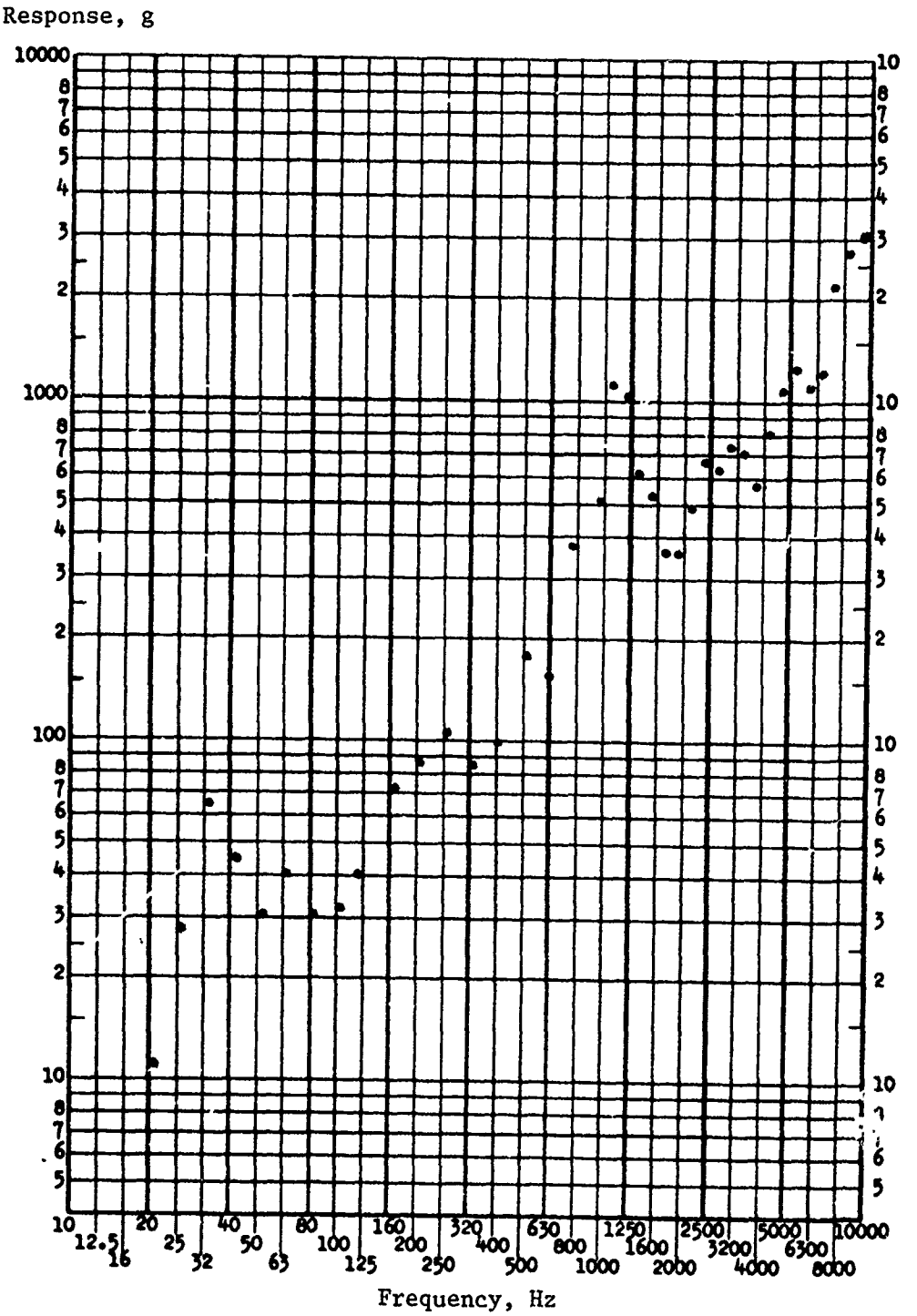
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 30 (cont)



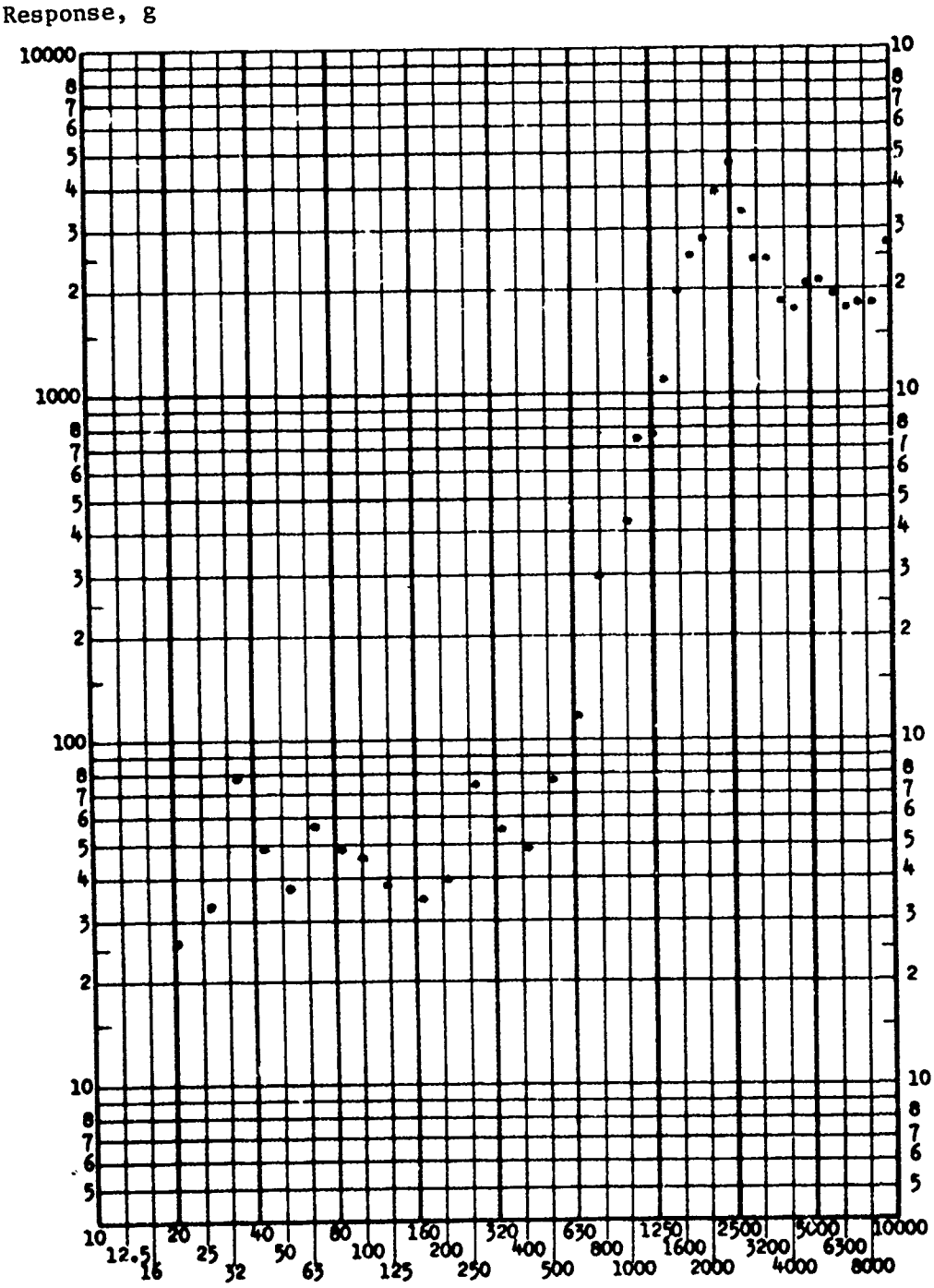
Bench Shock Test - Stage II/III Separation, Run 30
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 30 (concl)



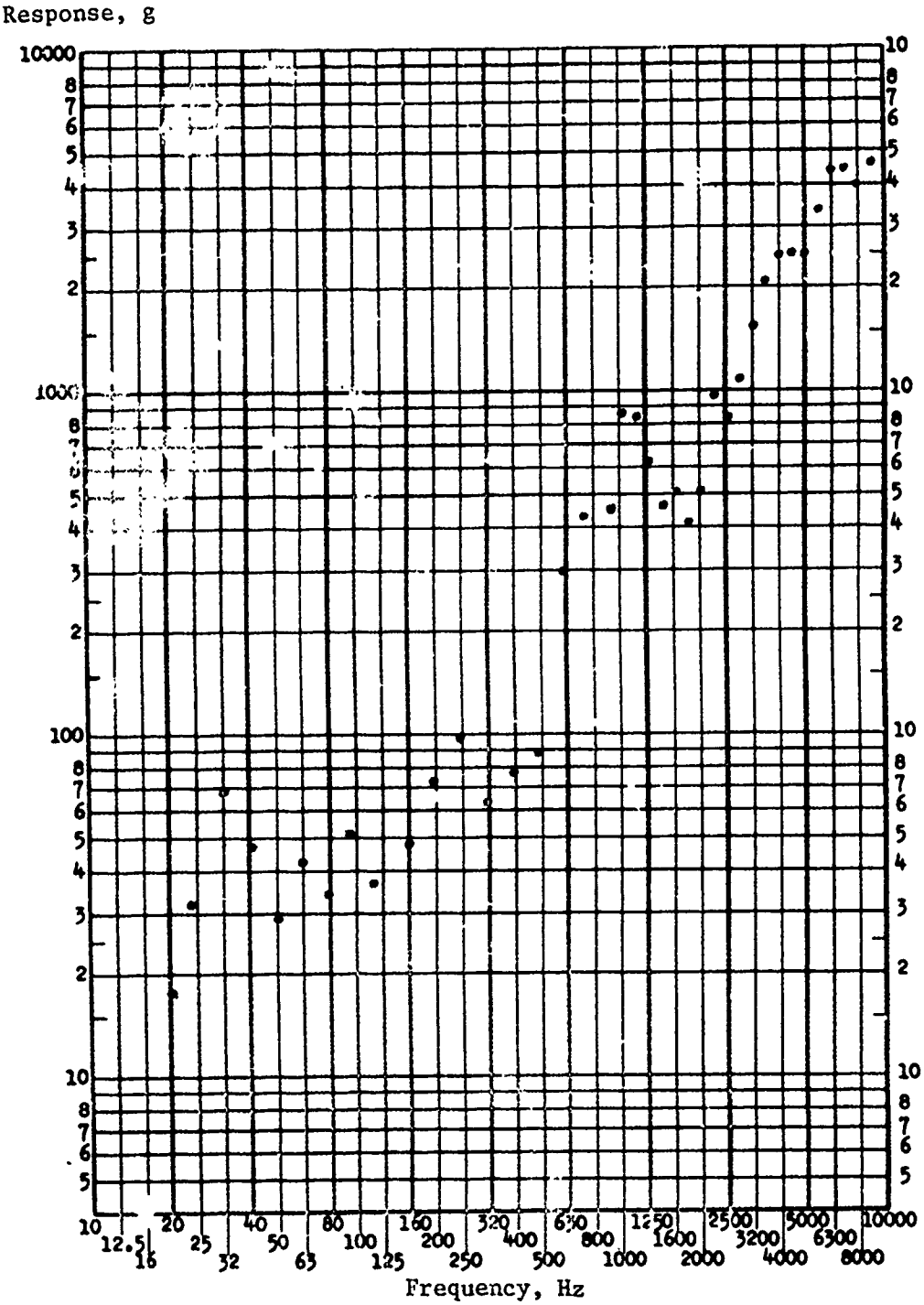
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 31 Run 31 Shock Response Spectrum



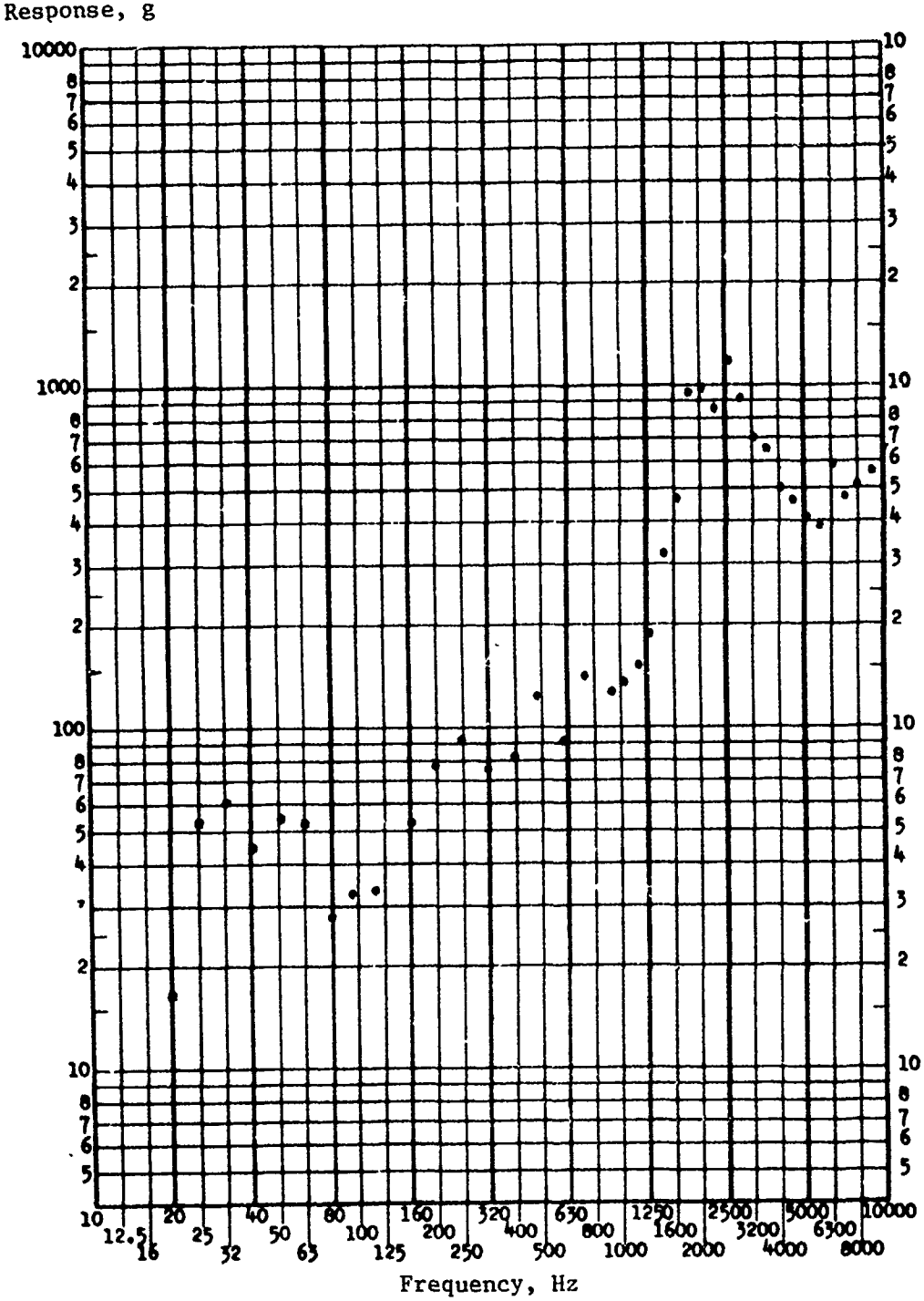
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 2 - Tangential axis longeron near station 133

Figure 31 (cont)



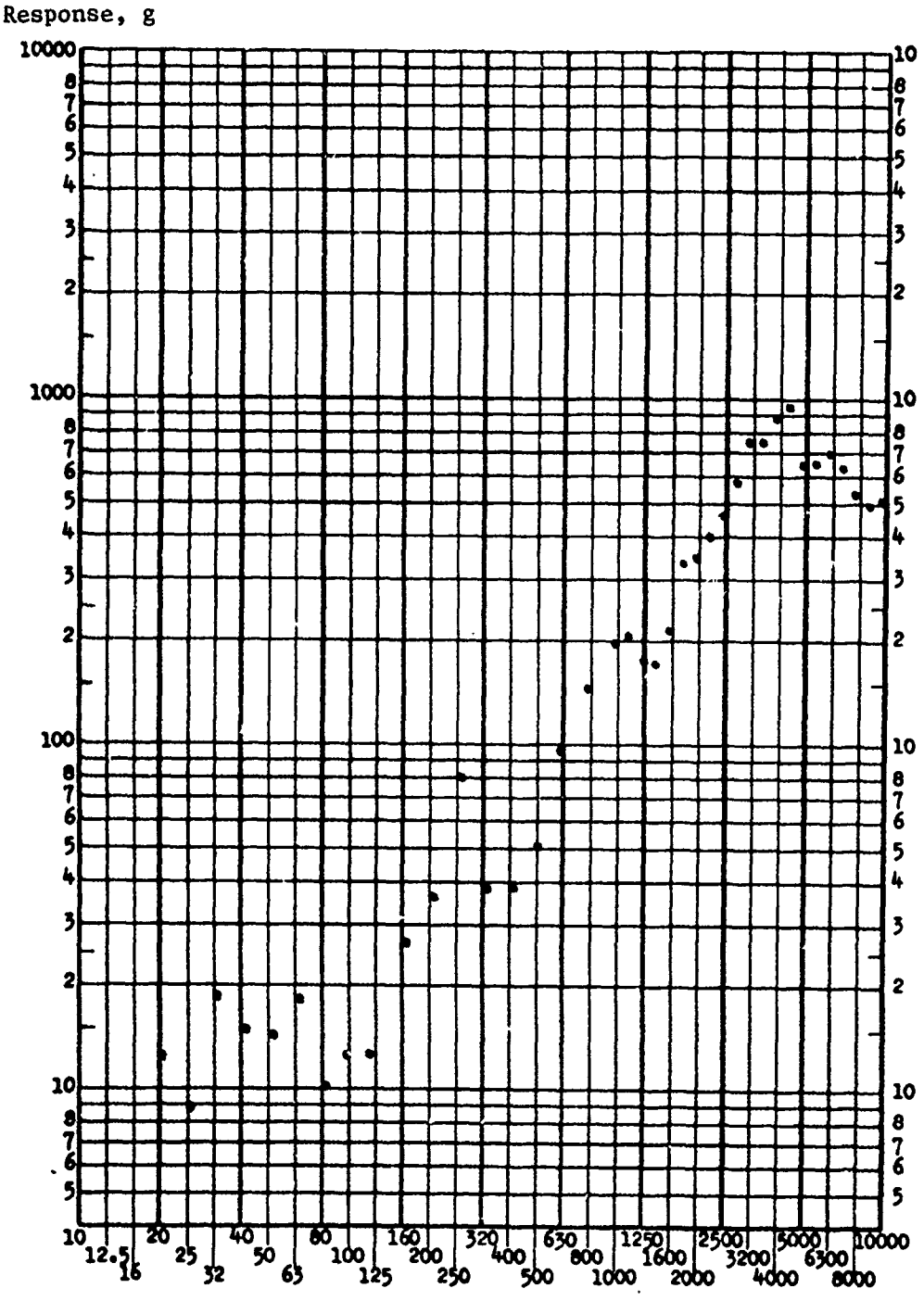
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 3 - Radial axis longeron near station 133

Figure 31 (cont)



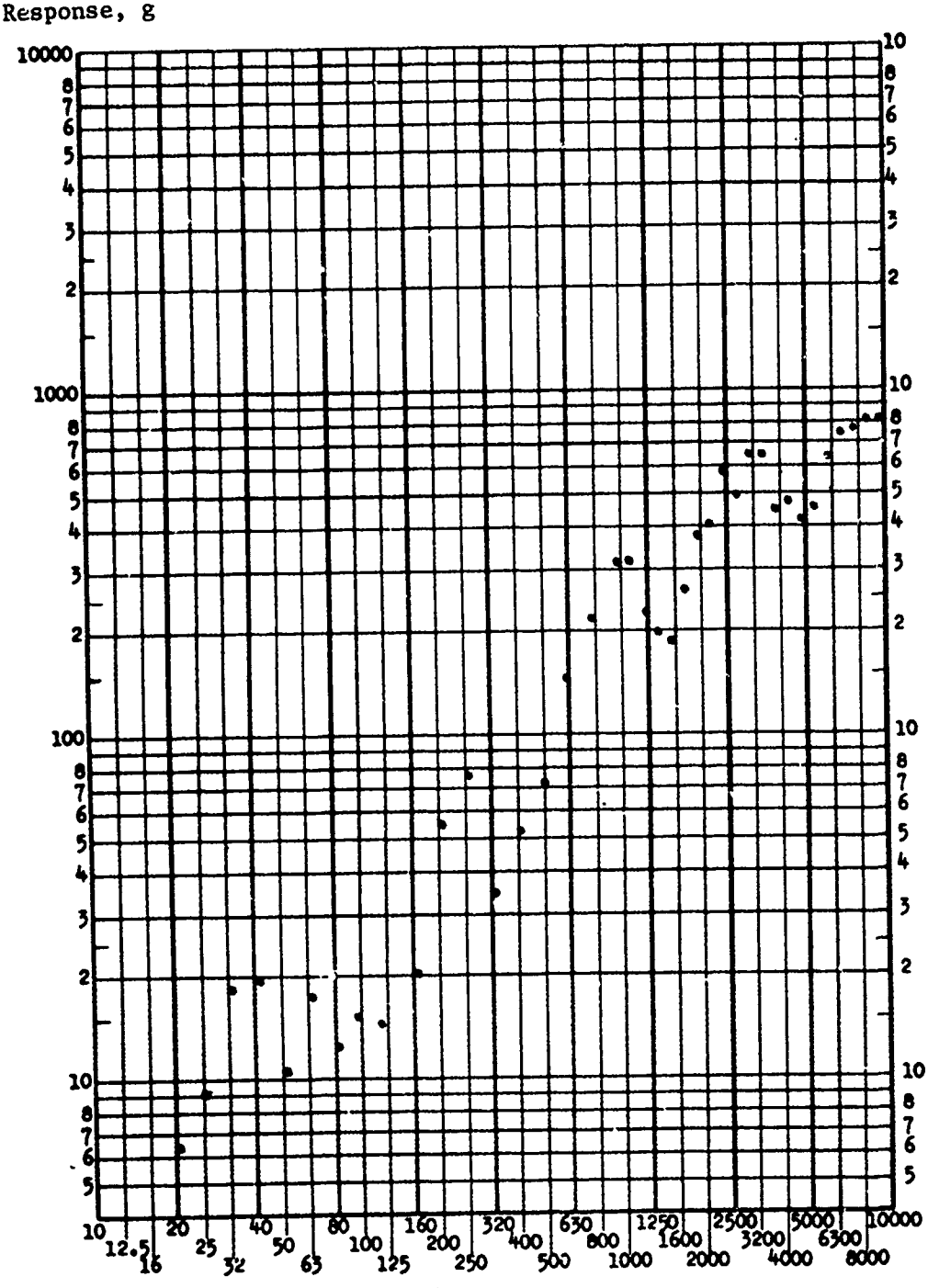
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 31 (cont)



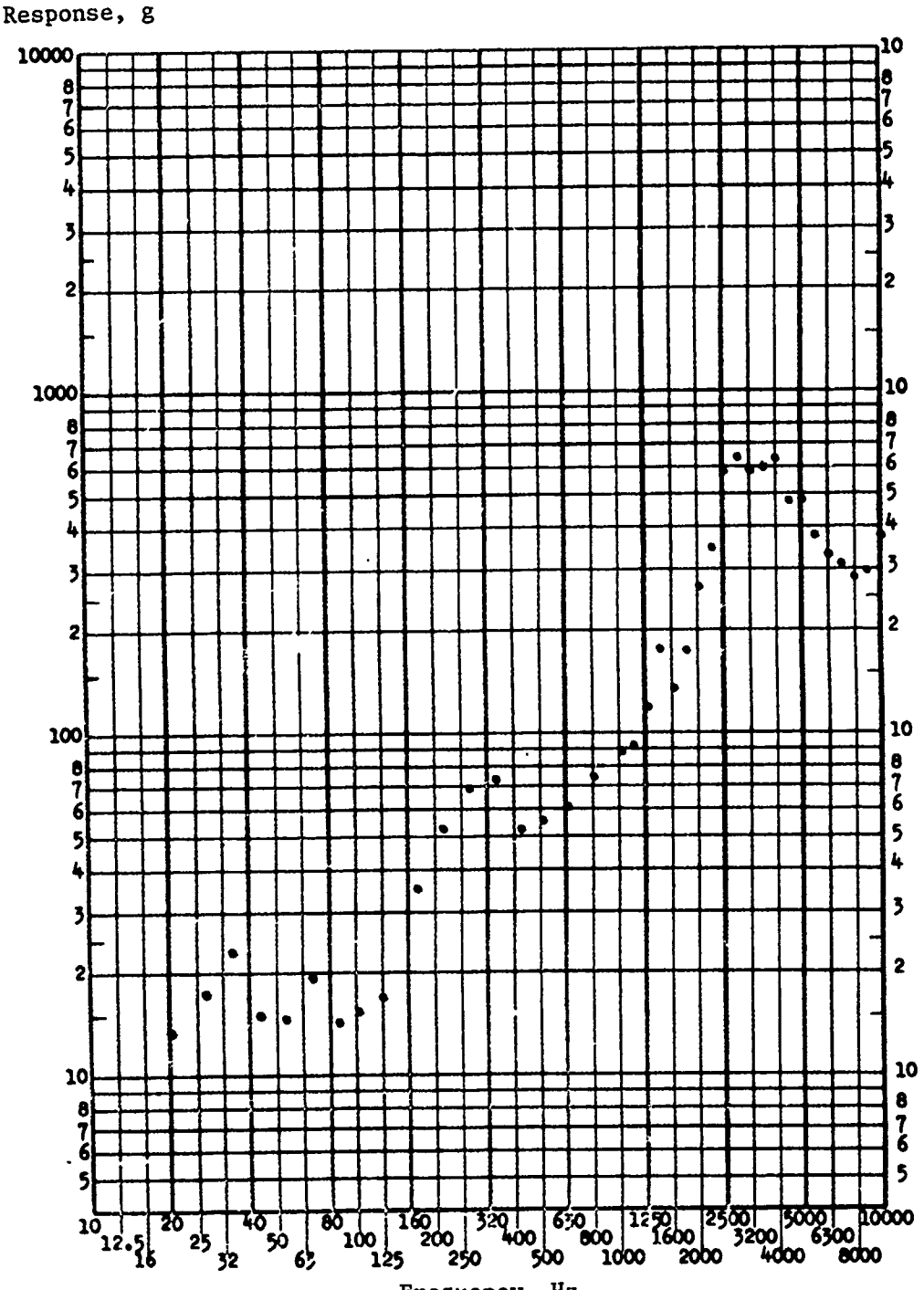
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 5 - Tangential axis longeron near station 117

Figure 31 (cont)



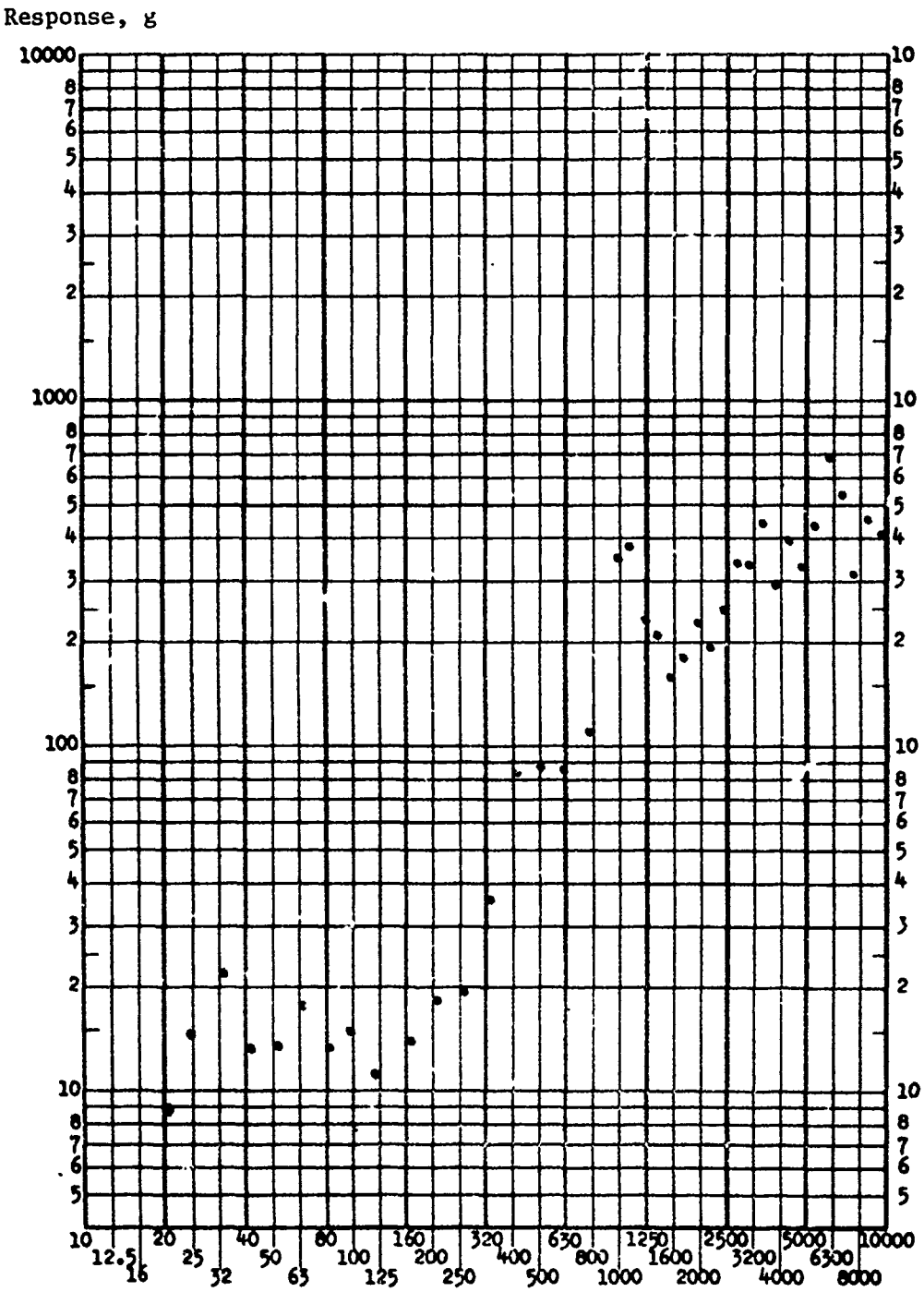
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 6 - Radial axis longeron near station 117

Figure 31 (cont)



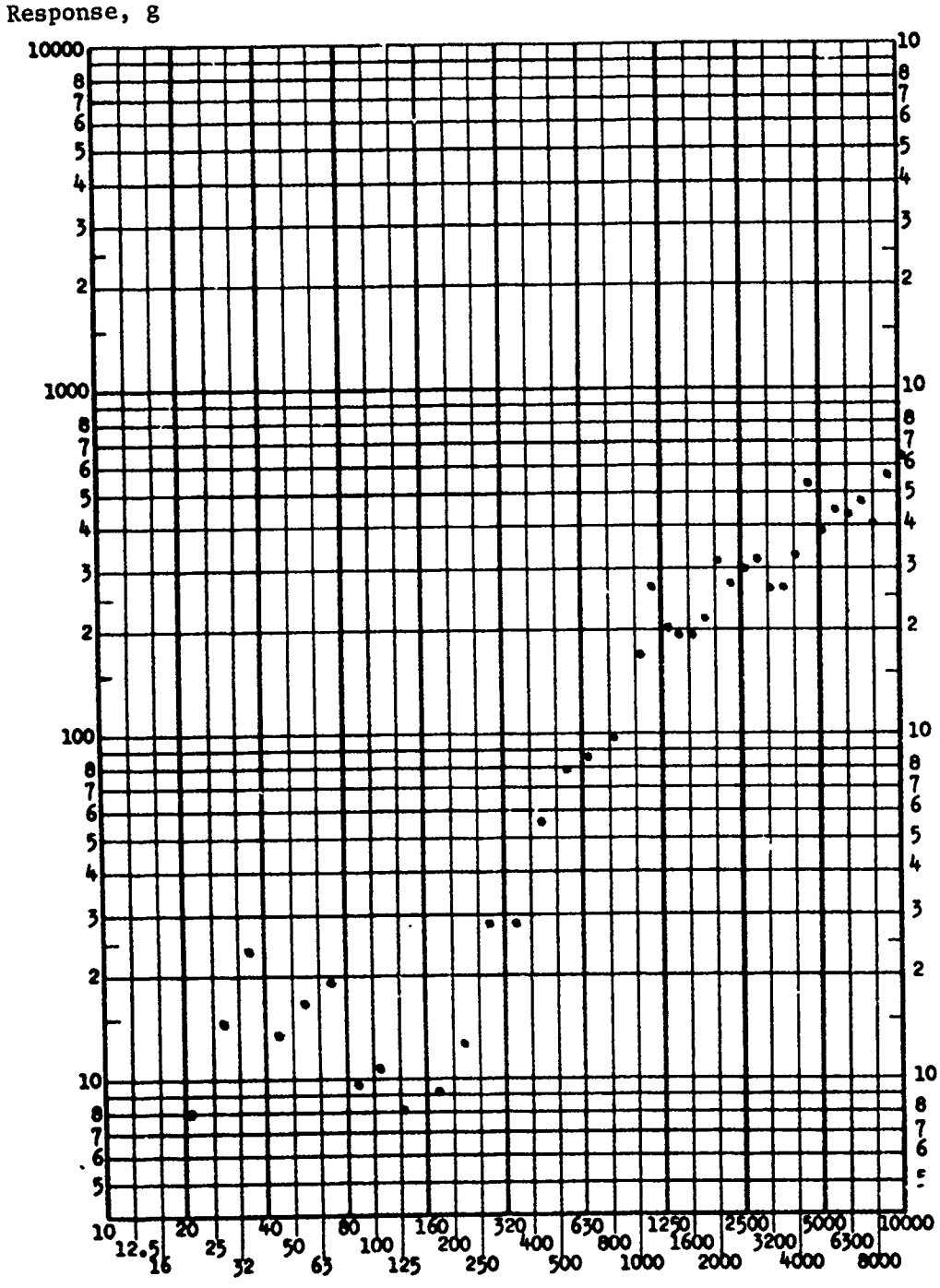
Bench Shock Test - Stage II/III Separation, Run 31__
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 31 (cont)



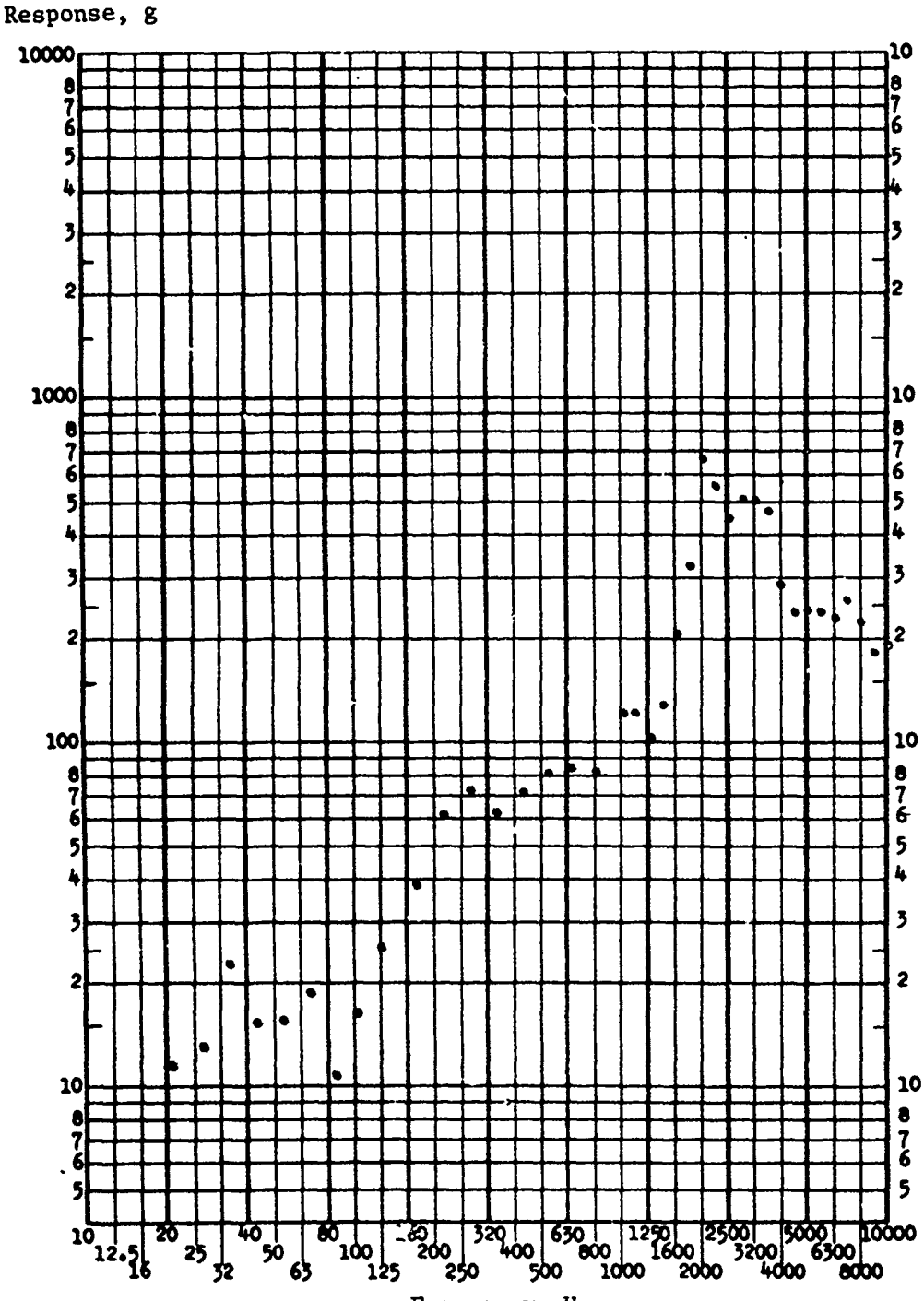
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 8 - Tangential axis longeron near station 77

Figure 31 (cont)



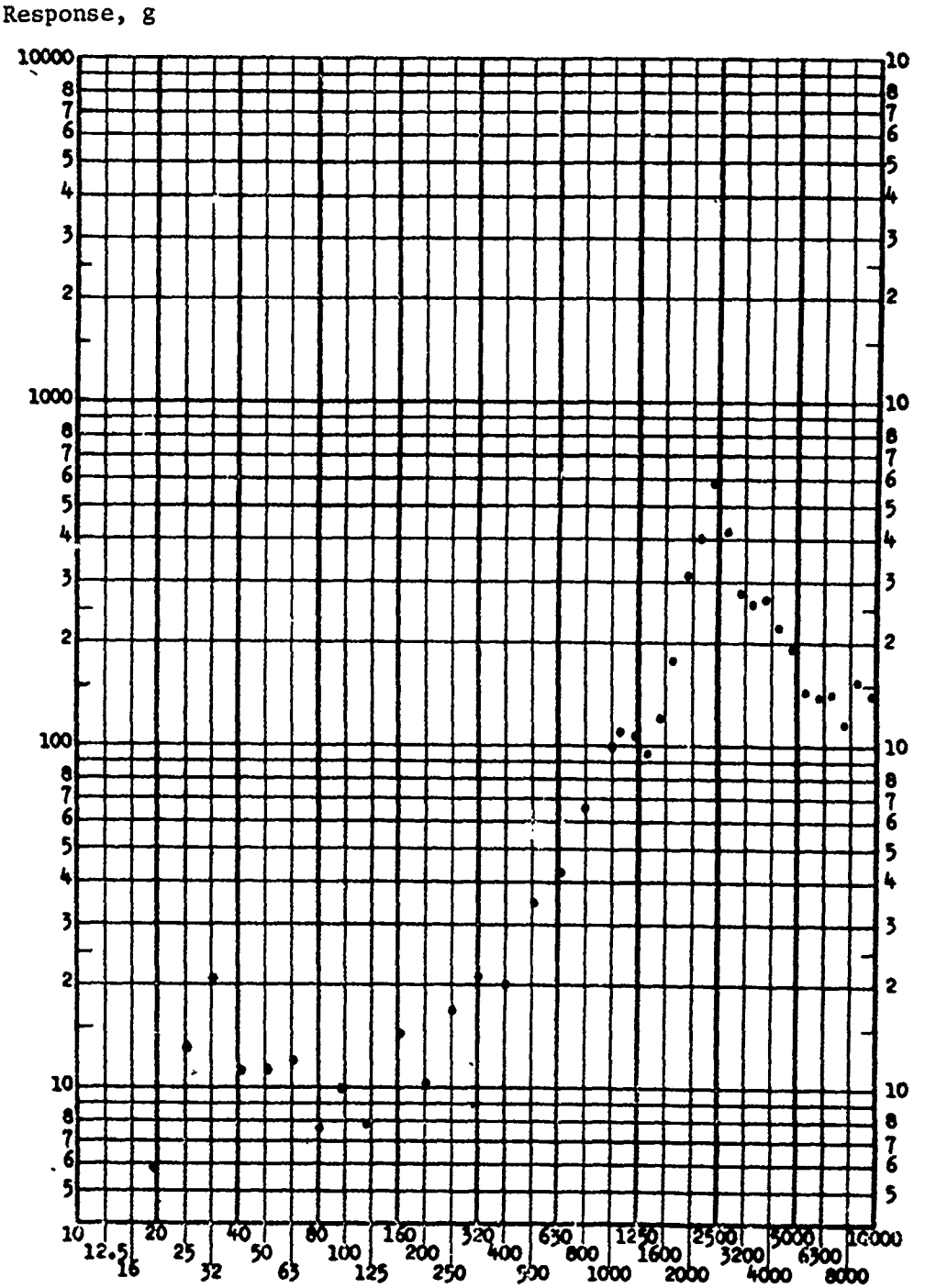
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 9 - Radial axis longeron near station 77

Figure 31 (cont)



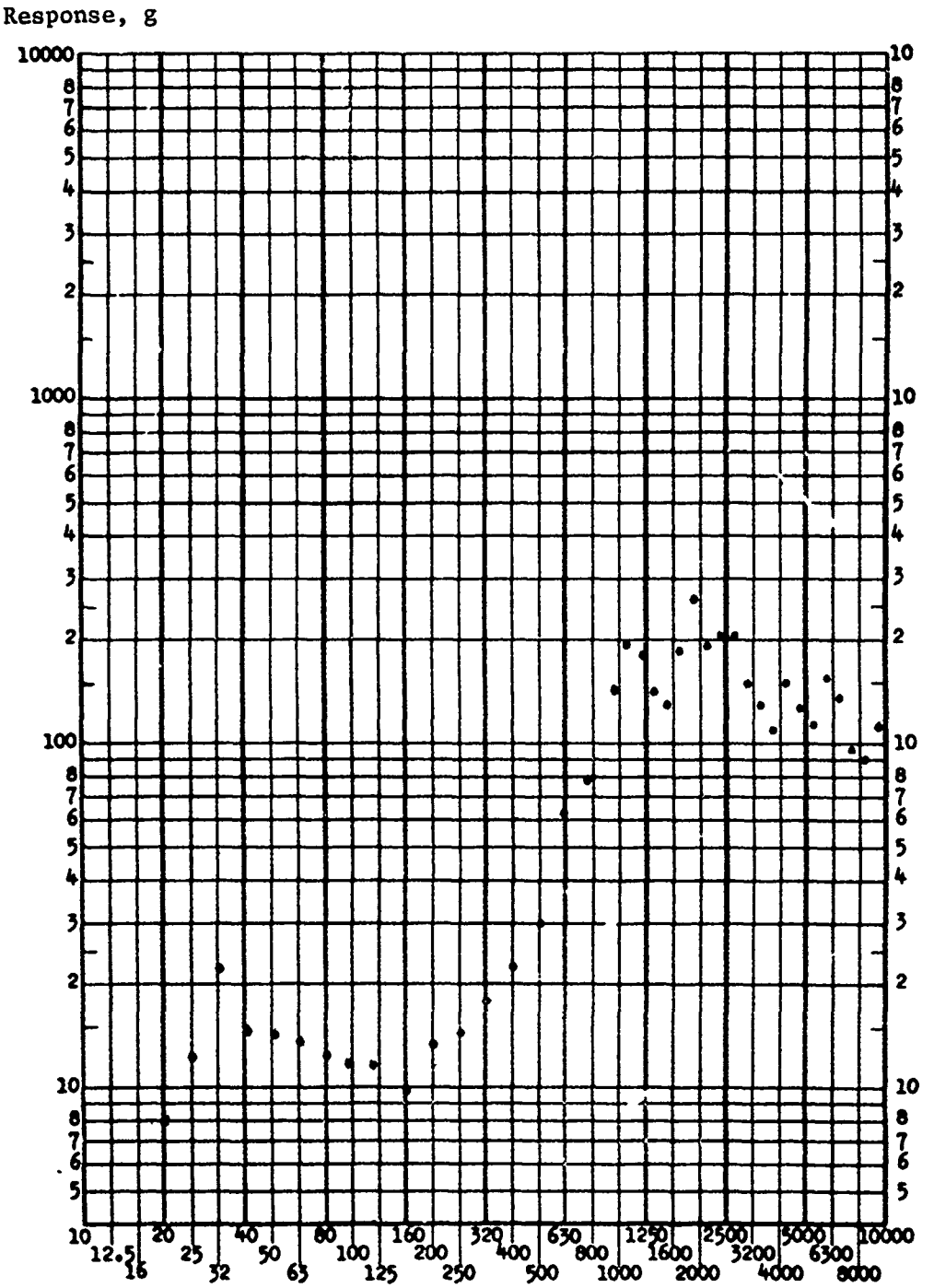
Bench Shock Test - Stage II/III Separation, Run 31__
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 31 (cont)



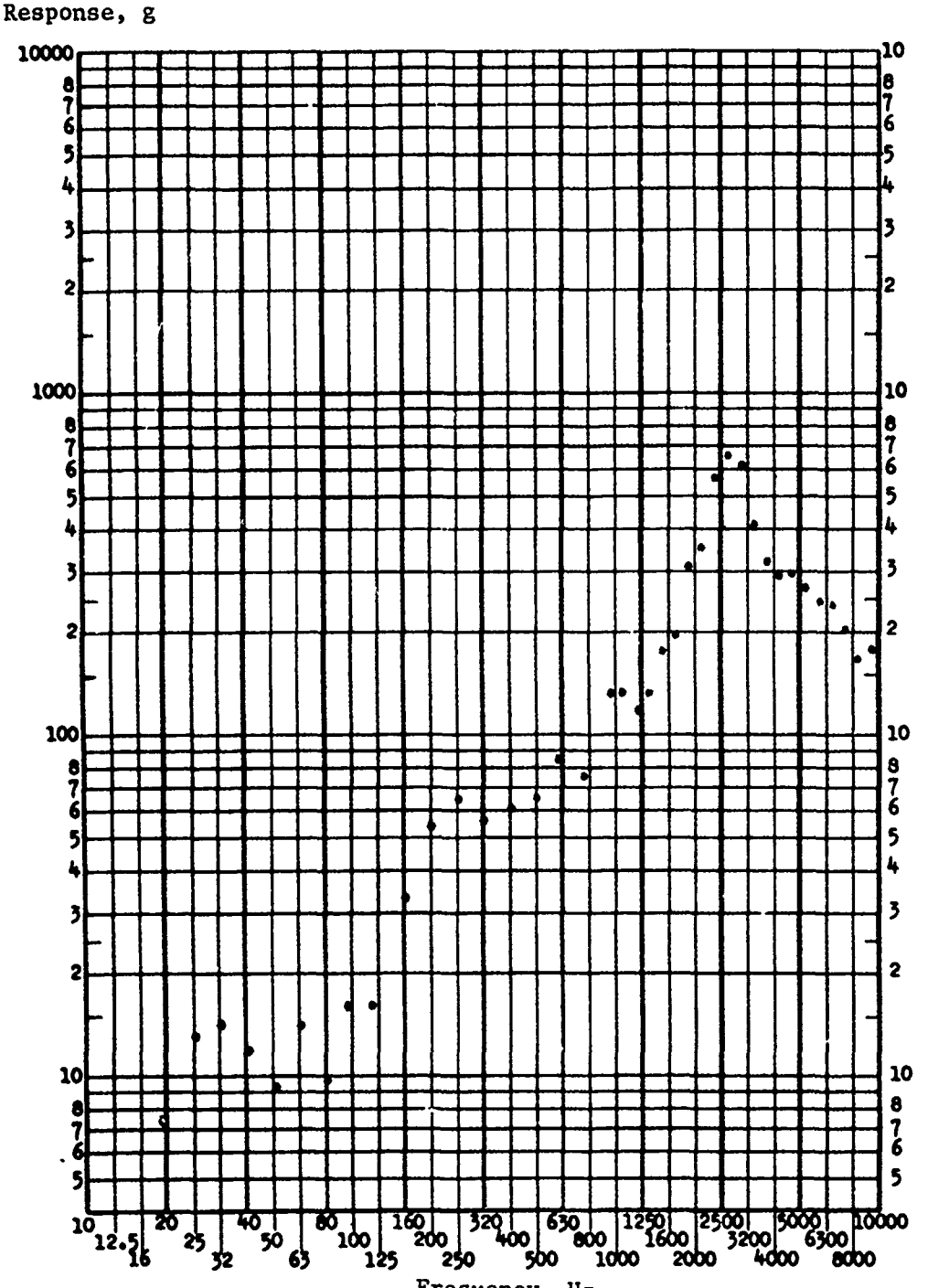
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 31 (cont)



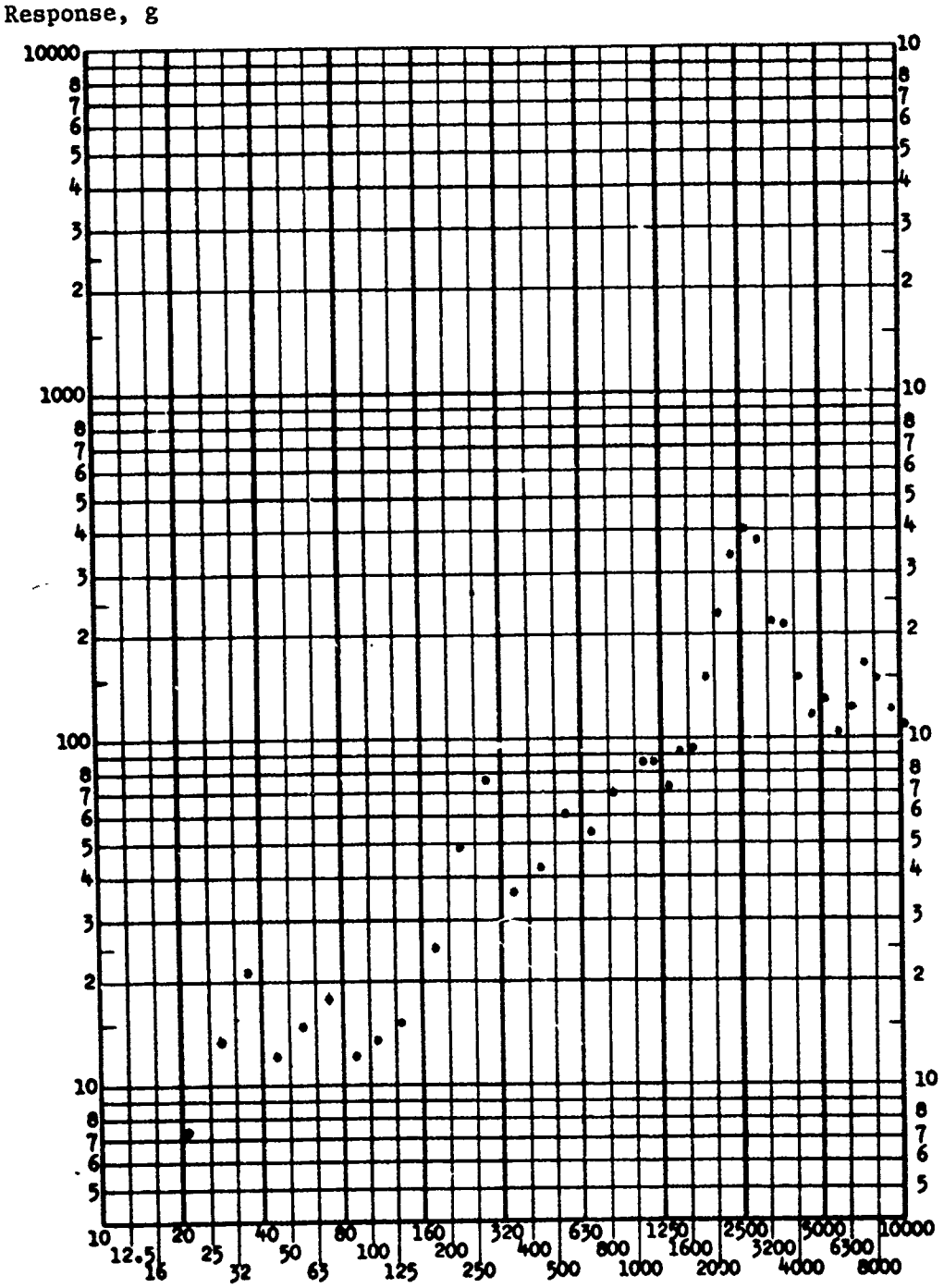
Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 31 (cont)



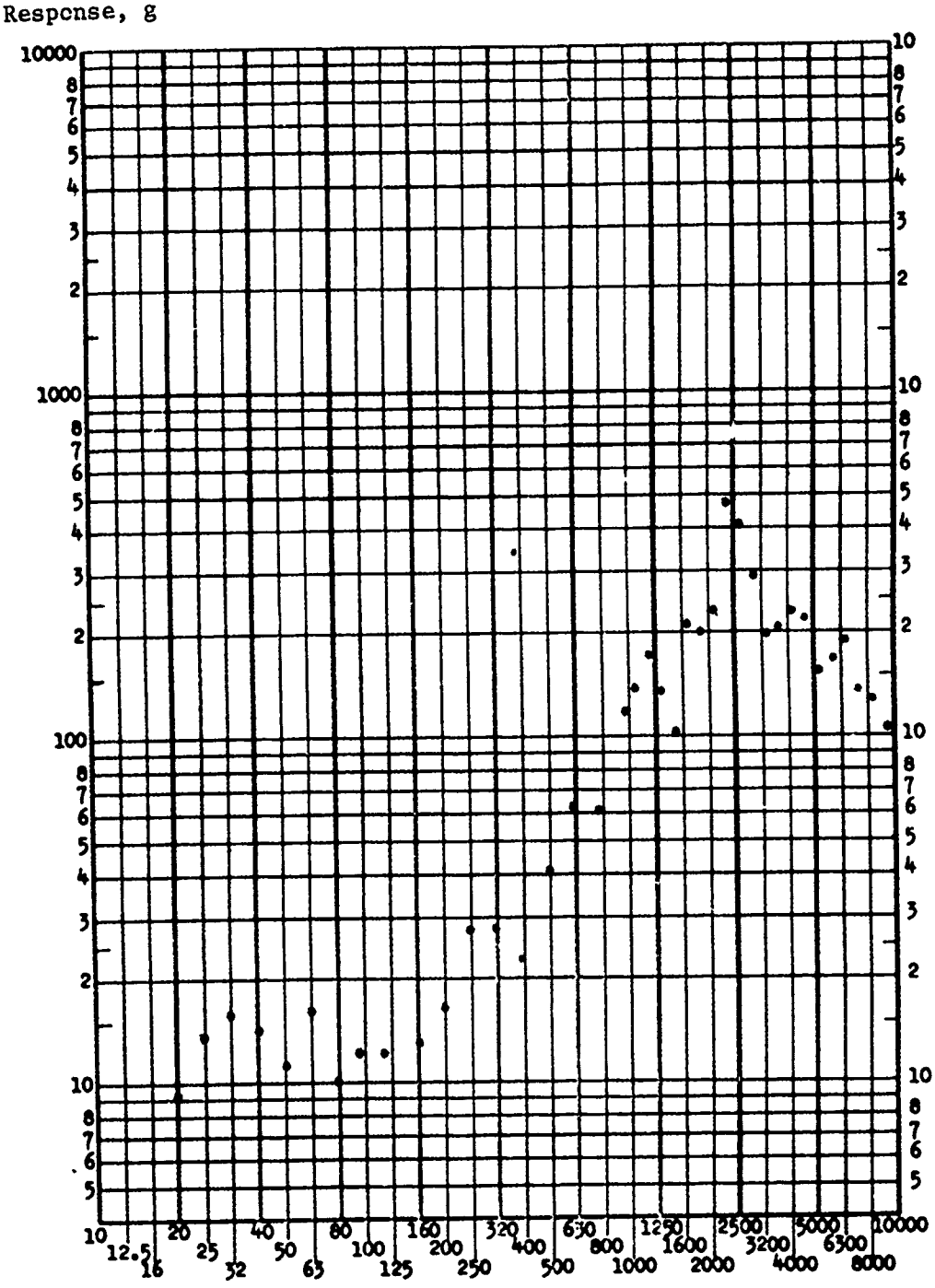
Bench Shock Test - Stage II/III Separation, Run 31_
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 31 (cont)



Bench Shock Test - Stage II/III Separation, Run 31__
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 31 (cont)



Bench Shock Test - Stage II/III Separation, Run 31
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 31 (concl)

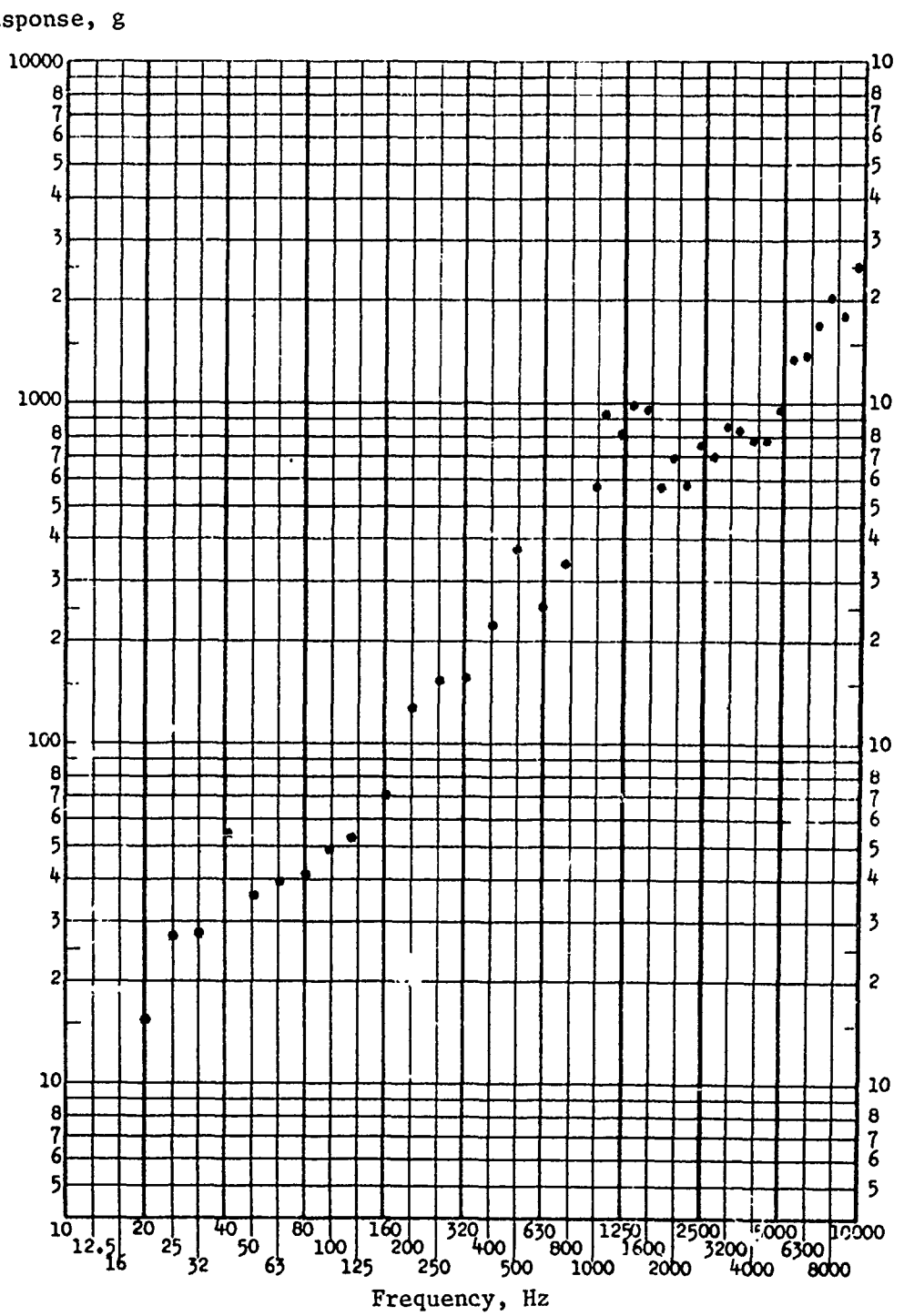
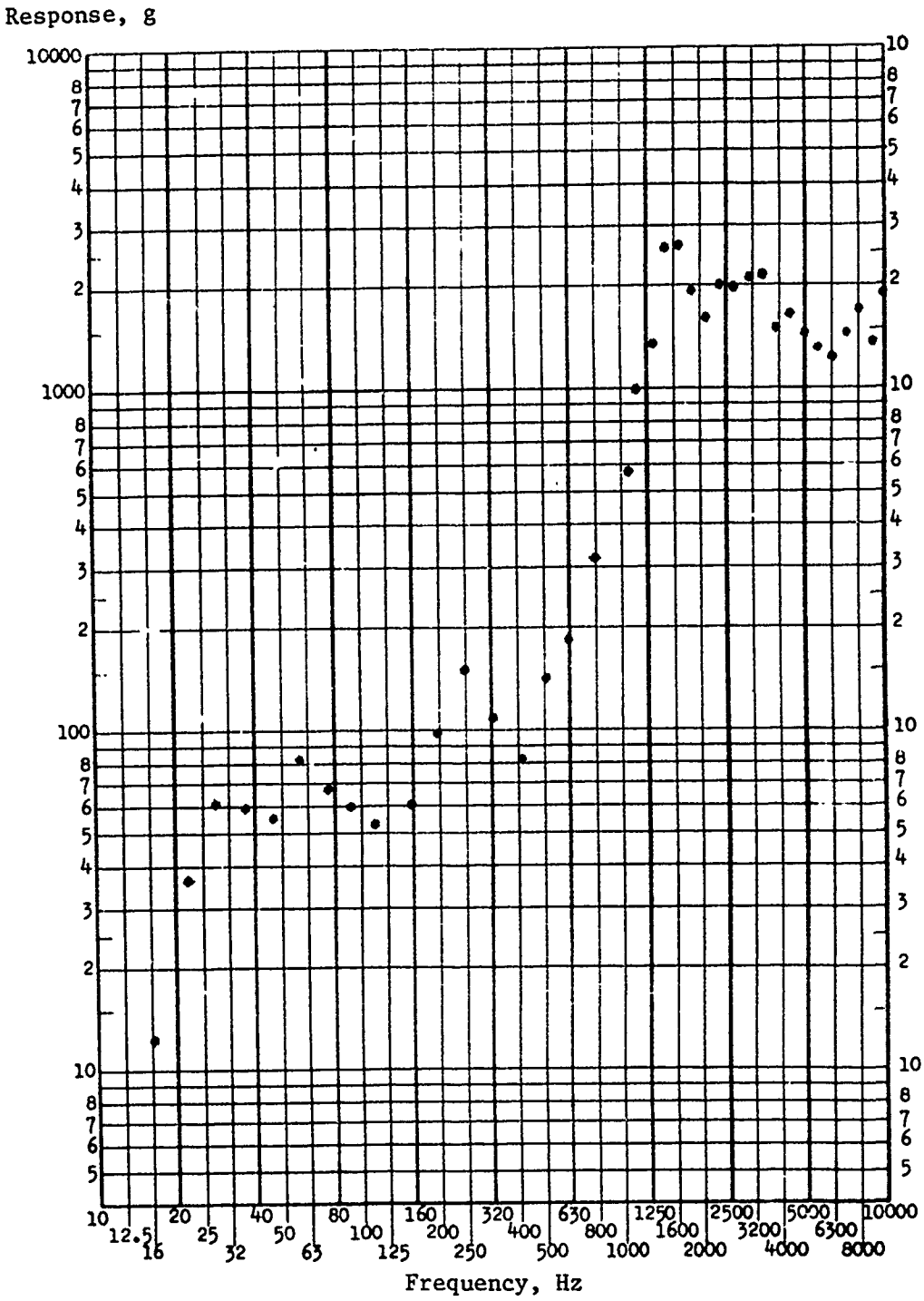
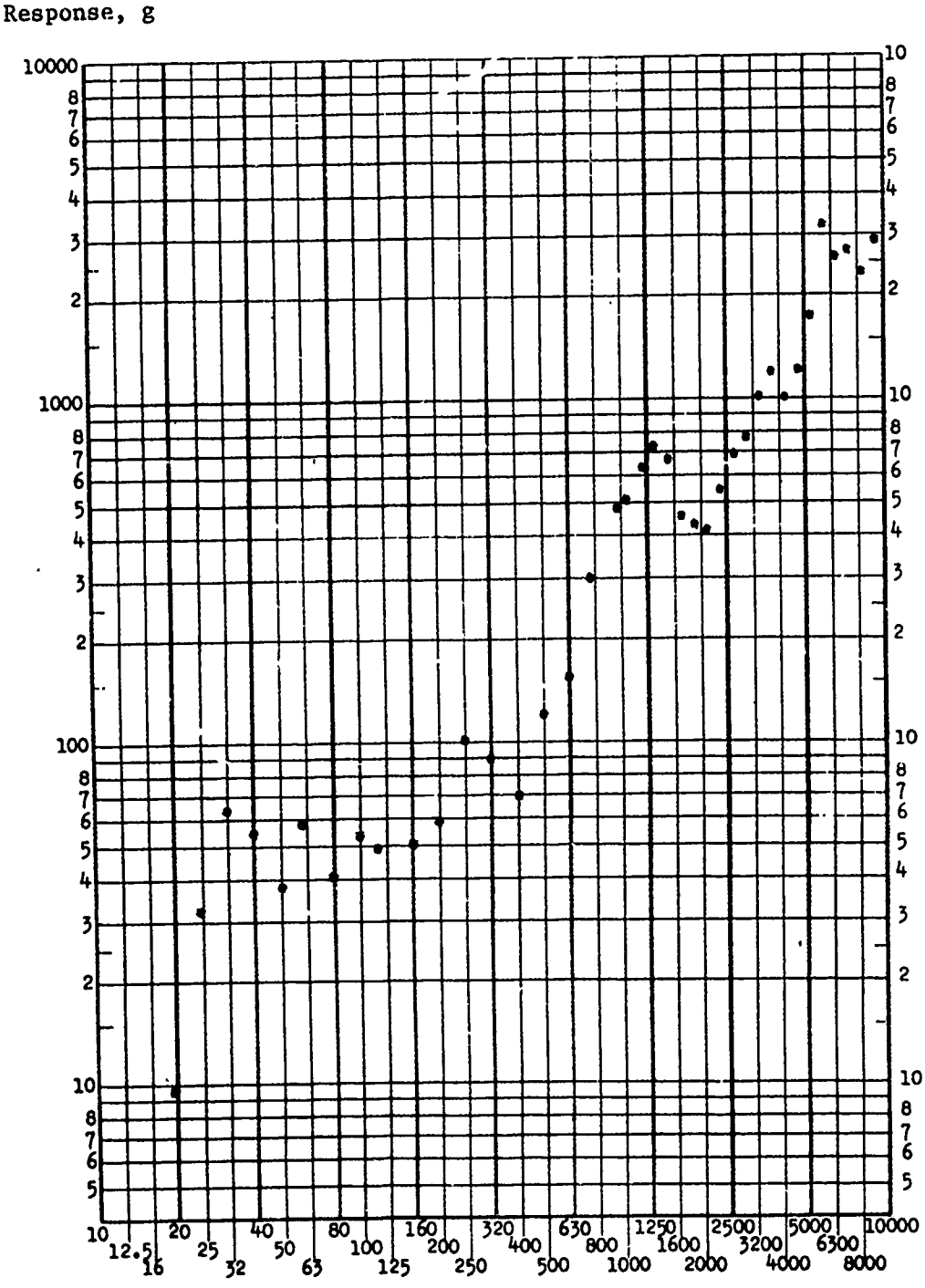


Figure 32 Run 32 Shock Response Spectrum



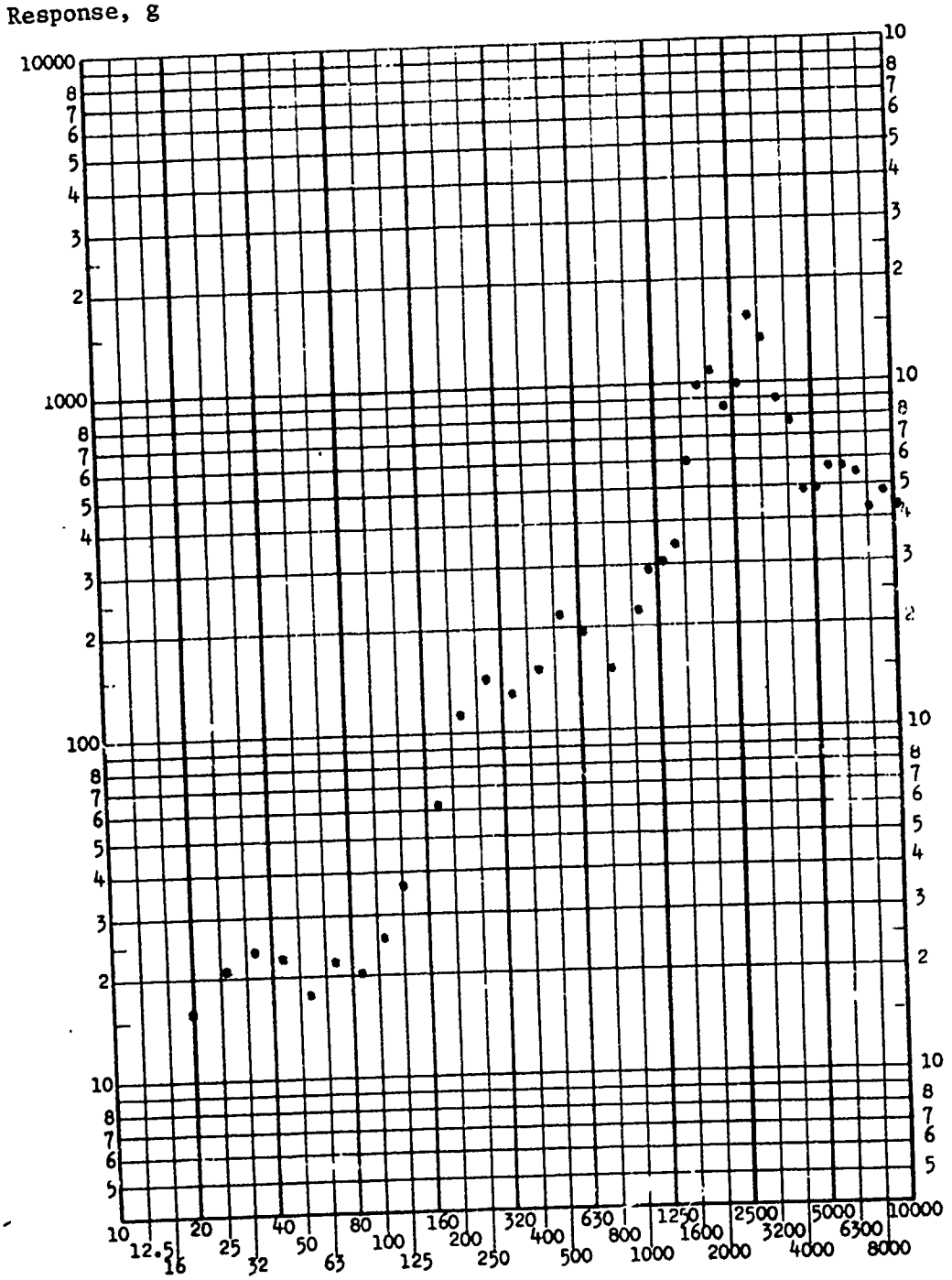
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 2 - Tangential axis longeron near station 133

Figure 32 (cont)



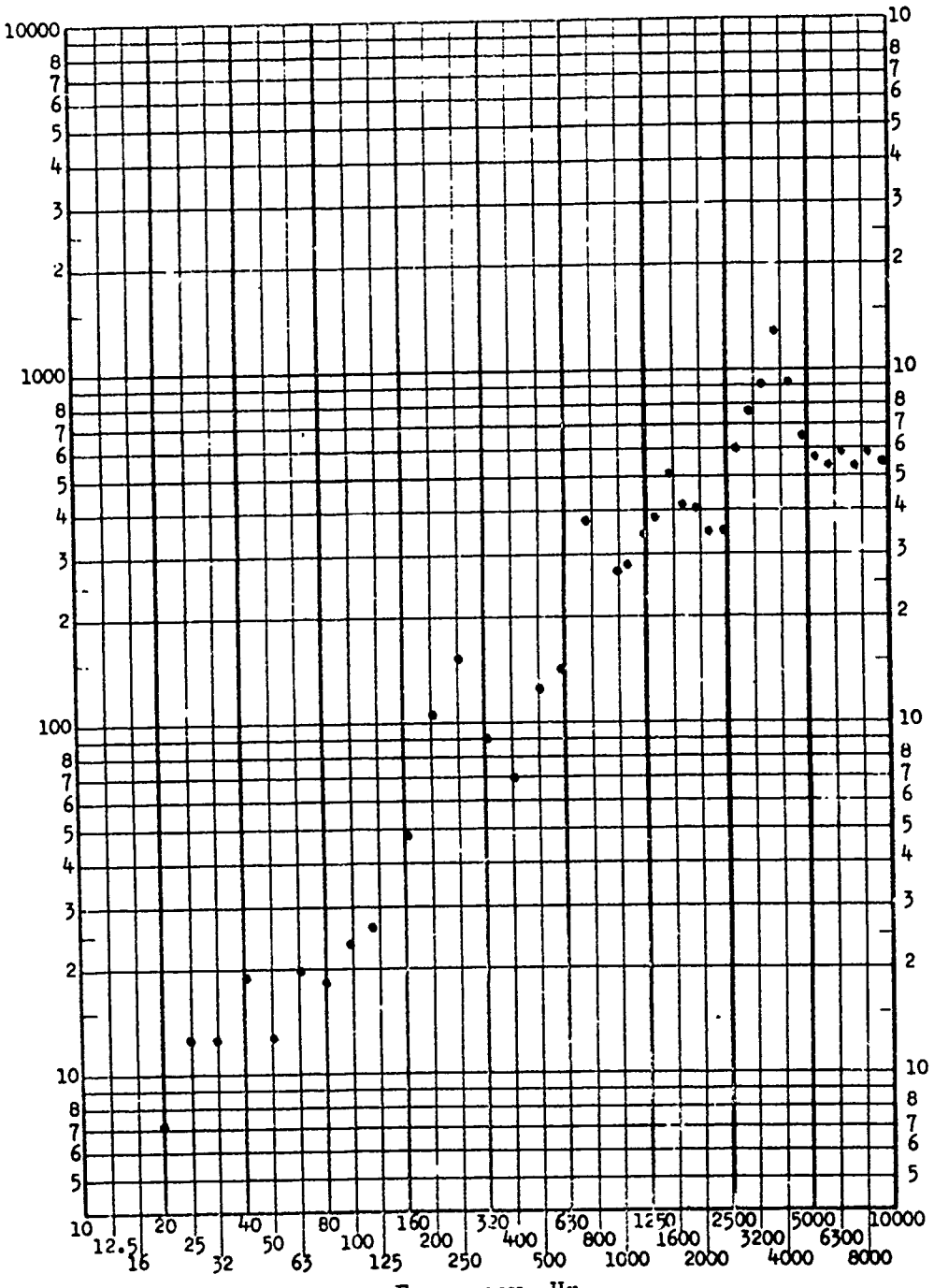
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 3 - Radial axis longeron near station 133

Figure 32 (cont)



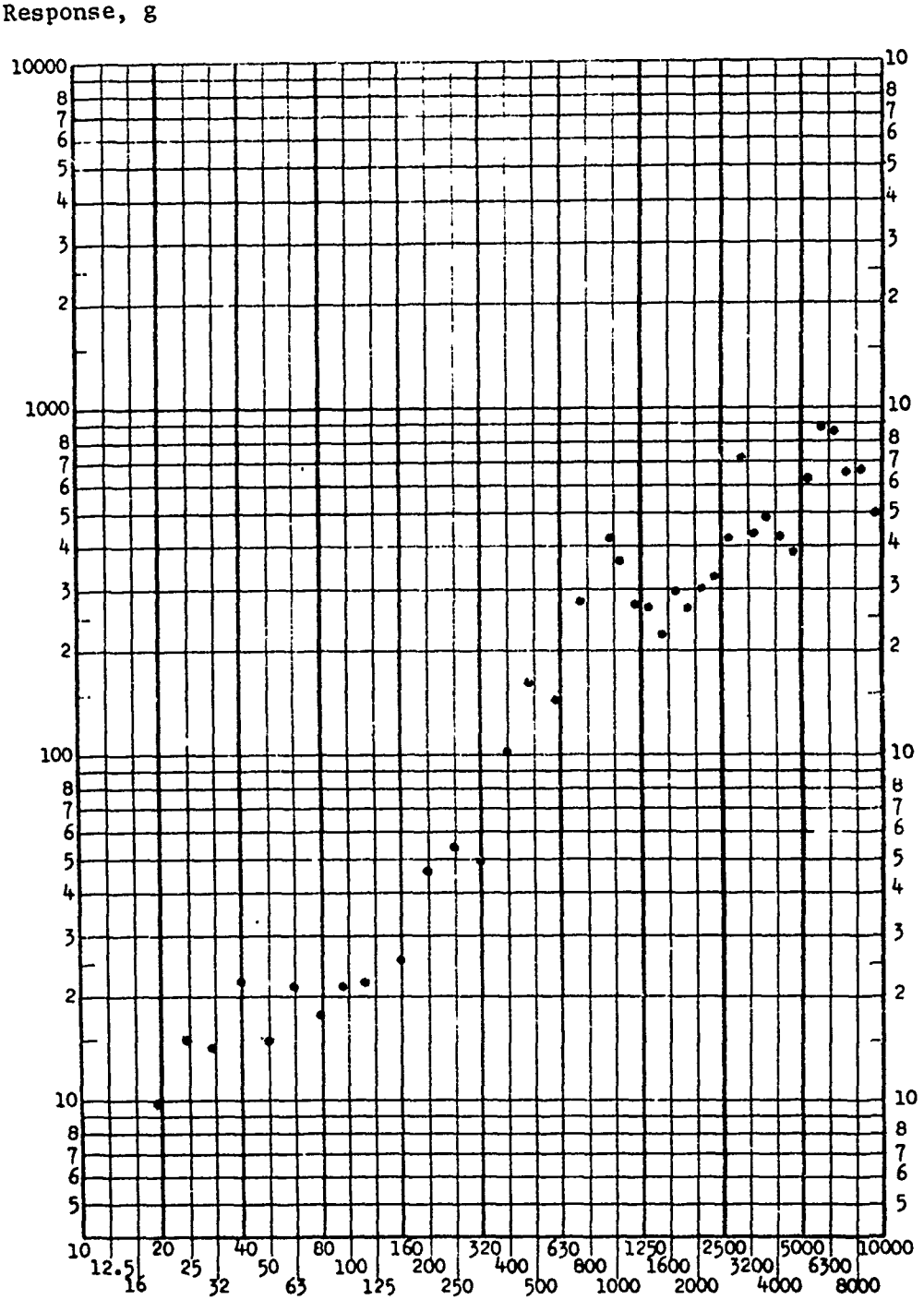
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 32 (cont)



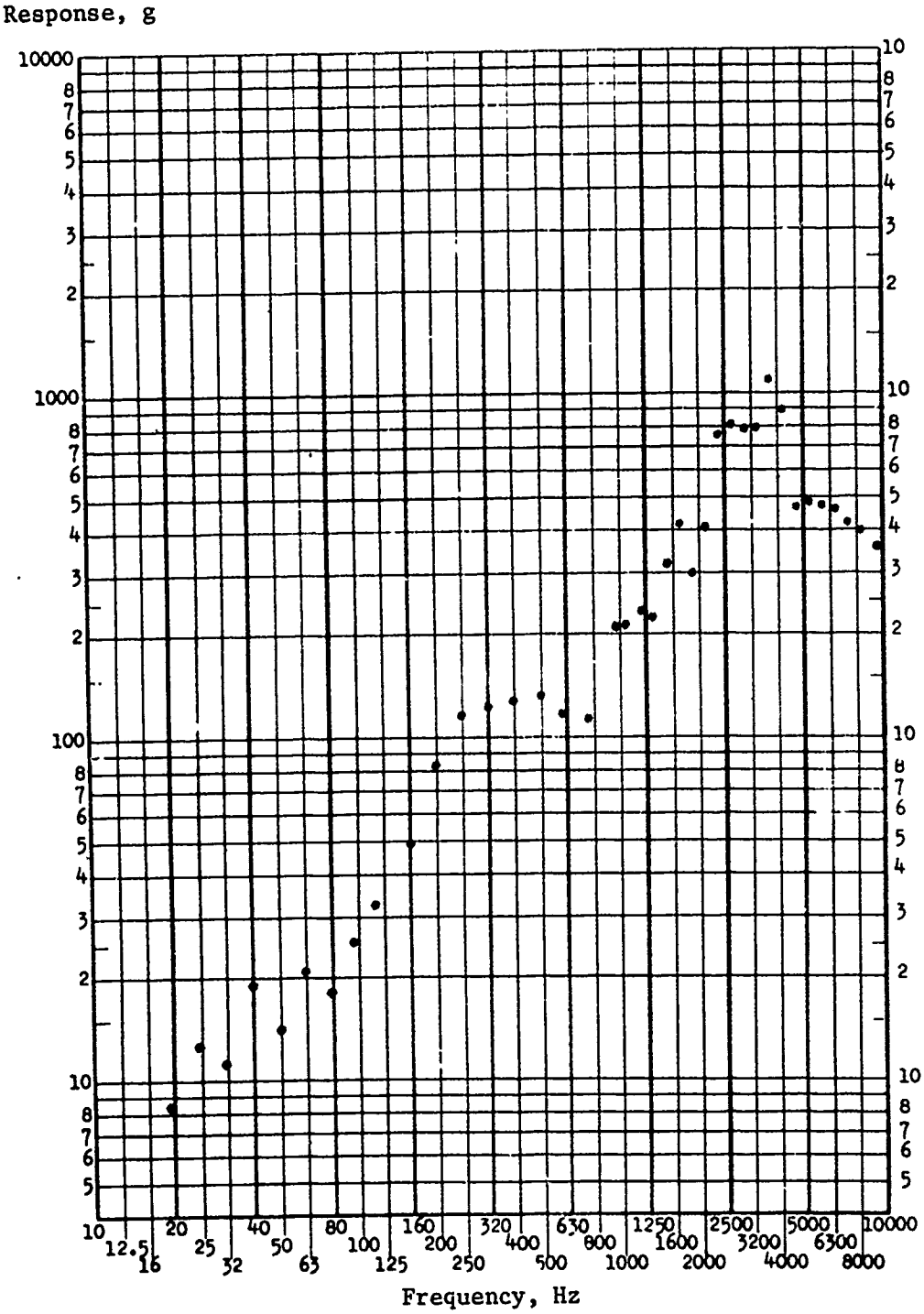
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 5 - Tangential axis longeron near station 117

Figure 32 (cont)



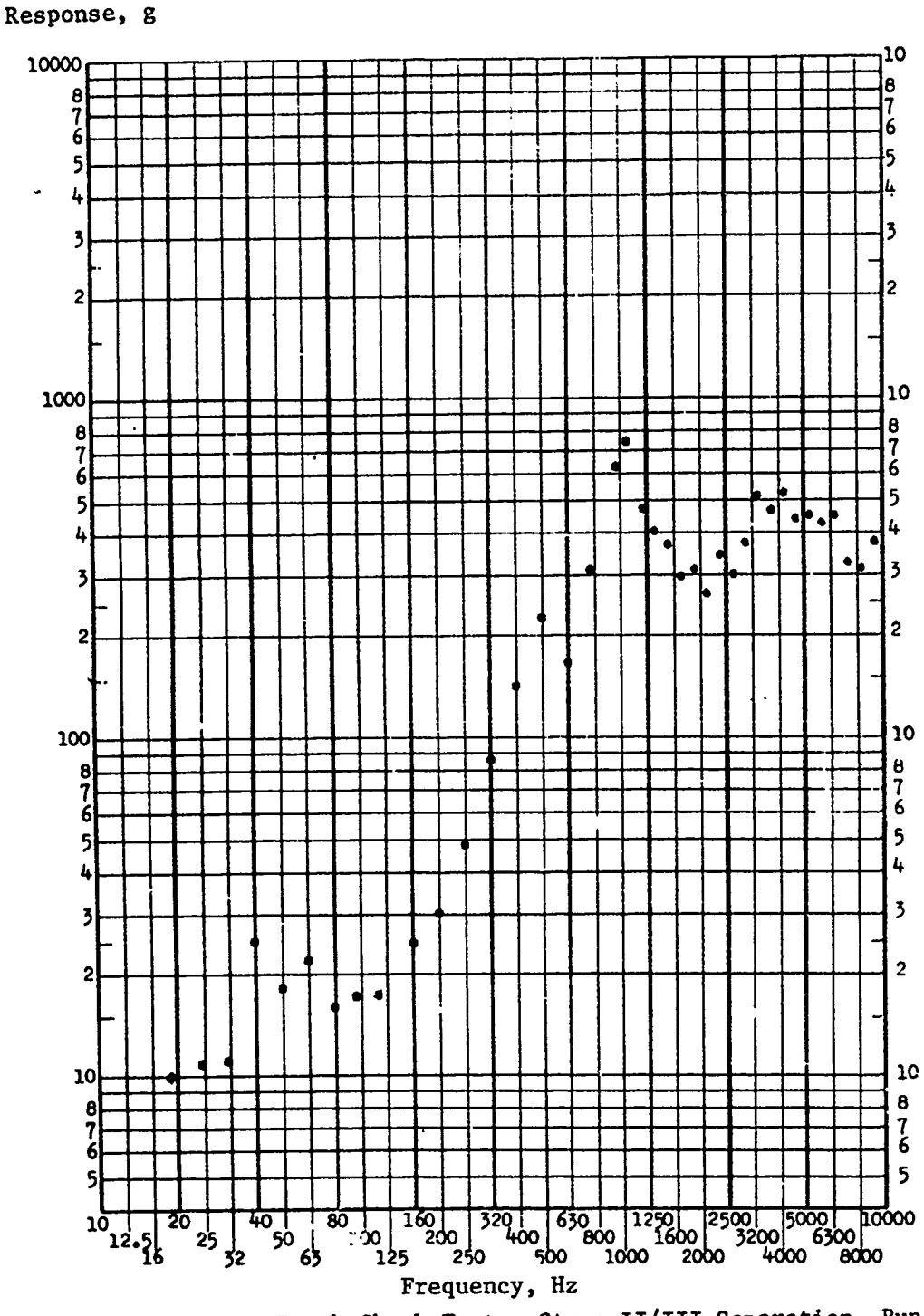
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 6 - Radial axis longeron near station 117

Figure 32 (cont)



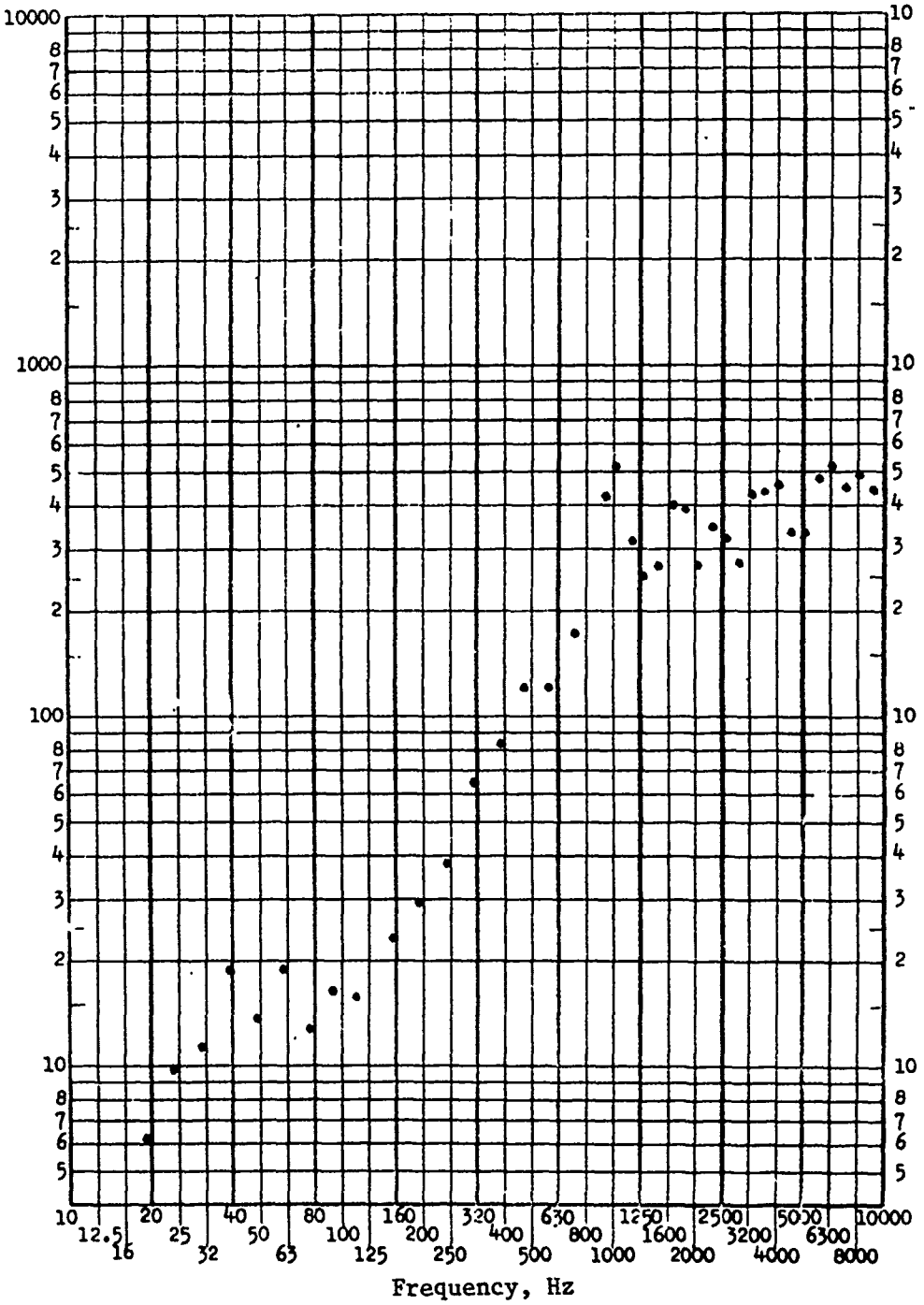
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 32 (cont)



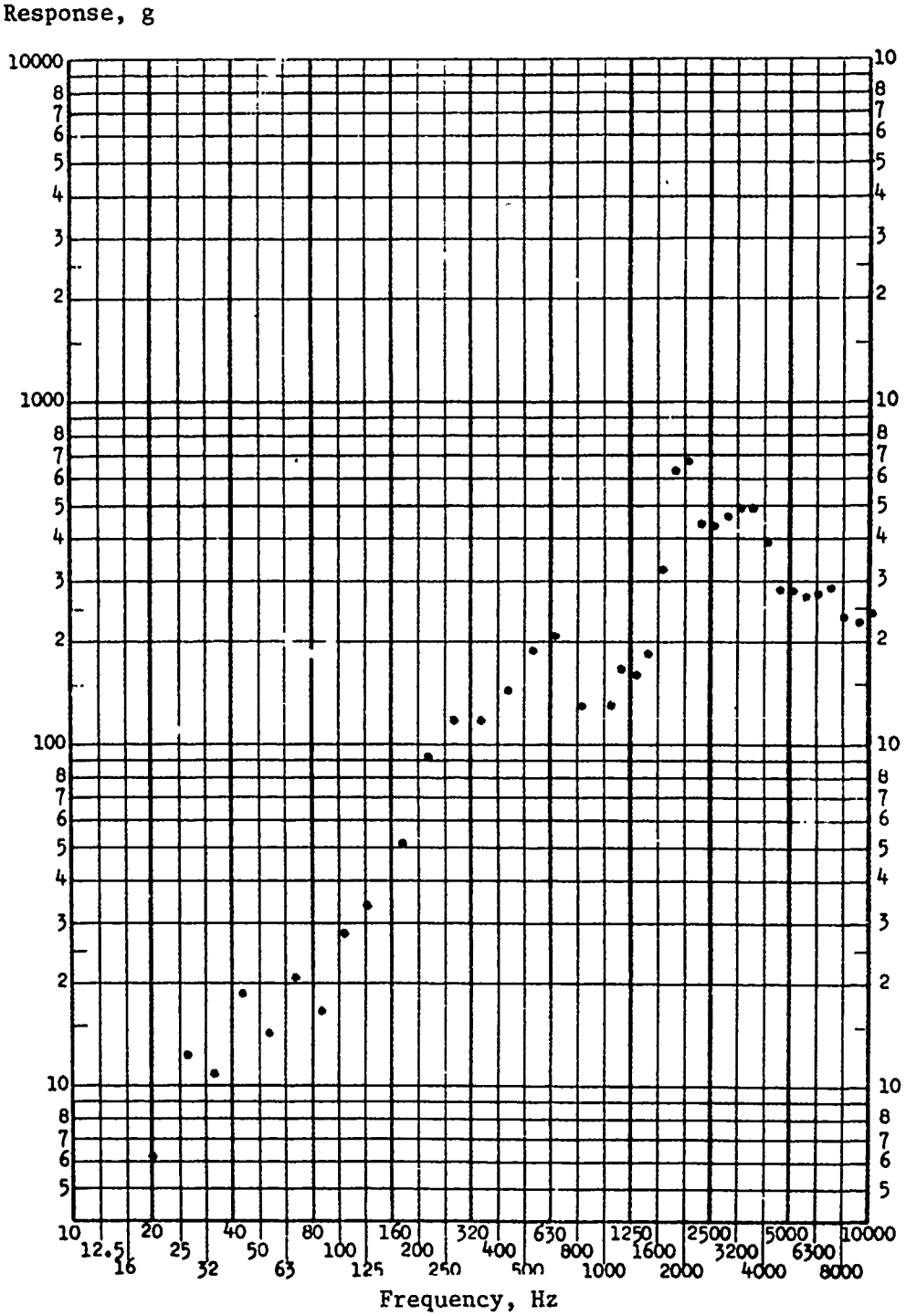
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 8 - Tangential axis longeron near station 77

Figure 32 (cont)



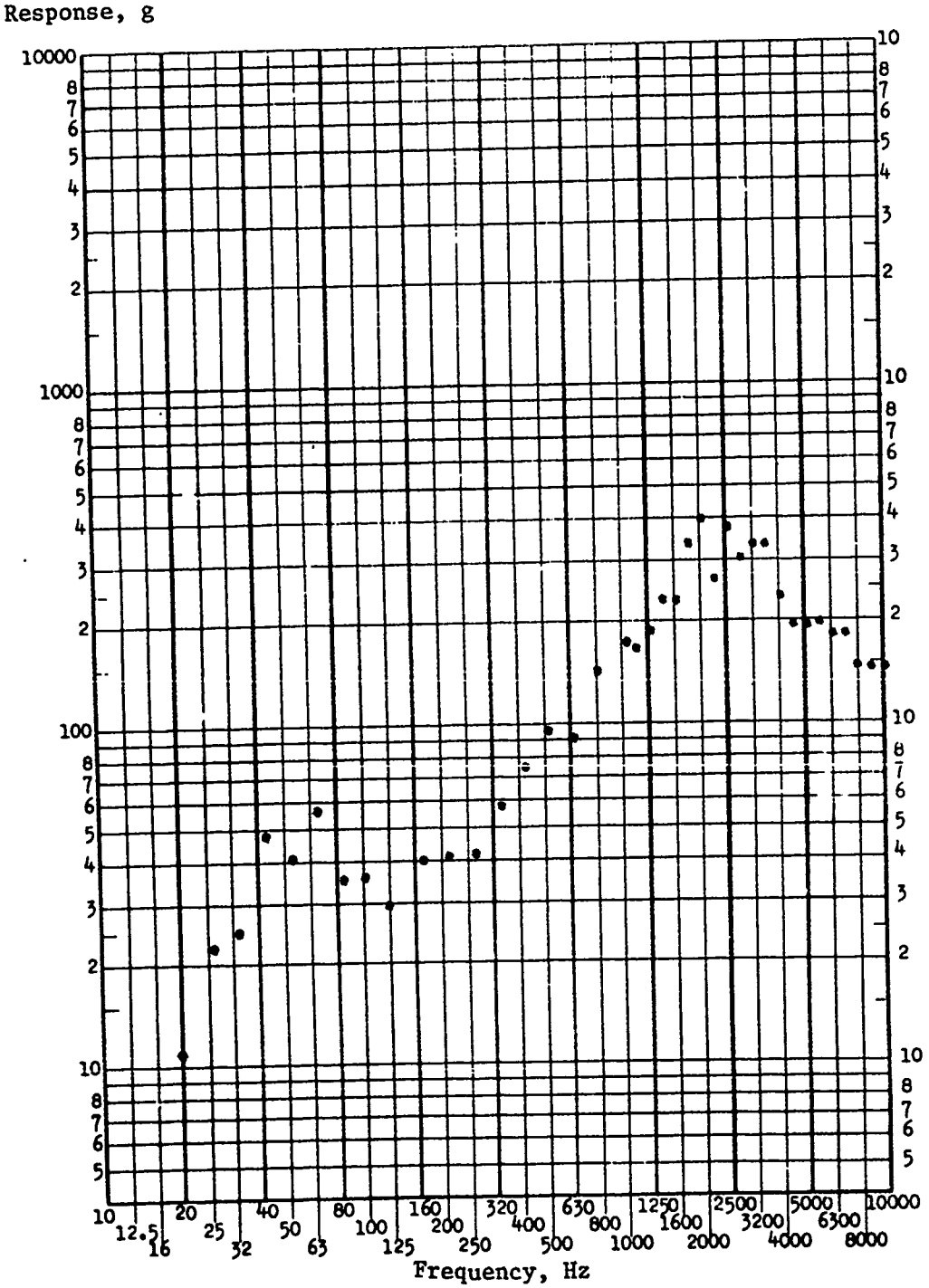
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 9 - Radial axis longeron near station 77

Figure 32 (cont)



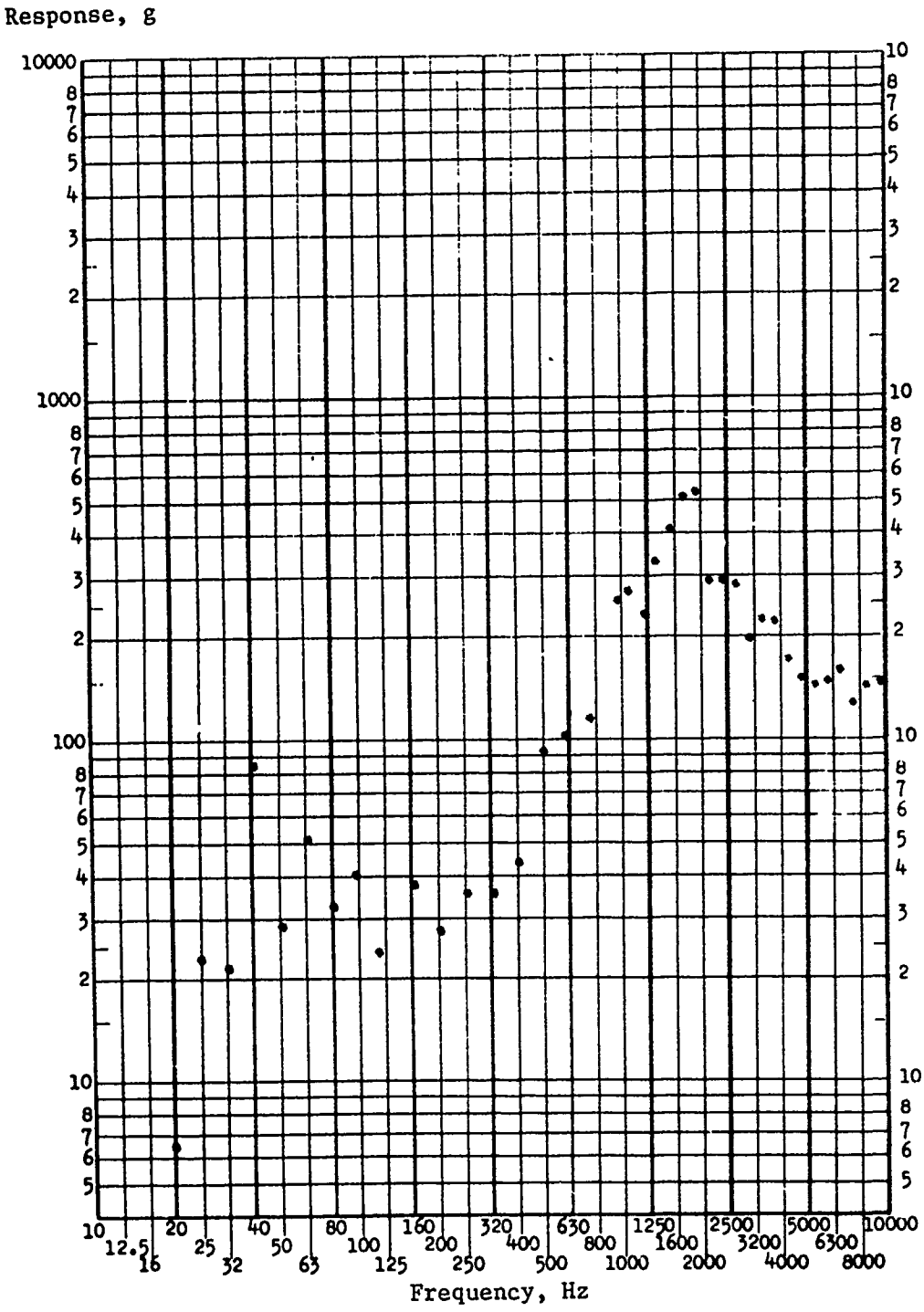
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 32 (cont)



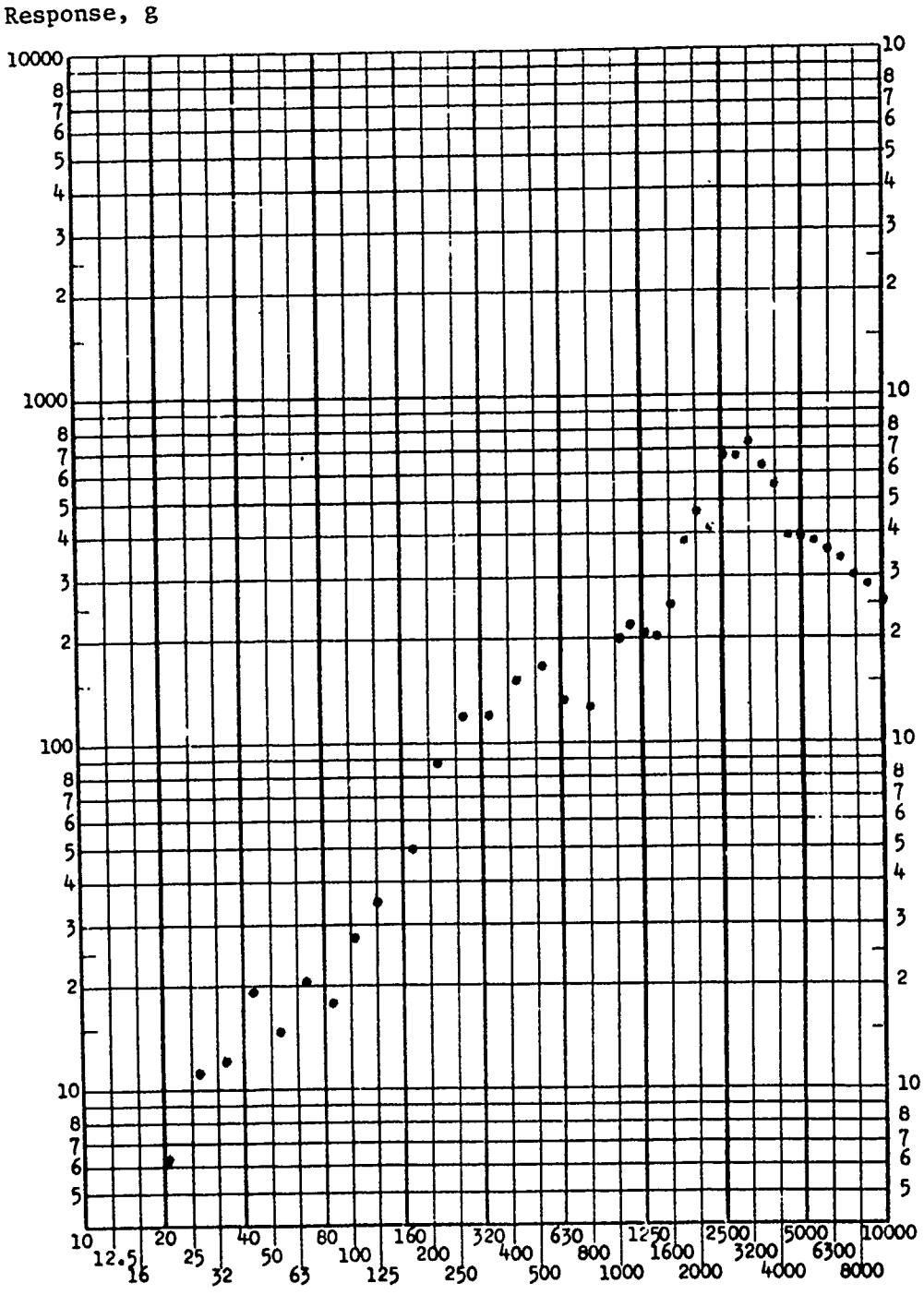
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 32 (cont)



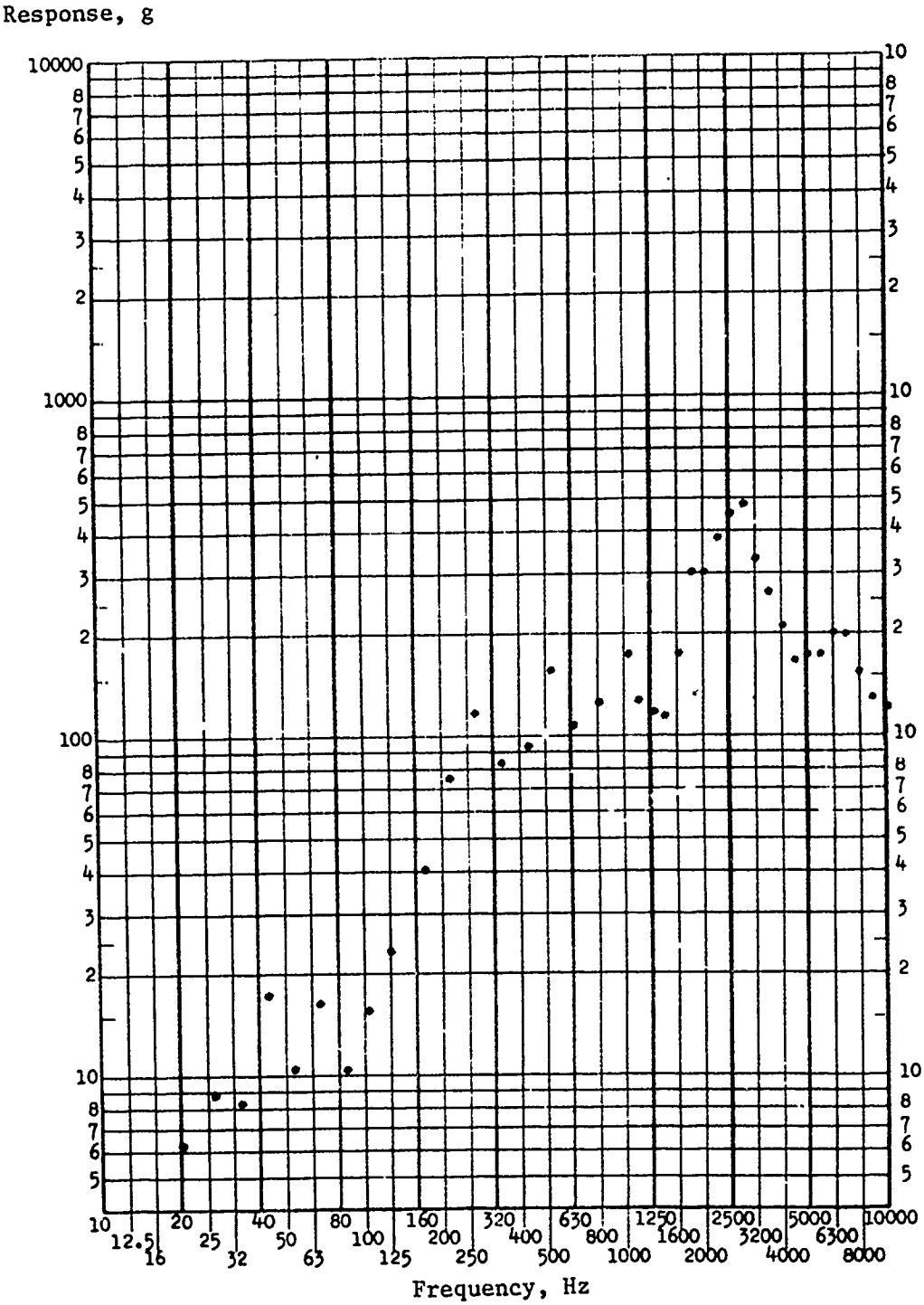
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 32 (cont)



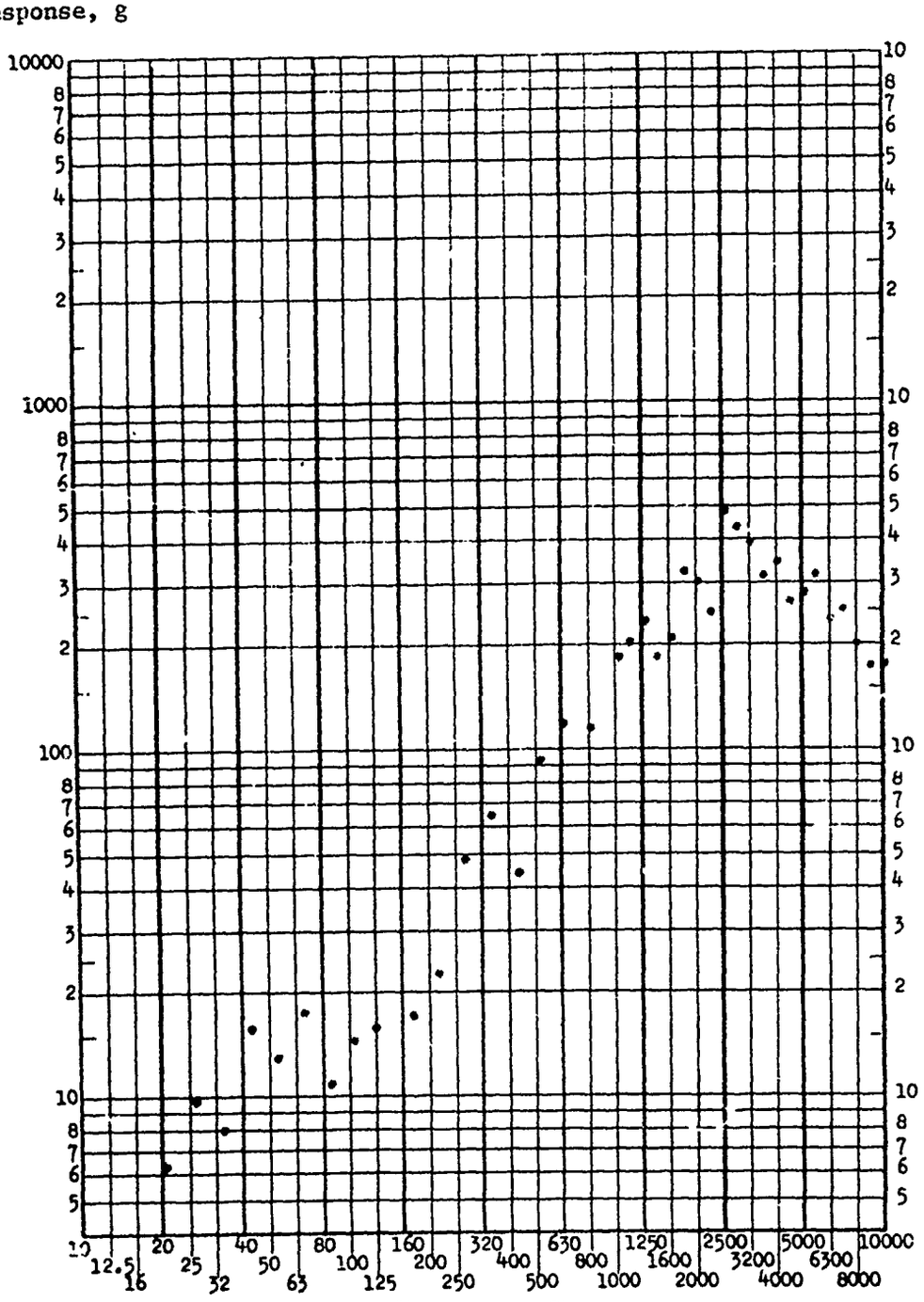
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 32 (cont)



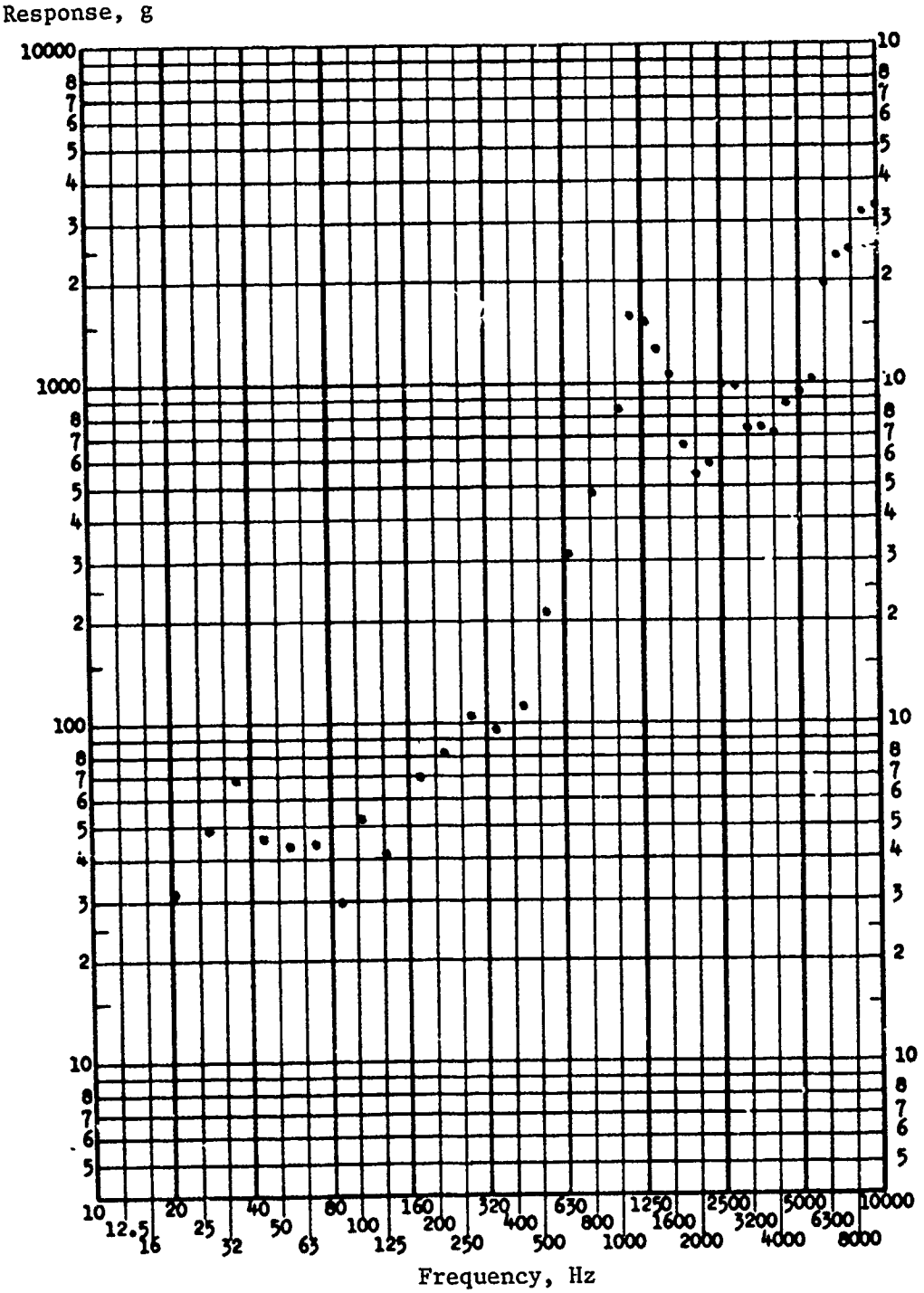
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 32 (cont)



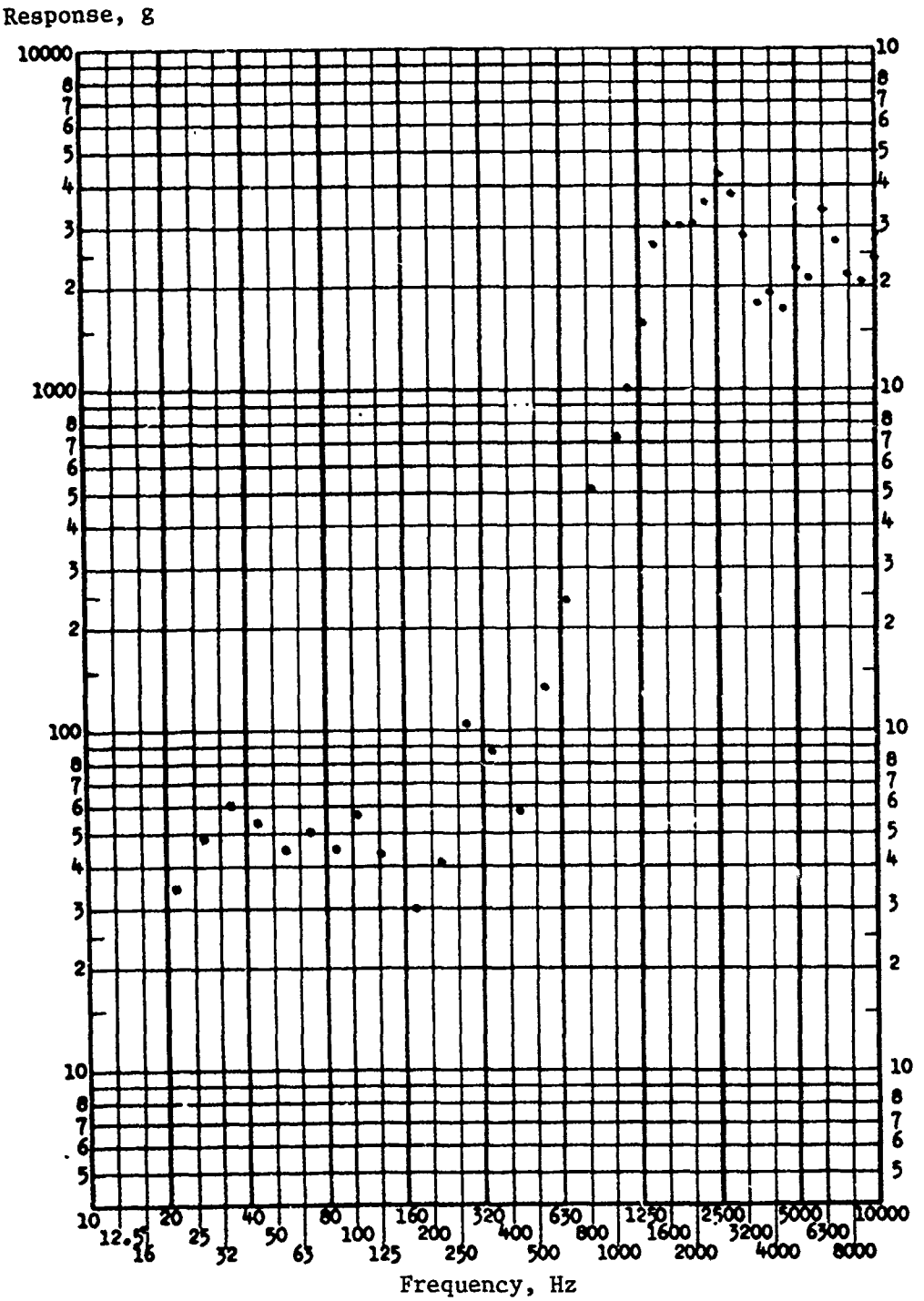
Bench Shock Test - Stage II/III Separation, Run 32
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 32 (concl)



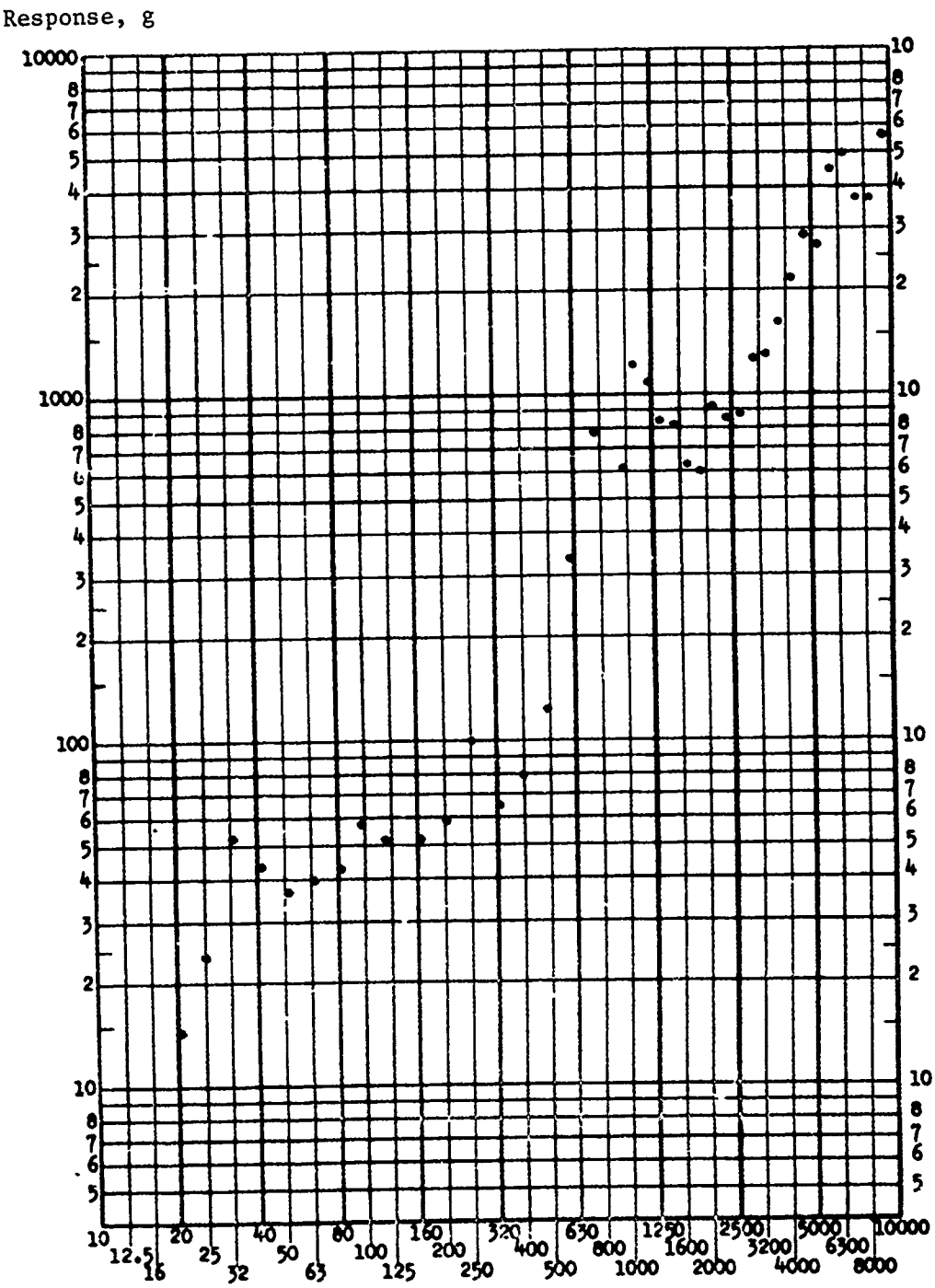
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 33 Run 33 Shock Response Spectrum



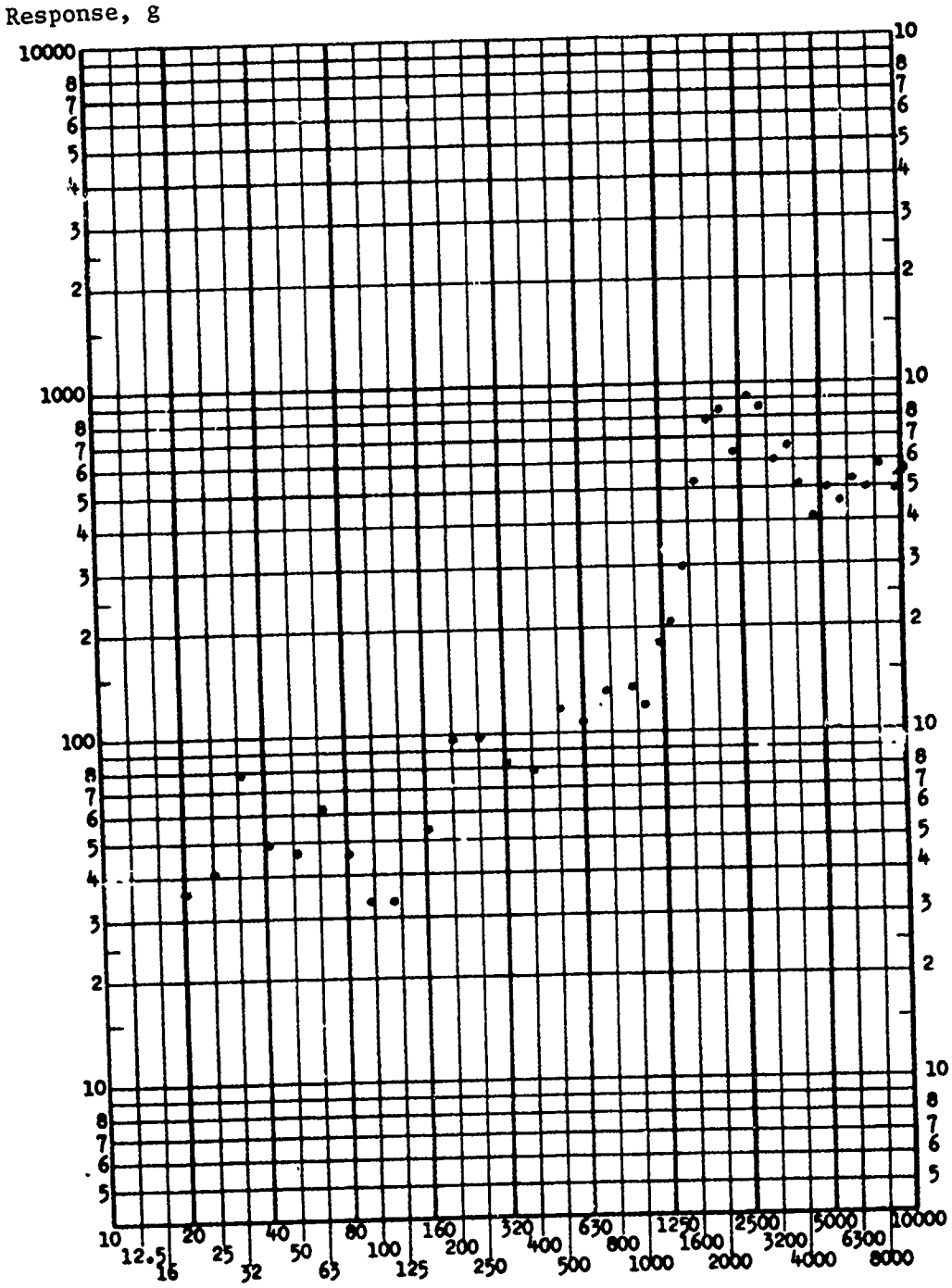
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 33 (cont)



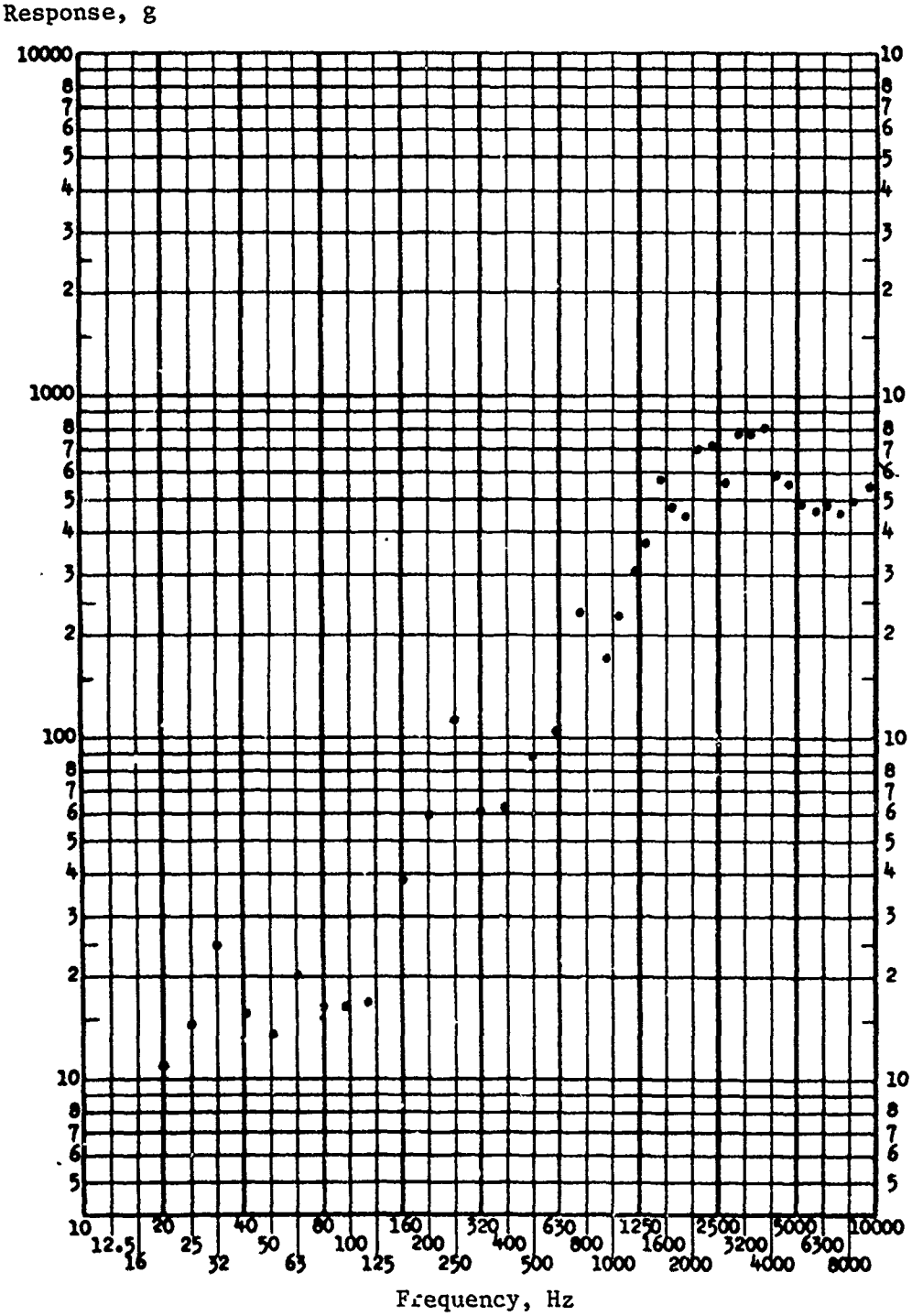
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 33 (cont)



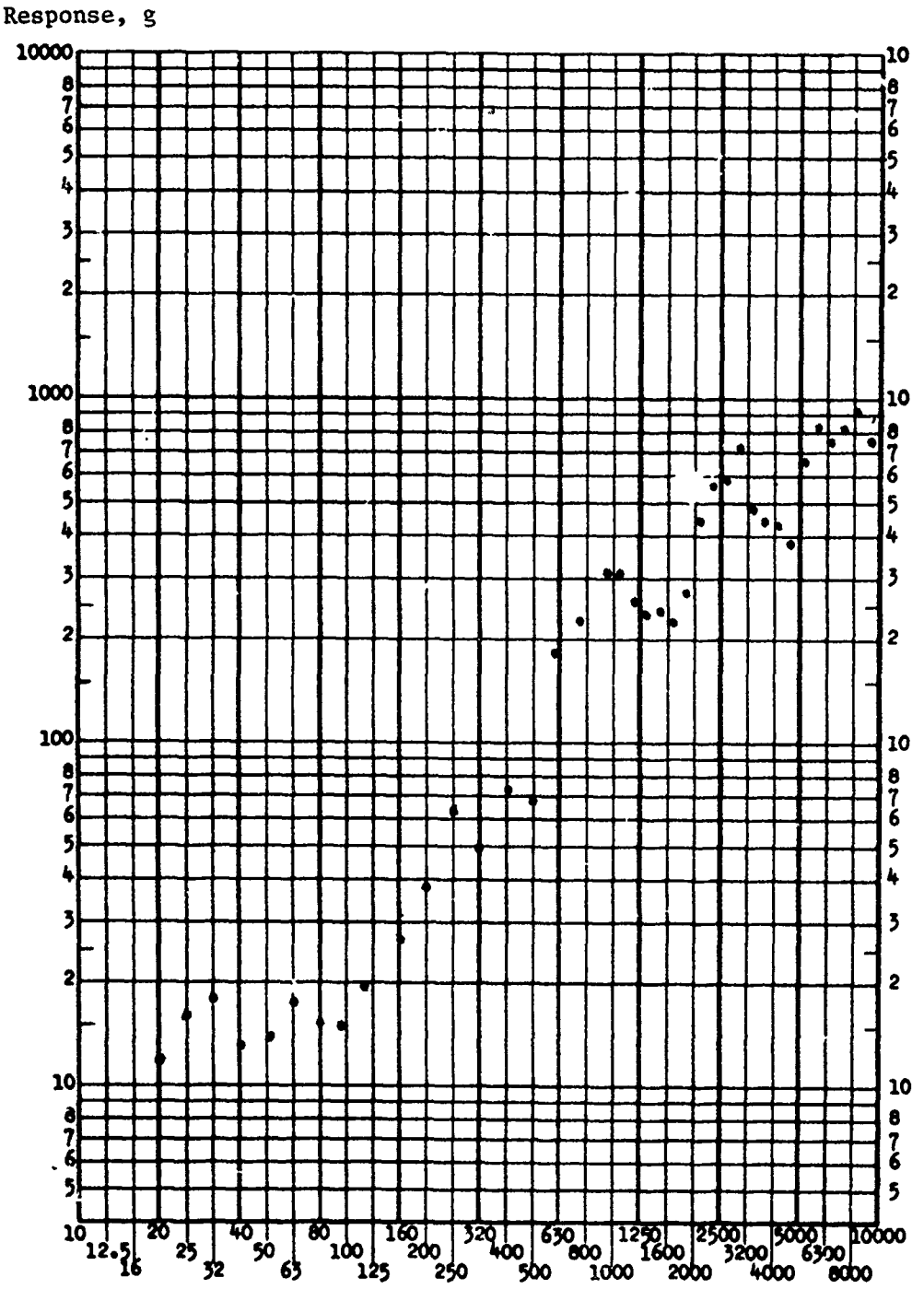
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 33 (cont)



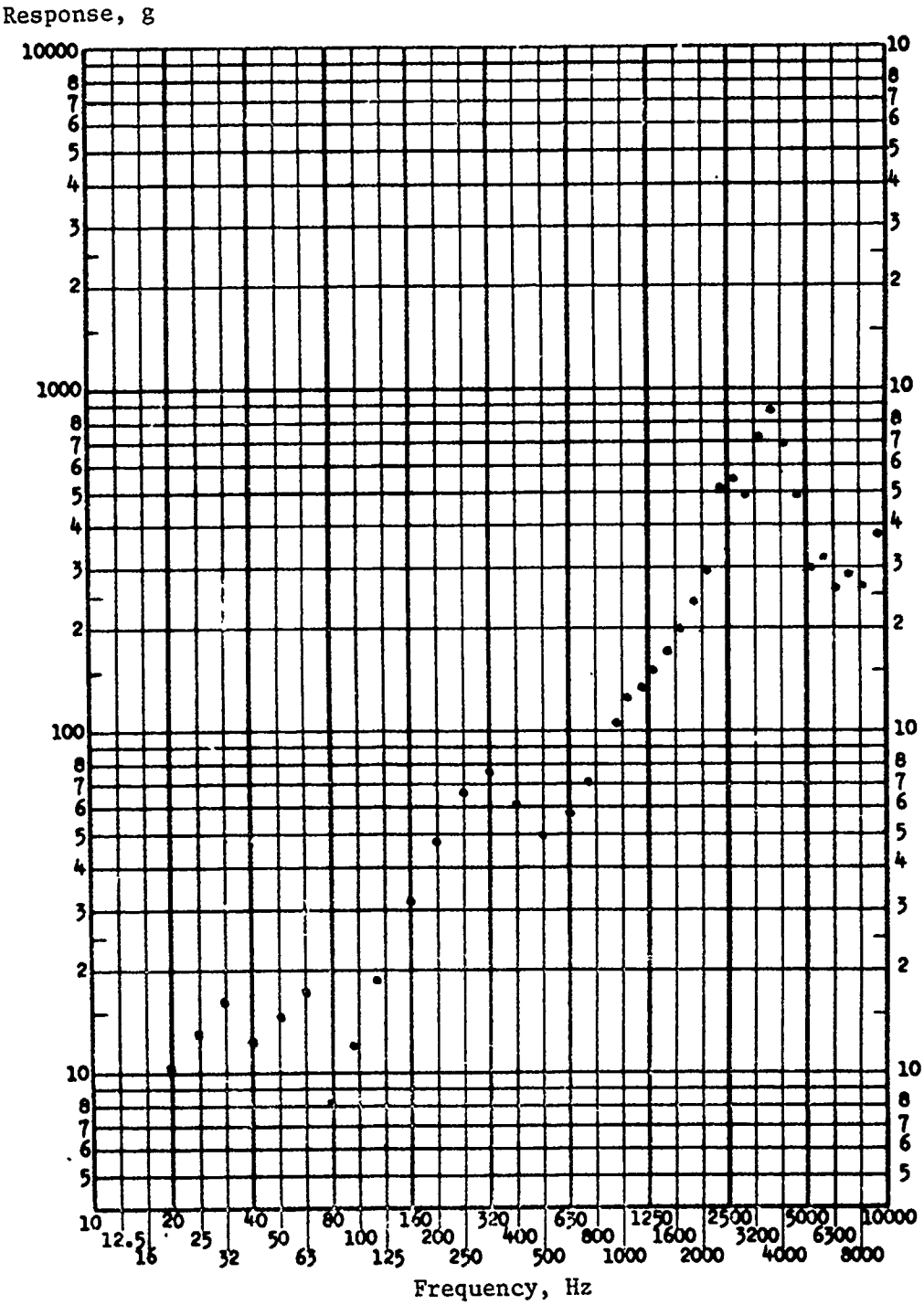
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 5 - Tangential axis longeron near
station 117

Figure 33 (cont)



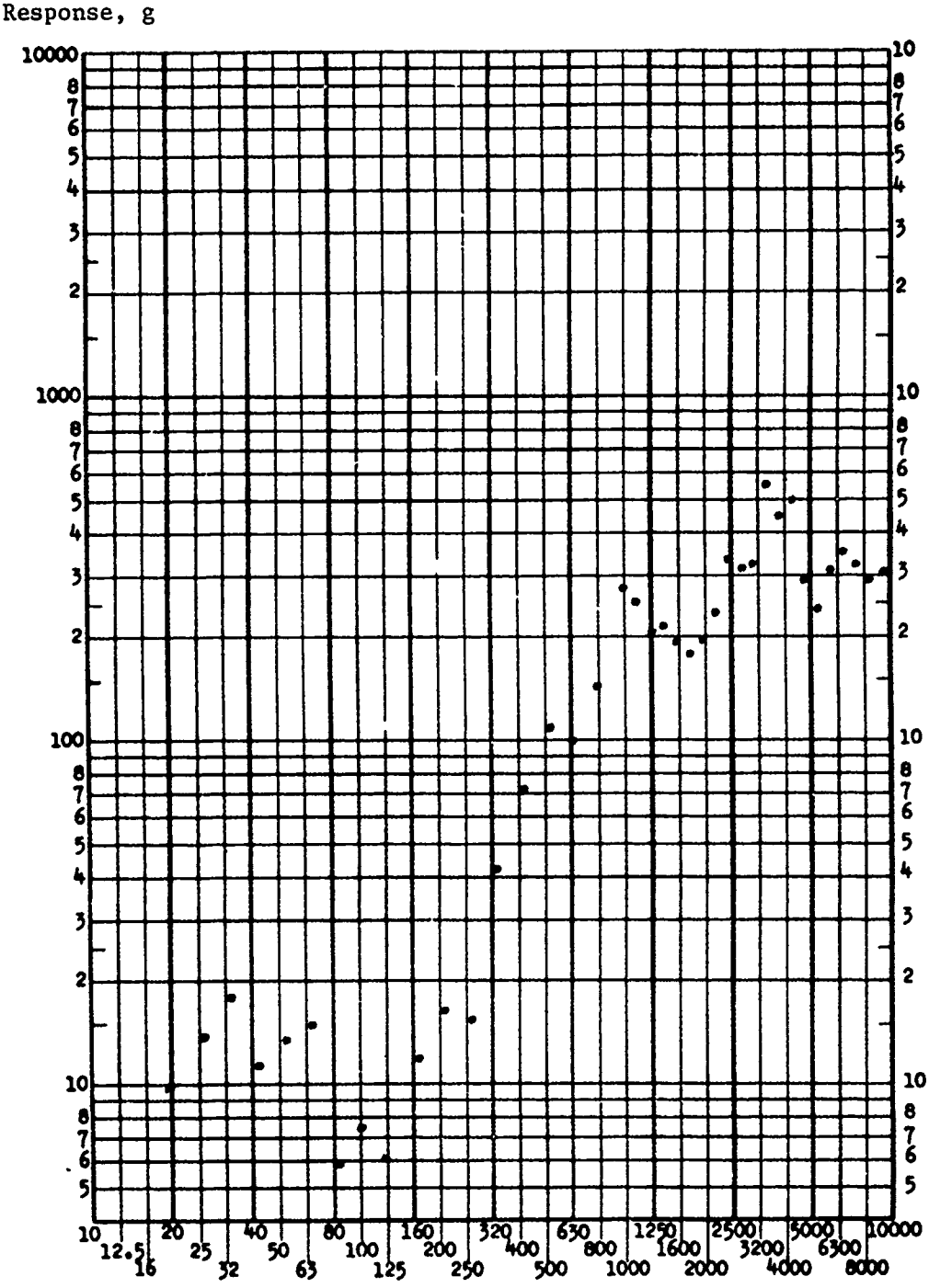
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 6 - Radial axis longeron near station 117

Figure 33 (cont)



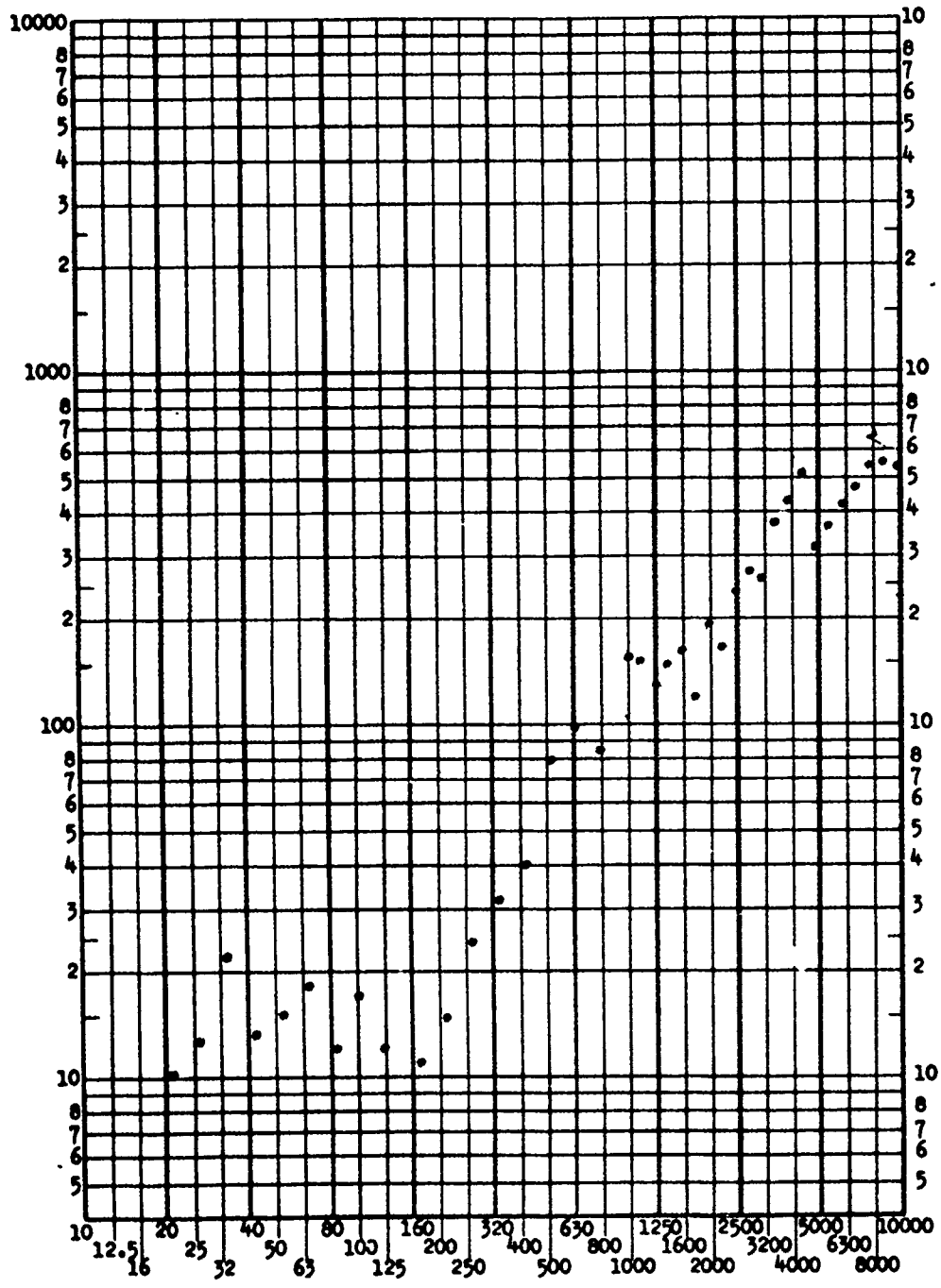
Bench Shock Test - Stage II/III Separation, Run 33
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 33 (cont)



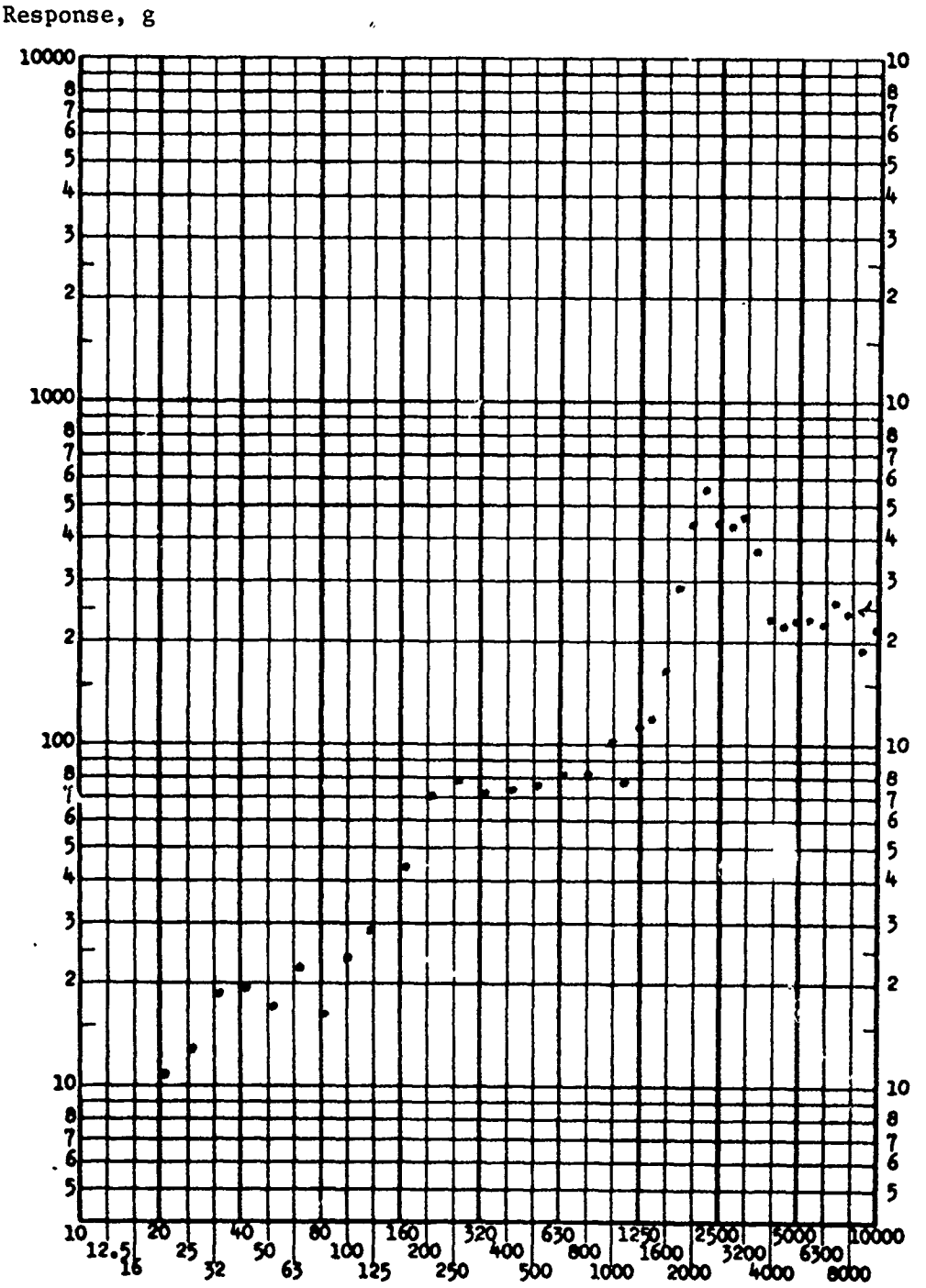
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 8 - Tangential axis longeron near station 77

Figure 33 (cont)



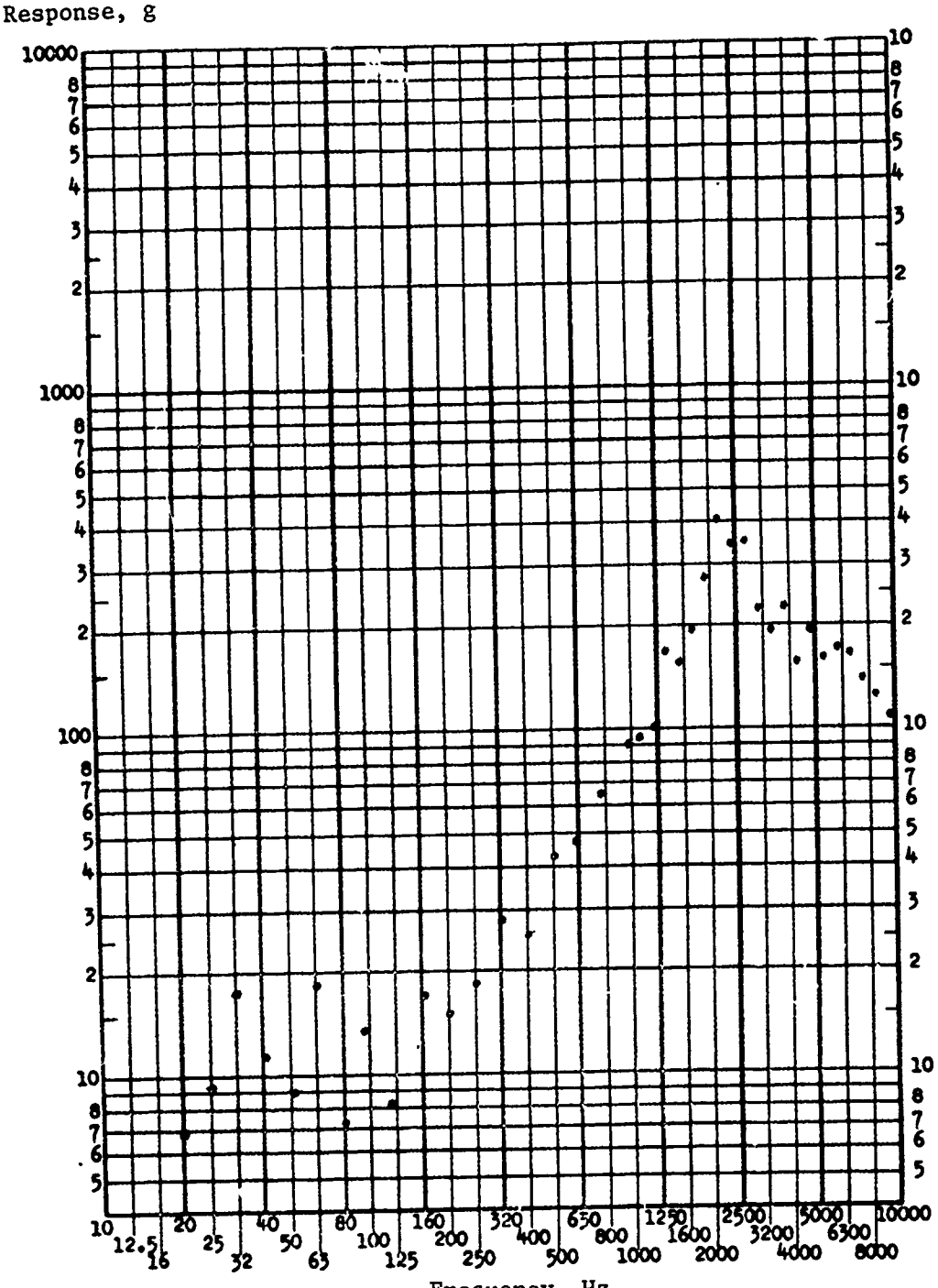
Bench Shock Test - Stage II/III Separation, Run 33
Measurement No. 9 - Radial axis longeron near station 77

Figure 33 (cont)



Bench Shock Test - Stage II/III Separation, Run 33
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

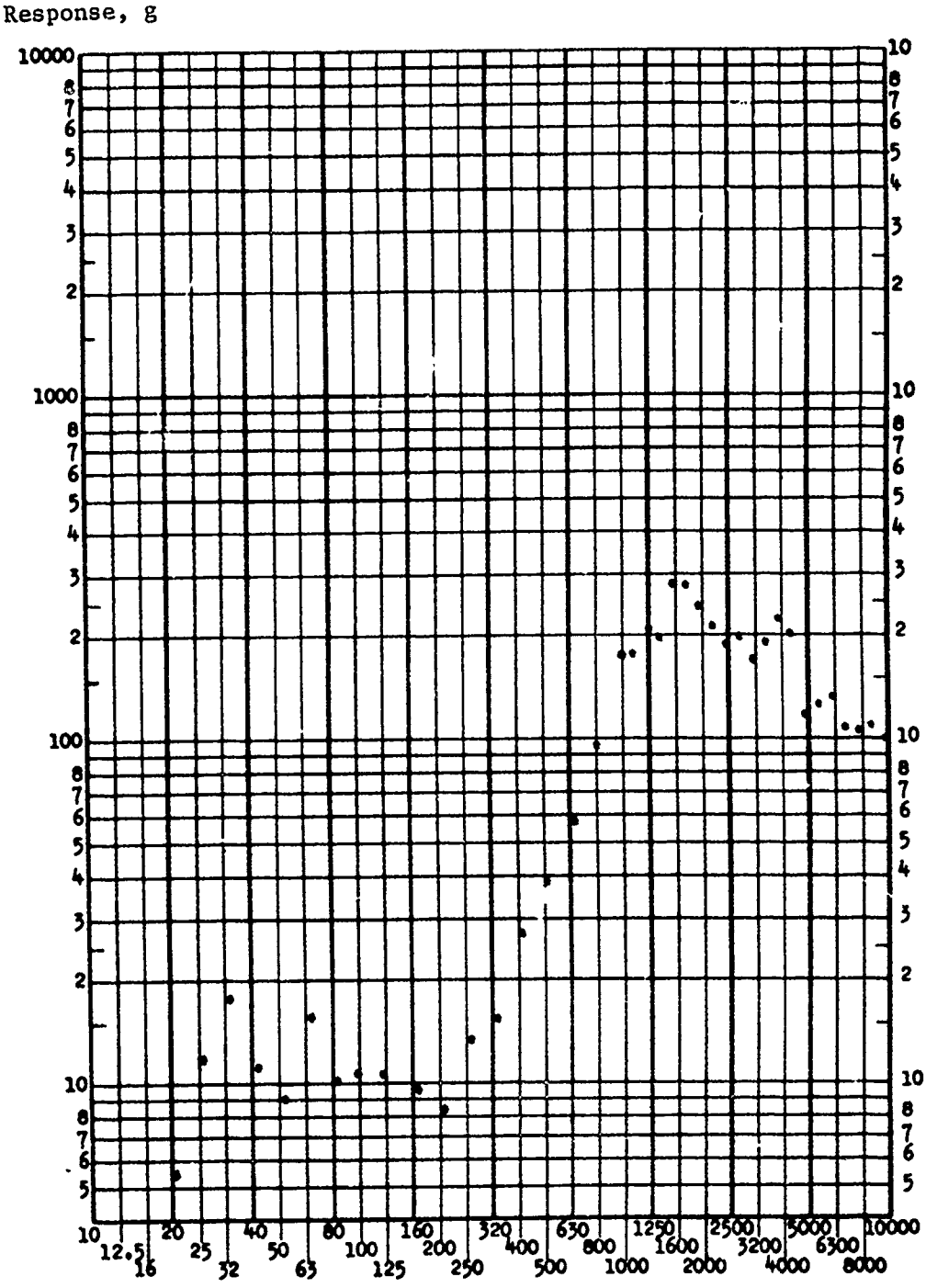
Figure 33 (cont)



Frequency, Hz

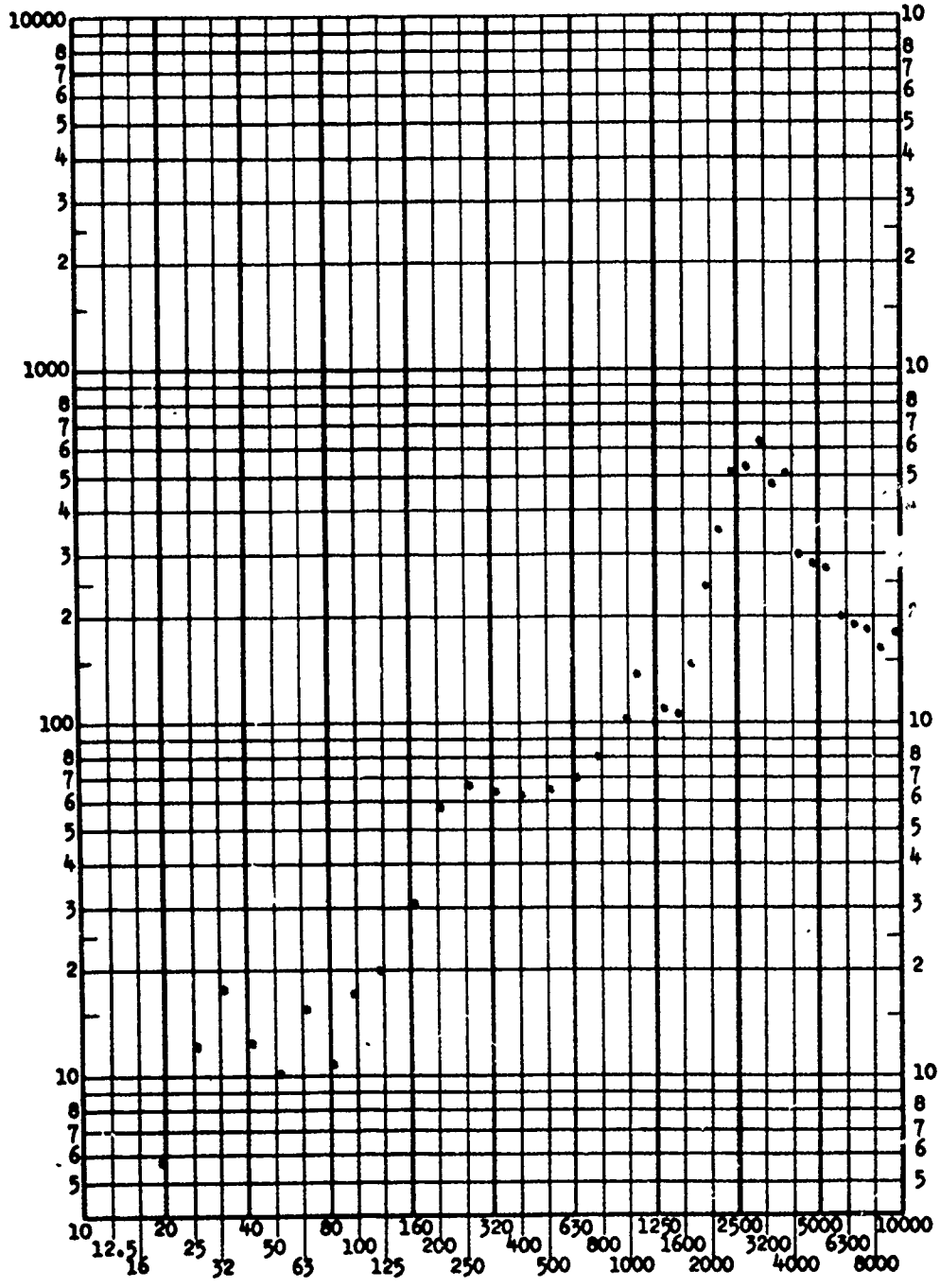
Bench Shock Test - Stage II/III Separation, Run 33
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 33 (cont)



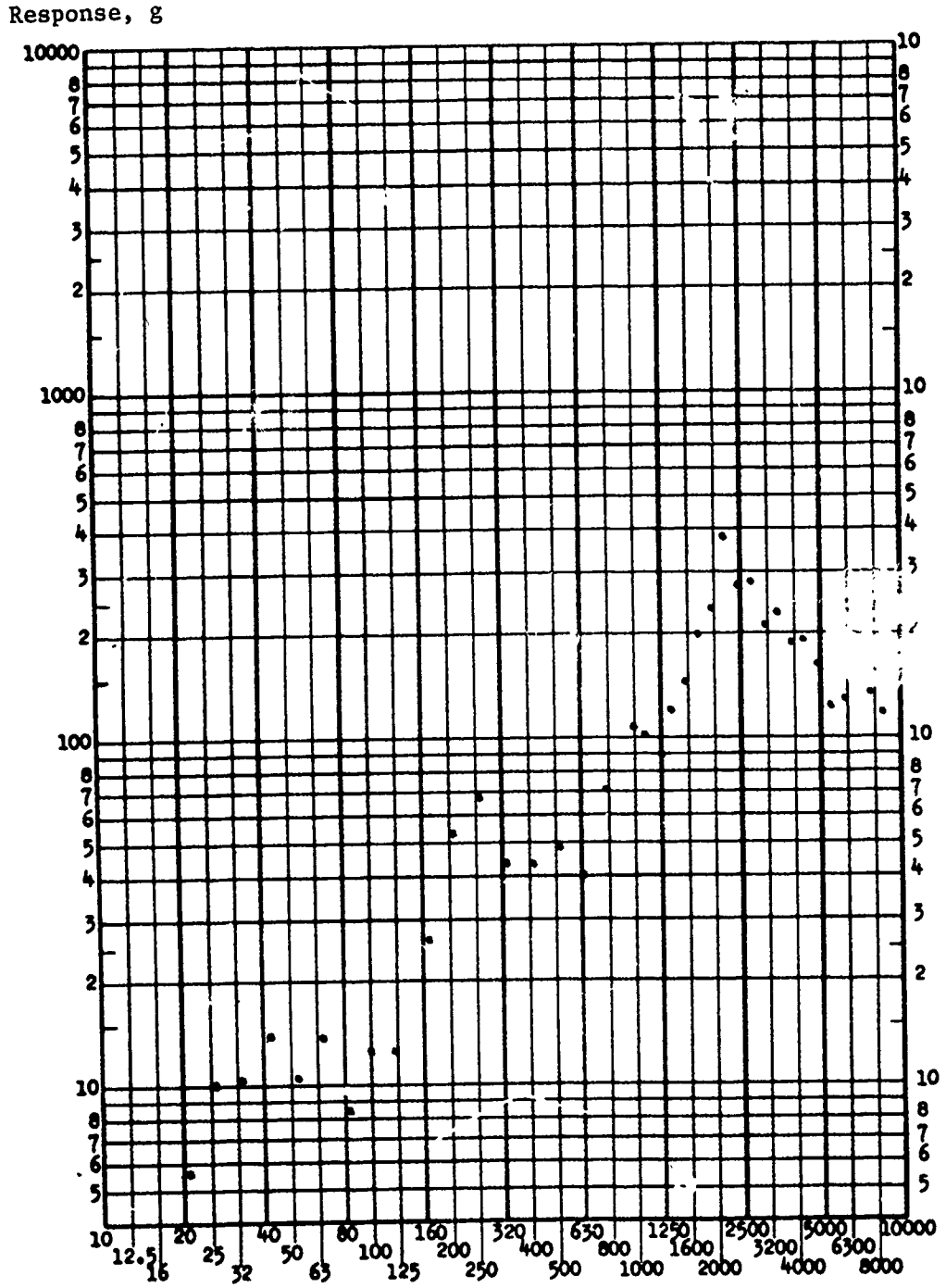
Bench Shock Test - Stage II/III Separation, Run 33
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 33 (cont)



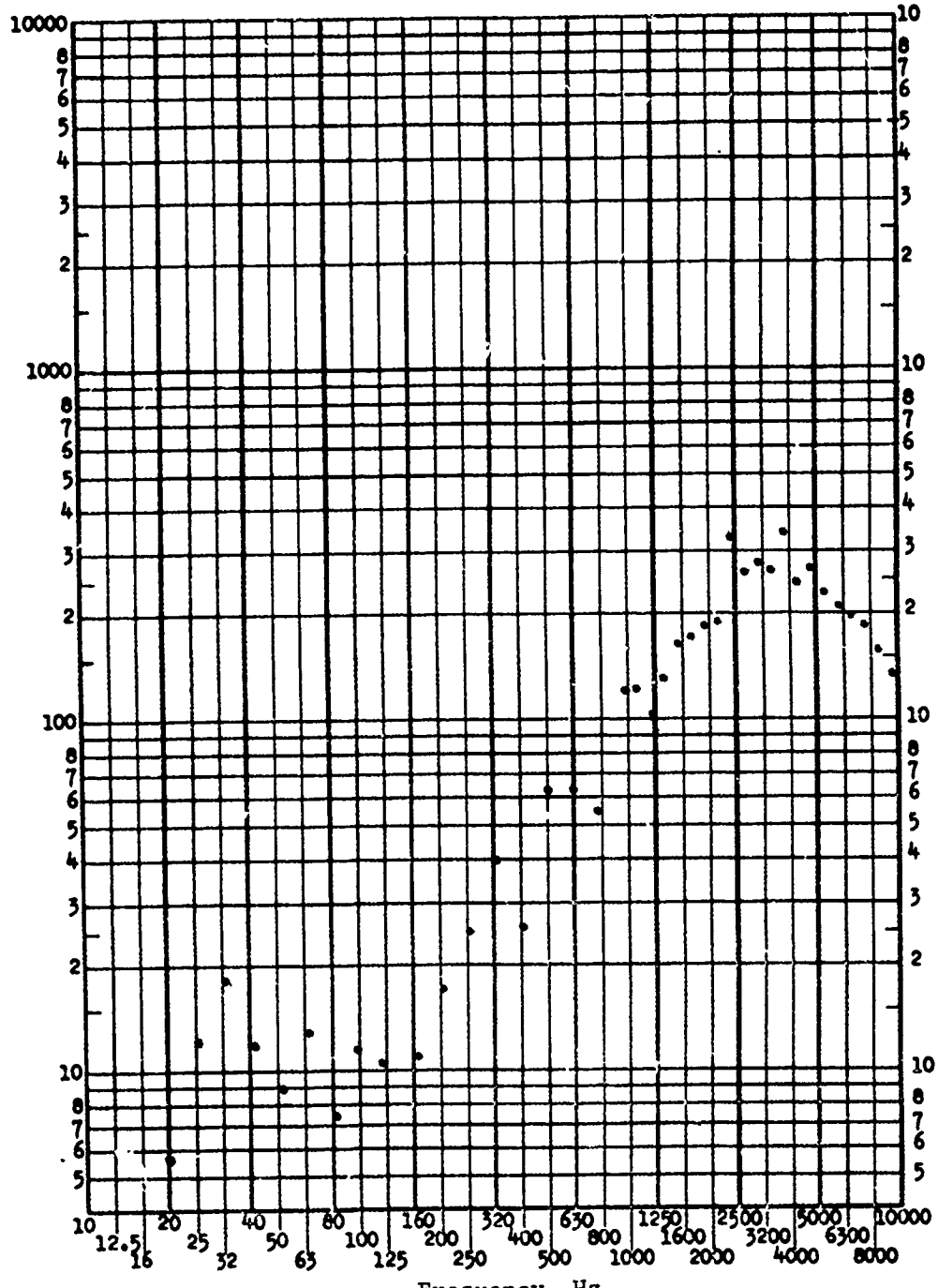
Bench Shock Test - Stage II/JII Separation, Run 33_
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 33 (cont)



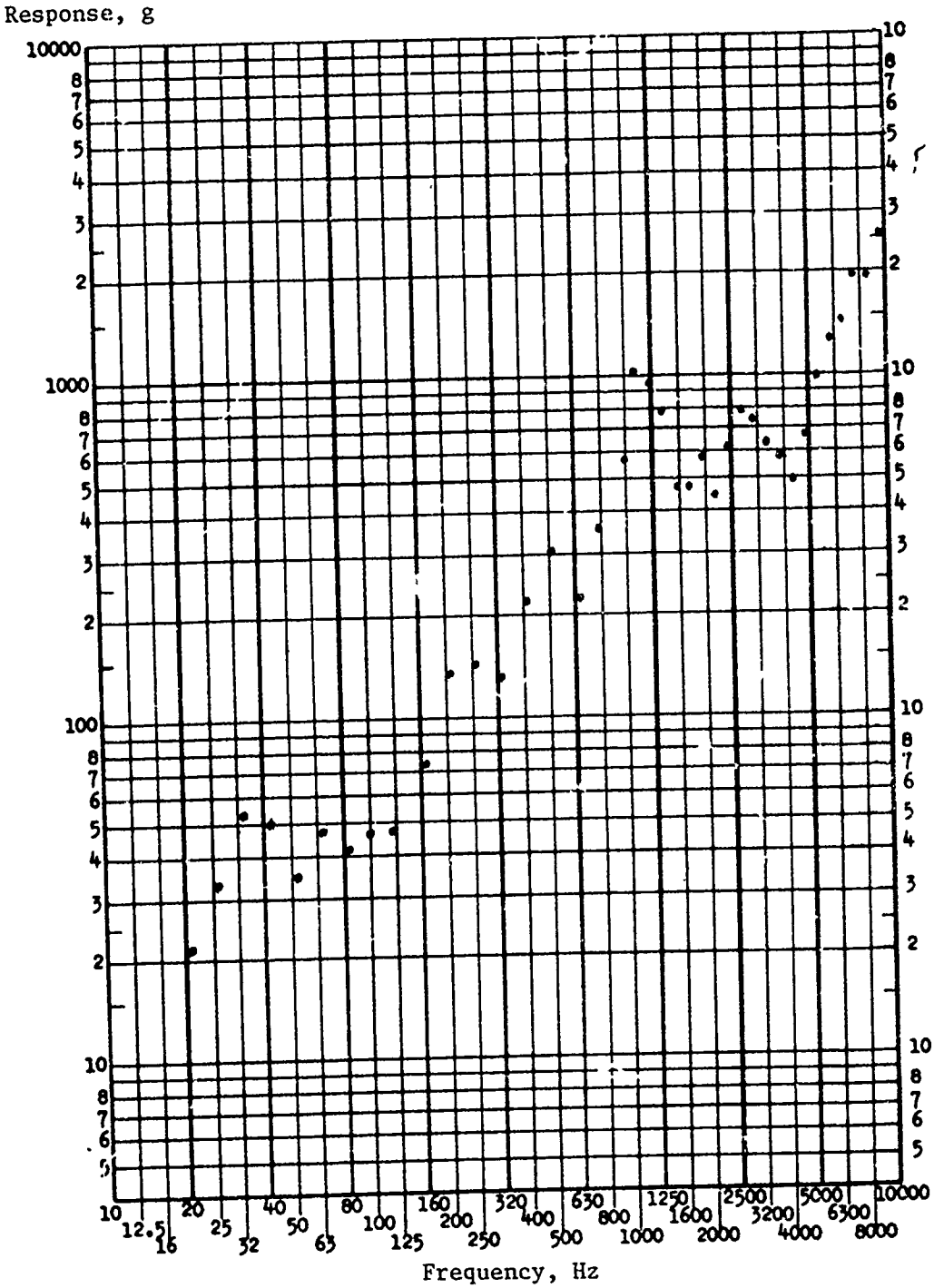
Bench Shock Test - Stage II/III Separation, Run 33 _
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 33 (cont)



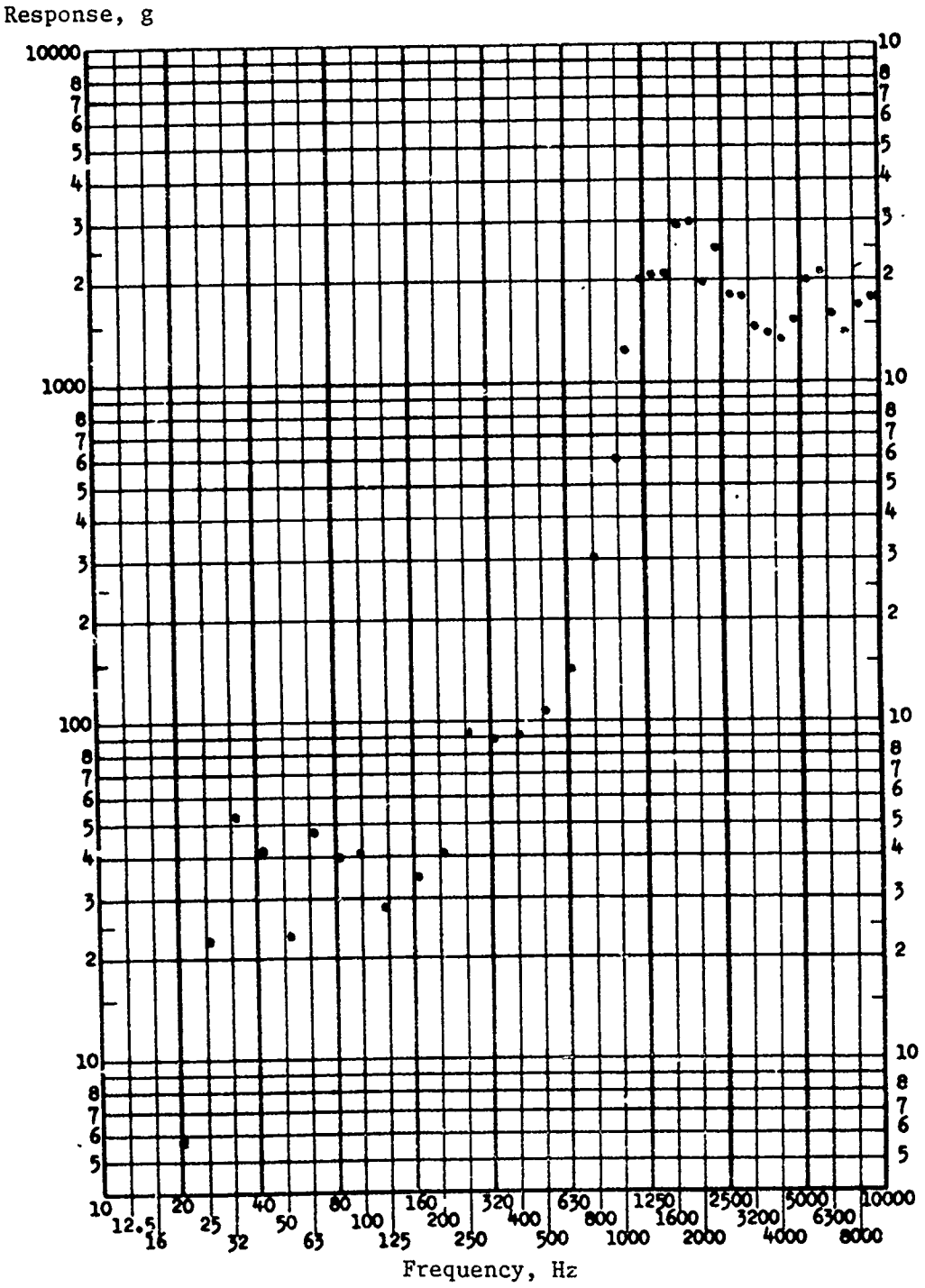
Bench Shock Test - Stage II/III Separation, Run 33
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 33 (concl)



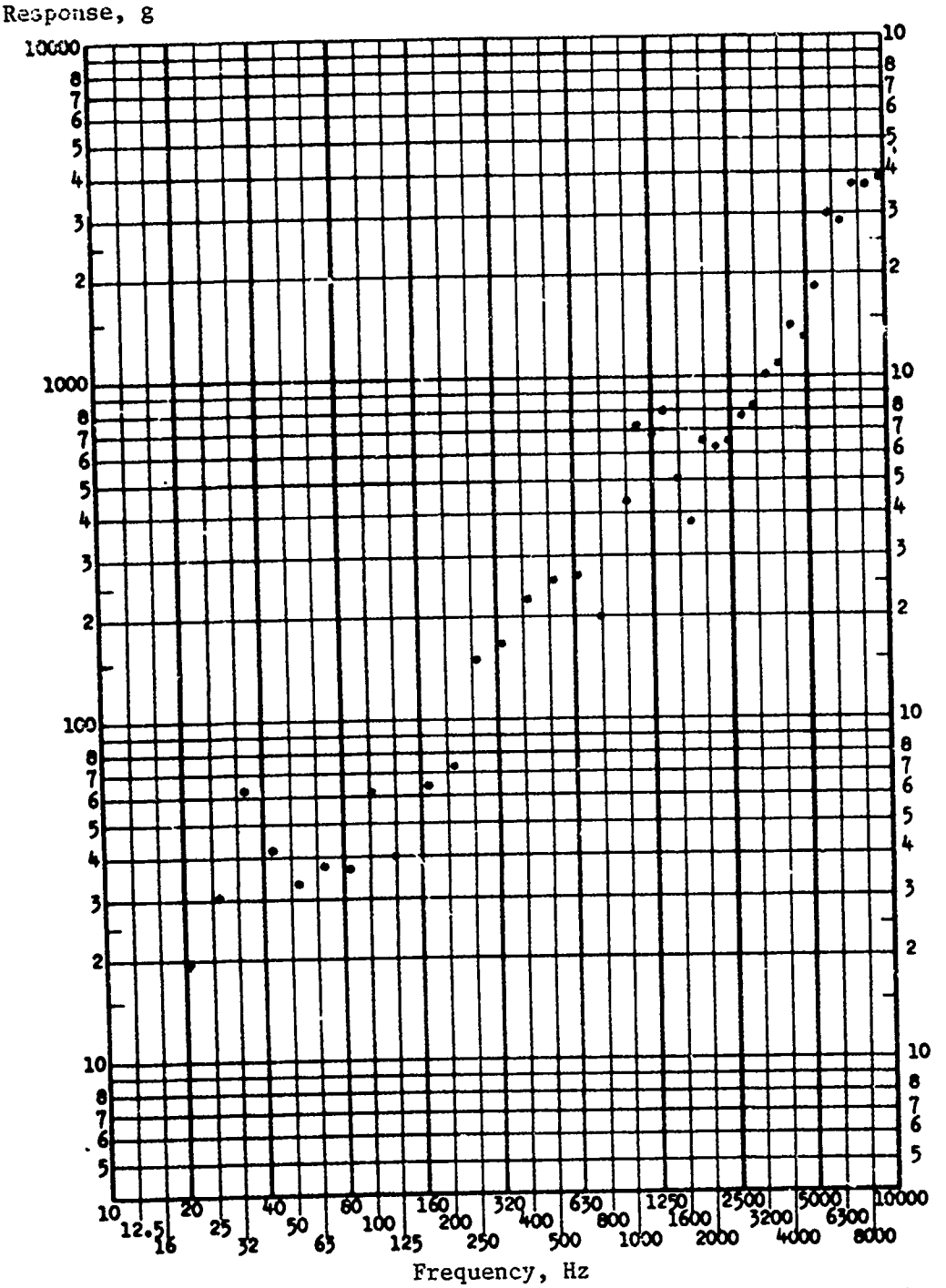
Bench Shock Test - Stage II/III Separation, Run 34
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 34 Run 34 Shock Response Spectrum



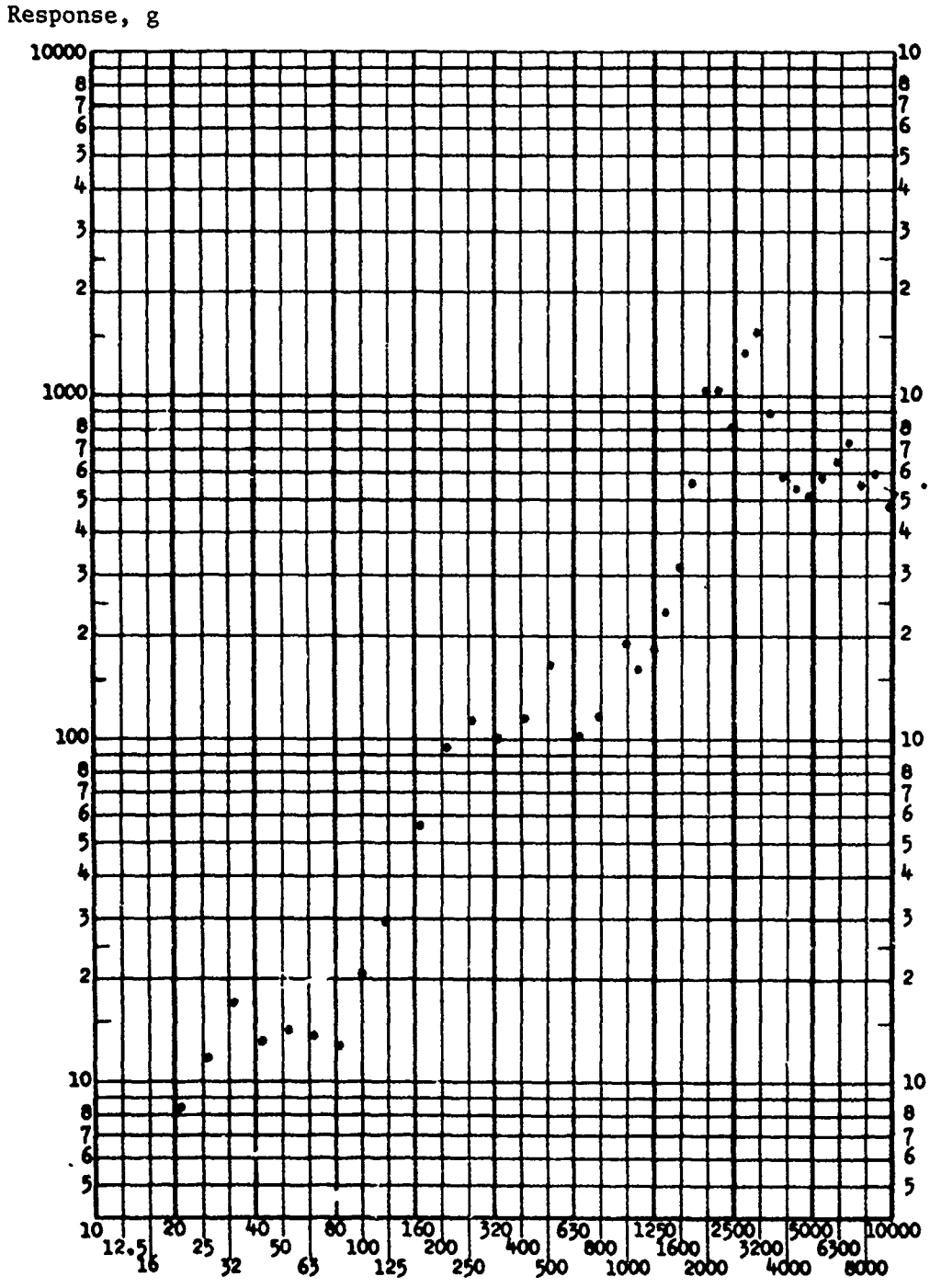
Bench Shock Test - Stage II/III Separation, Run 34
Measurement No. 2 - Tangential axis longeron near station 133

Figure 34 (cont.)



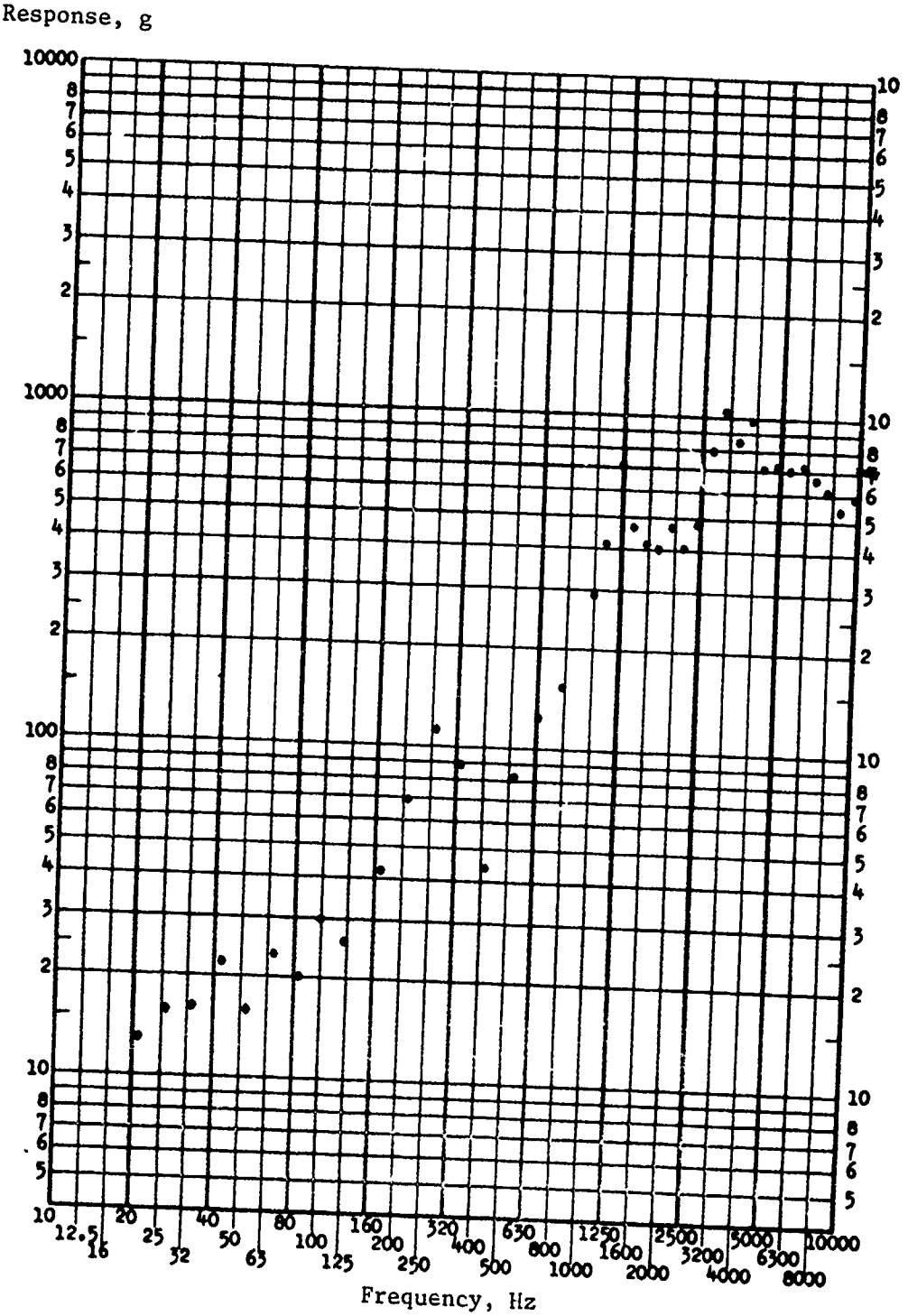
Bench Shock Test - Stage II/III Separation, Run 34 __
Measurement No. 3 - Radial axis longeron near station 133

Figure 34 (cont)



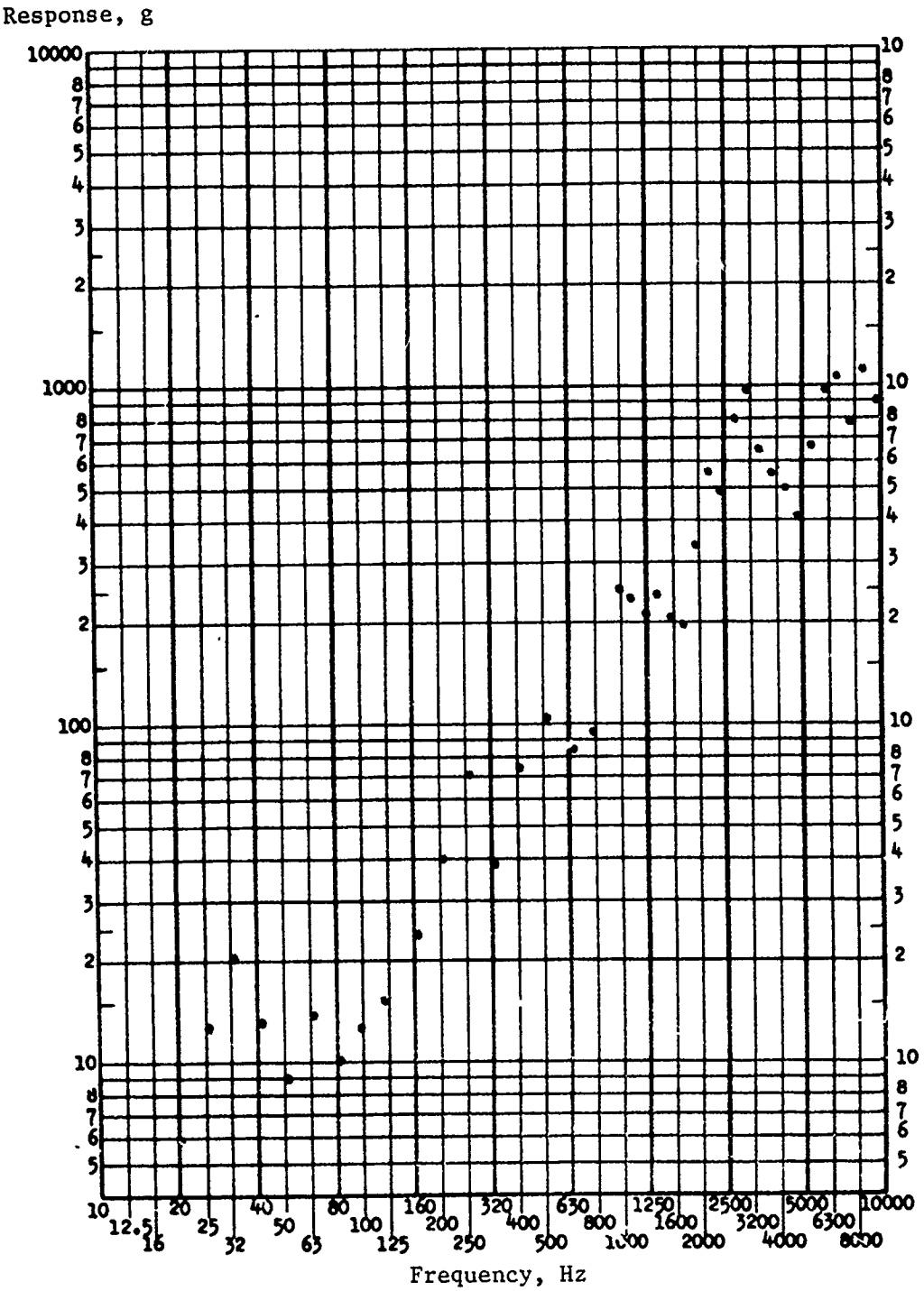
Bench Shock Test - Stage II/III Separation, Run 34
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 34 (cont)



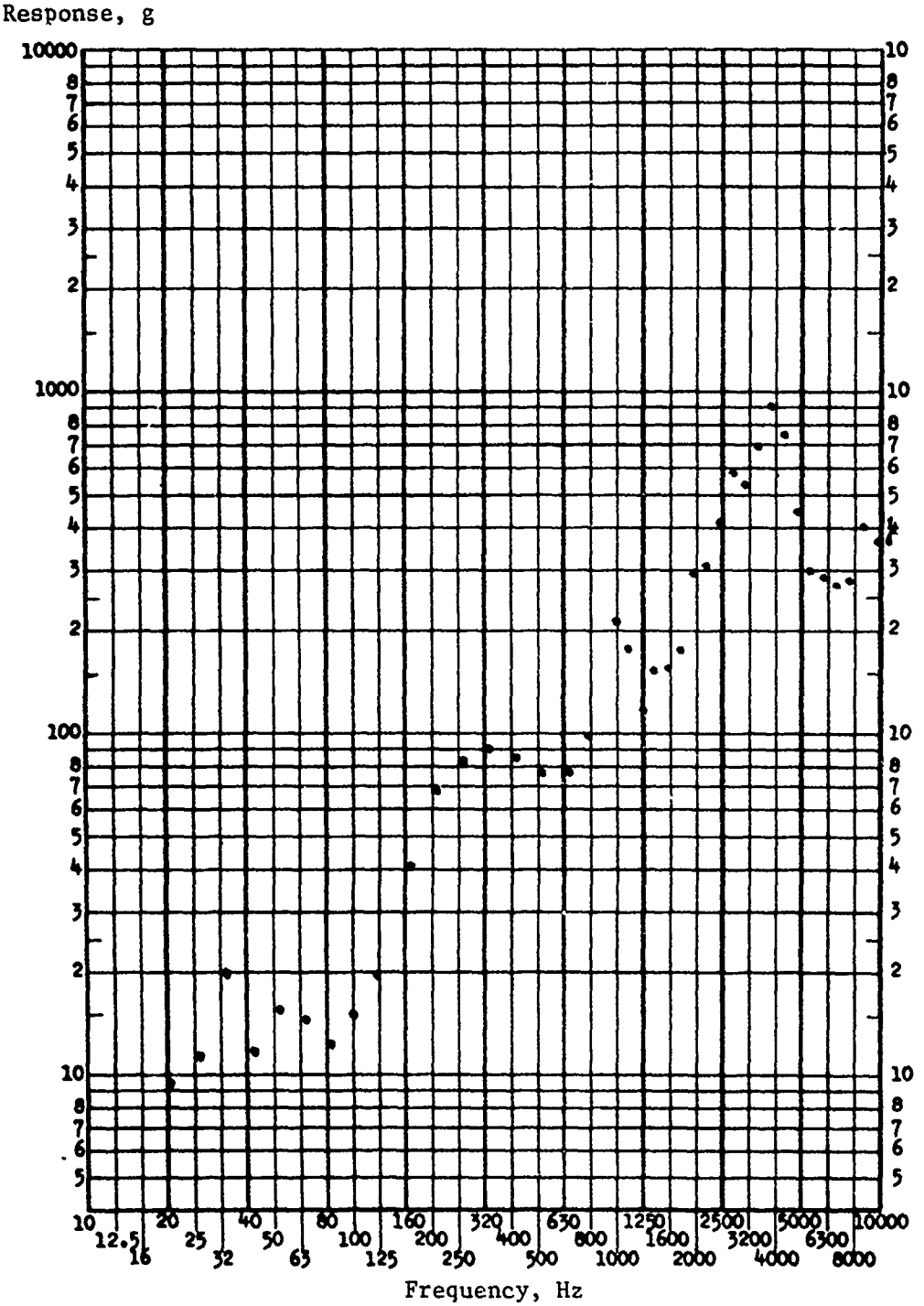
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 5 - Tangential axis longeron near station 117

Figure 34 (cont.)



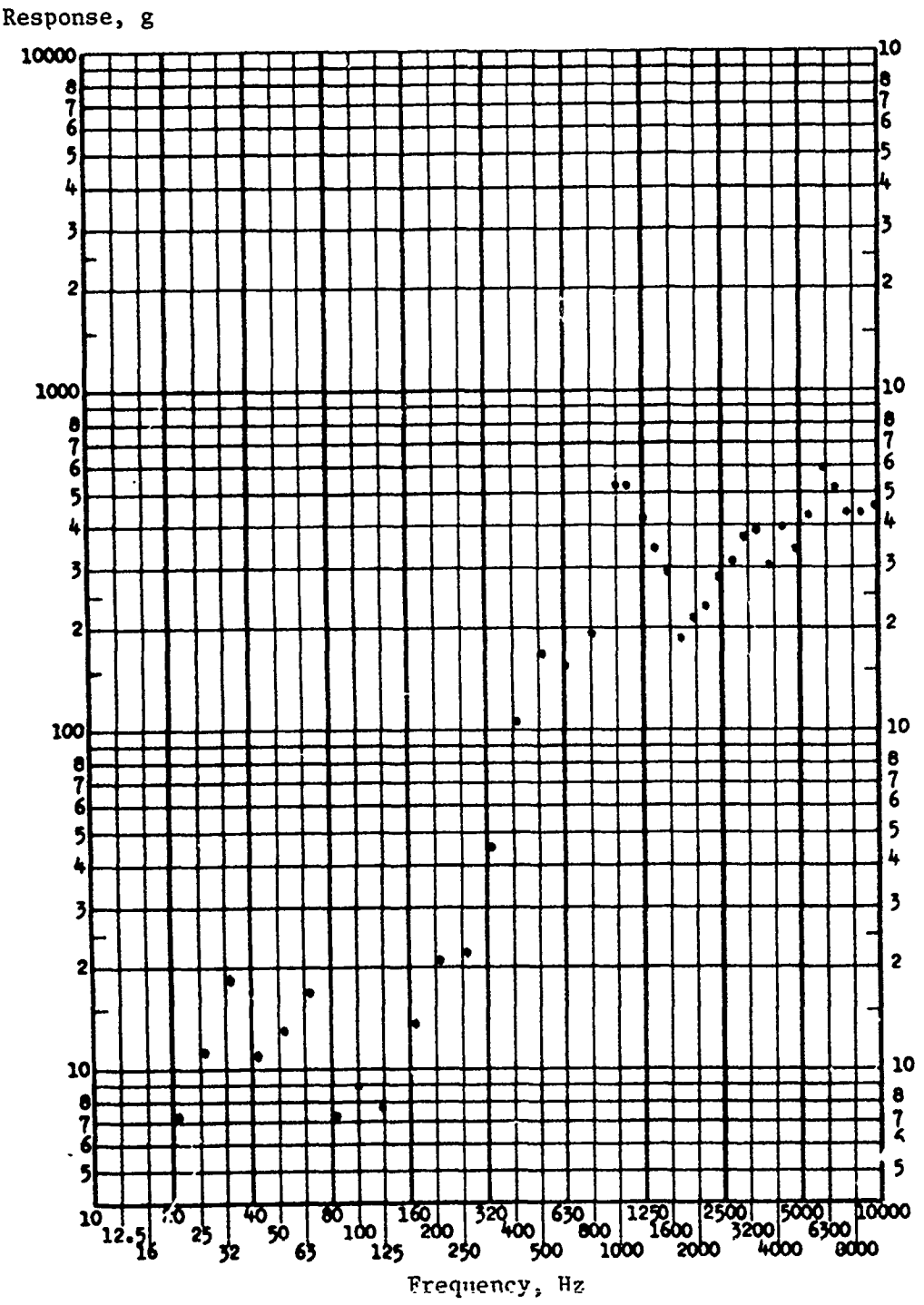
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 6 - Radial axis longeron near
station 117

Figure 34 (cont)



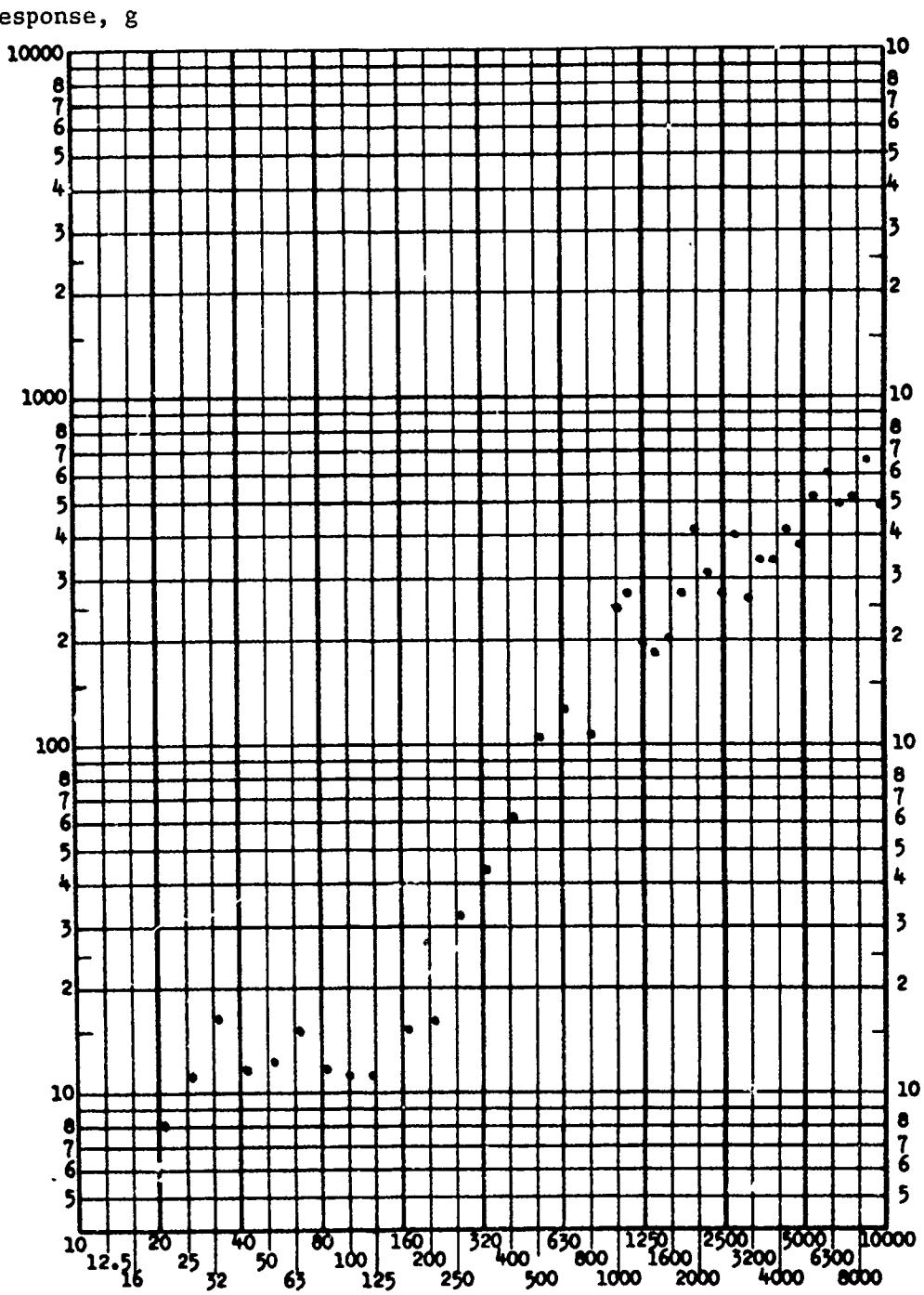
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 34 (cont)



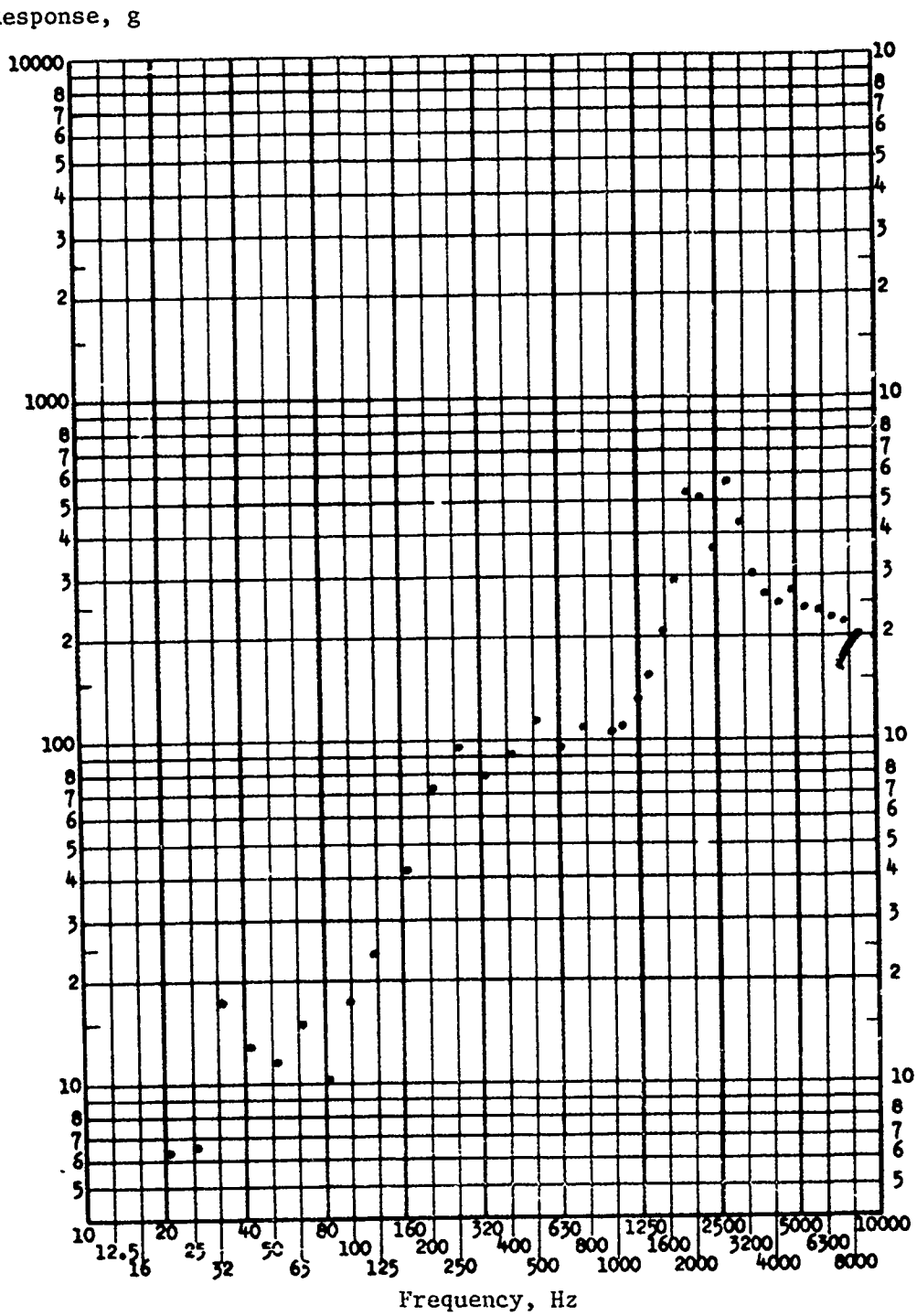
Bench Shock Test - Stage II/III Separation, Run 34
Measurement No. 8 - Tangential axis longeron near station 77

Figure 34 (cont)



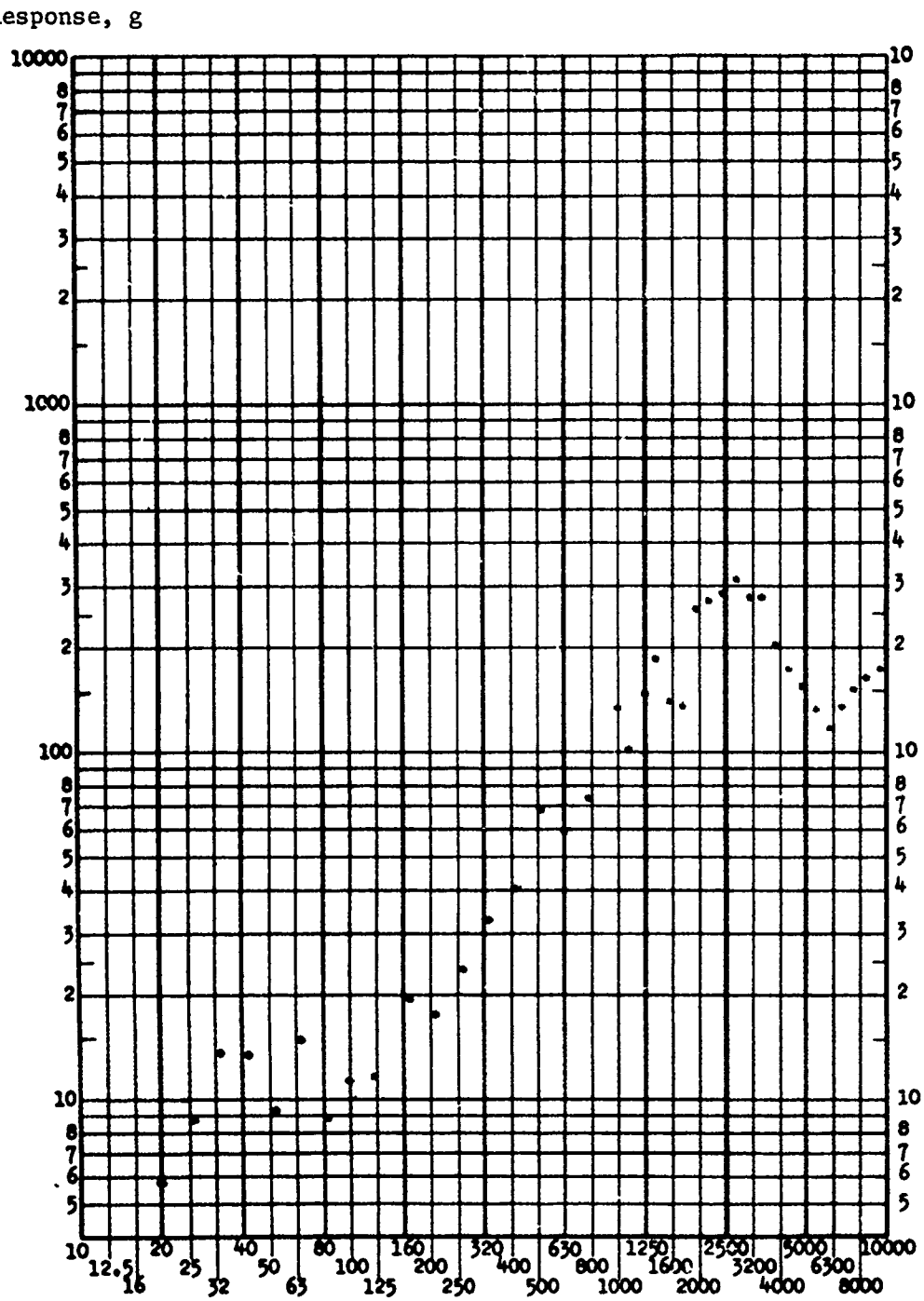
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 9 - Radial axis longeron near
station 77

Figure 34 (cont)



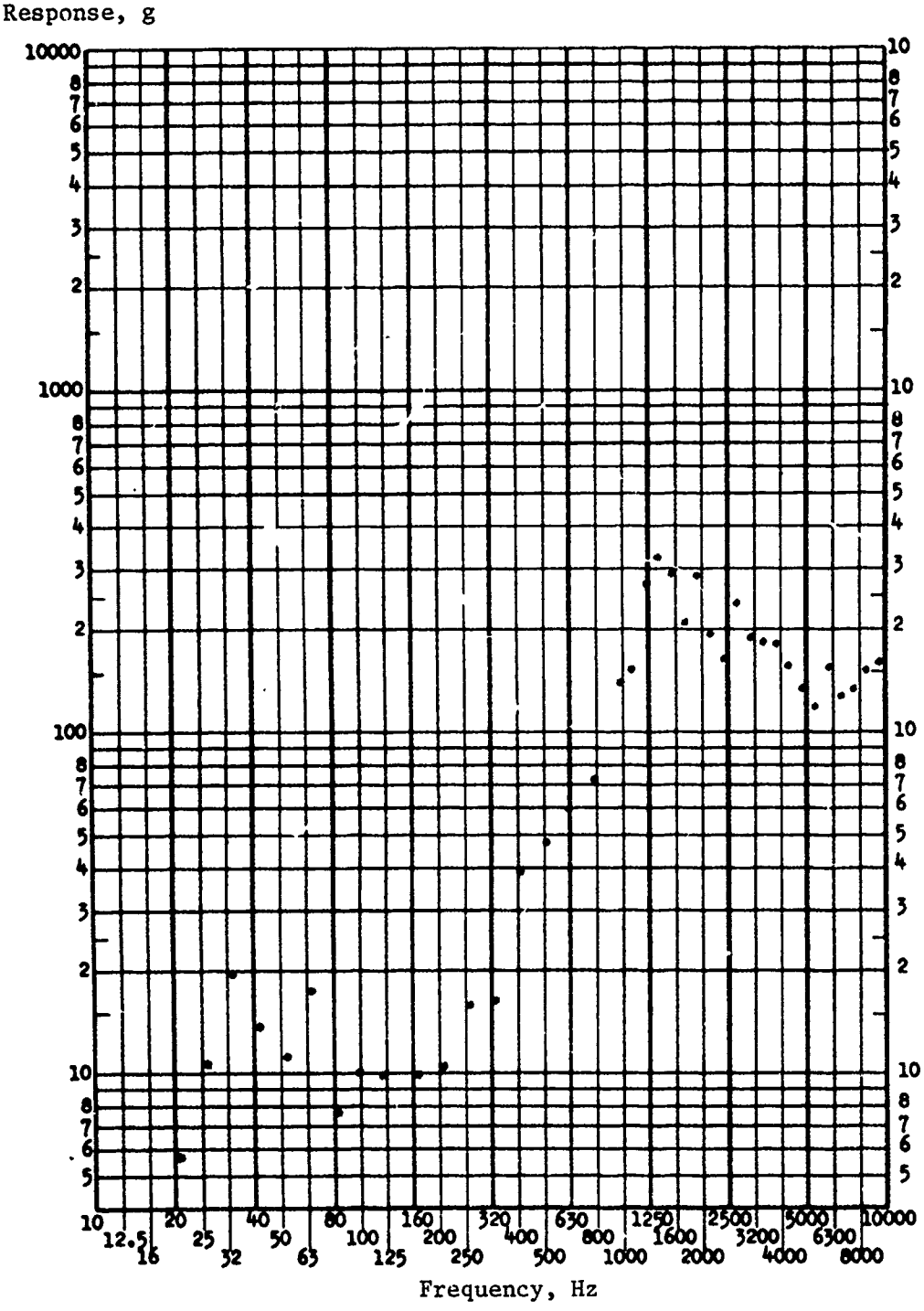
Bench Shock Test - Stage II/III Separation, Run 34
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 34 (cont)



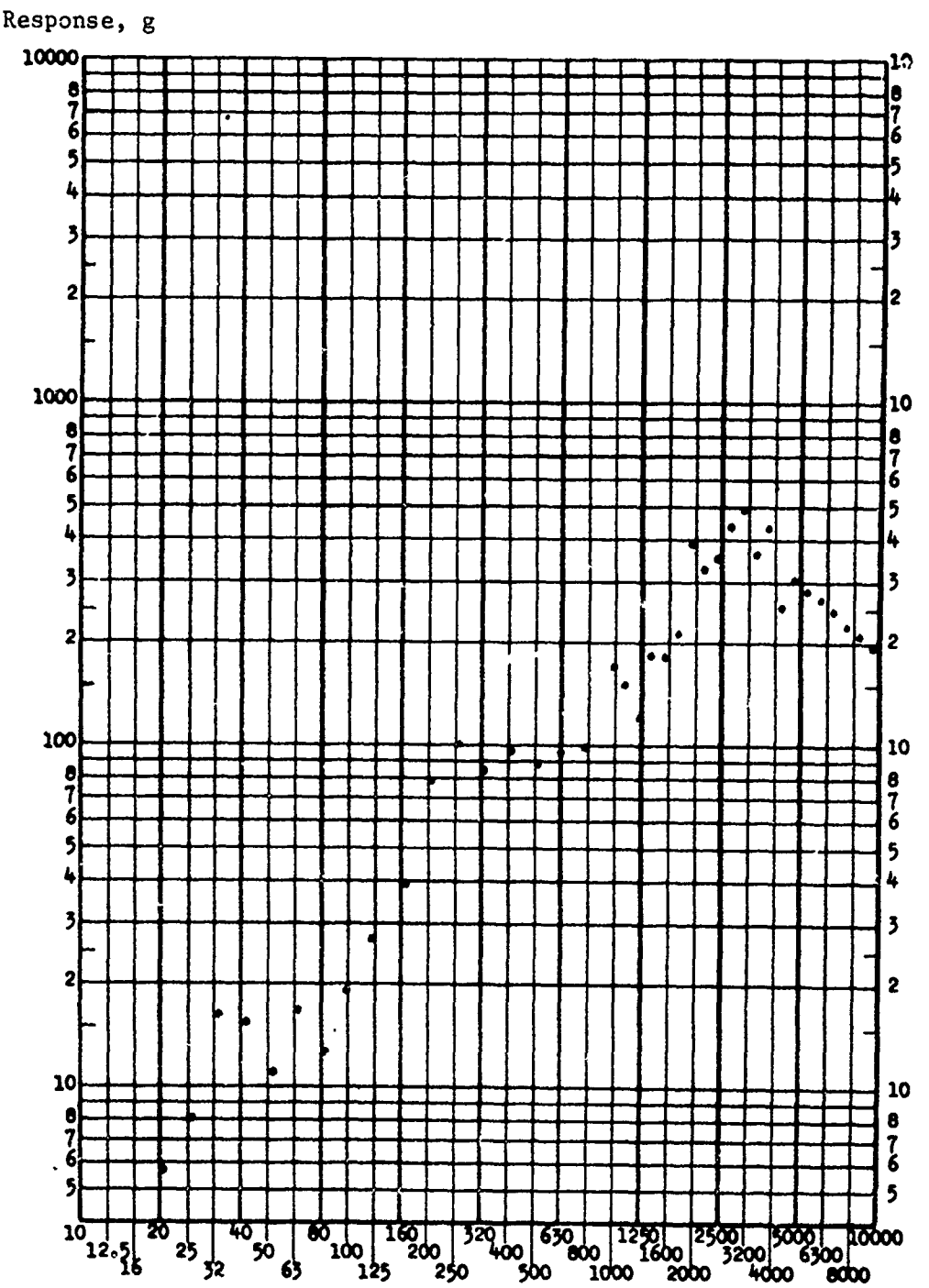
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 34 (cont)



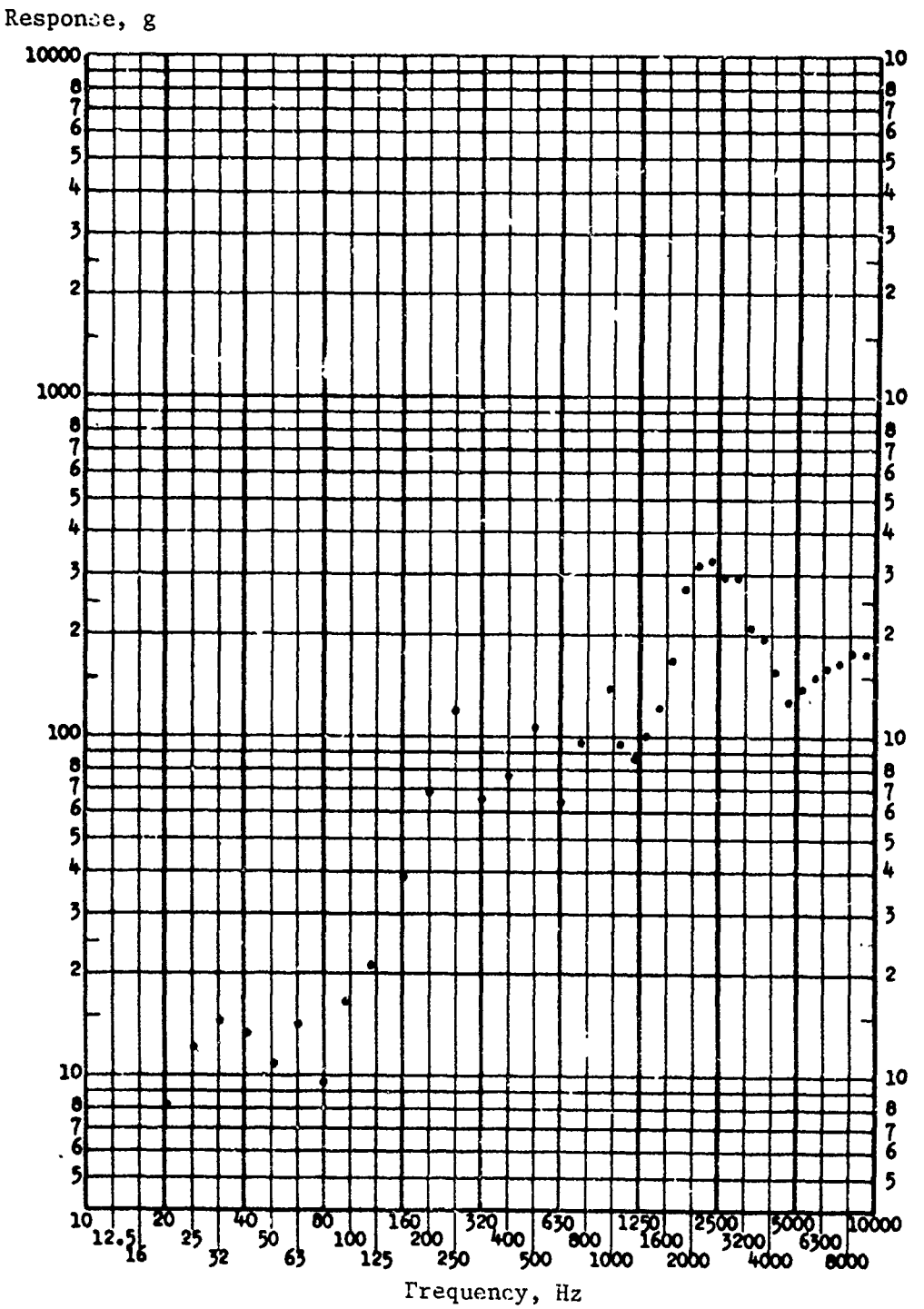
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 34 (cont)



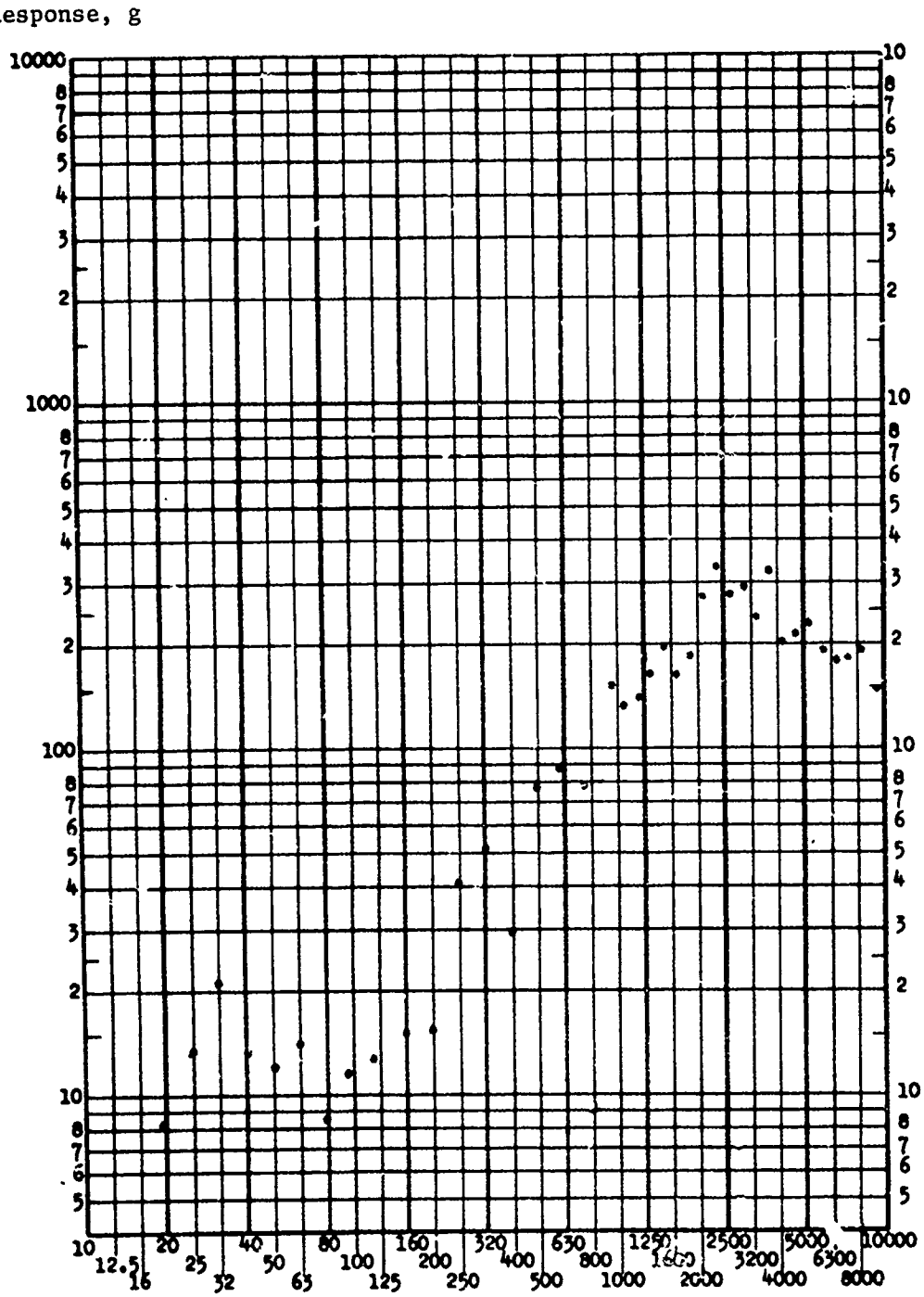
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 34 (cont)



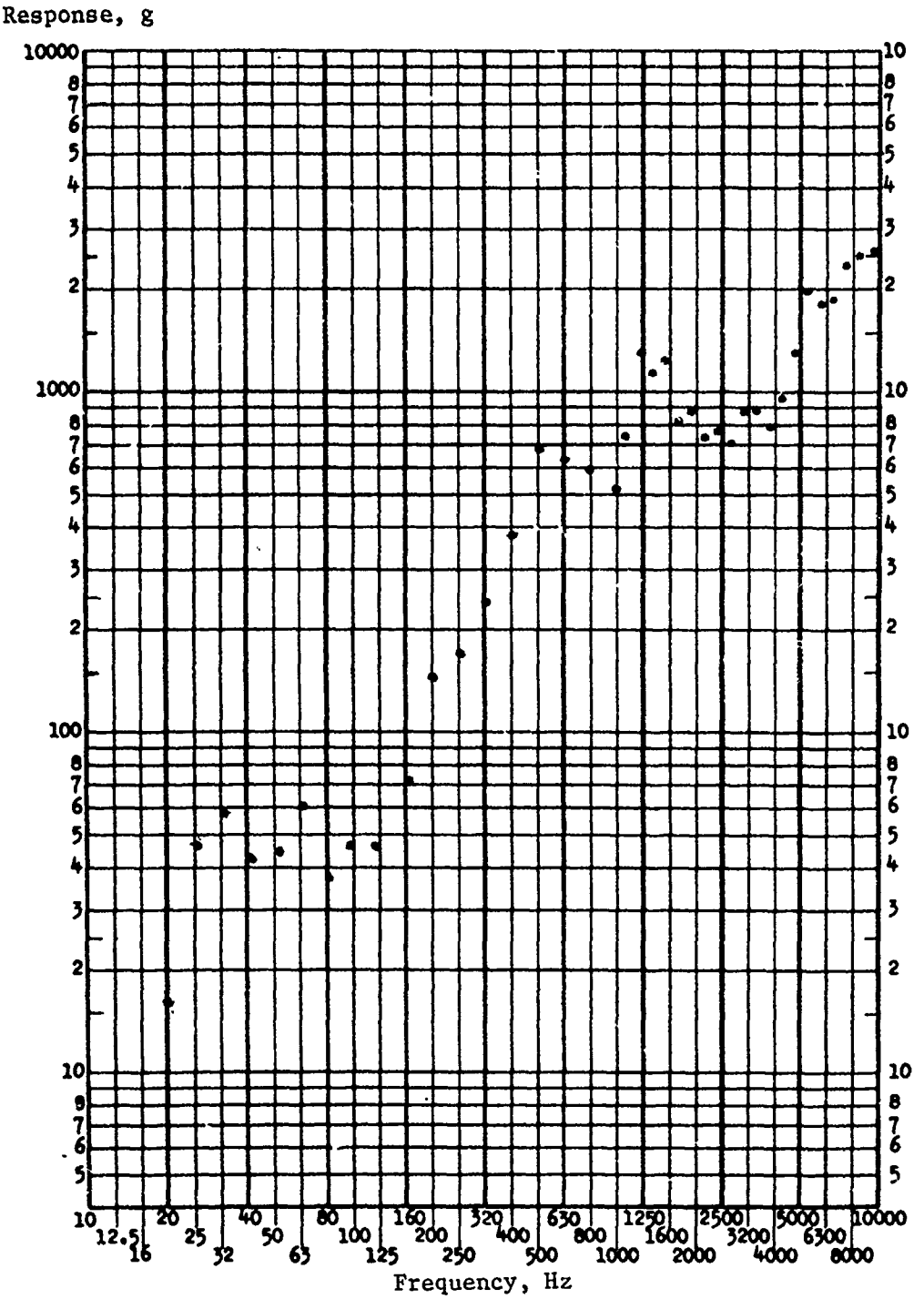
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 34 (cont)



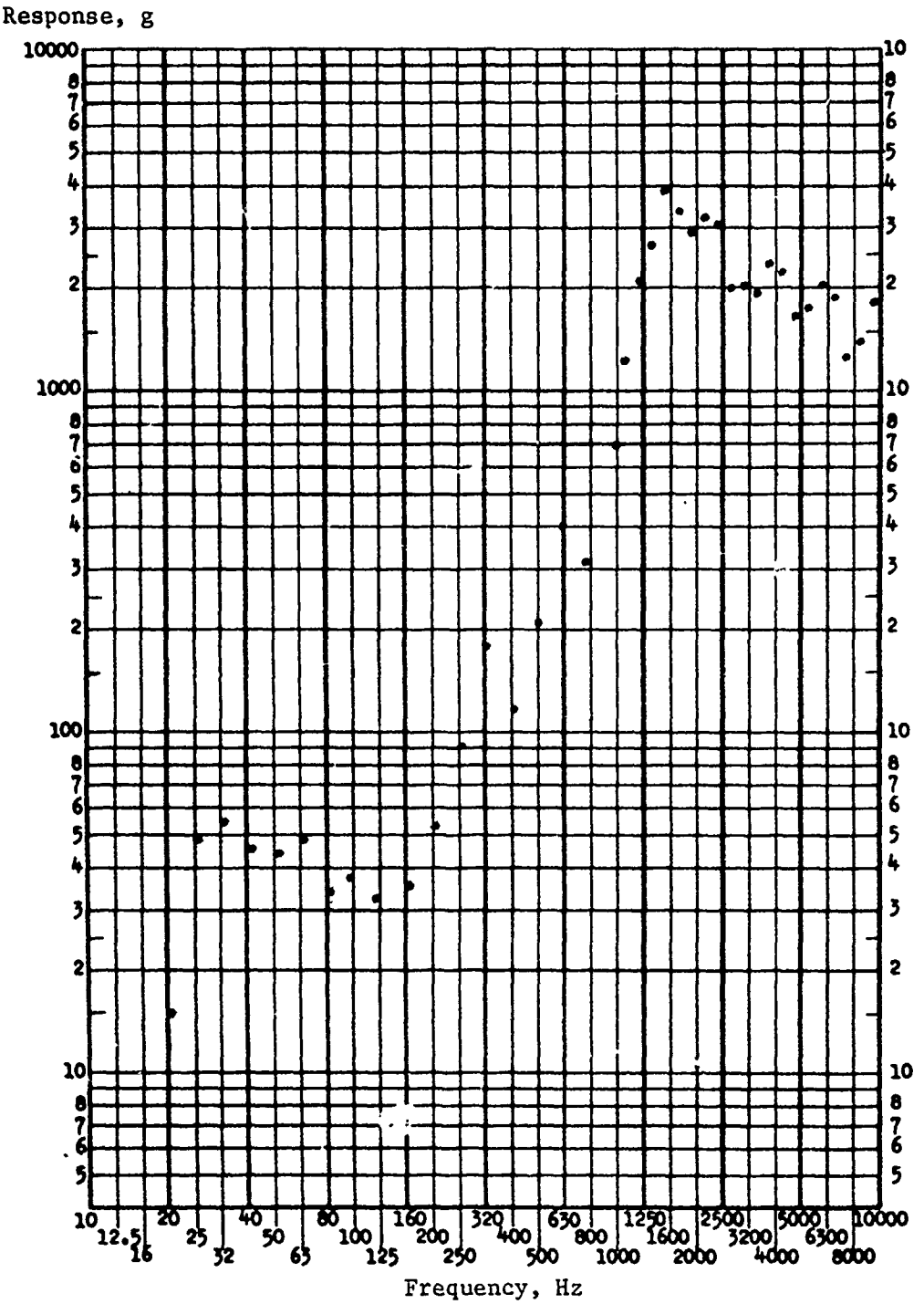
Bench Shock Test - Stage II/III Separation, Run 34 _
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 34 (concl)



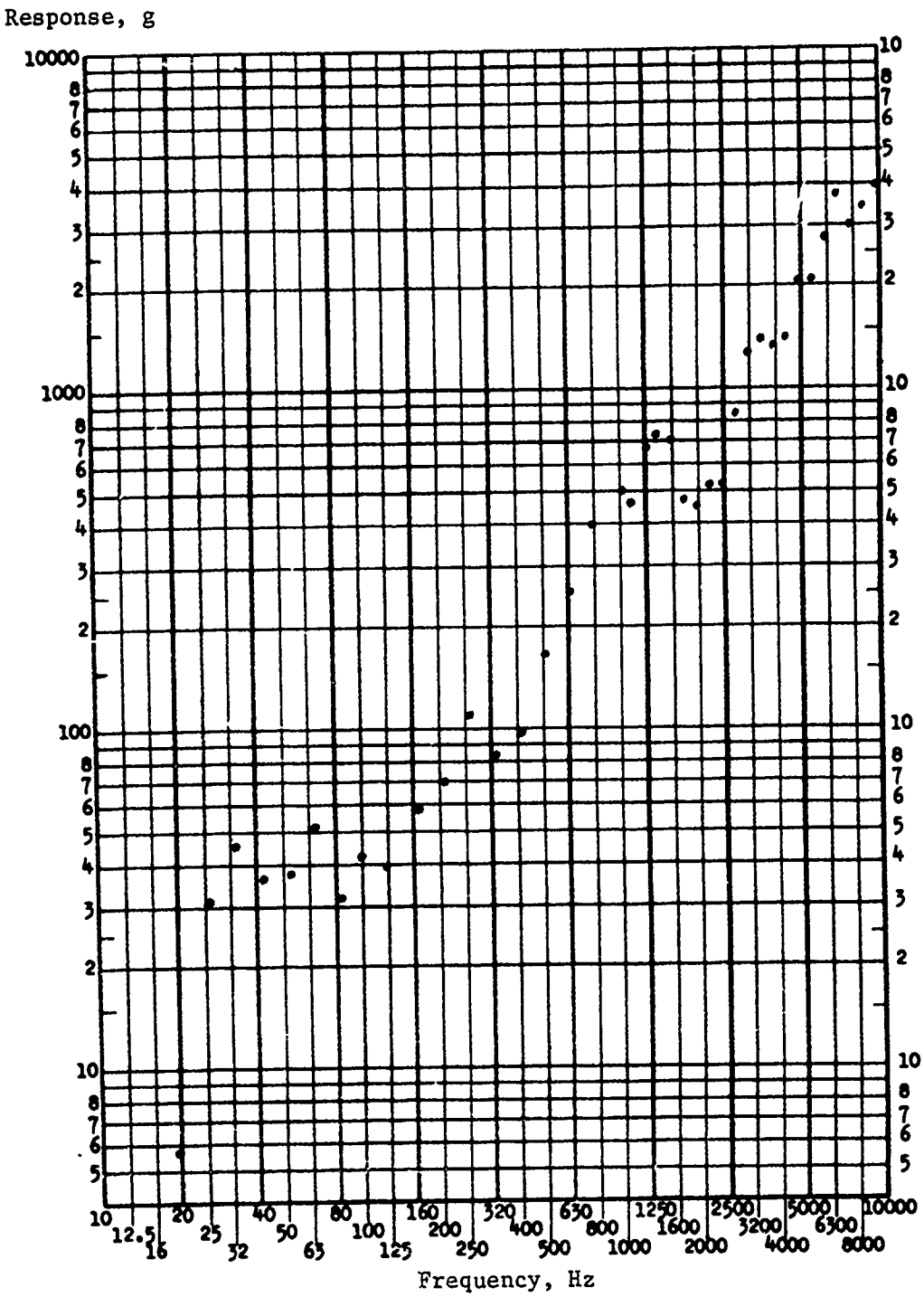
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 35 Run 35 Shock Response Spectrum



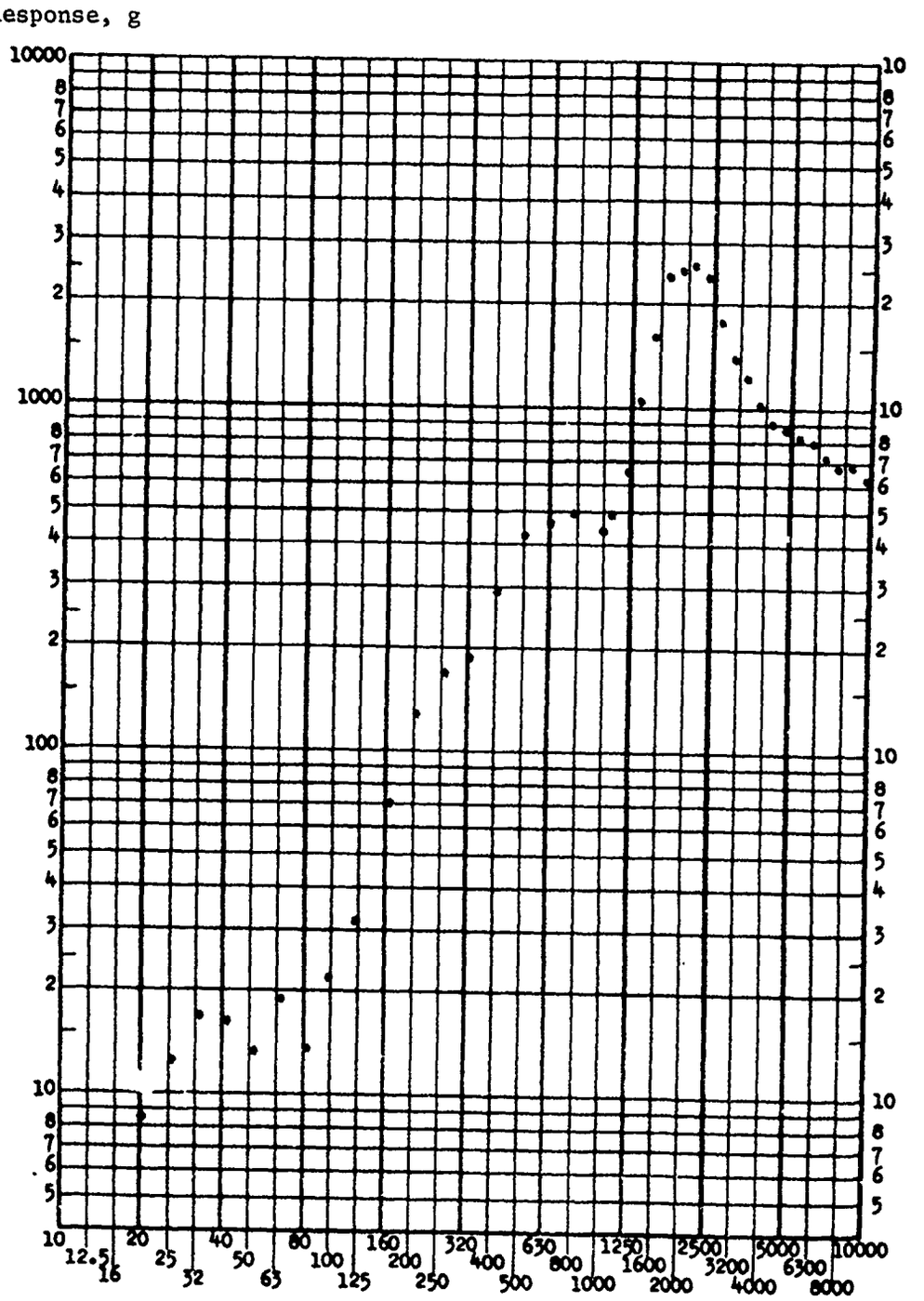
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 35 (cont)



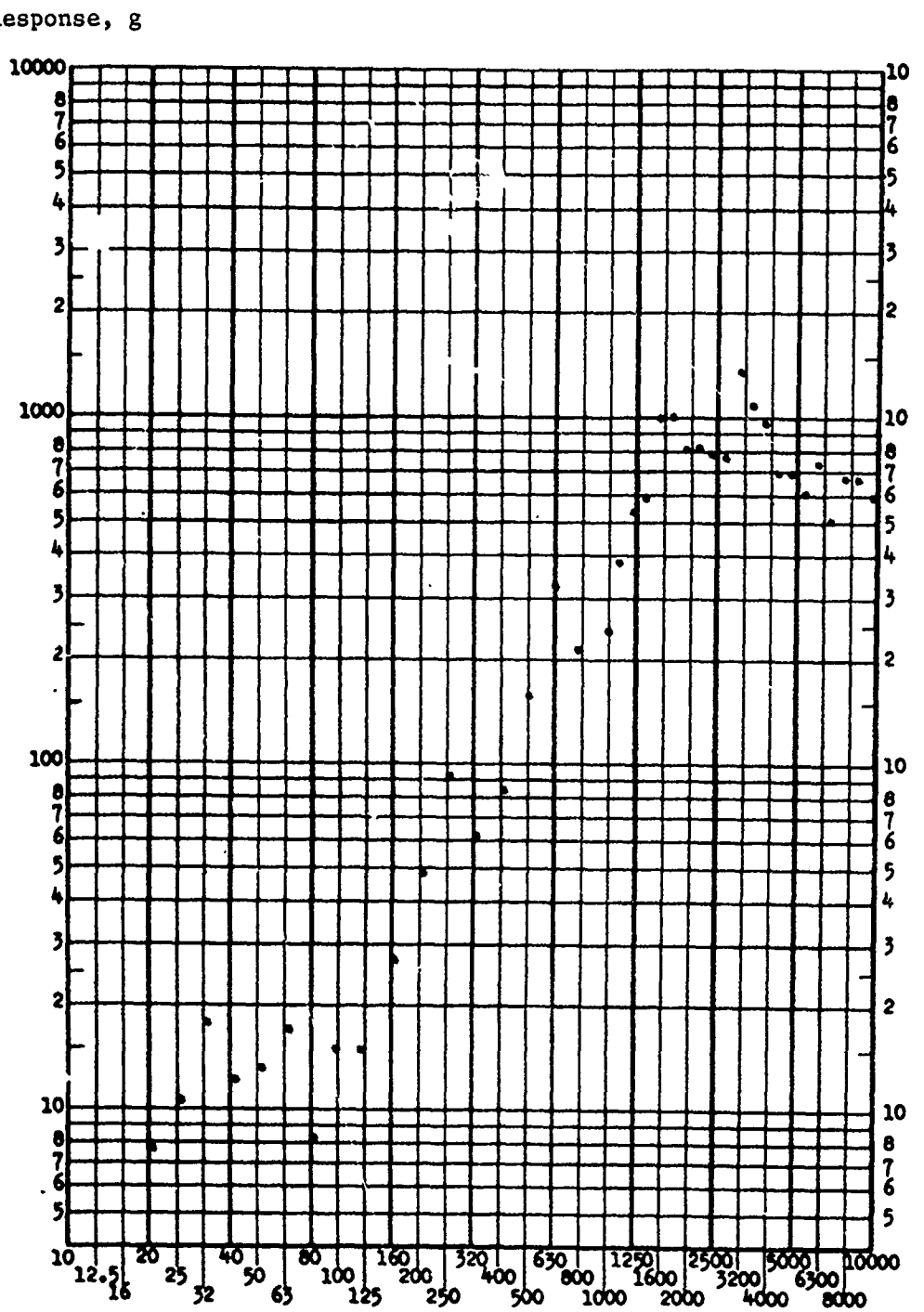
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 3 - Radial axis longeron near
station 133

Figure 35 (cont)



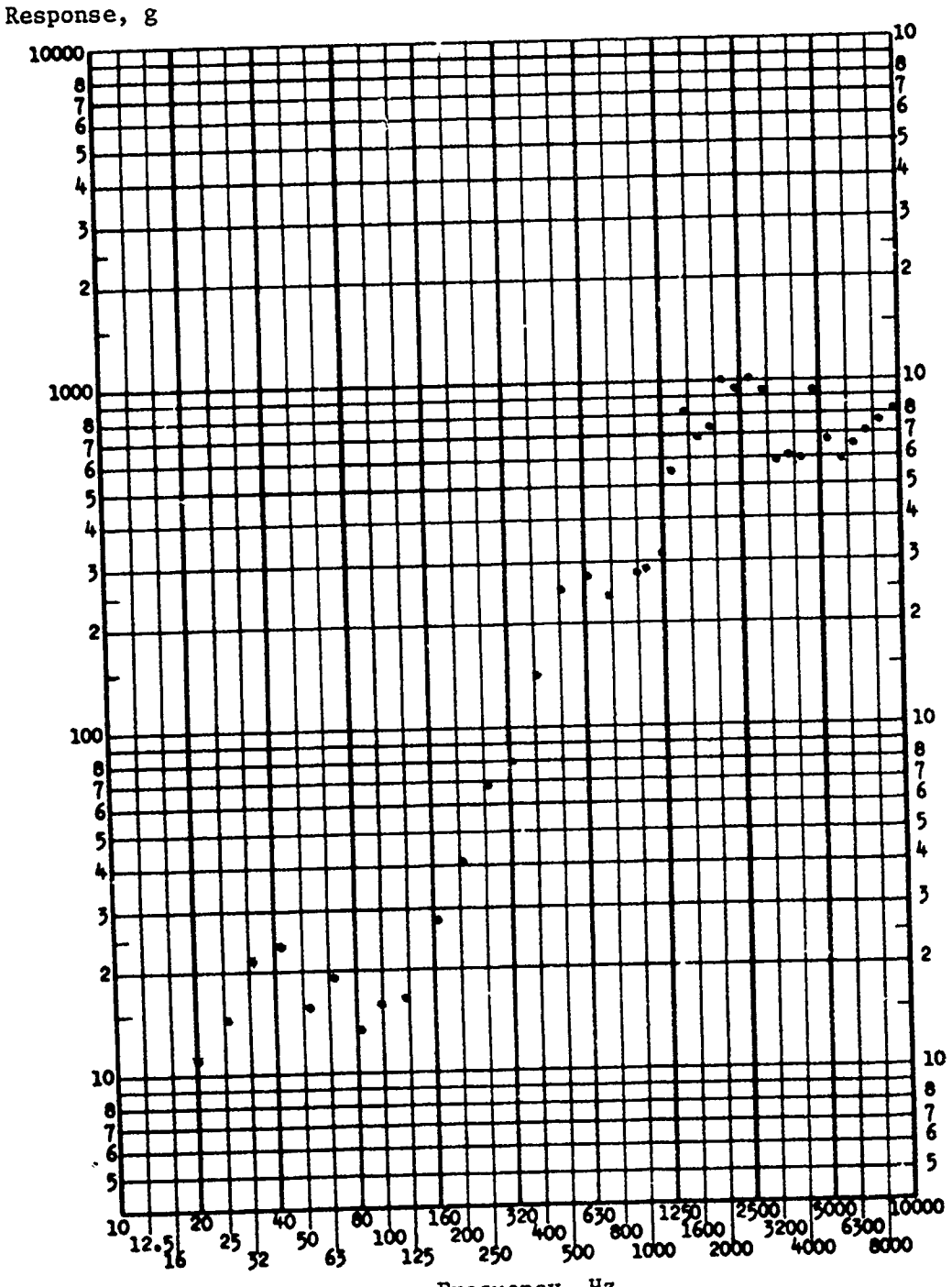
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 35 (cont)



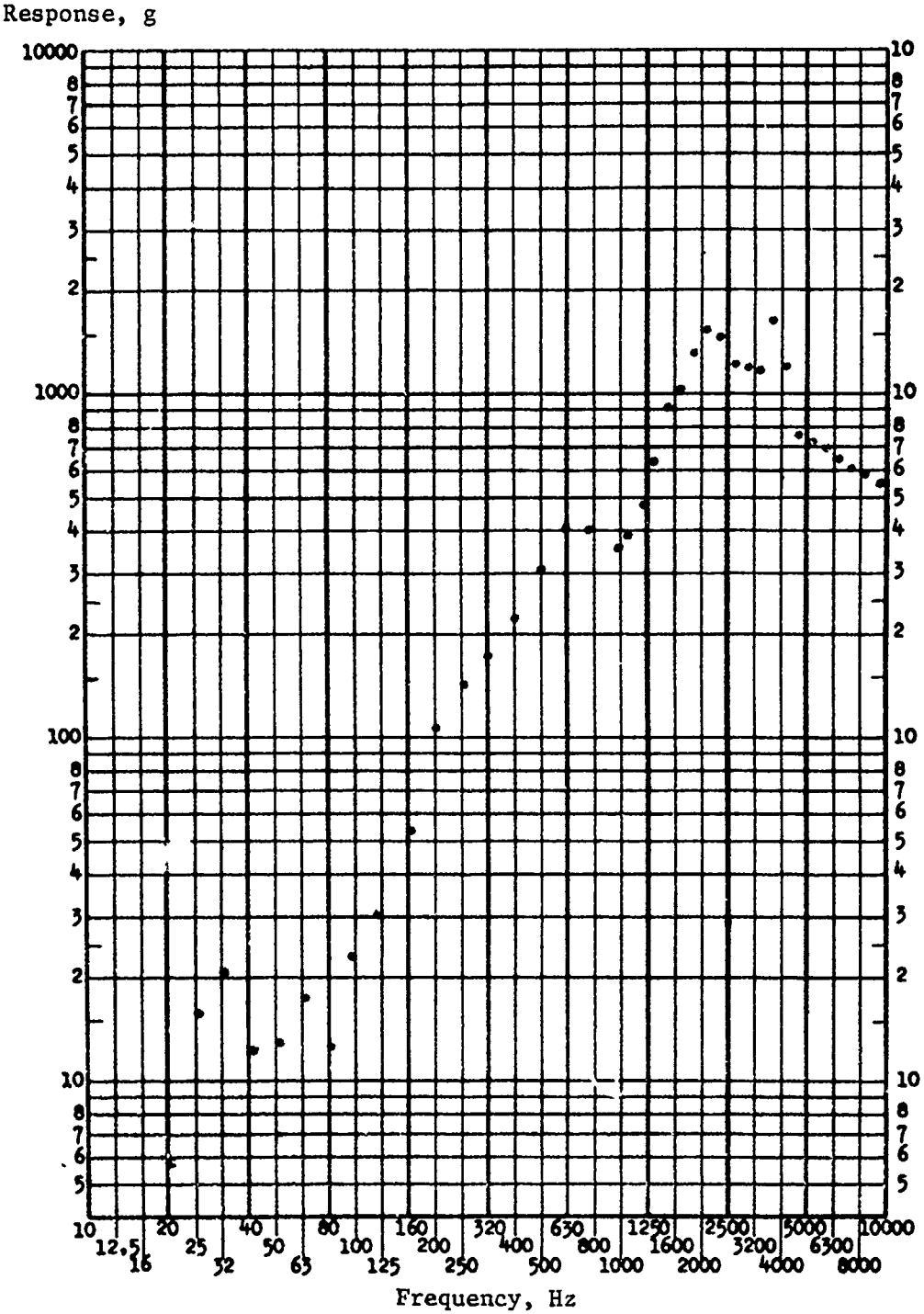
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 5 - Tangential axis longeron near station 117

Figure 35 (cont)



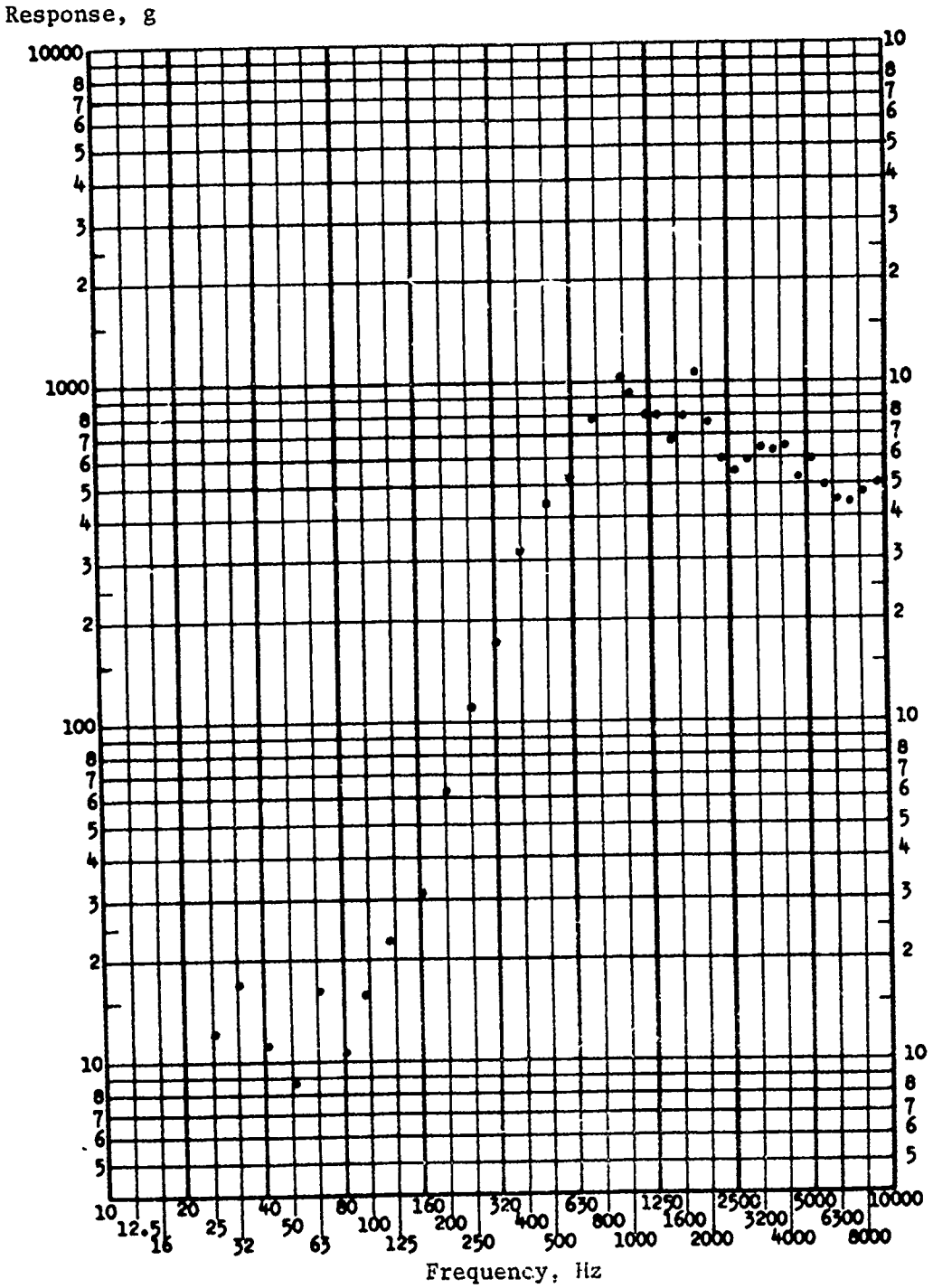
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 6 - Radial axis longeron near
station 117

Figure 35 (cont)



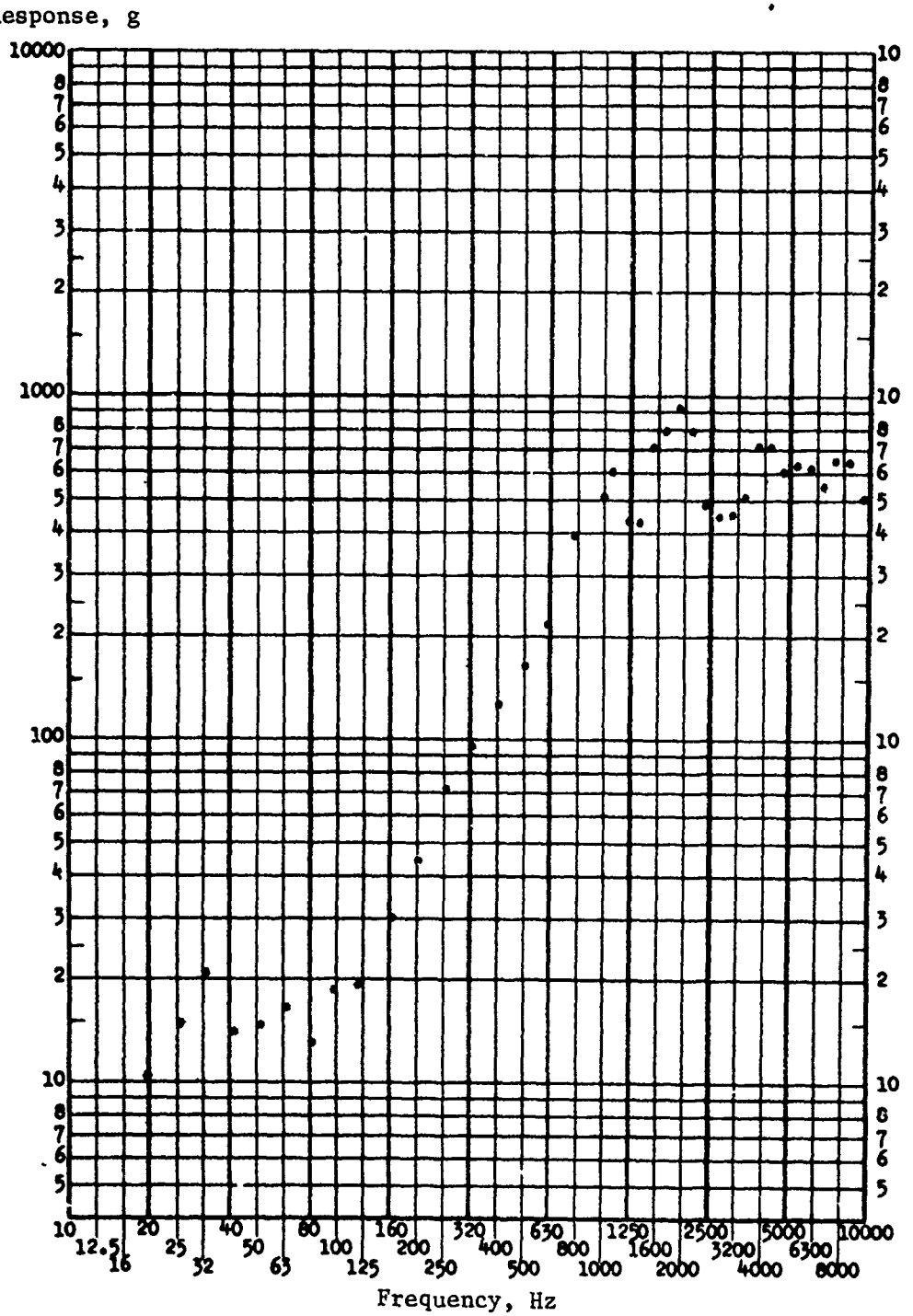
Bench Shock Test - Stage II/III Separation, Run 35
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 35 (cont)



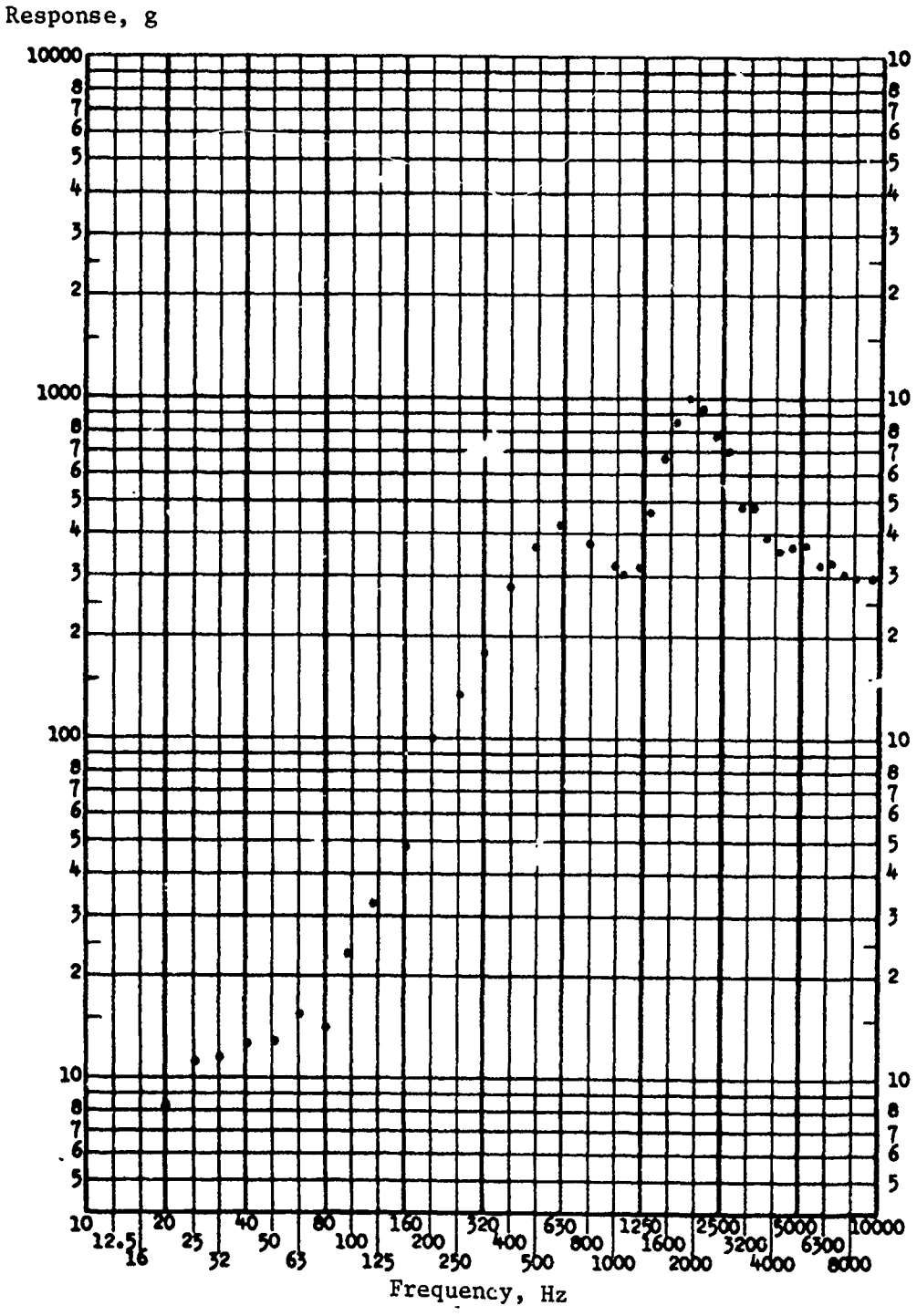
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 8 - Tangential axis longeron near
station 77

Figure 35 (cont)



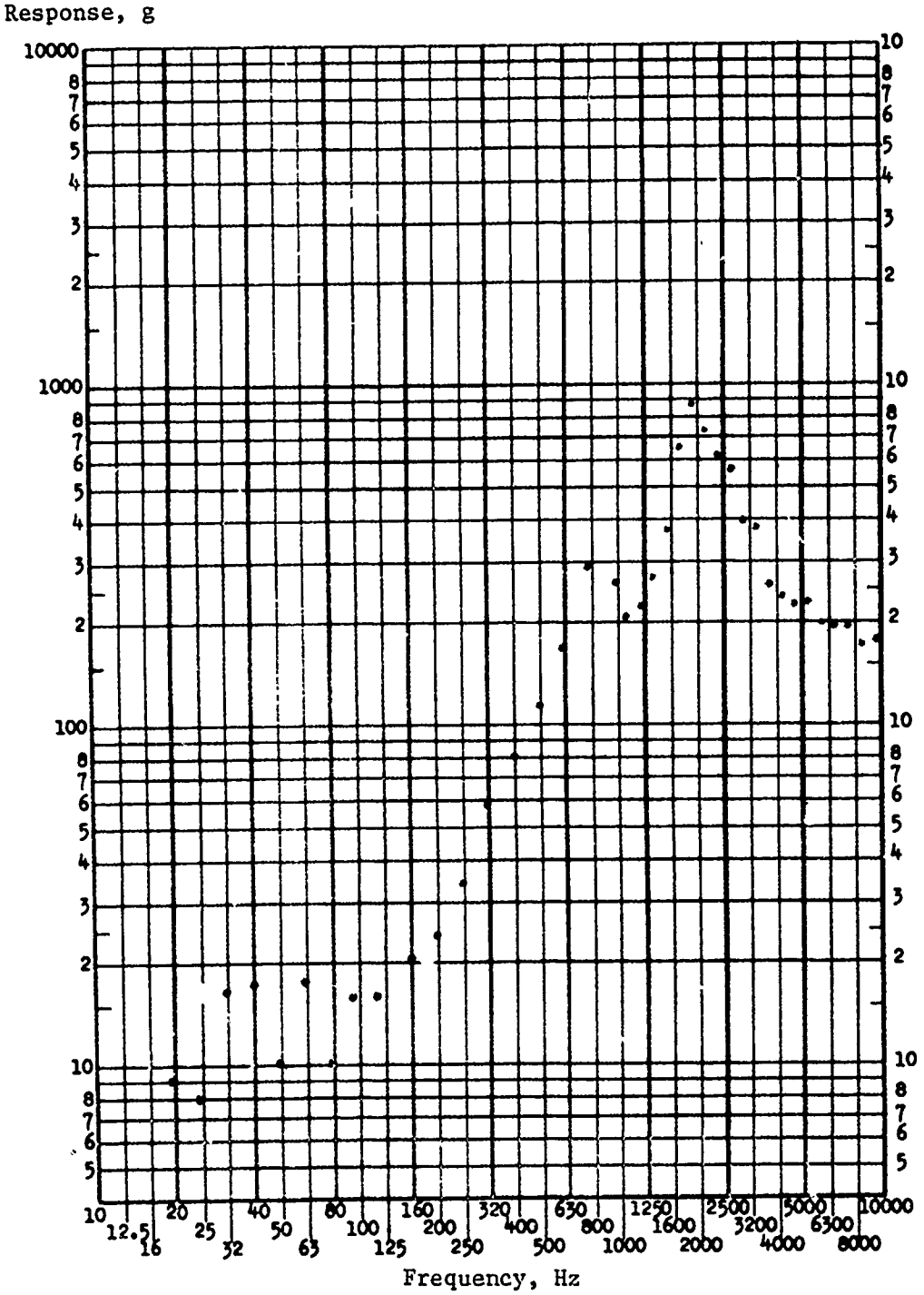
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 9 - Radial axis longeron near
station 77

Figure 35 (cont)



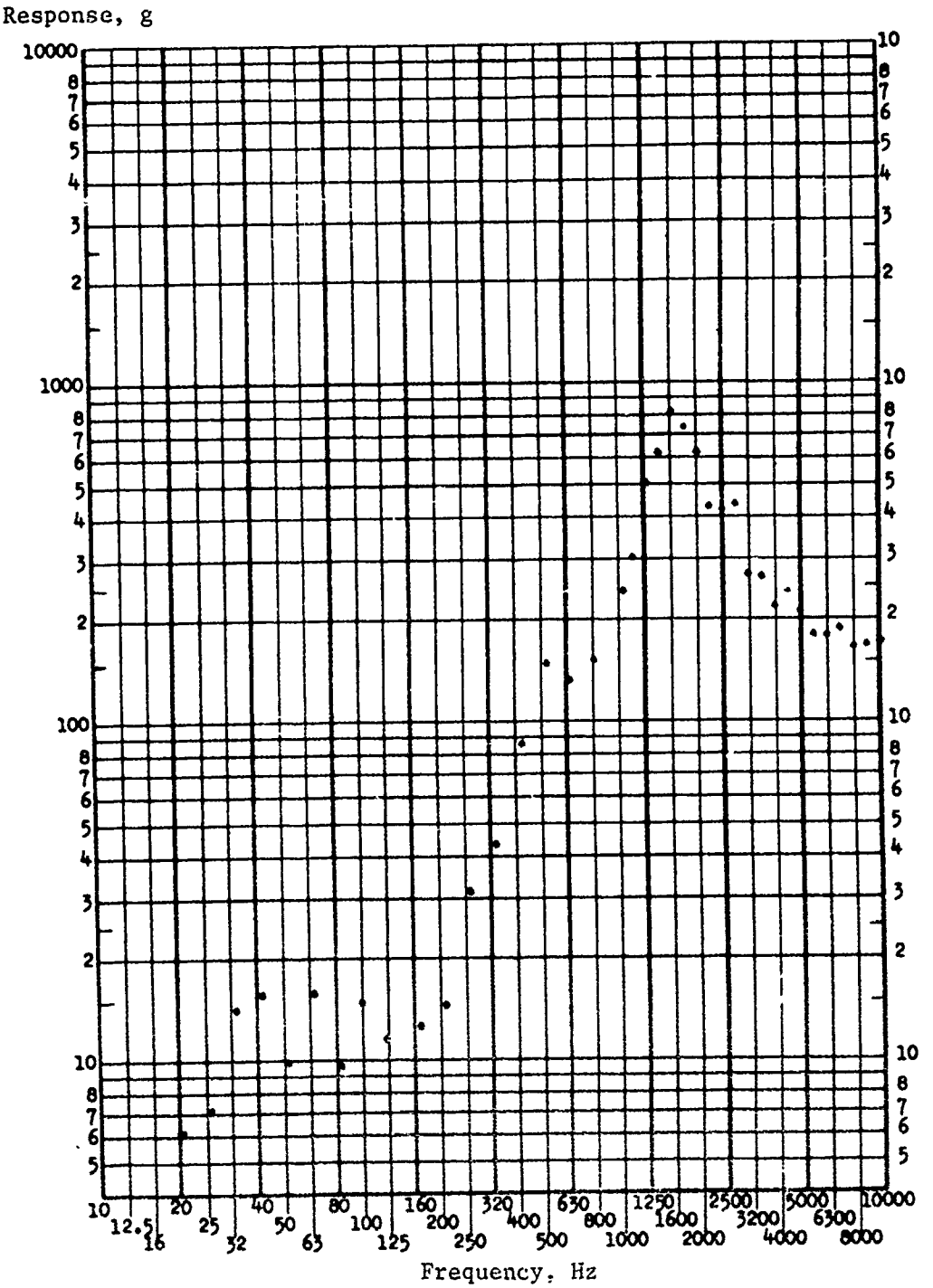
Bench Shock Test - Stage II/III Separation, Run 35
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 35 (cont)



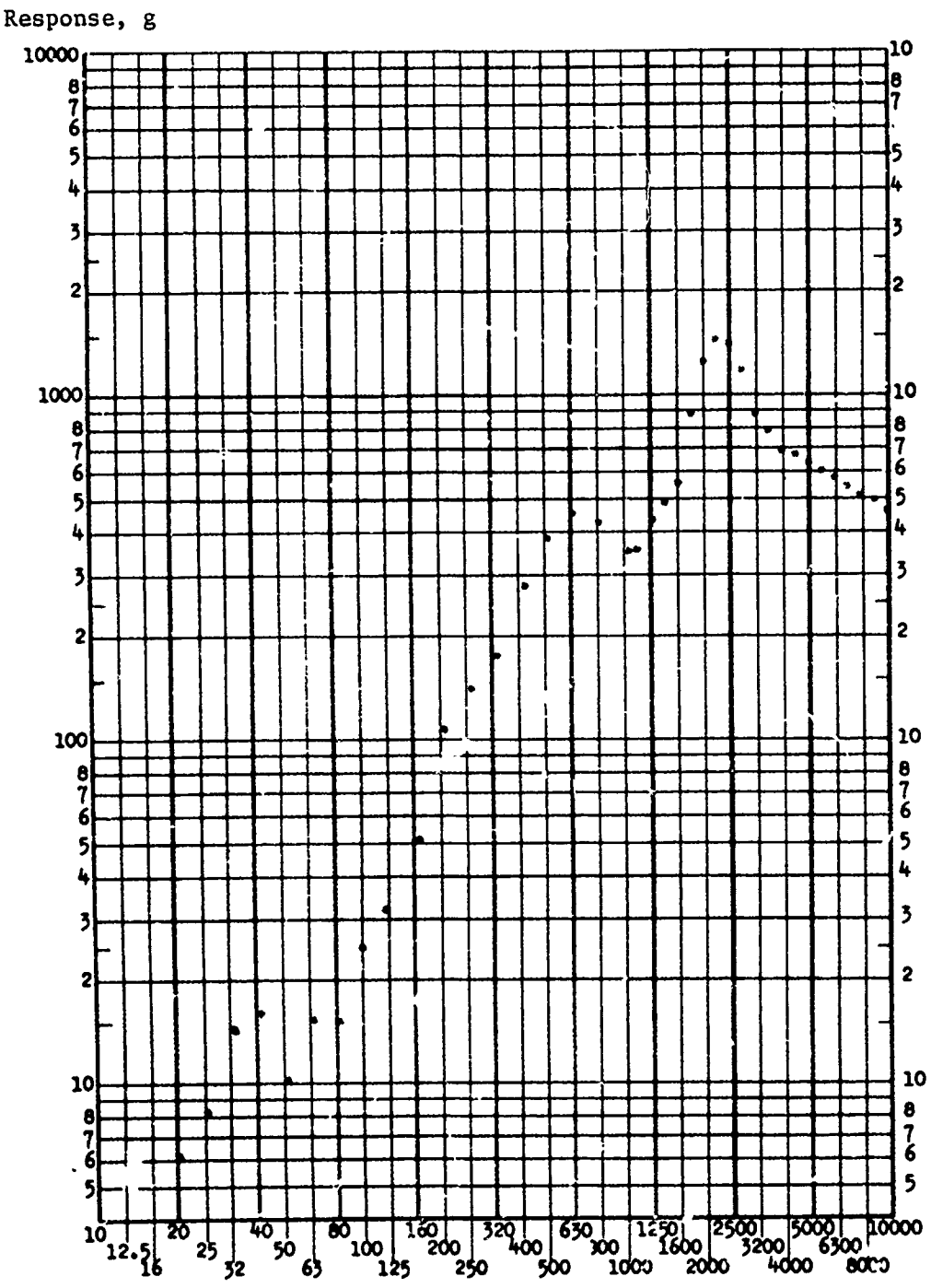
Bench Shock Test - Stage II/III Separation, Run 35
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 35 (cont)



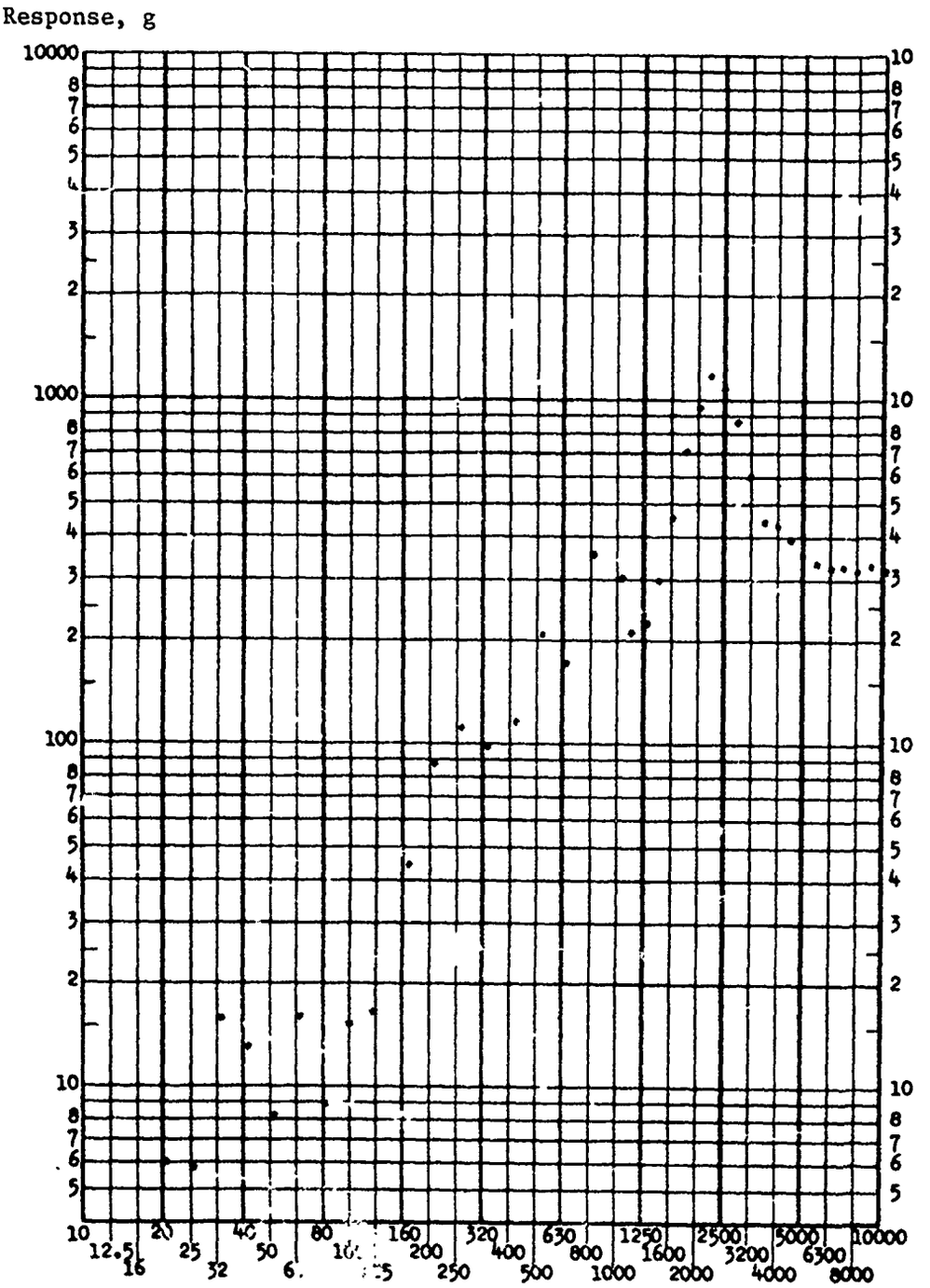
Bench Shock Test - Stage II/III Separation, Run 35 __
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 35 (cont)



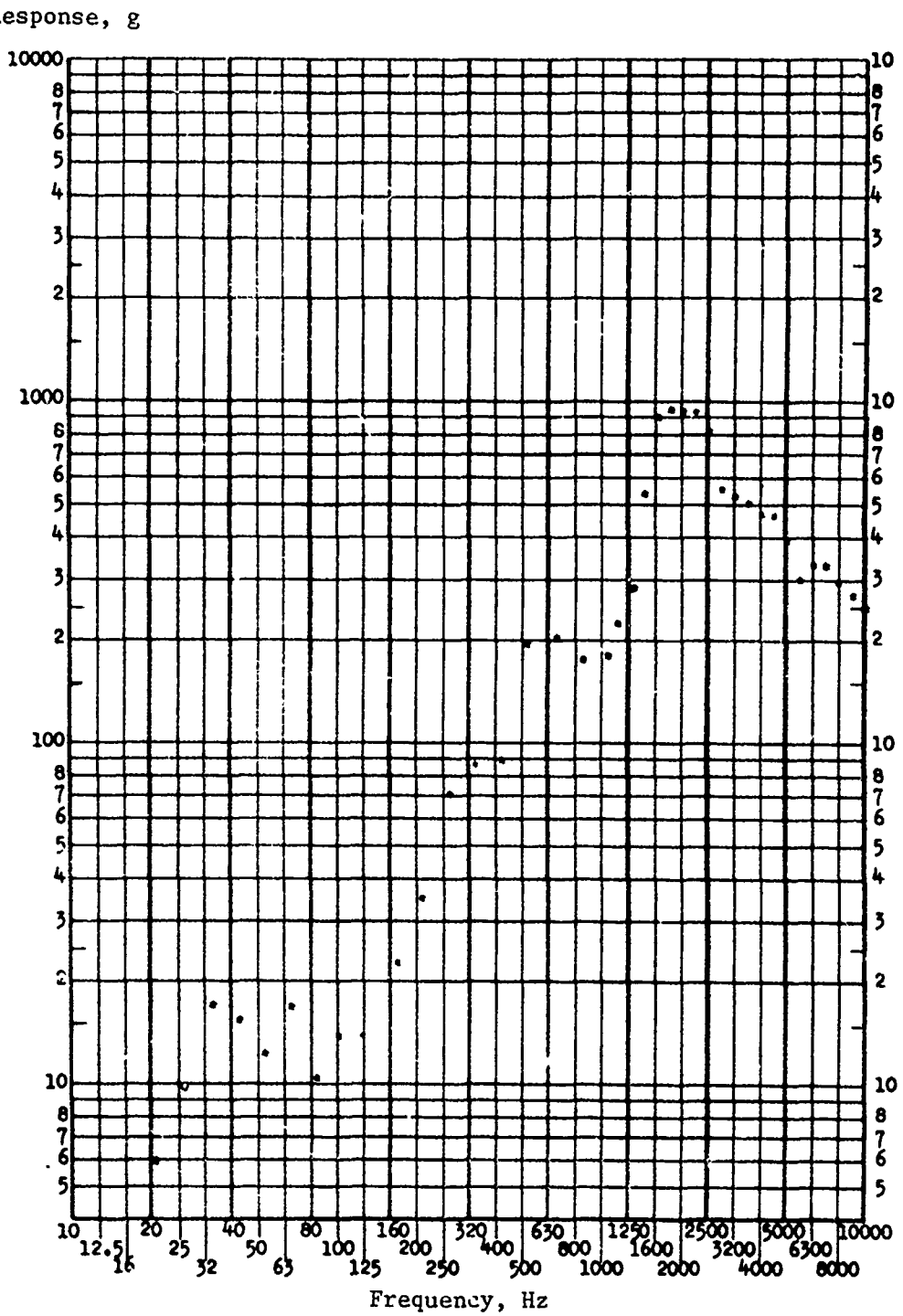
Bench Shock Test - Stage II/III Separation, Run 35
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 35 (cont)



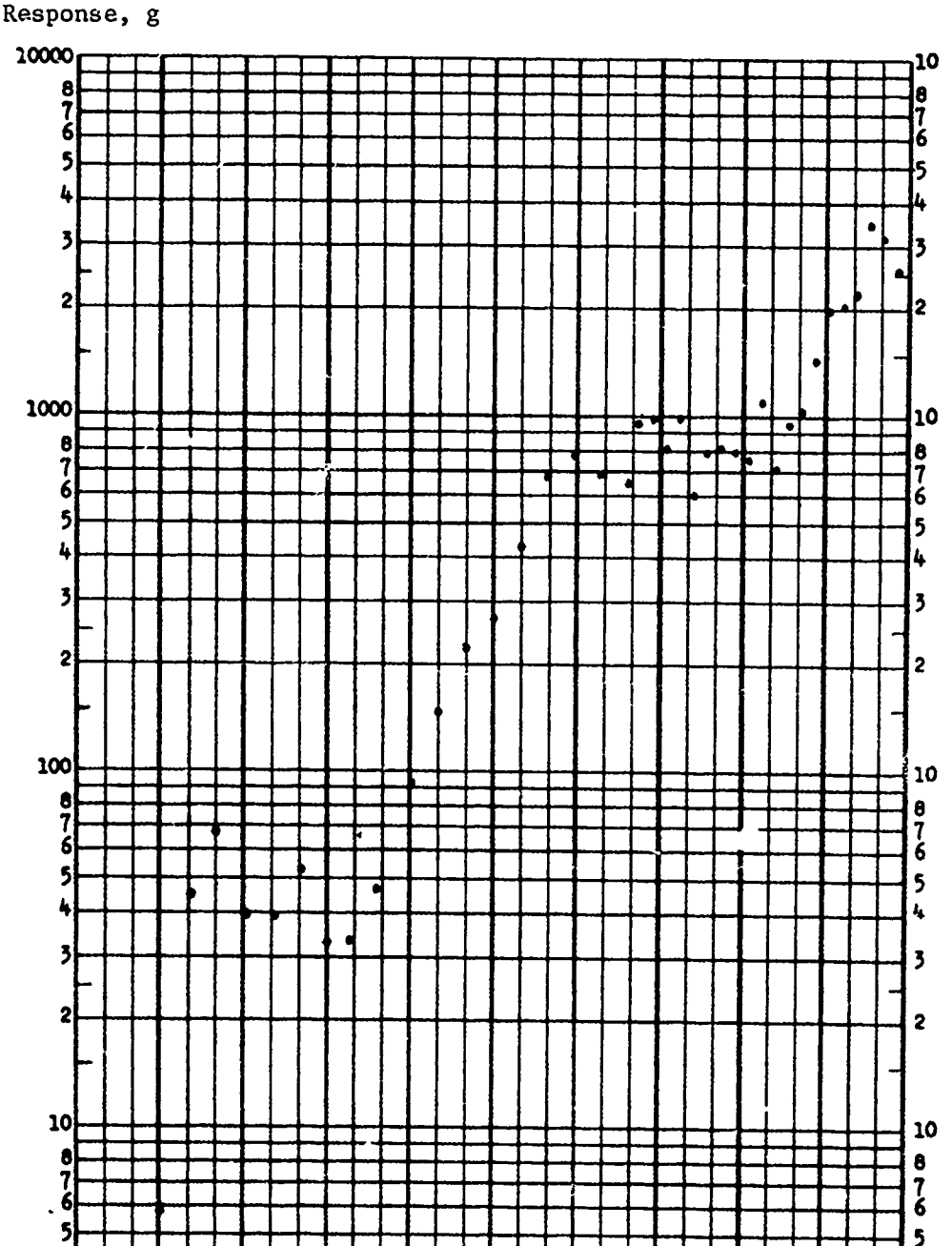
Bench Shock Test - Stage II/III Separation, Run 35
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 35 (cont)



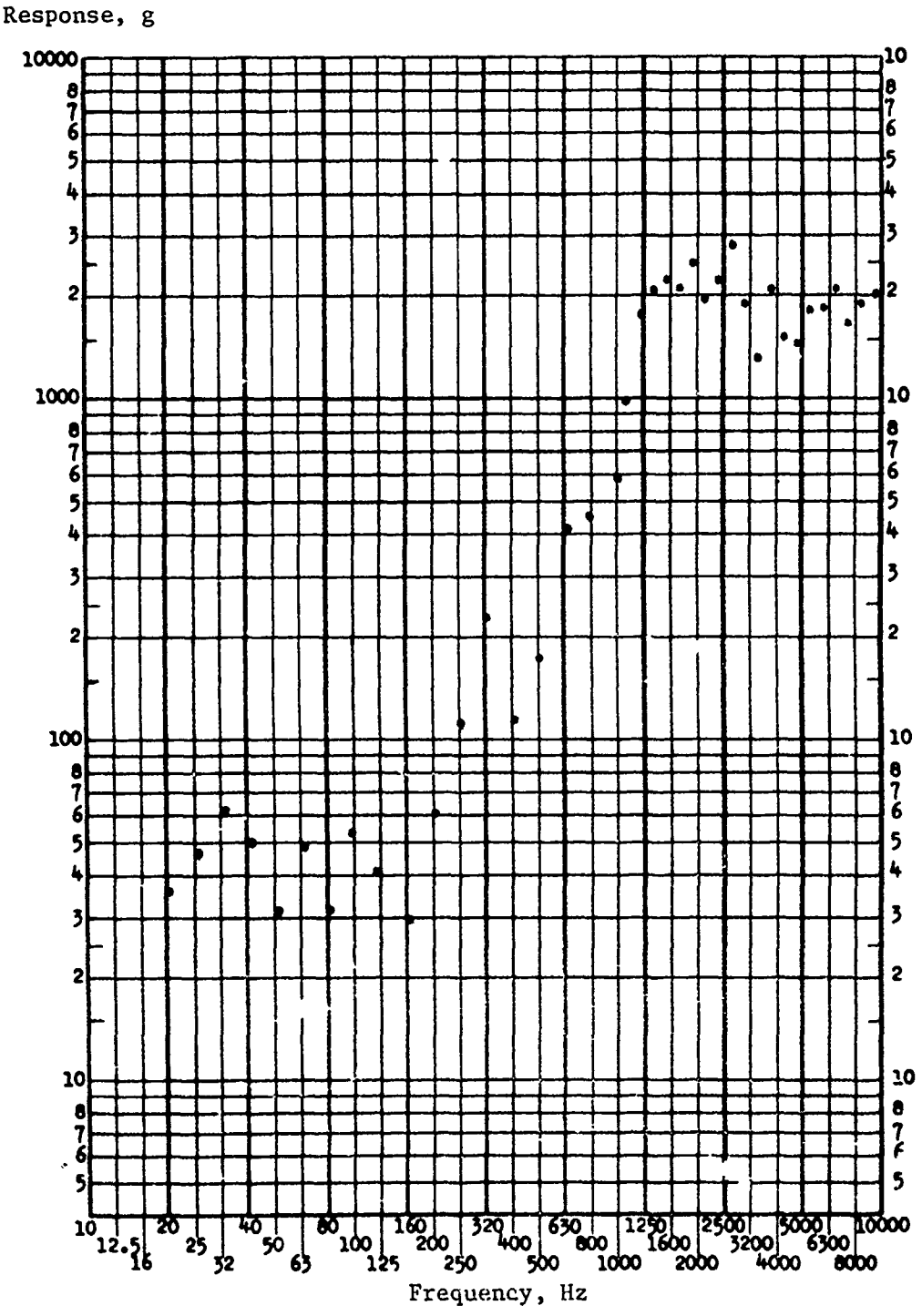
Bench Shock Test - Stage II/III Separation, Run 35 _
Measurement No. 15 - Lateral axis truss top near
longeron attach point

Figure 35 (concl)



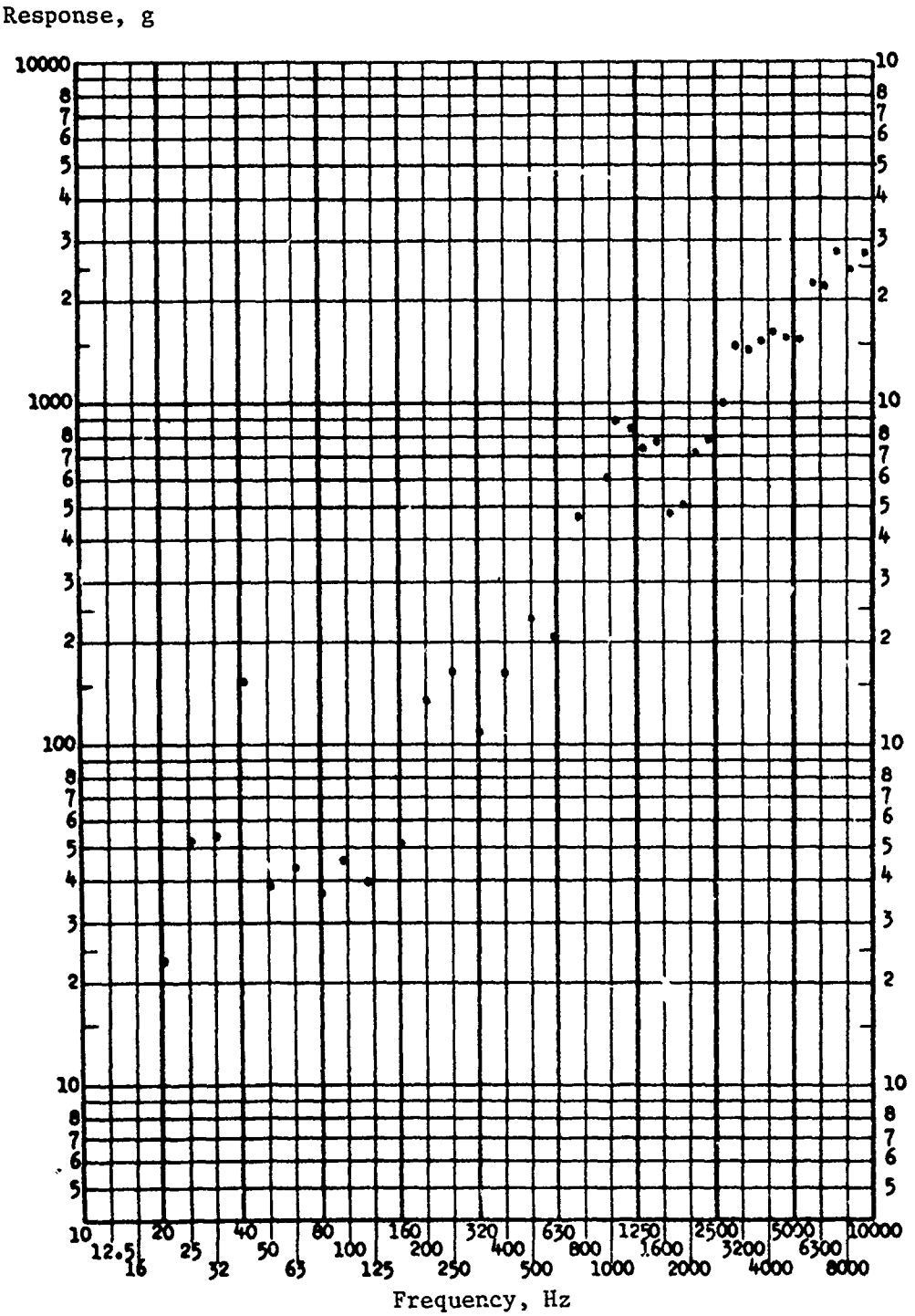
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 36 Run 36 Shock Response Spectrum



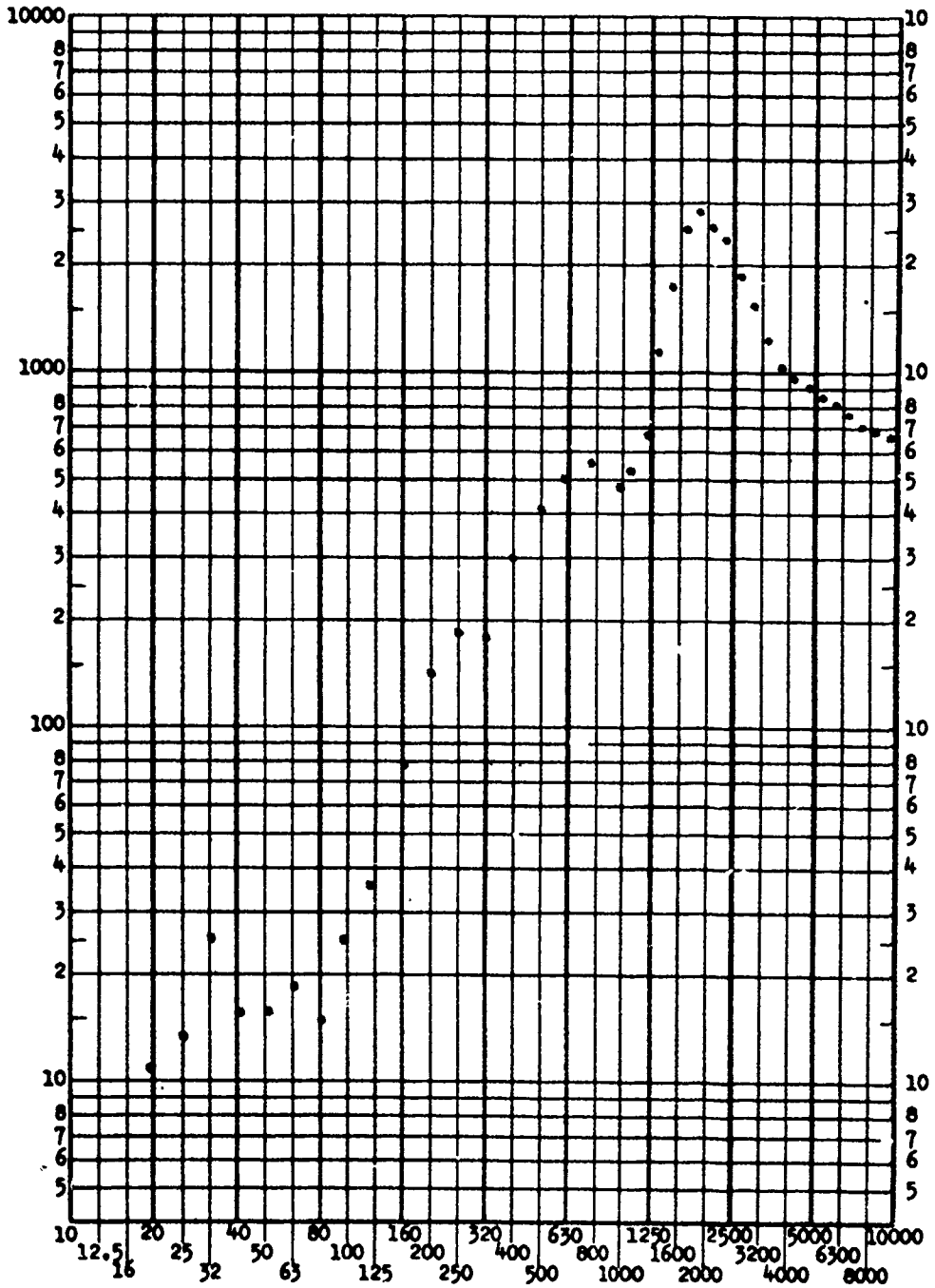
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 2 - Tangential axis longeron near station 133

Figure 36 (cont)



Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 3 - Radial axis longeron near station 133

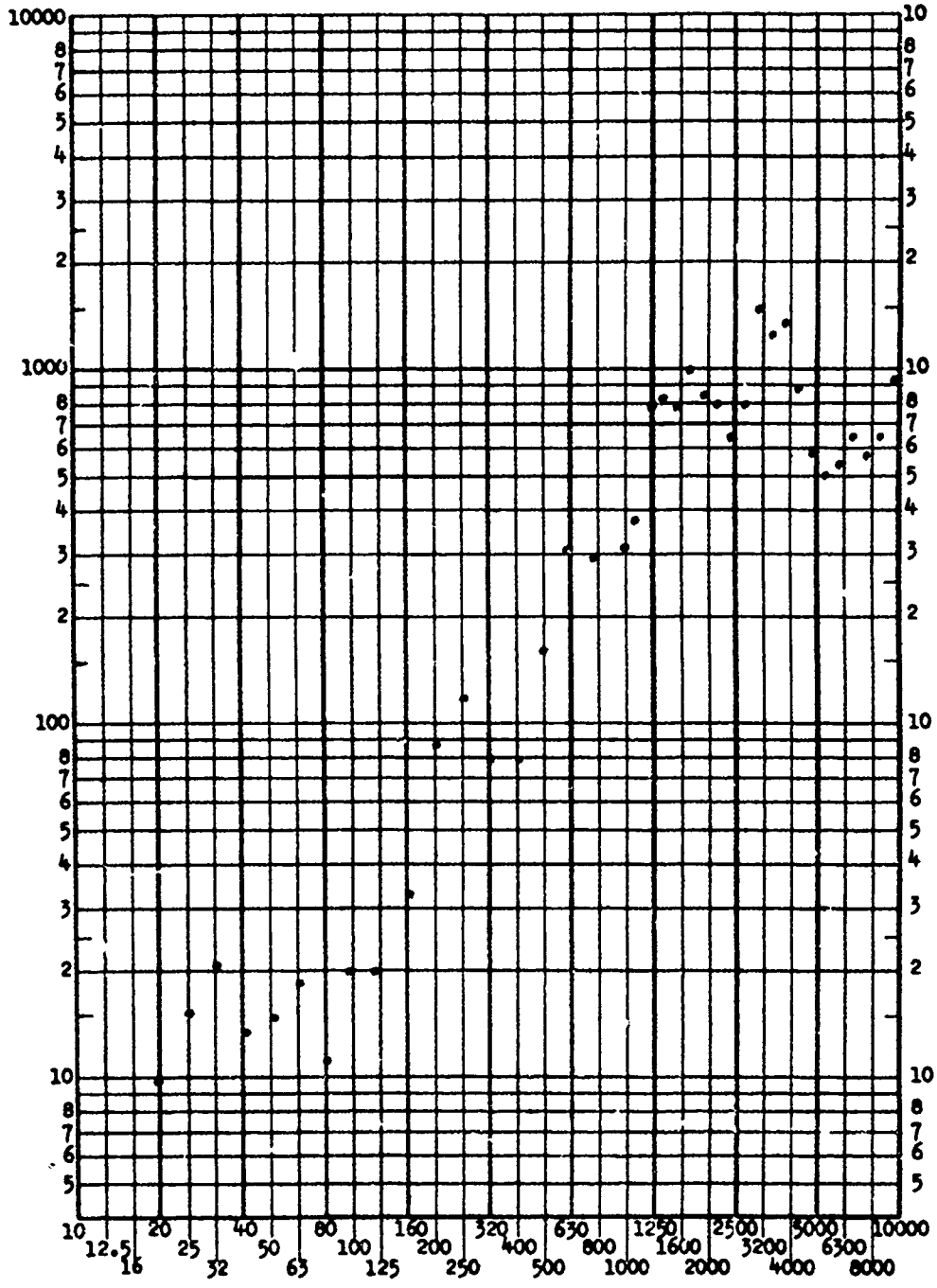
Figure 36 (cont)



Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 36 (cont)

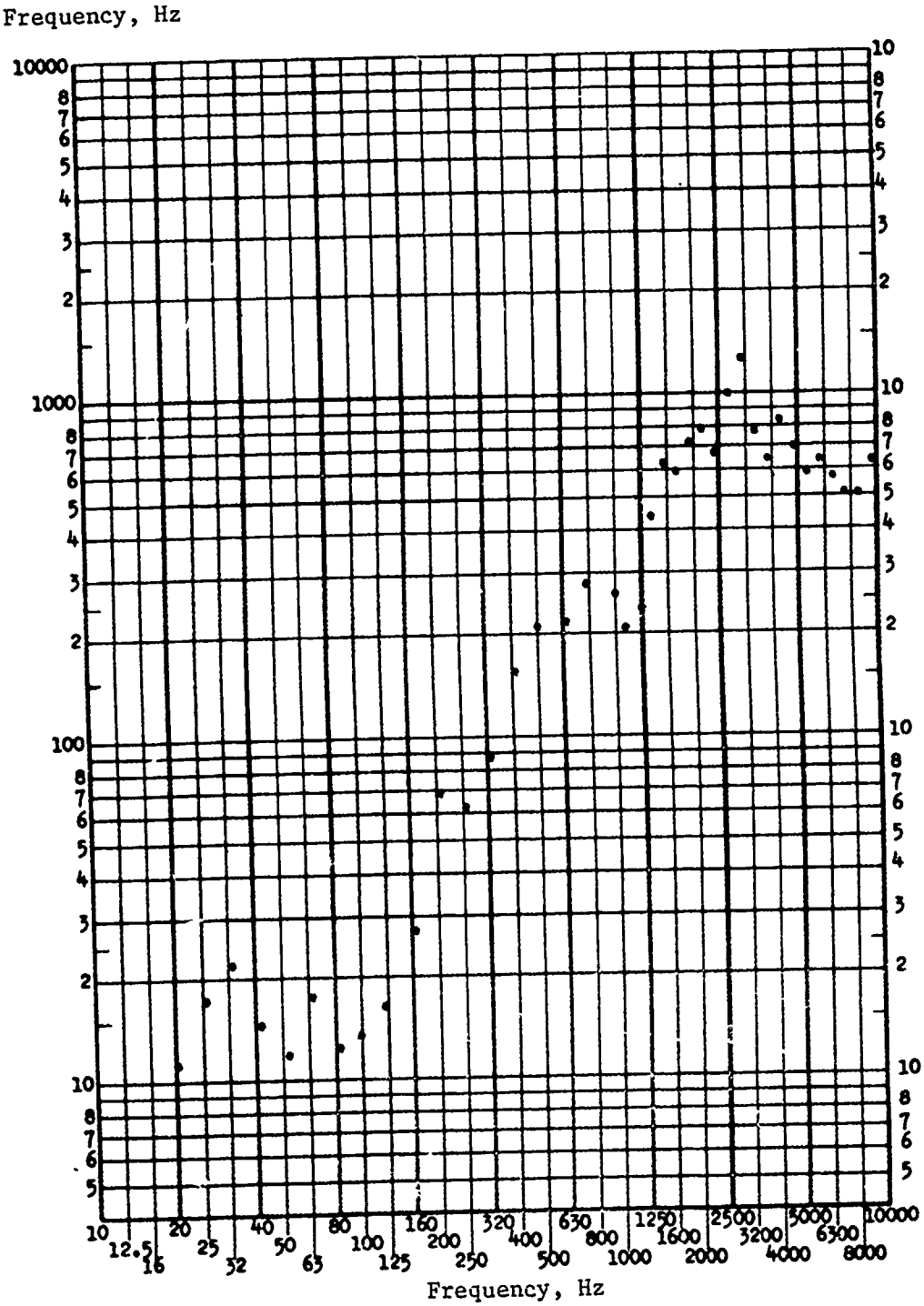
Response, g



Frequency, Hz

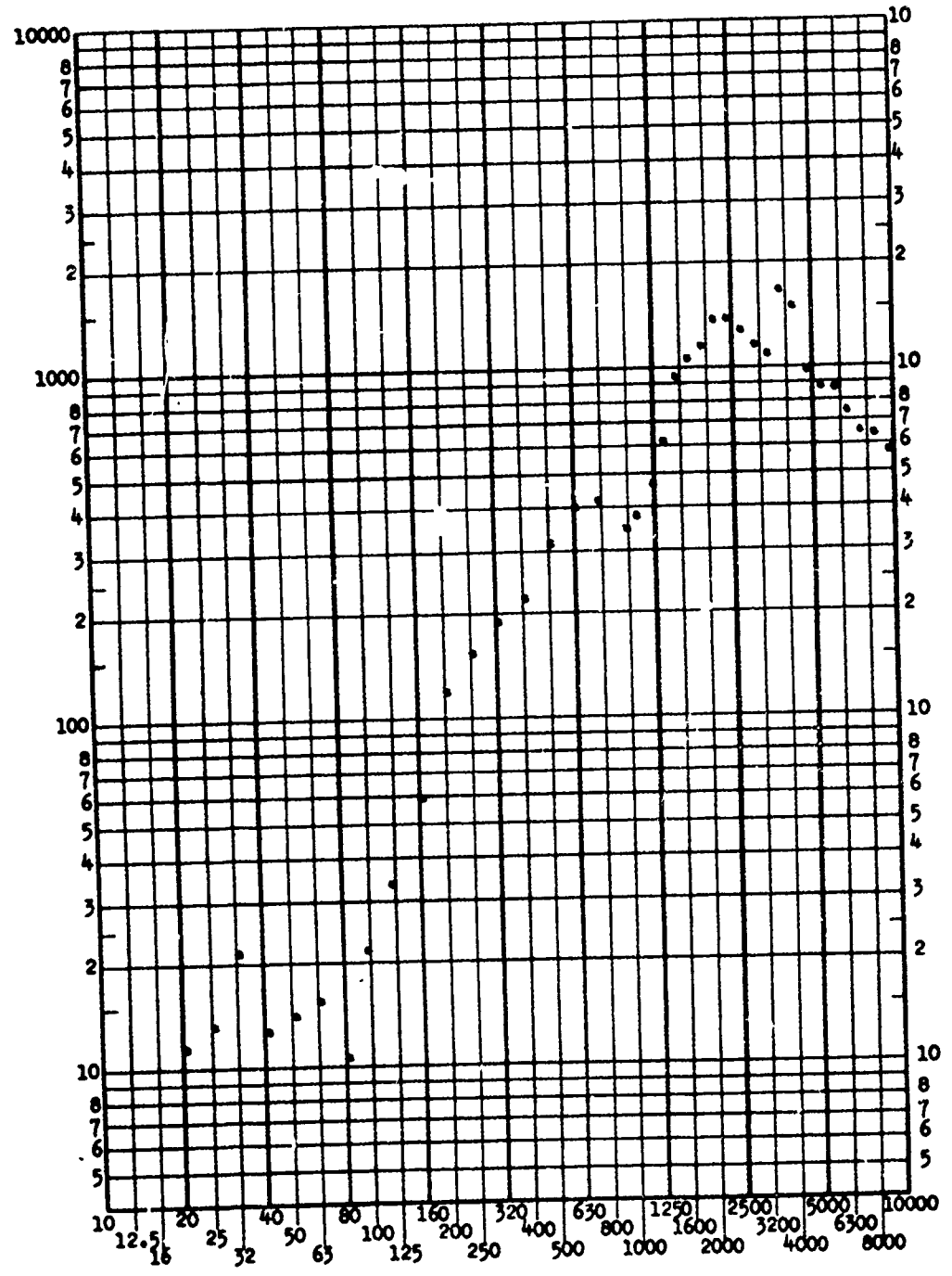
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 5 - Tangential axis longeron near station 117

Figure 36 (cont)



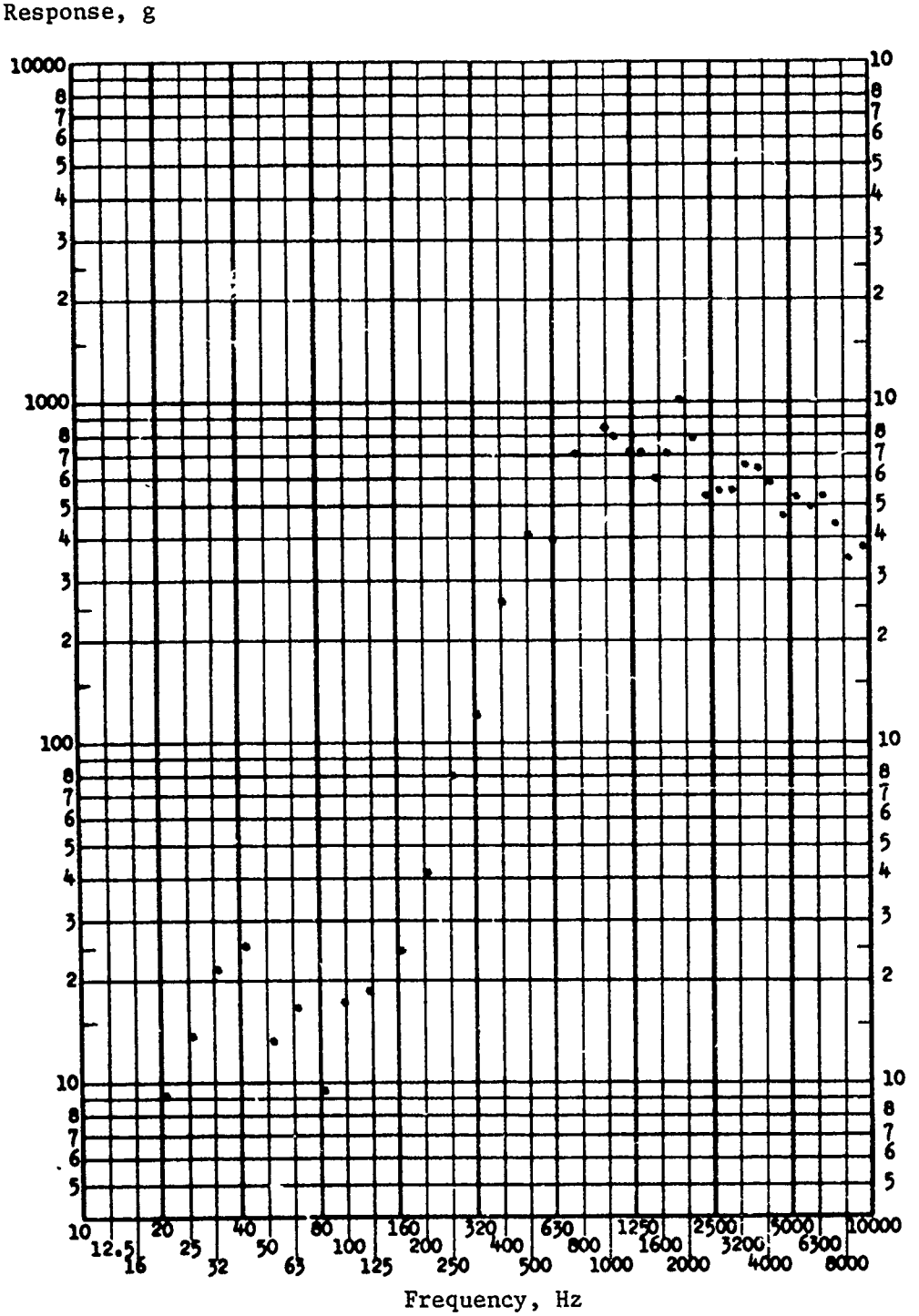
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 6 - Radial axis longeron near station 117

Figure 36 (cont)



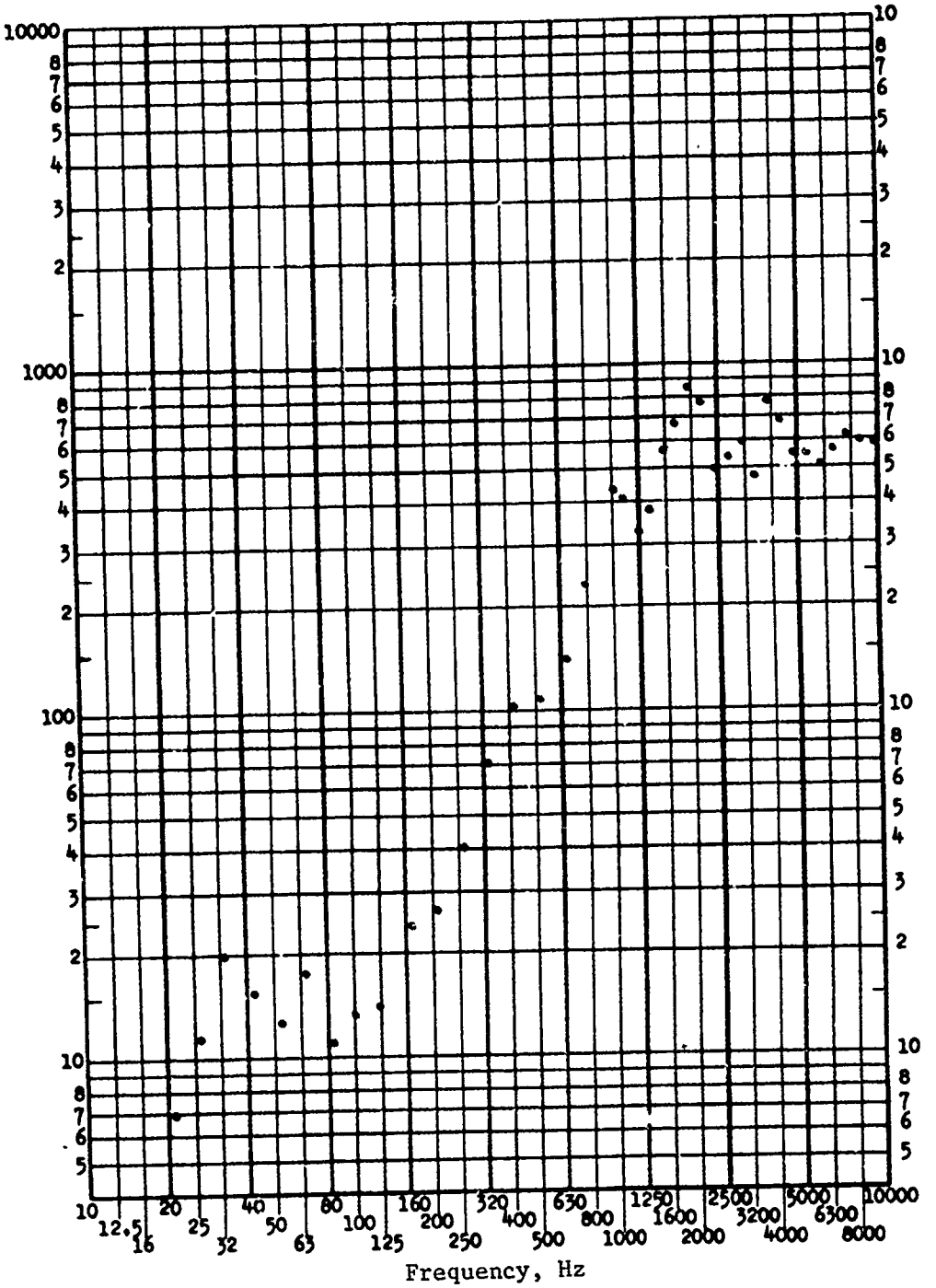
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 36 (cont)



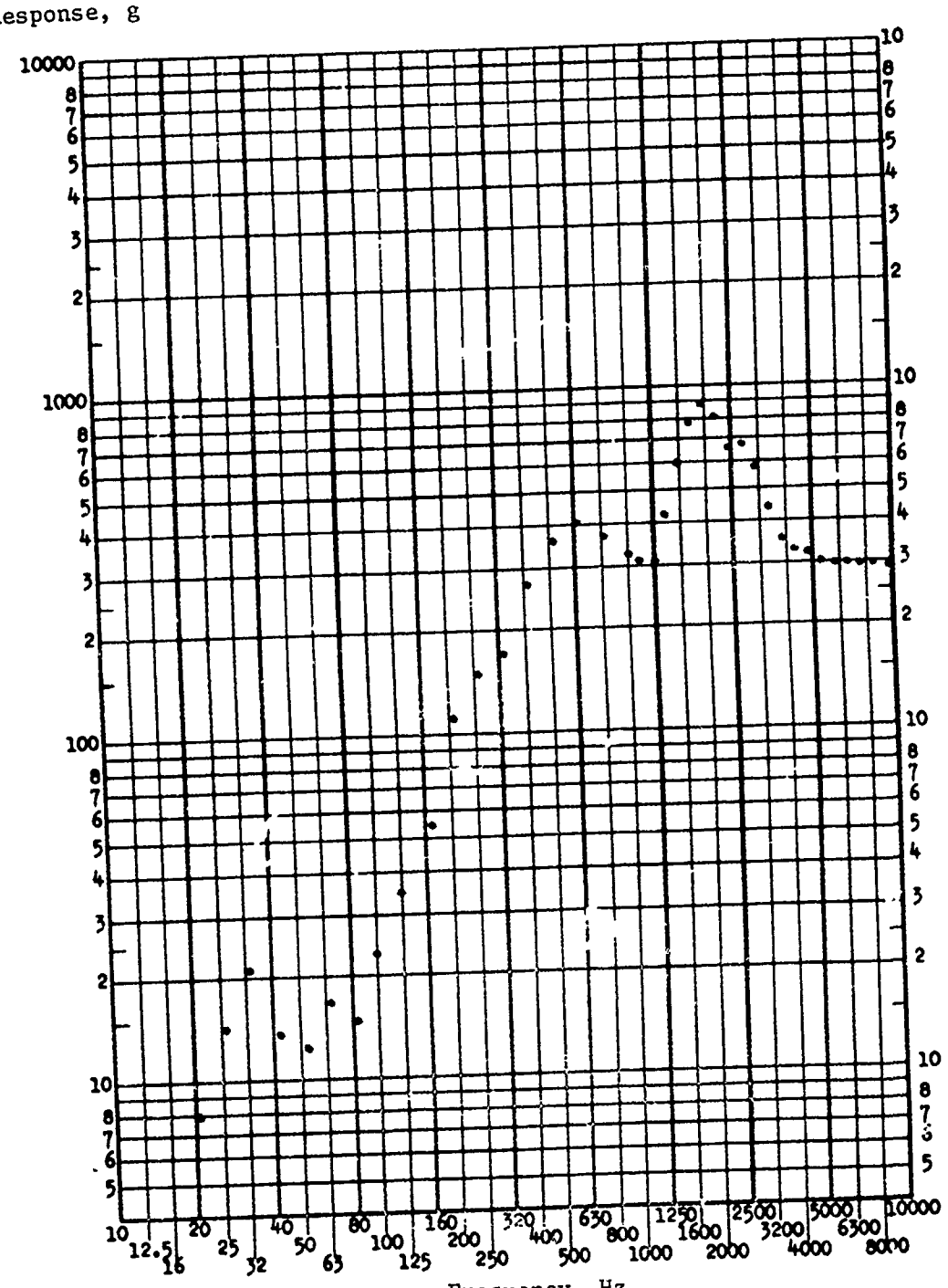
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 8 - Tangential axis longeron near station 77

Figure 36 (cont)



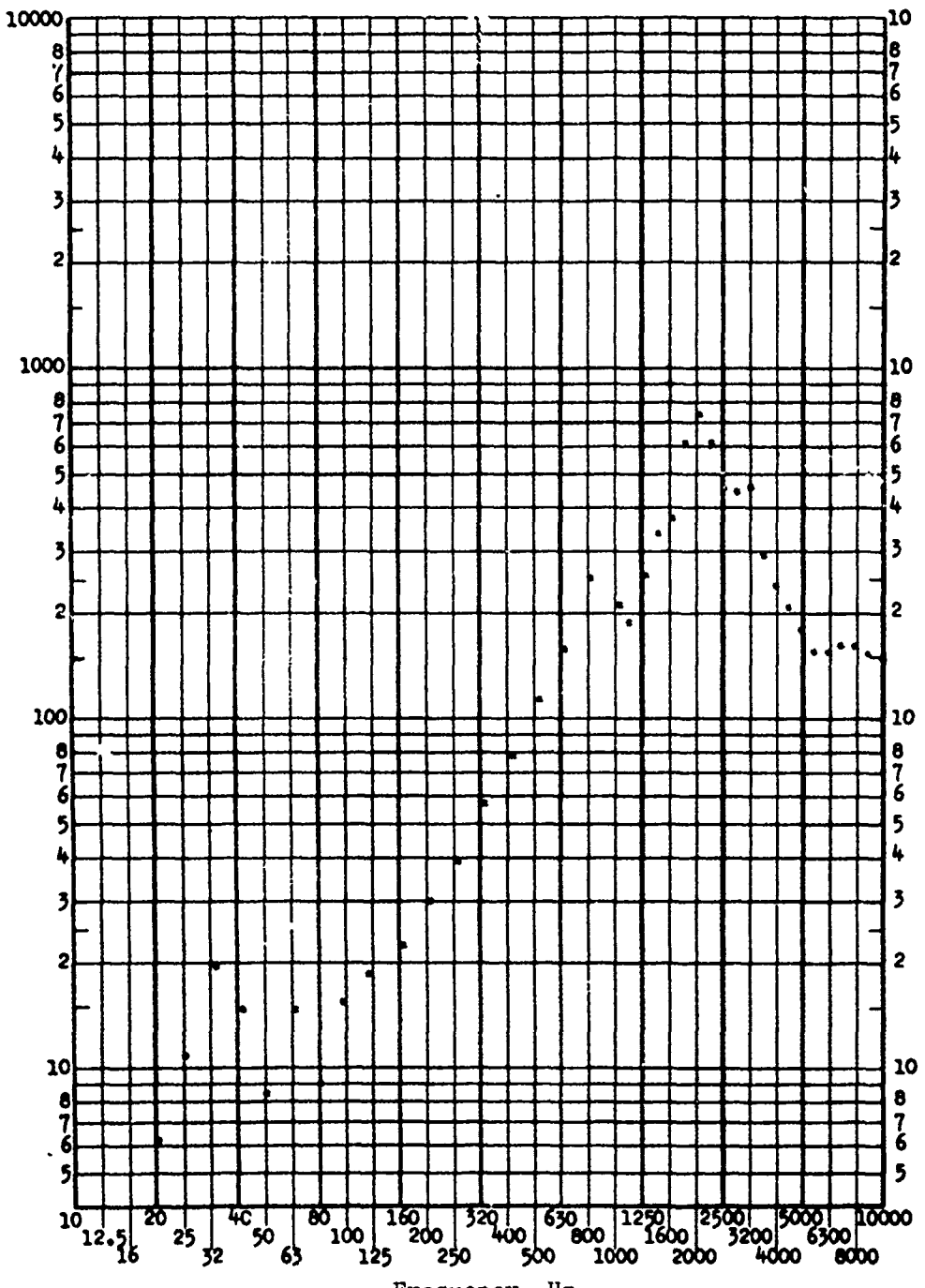
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 9 - Radial axis longeron near station 77

Figure 36 (cont)



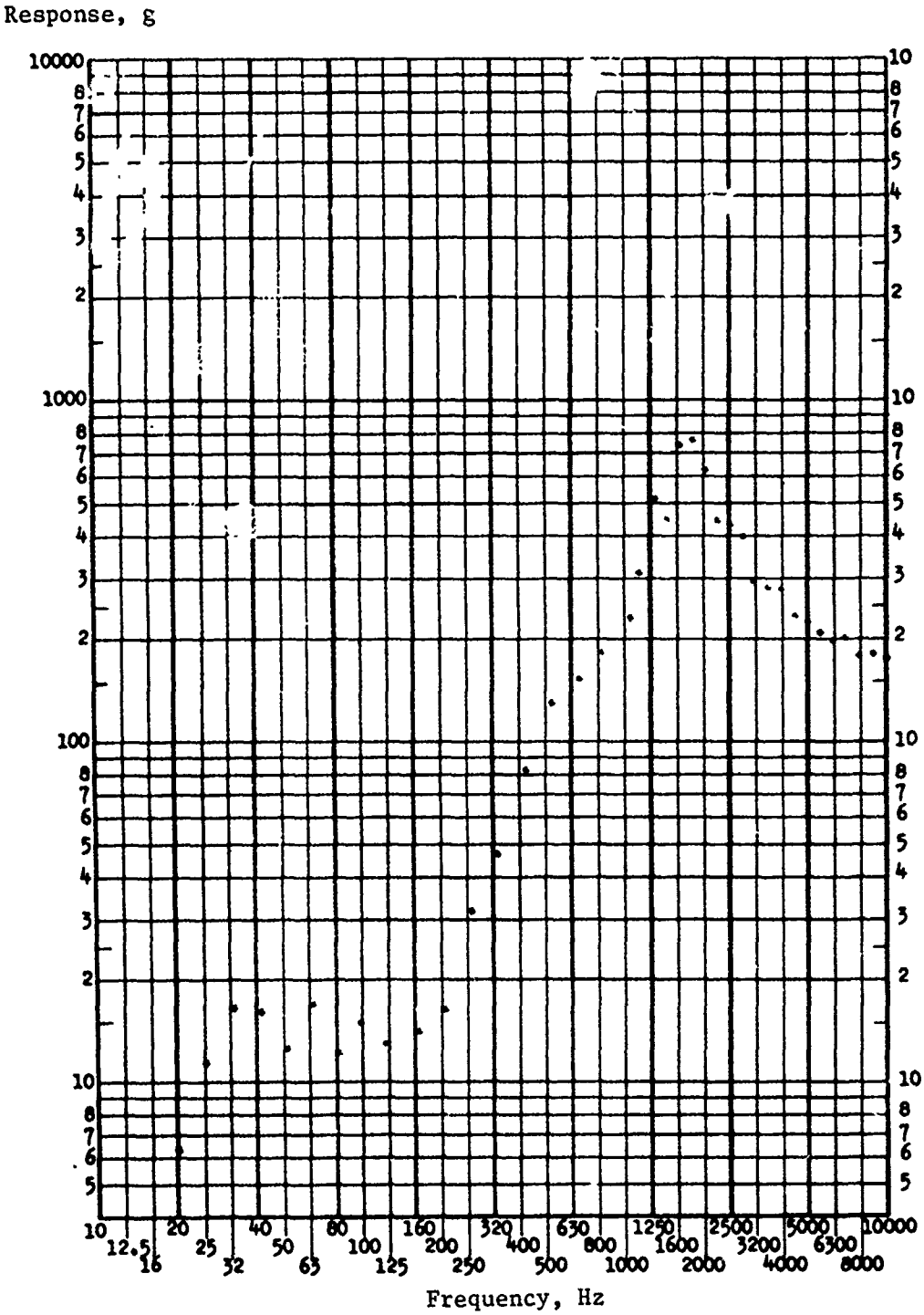
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 36 (cont)



Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

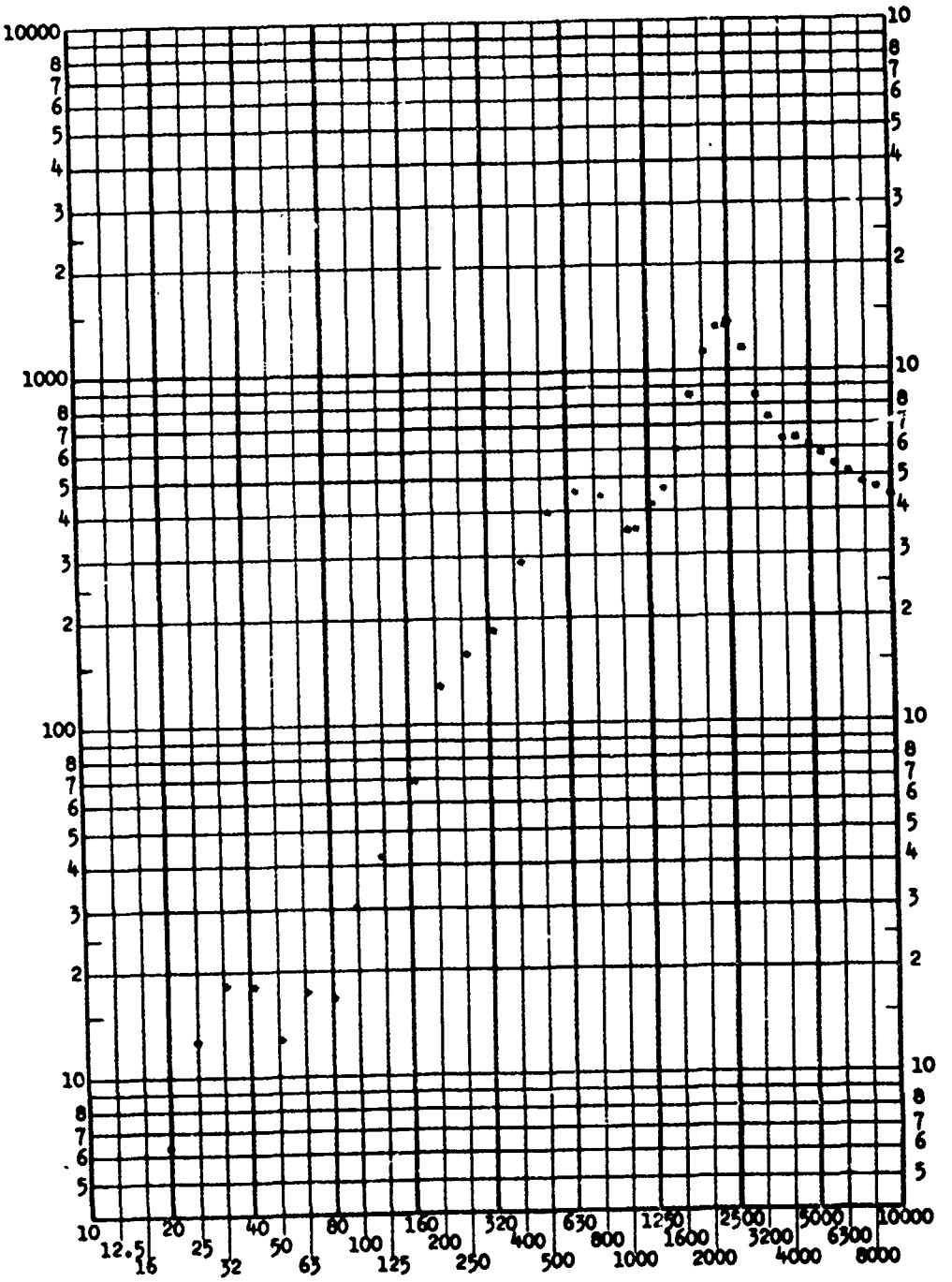
Figure 36 (cont)



Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 36 (cont)

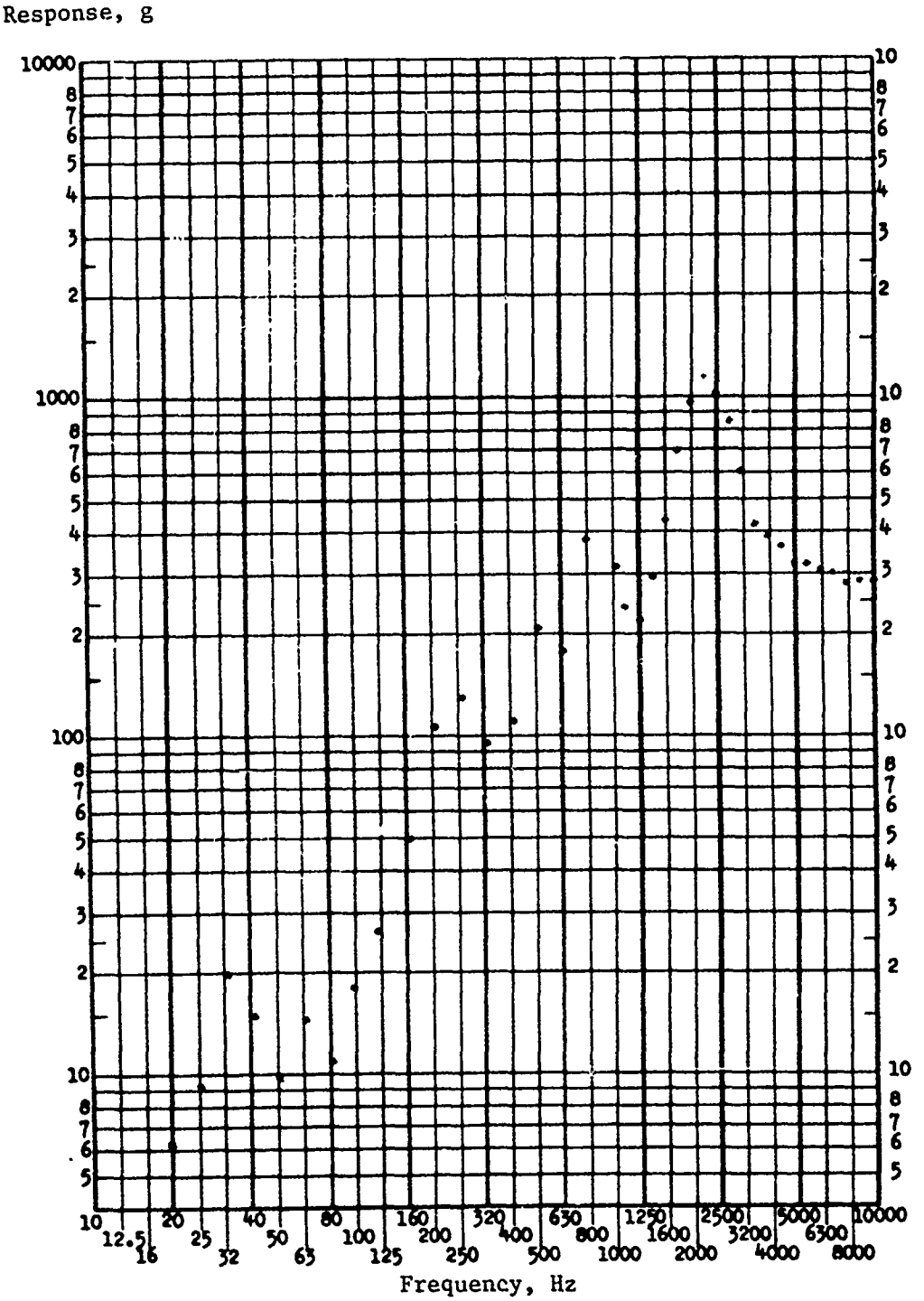
Response, g



Frequency, Hz

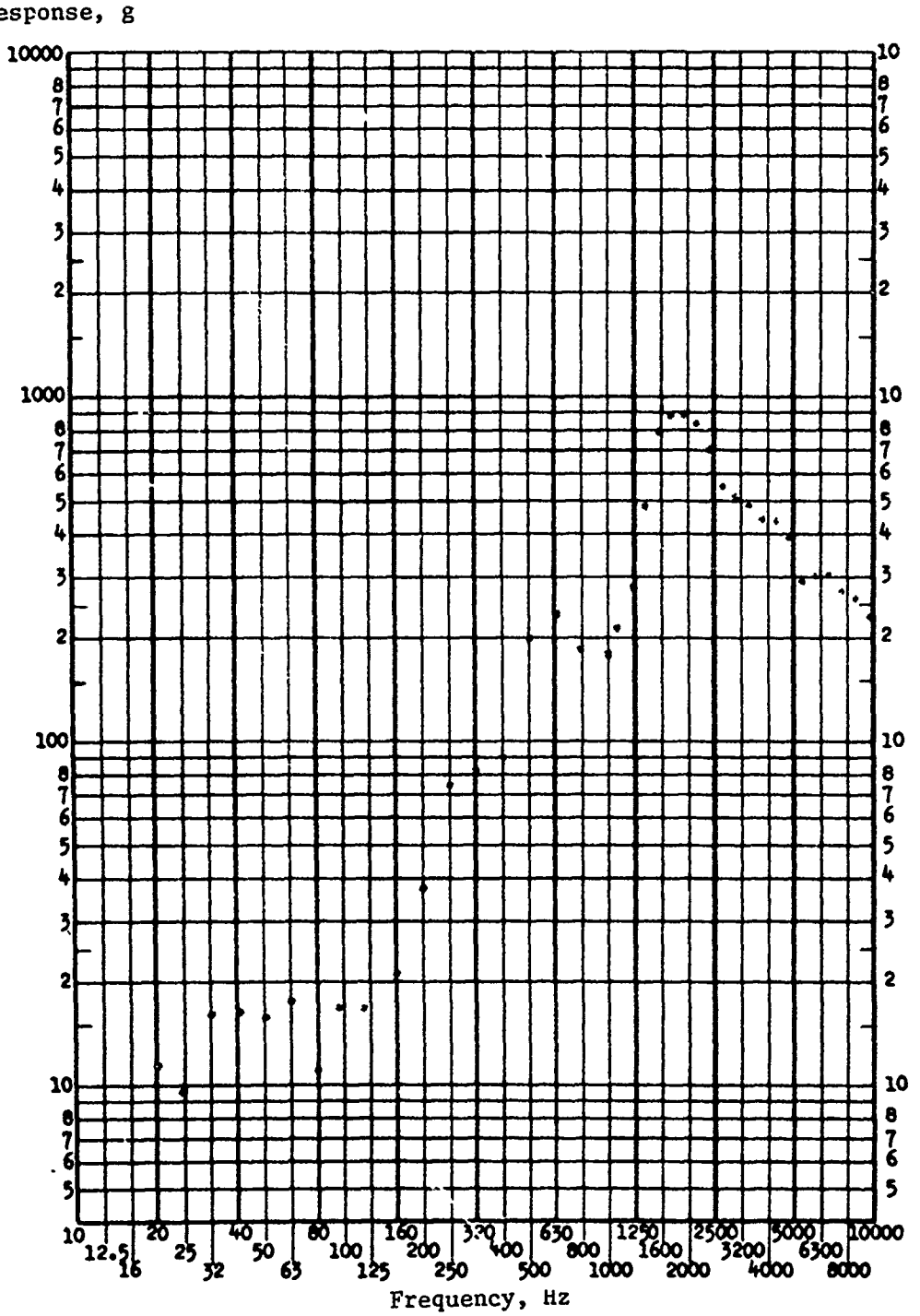
Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 36 (cont)



Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 36 (cont)



Bench Shock Test - Stage II/III Separation, Run 36
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 36 (concl)

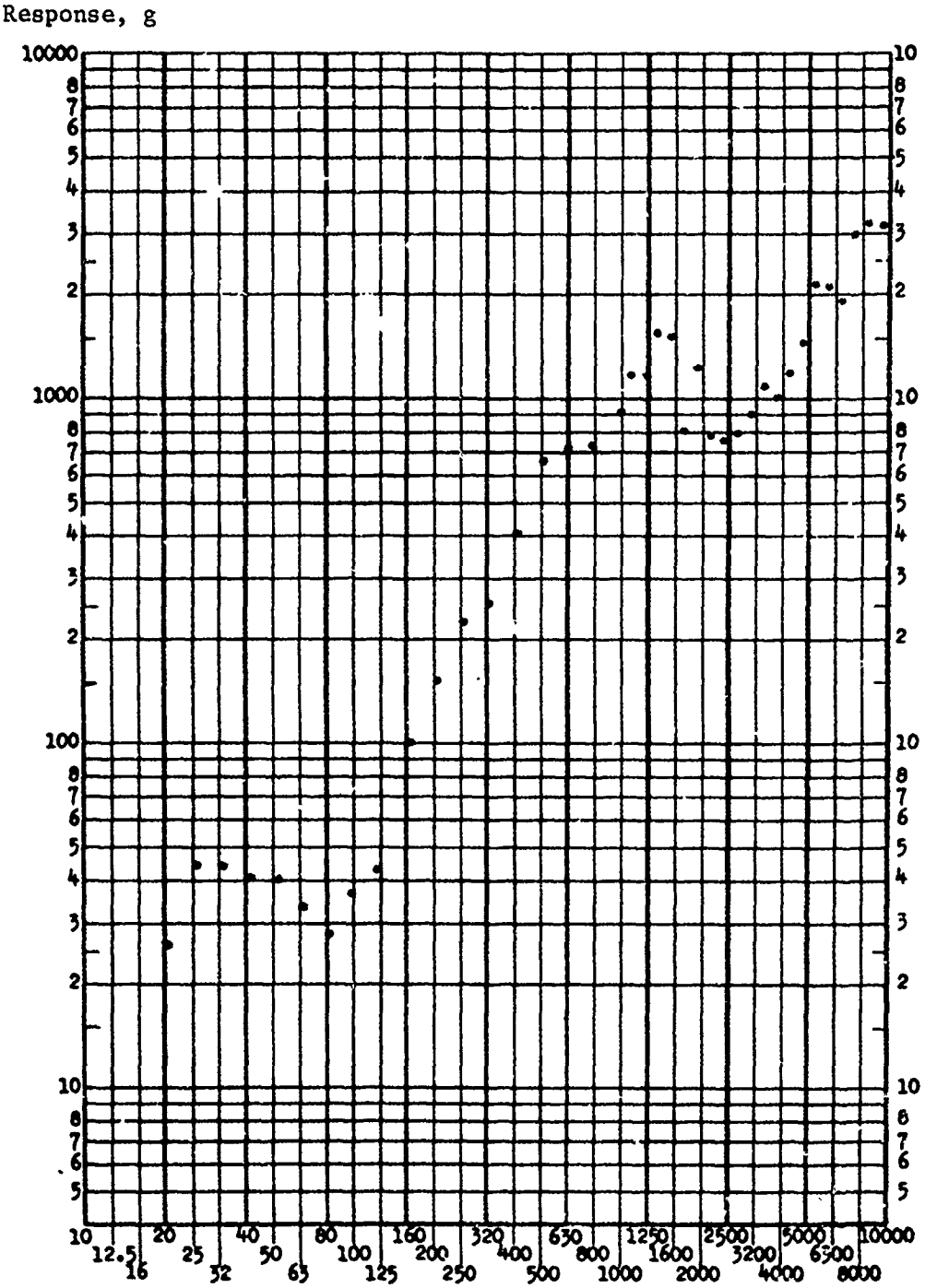
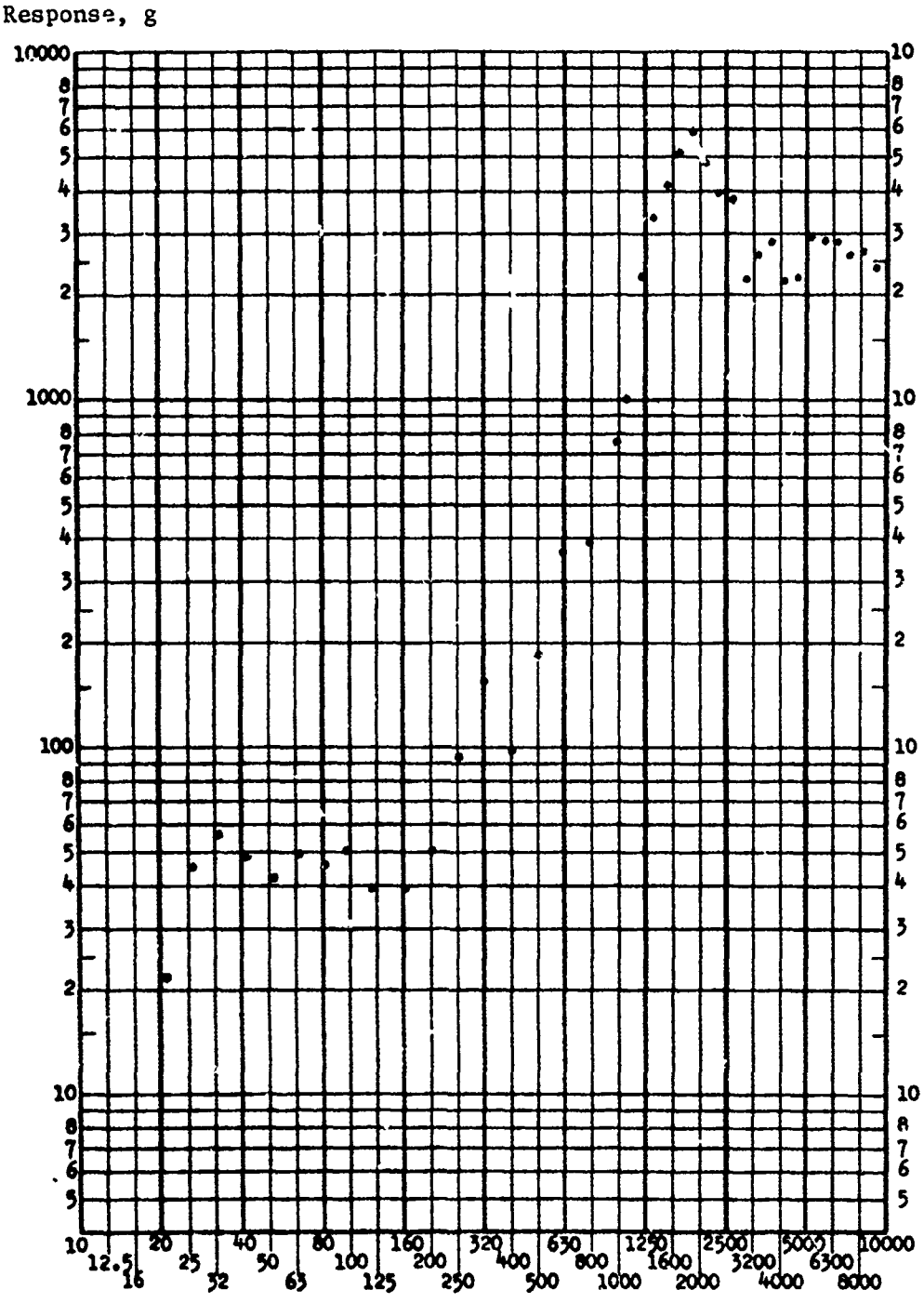
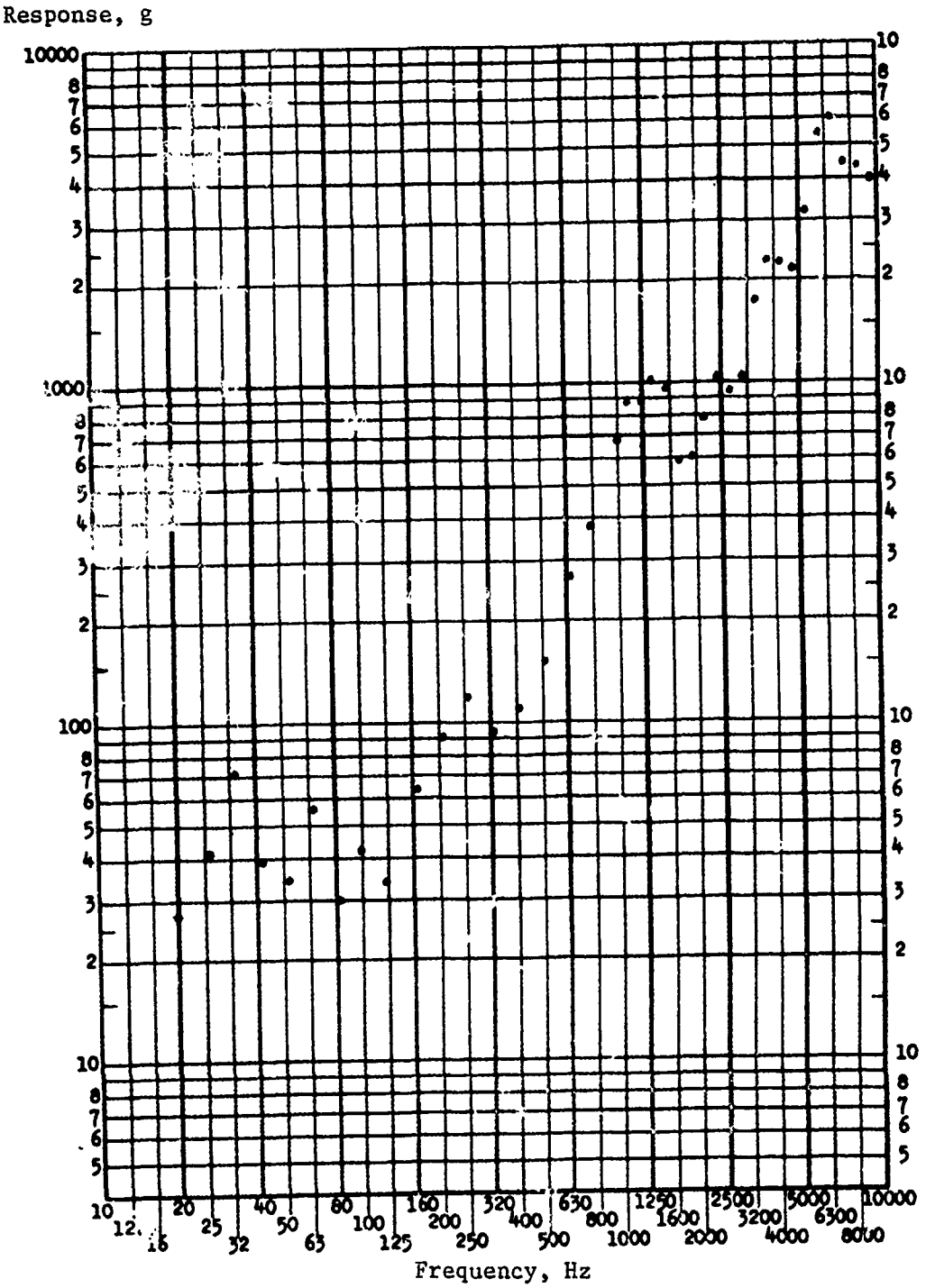


Figure 37 Run 37 Shock Response Spectrum



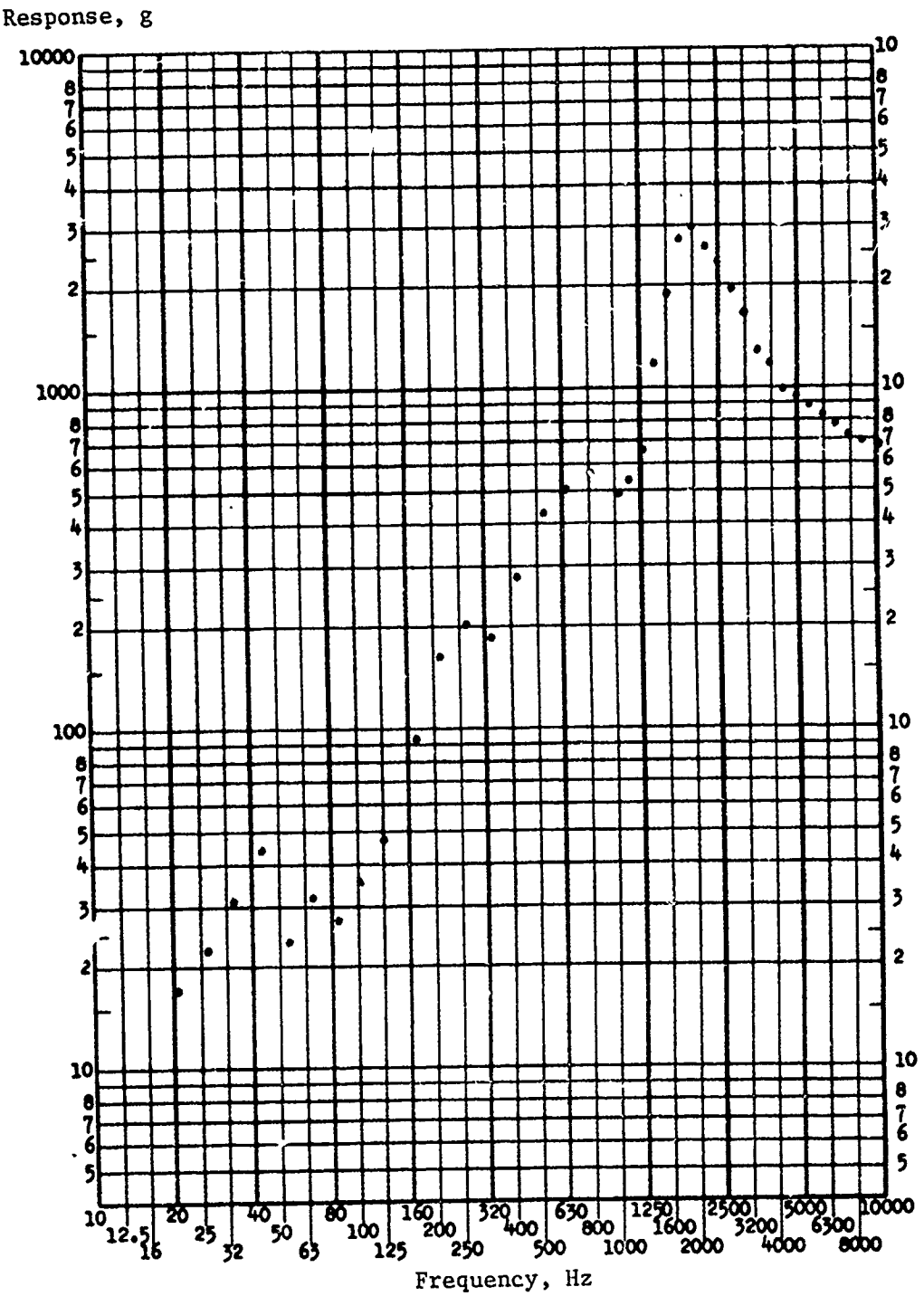
Bench Shock Test - Stage II/III Separation, Run 37 _
Measurement No. 2 - Tangential axis longeron near station 133

Figure 37 (cont)



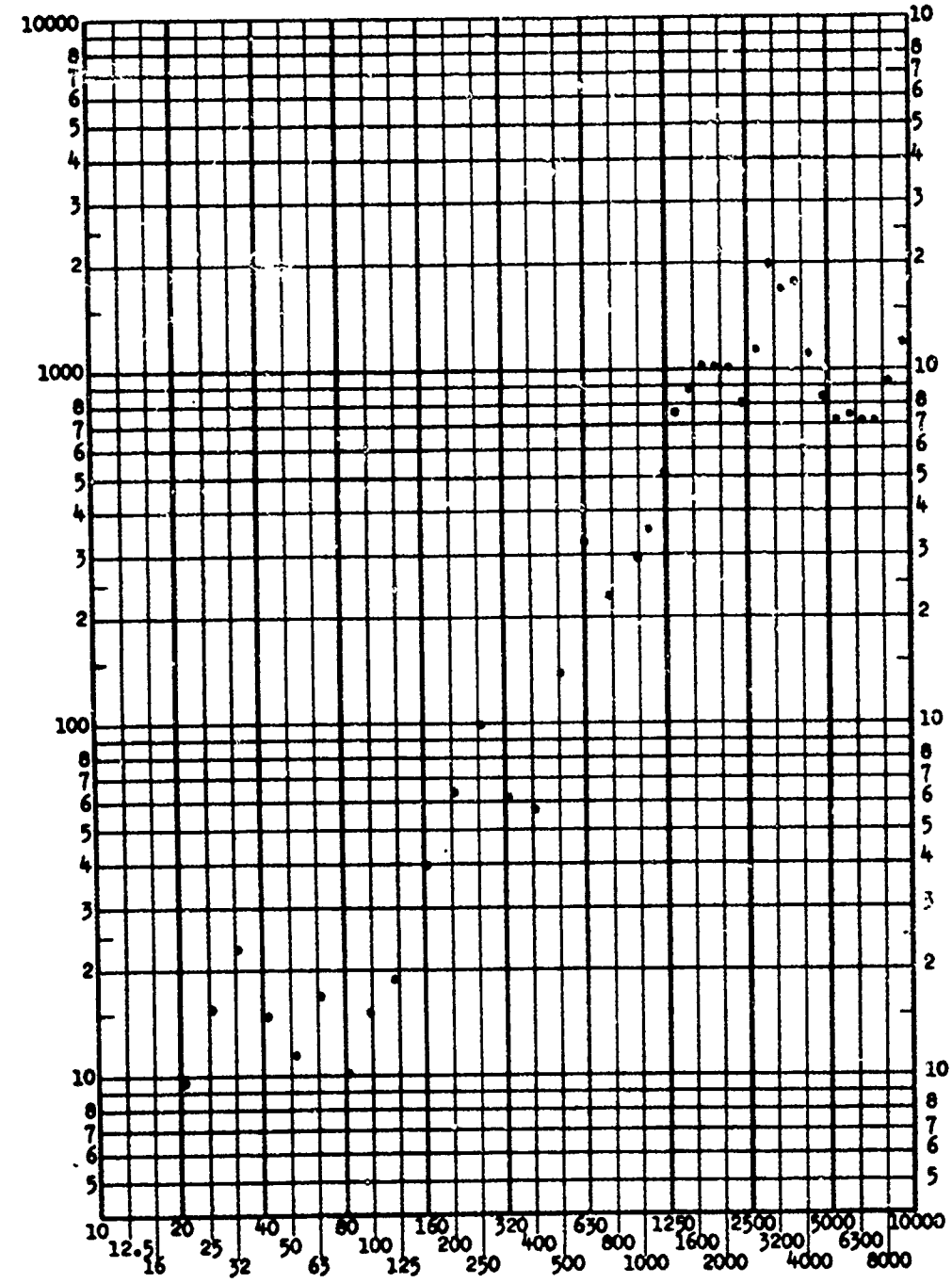
Bench Shock Test - Stage II/III Separation, Run 37 _
Measurement No. 3 - Radial axis longeron near
station 133

Figure 37 (cont)



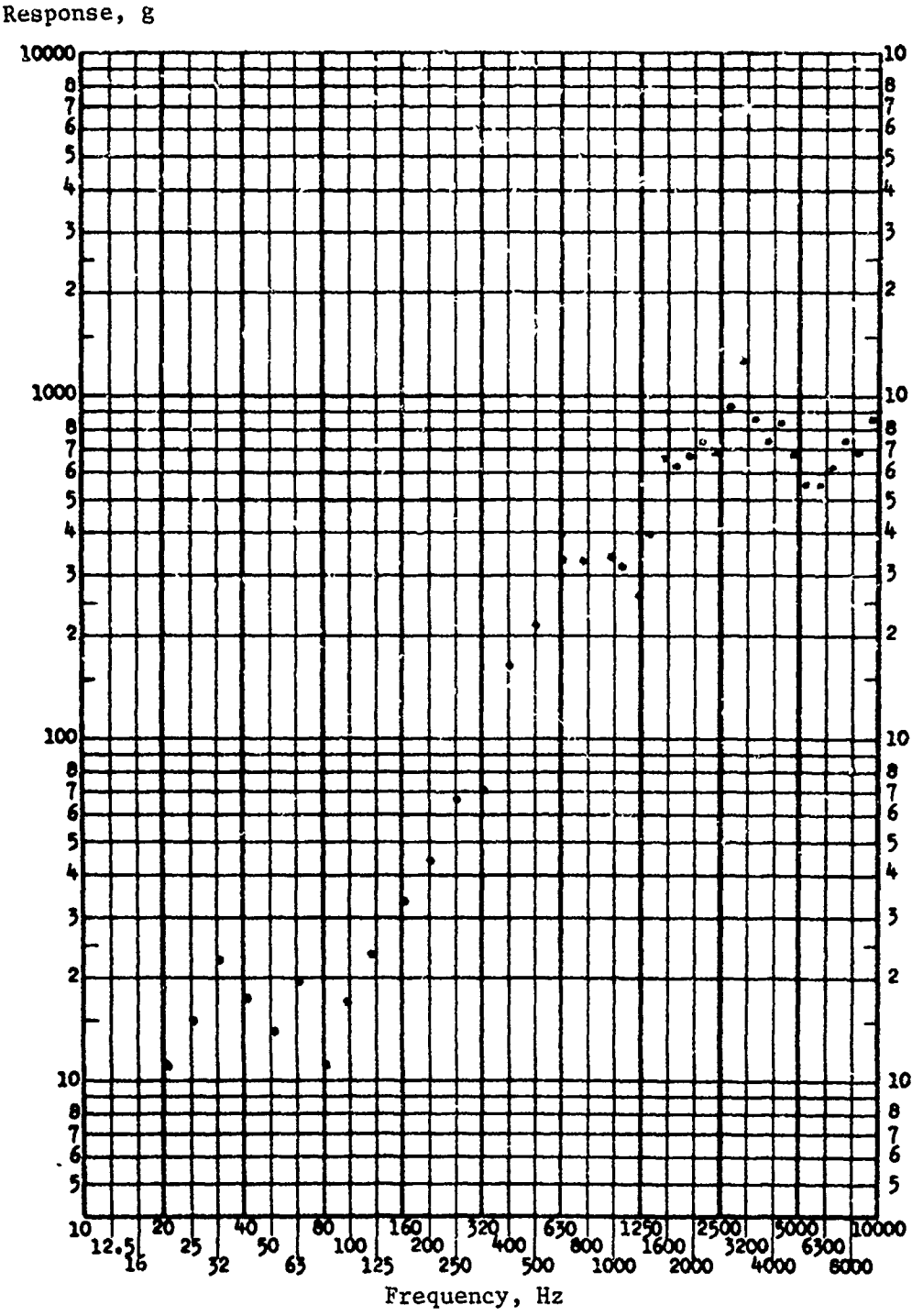
Bench Shock Test - Stage II/III Separation, Run 37 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 37 (cont)



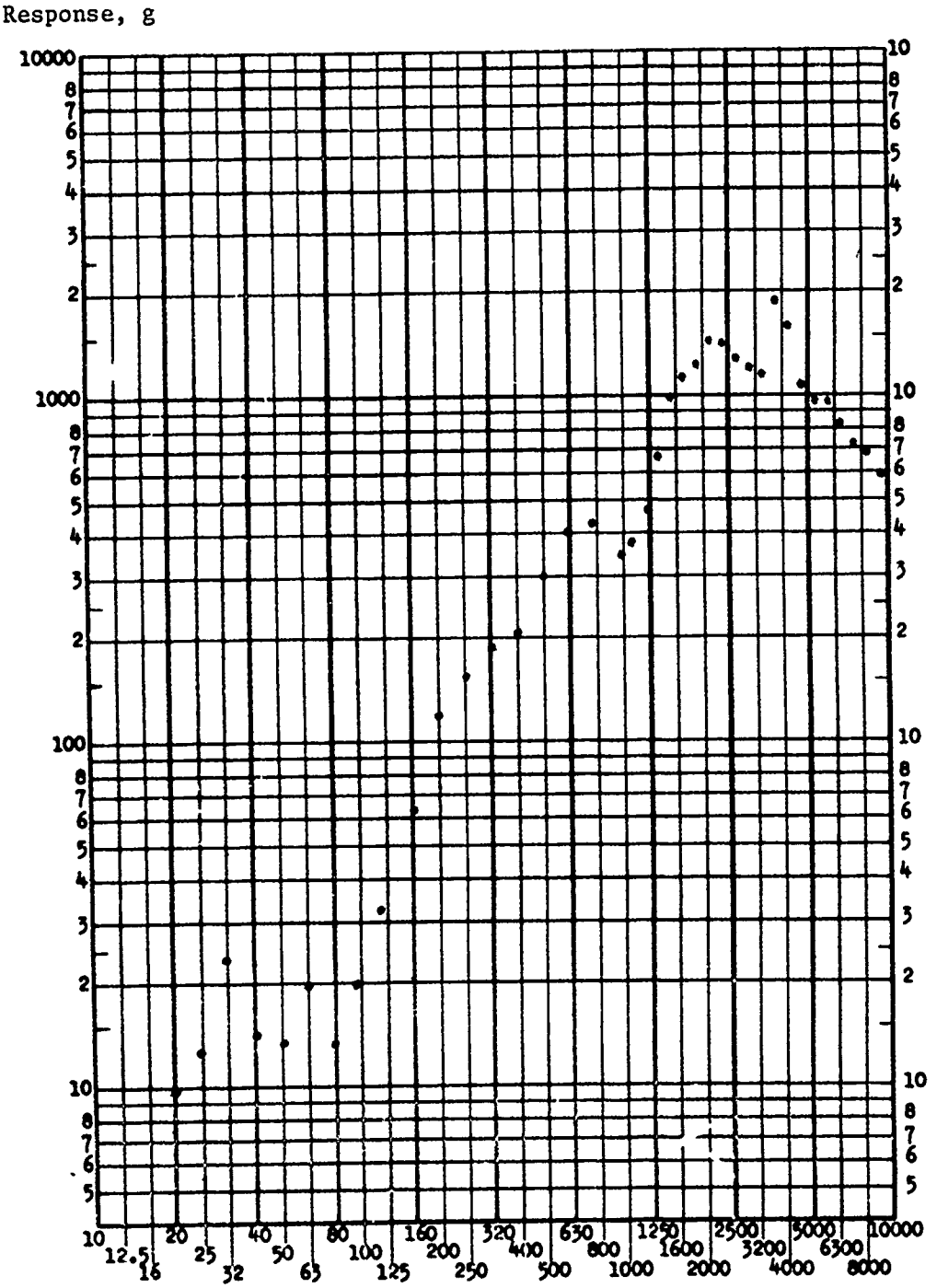
Bench Shock Test - Stage II/III Separation, Run 37 _
Measurement No. 5 - Tangential axis longeron near station 117

Figure 37 (cont)



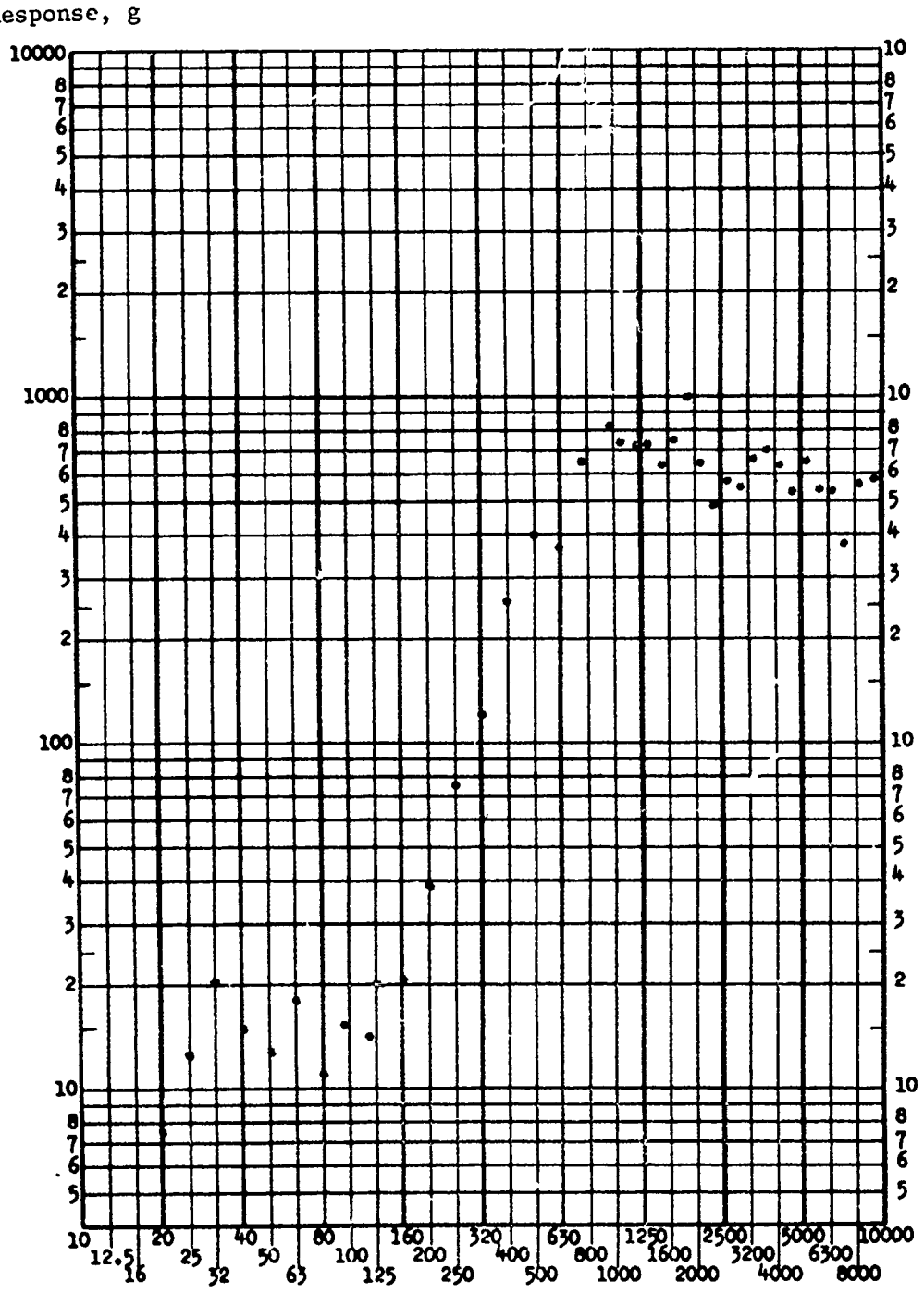
Bench Shock Test - Stage II/III Separation, Run 37 _
Measurement No. 6 - Radial axis longeron near
station 117

Figure 37 (cont)



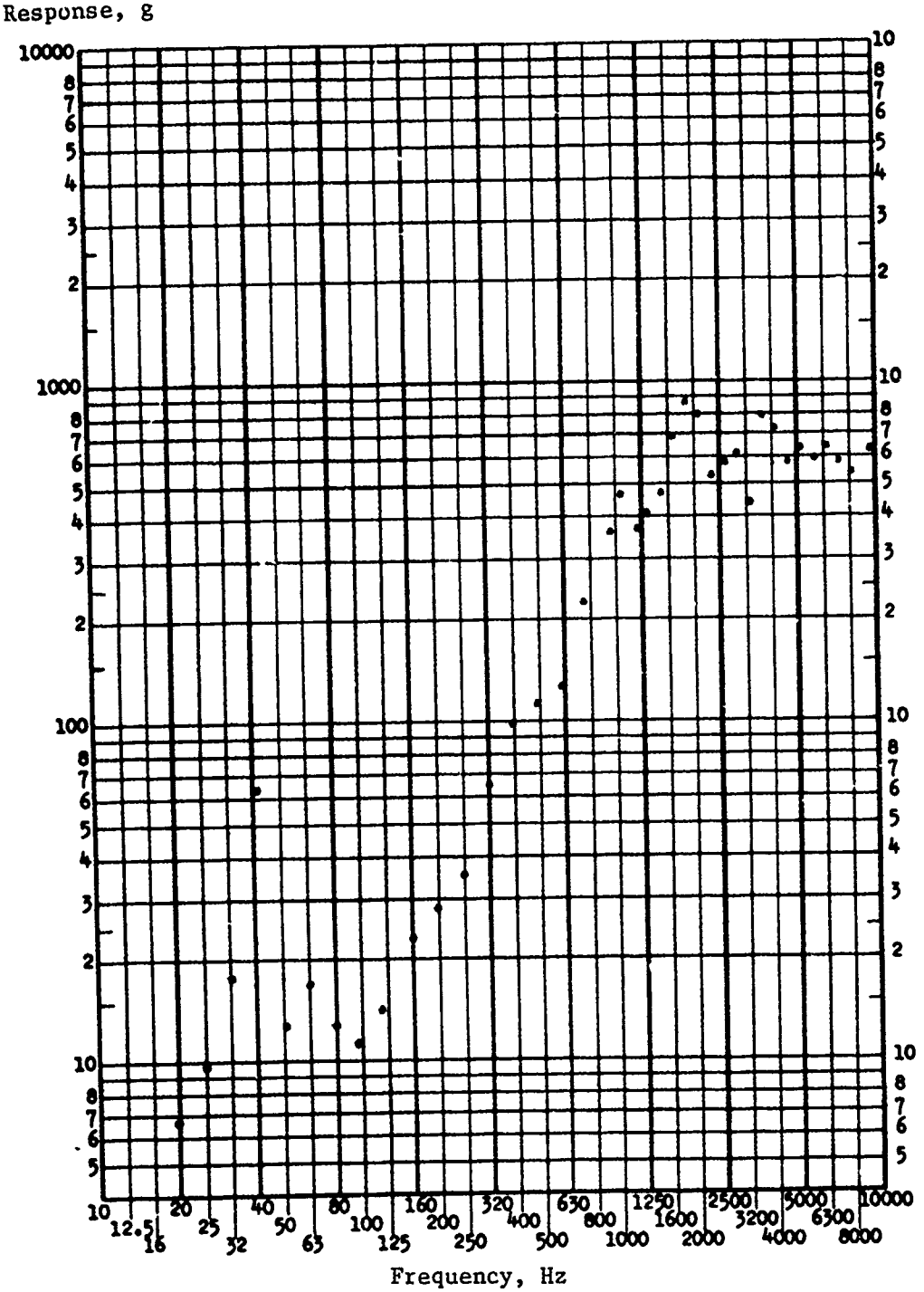
Bench Shock Test - Stage II/III Separation, Run 37 _
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 37 (cont)



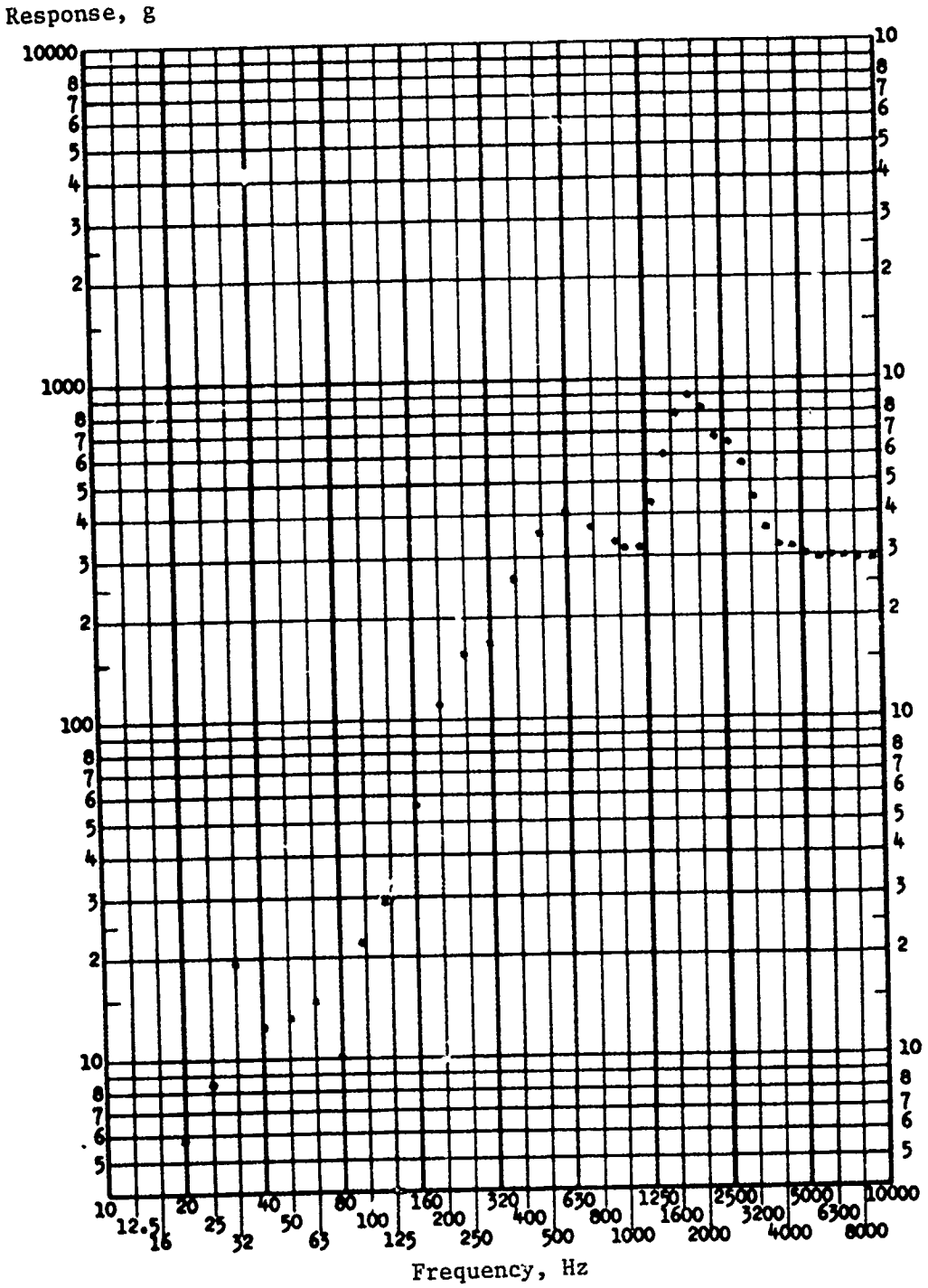
Bench Shock Test - Stage II/III Separation, Run 37
Measurement No. 8 - Tangential axis longeron near station 77

Figure 37 (cont)



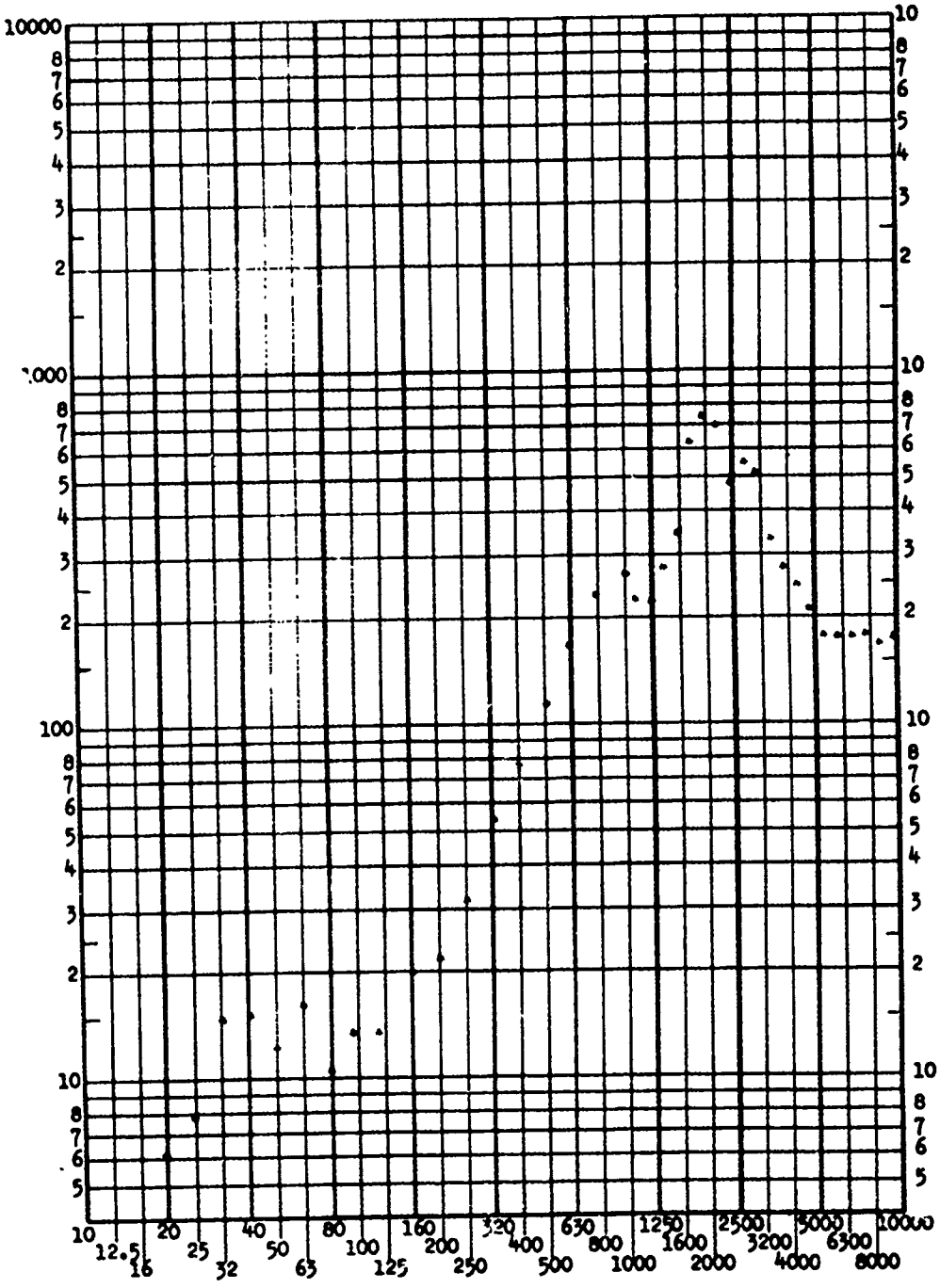
Bench Shock Test - Stage II/III Separation, Run 37 __
Measurement No. 9 - Radial axis longeron near station 77

Figure 37 (cont)



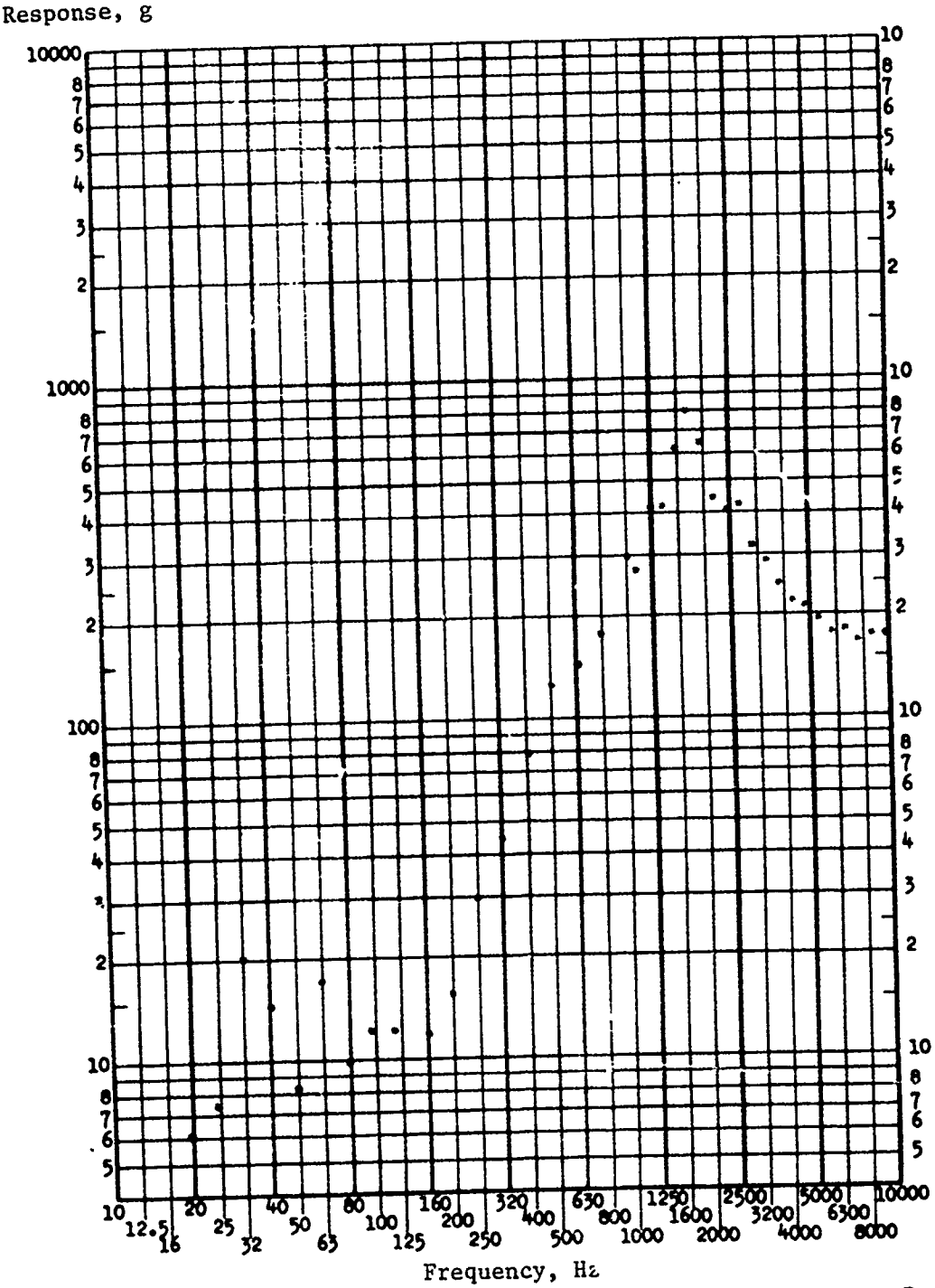
Bench Shock Test - Stage II/III Separation, Run 37 _
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 37 (cont)



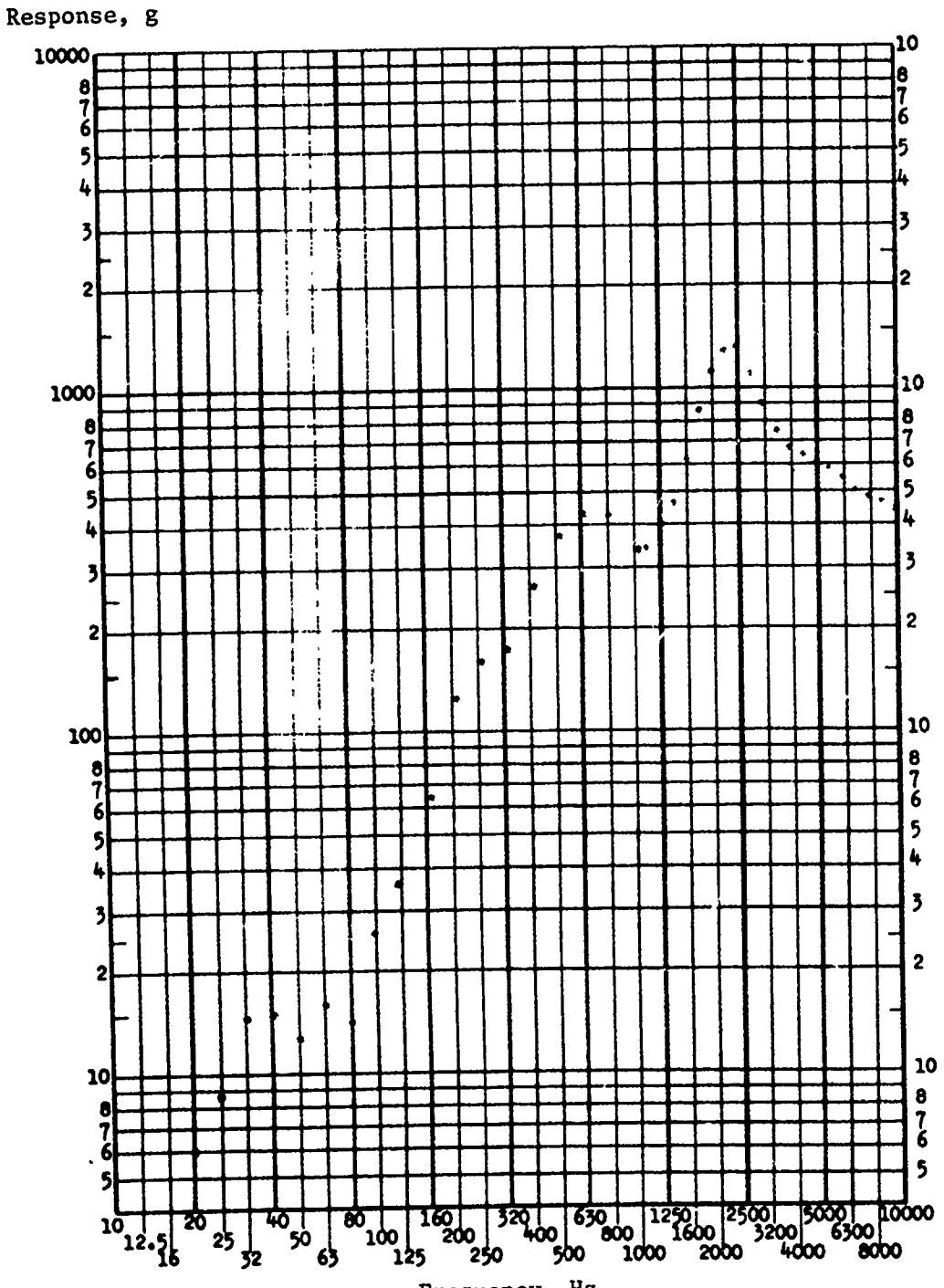
Bench Shock Test - Stage II/III Separation, Run 37_
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 37 (cont)



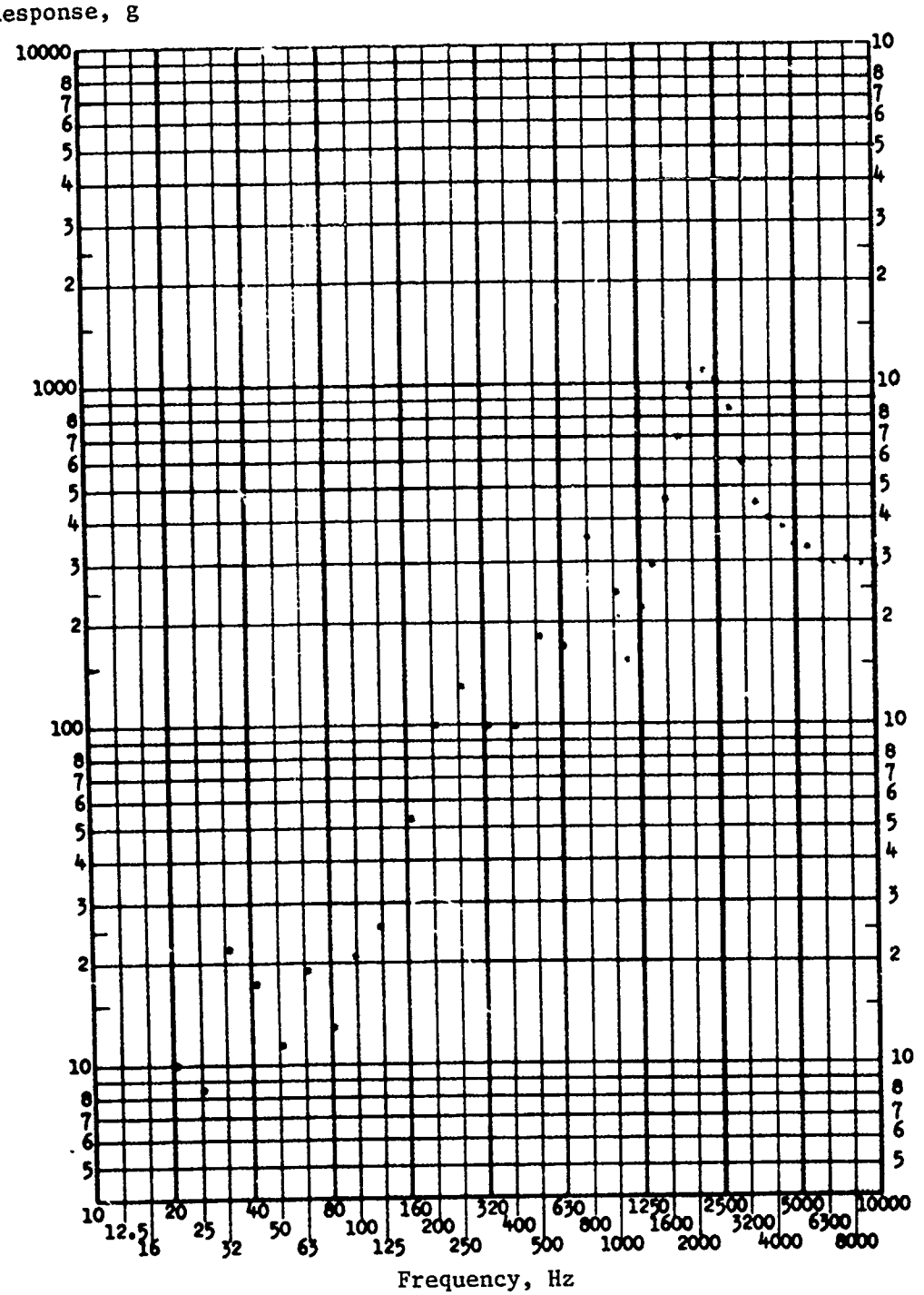
Bench Shock Test - Stage II/III Separation, Run 37
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 37 (cont)



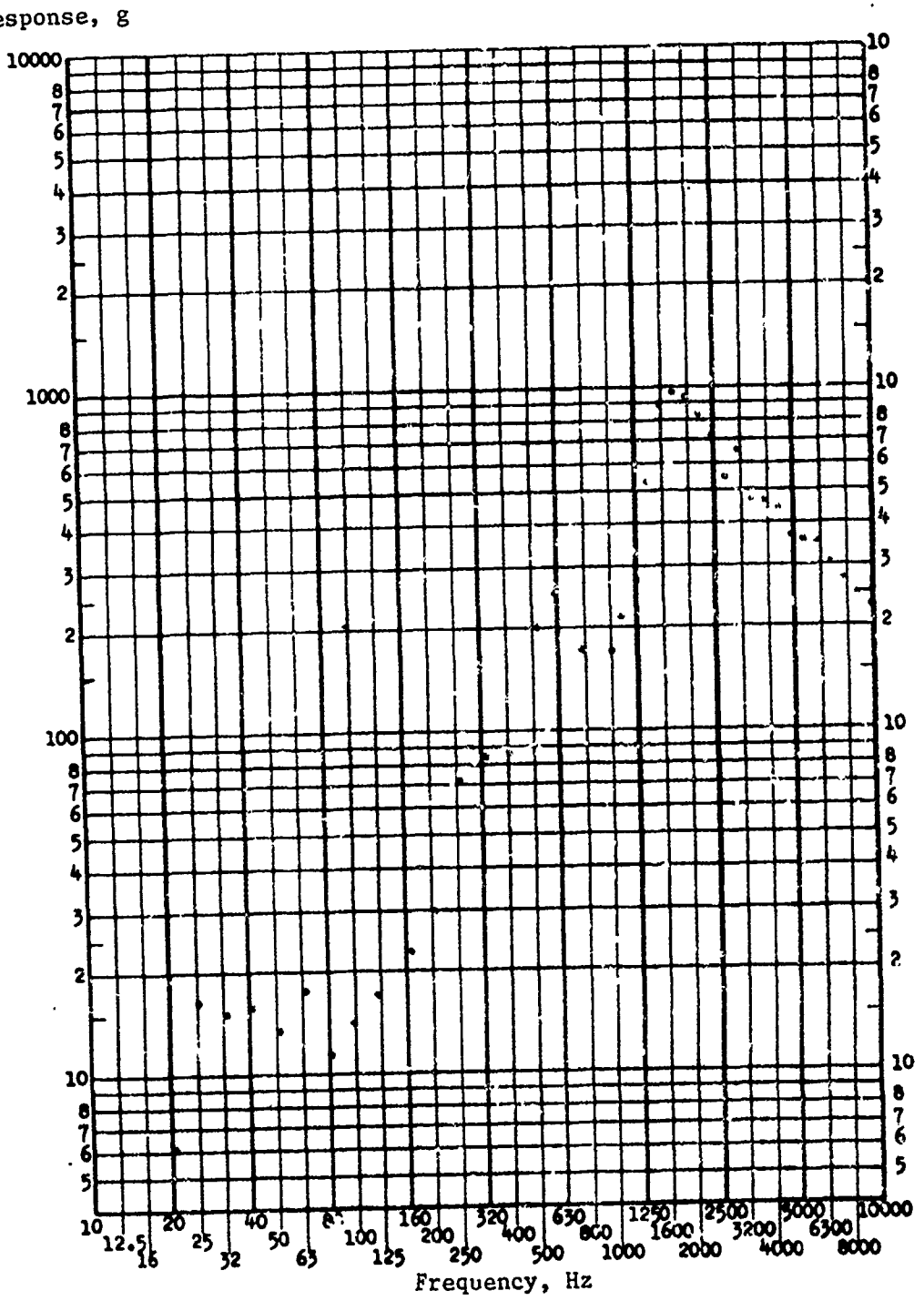
Bench Shock Test - Stage II/III Separation, Run 37_
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 37 (cont)



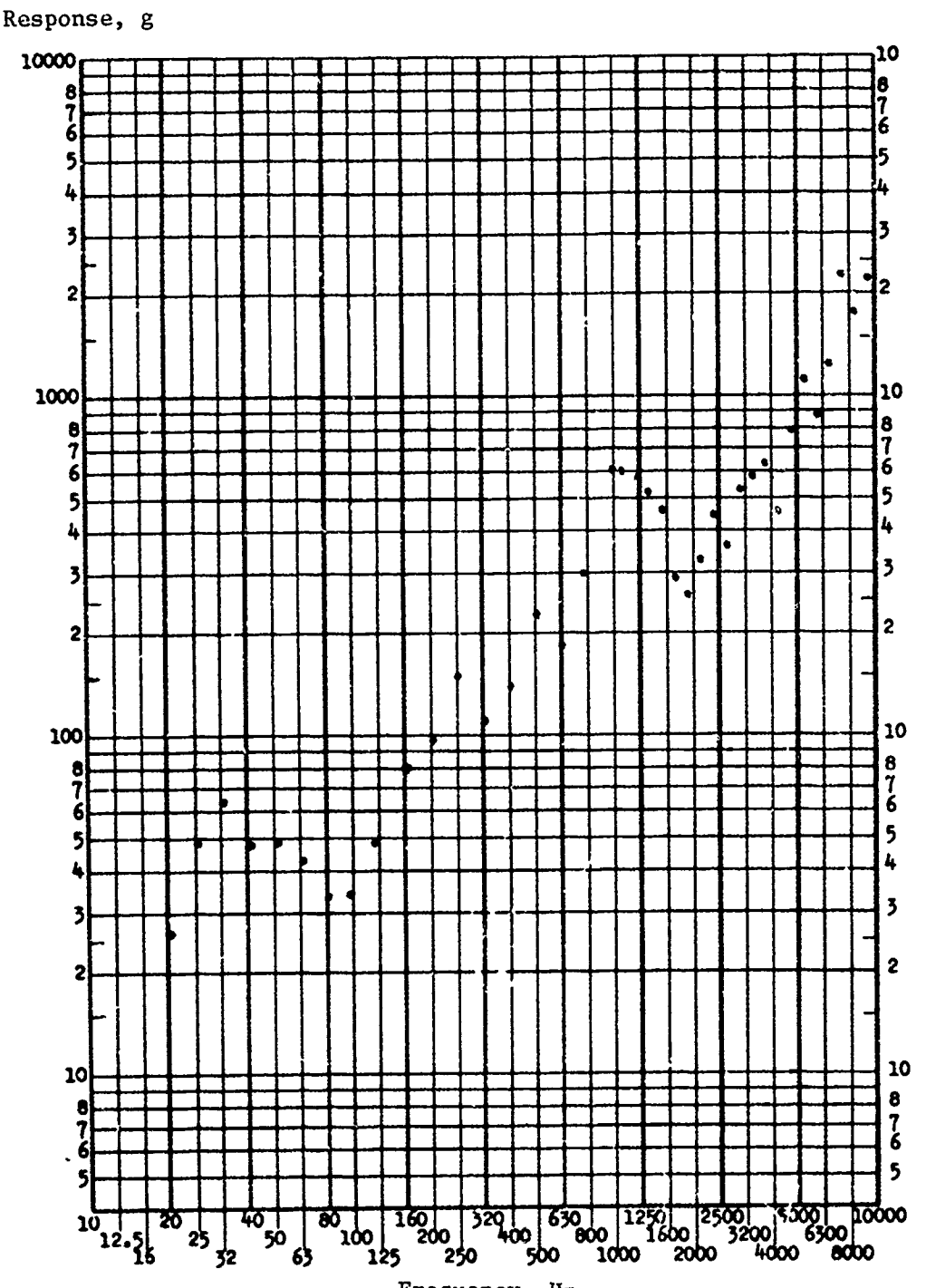
Bench Shock Test - Stage II/III Separation, Run 37_
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 37 (cont)



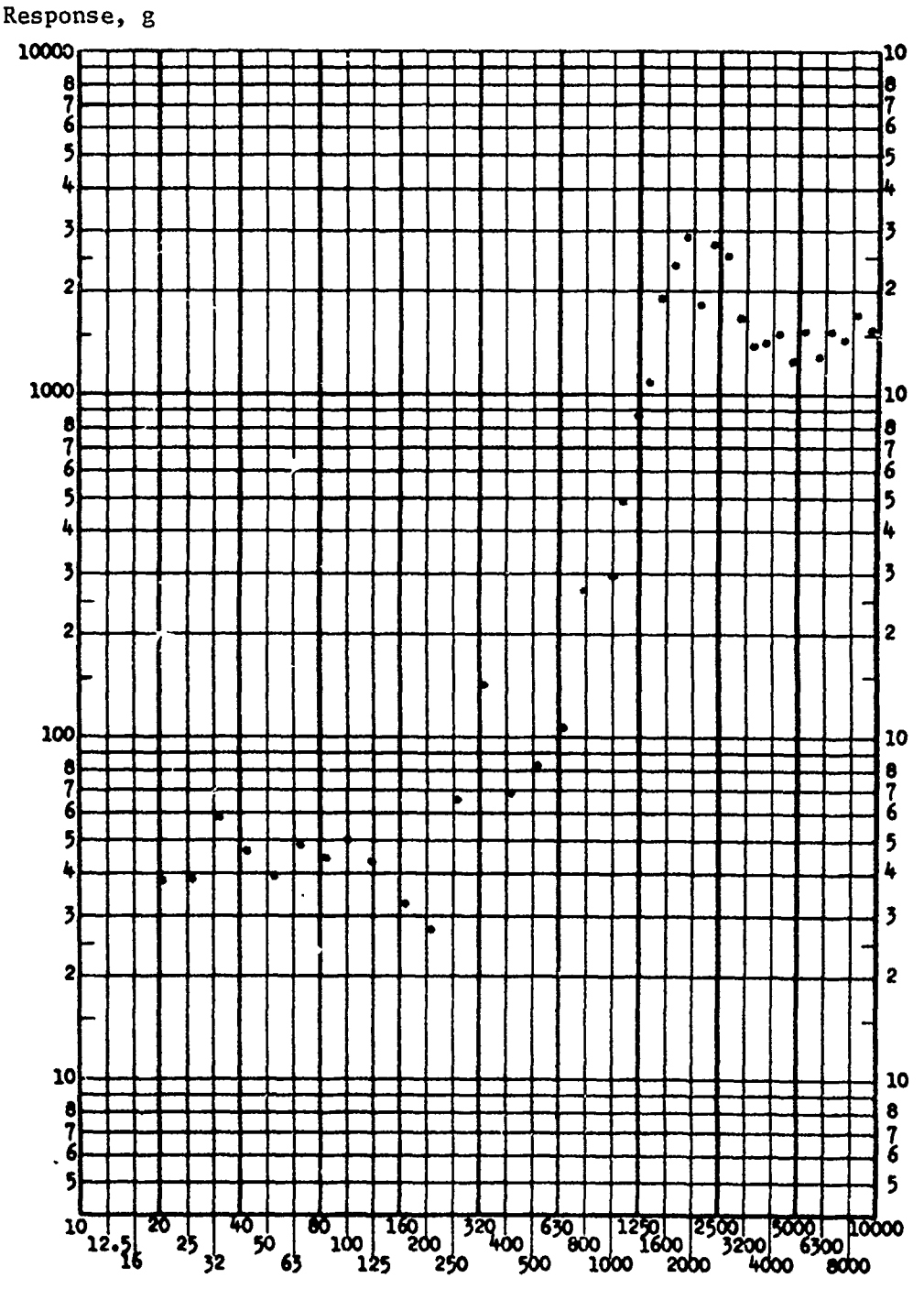
Bench Shock Test - Stage II/III Separation, Run 37
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 37 (concl)



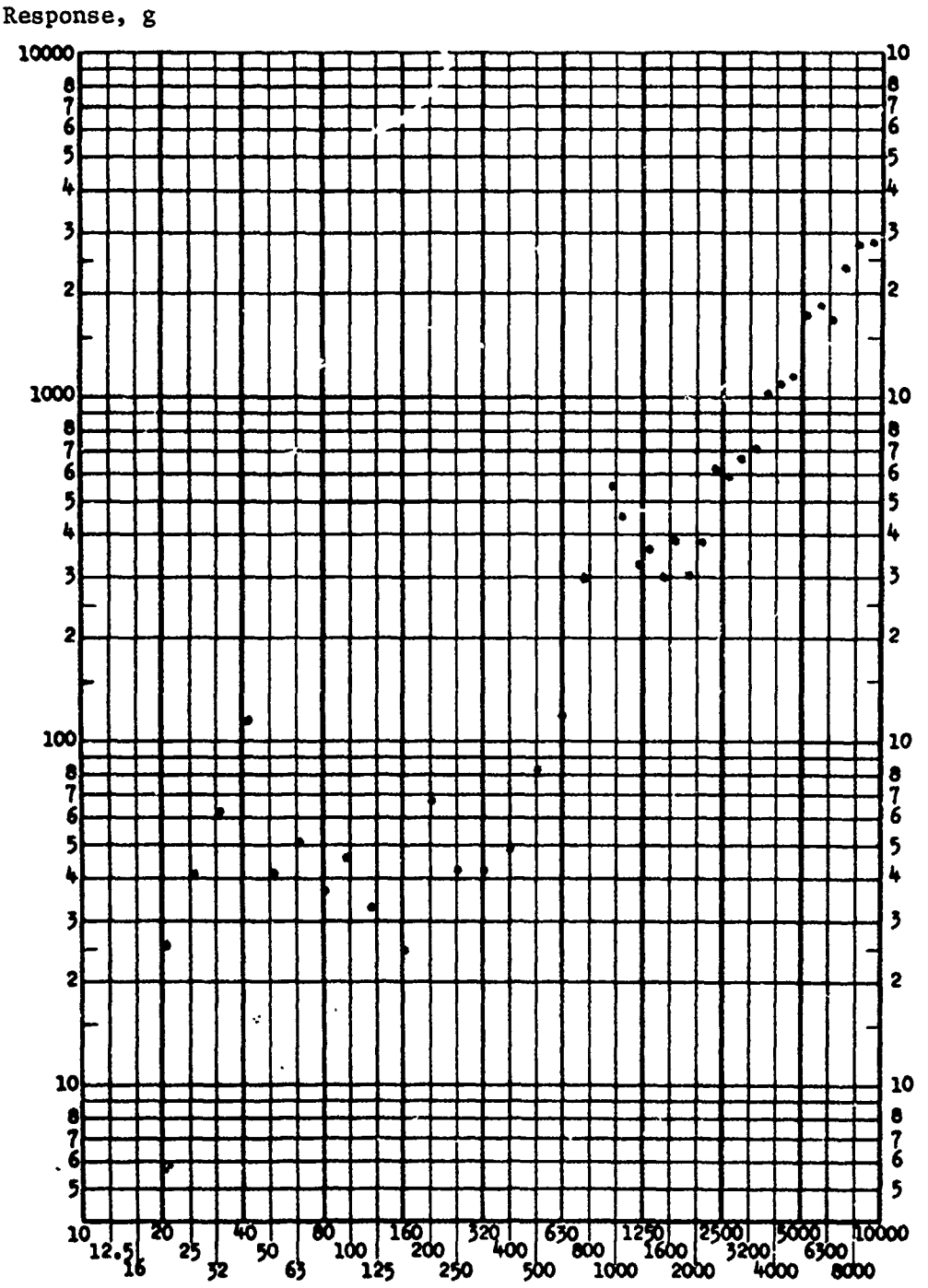
Bench Shock Test - Stage II/III Separation, Run 38
Measurement No. 1 - Longitudinal axis longeron near station 133

Figure 38 Run 38 Shock Response Spectrum



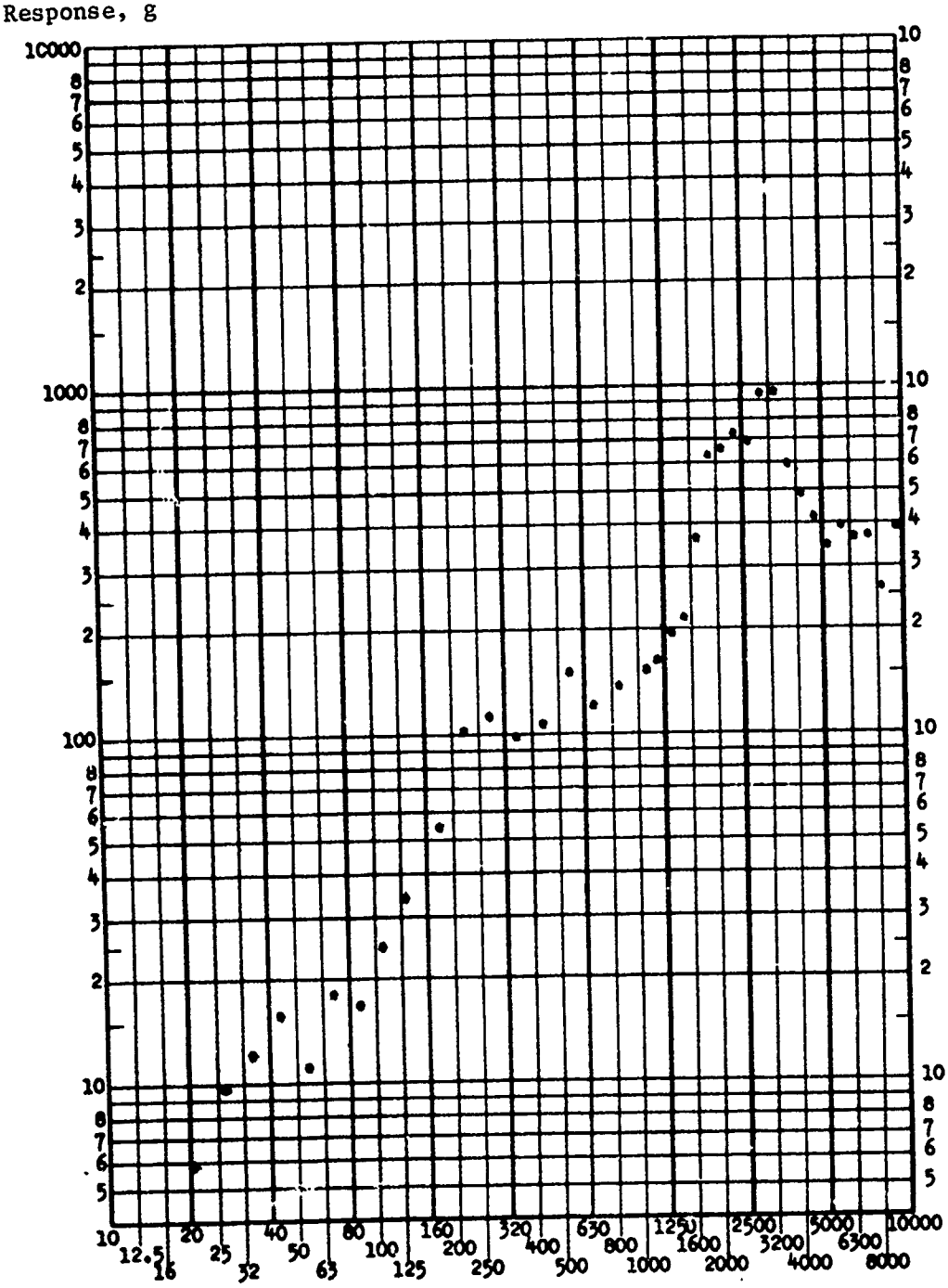
Bench Shock Test - Stage II/III Separation, Run 38
Measurement No. 2 - Tangential axis longeron near station 133

Figure 38 (cont)



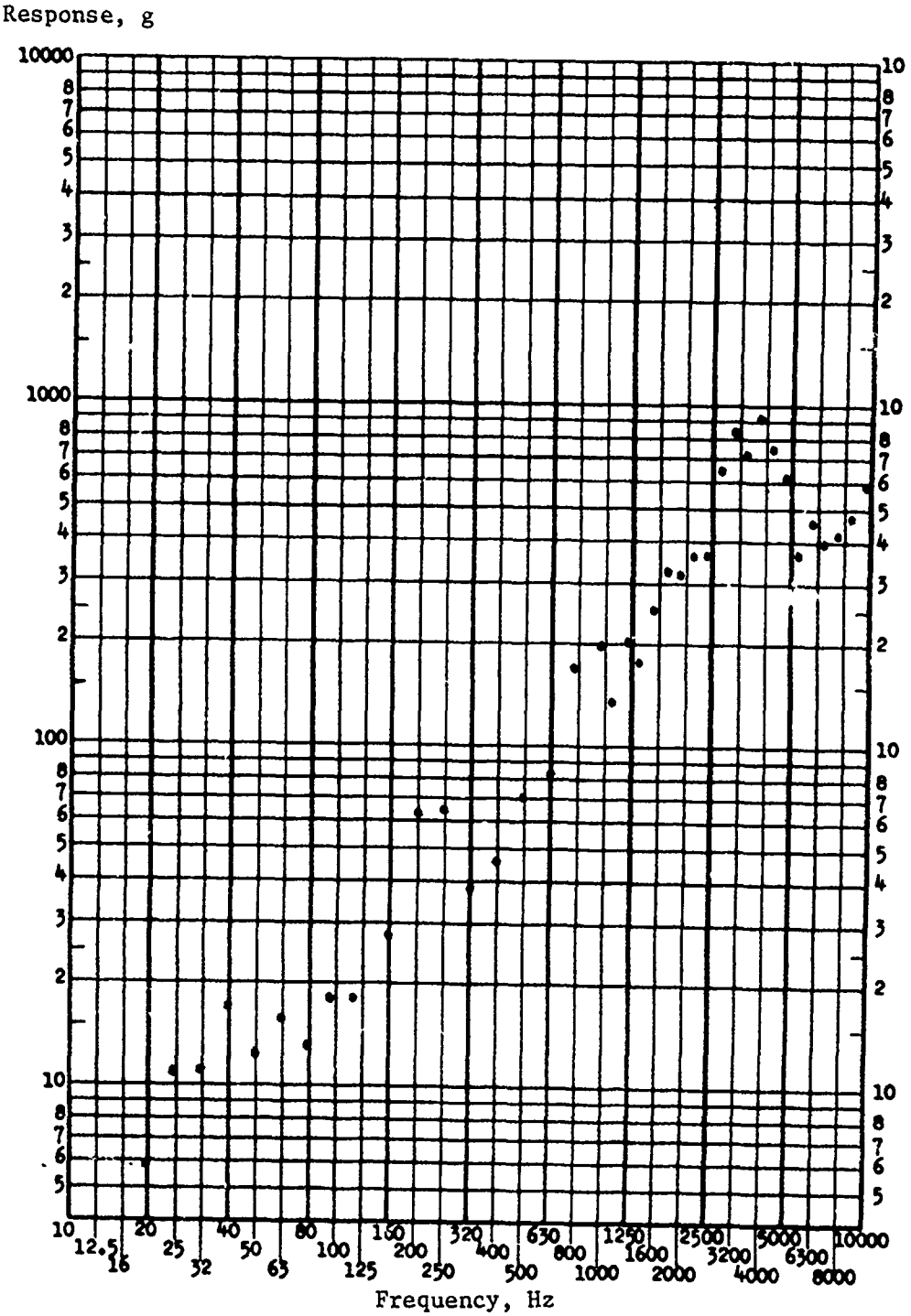
Bench Shock Test - Stage II/III Separation, Run 38__
Measurement No. 3 - Radial axis longeron near station 133

Figure 38 (cont)



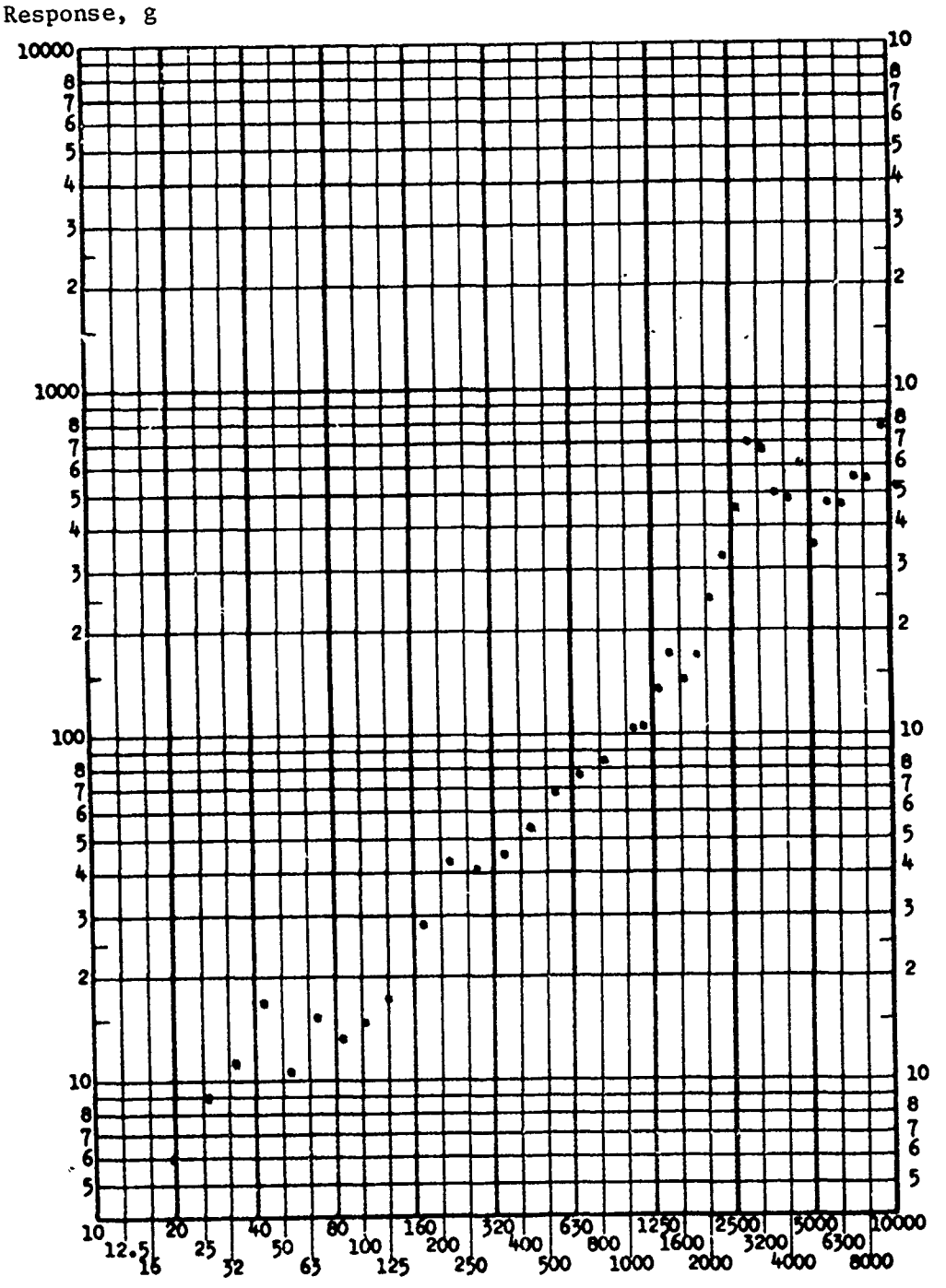
Bench Shock Test - Stage II/III Separation, Run 38__
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 38 (cont)



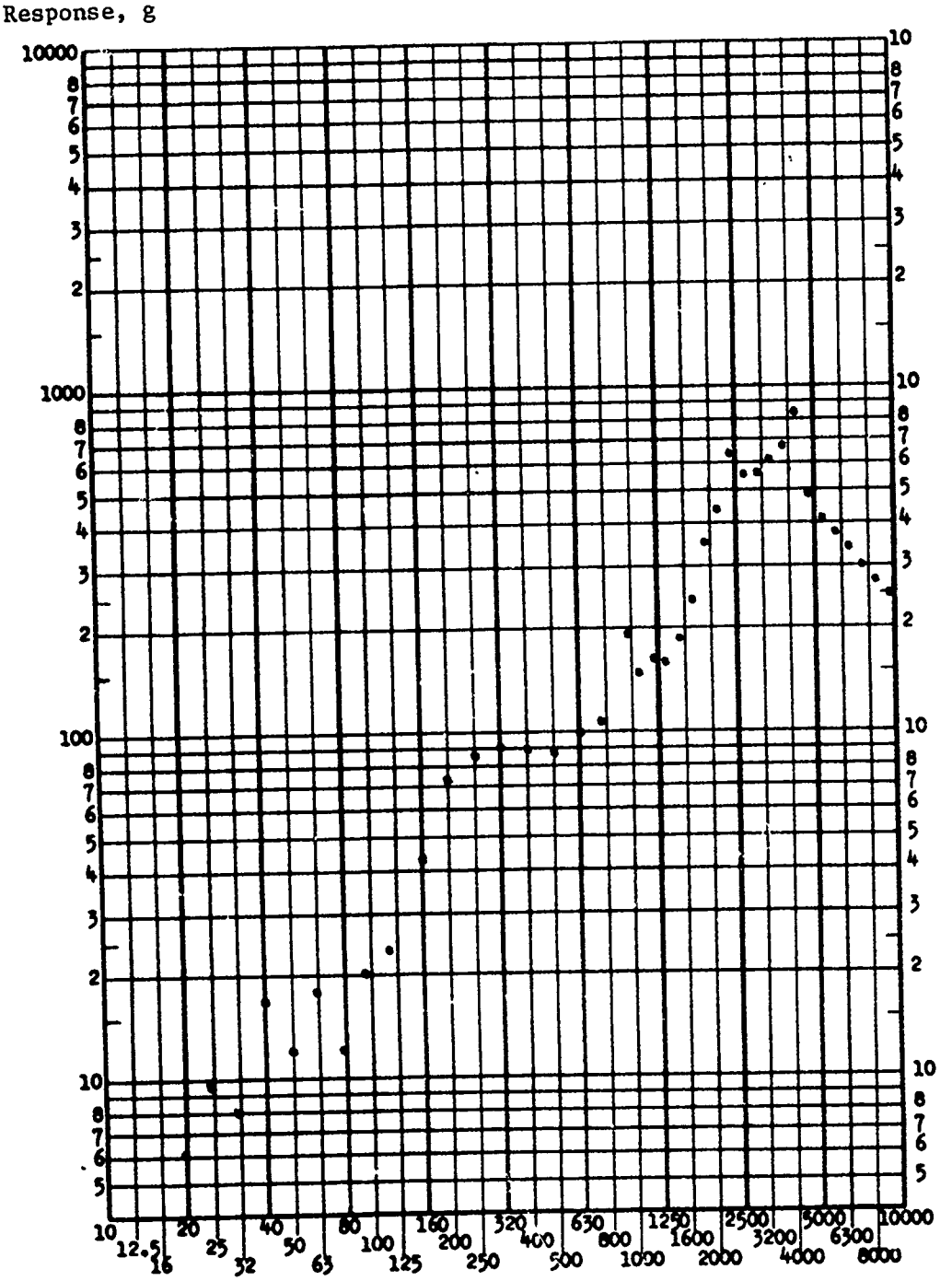
Bench Shock Test - Stage II/III Separation, Run 38
Measurement No. 5 - Tangential axis longeron near station 117

Figure 38 (cont)



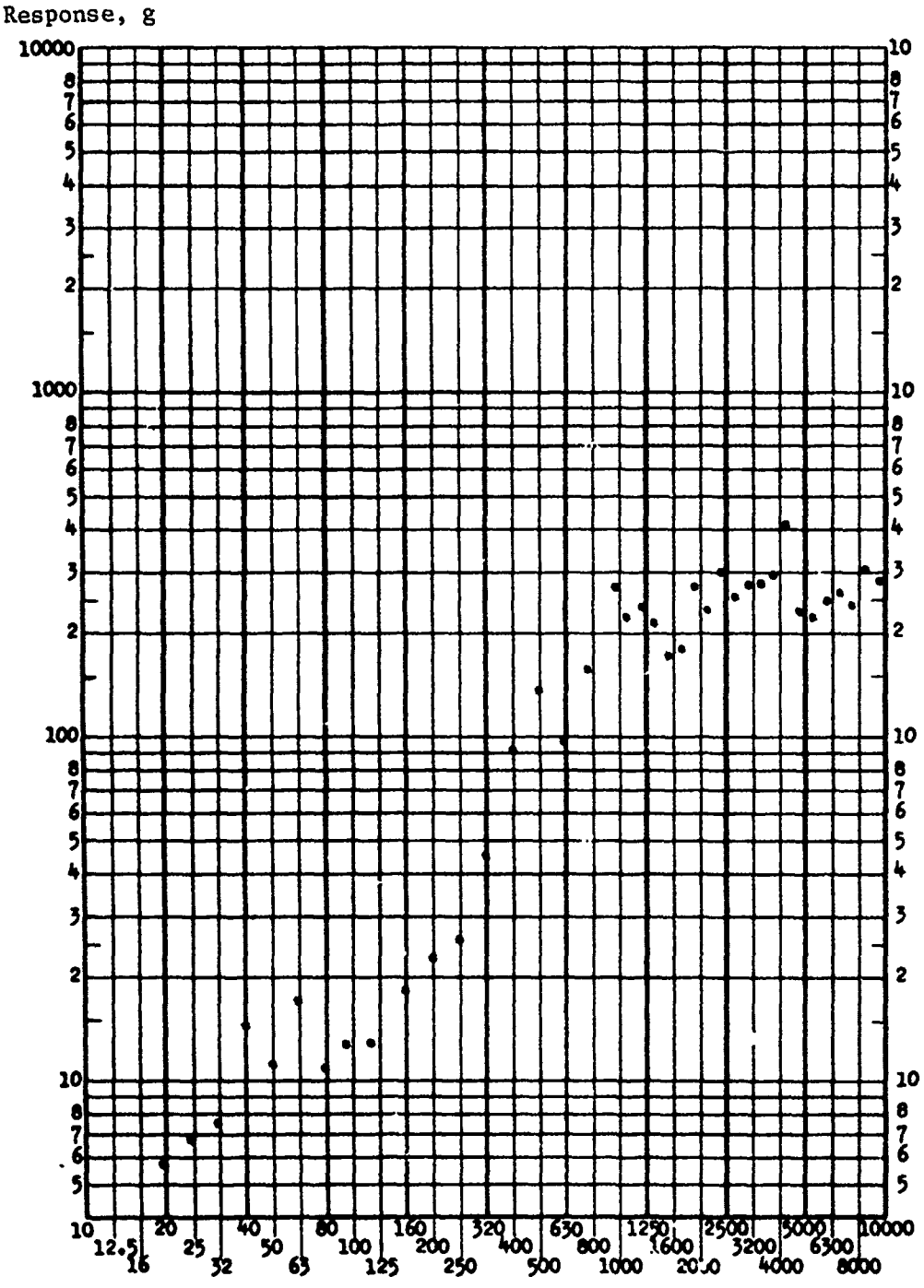
Bench Shock Test - Stage II/III Separation, Run 38
Measurement No. 6 - Radial axis longeron near station 117

Figure 38 (cont)



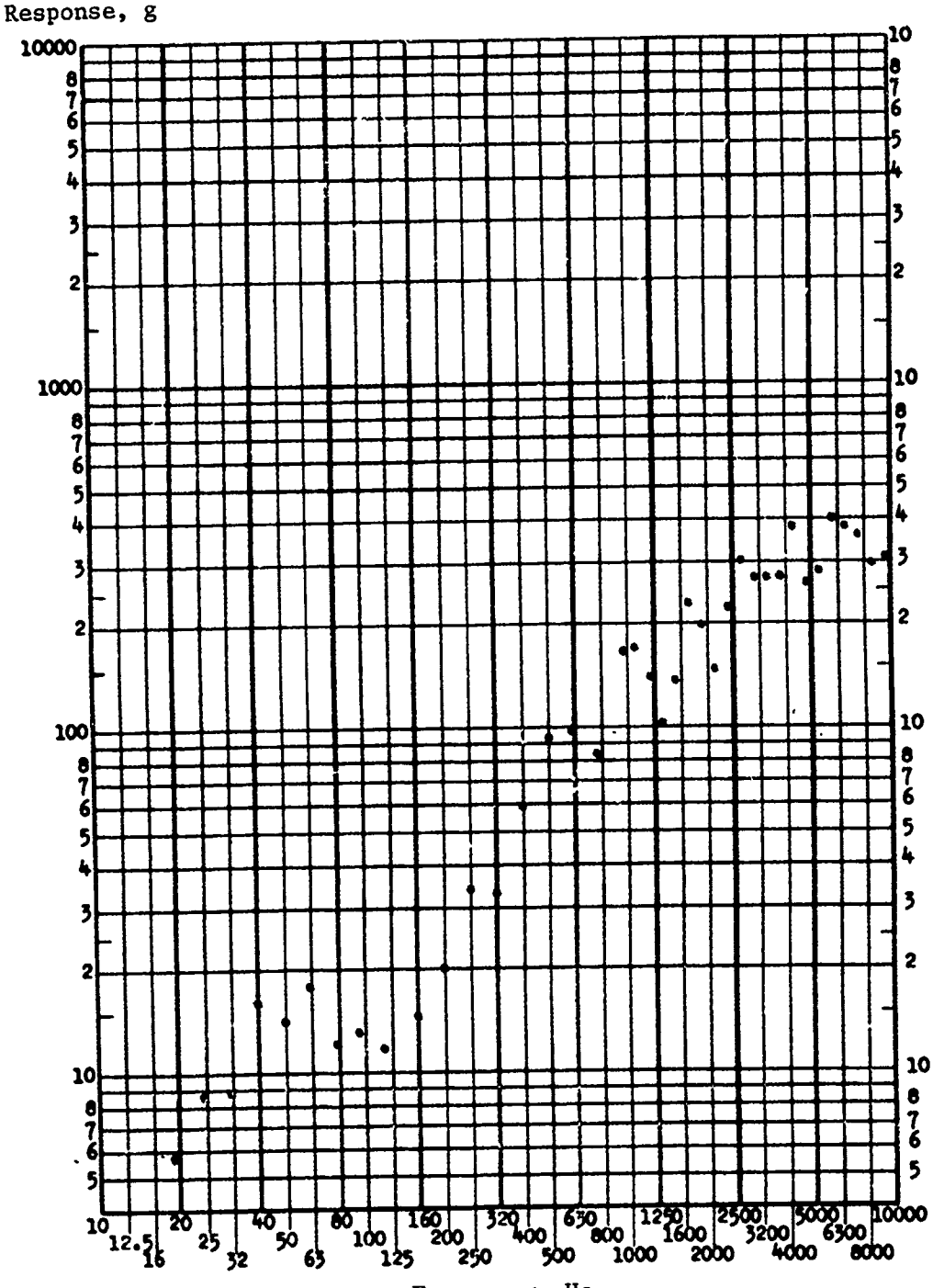
Bench Shock Test - Stage II/III Separation, Run 38__
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 38 (cont)



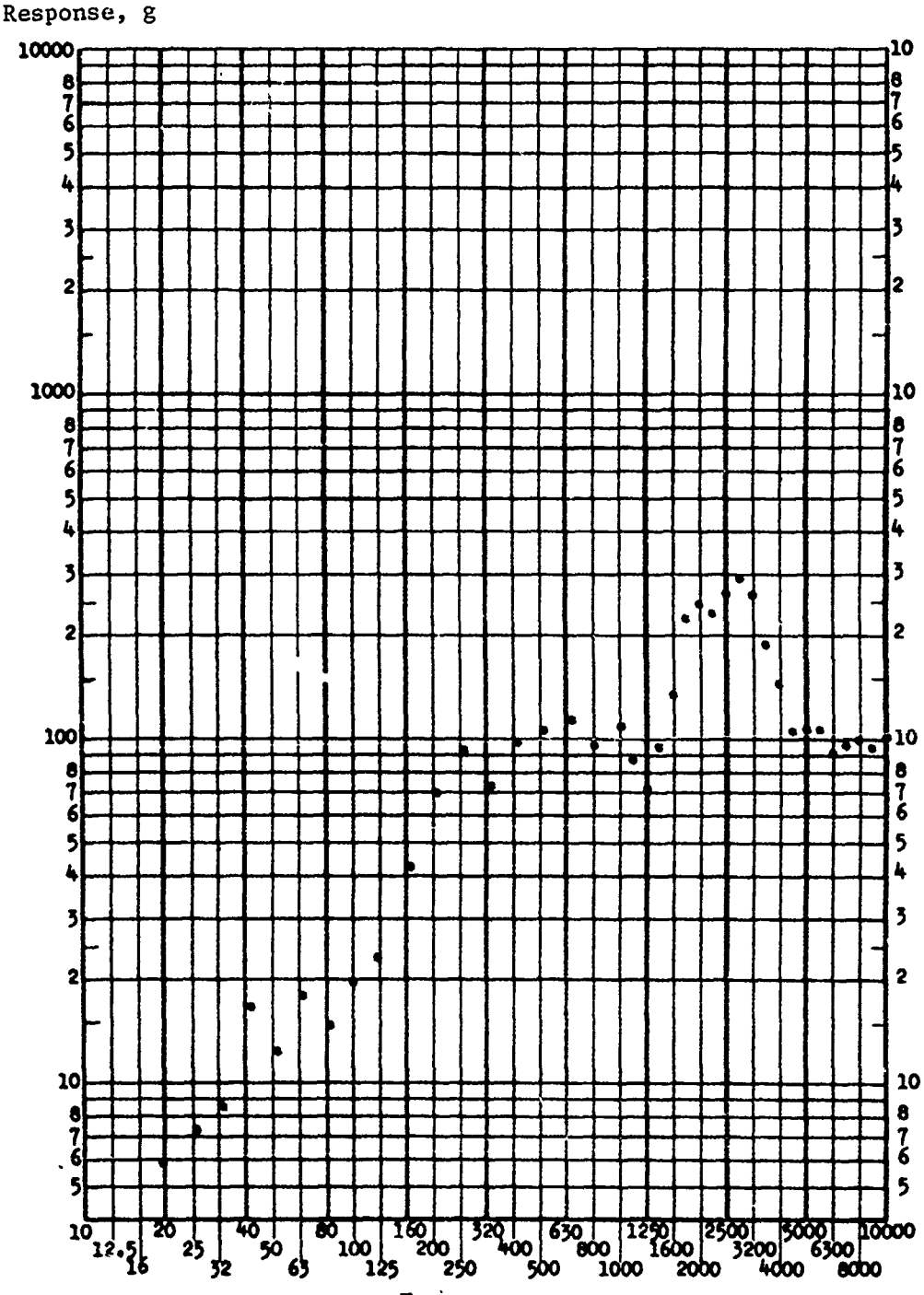
Bench Shock Test - Stage II/III Separation, Run 38
Measurement No. 8 - Tangential axis longeron near station 77

Figure 38 (cont)



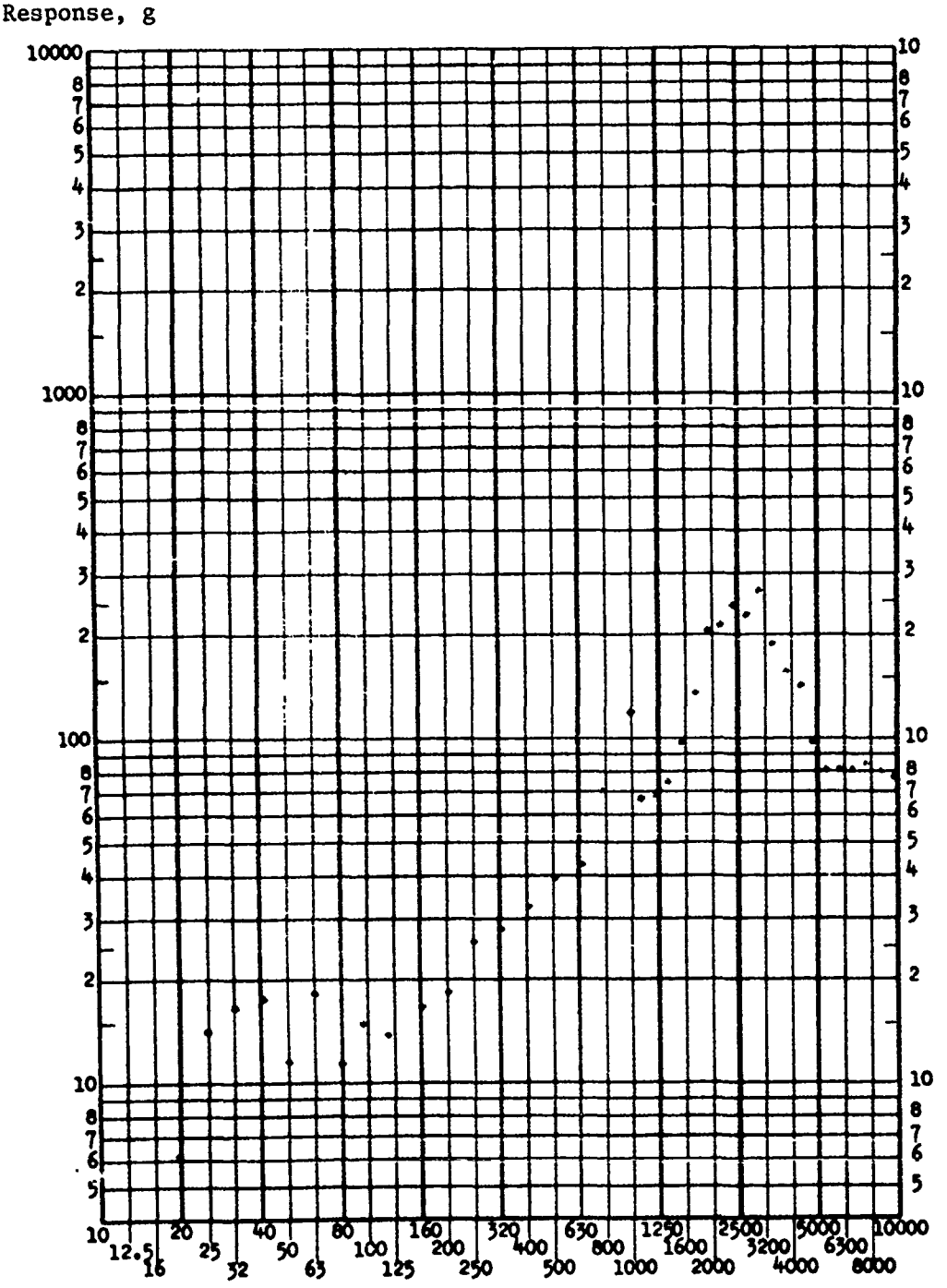
Bench Shock Test - Stage II/III Separation, Run 38__
Measurement No. 9 - Radial axis longeron near station 77

Figure 38 (cont)



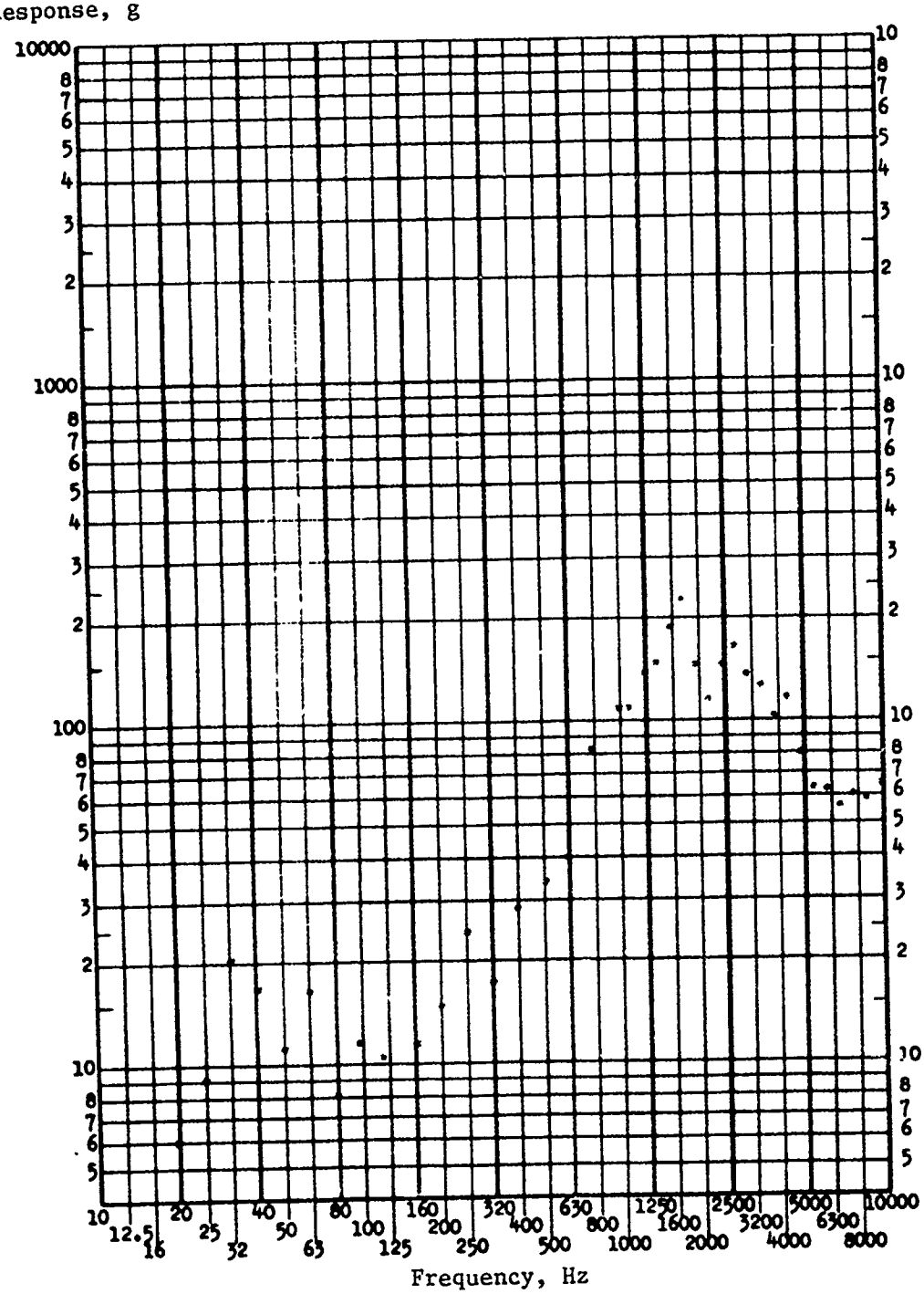
Bench Shock Test - Stage II/III Separation, Run 38
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 38 (cont)



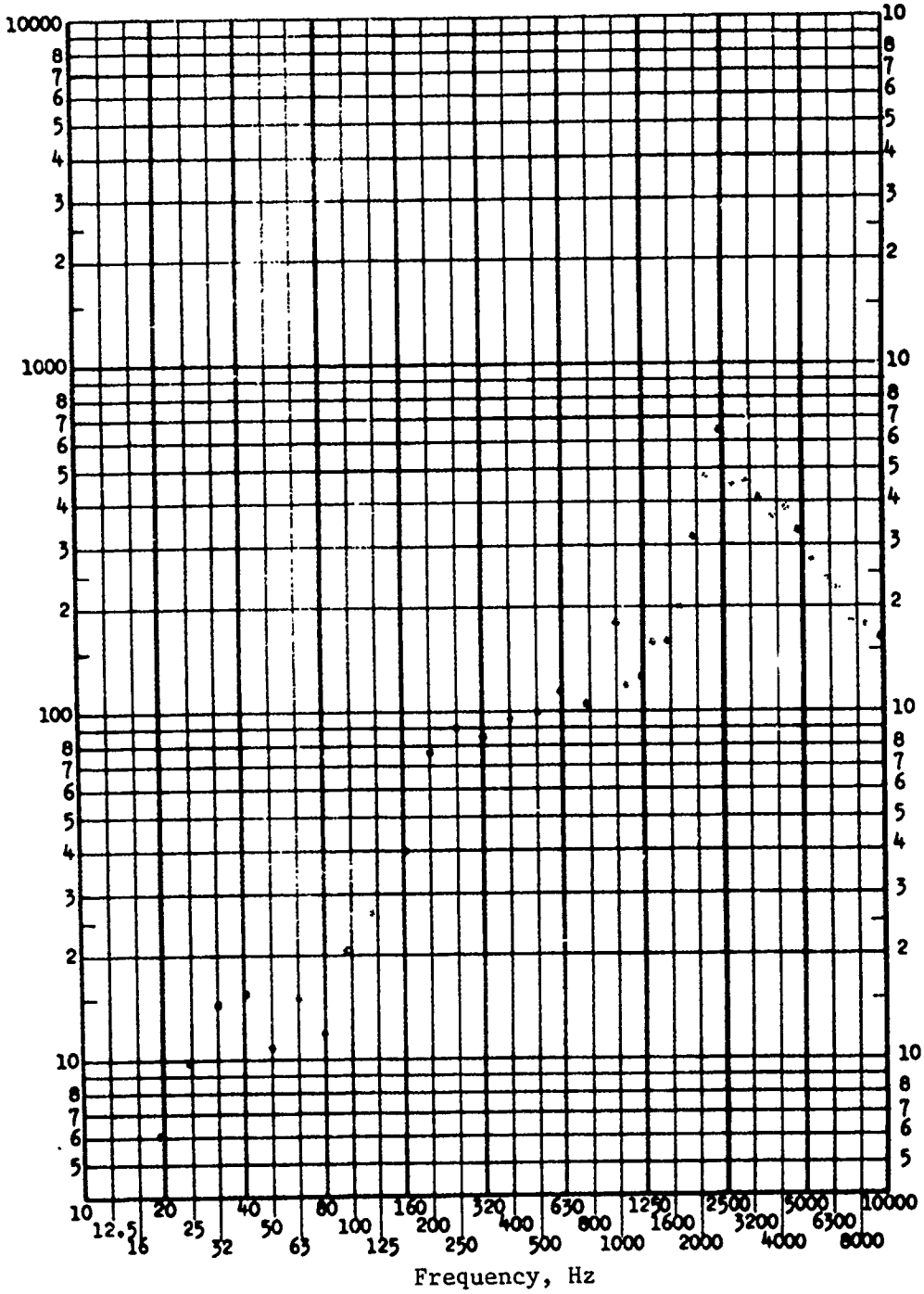
Bench Shock Test - Stage II/III Separation, Run 38_
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 38 (cont)



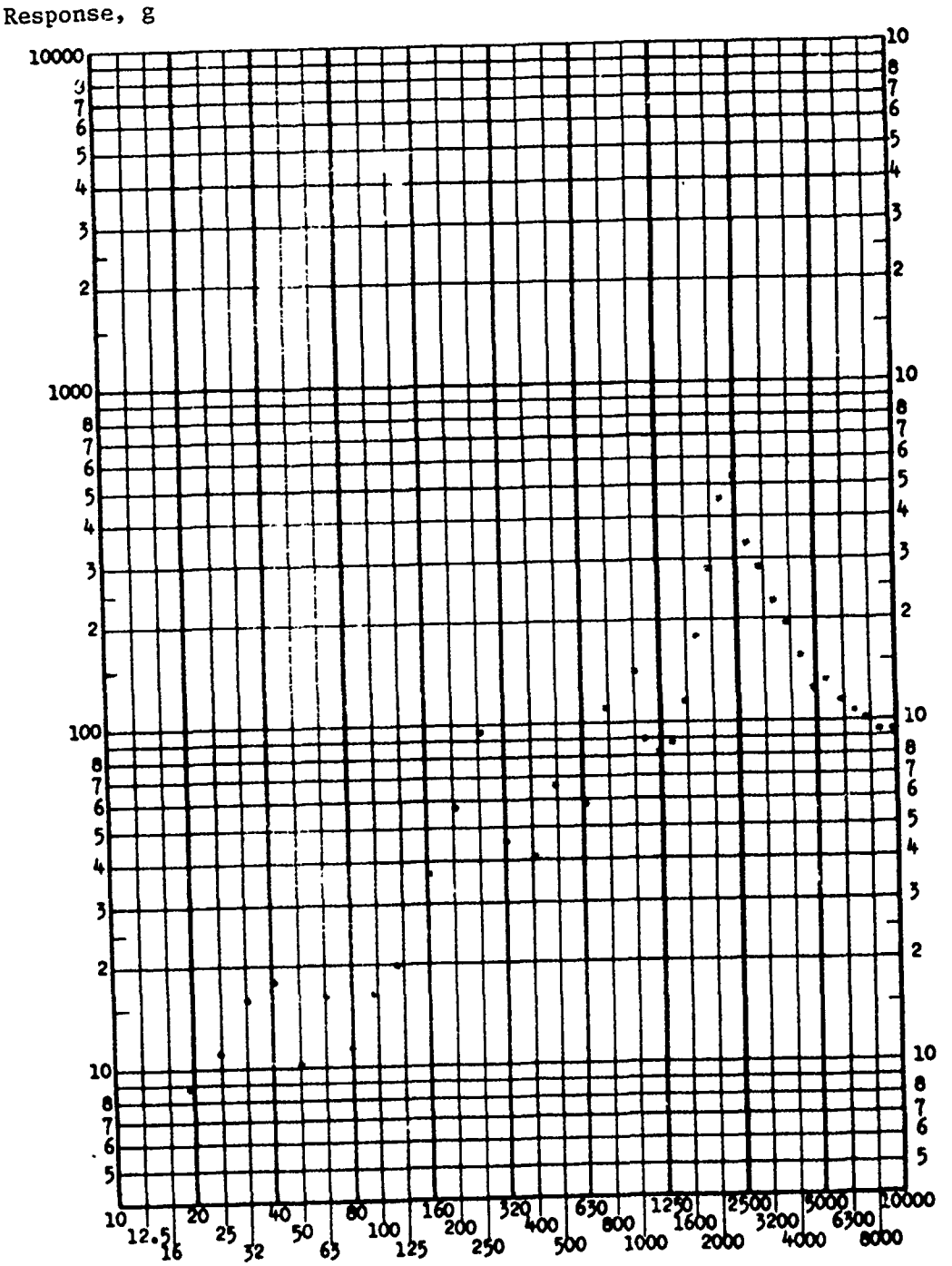
Bench Shock Test - Stage II/III Separation, Run 38__
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 38 (cont)



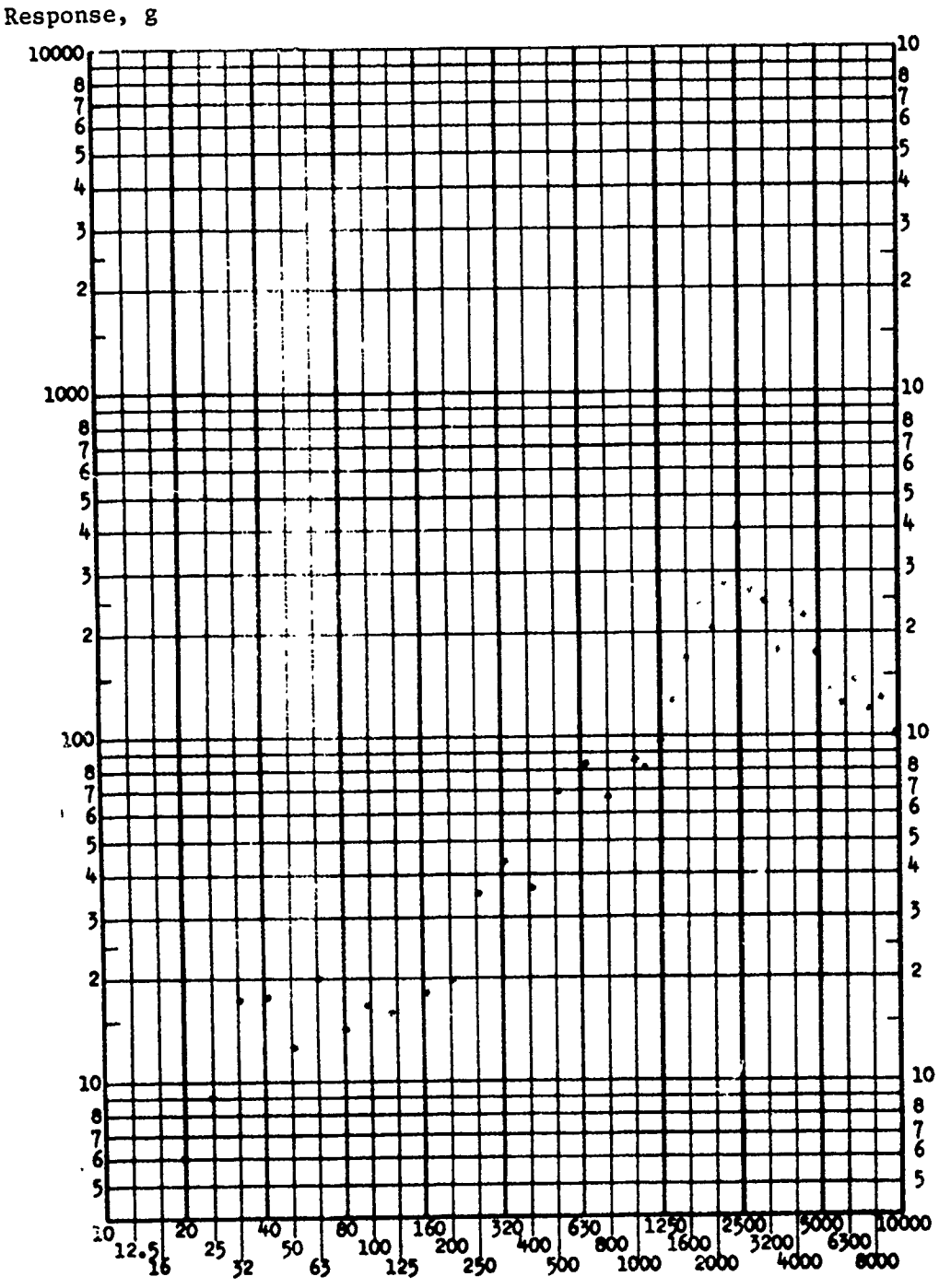
Bench Shock Test - Stage II/III Separation, Run 38__
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 38 (cont)



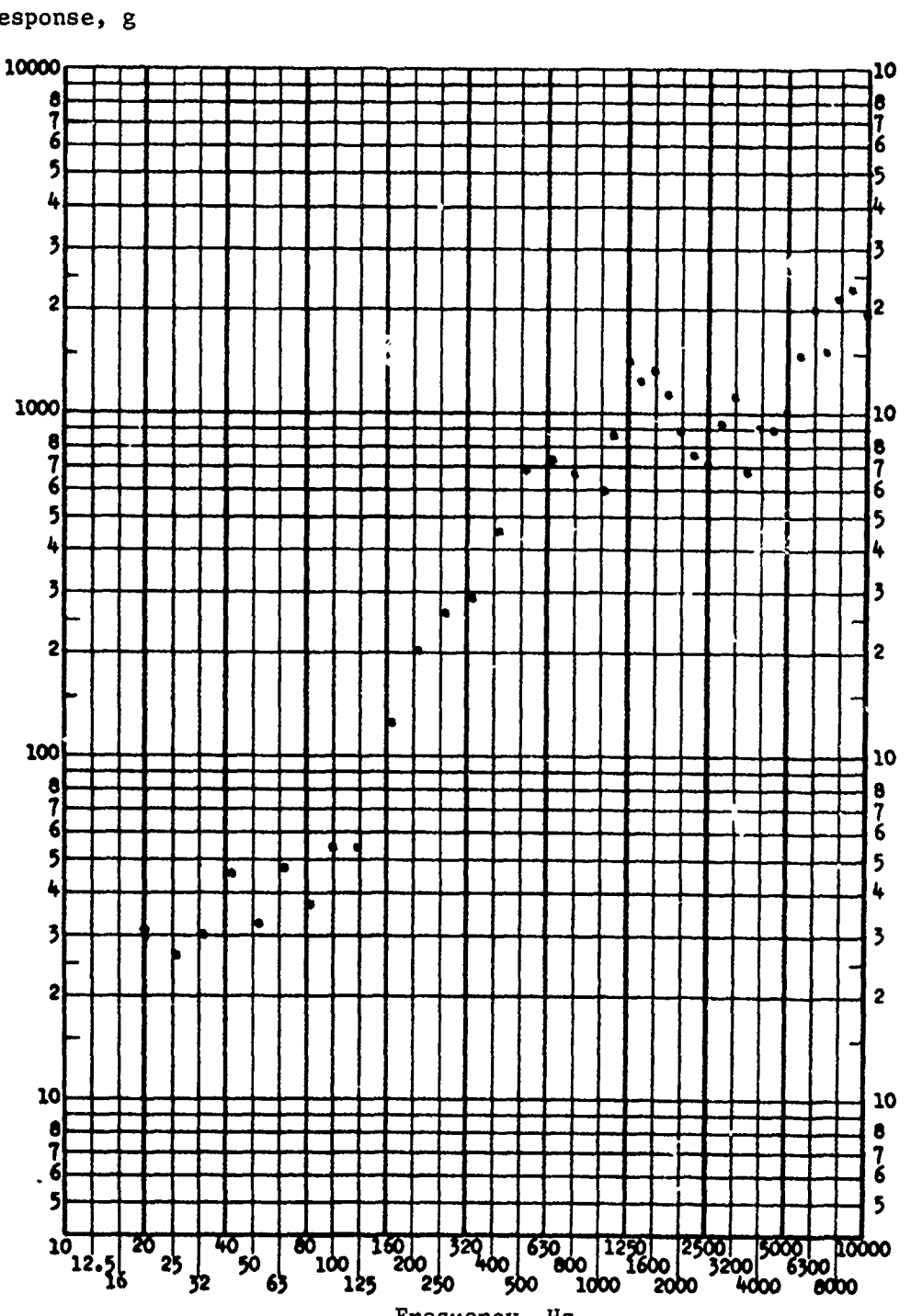
Bench Shock Test - Stage II/III Separation, Run 38
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 38 (cont)



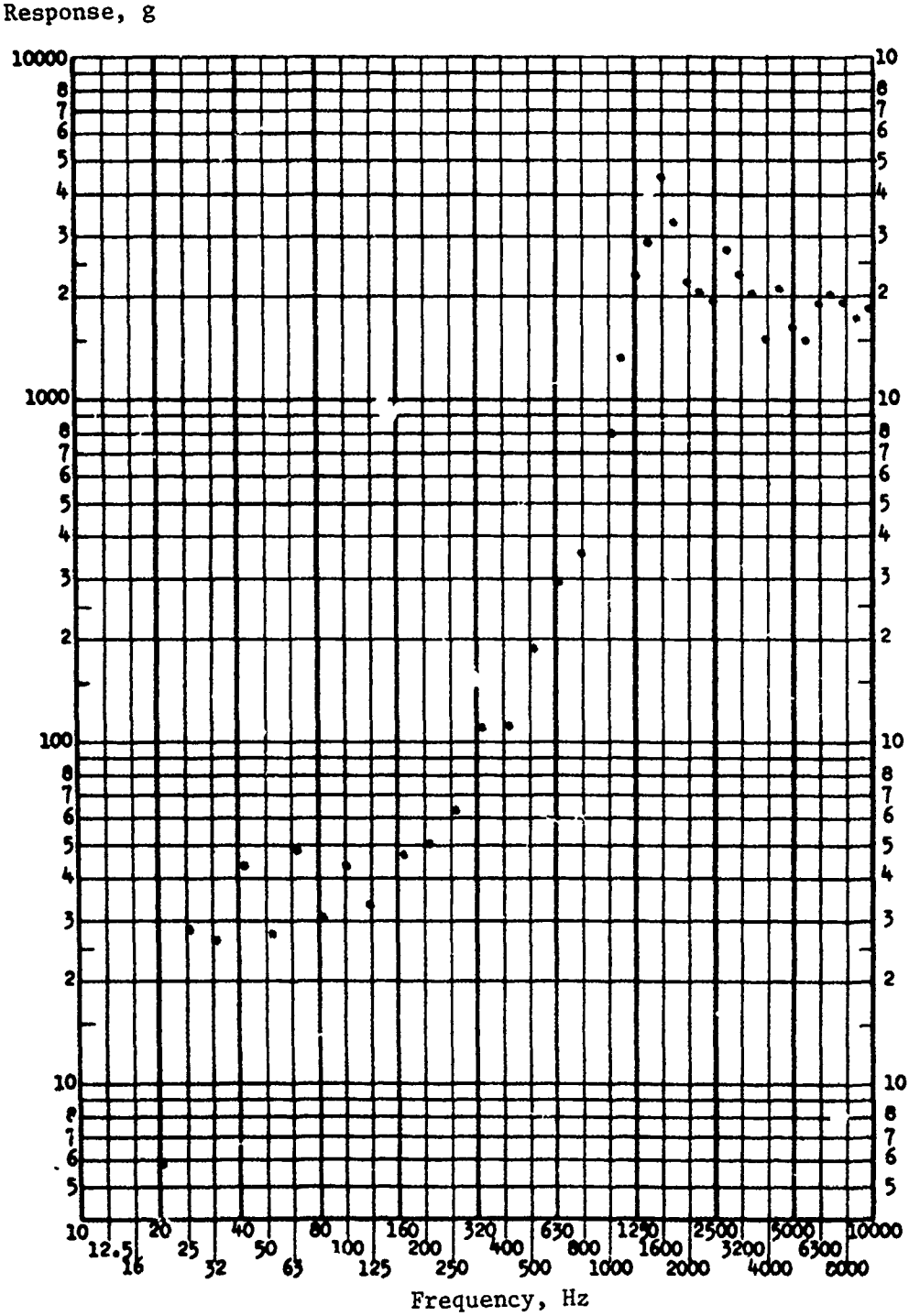
Bench Shock Test - Stage II/III Separation, Run 38_
Measurement No. 15 - Lateral axis truss top near
longeron attach point

Figure 38 (concl)



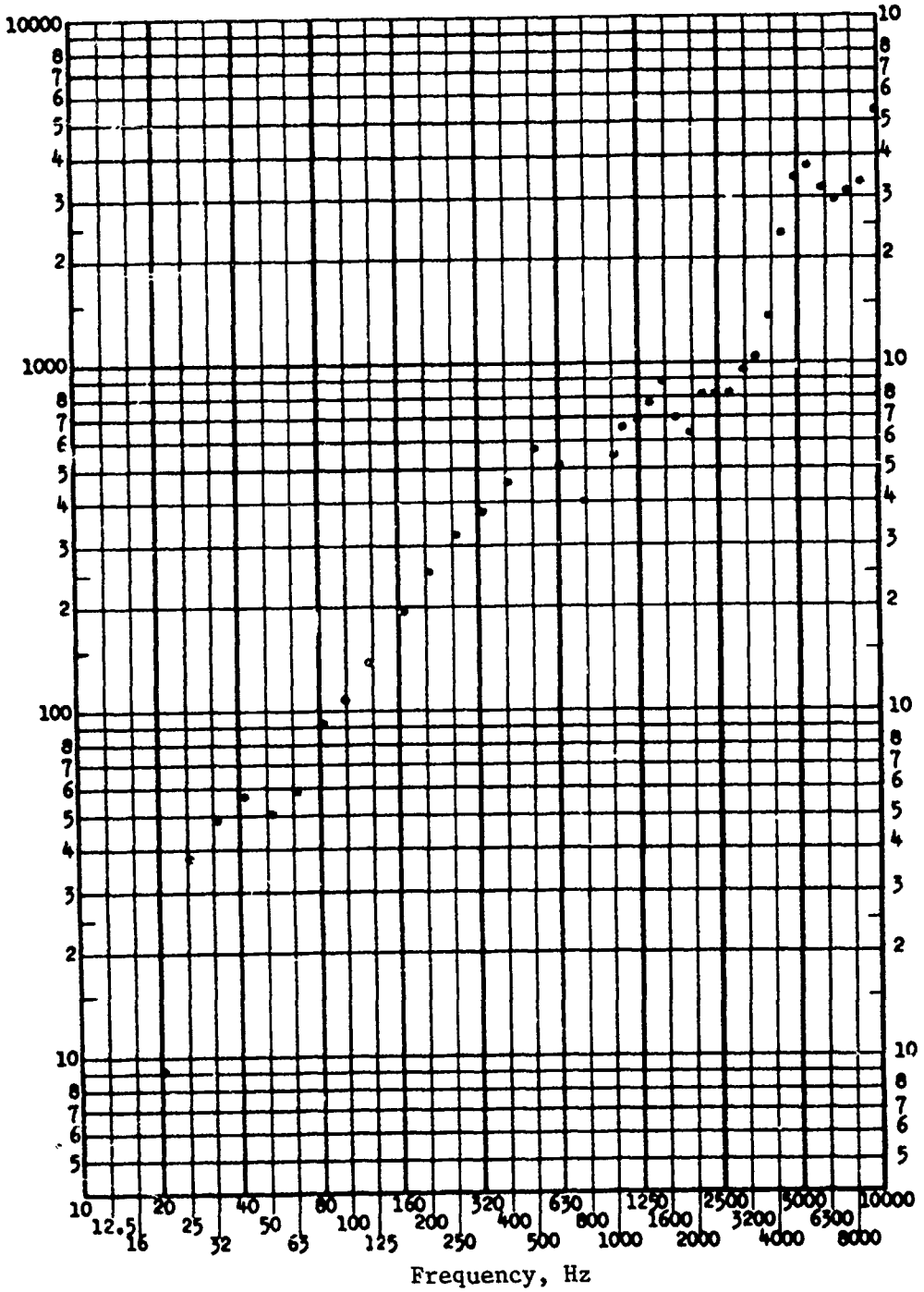
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 39 Run 39 Shock Response Spectrum



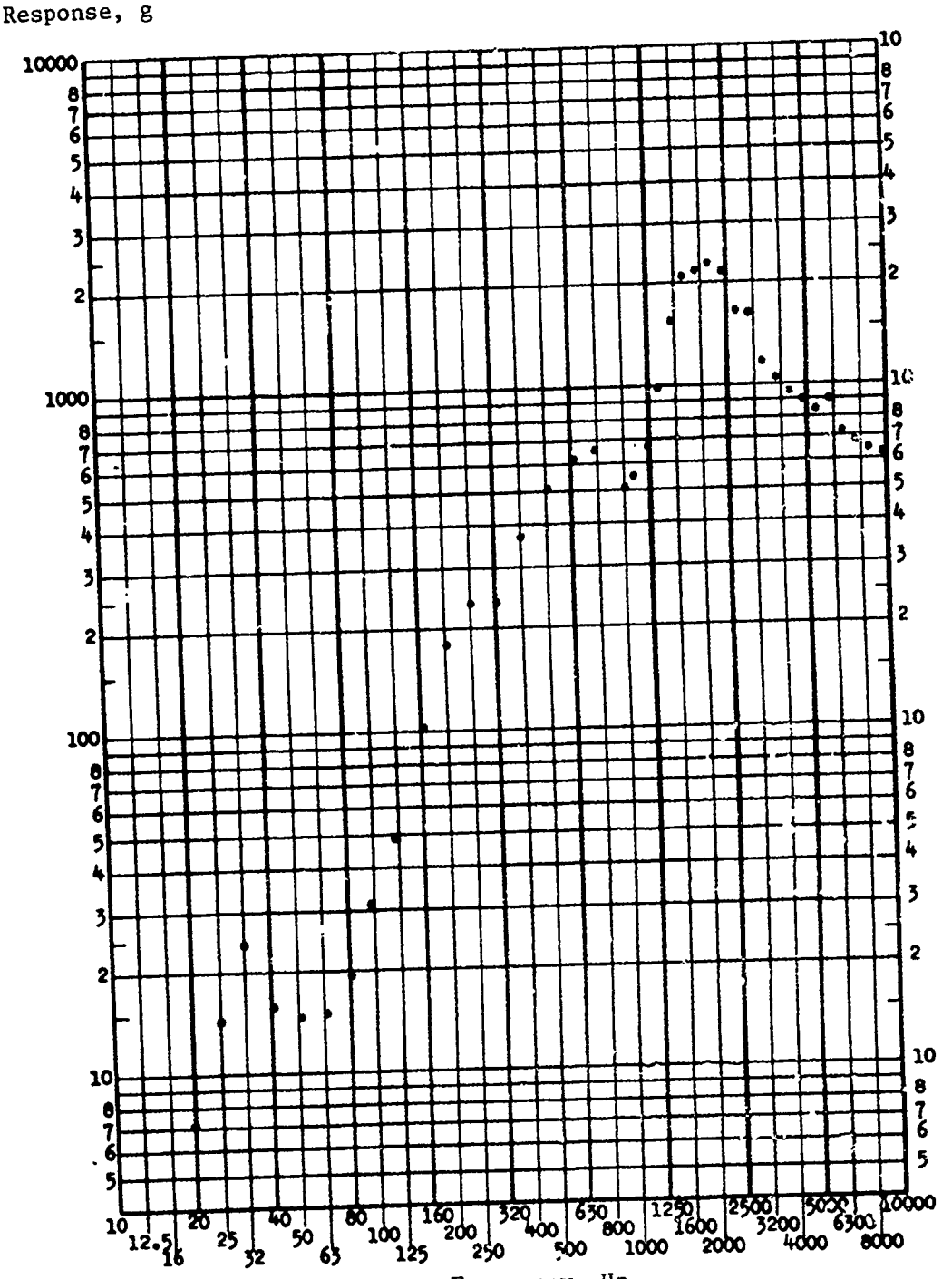
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 2 - Tangential axis longeron near station 133

Figure 39 (cont)



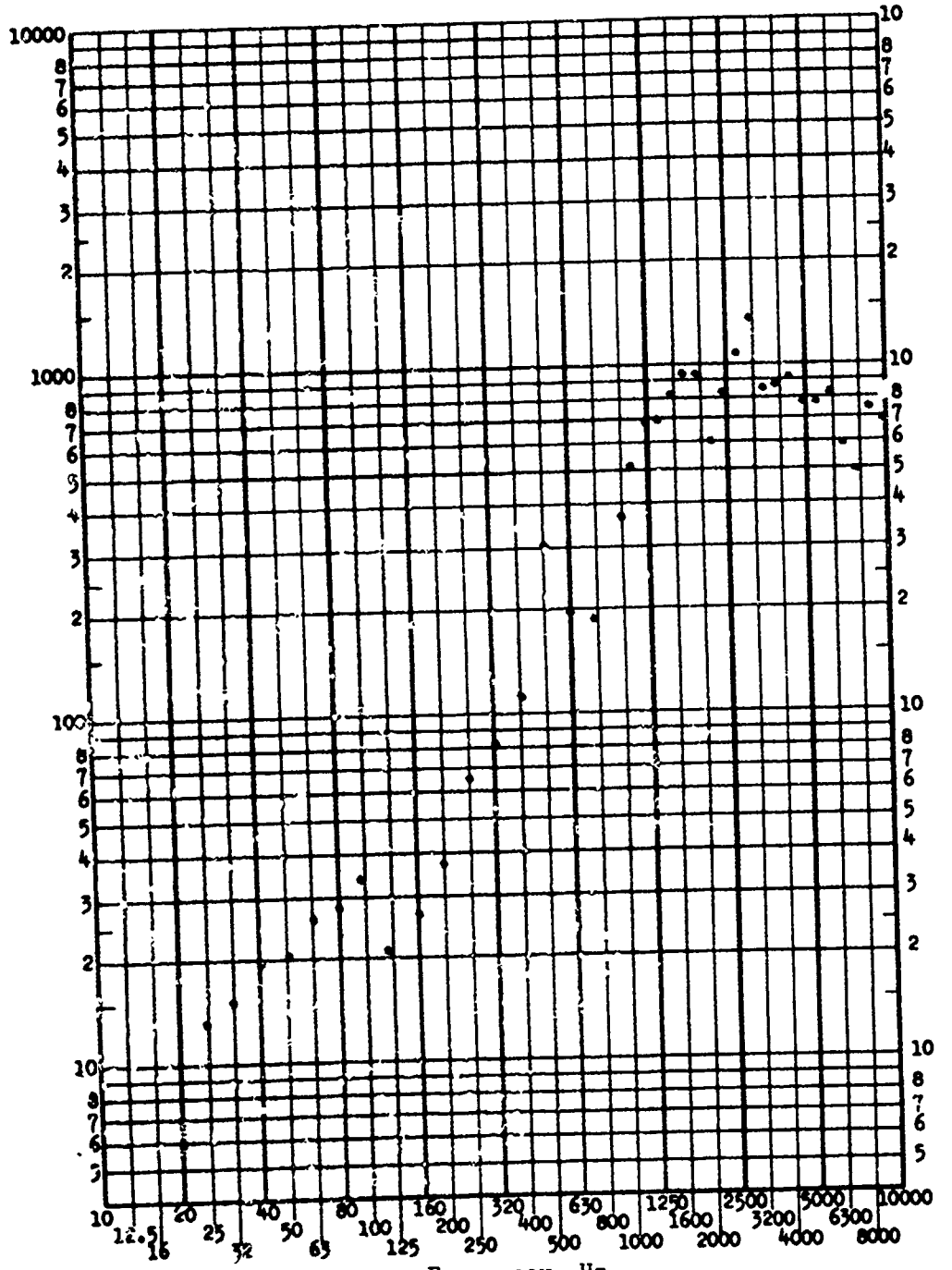
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 3 - Radial axis longeron near station 133

Figure 39 (cont)



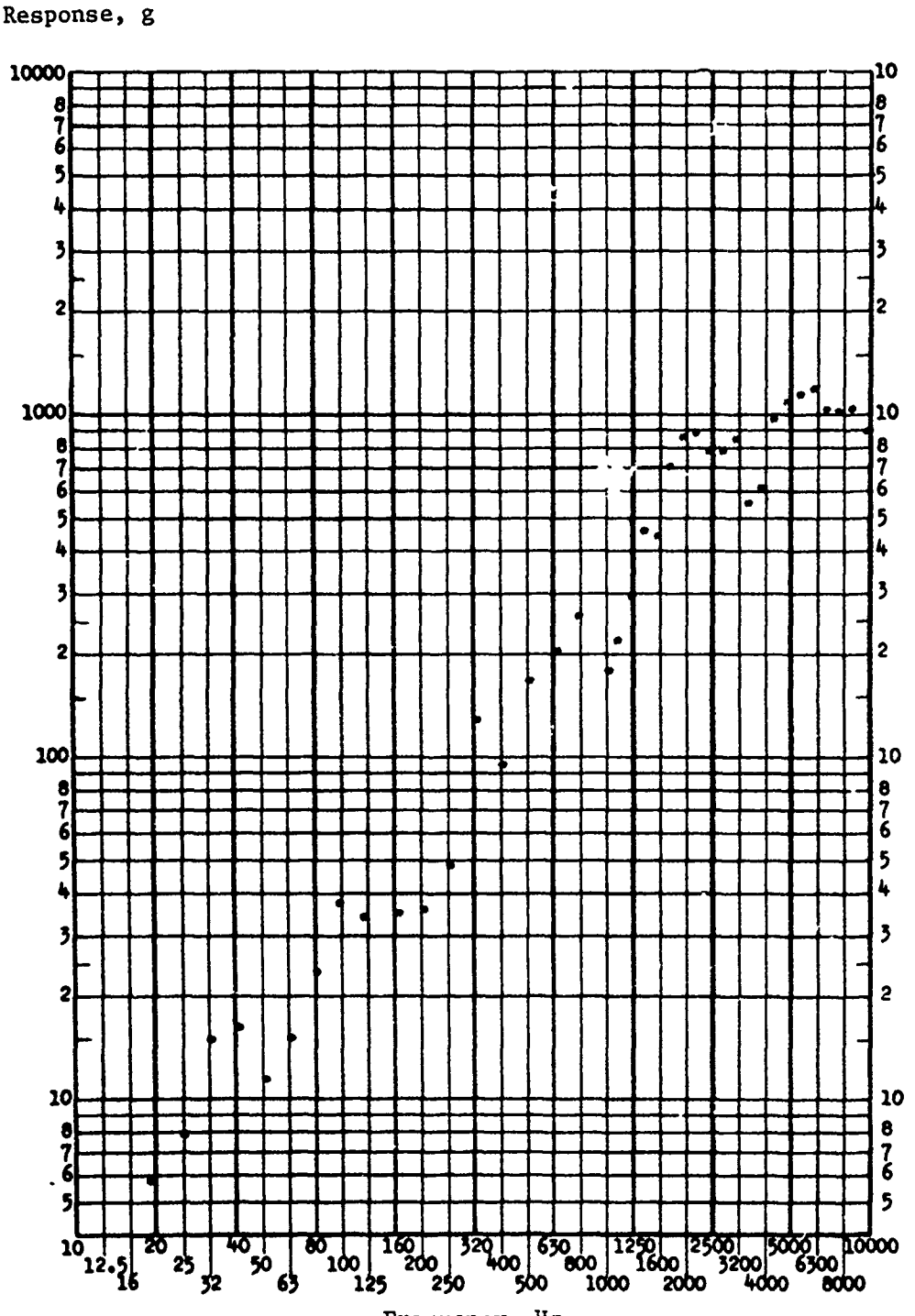
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 39 (cont)



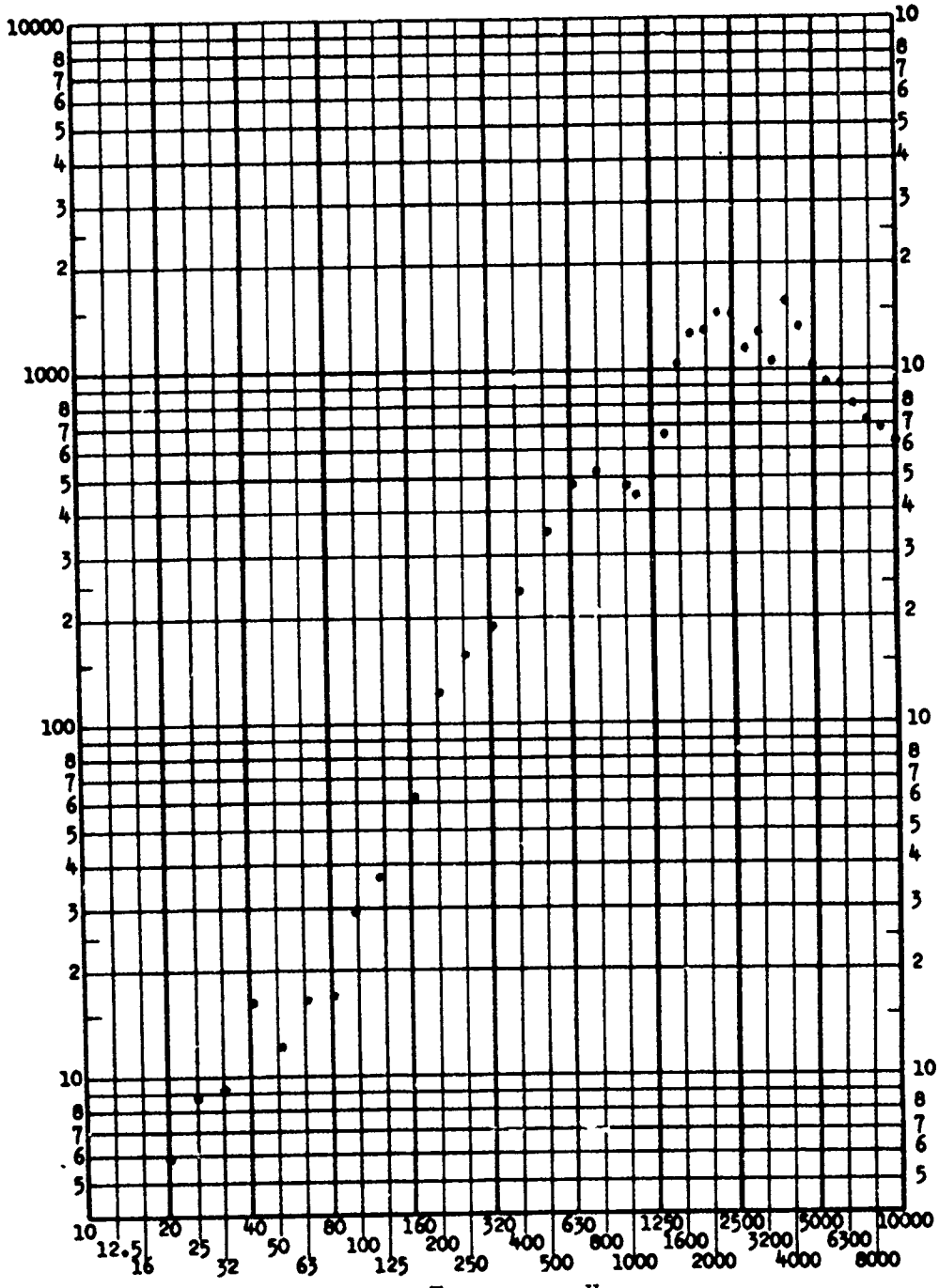
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 5 - Tangential axis longeron near station 117

Figure 39 (cont)



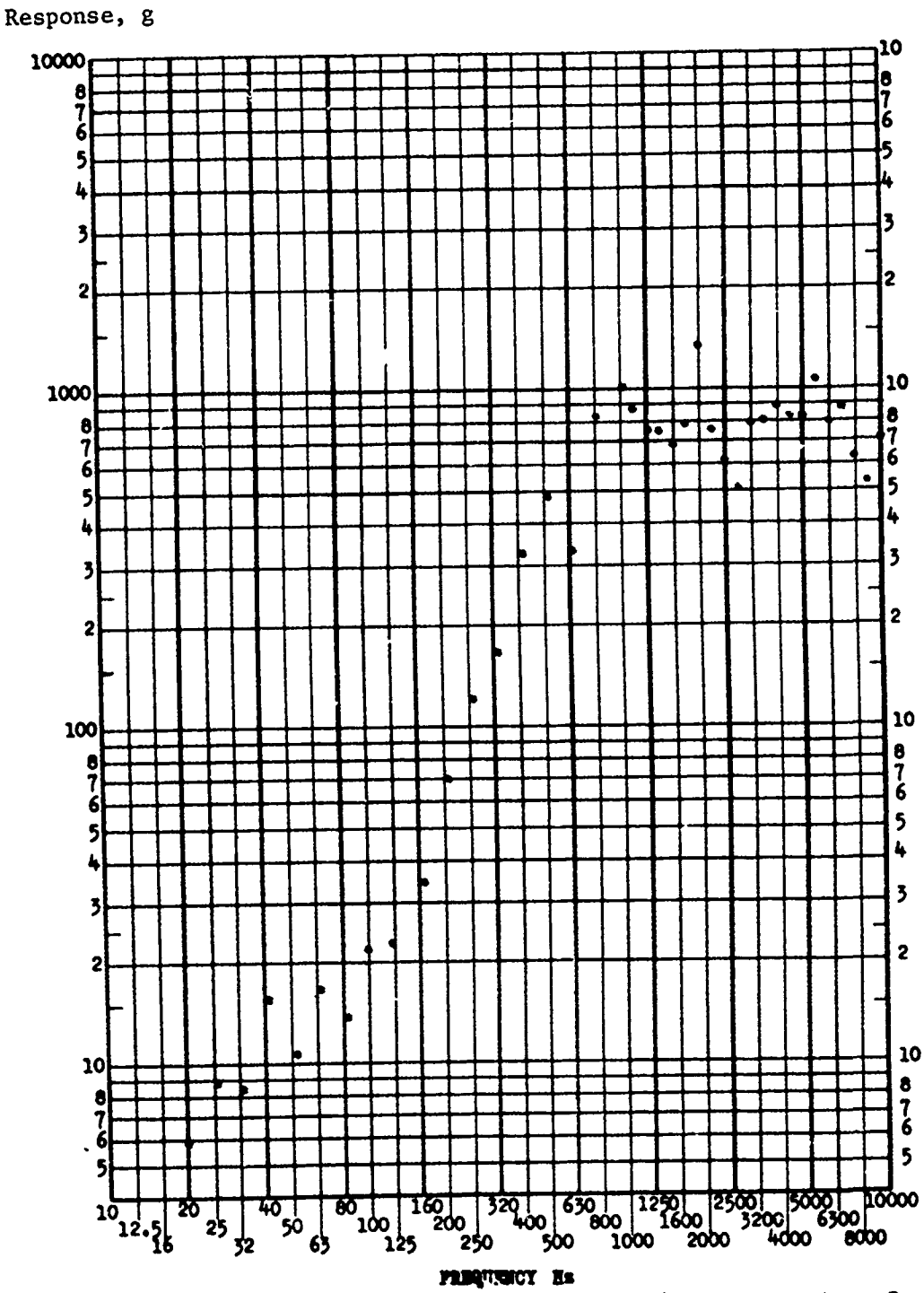
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 6 - Radial axis longeron near station 117

Figure 39 (cont)



Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 7 - Longitudinal axis longeron near station 77

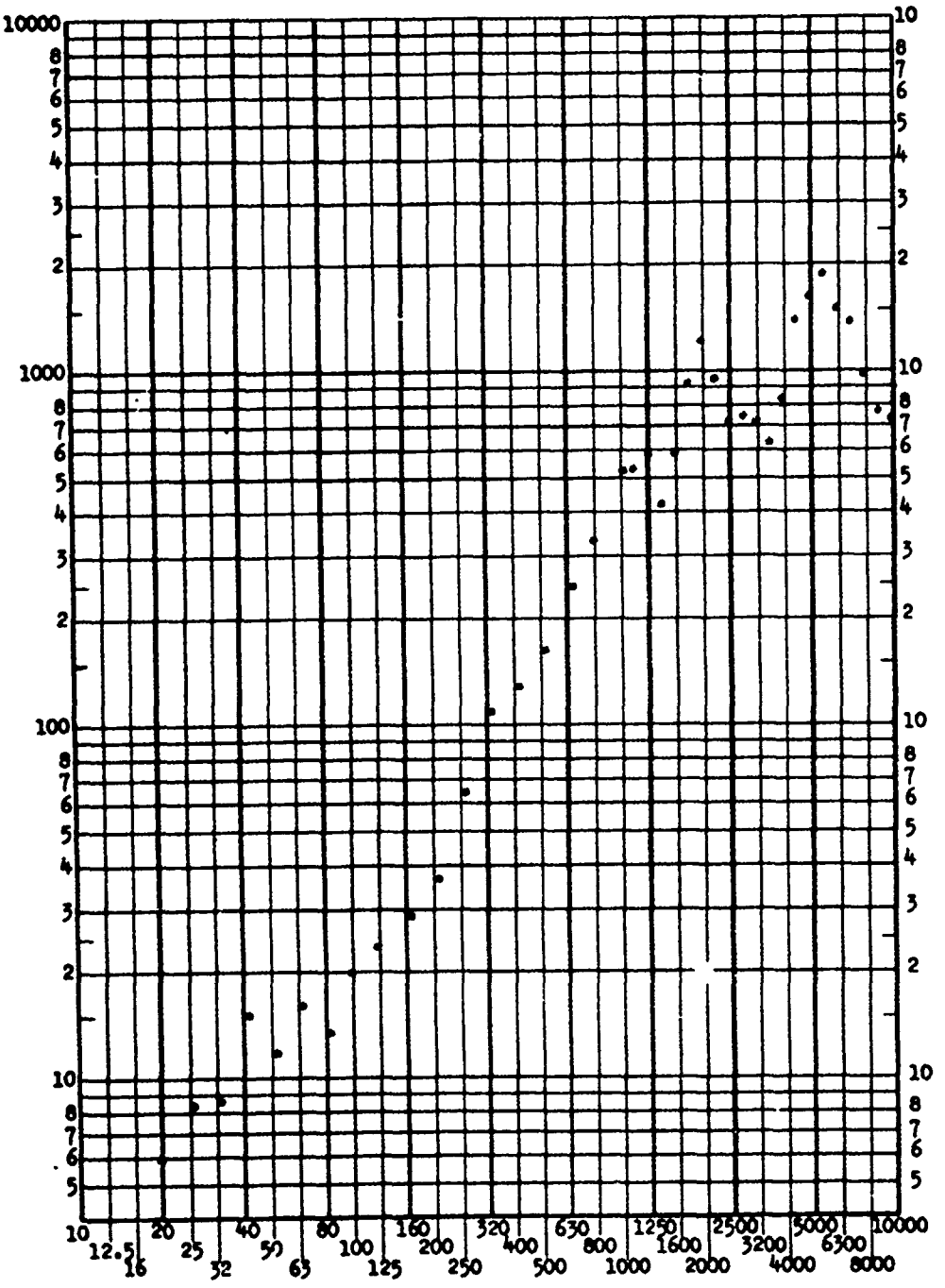
Figure 39 (cont)



Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 8 - Tangential axis longeron near station 77

Figure 39 (cont)

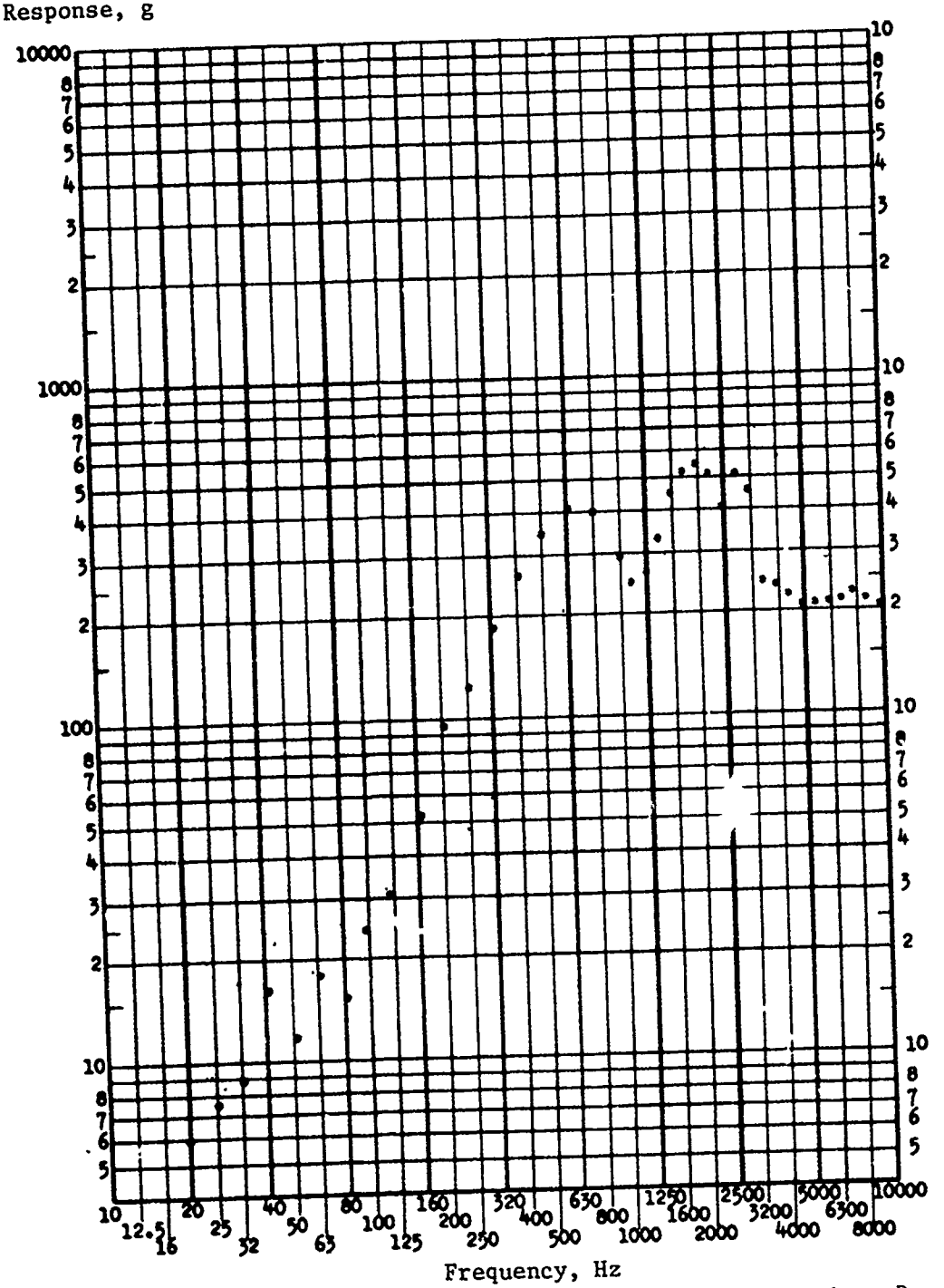
Response, g



Frequency, Hz

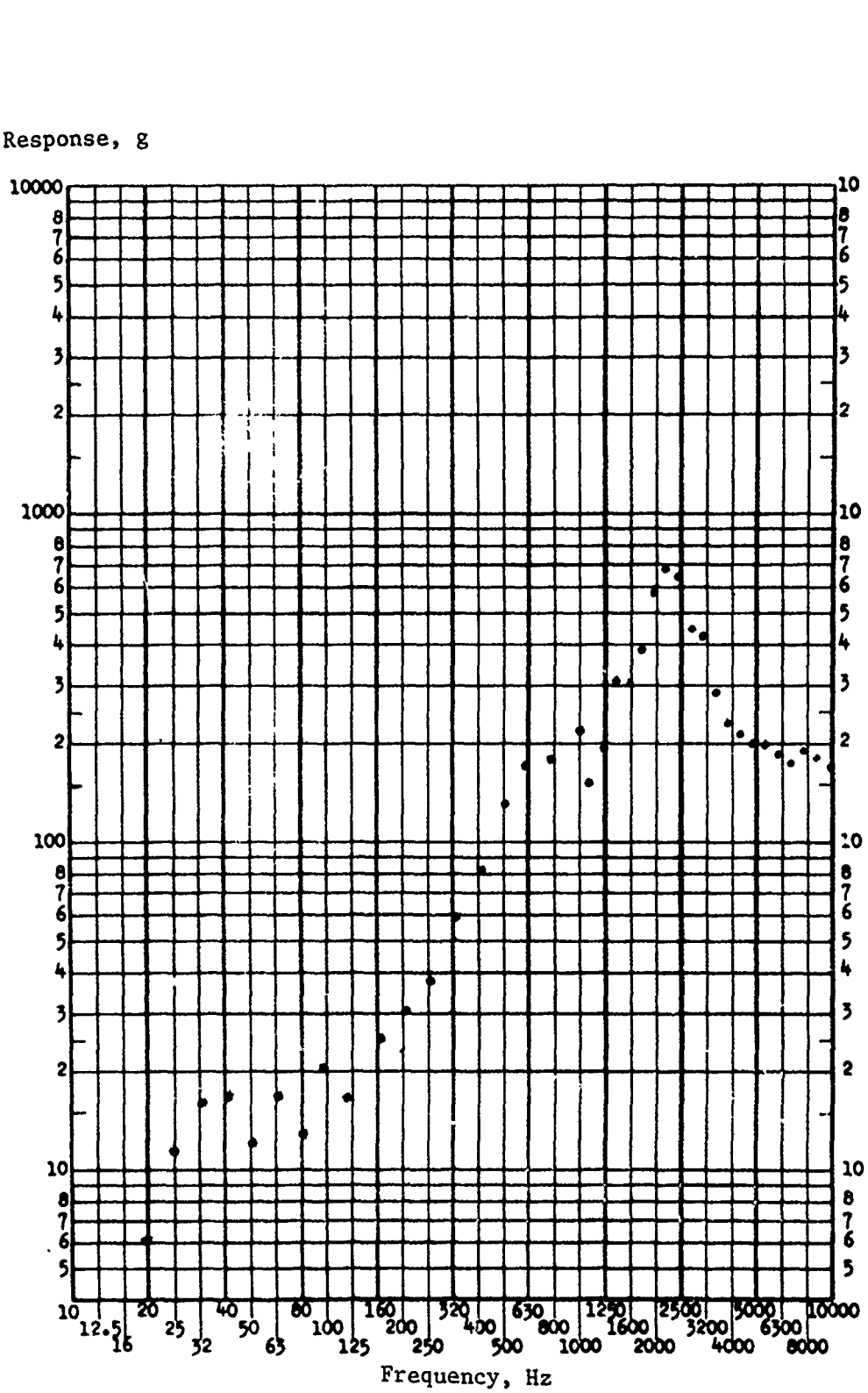
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 9 - Radial axis longeron near station 77

Figure 39 (cont)



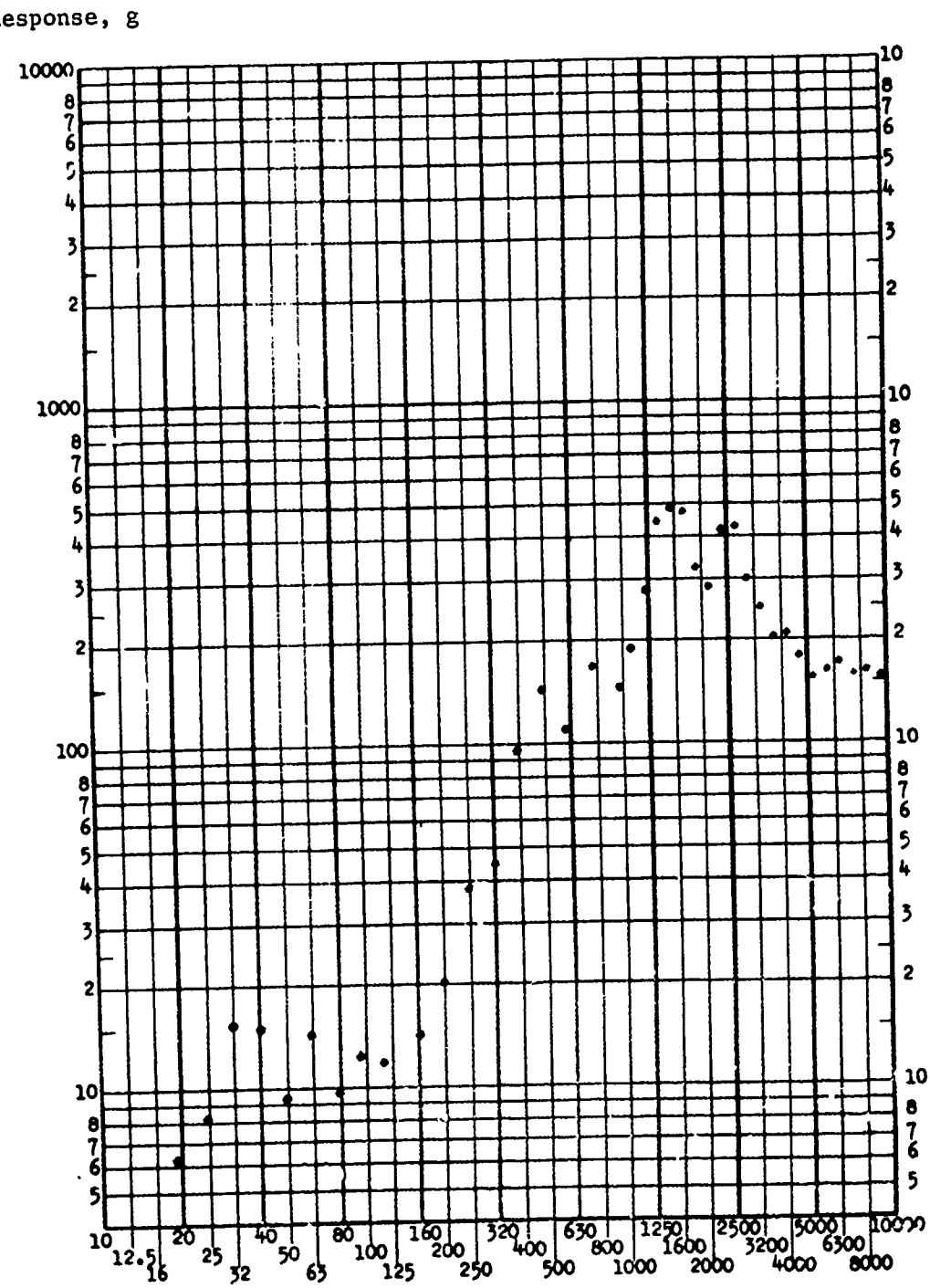
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 39 (cont)



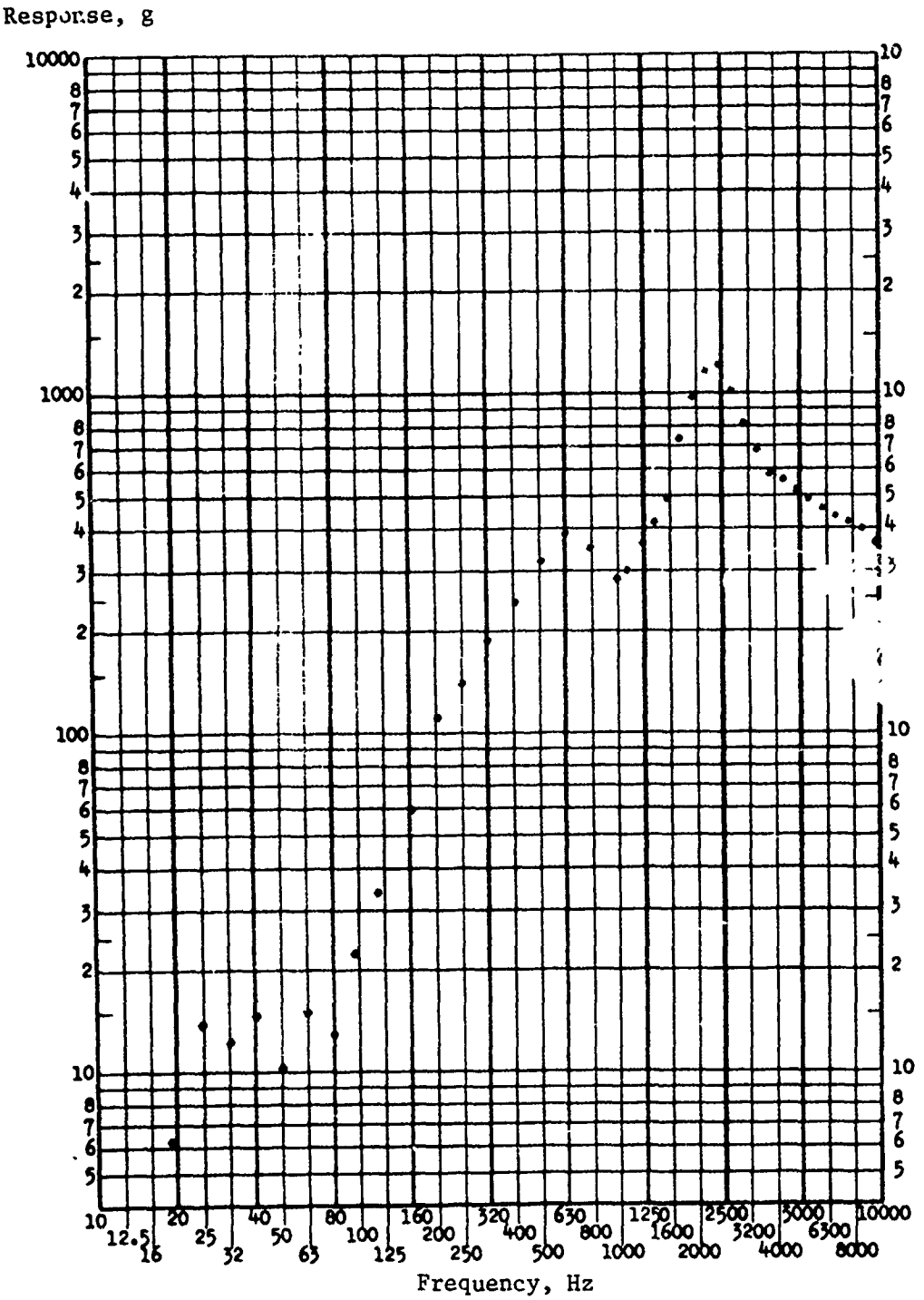
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 39 (cont)



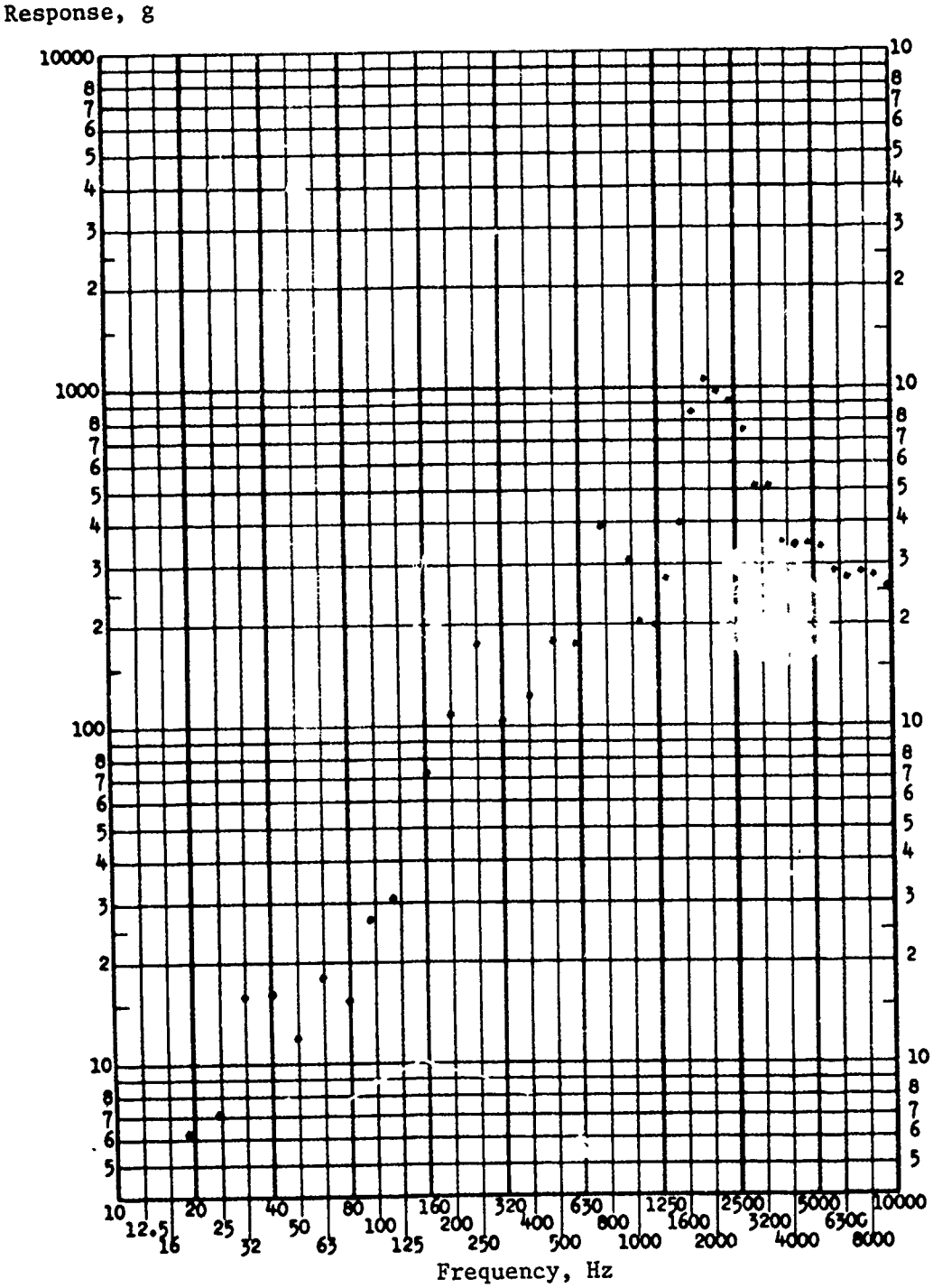
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 39 (cont)



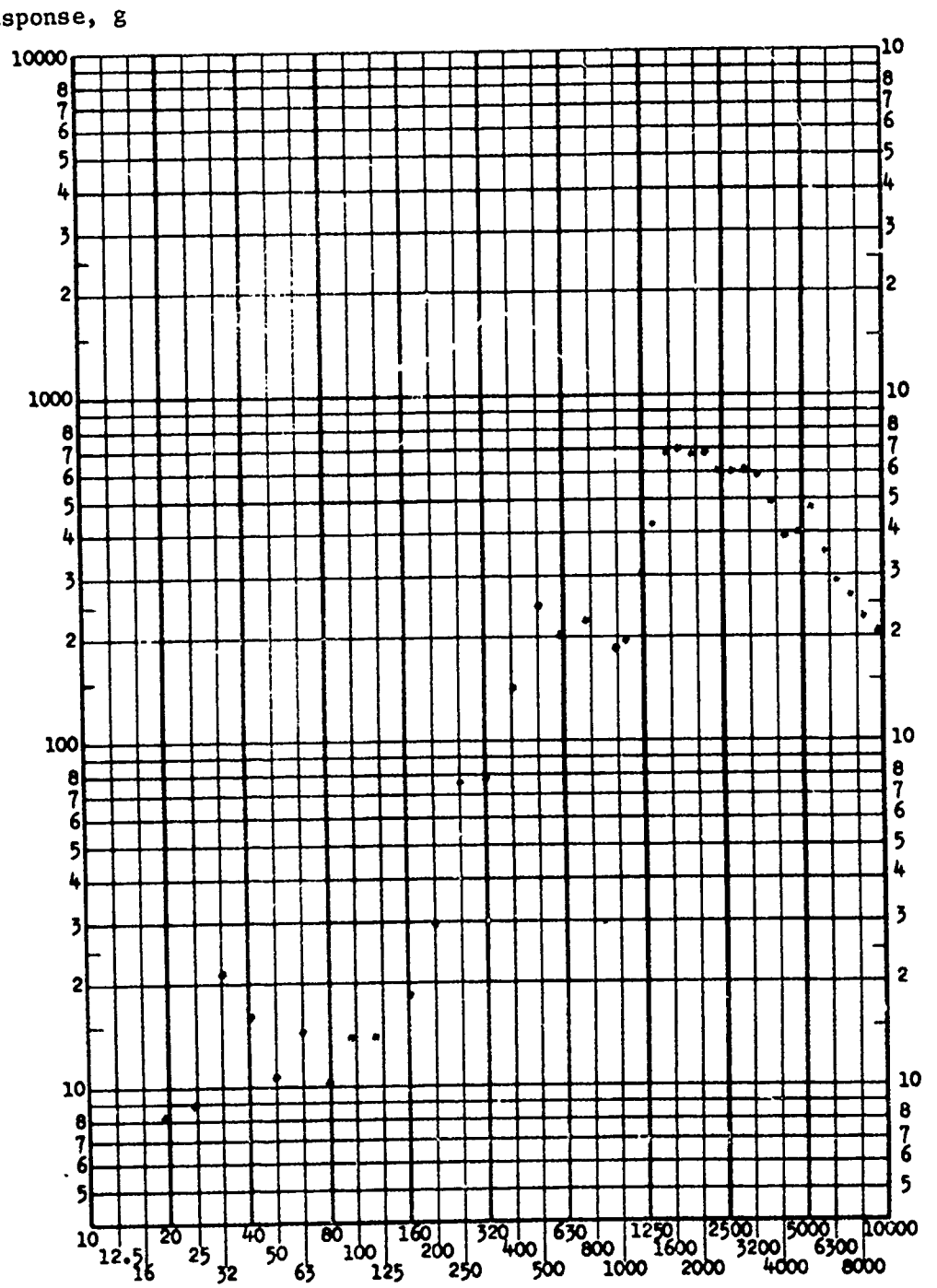
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 39 (cont)



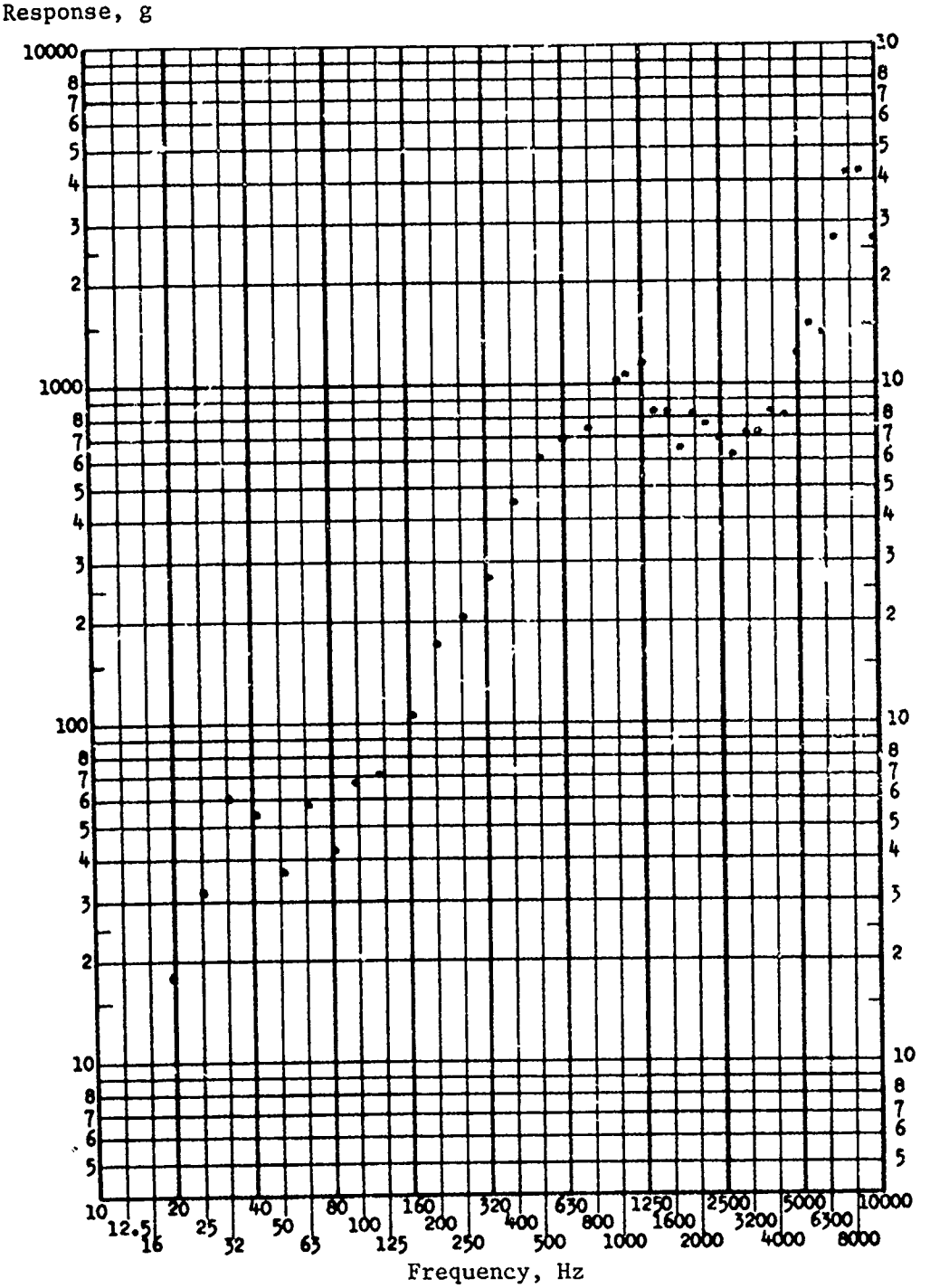
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 39 (cont)



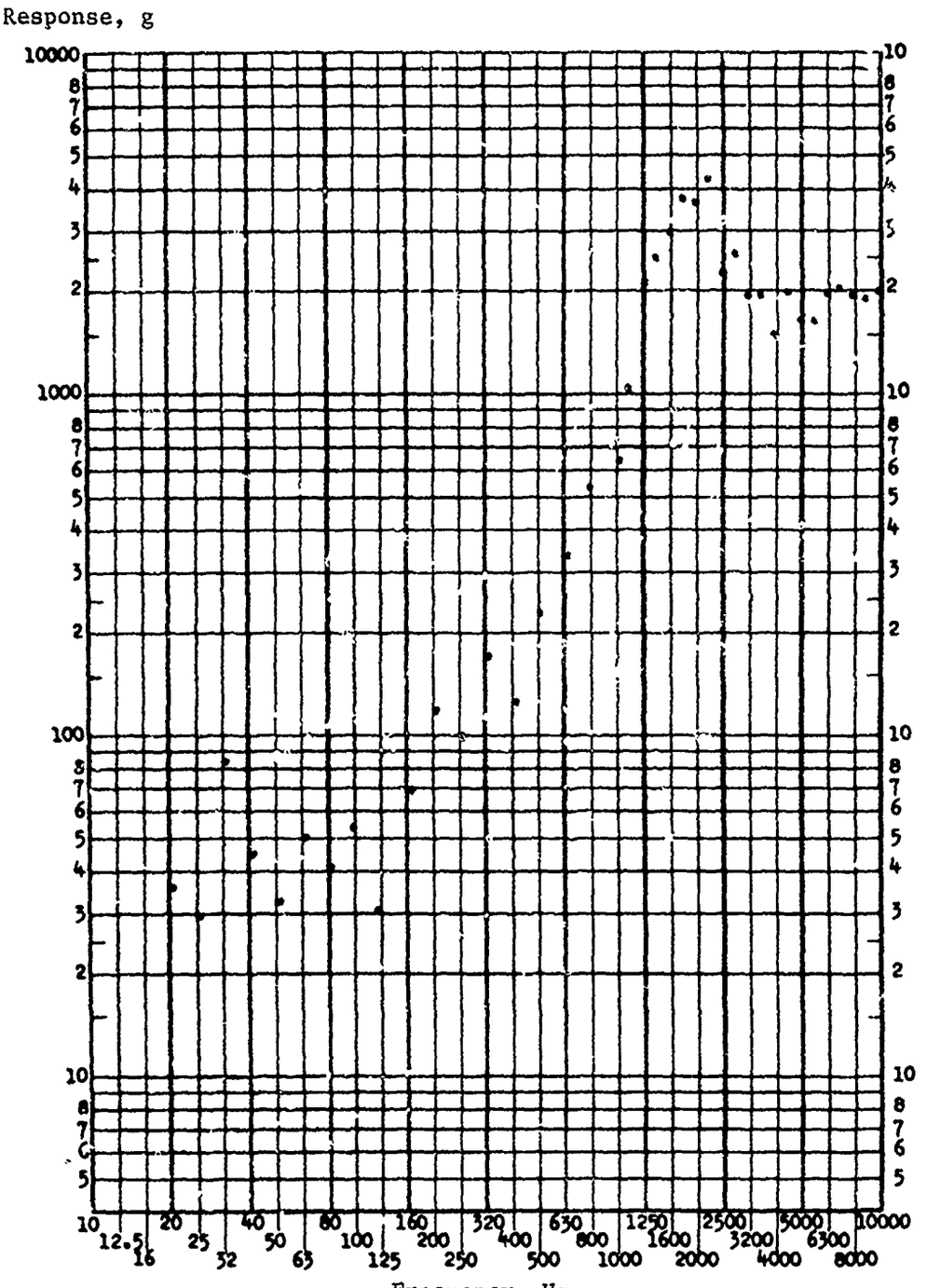
Bench Shock Test - Stage II/III Separation, Run 39
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 39 (concl)



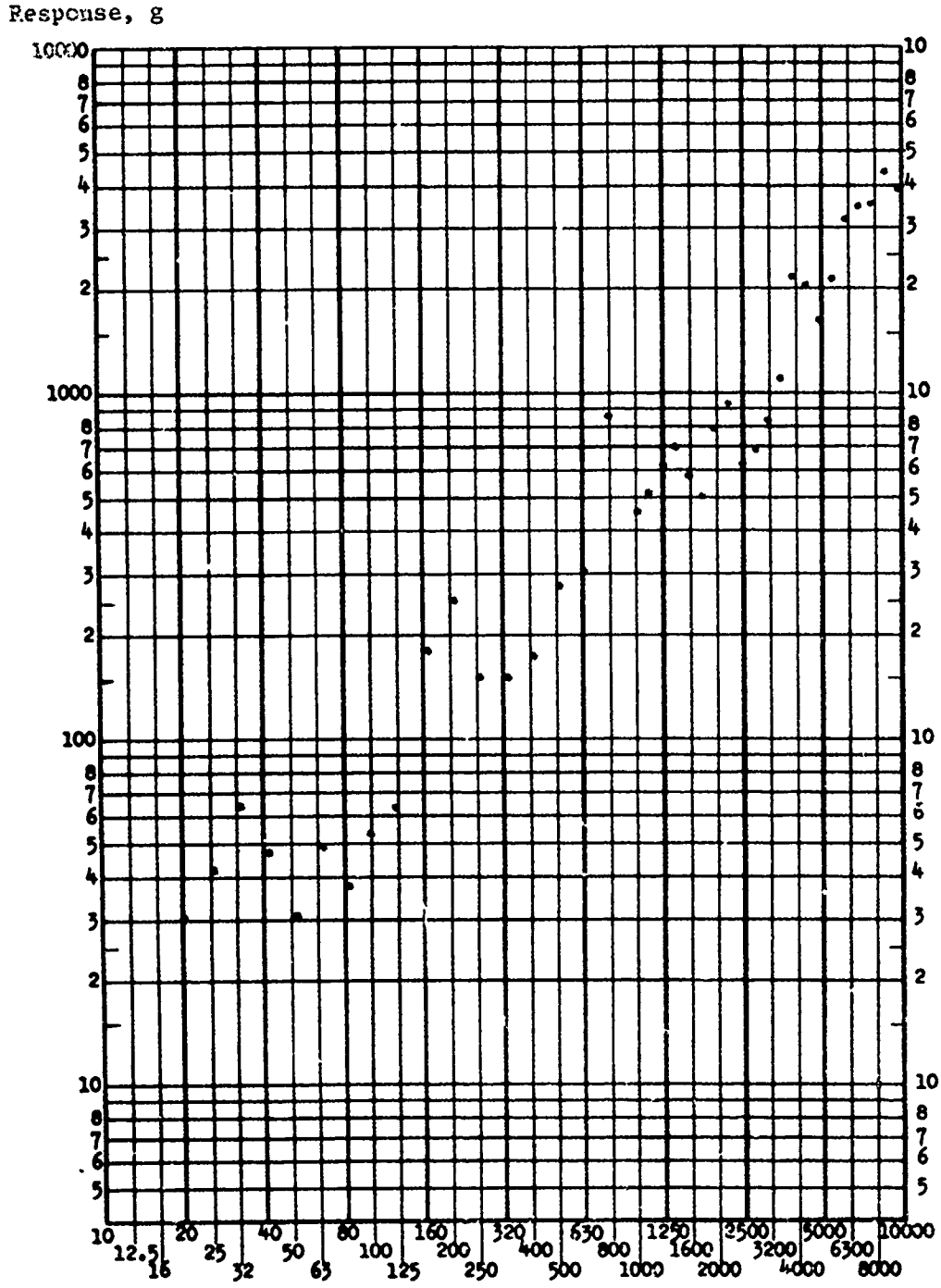
Bench Shock Test - Stage II/III Separation, Run 40_
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 40 Run 40 Shock Response Spectrum



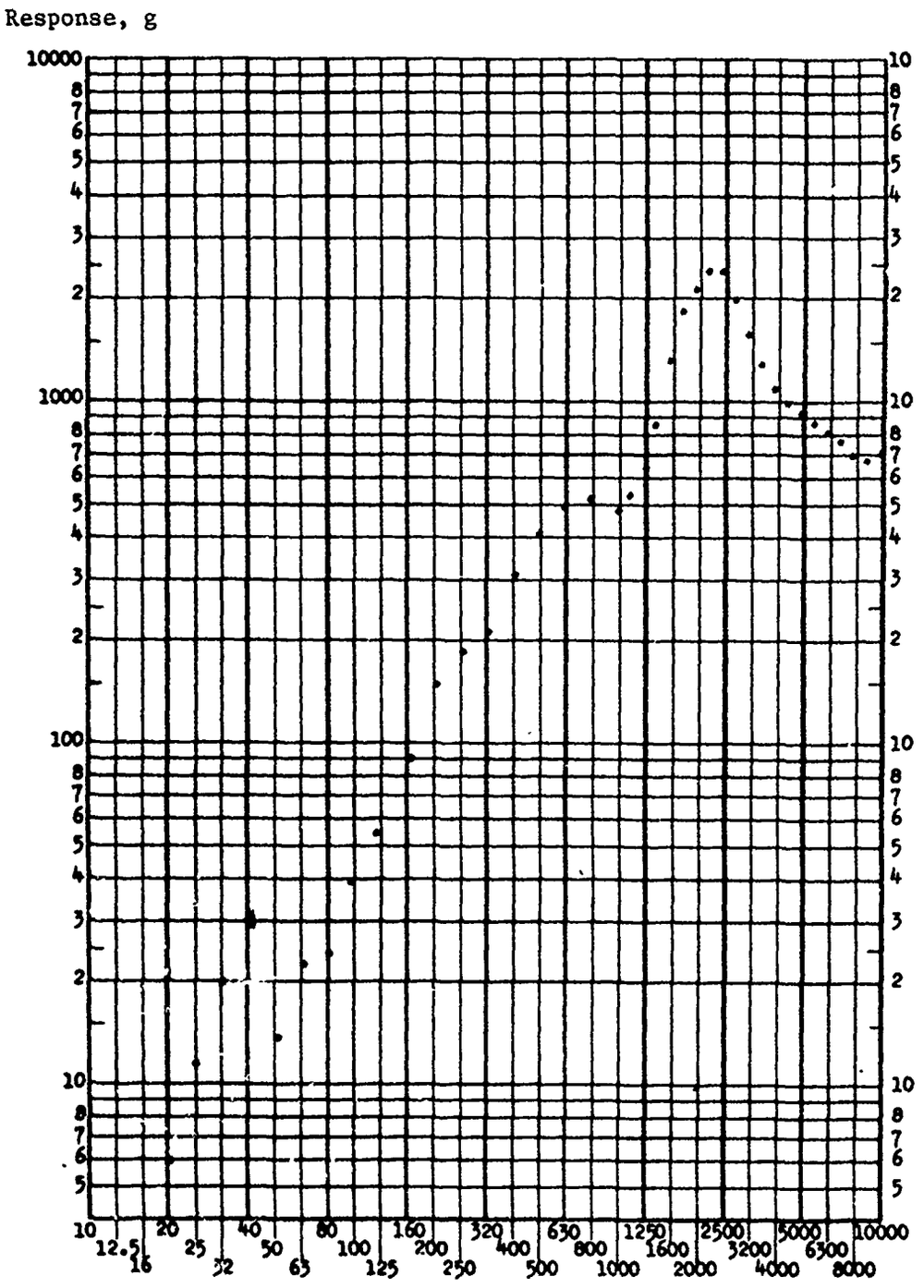
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 2 - Tangential axis longeron near station 133

Figure 40 (cont)



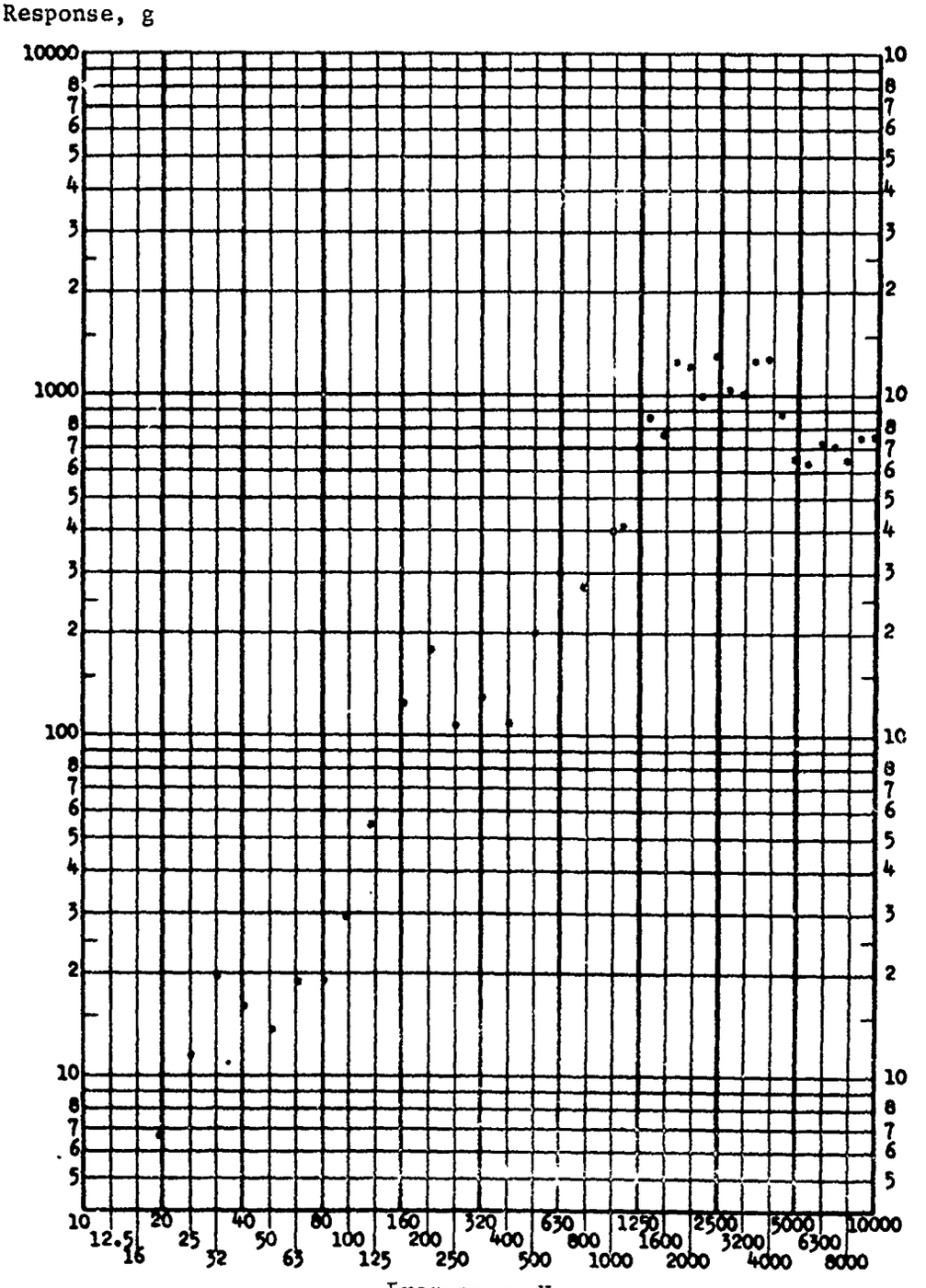
Bench Shock Test - Stage II/III Separation, Run 40__
Measurement No. 3 - Radial axis longeron near station 133

Figure 40 (cont)



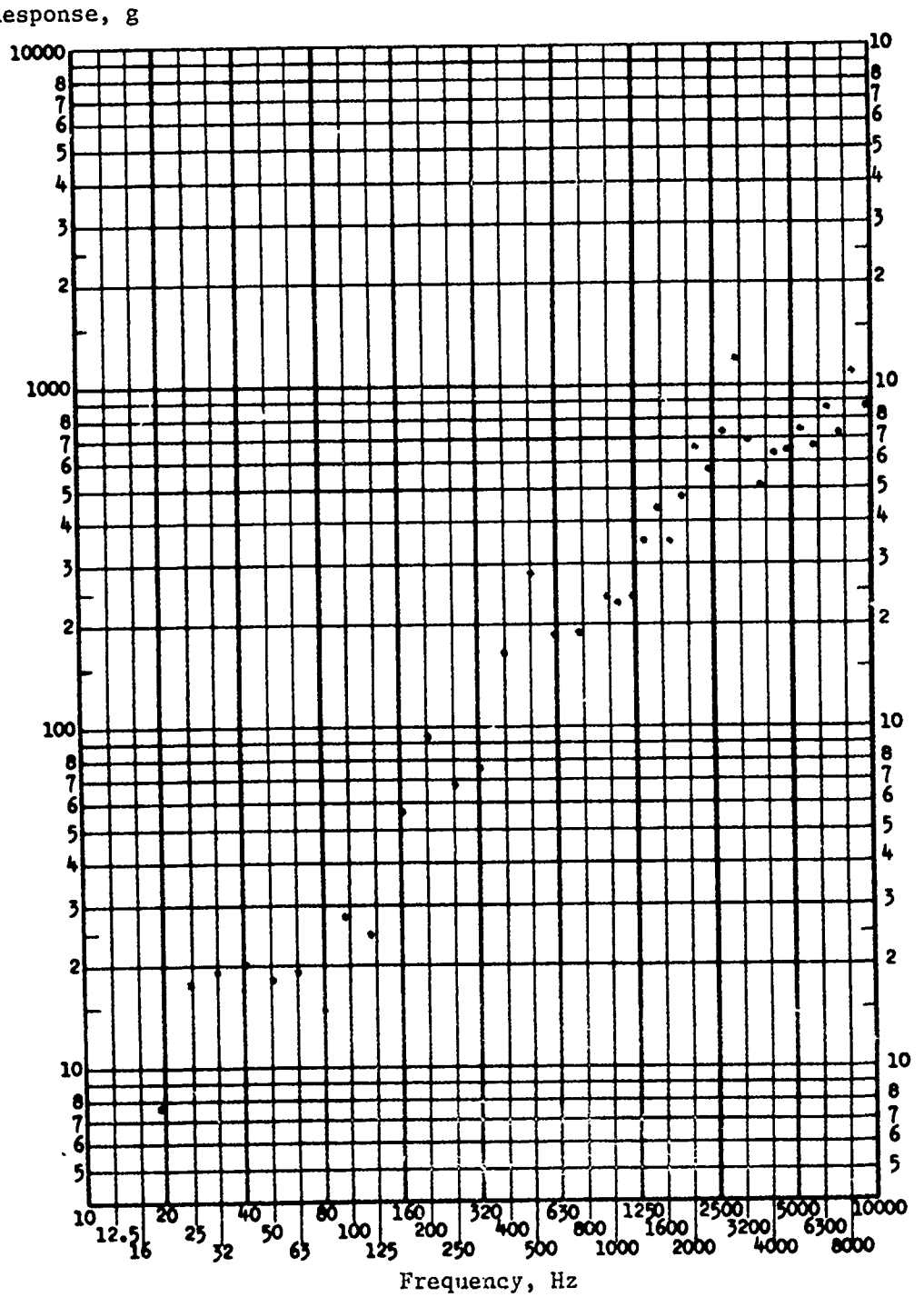
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 40 (cont)



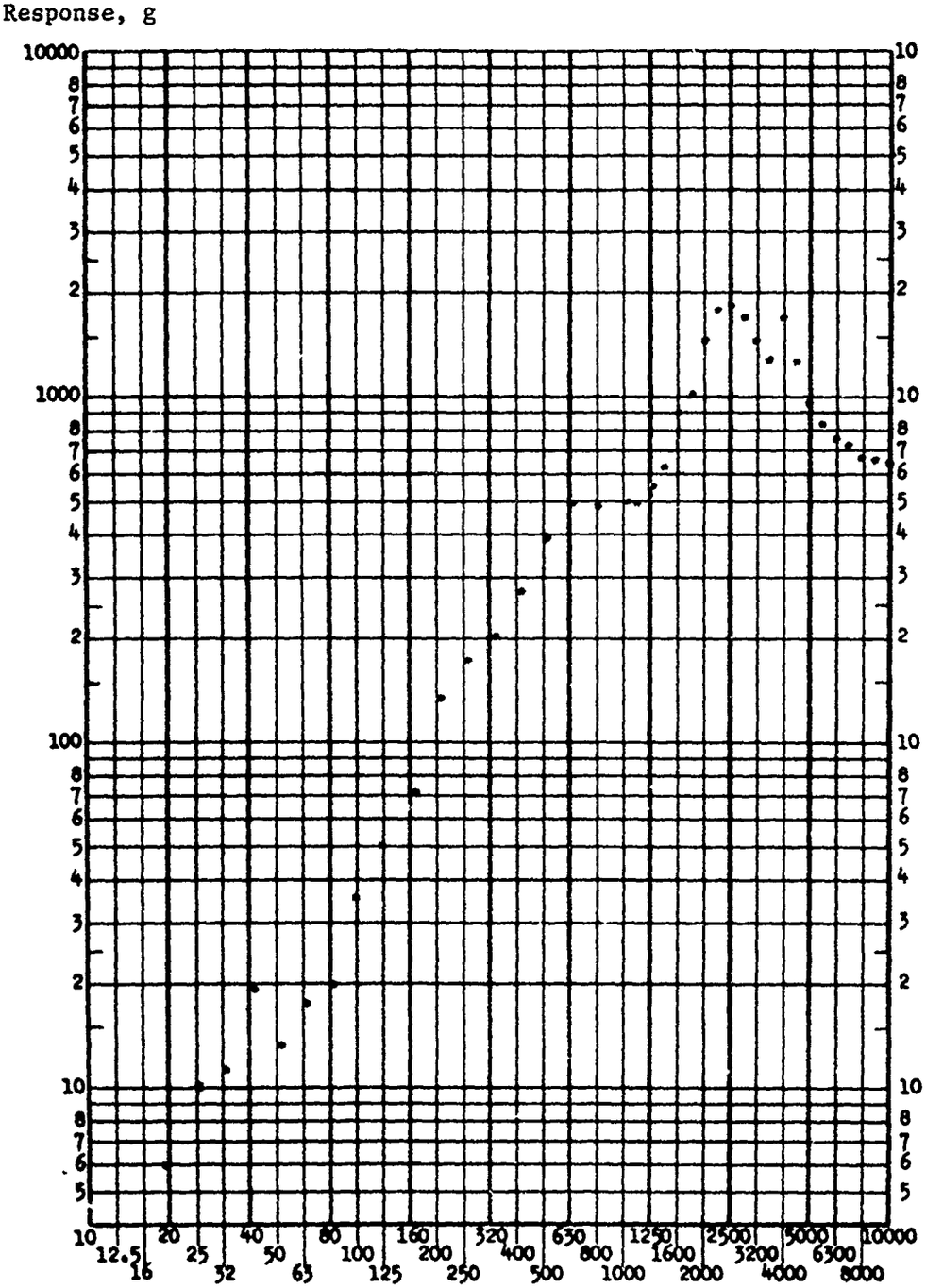
Bench Shock Test - Stage II/III Separation, Run 40__
Measurement No. 5 - Tangential axis longeron near station 117

Figure 40 (cont)



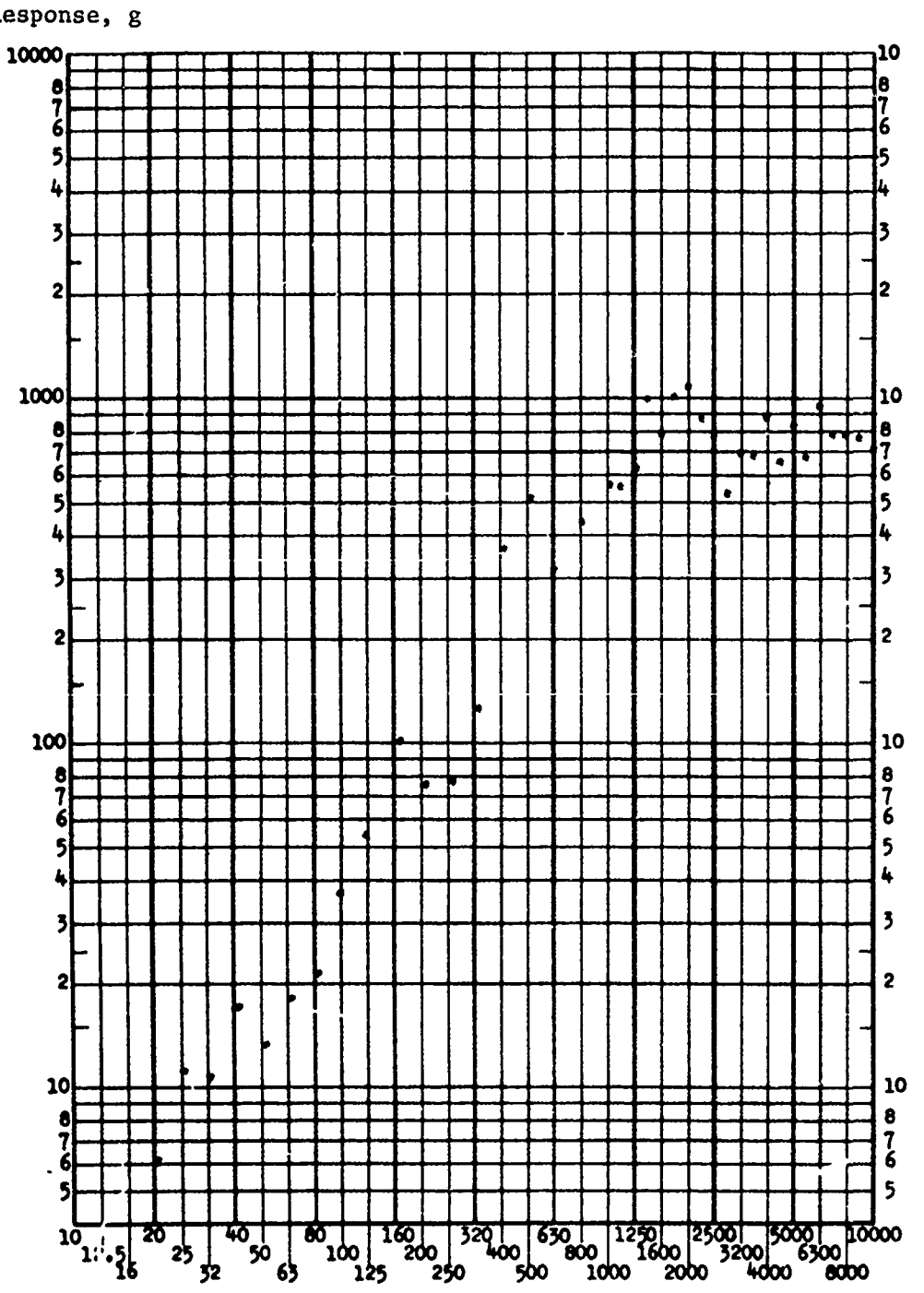
Bench Shock Test - Stage II/III Separation, Run 40_
Measurement No. 6 - Radial axis longeron near station 117

Figure 40 (cont)



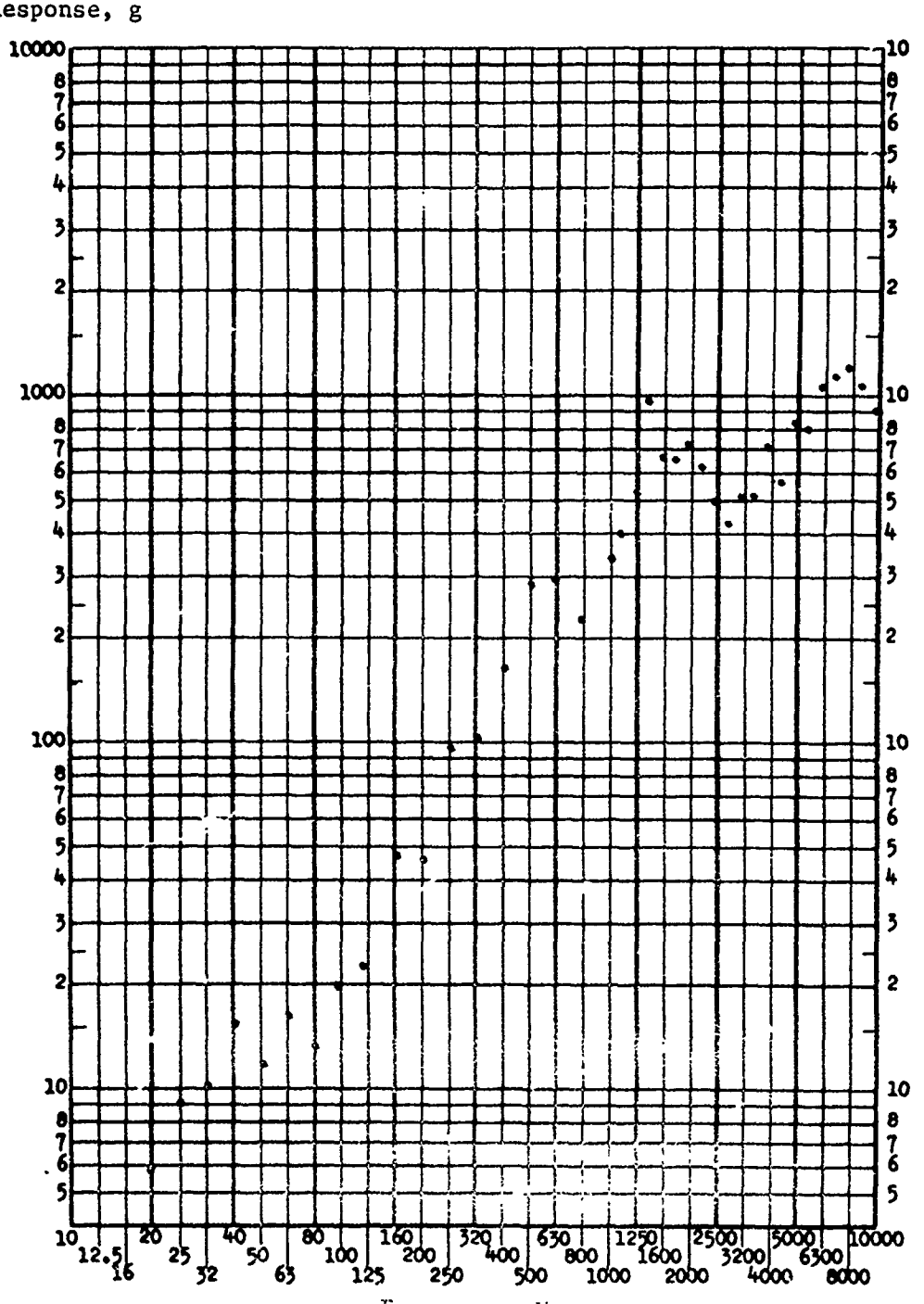
Bench Shock Test - Stage II/III Separation, Run 40_
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 40 (cont)



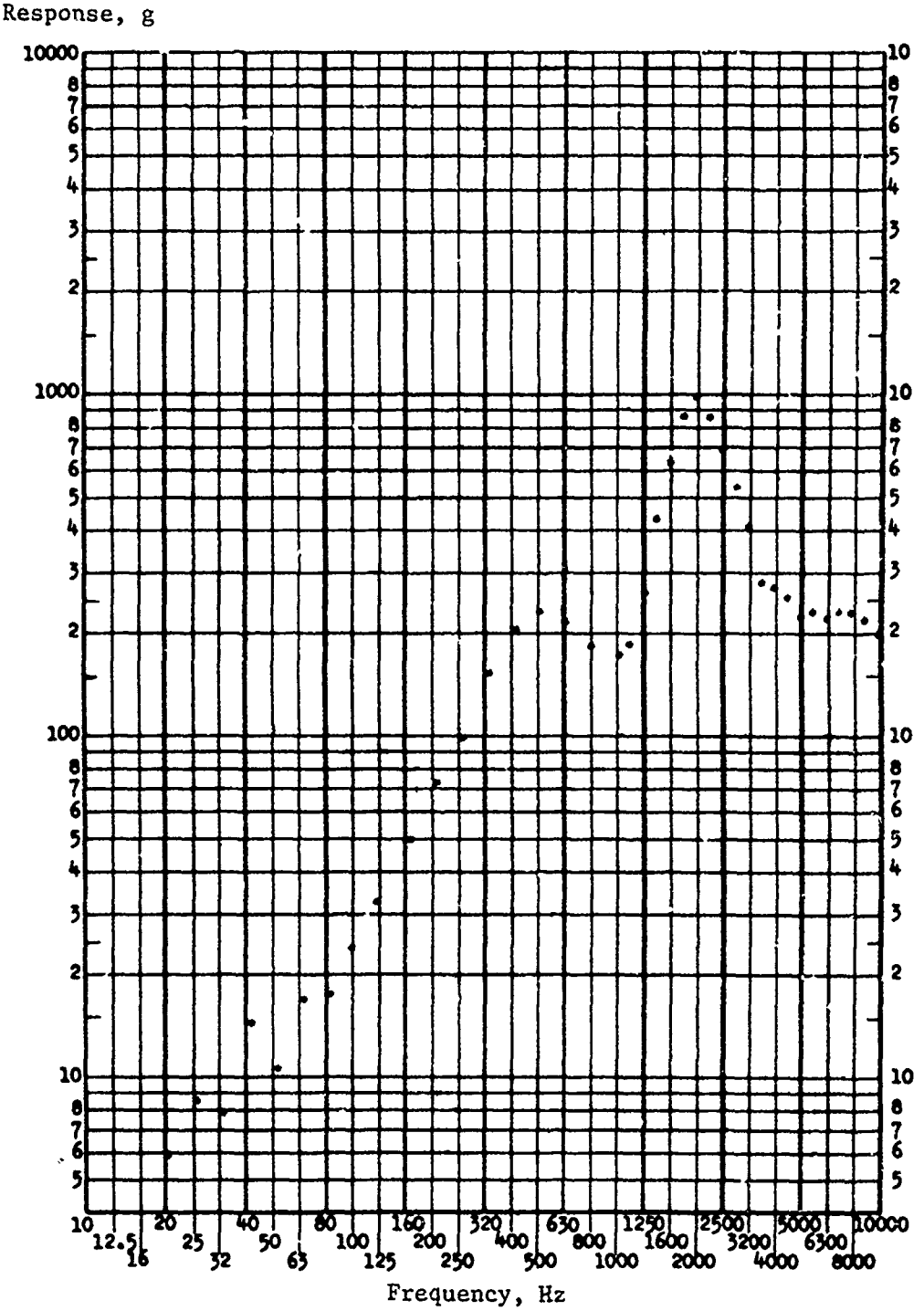
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 8 - Tangential axis longeron near station 77

Figure 40 (cont)



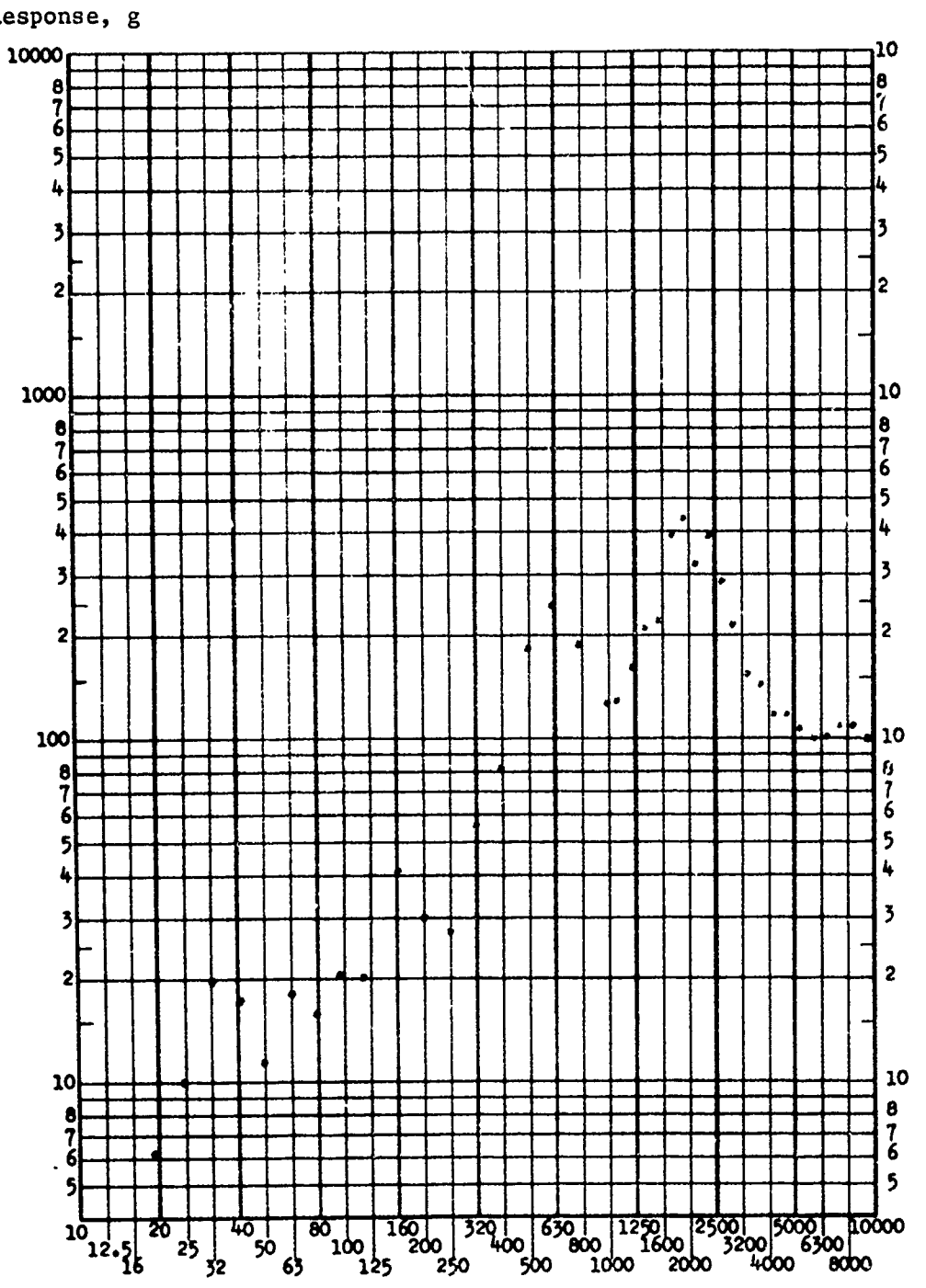
Bench Shock Test - Stage II/III Separation, Run 40_
Measurement No. 9 - Radial axis longeron near station 77

Figure 40 (cont)



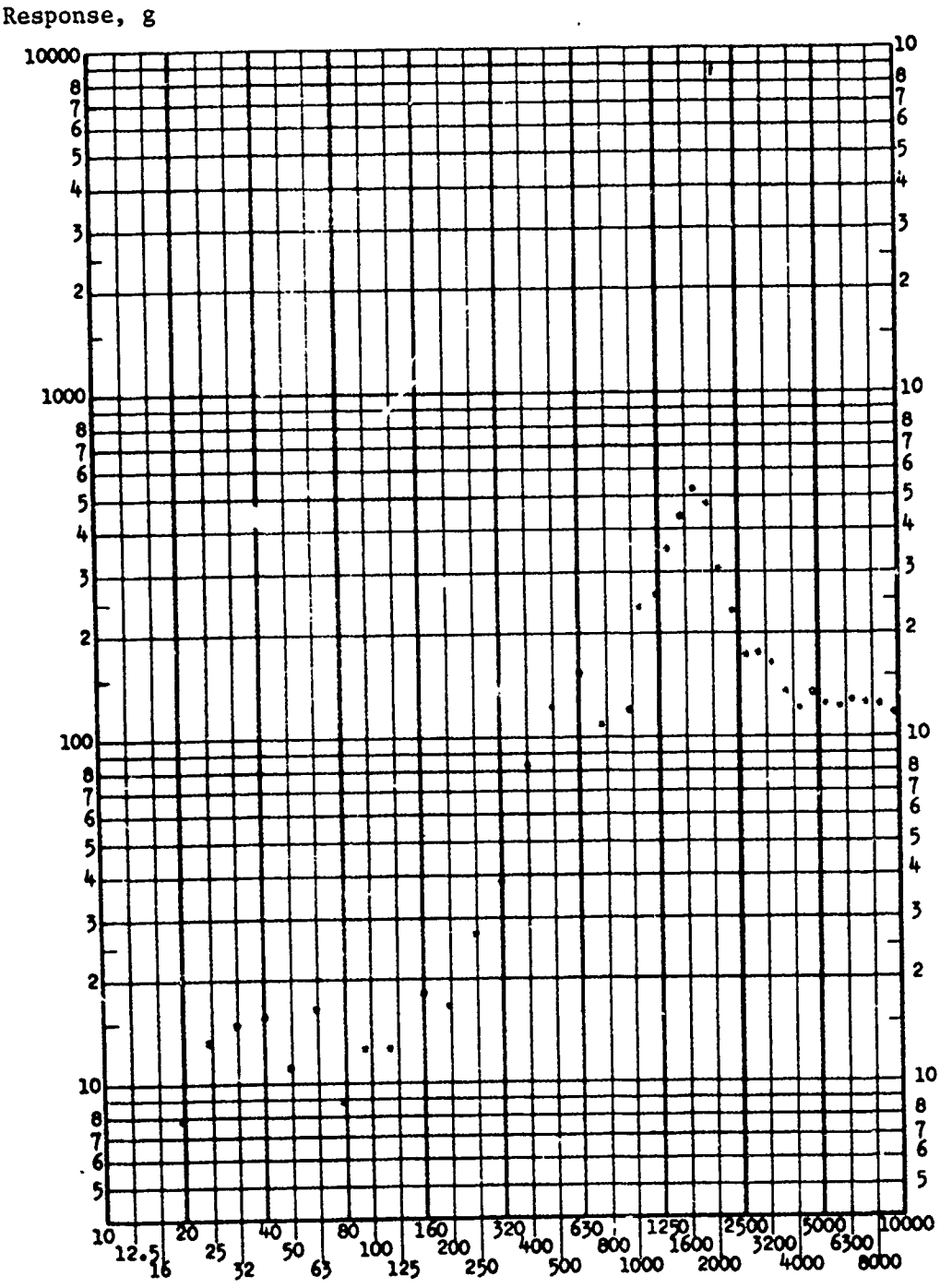
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 40 (cont)



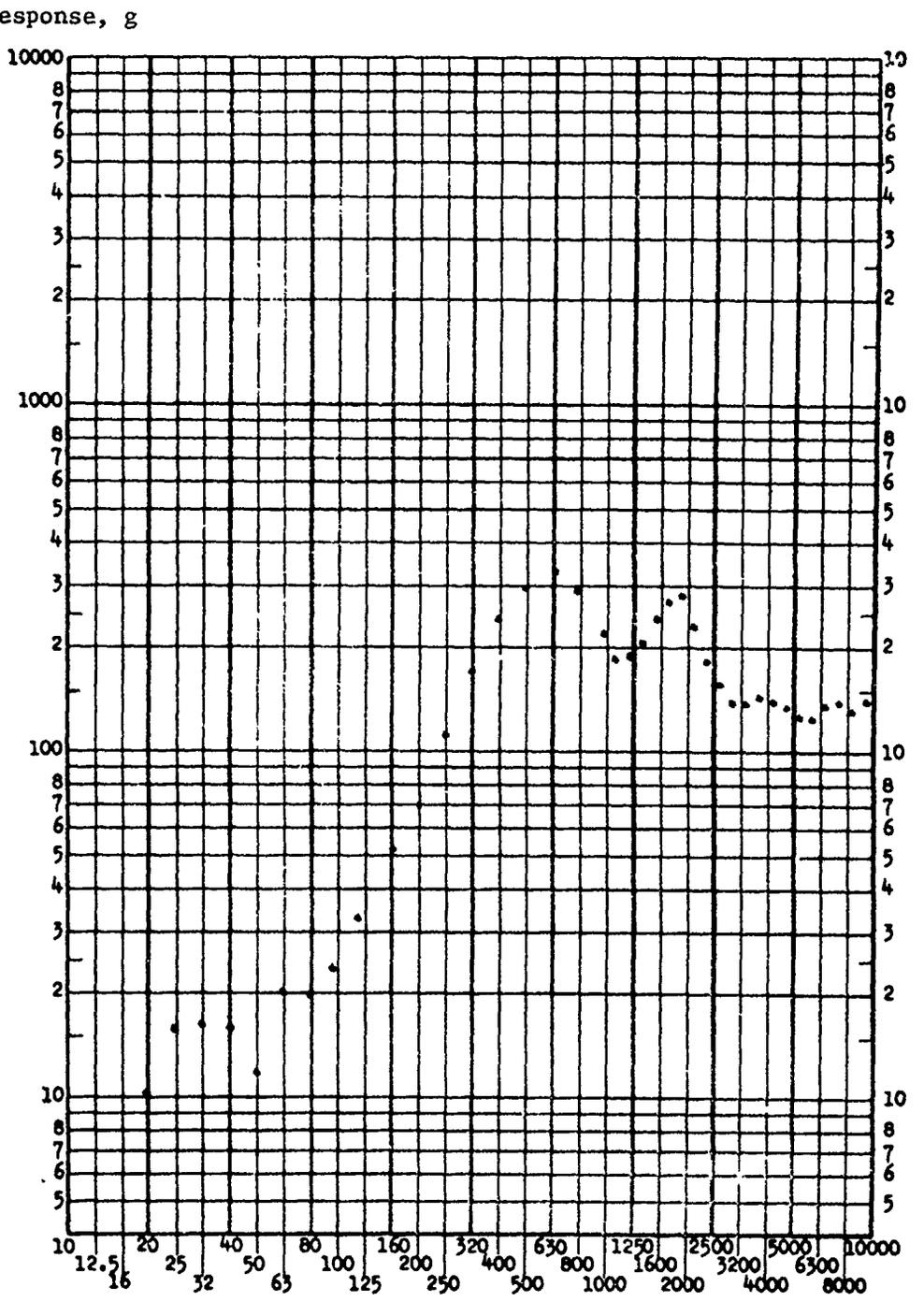
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 40 (cont)



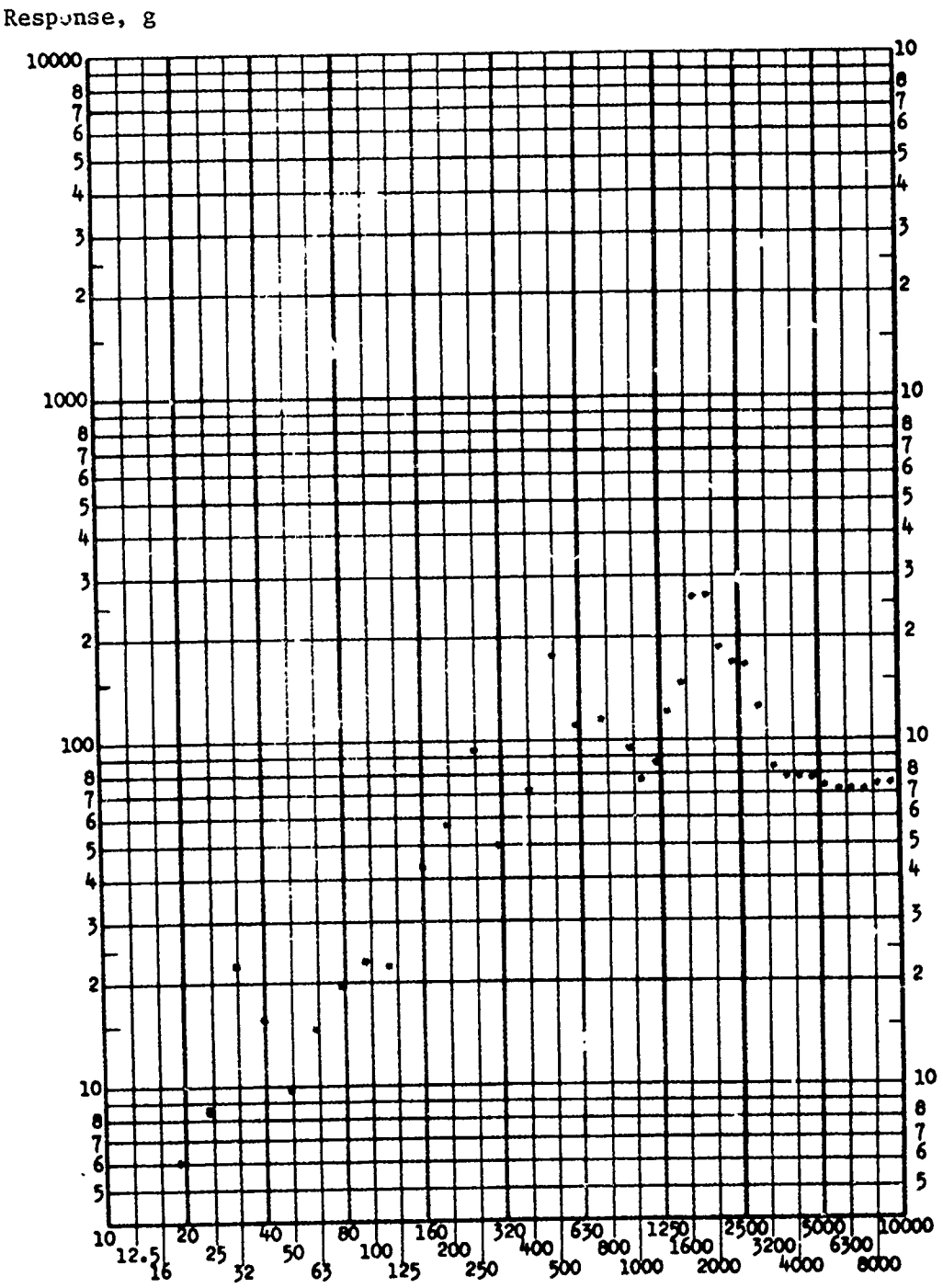
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 40 (cont)



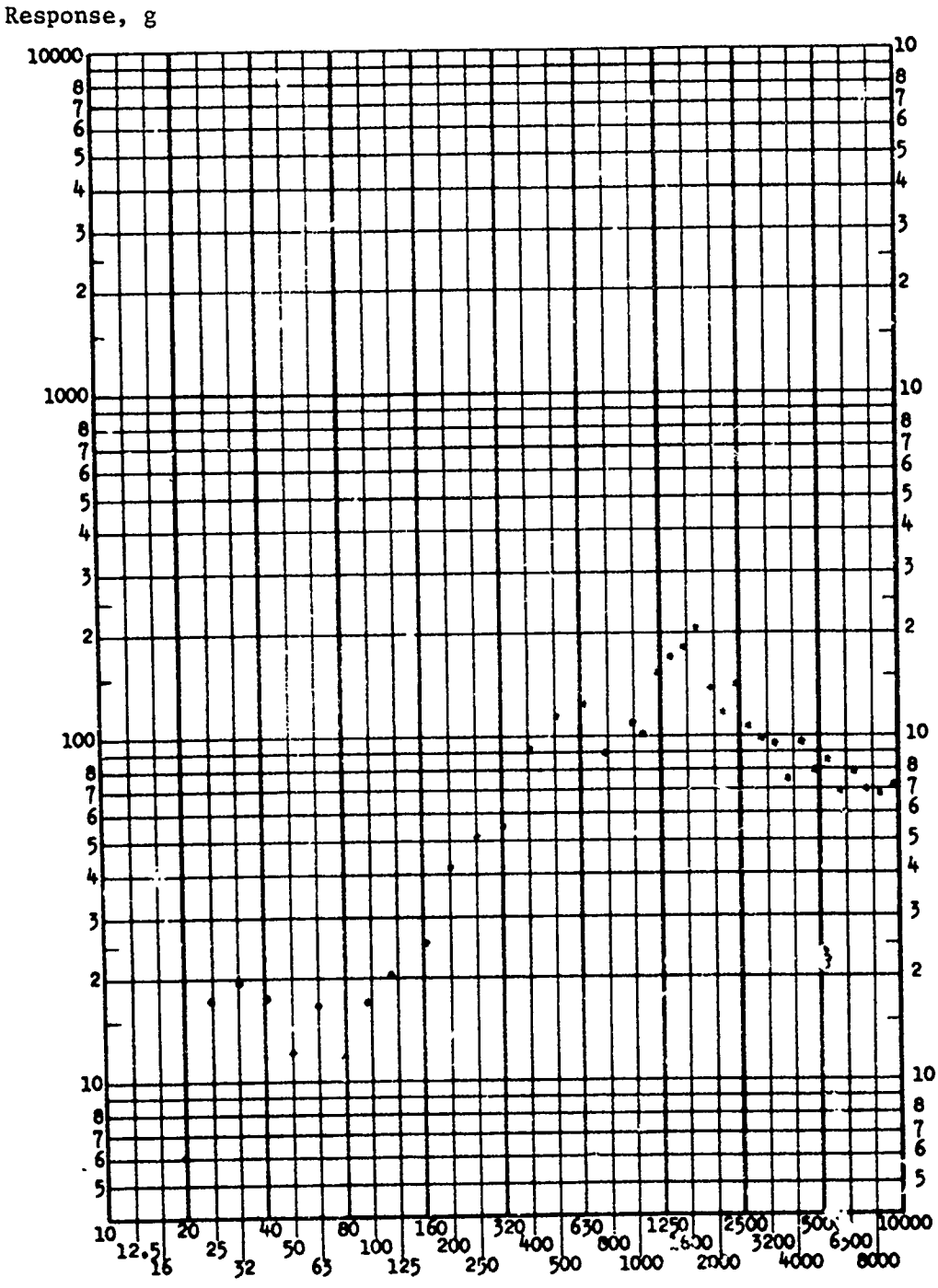
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 40 (cont)



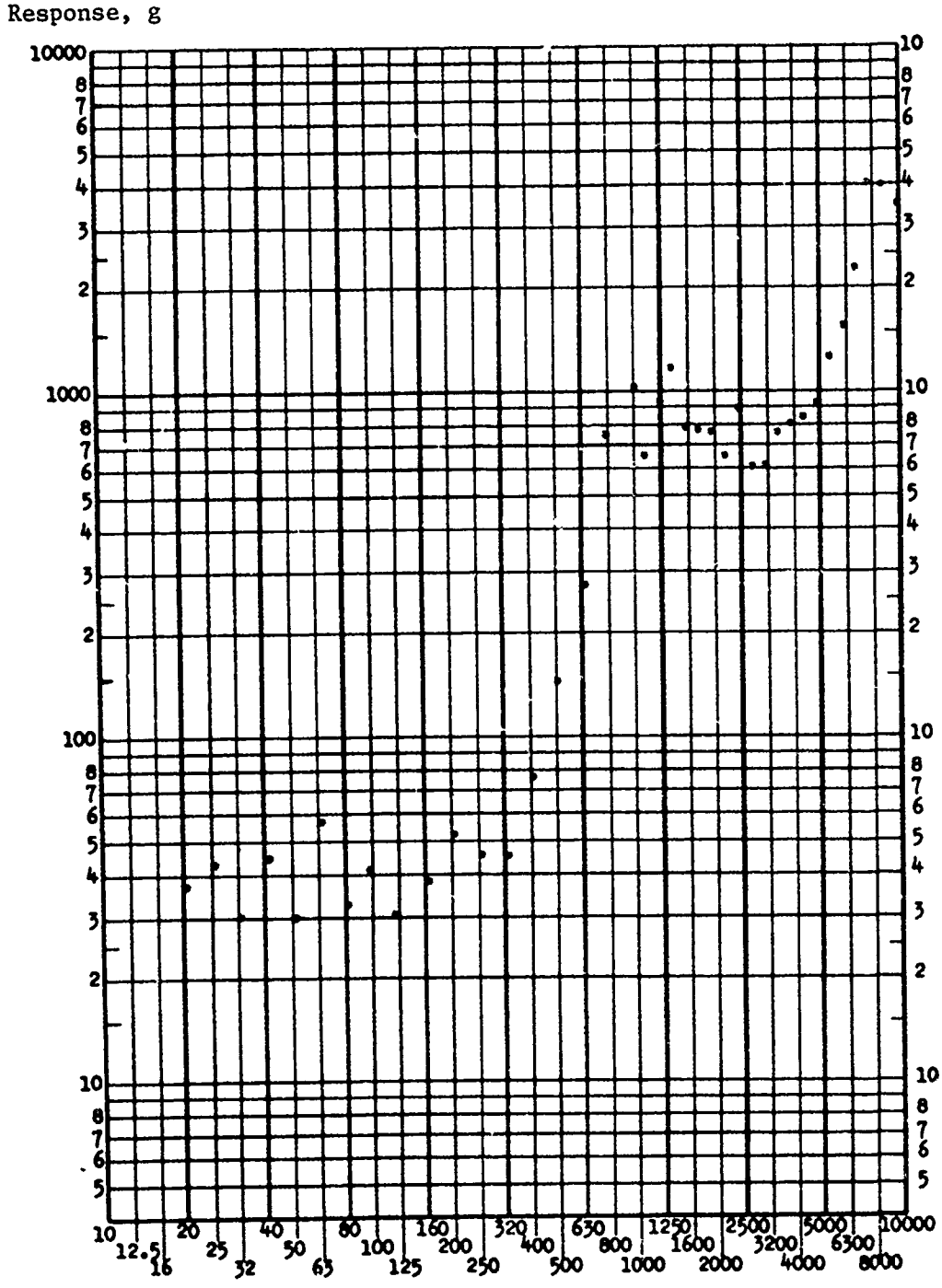
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 40 (cont)



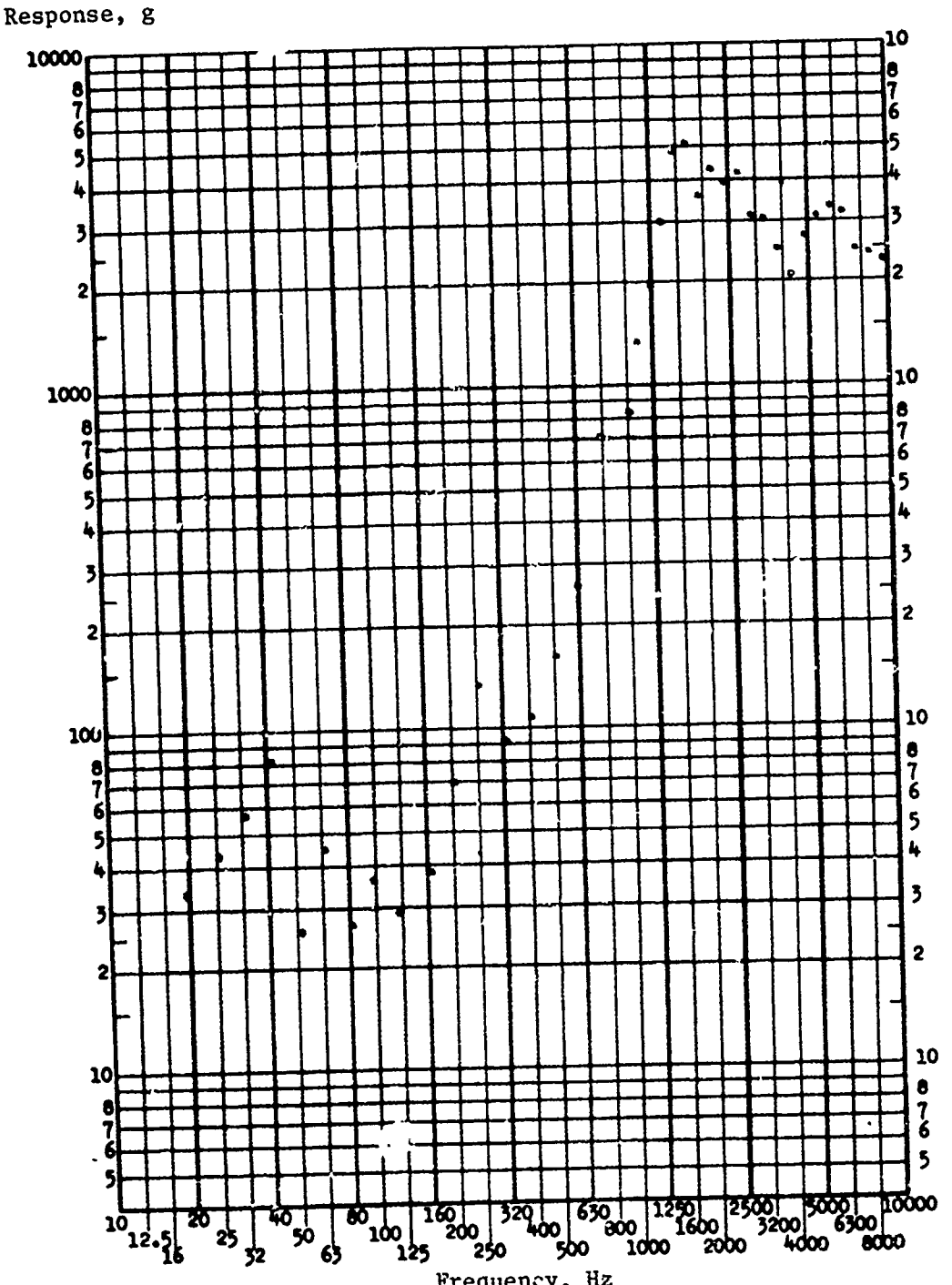
Bench Shock Test - Stage II/III Separation, Run 40
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 40 (concl)



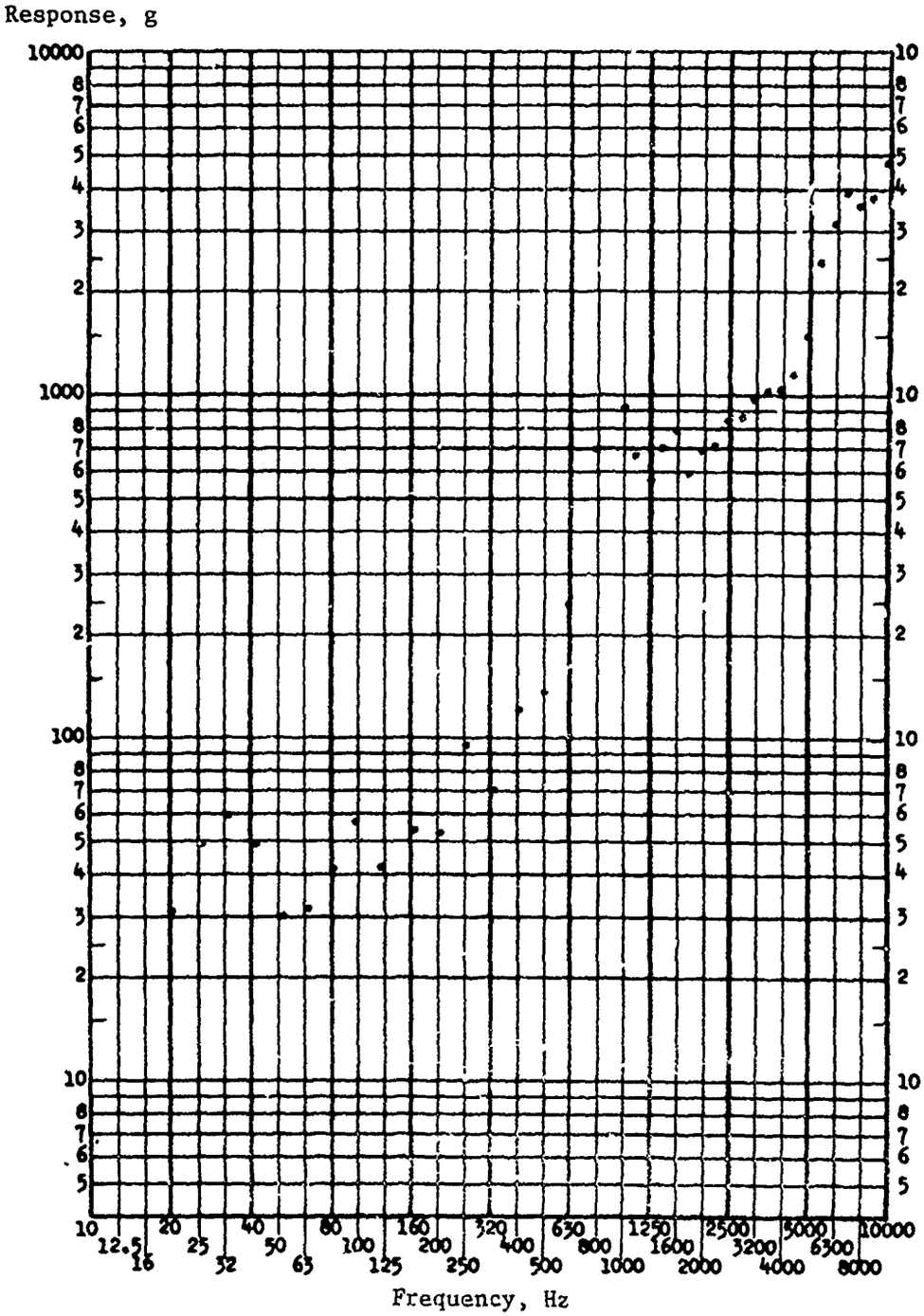
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 41 Run 41 Shock Response Spectrum



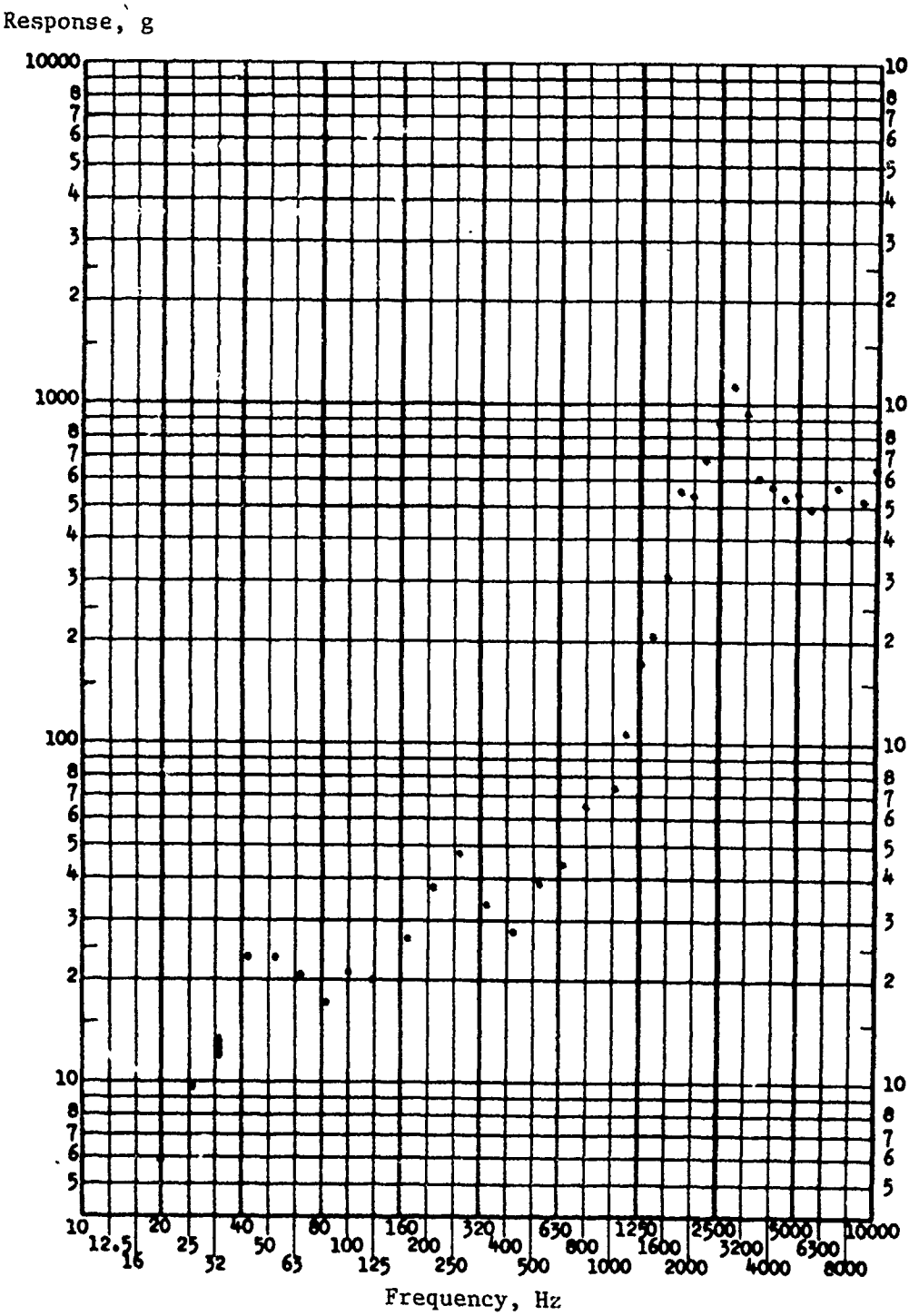
Bench Shock Test - Stage II/III Separation, Run 41 _.
Measurement No. 2 - Tangential axis longeron near station 133

Figure 41 (cont)



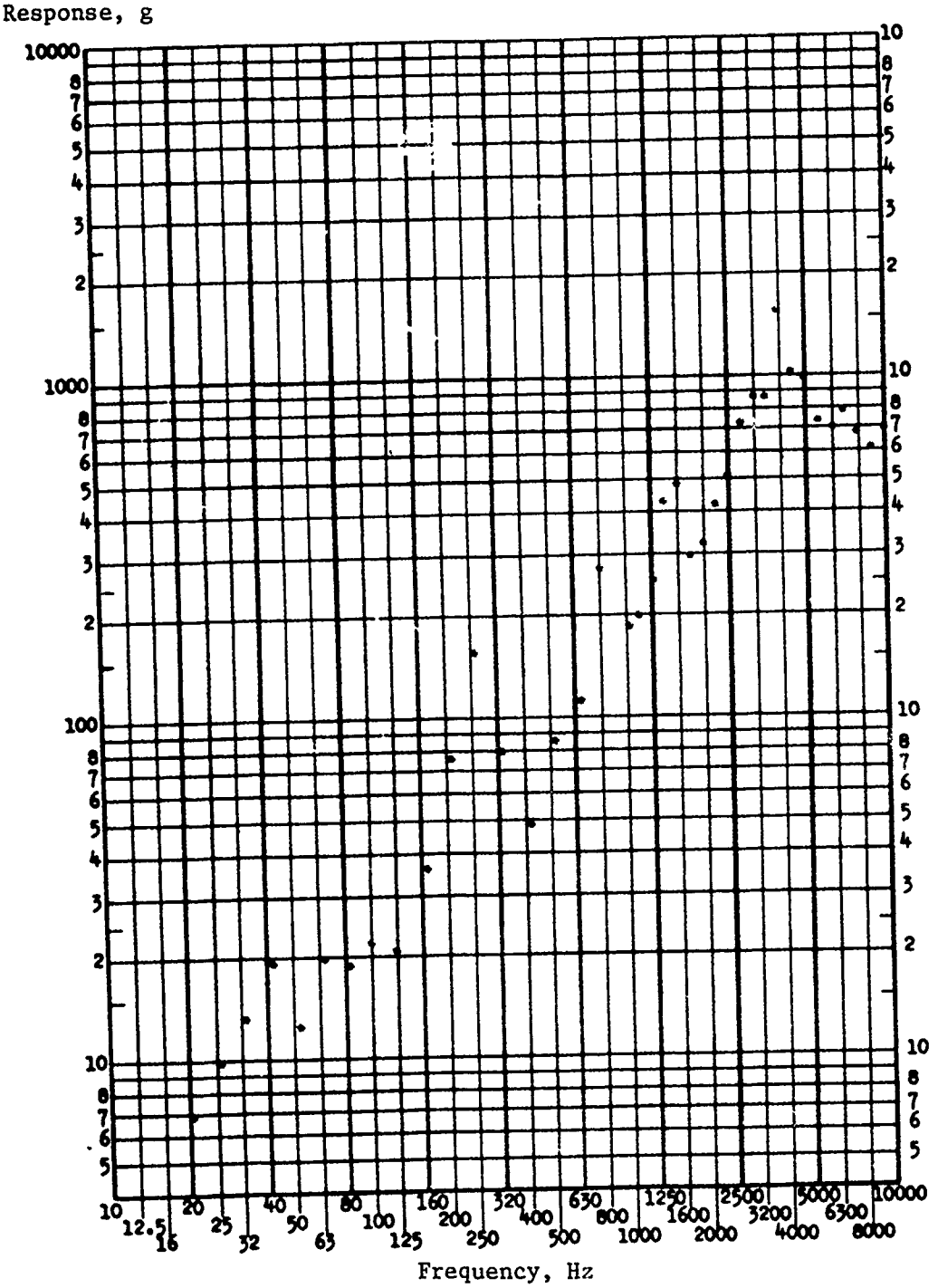
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 3 - Radial axis longeron near station 133

Figure 41 (cont)



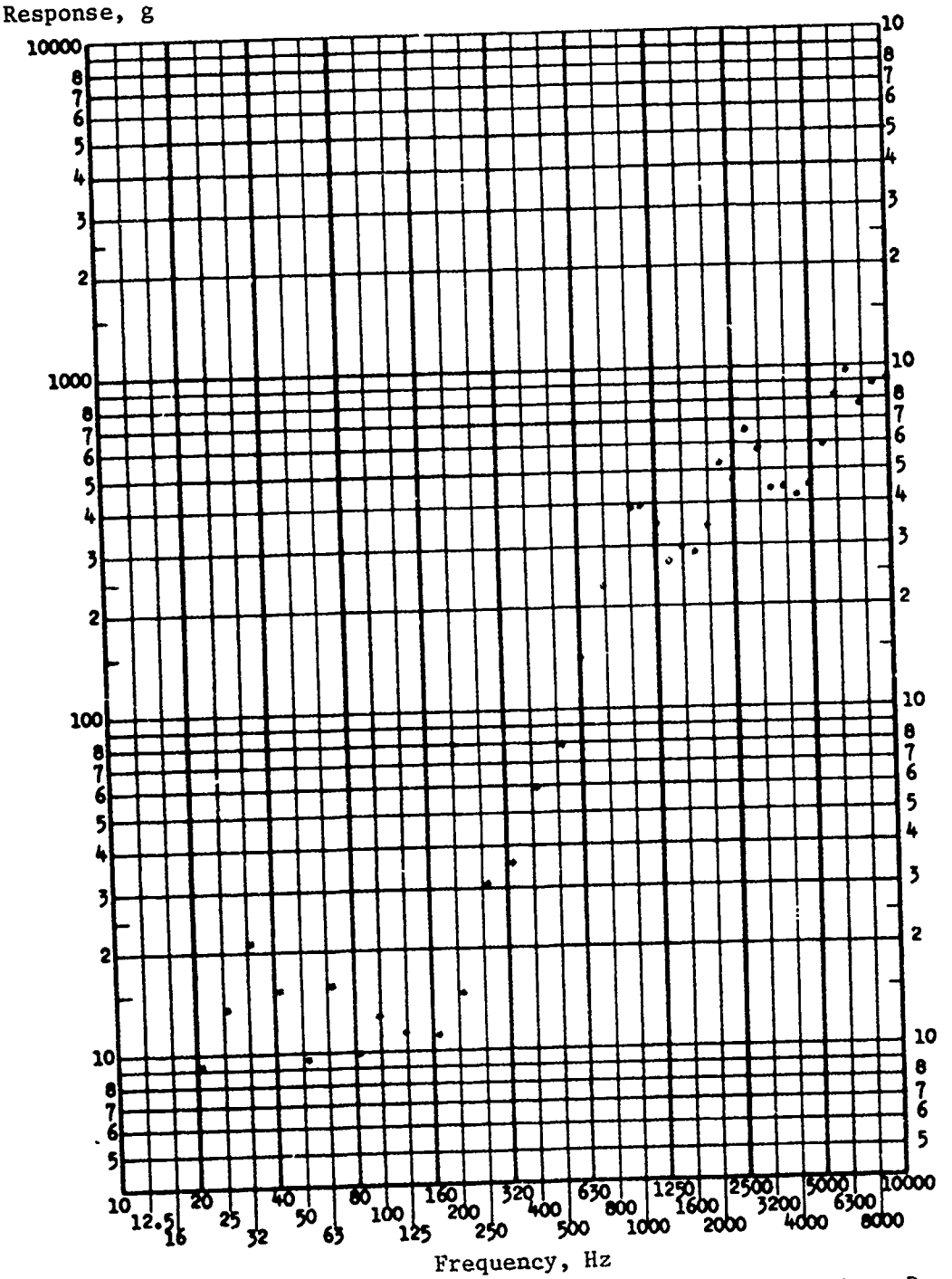
Bench Shock Test - Stage II/III Separation, Run 41_
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 41 (cont)



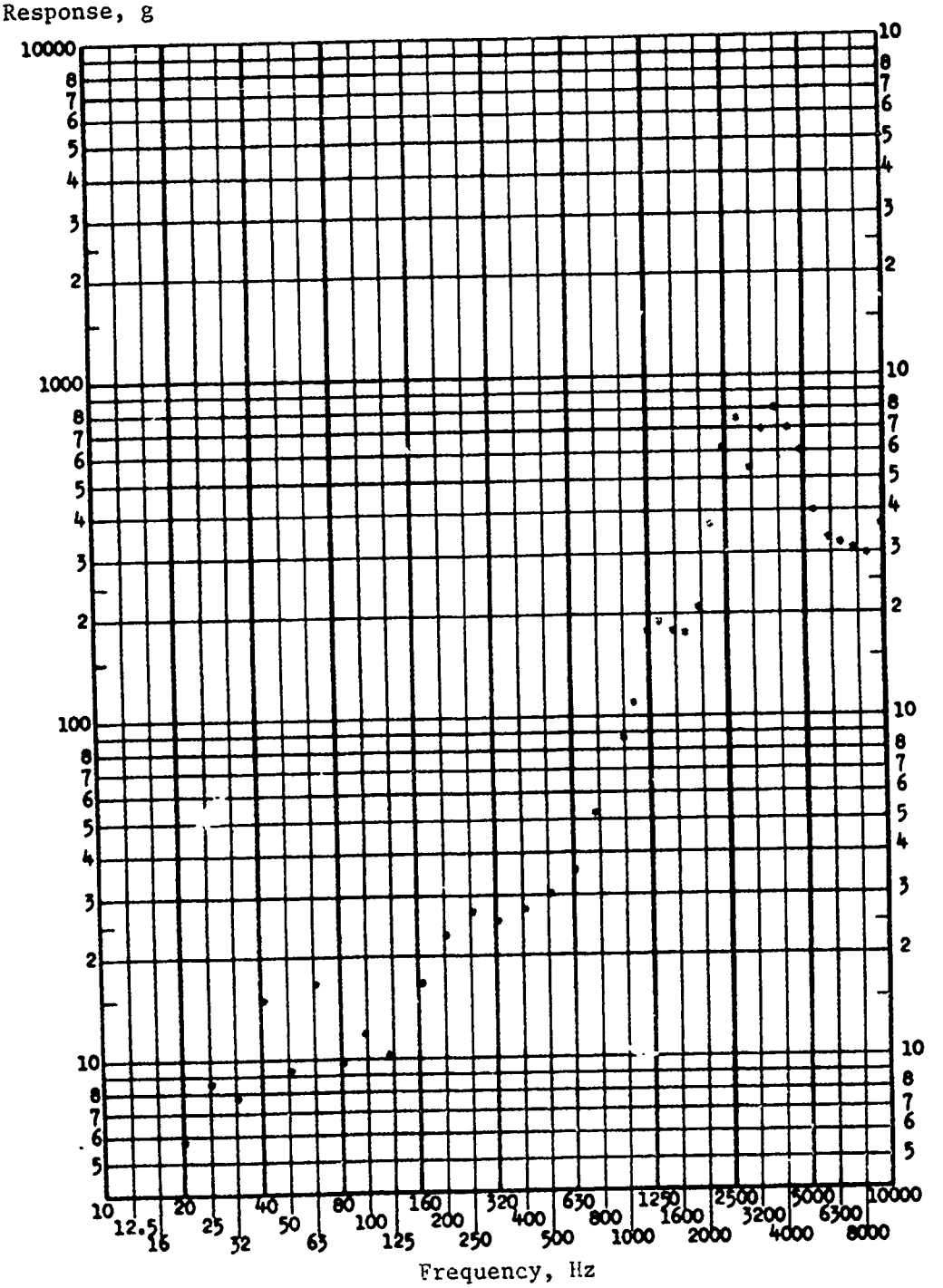
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 5 - Tangential axis longeron near station 117

Figure 41 (cont)



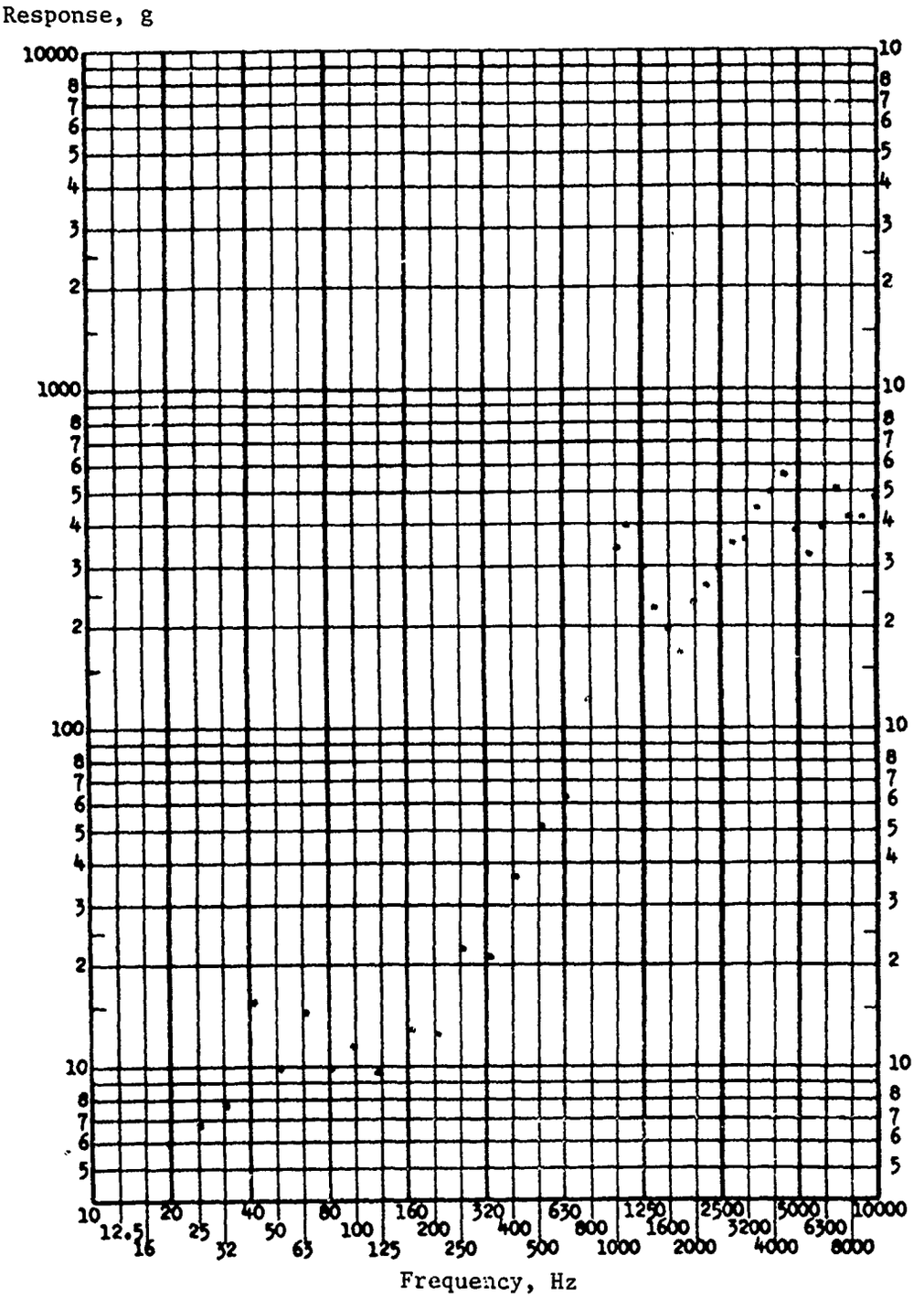
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 6 - Radial axis longeron near station 117

Figure 41 (cont)



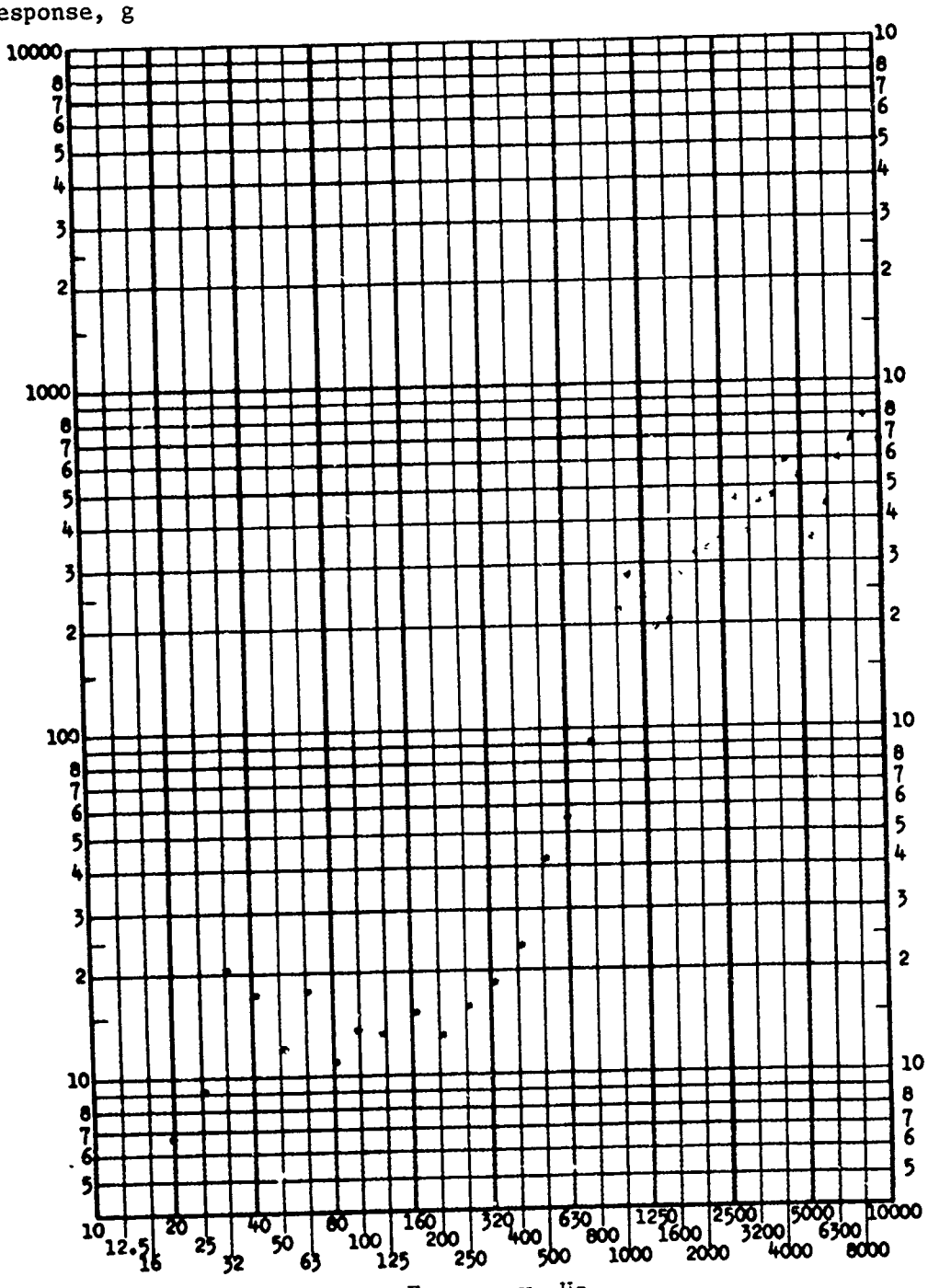
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 41 (cont)



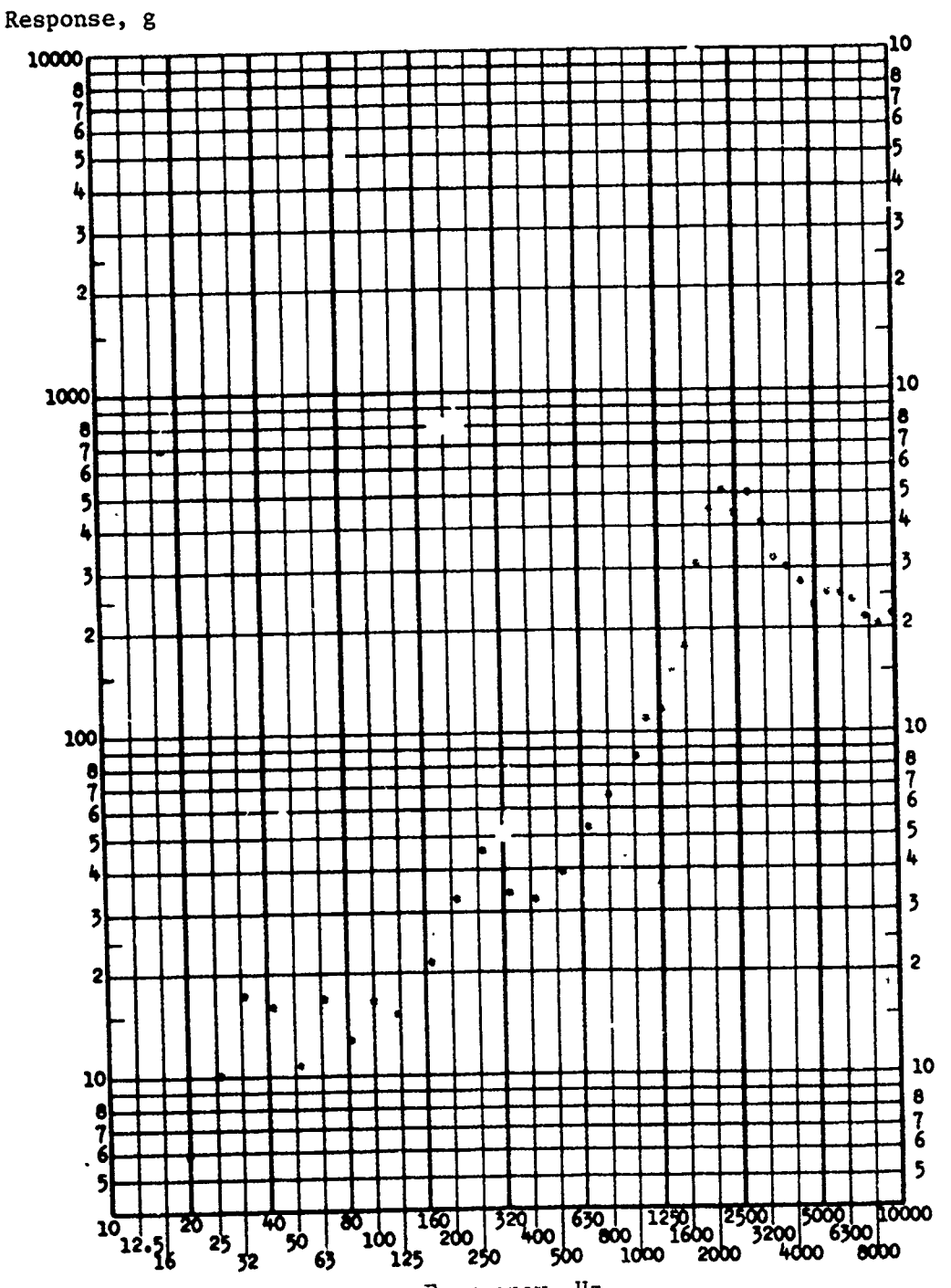
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 8 - Tangential axis longeron near station 77

Figure 41 (cont)



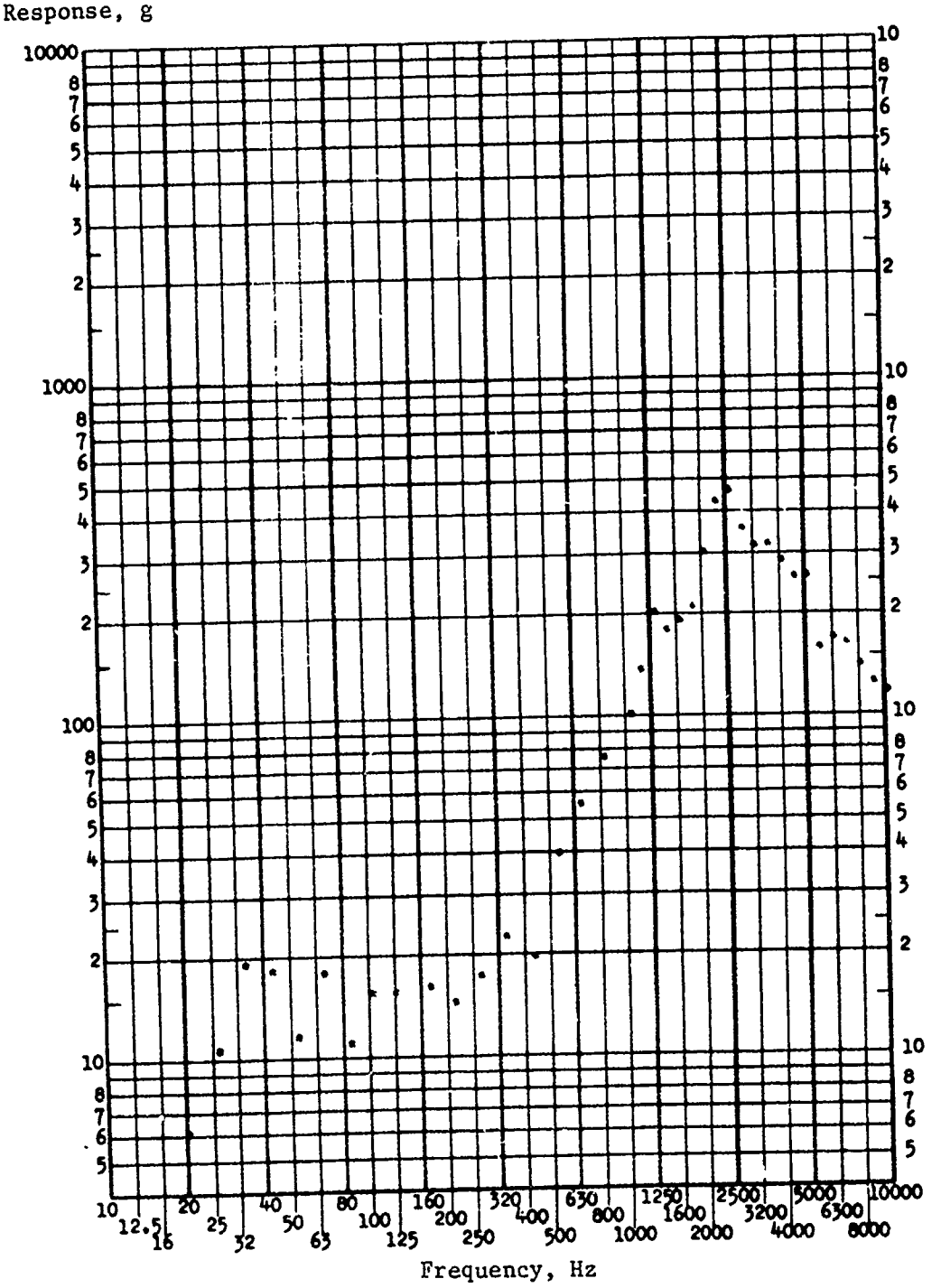
Bench Shock Test - Stage II/III Separation, Run 41__
Measurement No. 9 - Radial axis longeron near station 77

Figure 41 (cont)



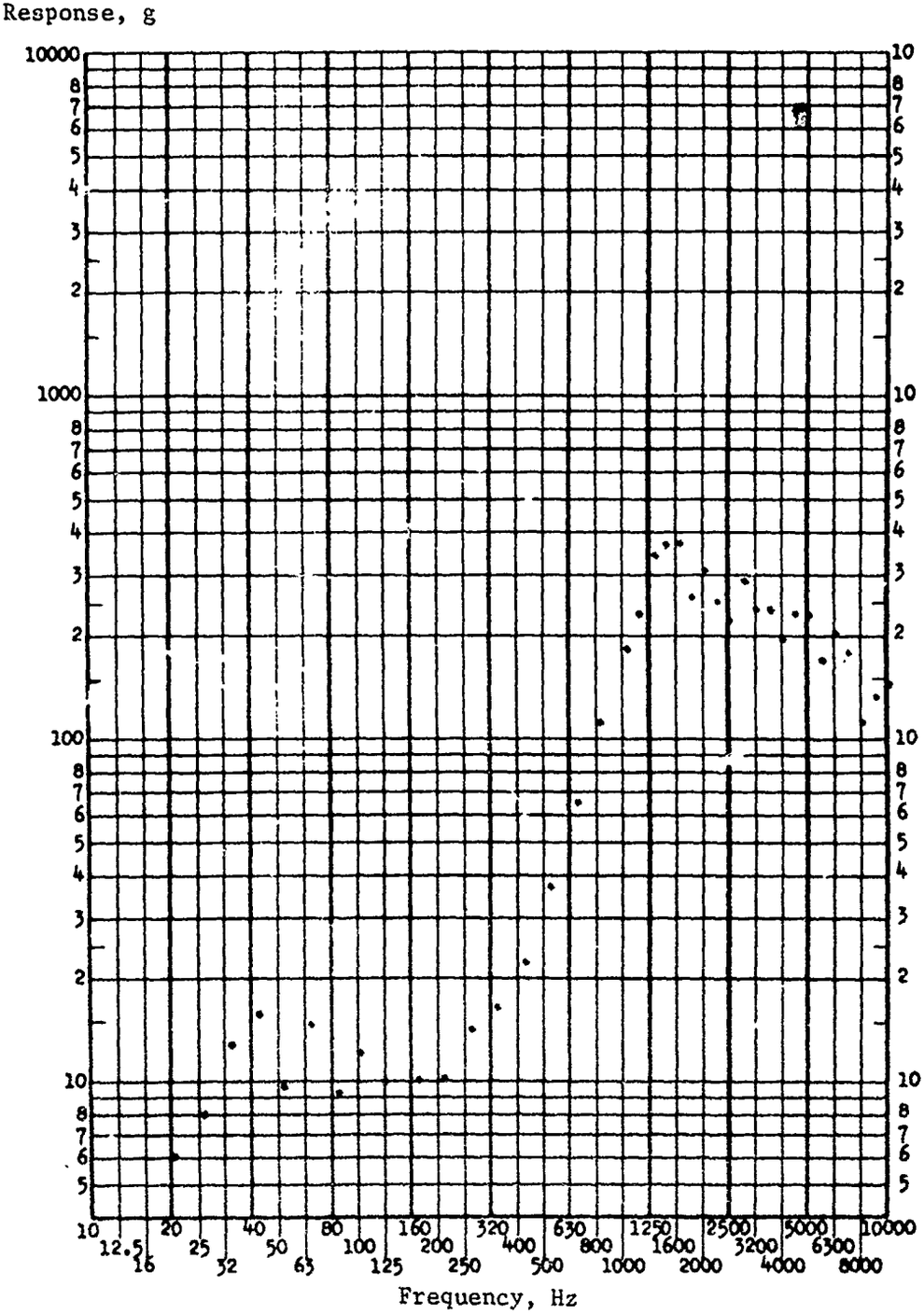
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 41 (cont)



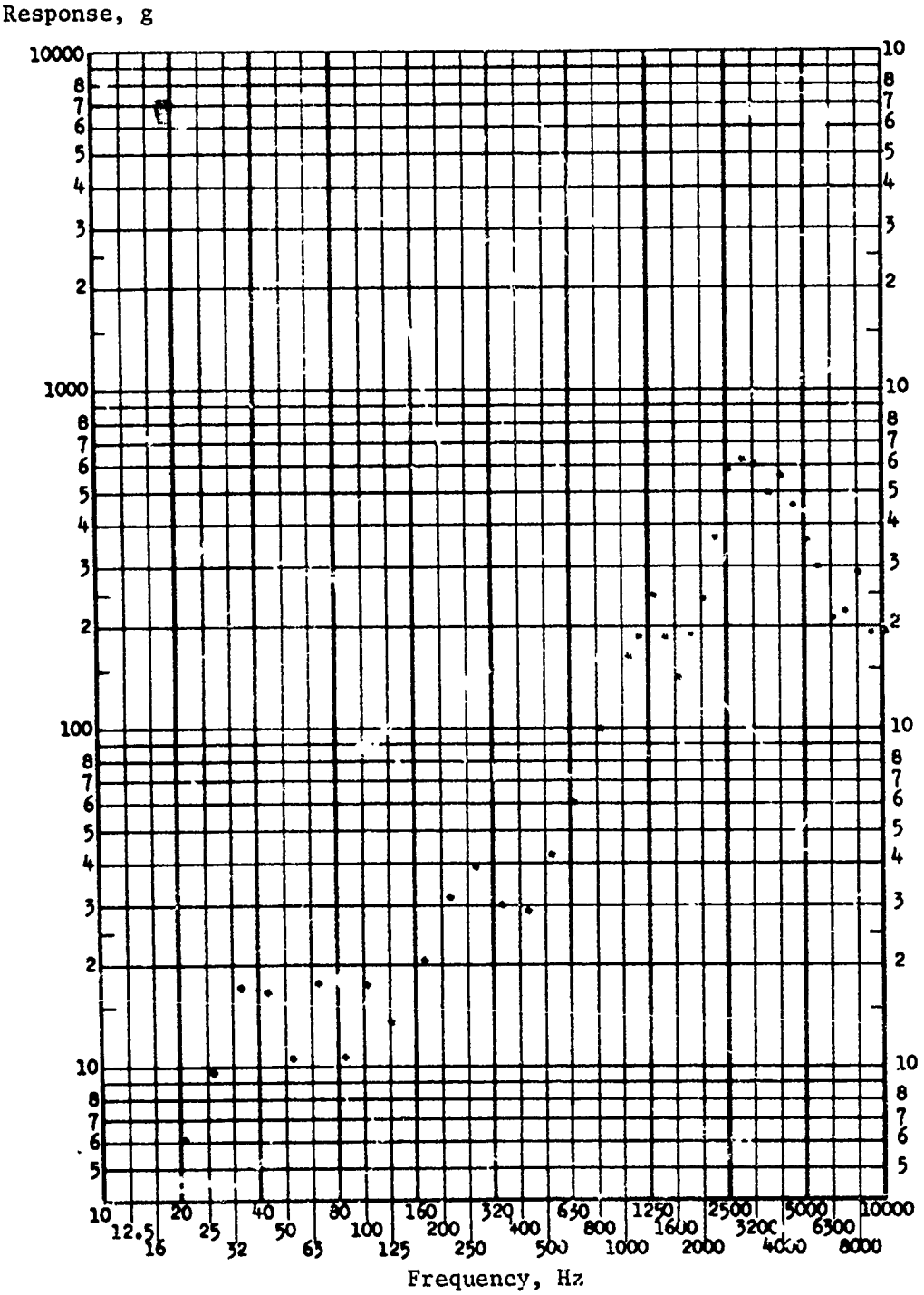
Bench Shock Test - Stage II/III Separation, Run 41_
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 41 (cont)



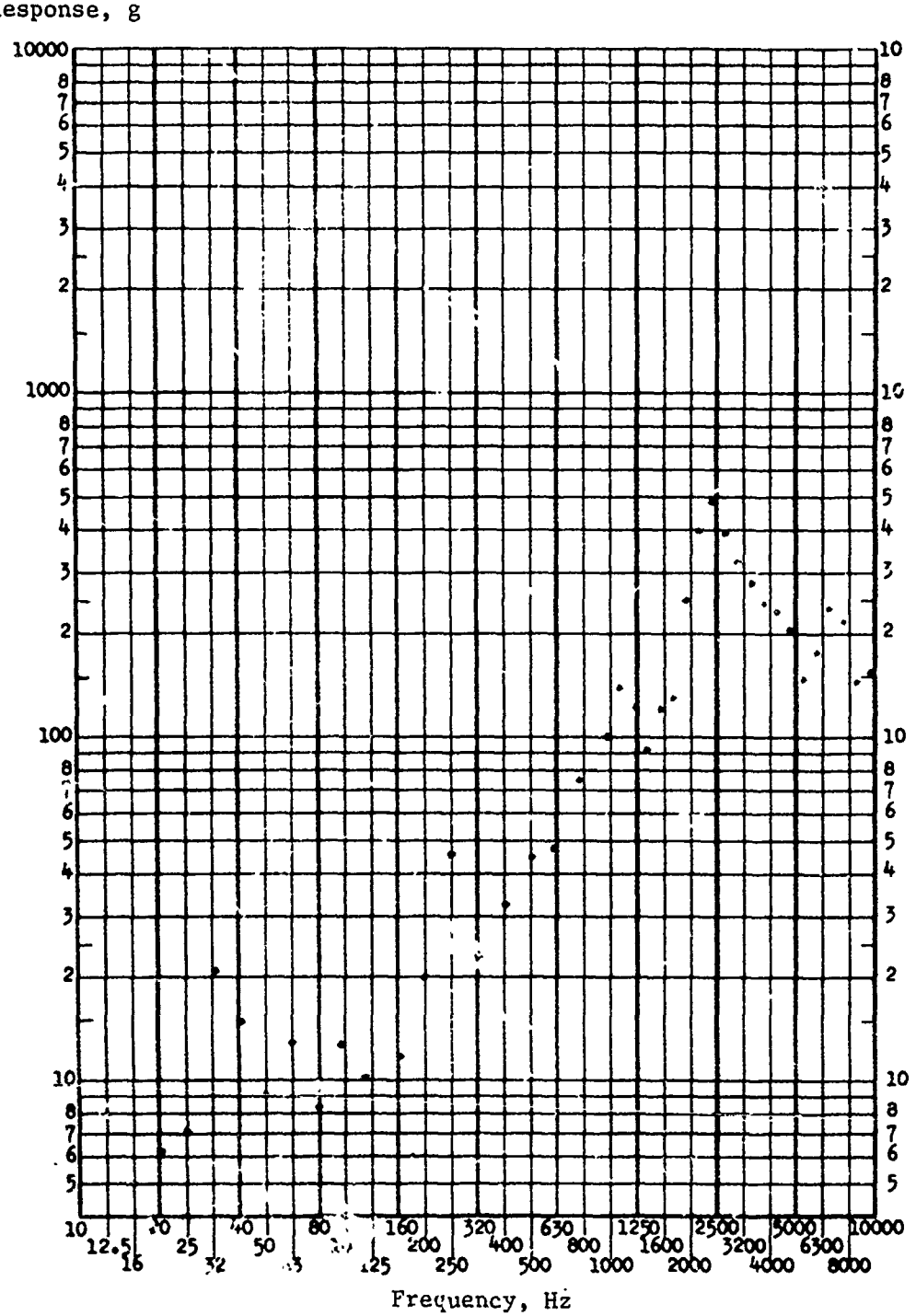
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 41 (cont)



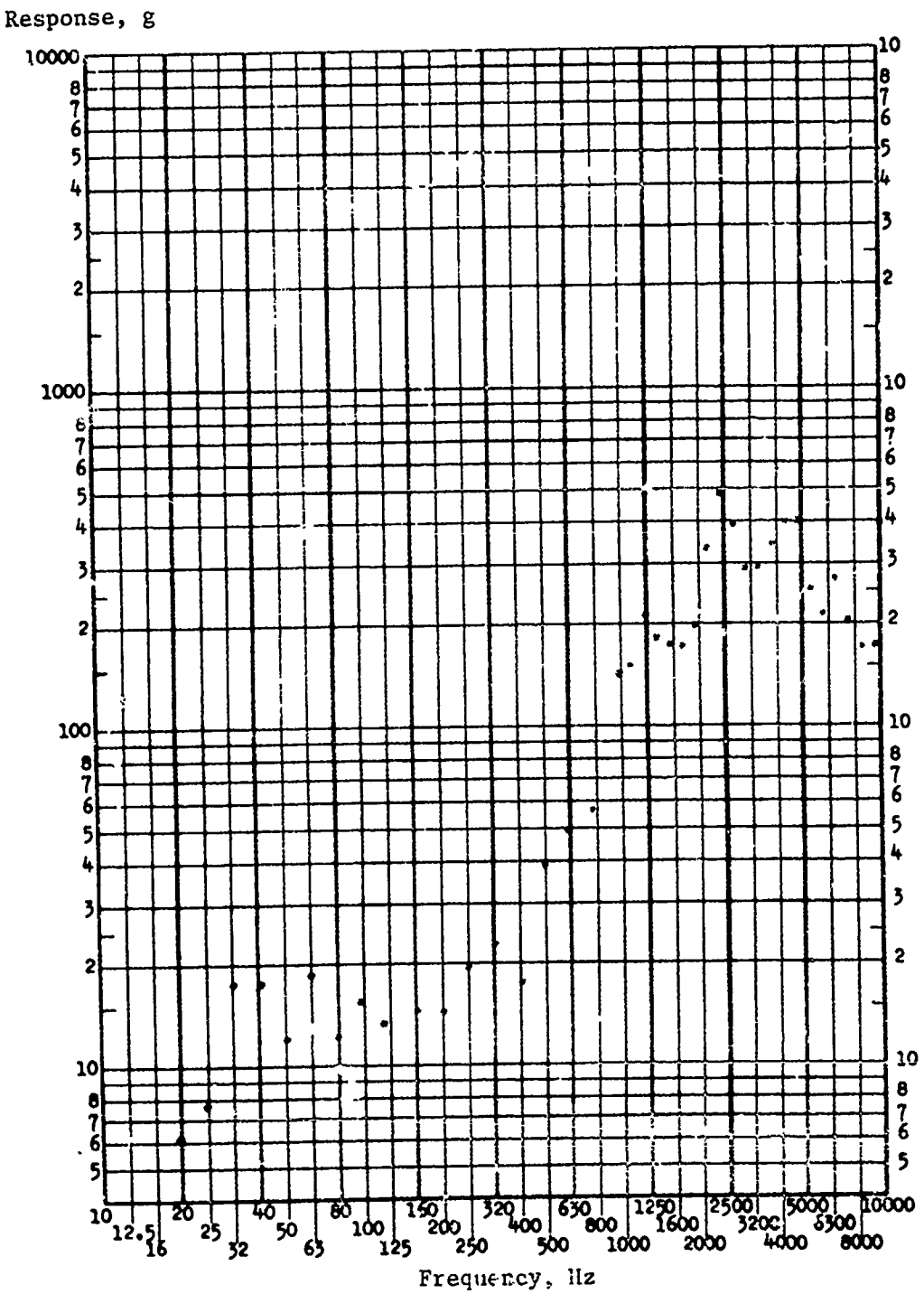
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 41 (cont)



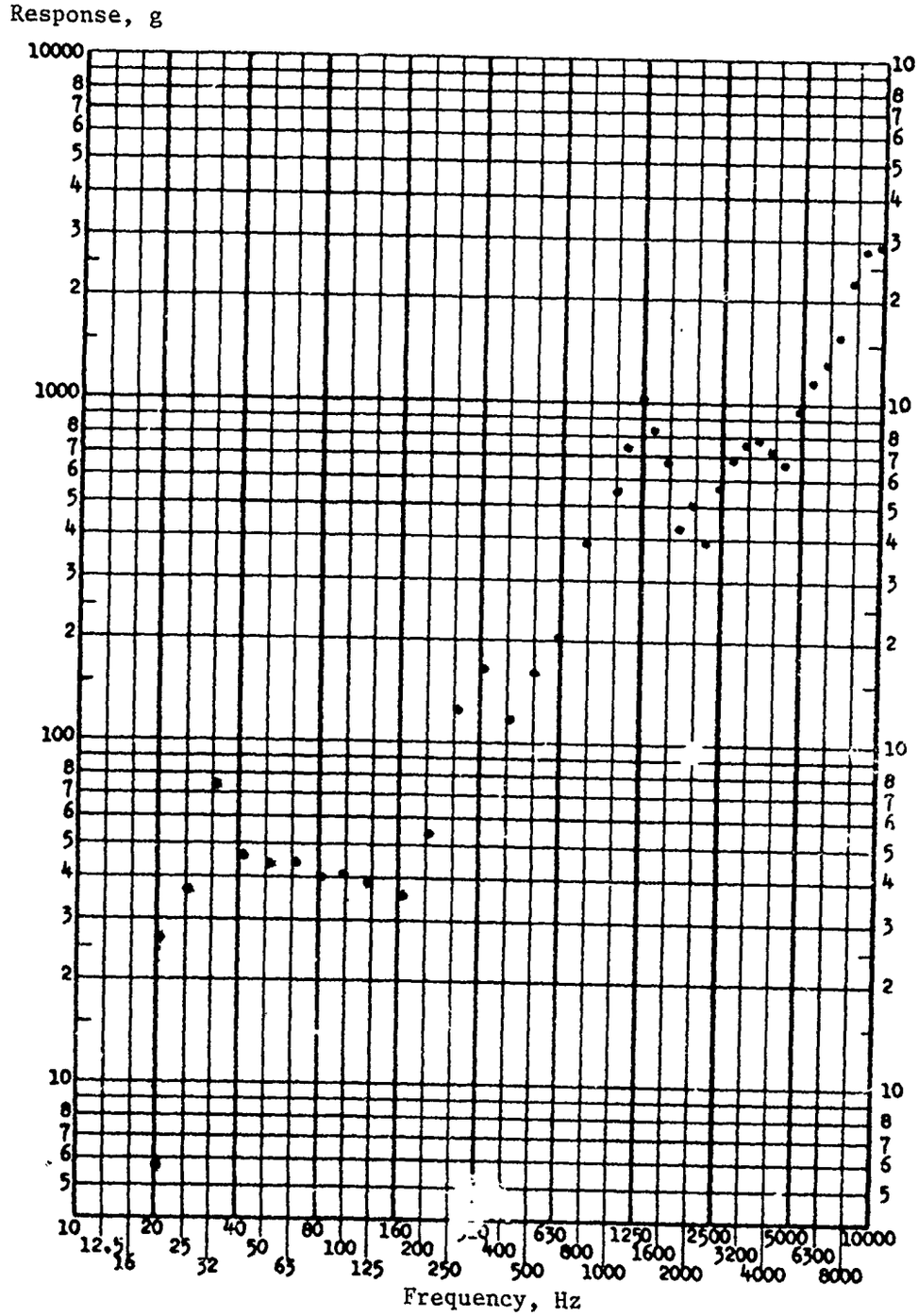
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 41 (cont)



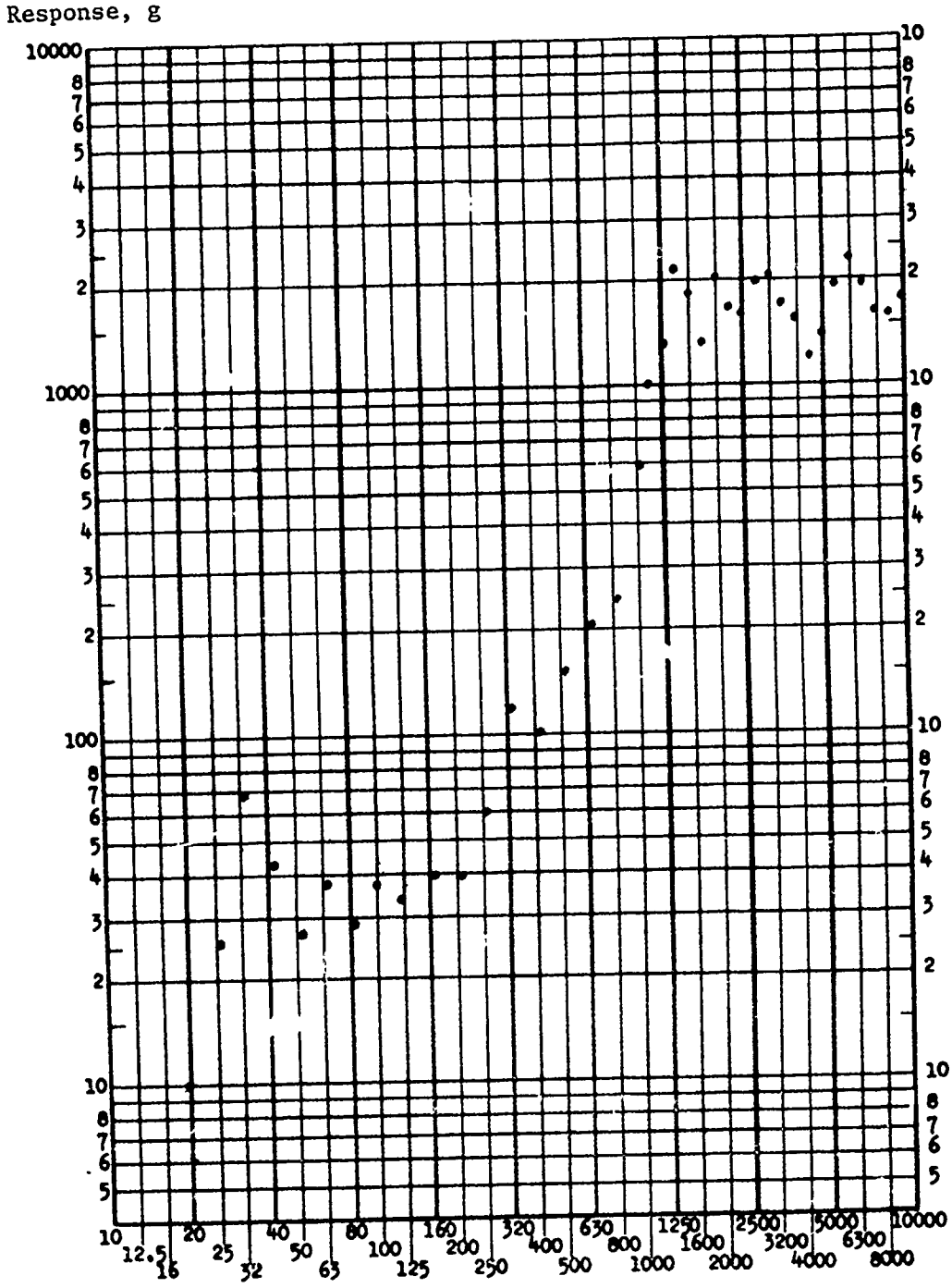
Bench Shock Test - Stage II/III Separation, Run 41
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 41 (concl)



Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 1 - Longitudinal axis longeron
near station 133

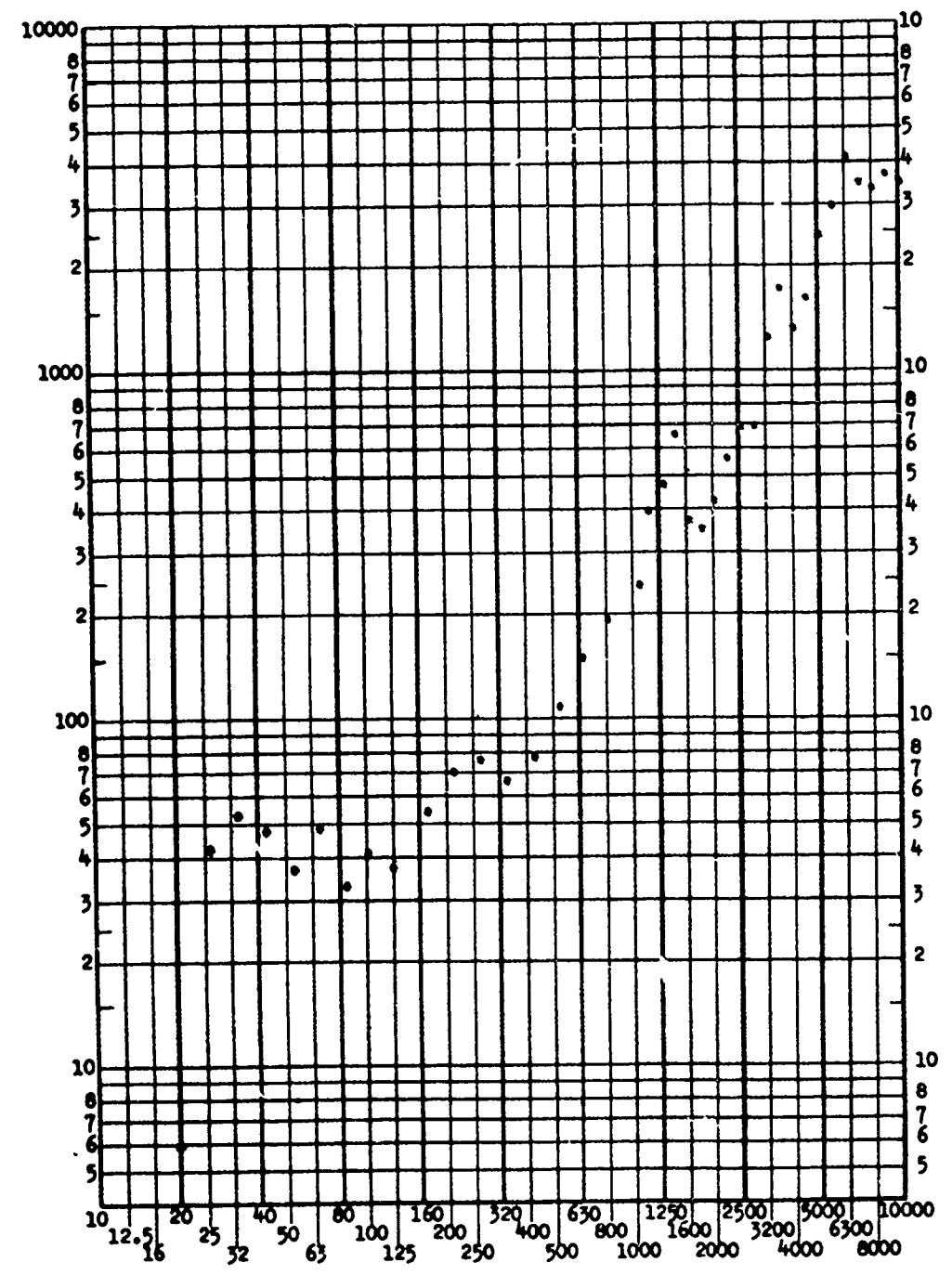
Figure 42 Run 42 Shock Response Spectrum



Frequency, Hz

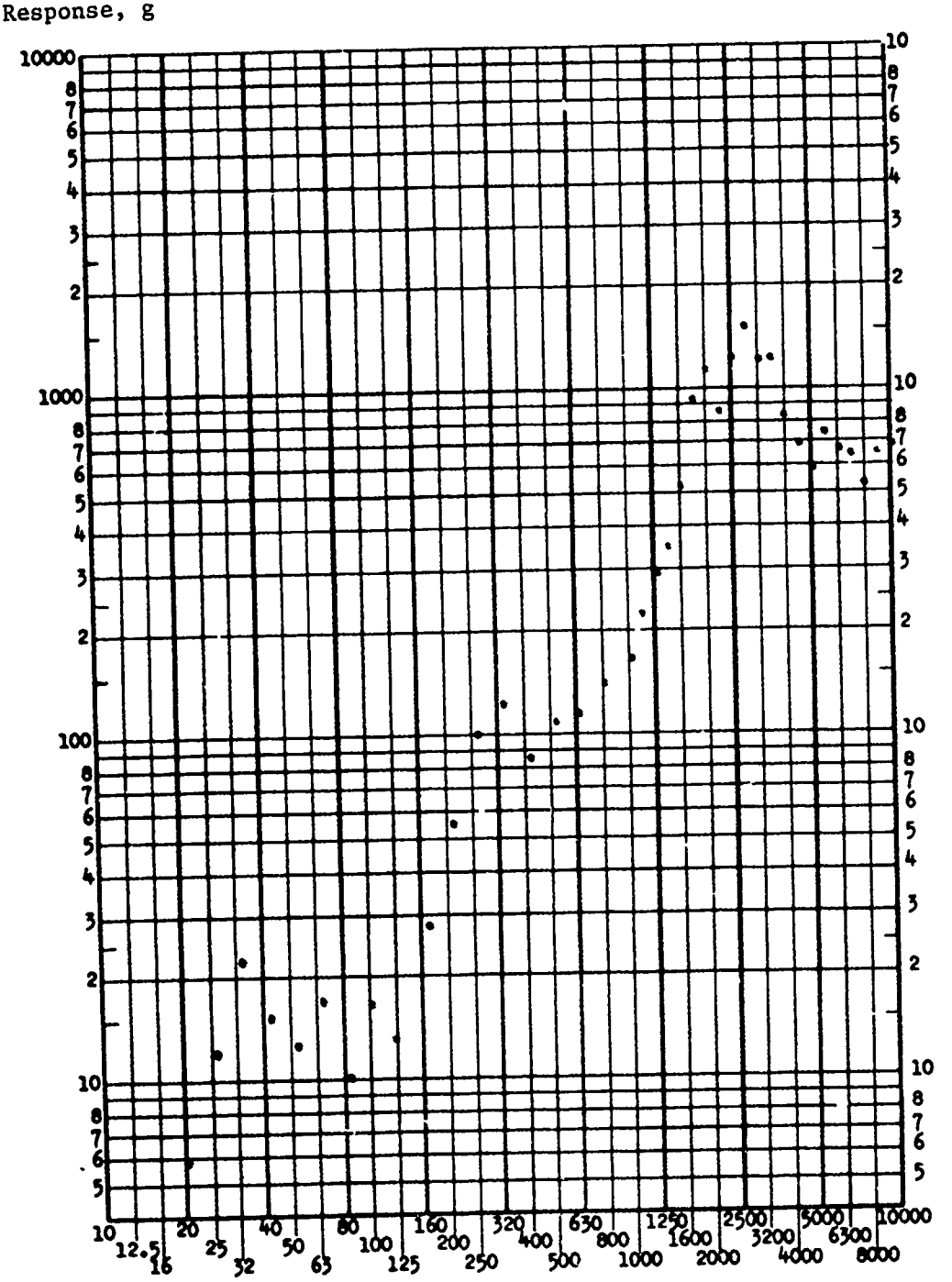
Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 2 - Tangential axis longeron near station 133

Figure 42 (cont)



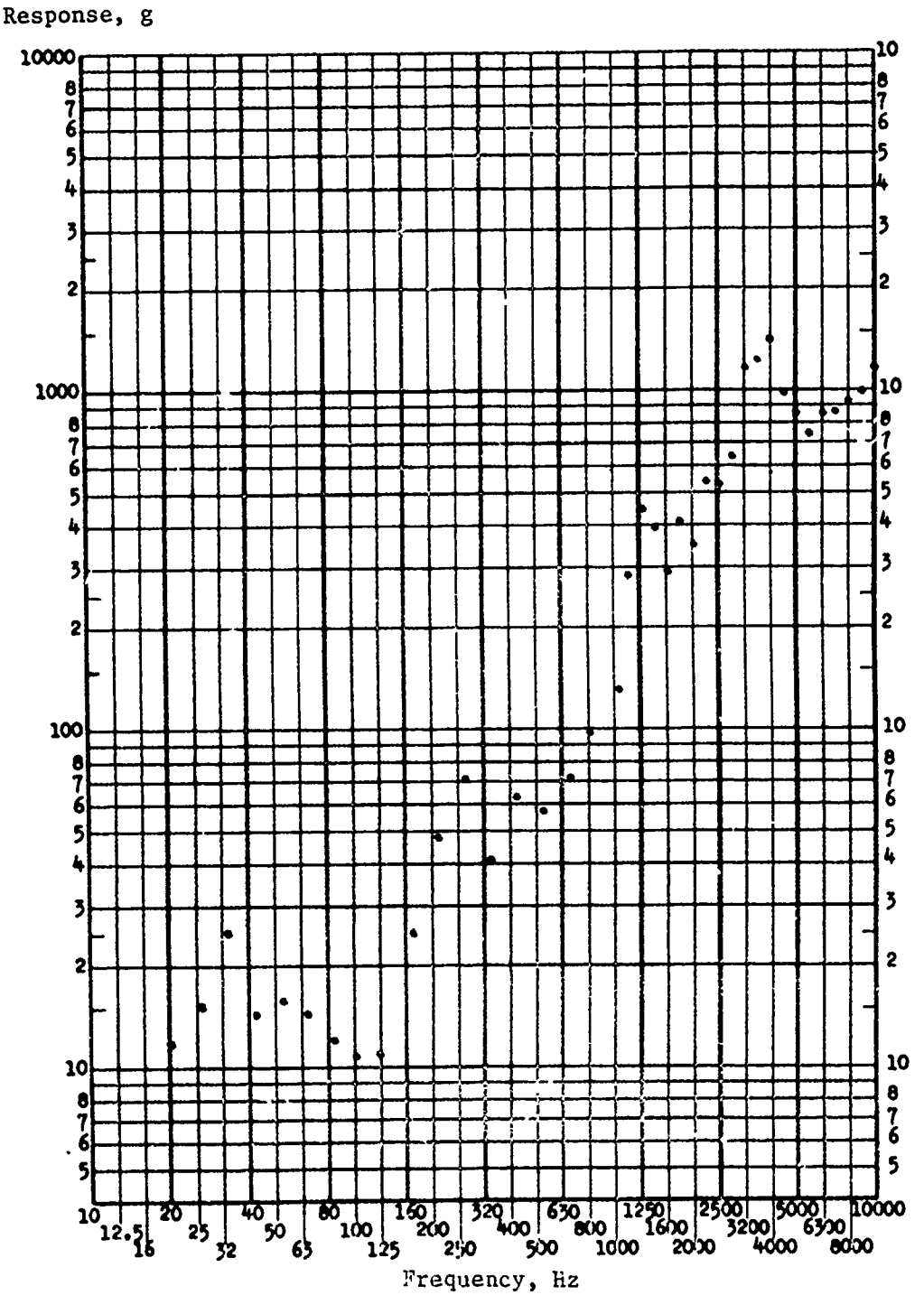
Bench Shock Test - Stage II/III Separation, Run 42 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 42 (cont)



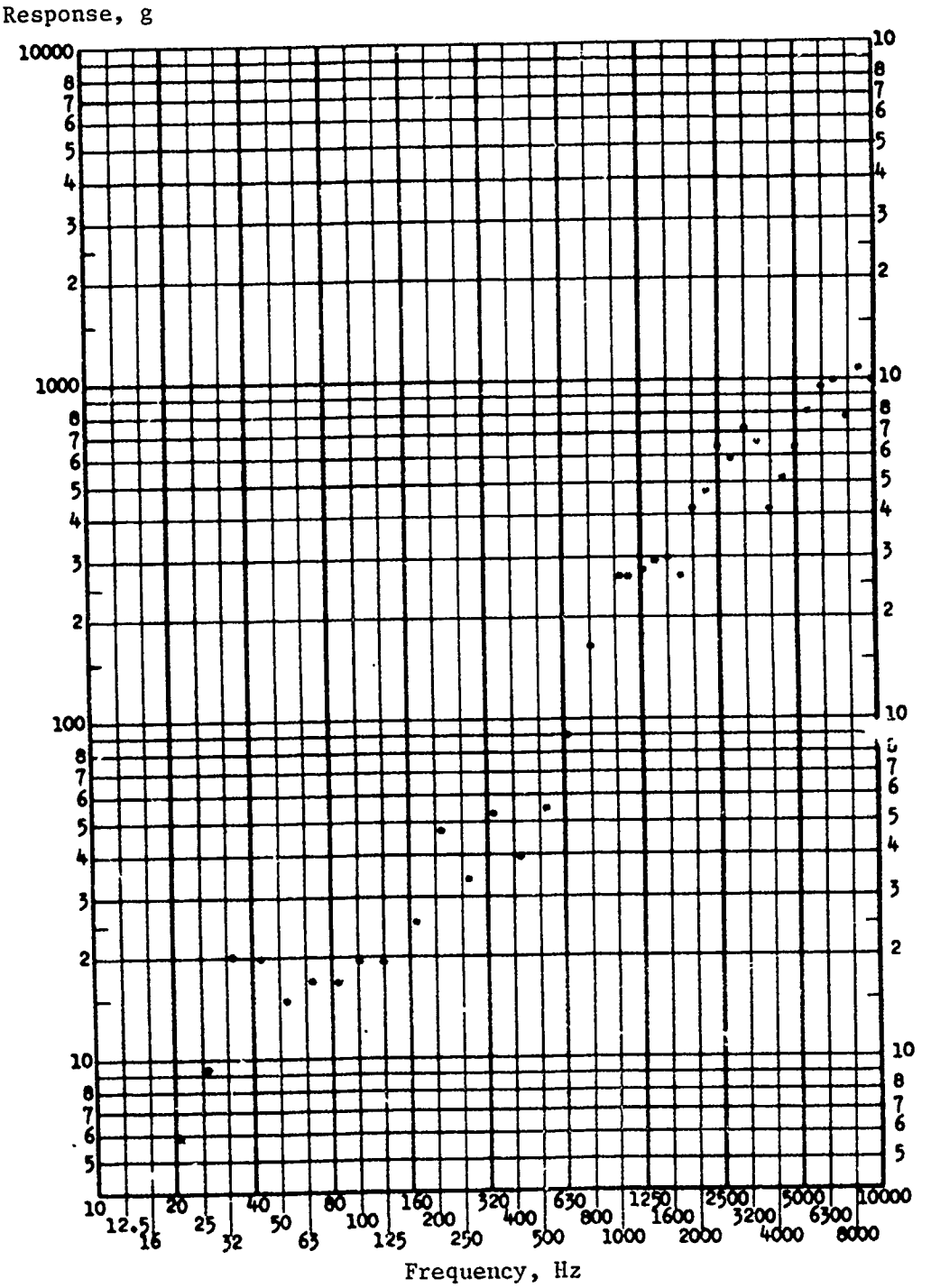
Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 42 (cont)



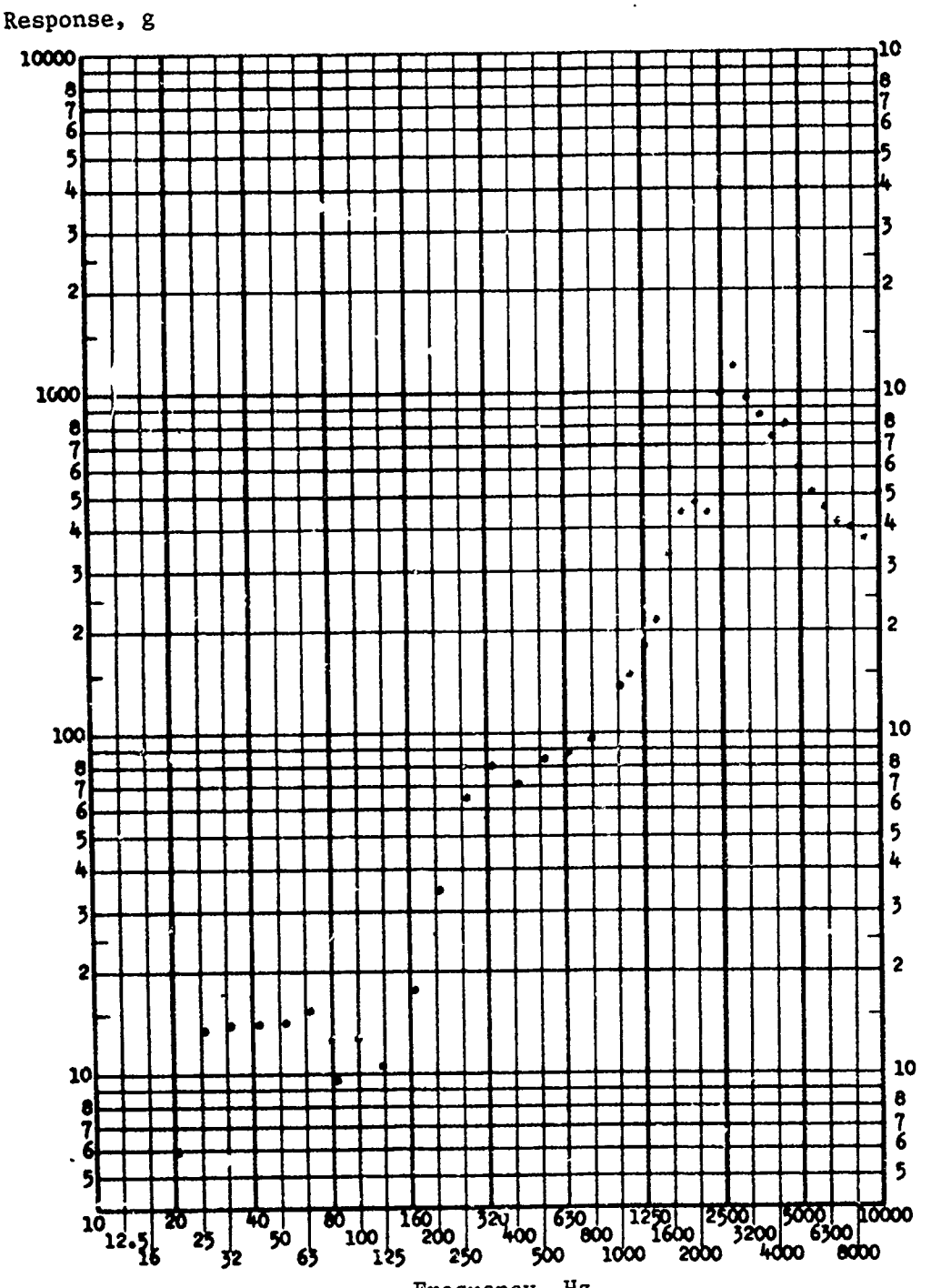
Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 5 - Tangential axis longeron near station 117

Figure 42 (cont)



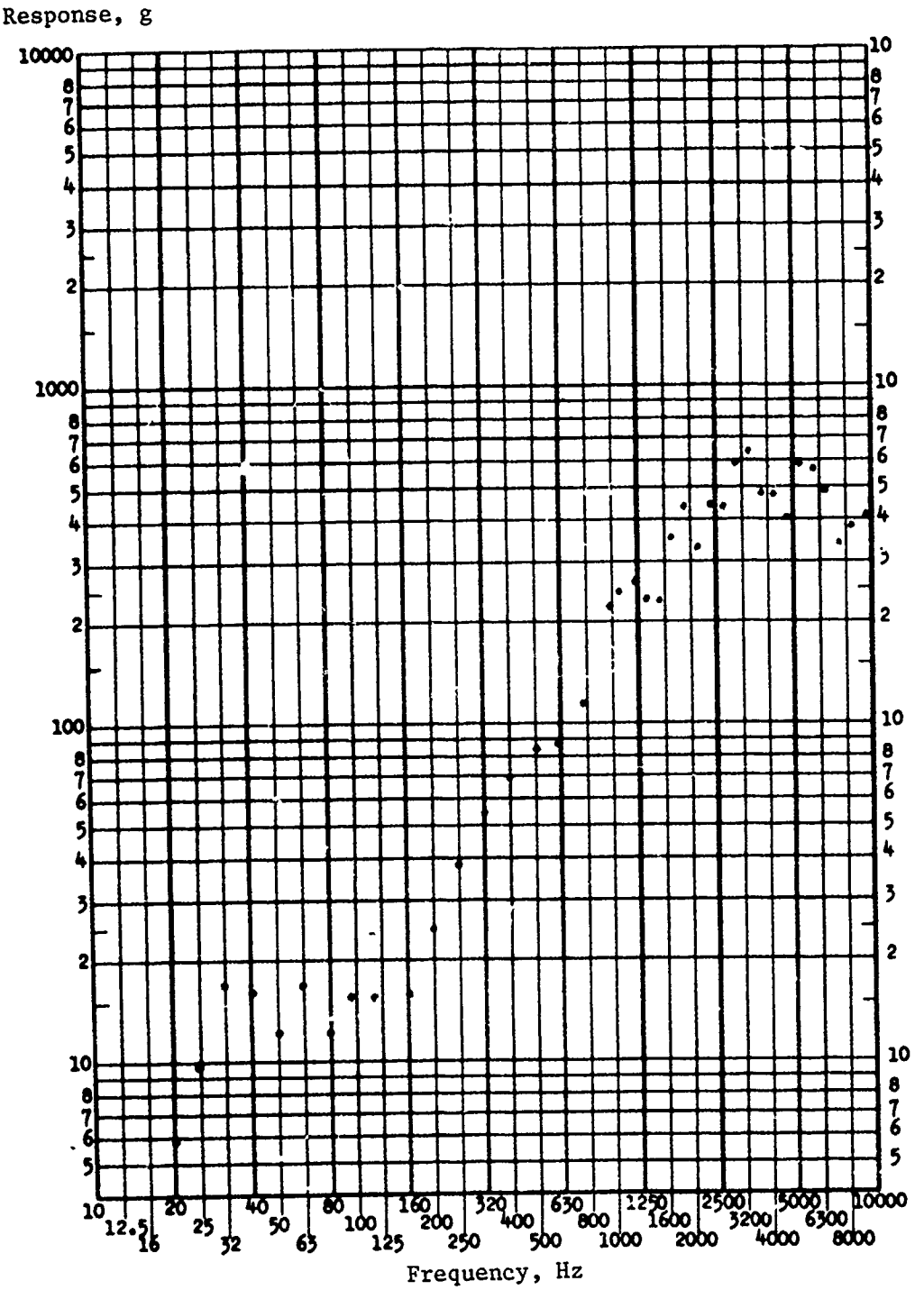
Bench Shock Test - Stage II/III Separation, Run 42_
Measurement No. 6 - Radial axis longeron near station 117

Figure 42 (cont)



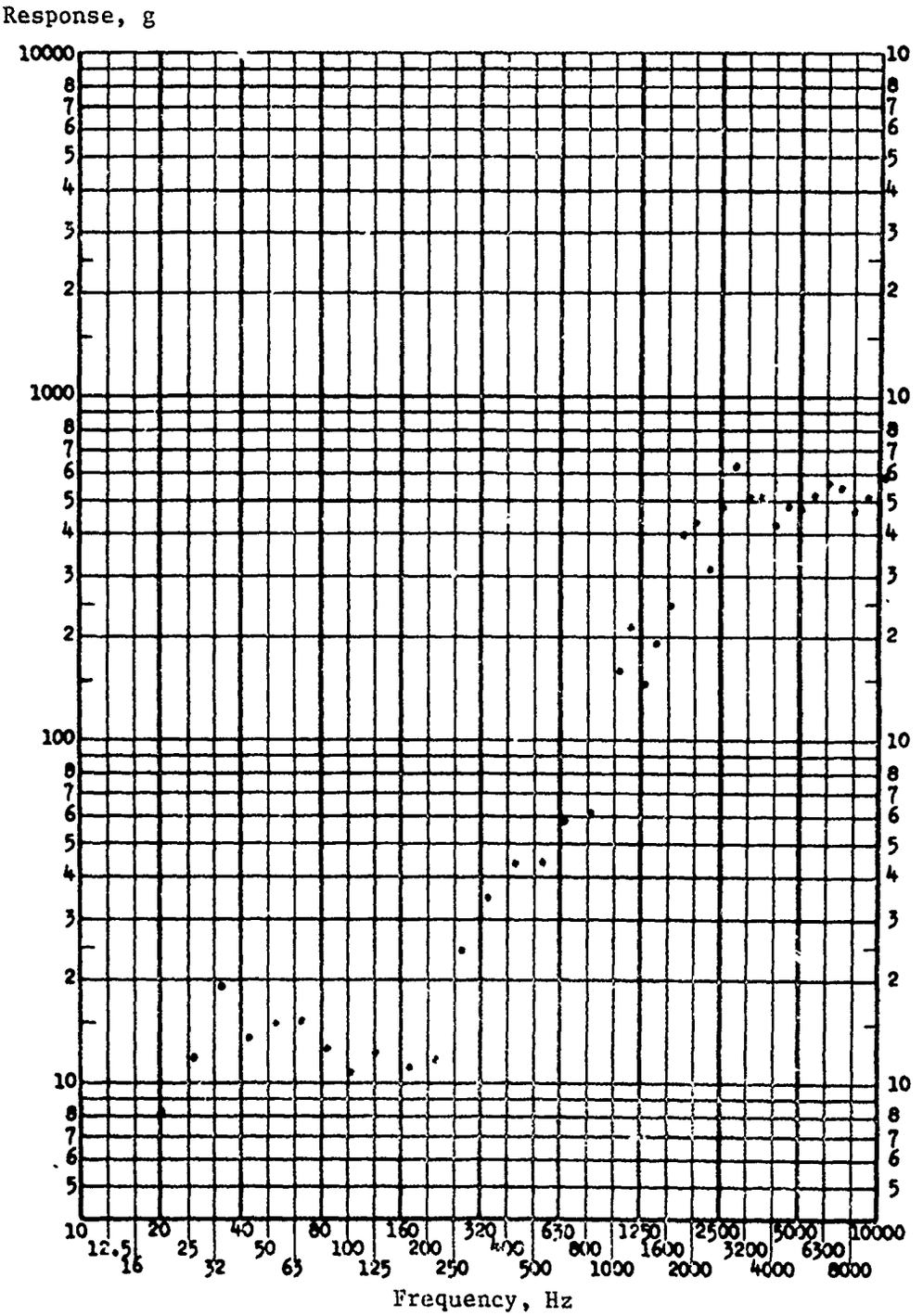
Bench Shock Test - Stage II/III Separation, Run 42_
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 42 (cont)



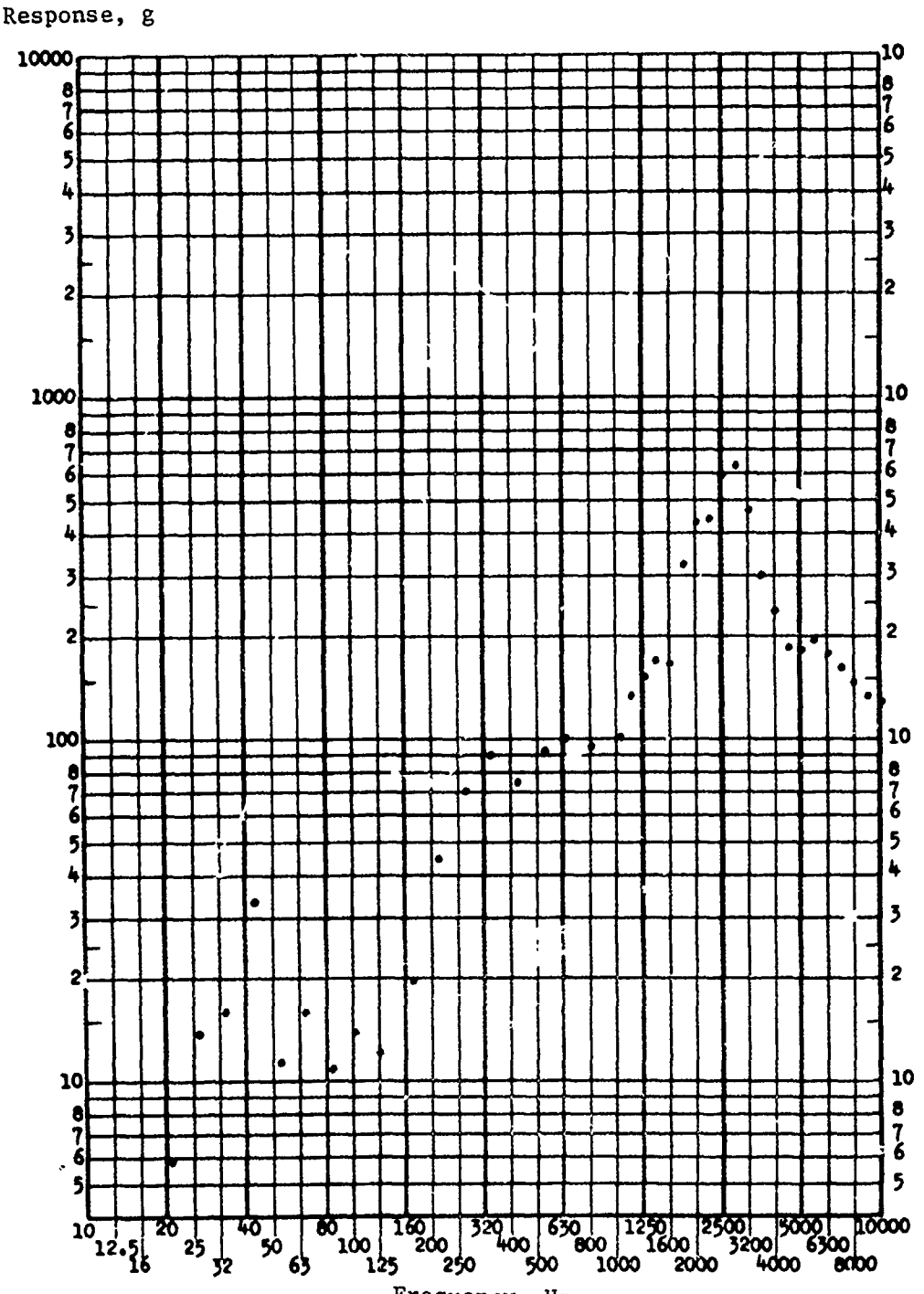
Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 8 - Tangential axis longeron near station 77

Figure 42 (cont)



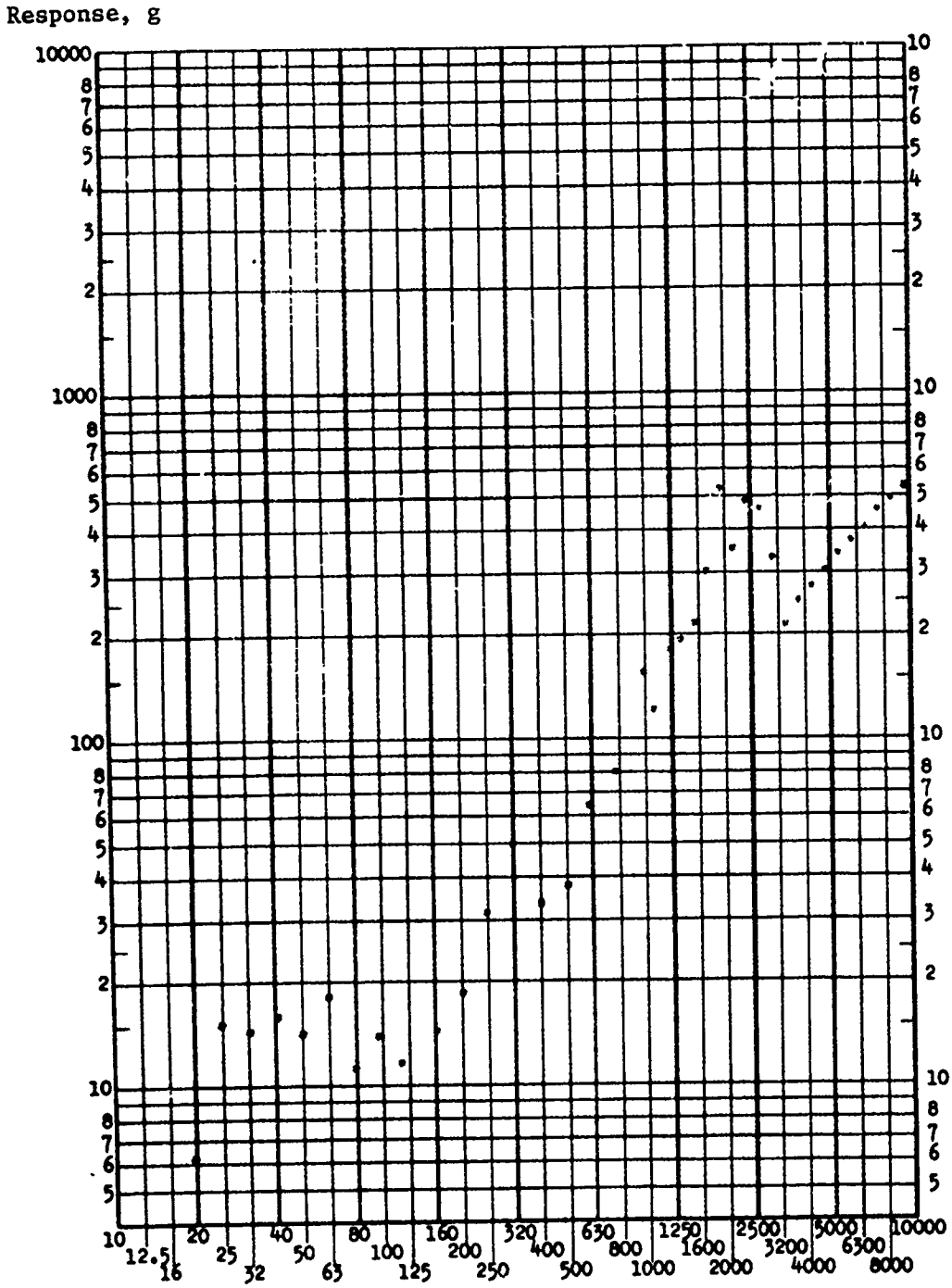
Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 9 - Radial axis longeron near station 77

Figure 42 (cont)



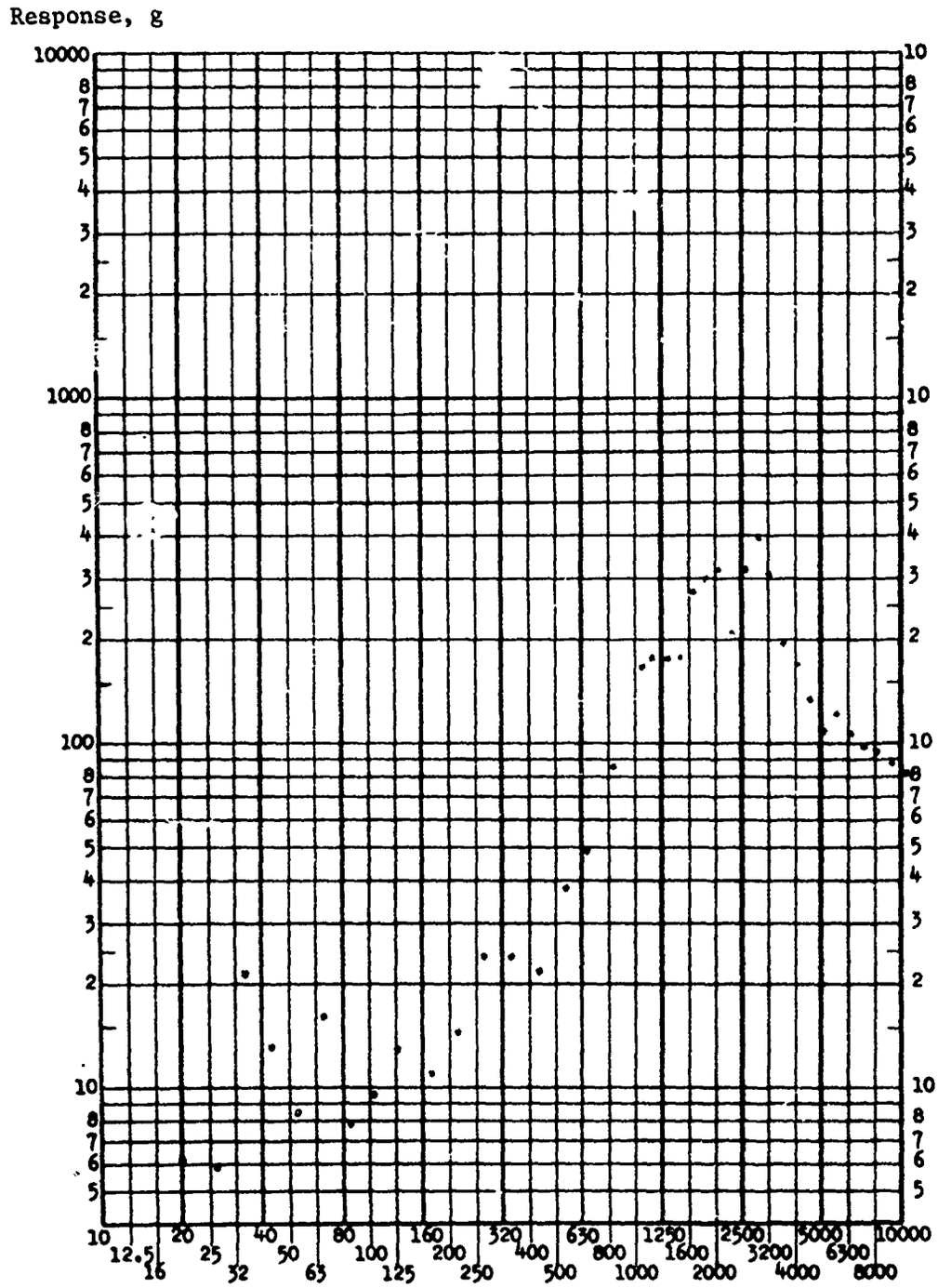
Bench Shock Test - Stage II/III Separation, Run 42_
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 42 (cont)



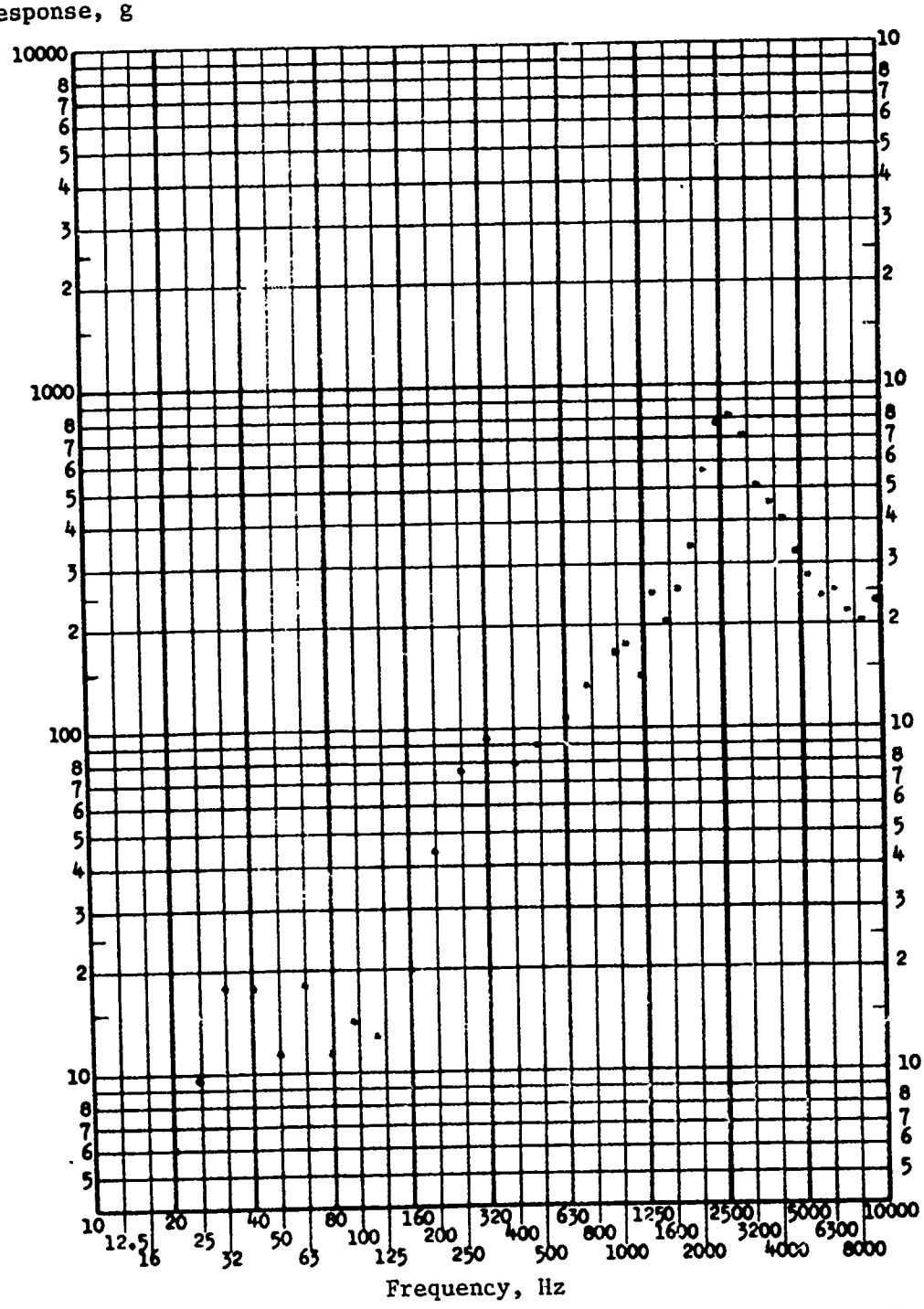
Bench Shock Test - Stage II/III Separation, Run 42_
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 42 (cont)



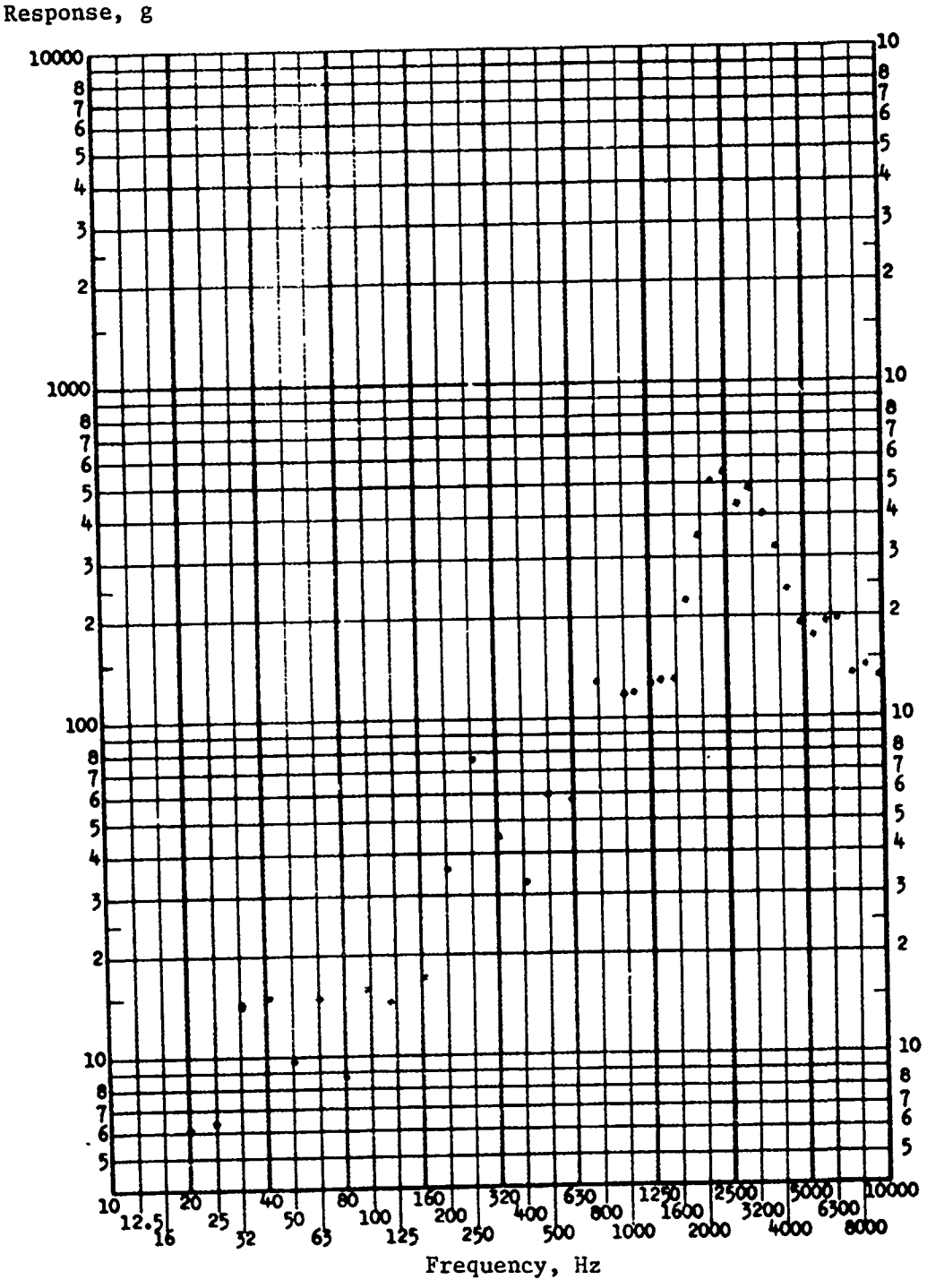
Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 42 (cont)



Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

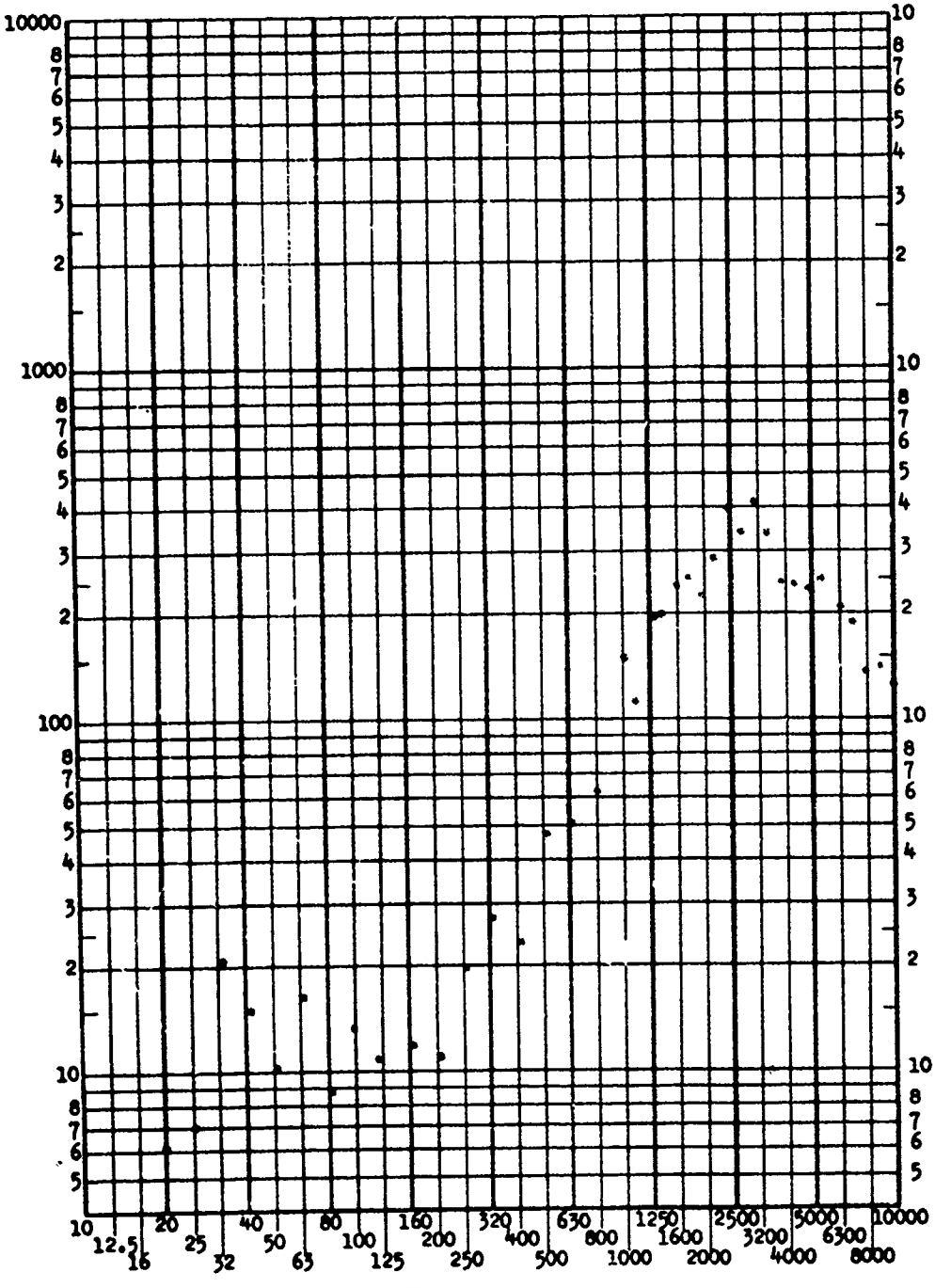
Figure 42 (cont)



Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 42 (cont)

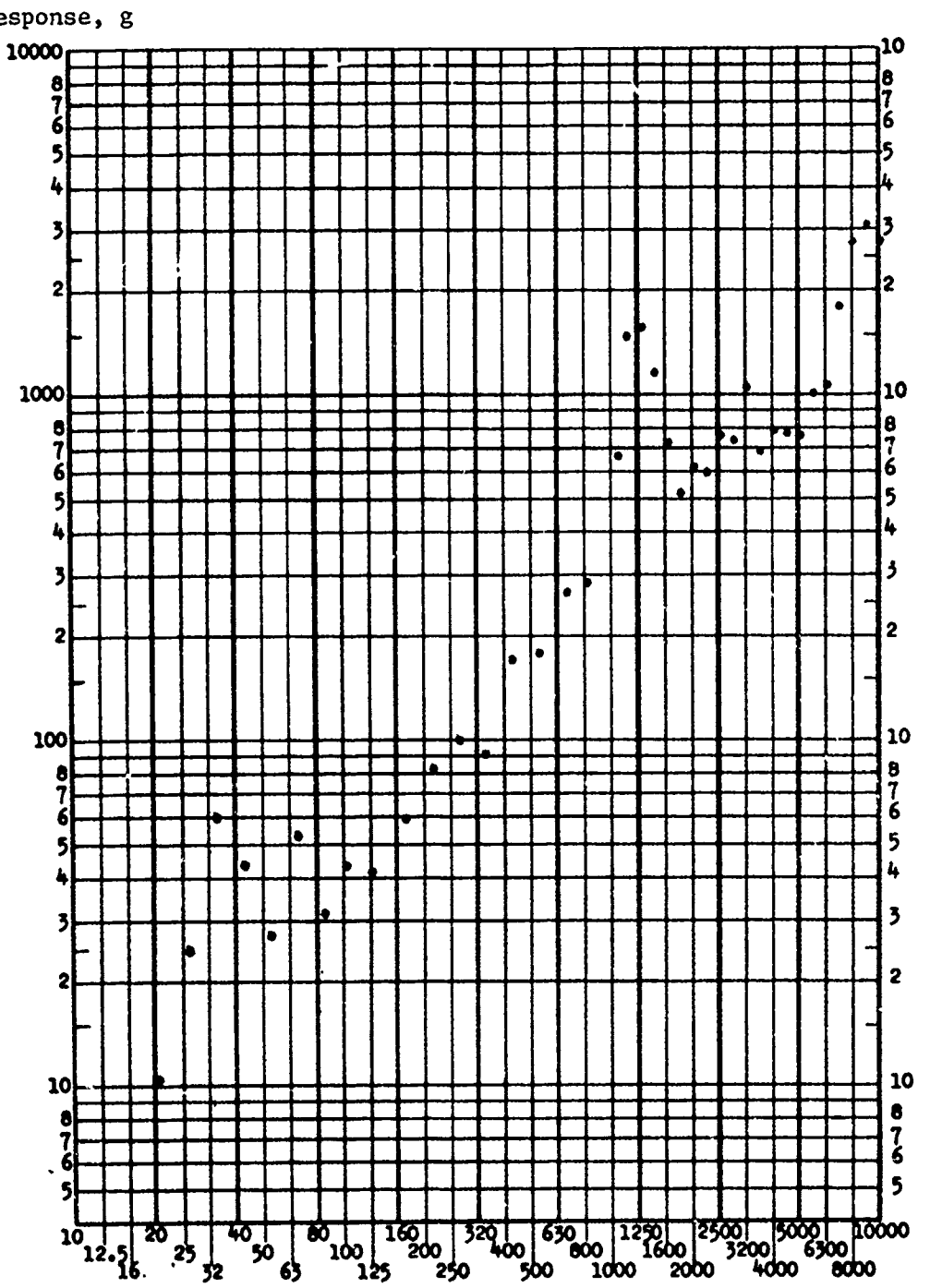
Response, g



Frequency, Hz

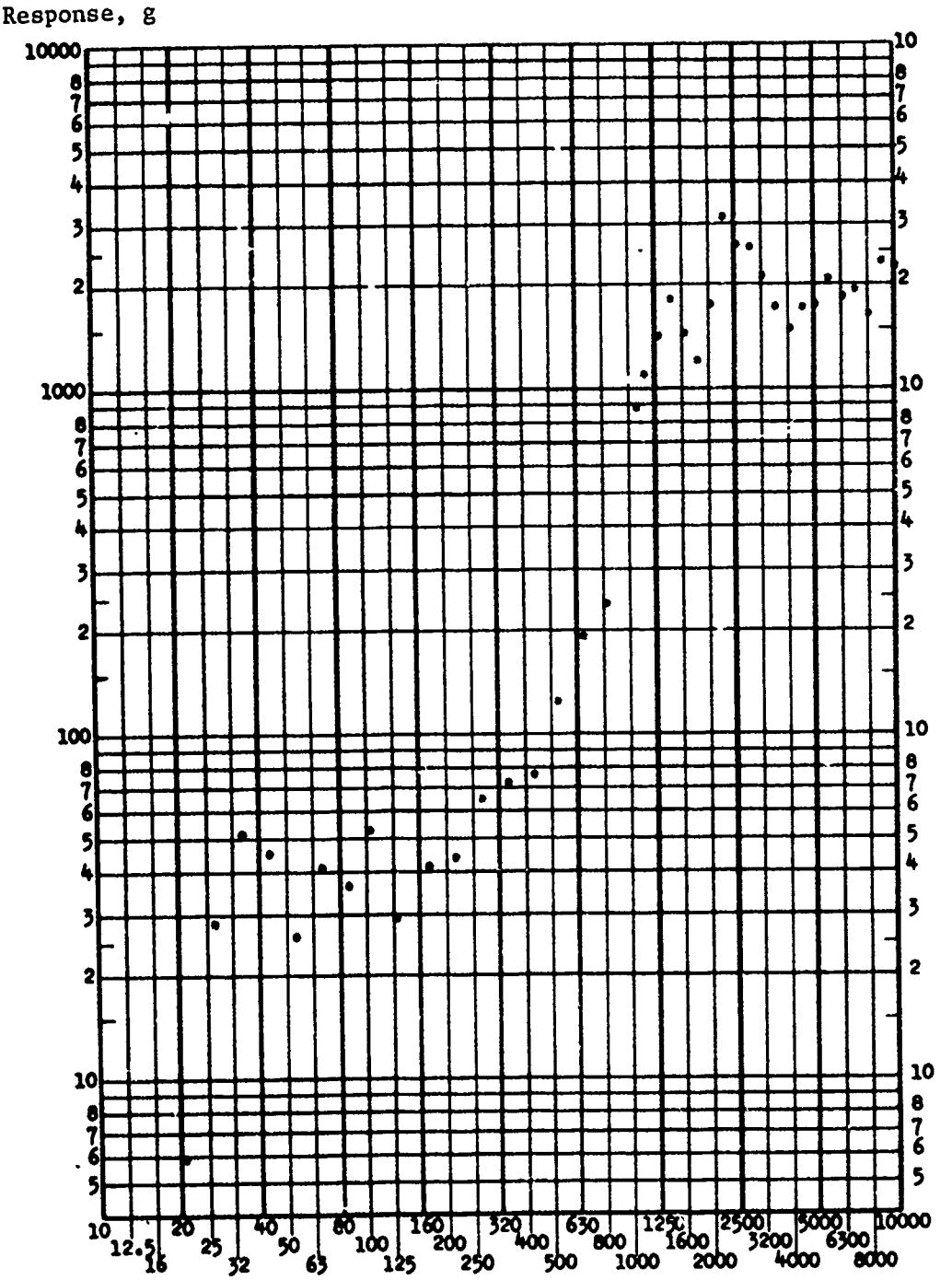
Bench Shock Test - Stage II/III Separation, Run 42
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 42 (concl)



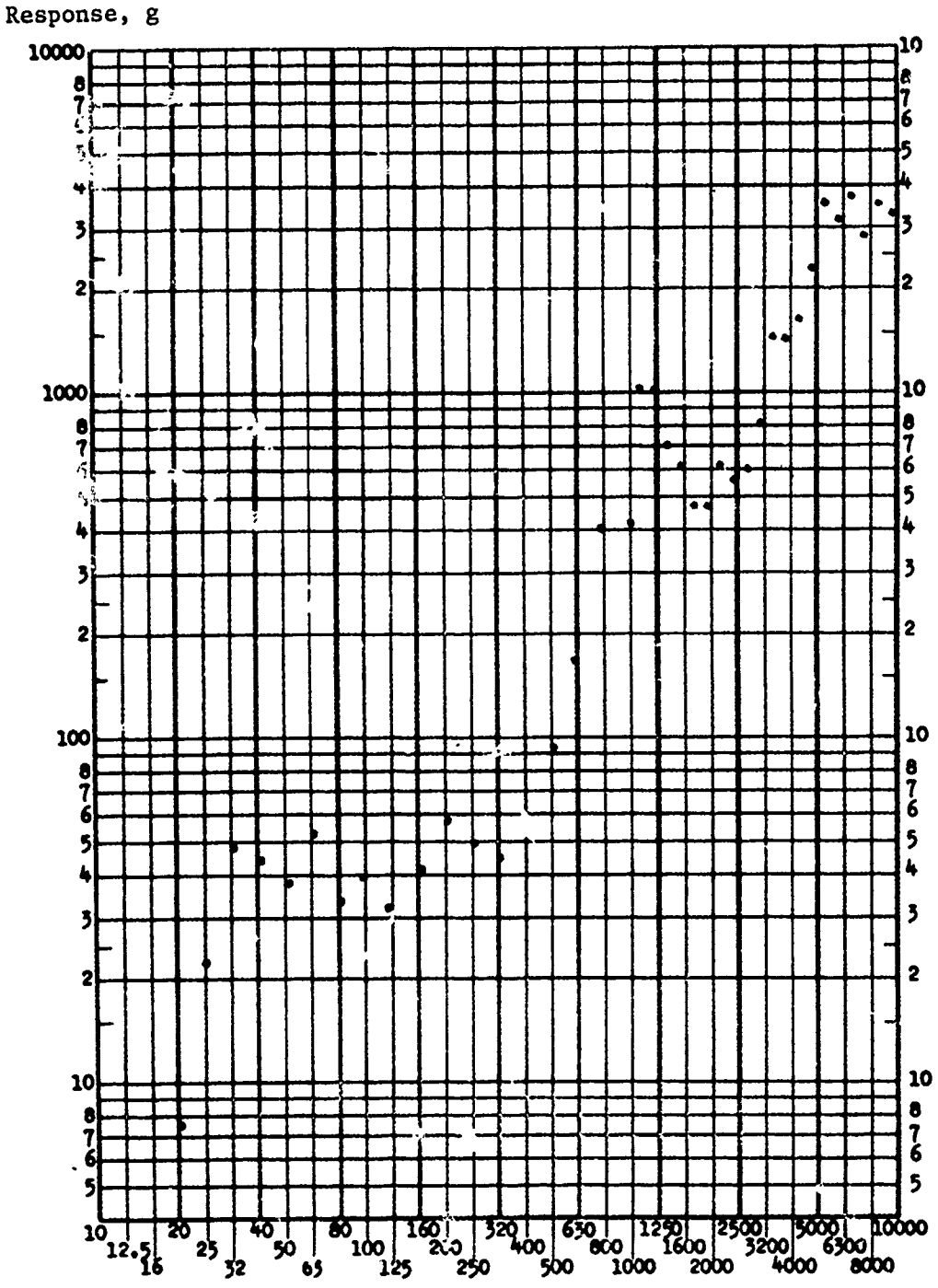
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 43 Run 43 Shock Response Spectrum



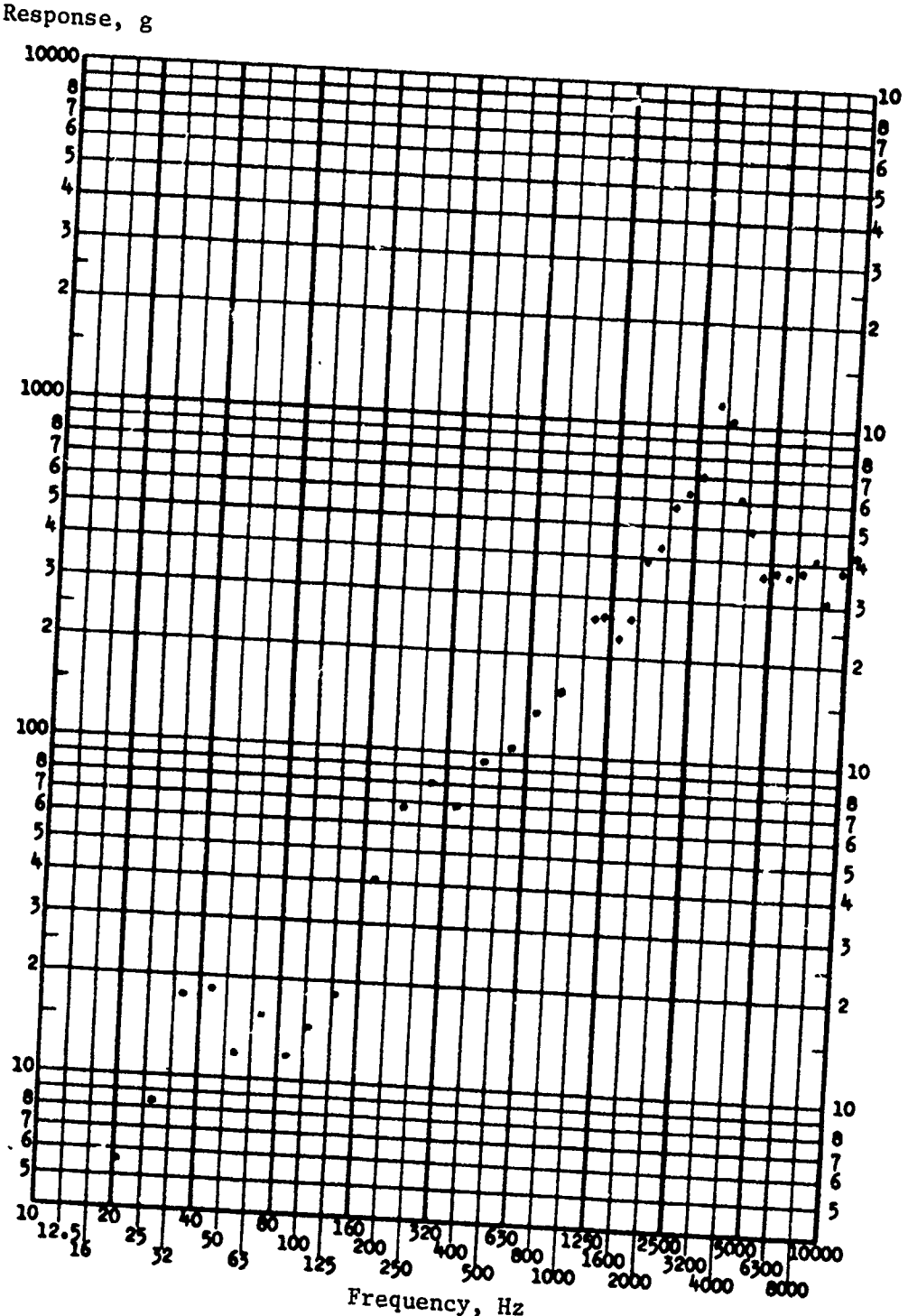
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 2 - Tangential axis longeron near station 133

Figure 43 (cont)



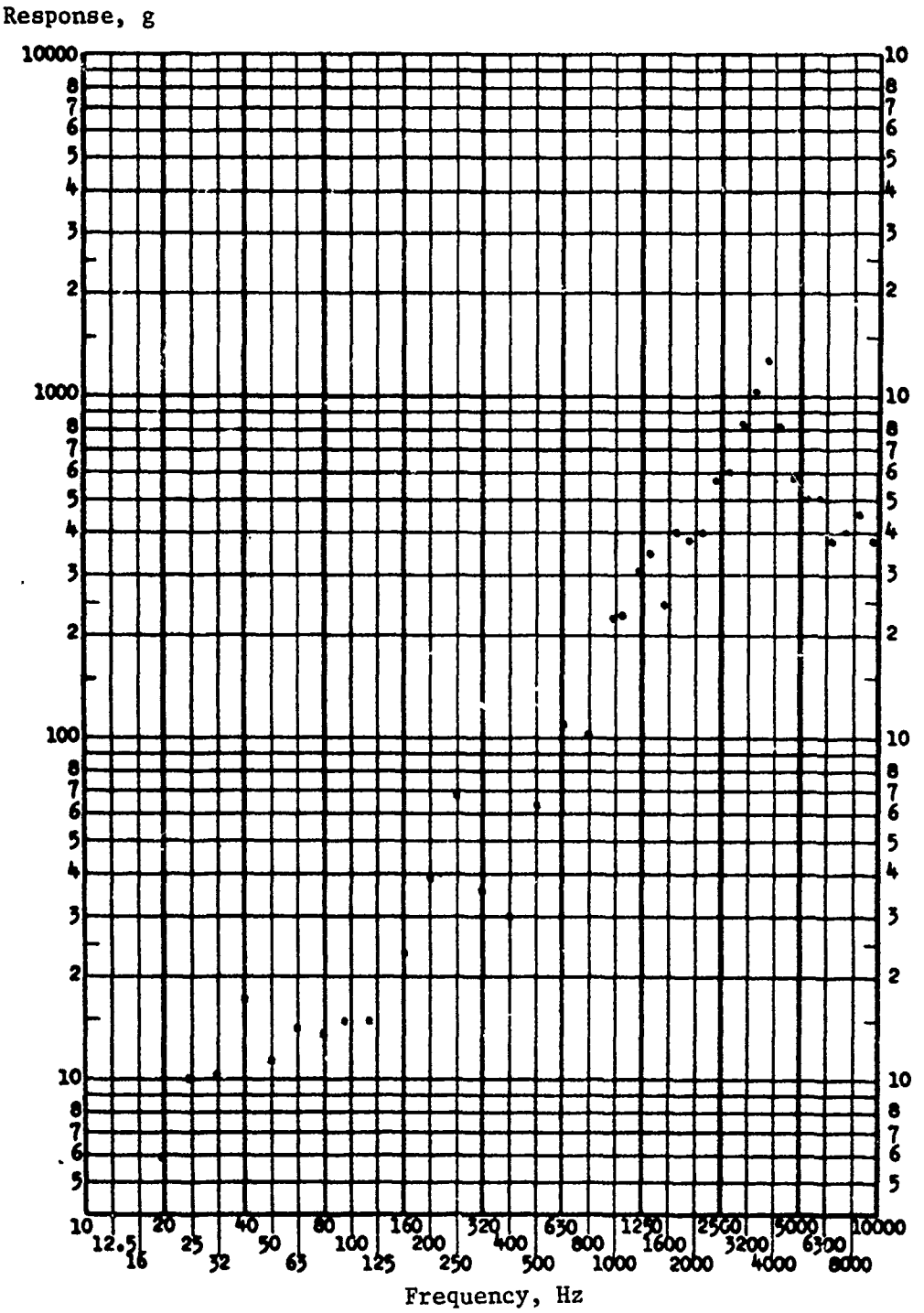
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 3 - Radial axis longeron near station 133

Figure 43 (cont)



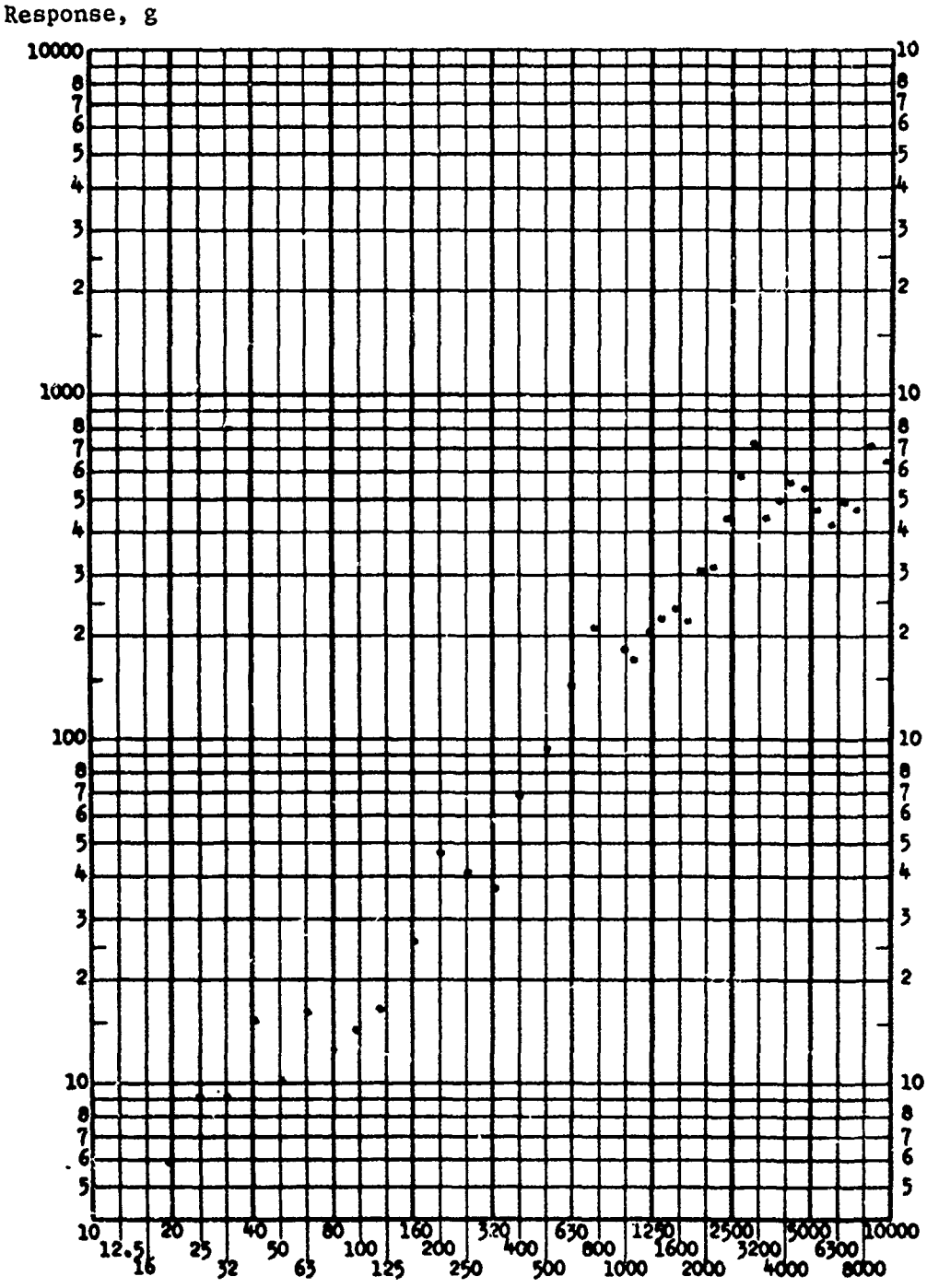
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 43 (cont)



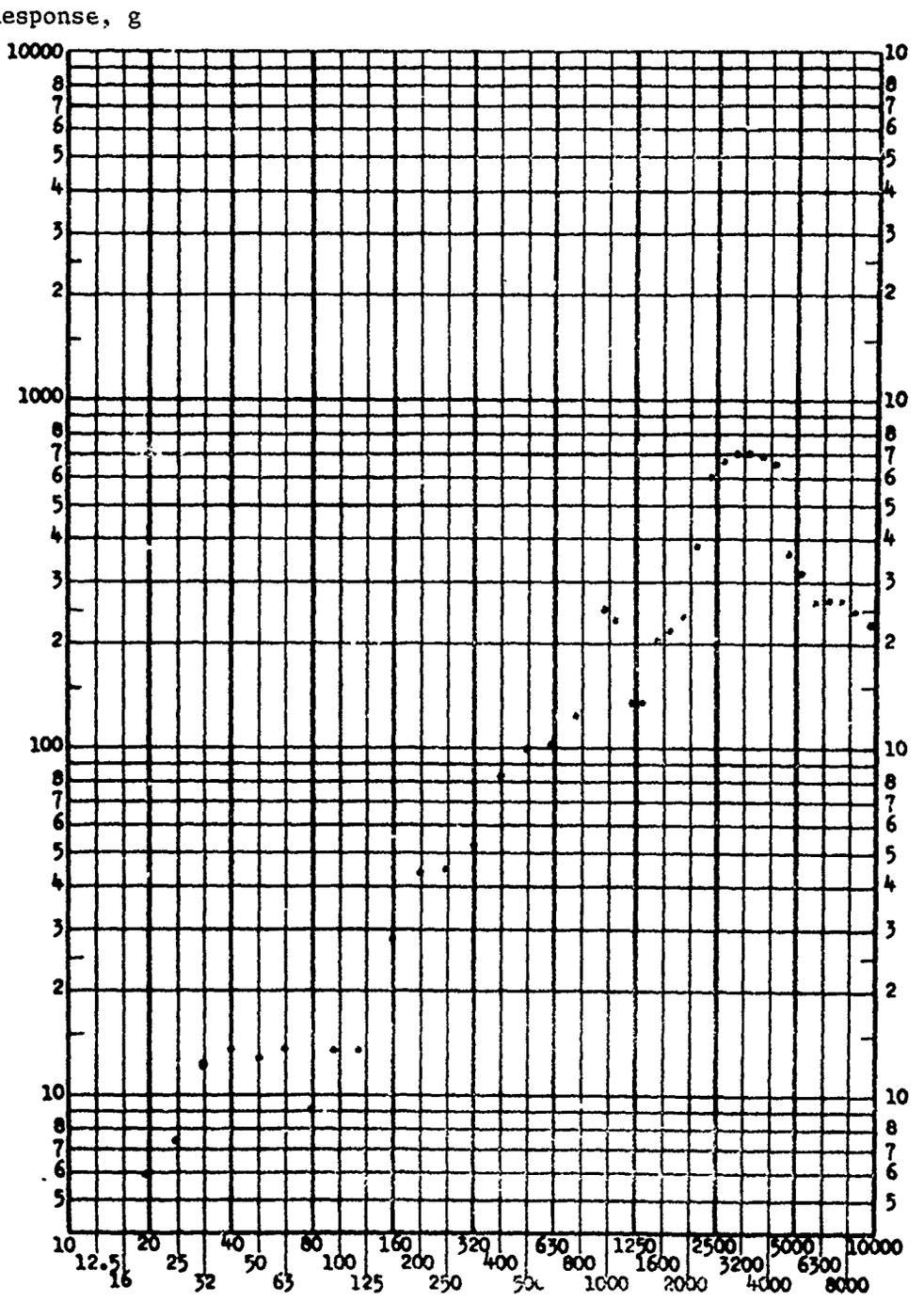
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 5 - Tangential axis longeron near station 117

Figure 43 (cont.)



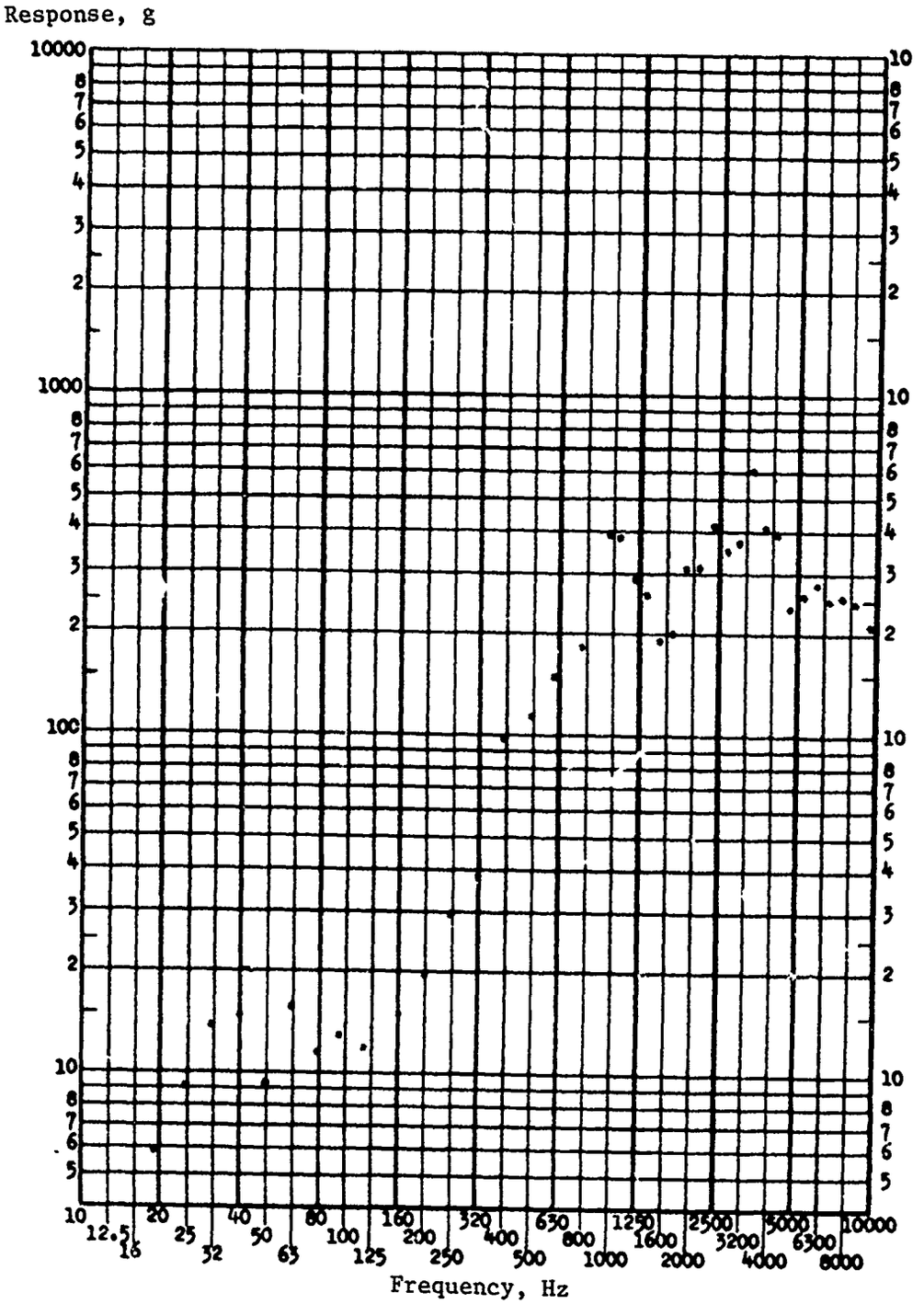
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 6 - Radial axis longeron near station 117

Figure 43 (cont)



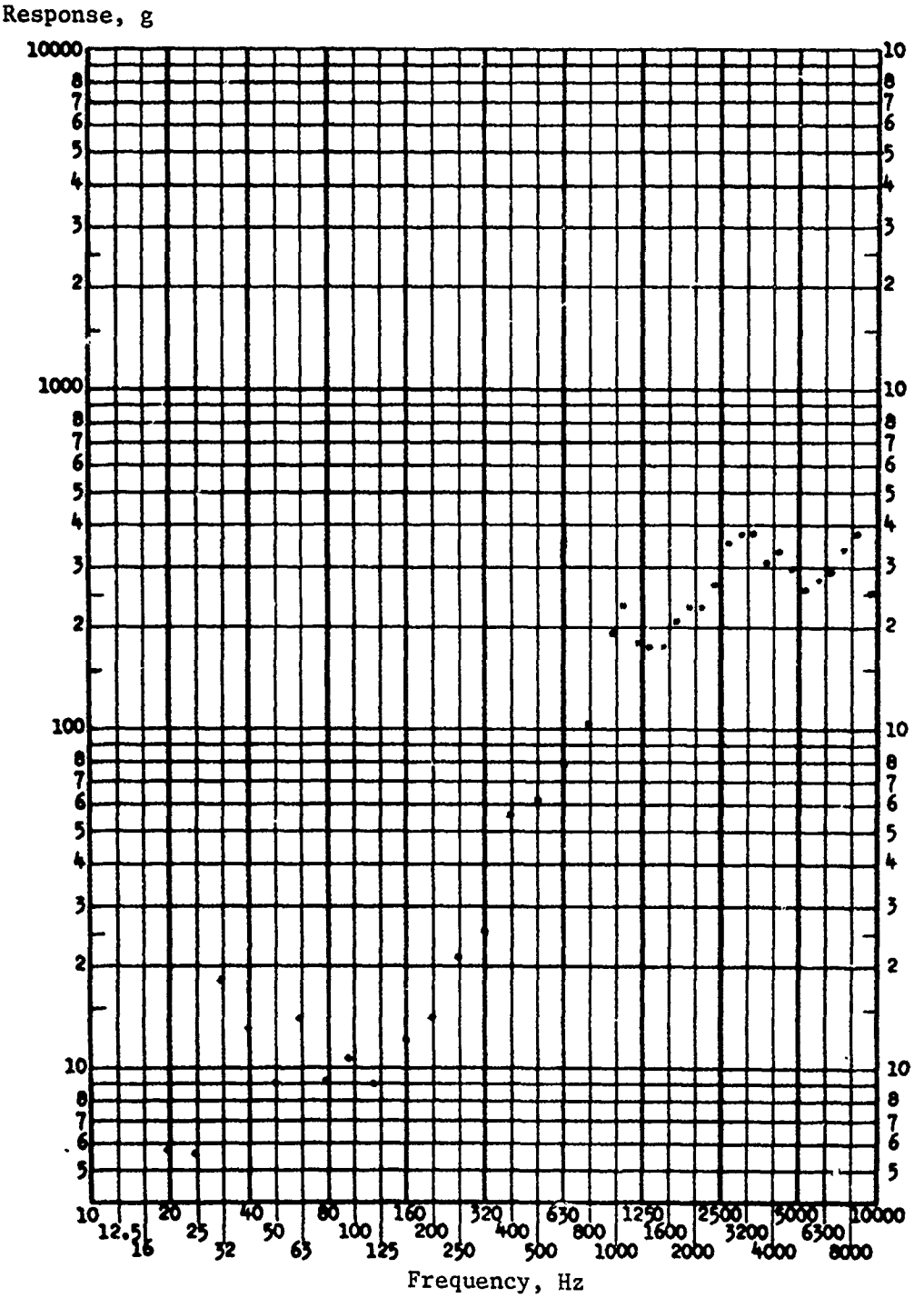
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 43 (cont)



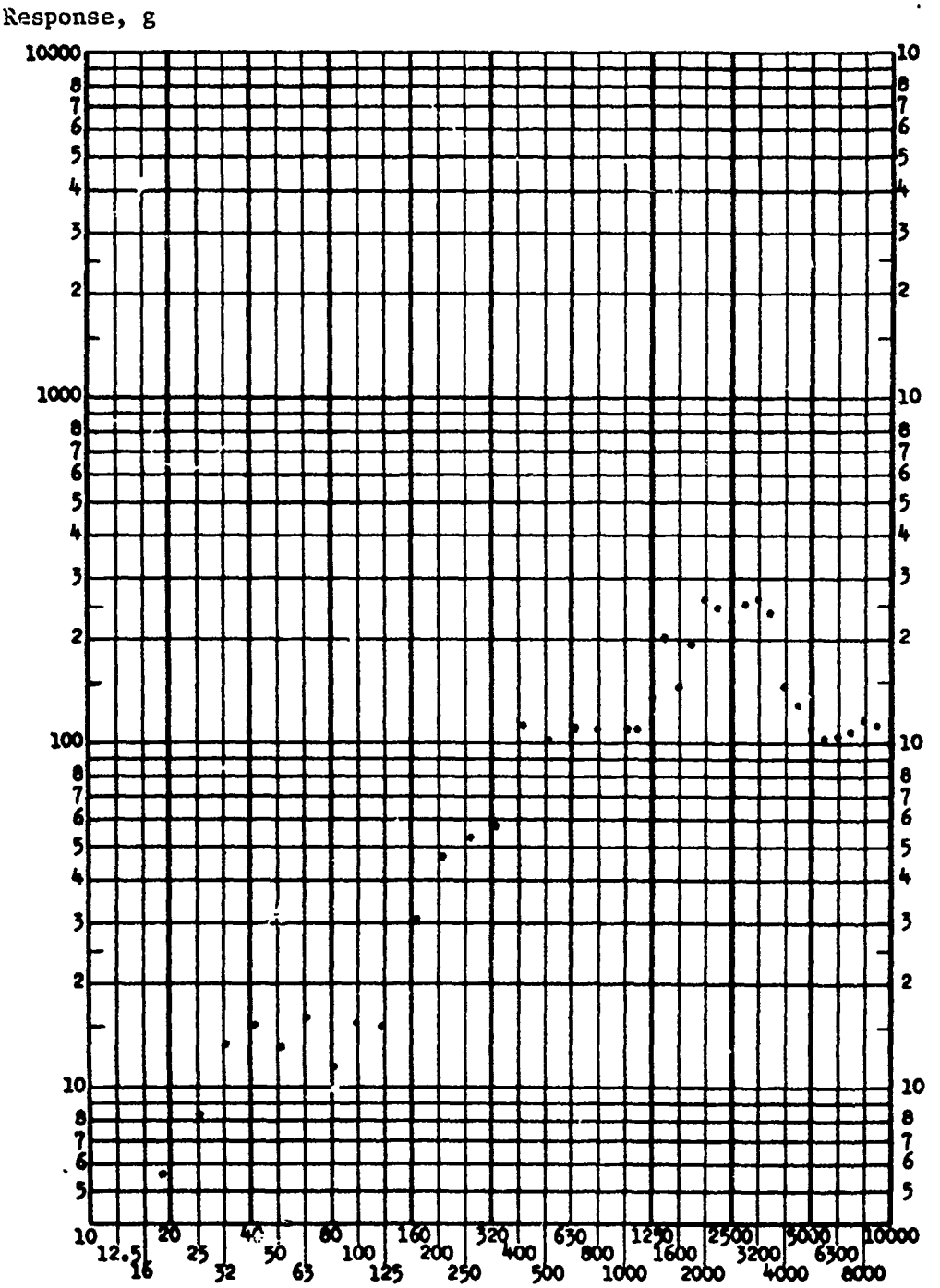
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 8 - Tangential axis longeron near station 77

Figure 43 (cont)



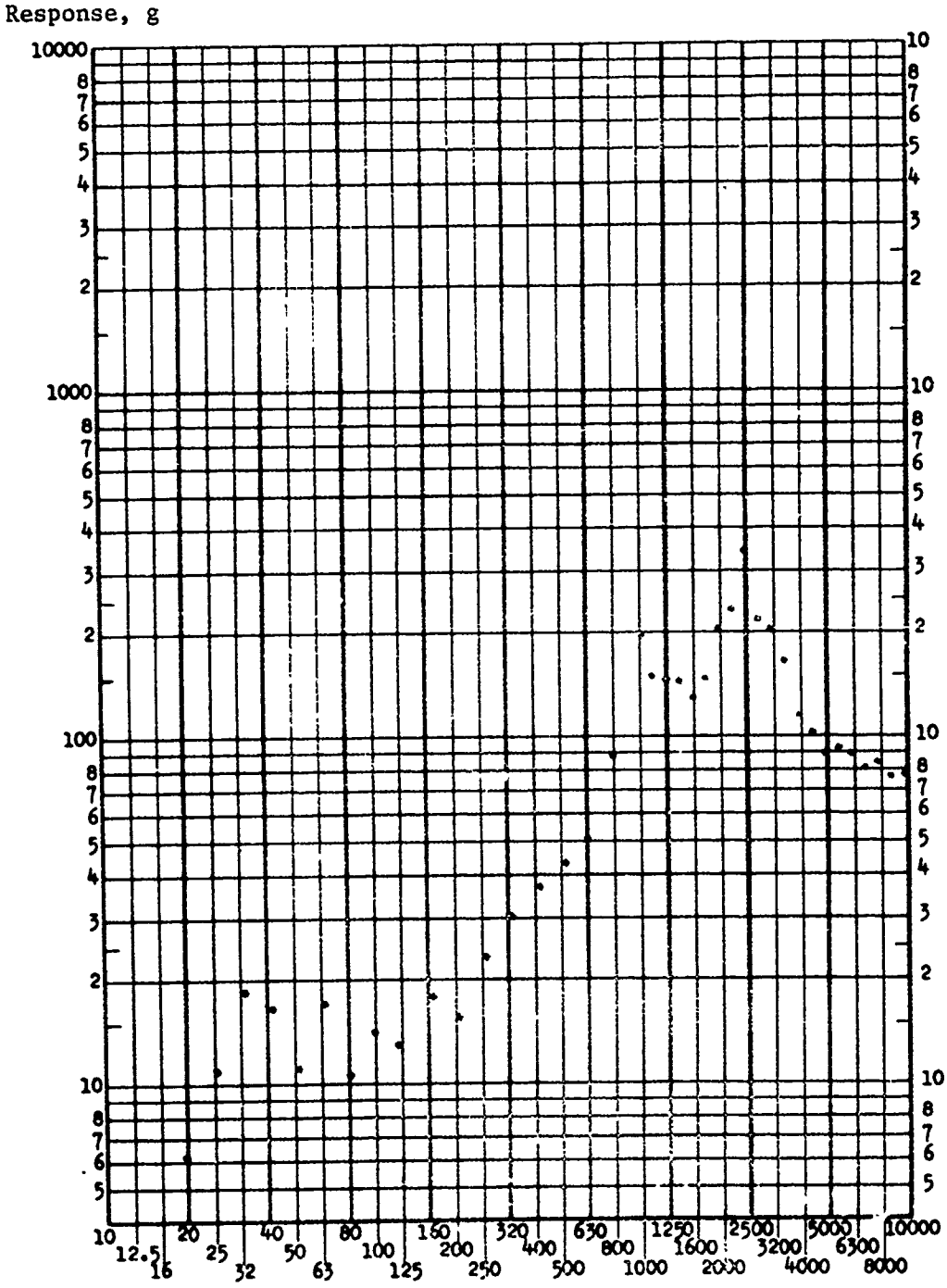
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 9 - Radial axis longeron near station 77

Figure 43 (cont)



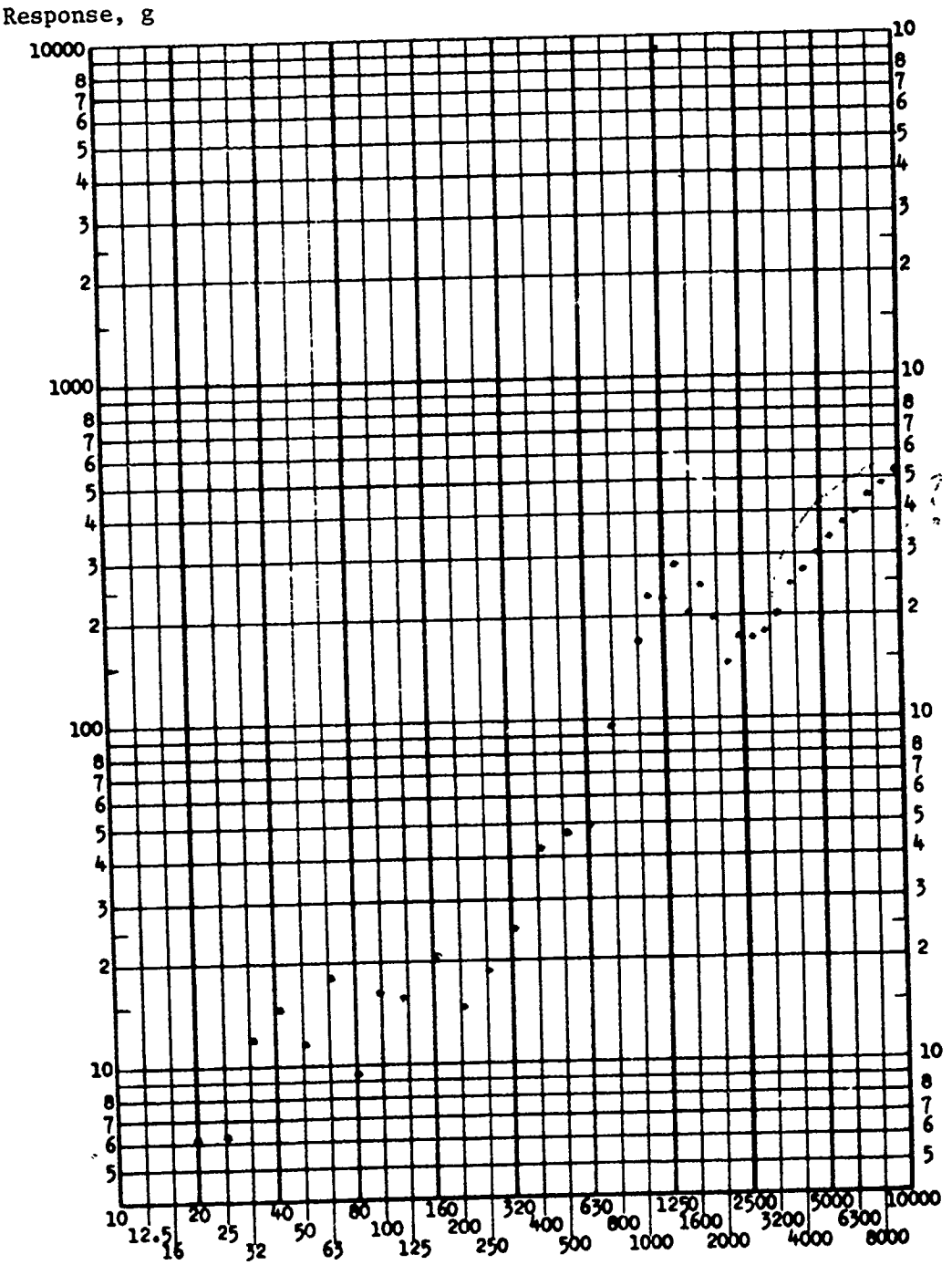
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 43 (cont)



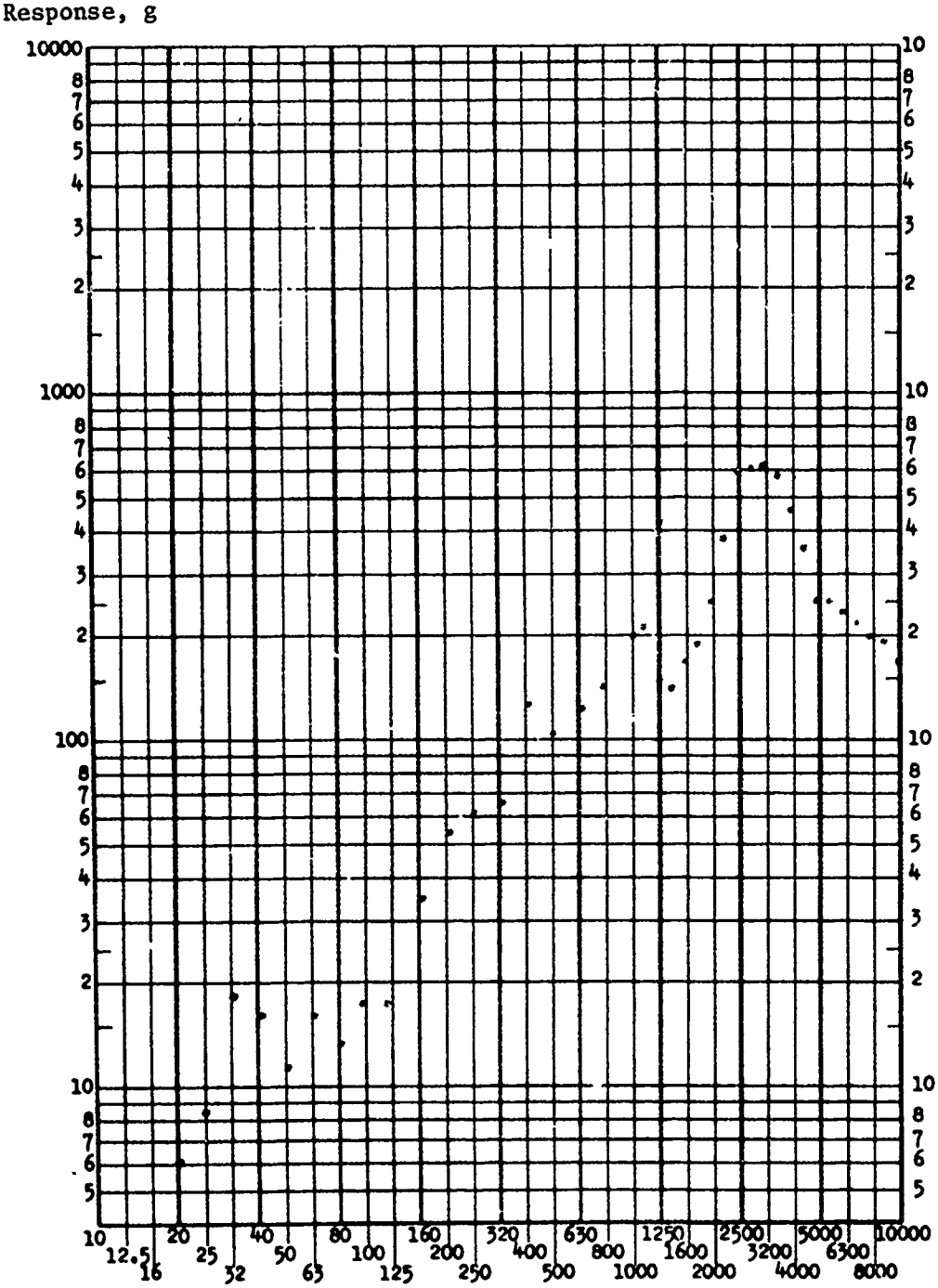
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 43 (cont)



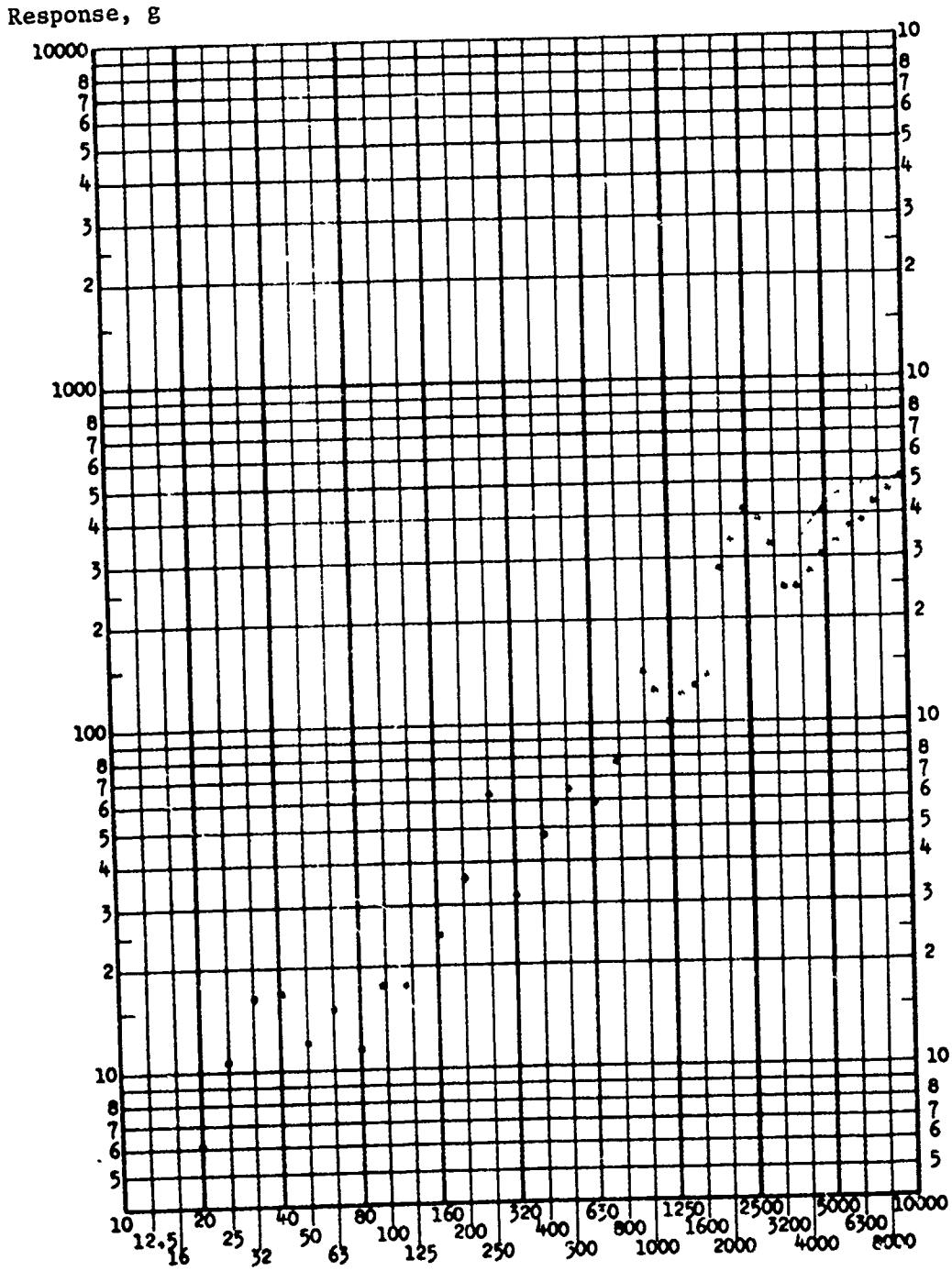
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 43 (cont)



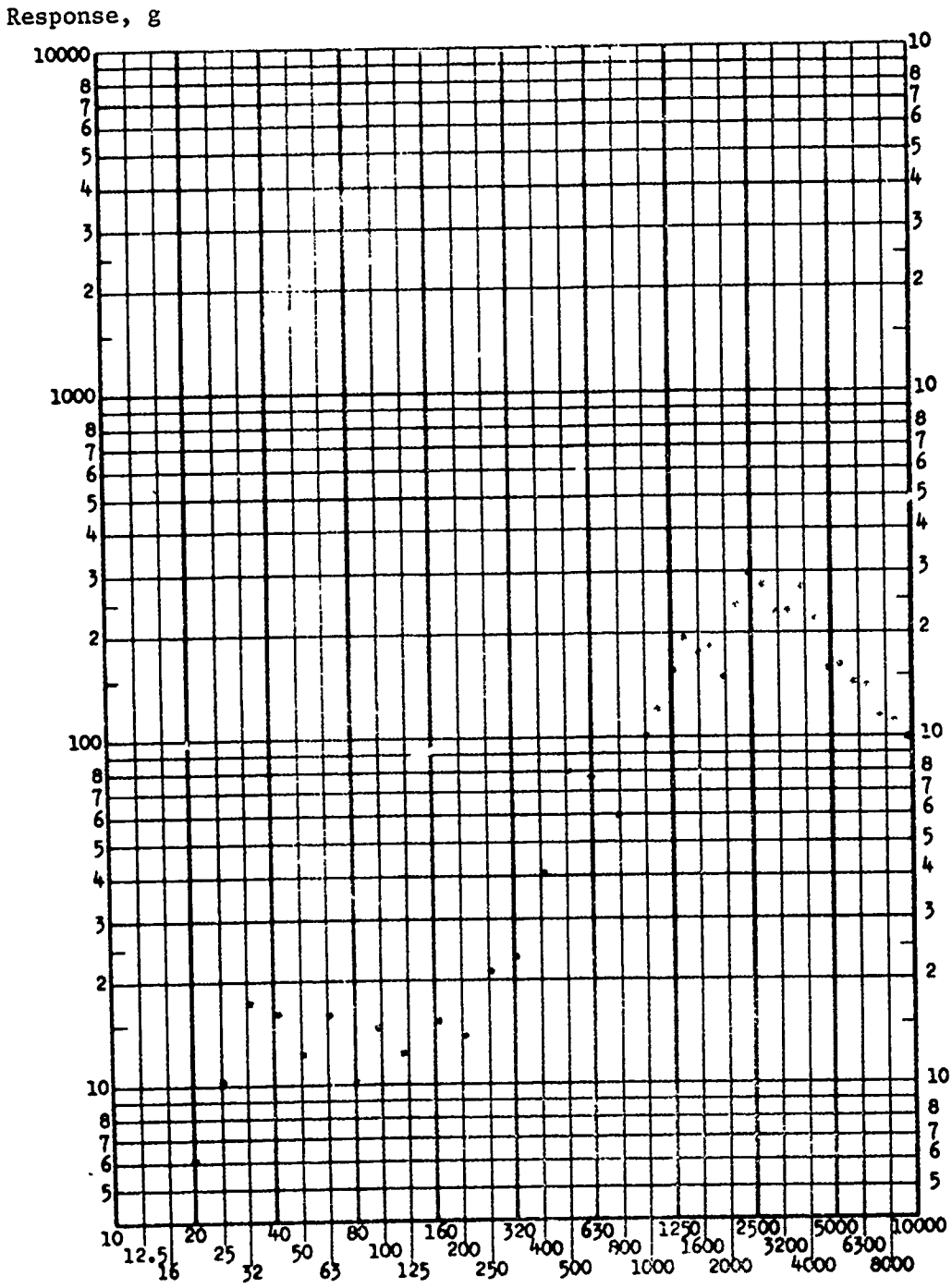
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 43 (cont)



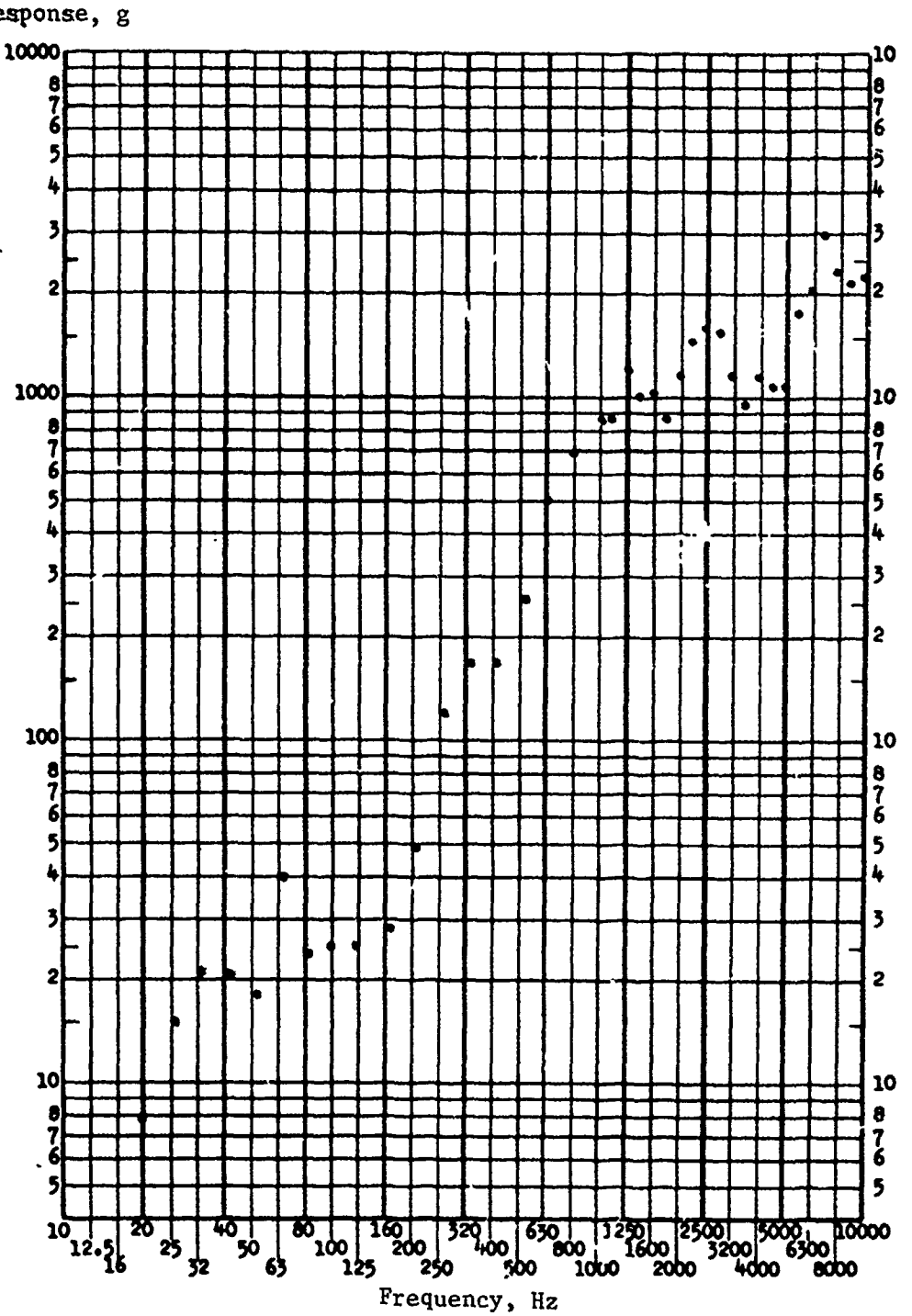
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 43 (cont)



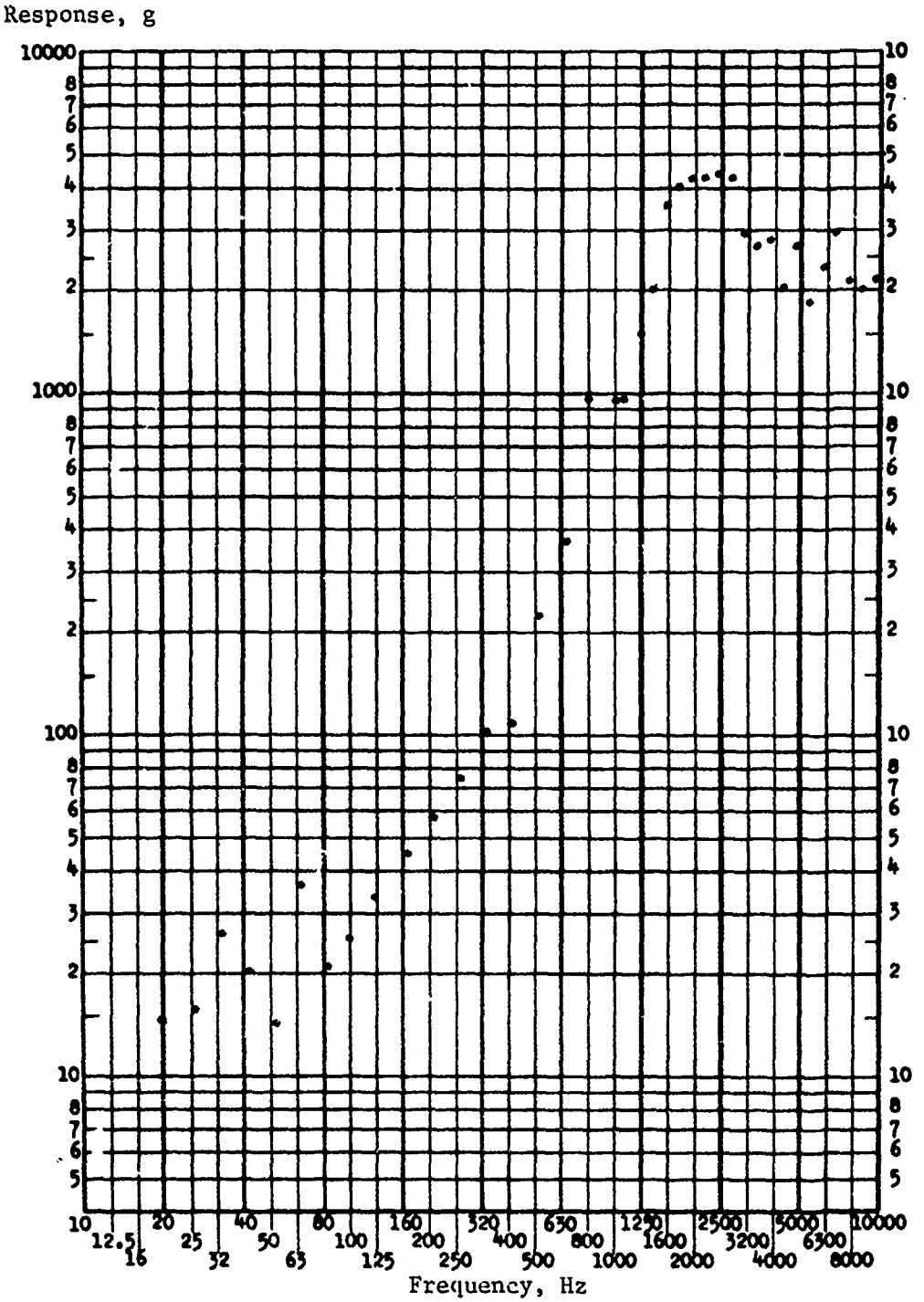
Bench Shock Test - Stage II/III Separation, Run 43
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 43 (concl)



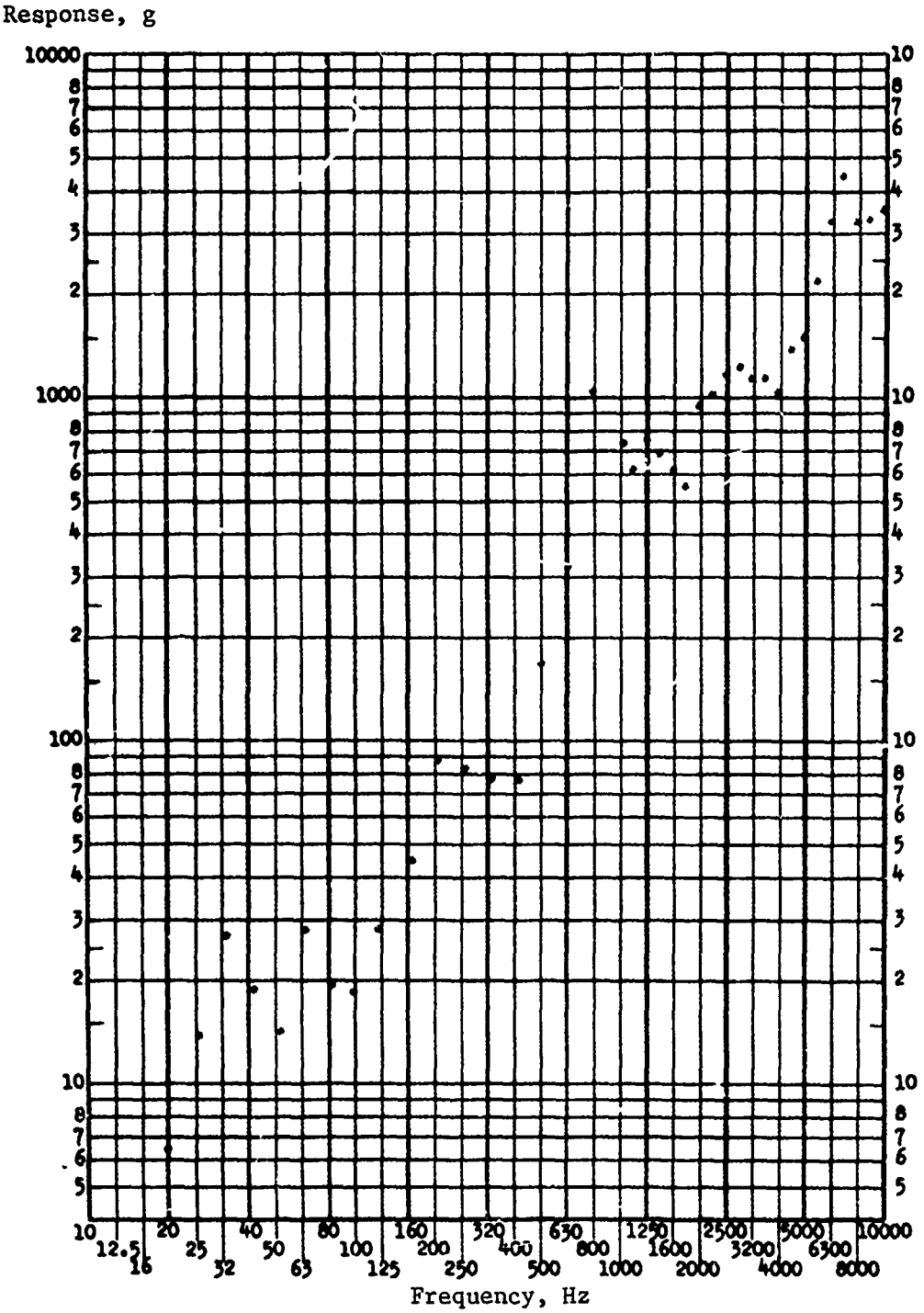
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 44 Run 44 Shock Response Spectrum



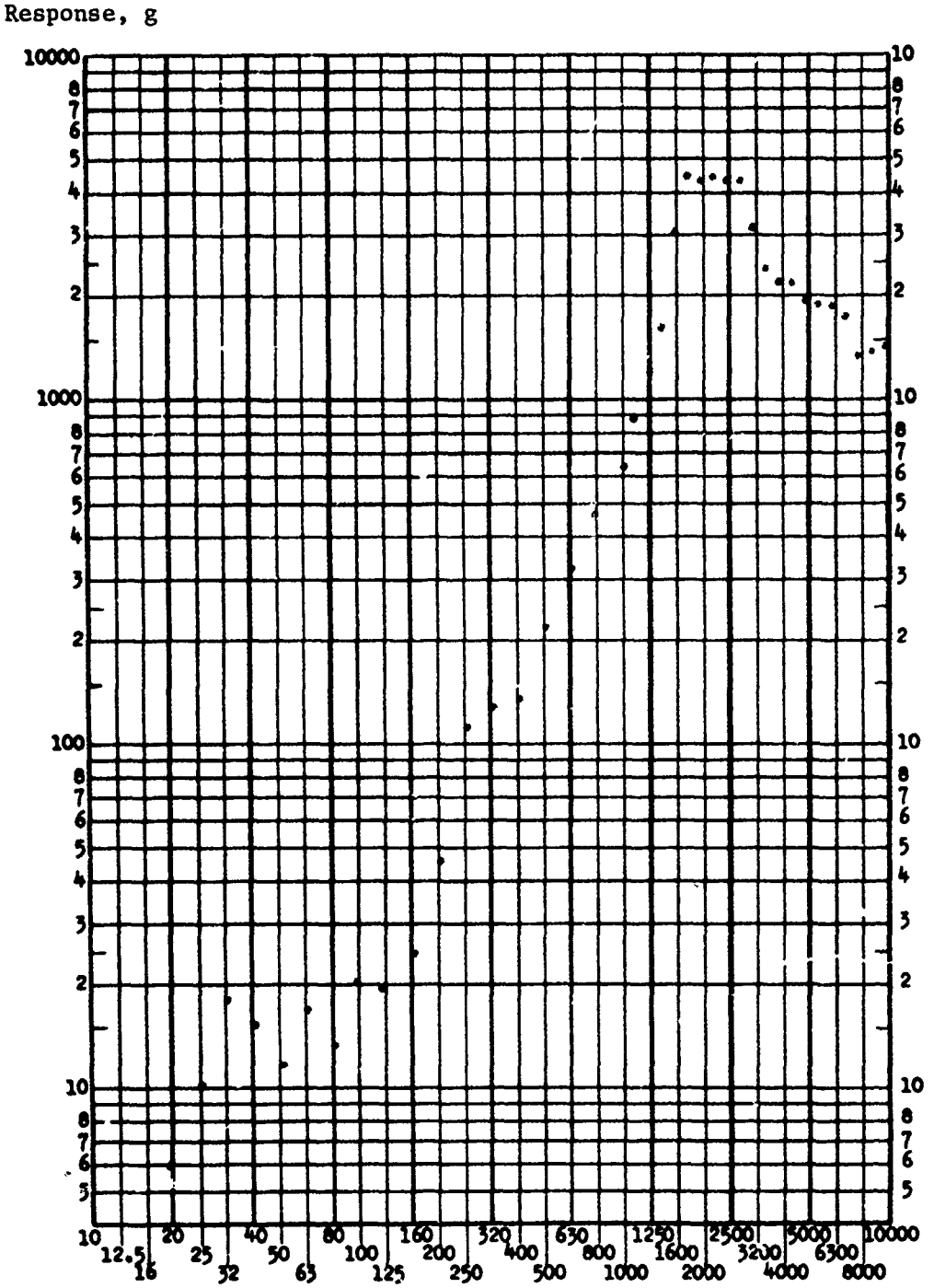
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 2 - Tangential axis longeron near station 133

Figure 44 (cont)



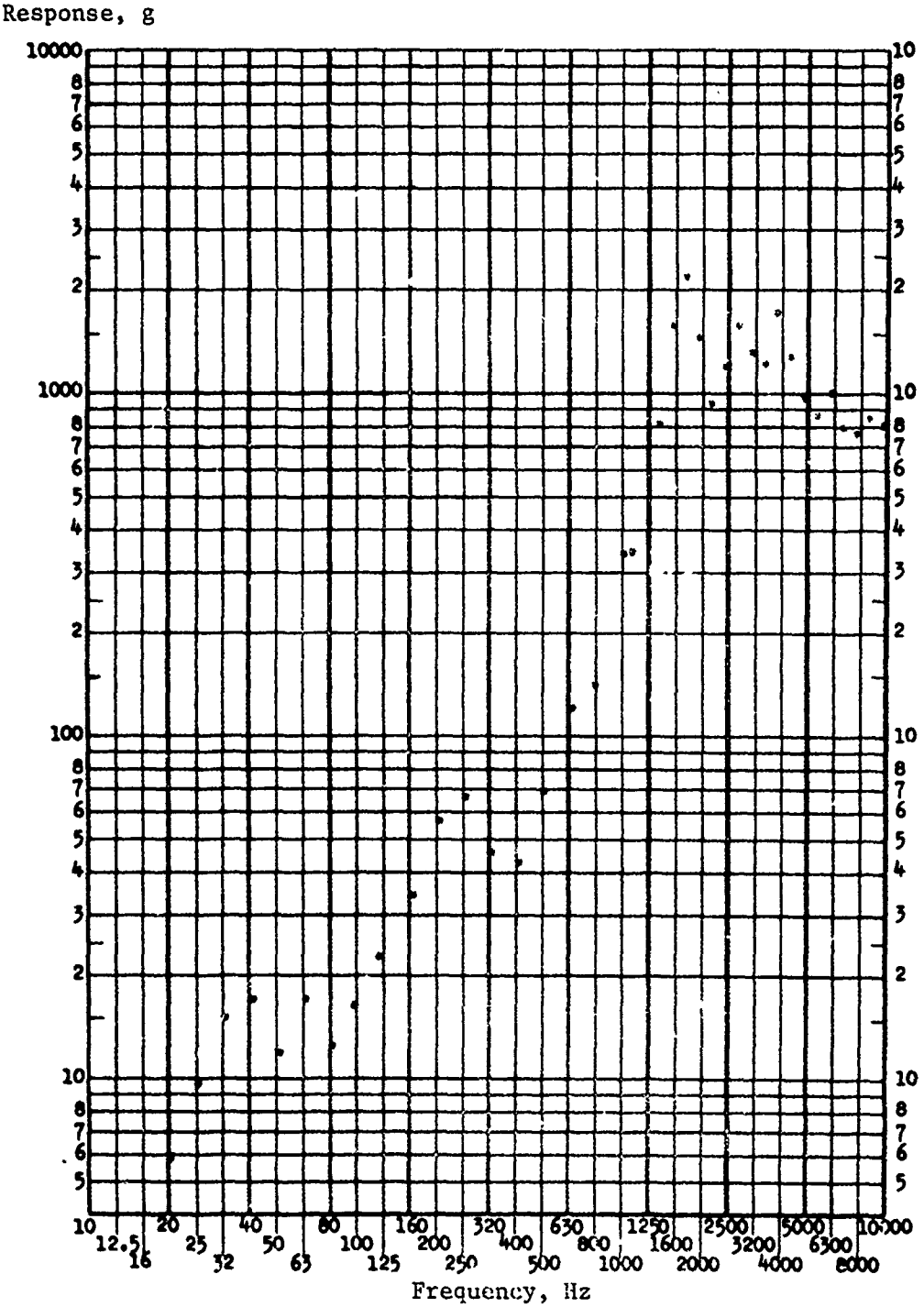
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 3 - Radial axis longeron near station 133

Figure 44 (cont)



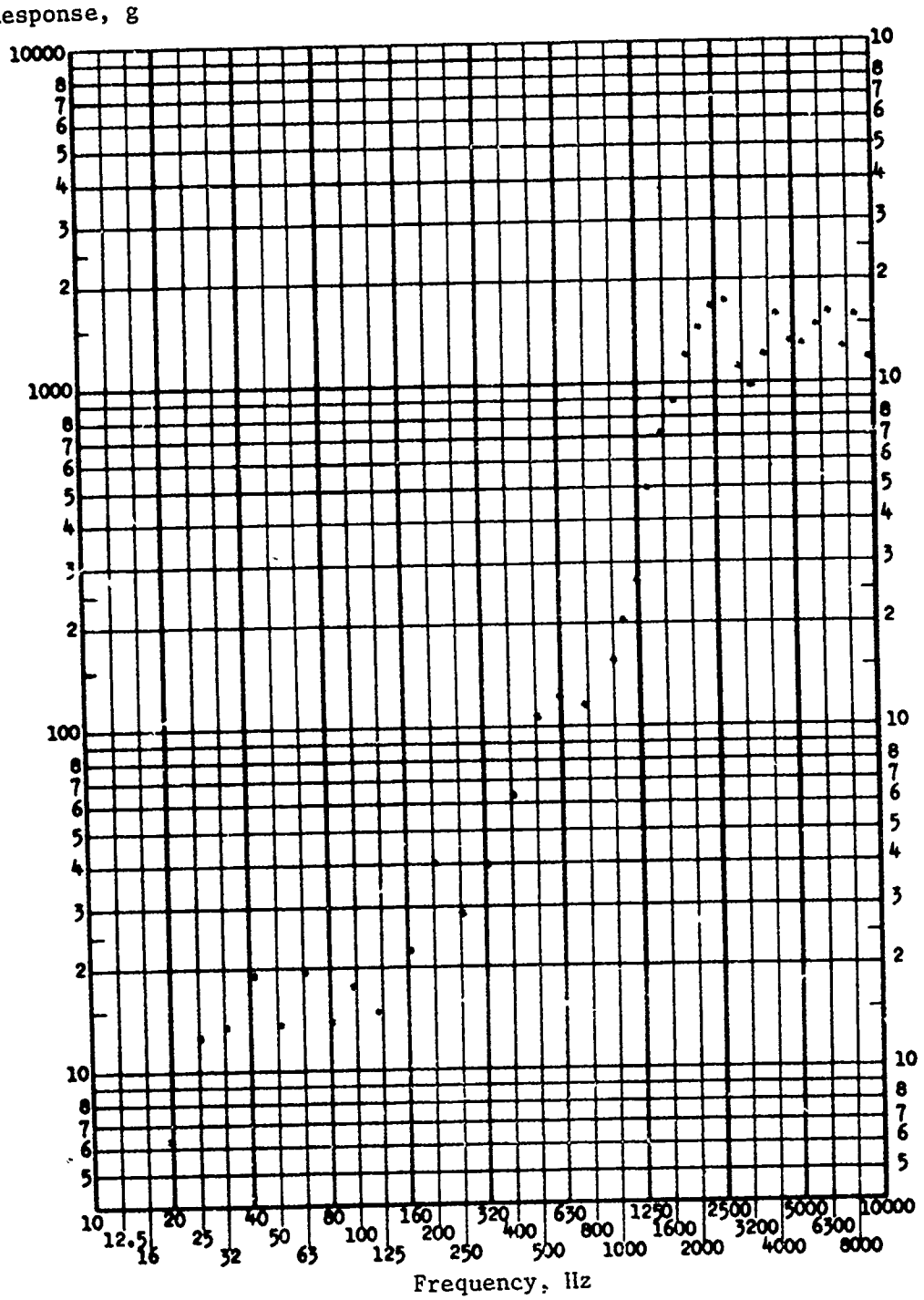
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 44 (cont)



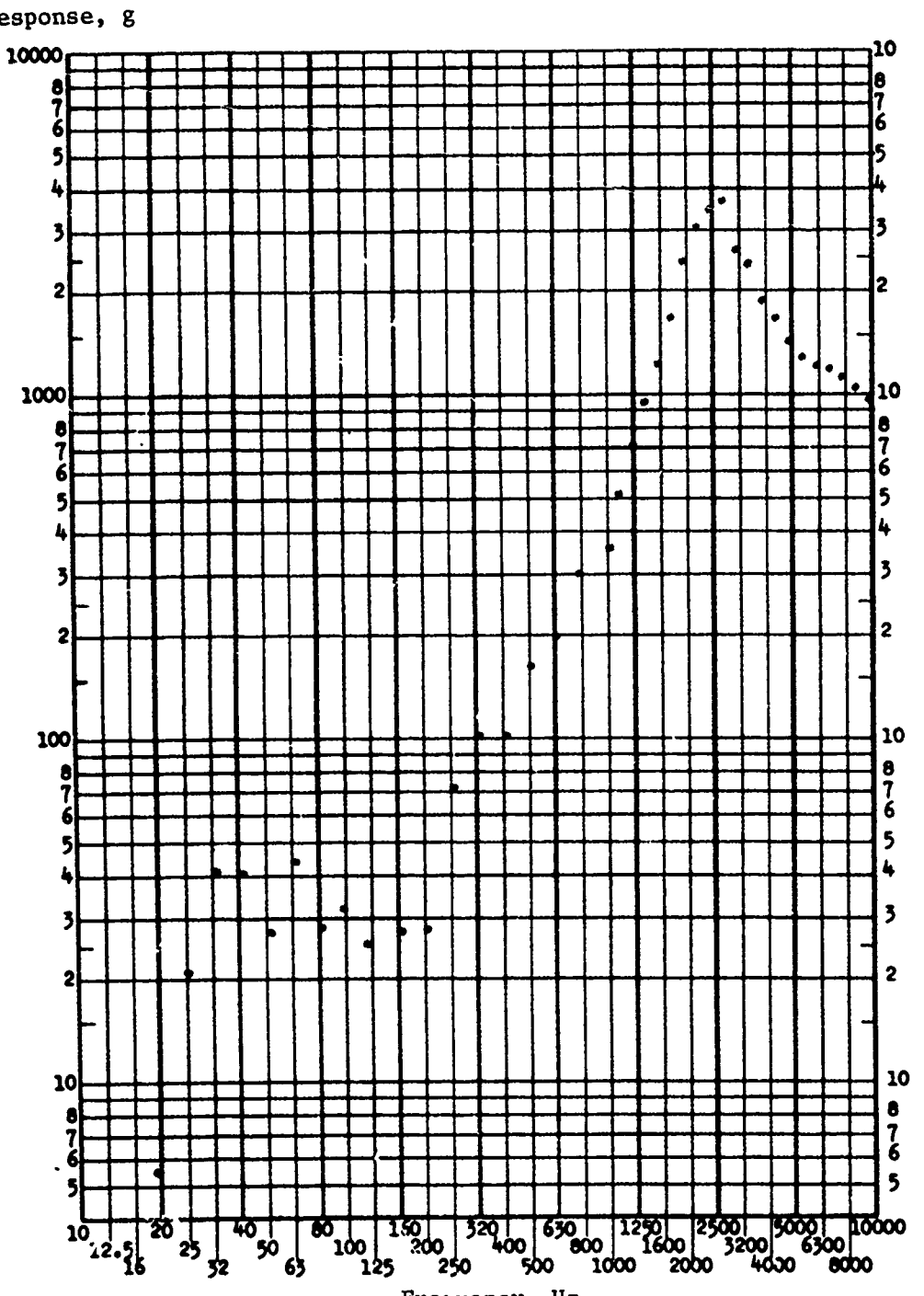
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 5 - Tangential axis longeron near station 117

Figure 44 (cont)



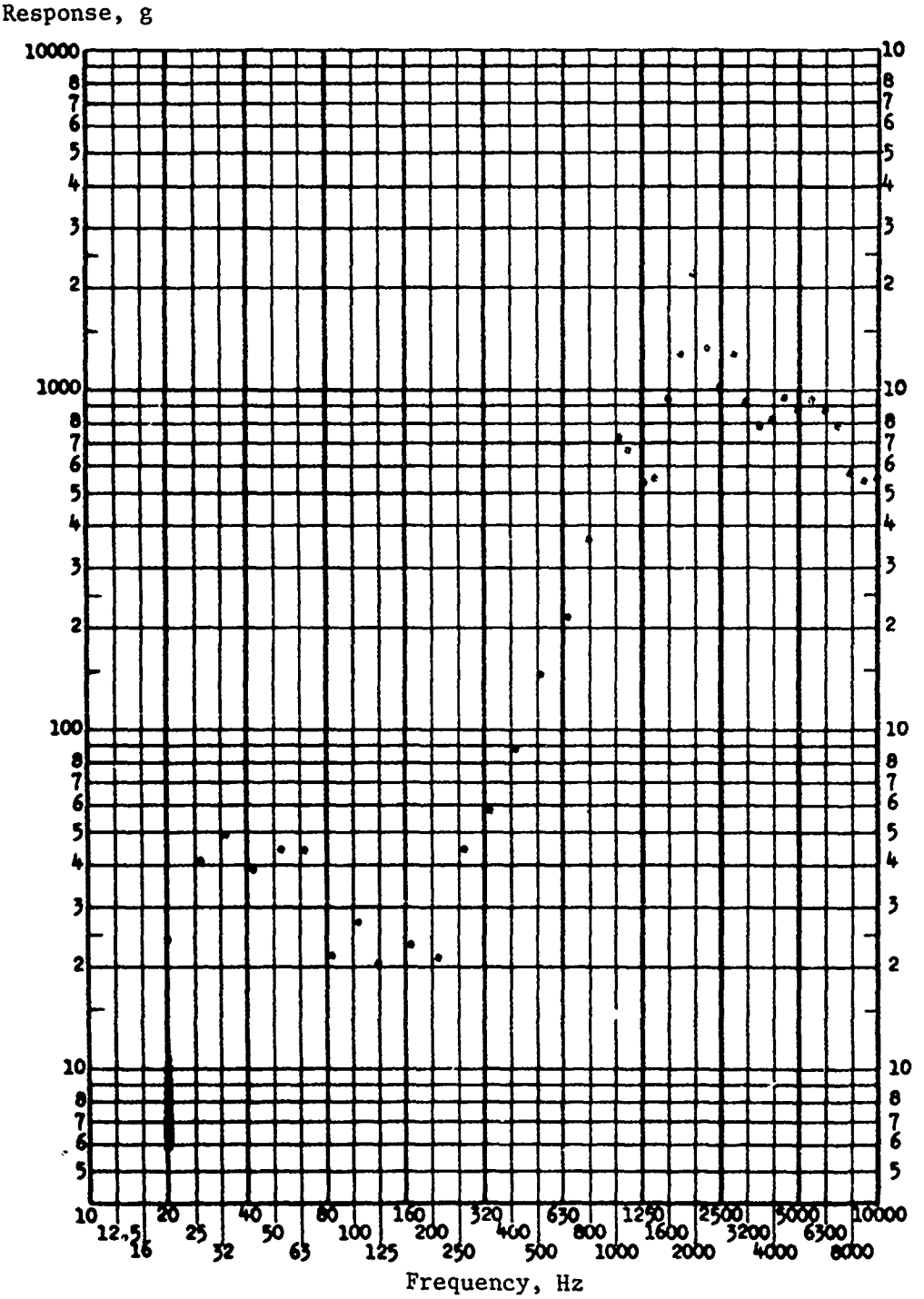
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 6 - Radial axis longeron near station 117

Figure 44 (cont)



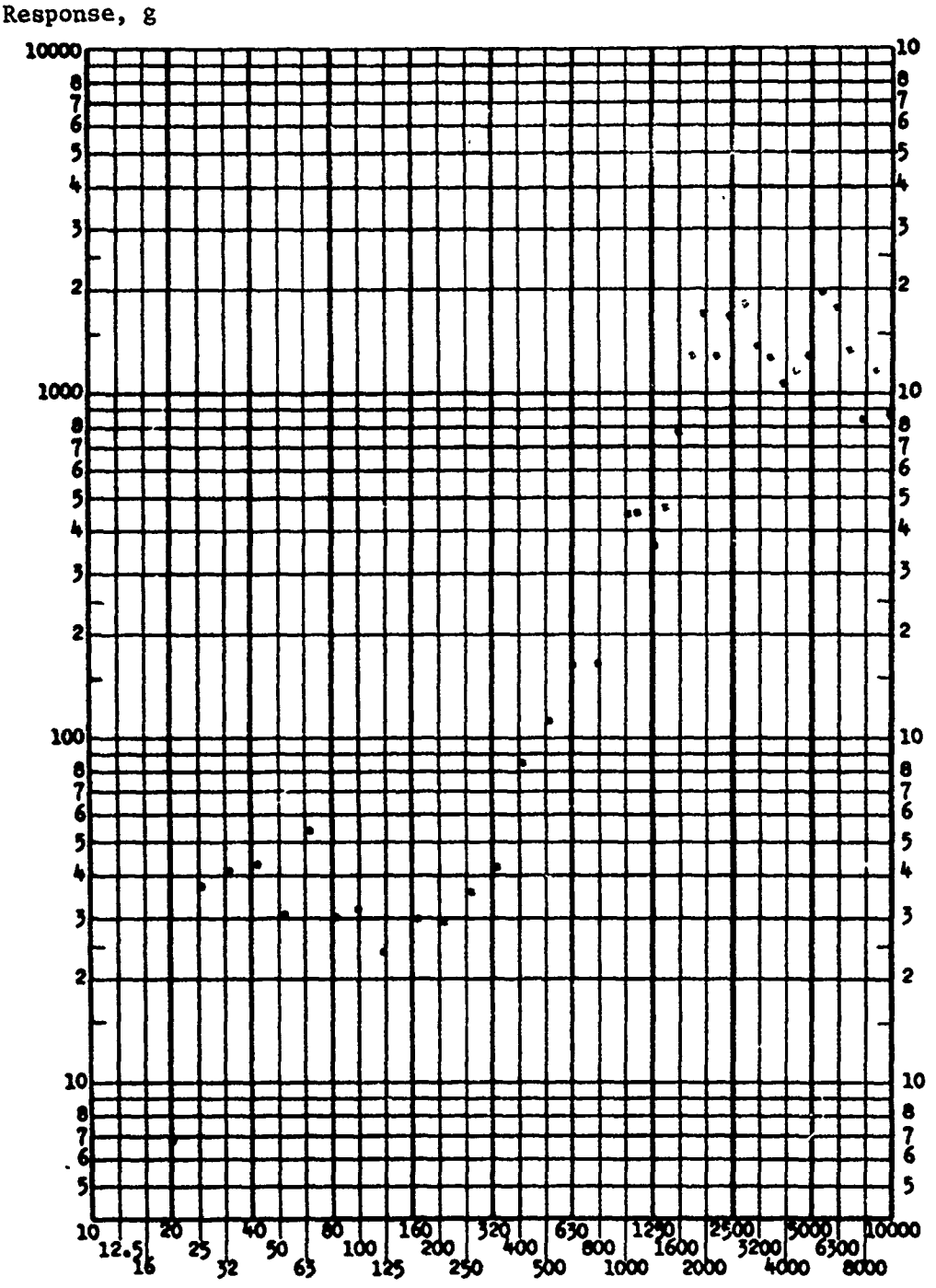
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 44 (cont)



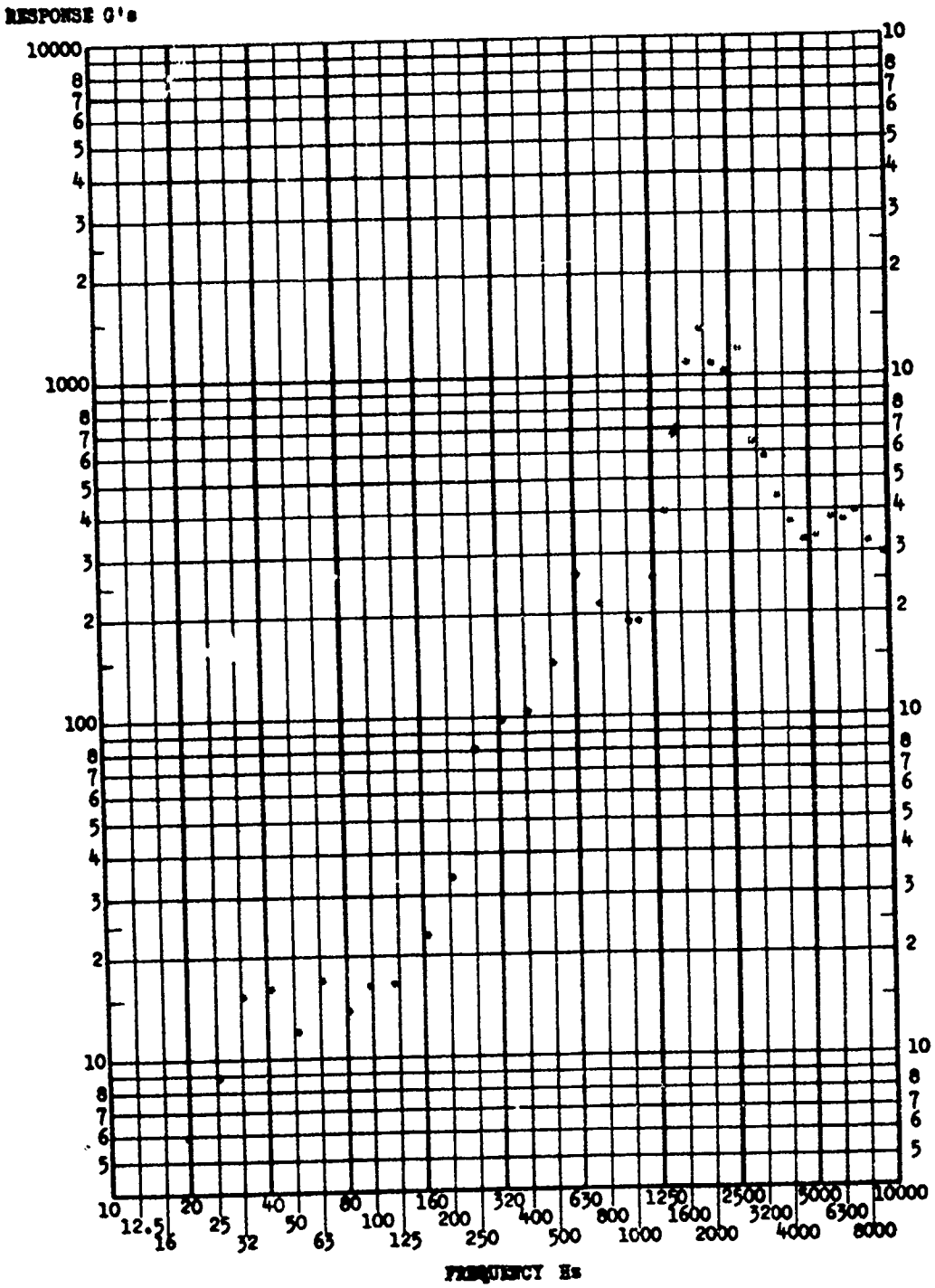
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 8 - Tangential axis longeron near station 77

Figure 44 (cont)



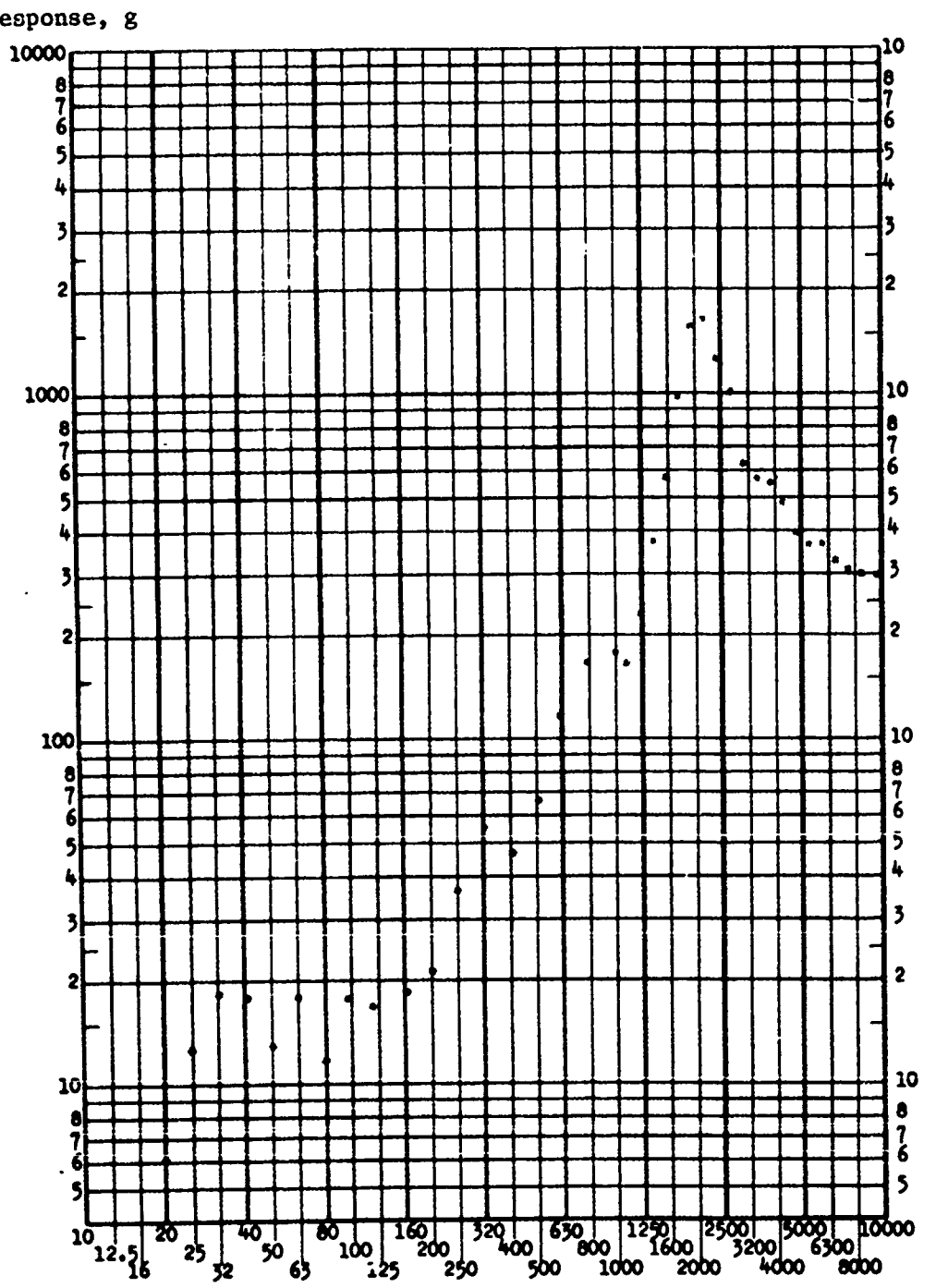
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 9 - Radial axis longeron near station 77

Figure 44 (cont)



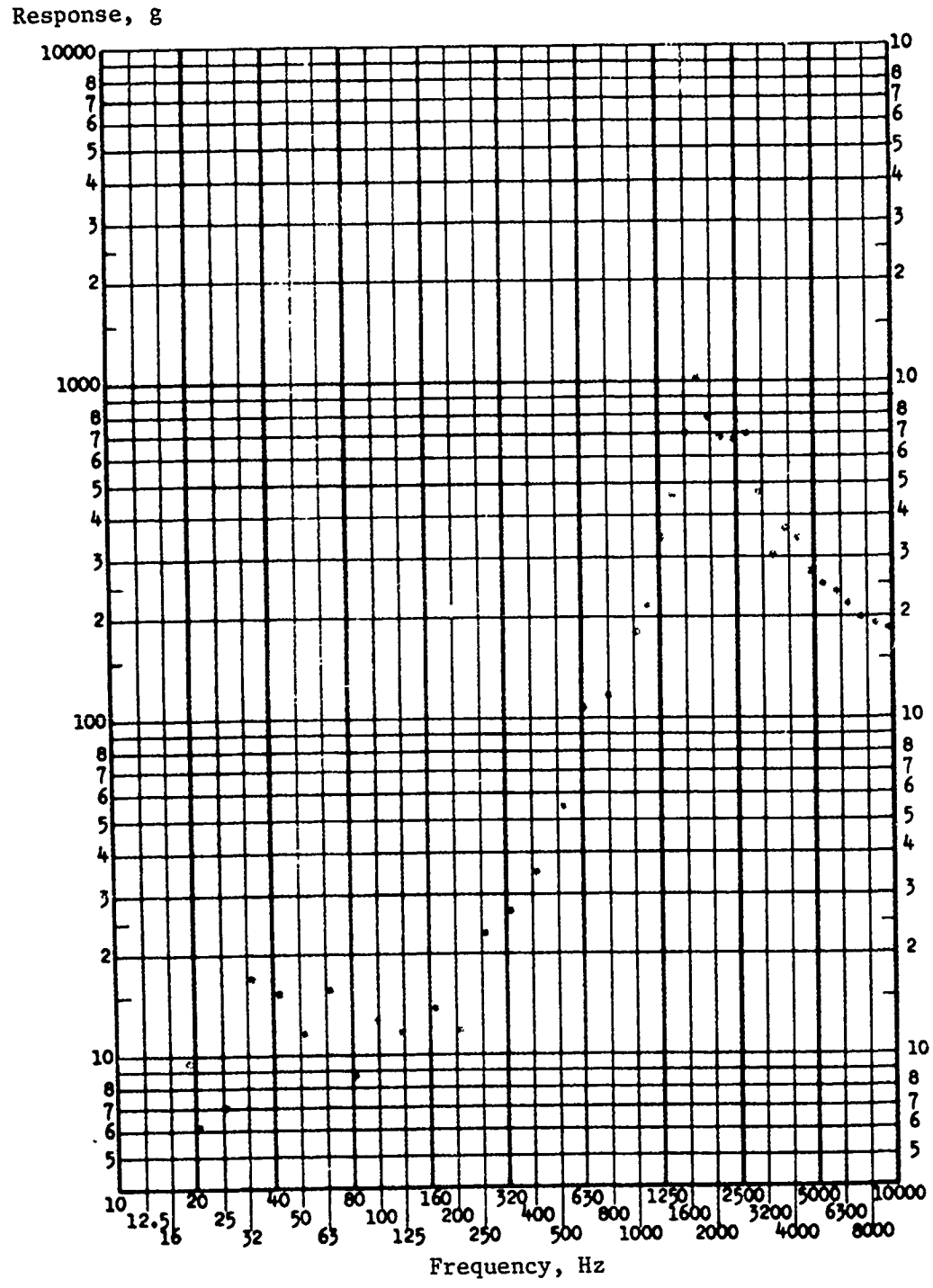
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 44 (cont)



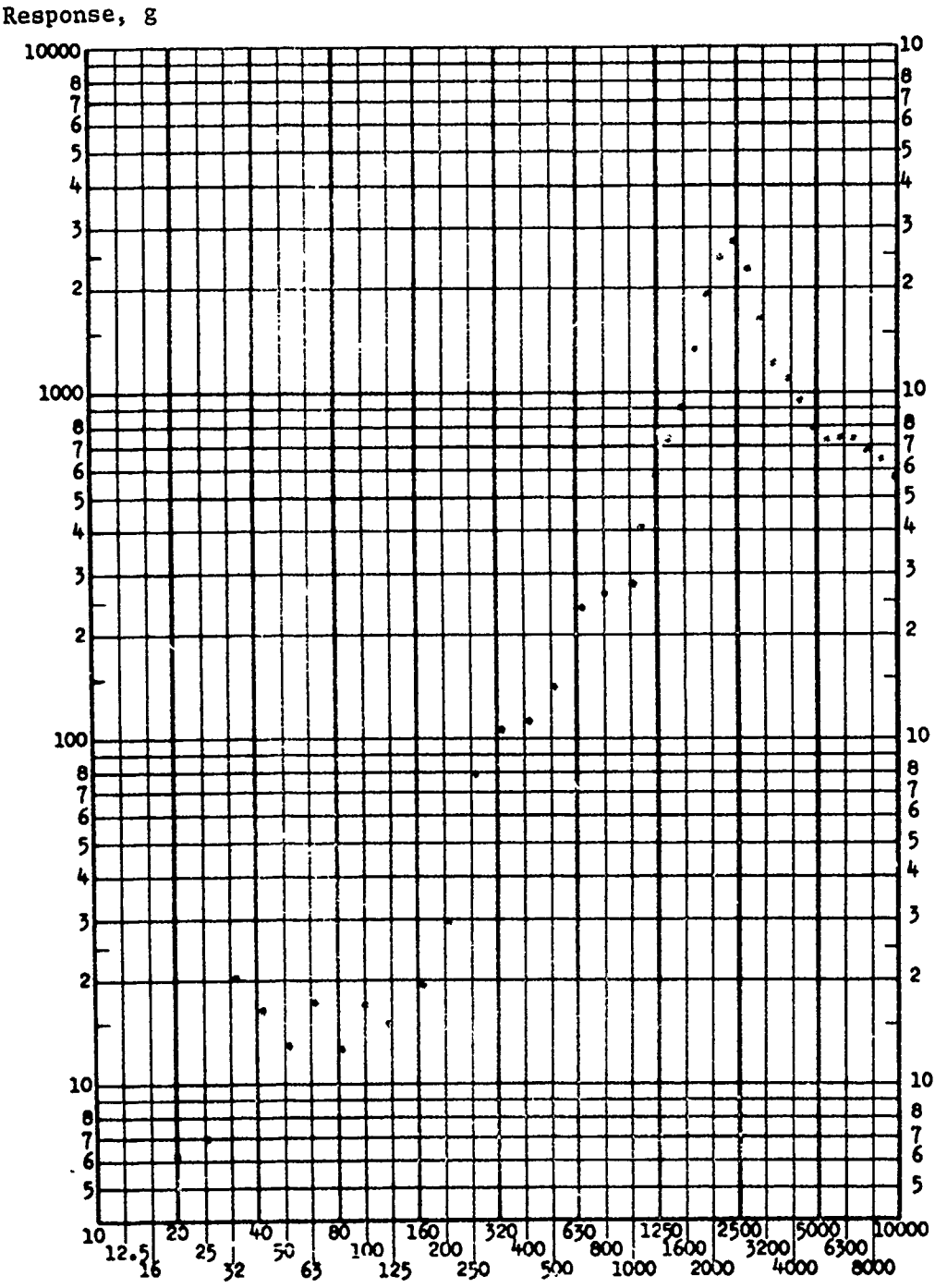
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 44 (cont)



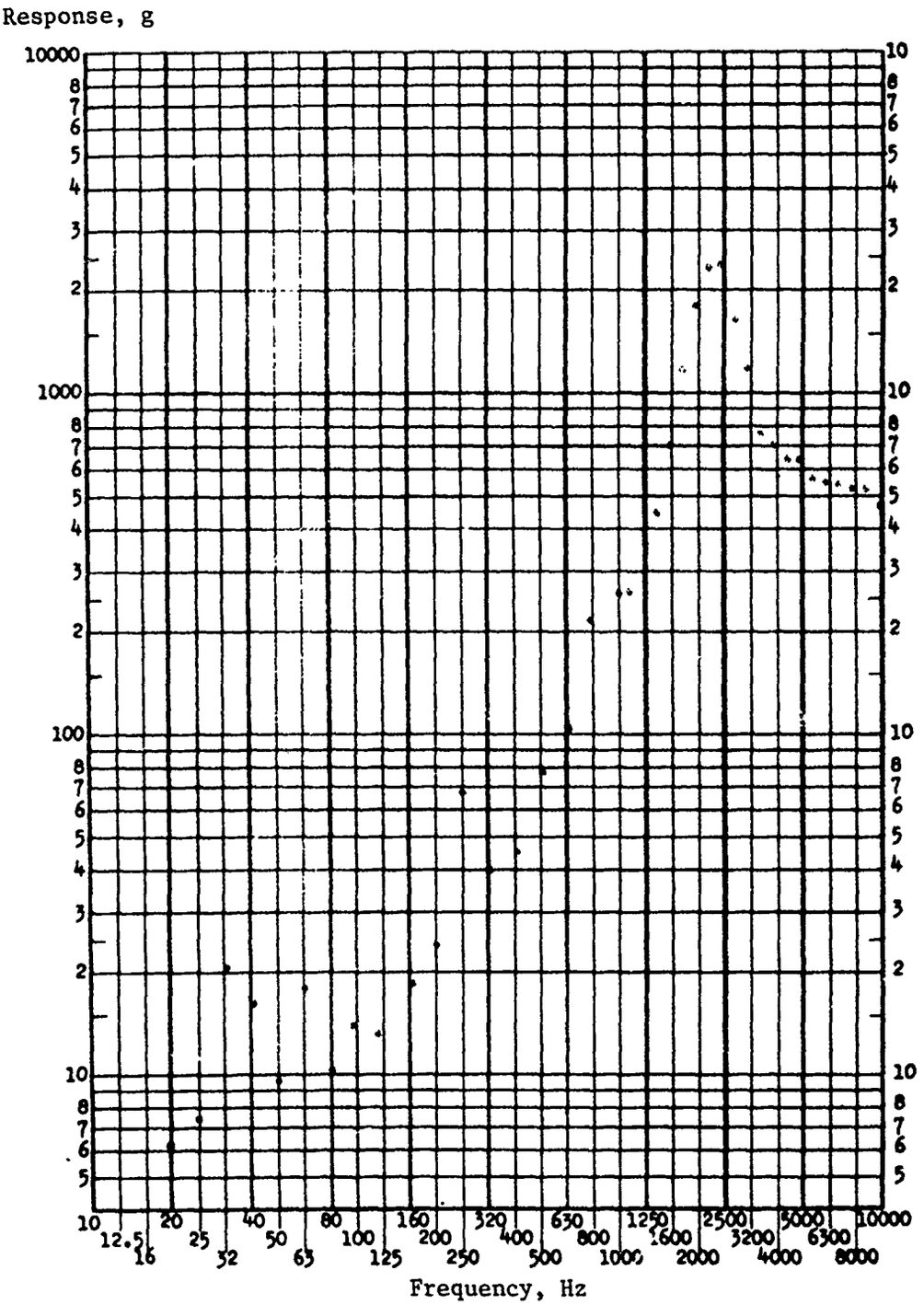
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 44 (cont)



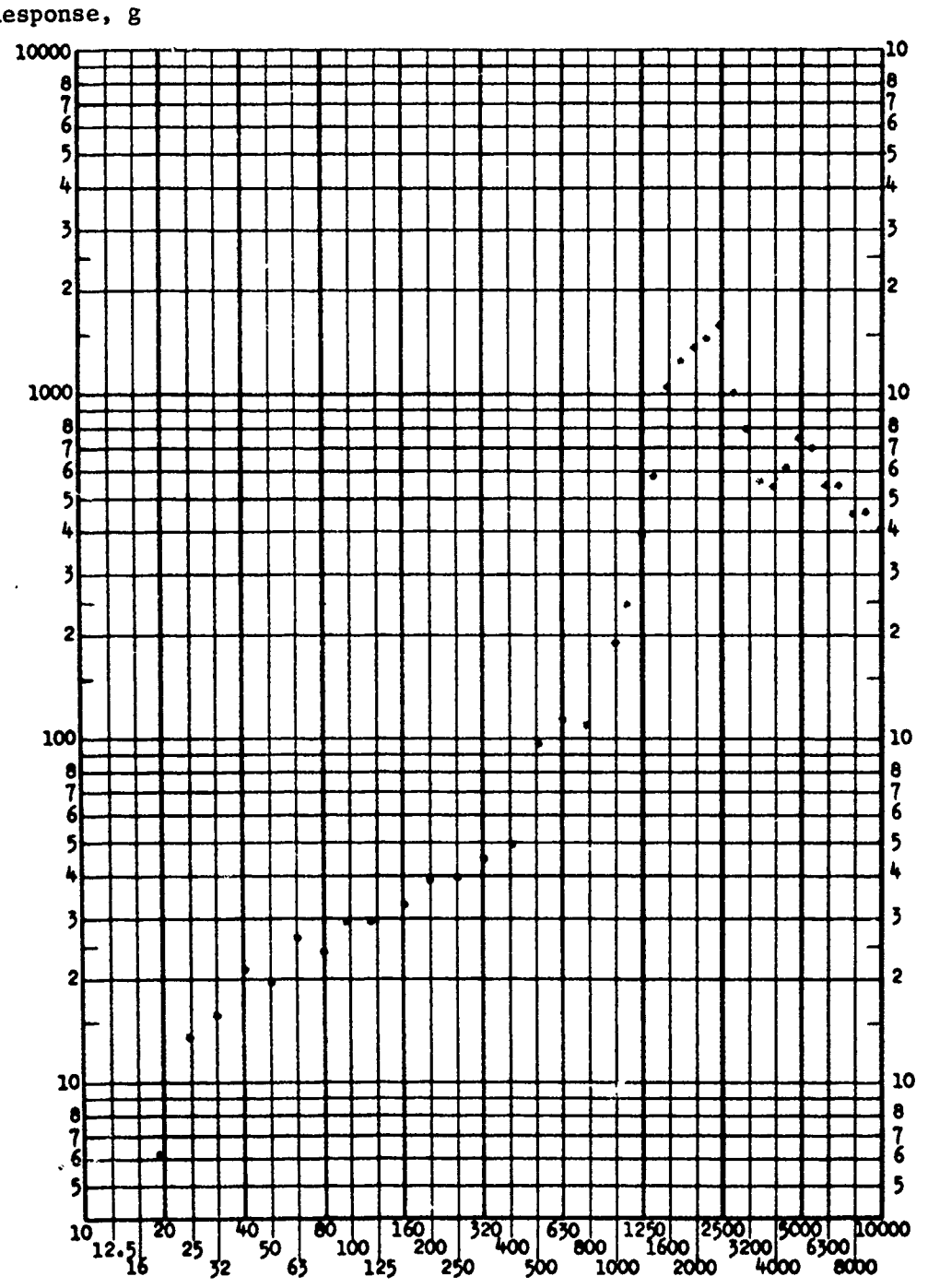
Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 44 (cont)



Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 44 (cont)



Bench Shock Test - Stage II/III Separation, Run 44
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 44 (concl)

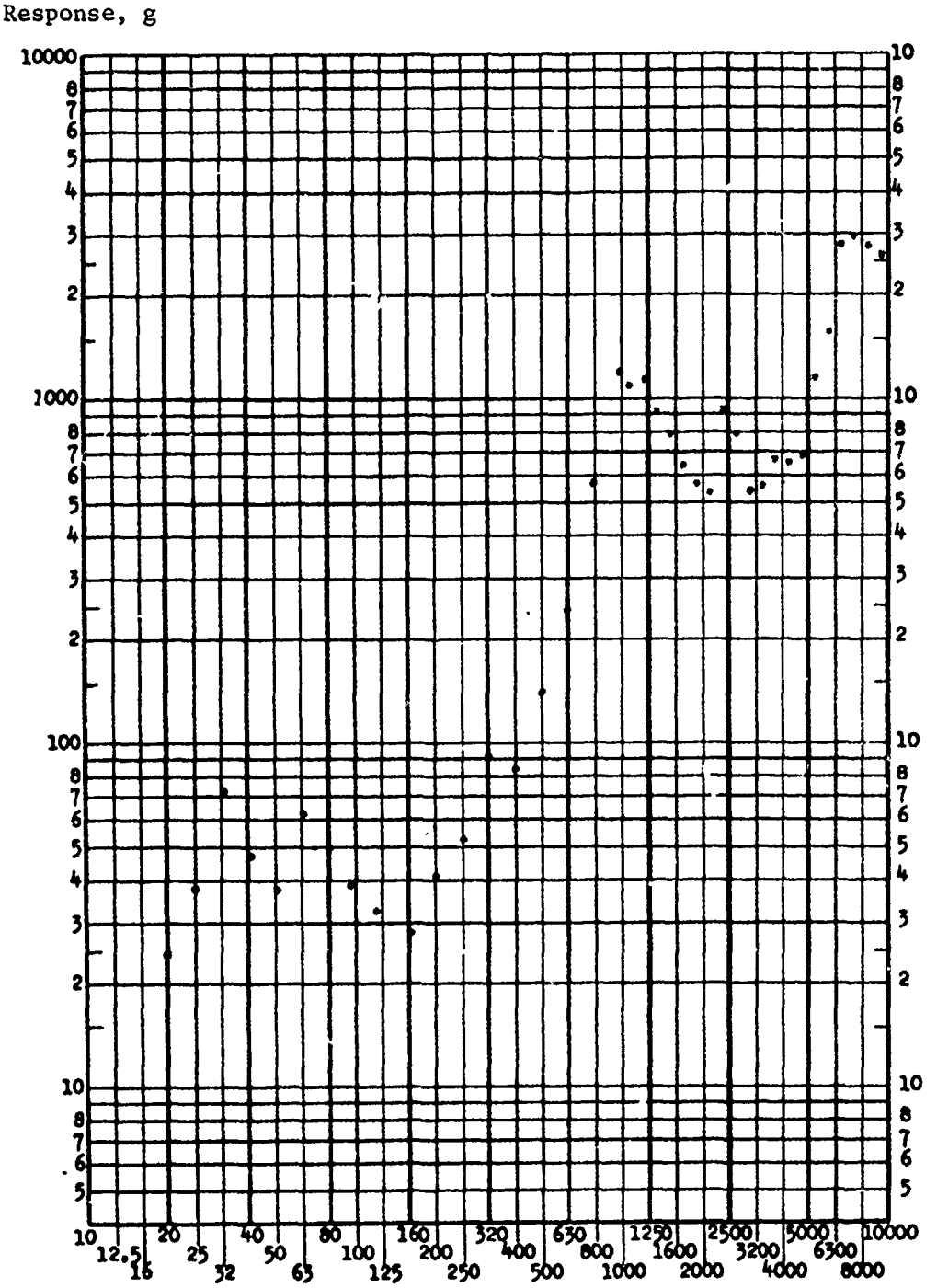
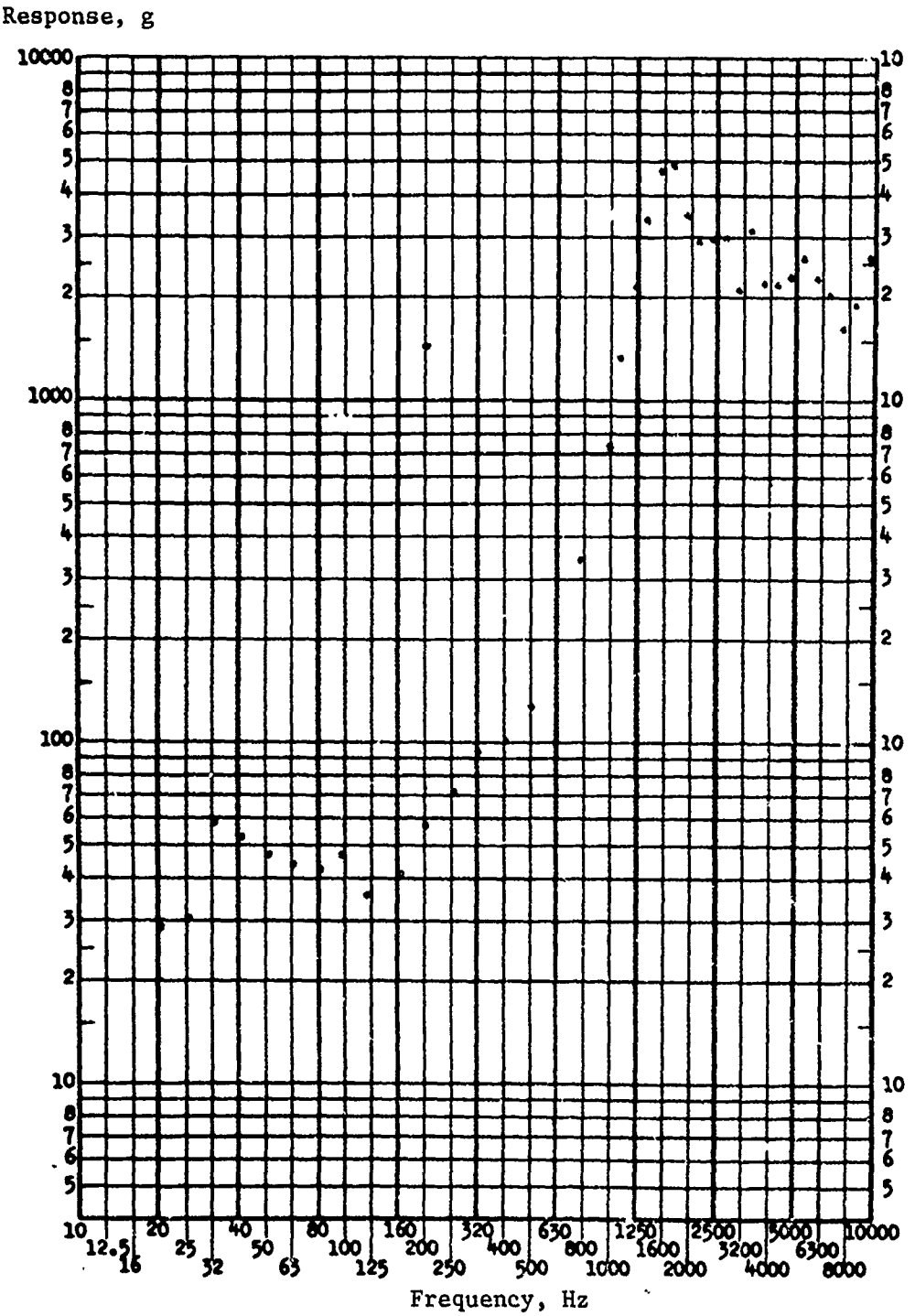
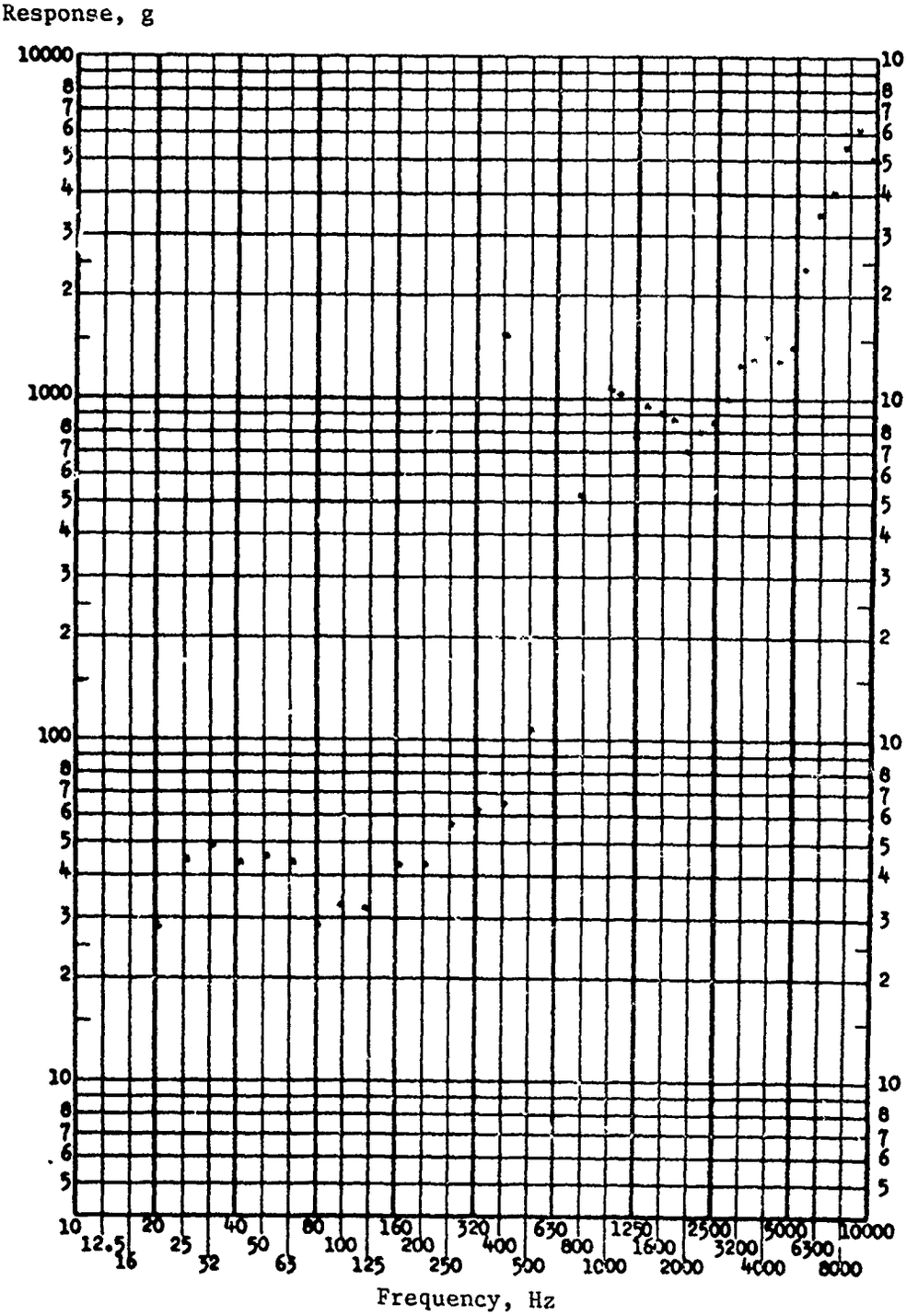


Figure 45 Run 45 Shock Response Spectrum



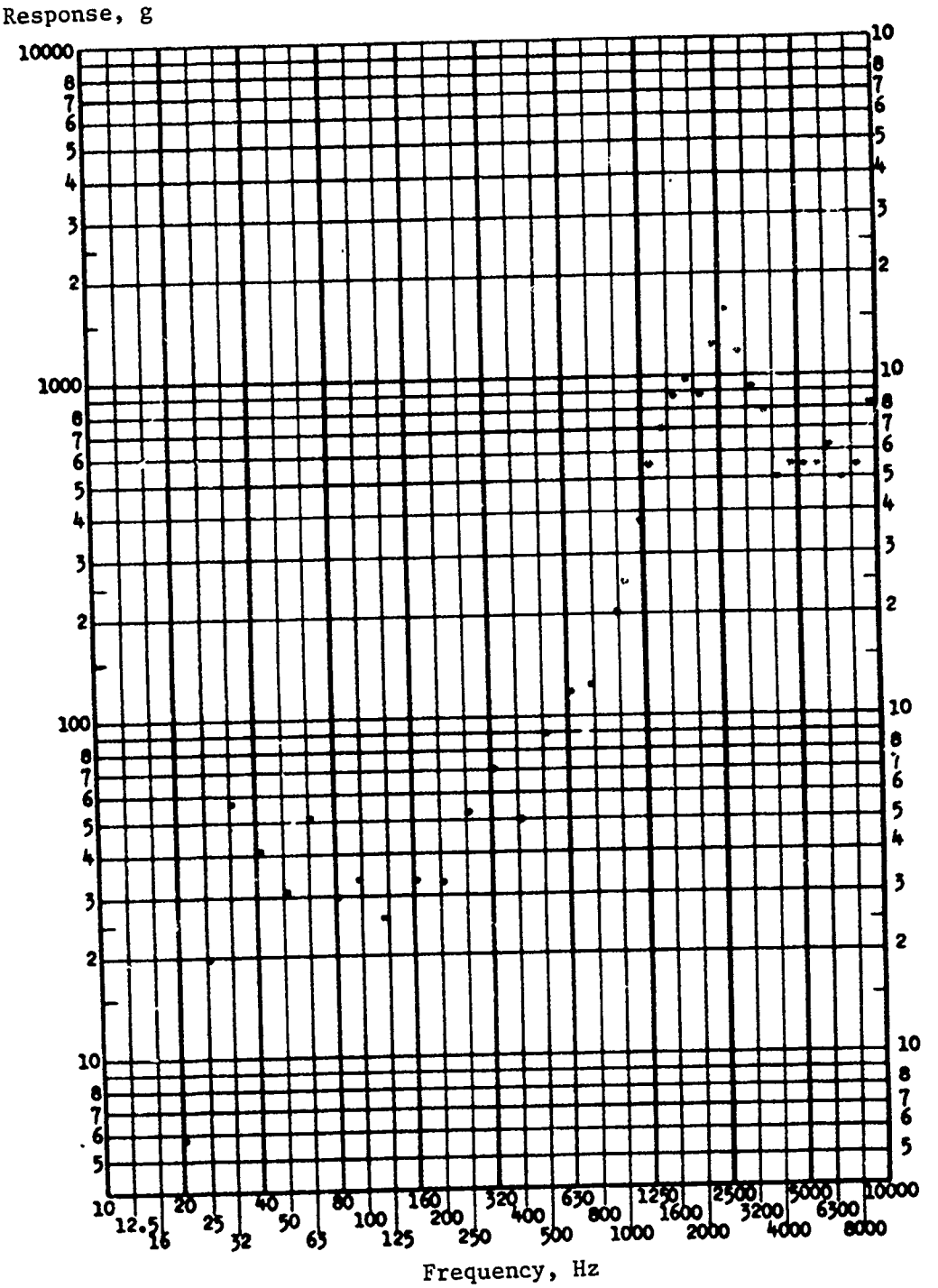
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 2 - Tangential axis longeron near station 133

Figure 45 (cont)



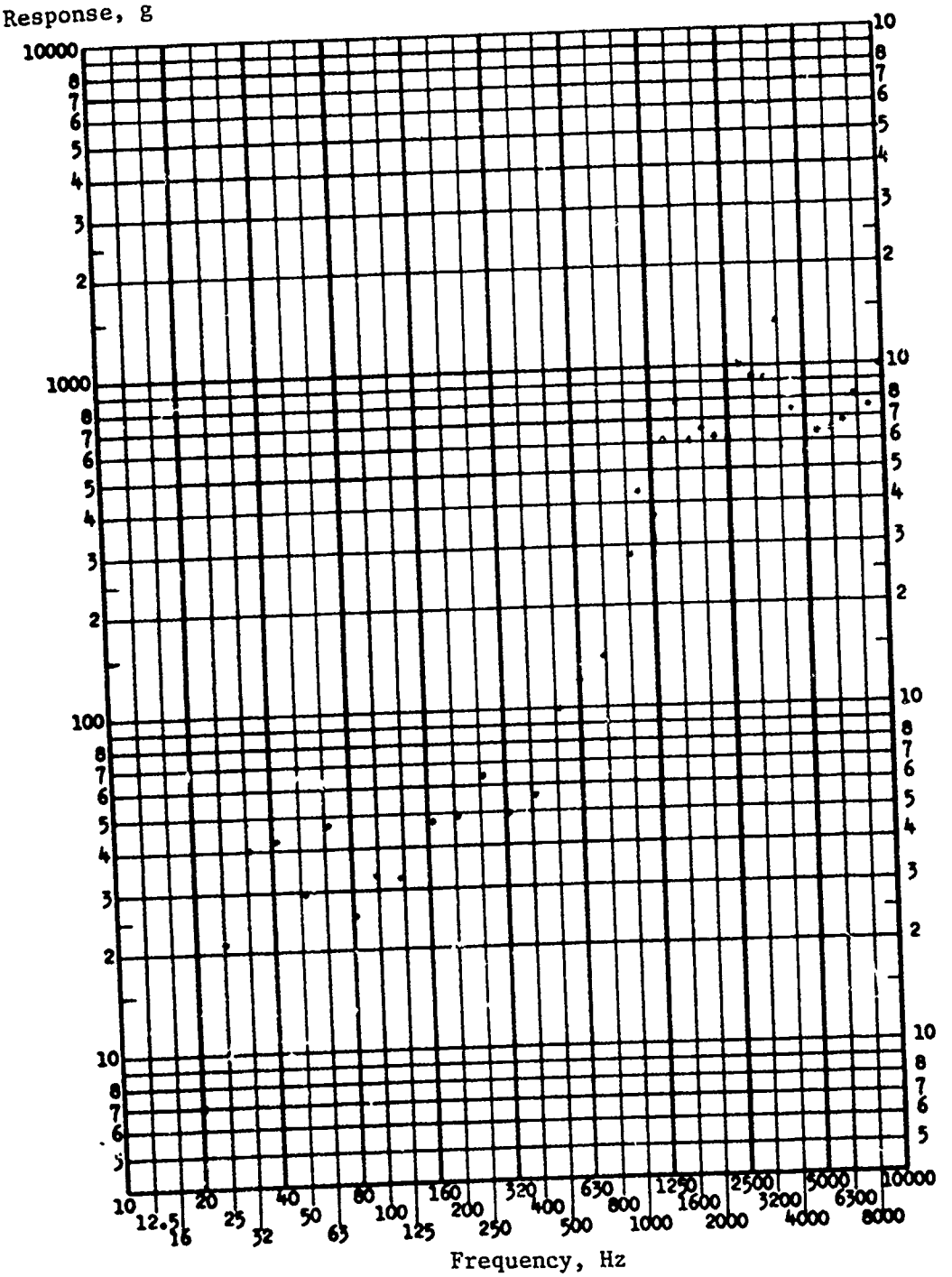
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 3 - Radial axis longeron near station 133

Figure 45 (cont)



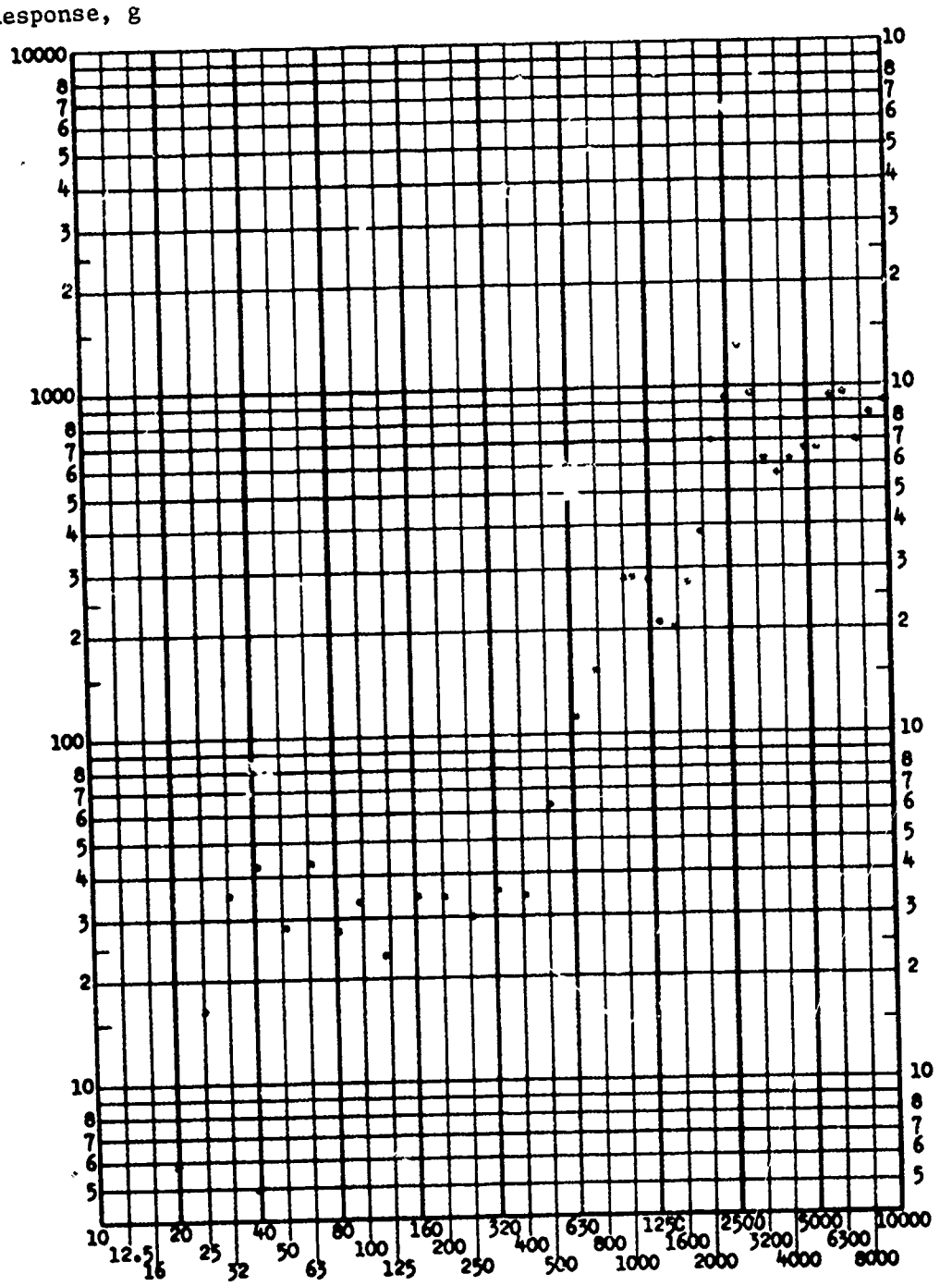
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 45 (cont)



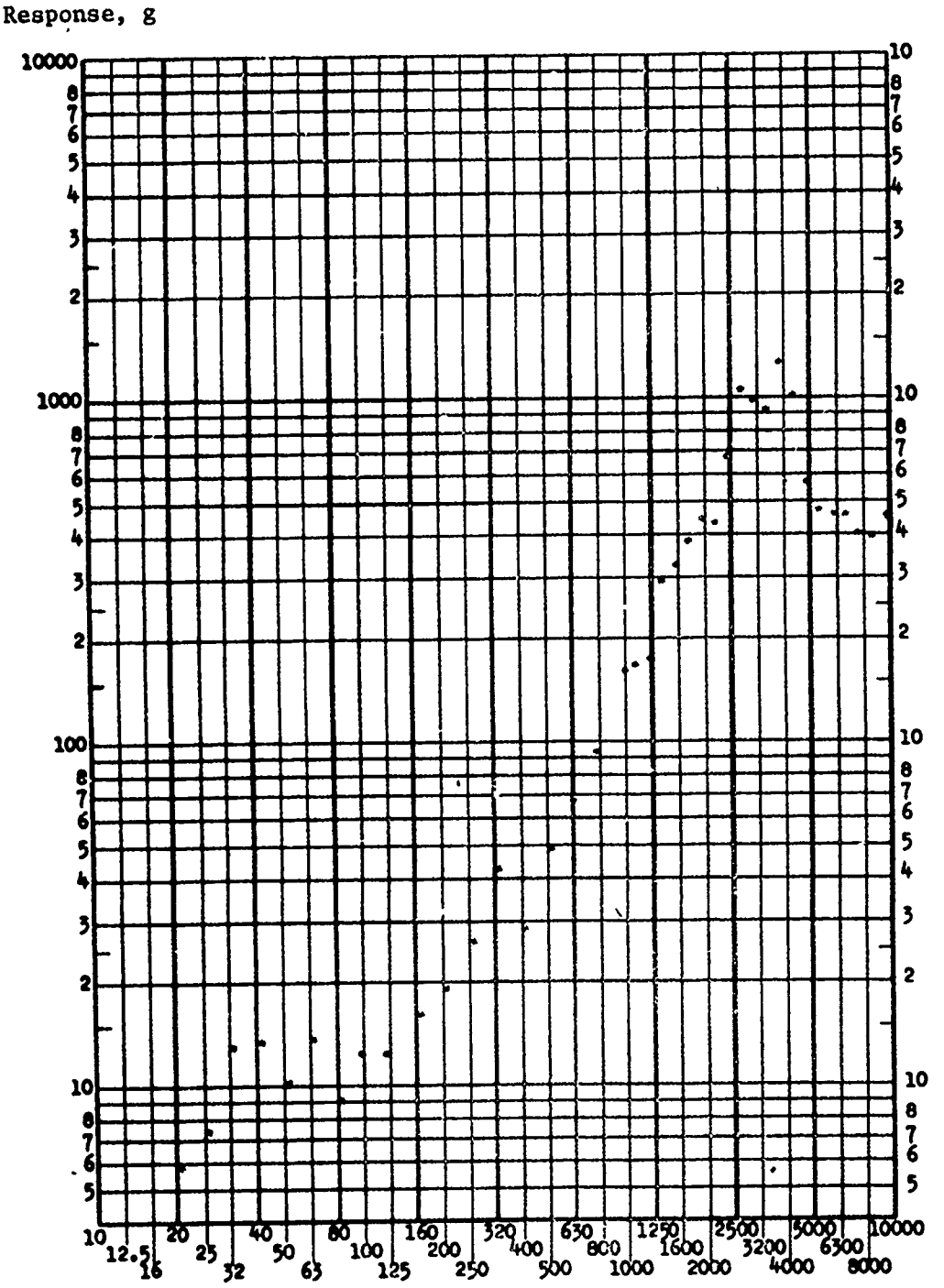
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 5 - Tangential axis longeron near station 117

Figure 45 (cont)



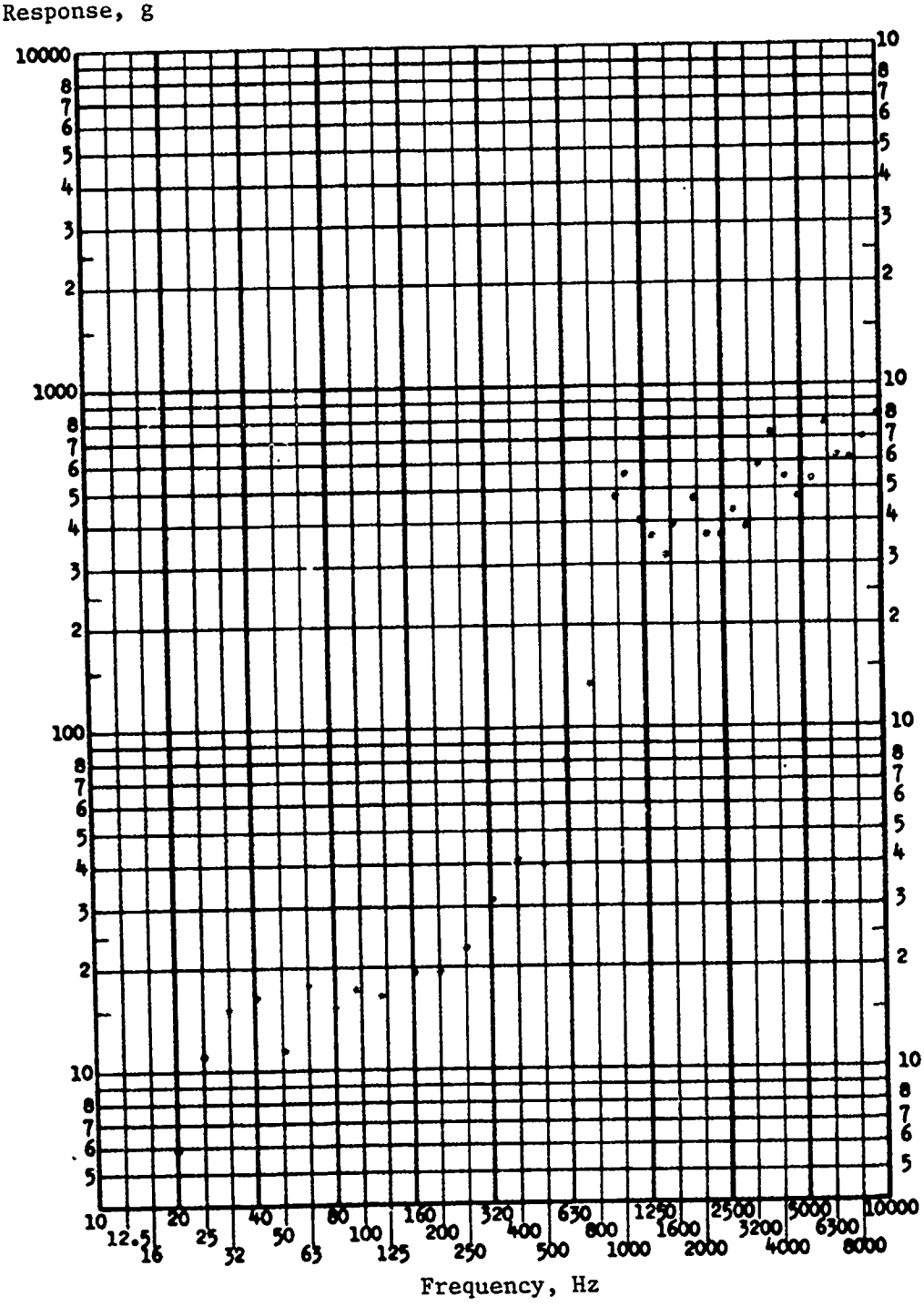
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 6 - Radial axis longeron near station 117

Figure 45 (cont)



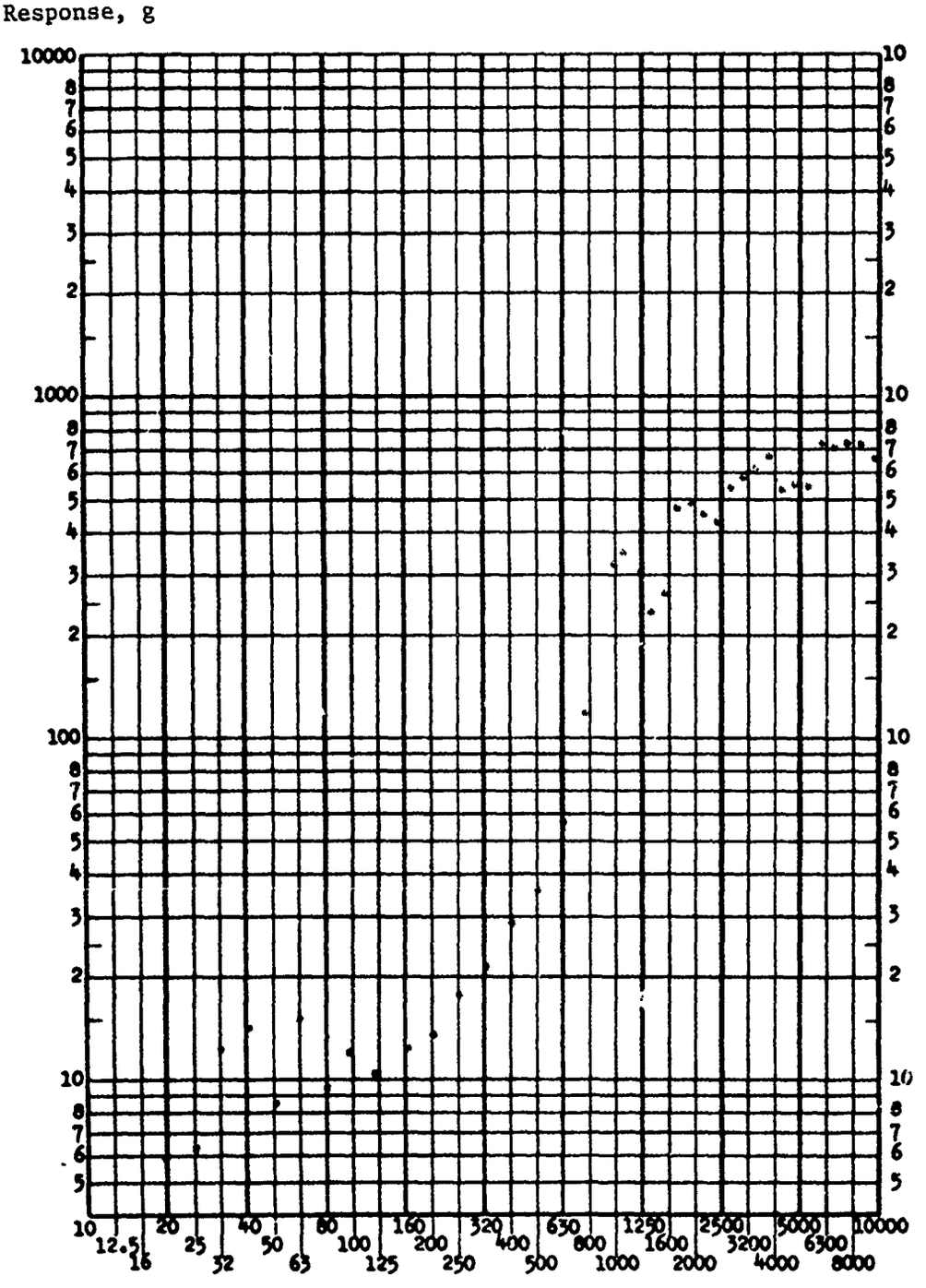
Bench Shock Test - Stage II/III Separation, Run 45_
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 45 (cont)



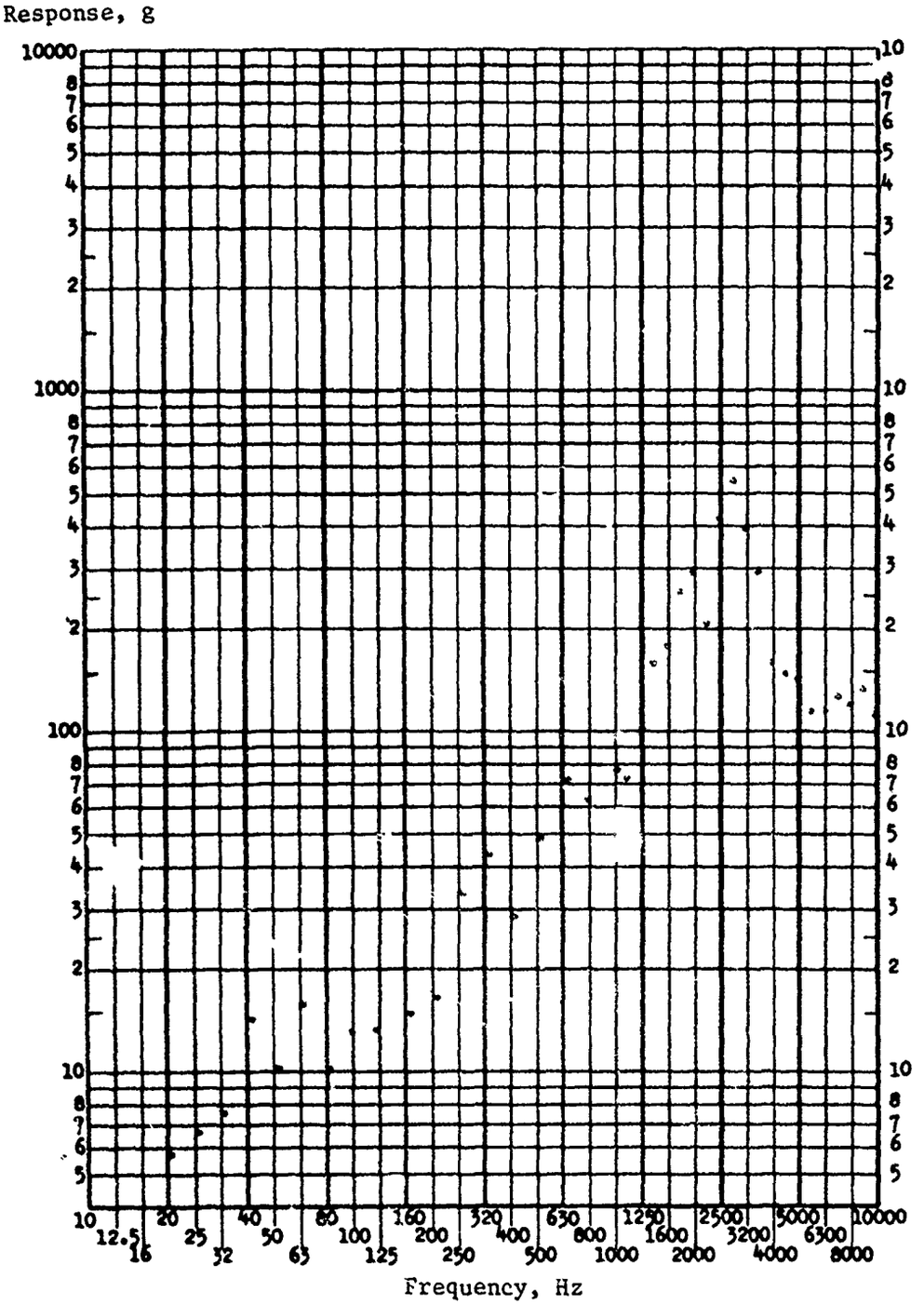
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 8 - Tangential axis longeron near station 77

Figure 45 (cont)



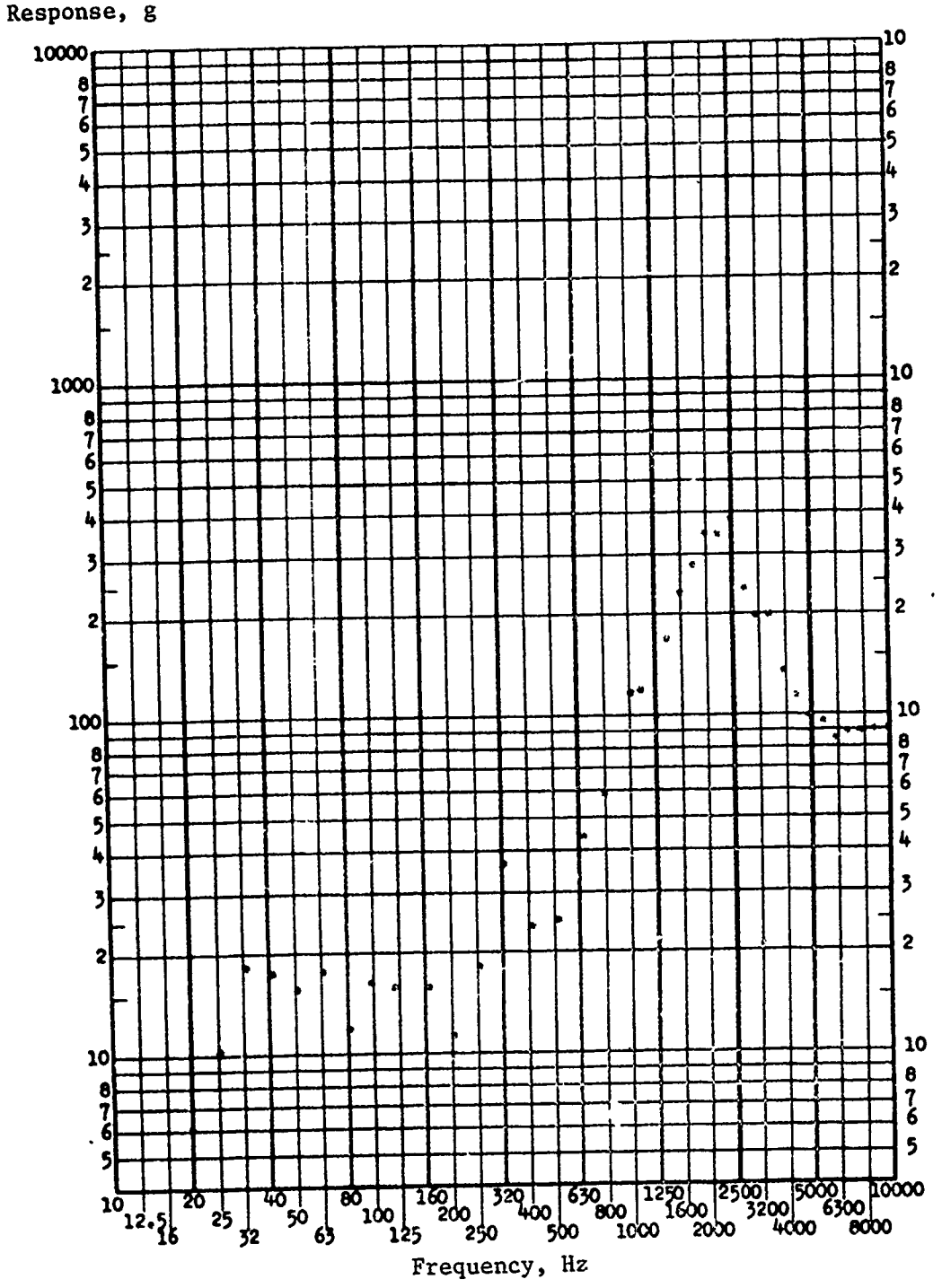
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 9 - Radial axis longeron near station 77

Figure 45 (cont)



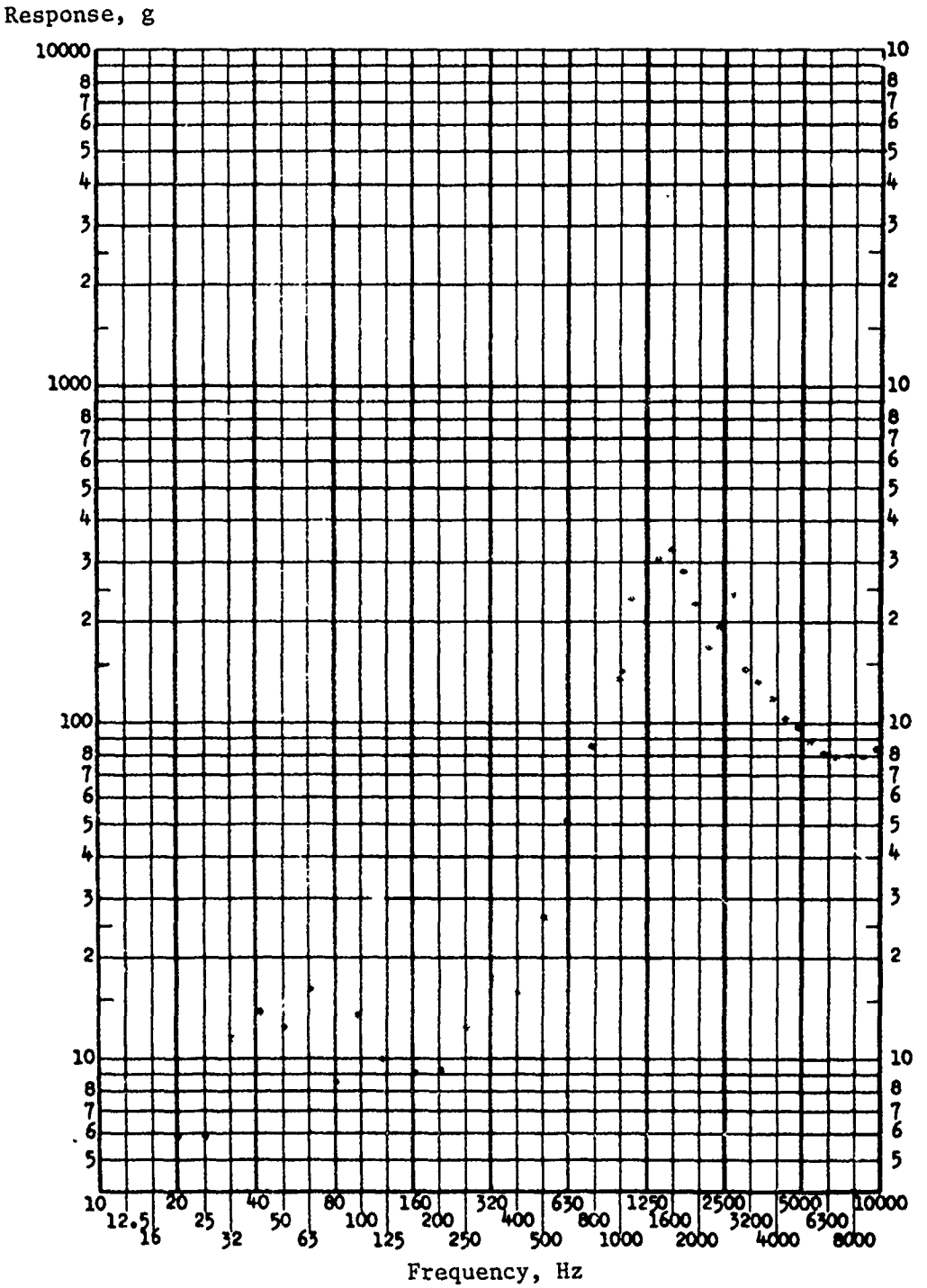
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 45 (cont)



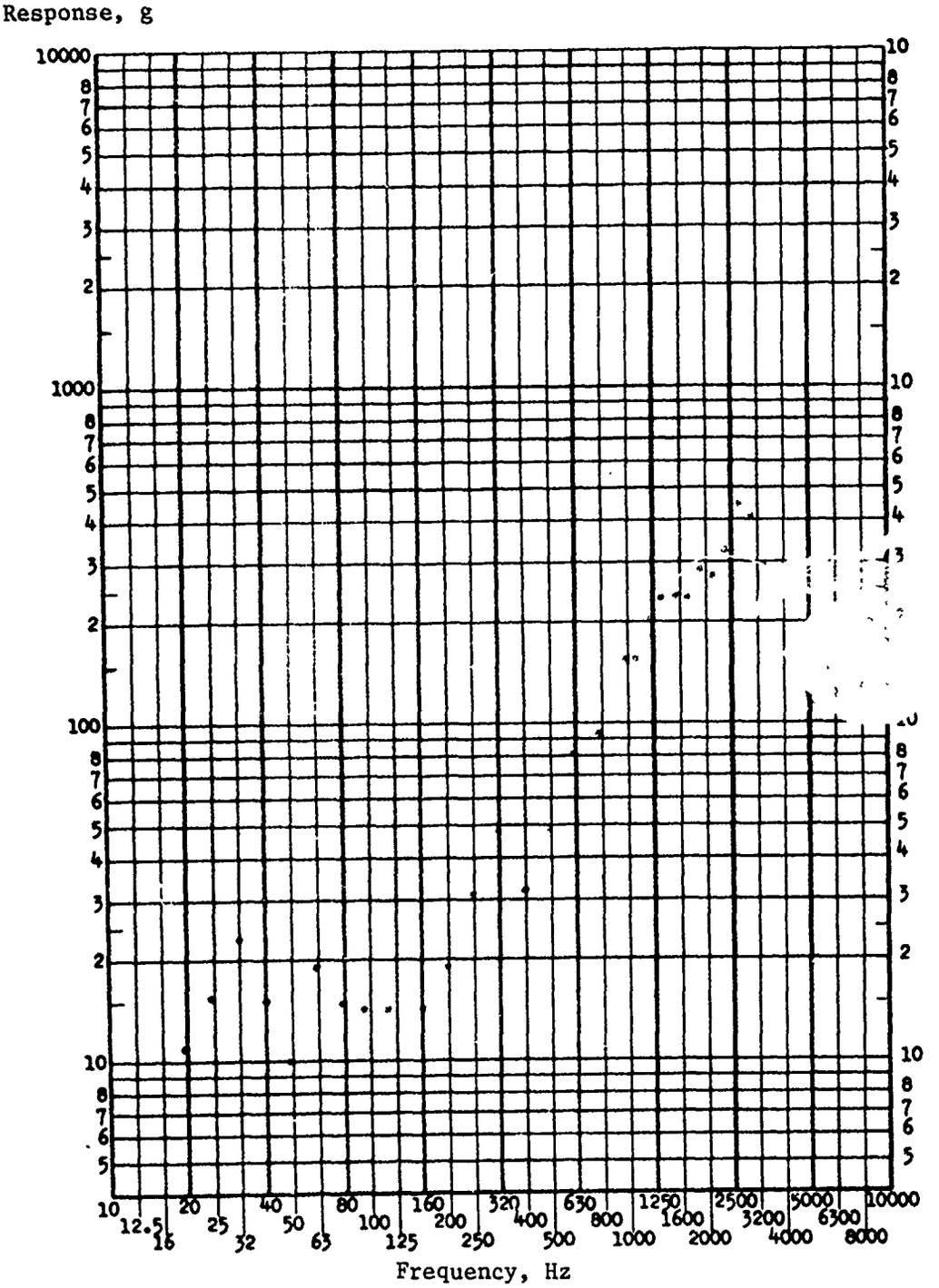
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 45 (cont)



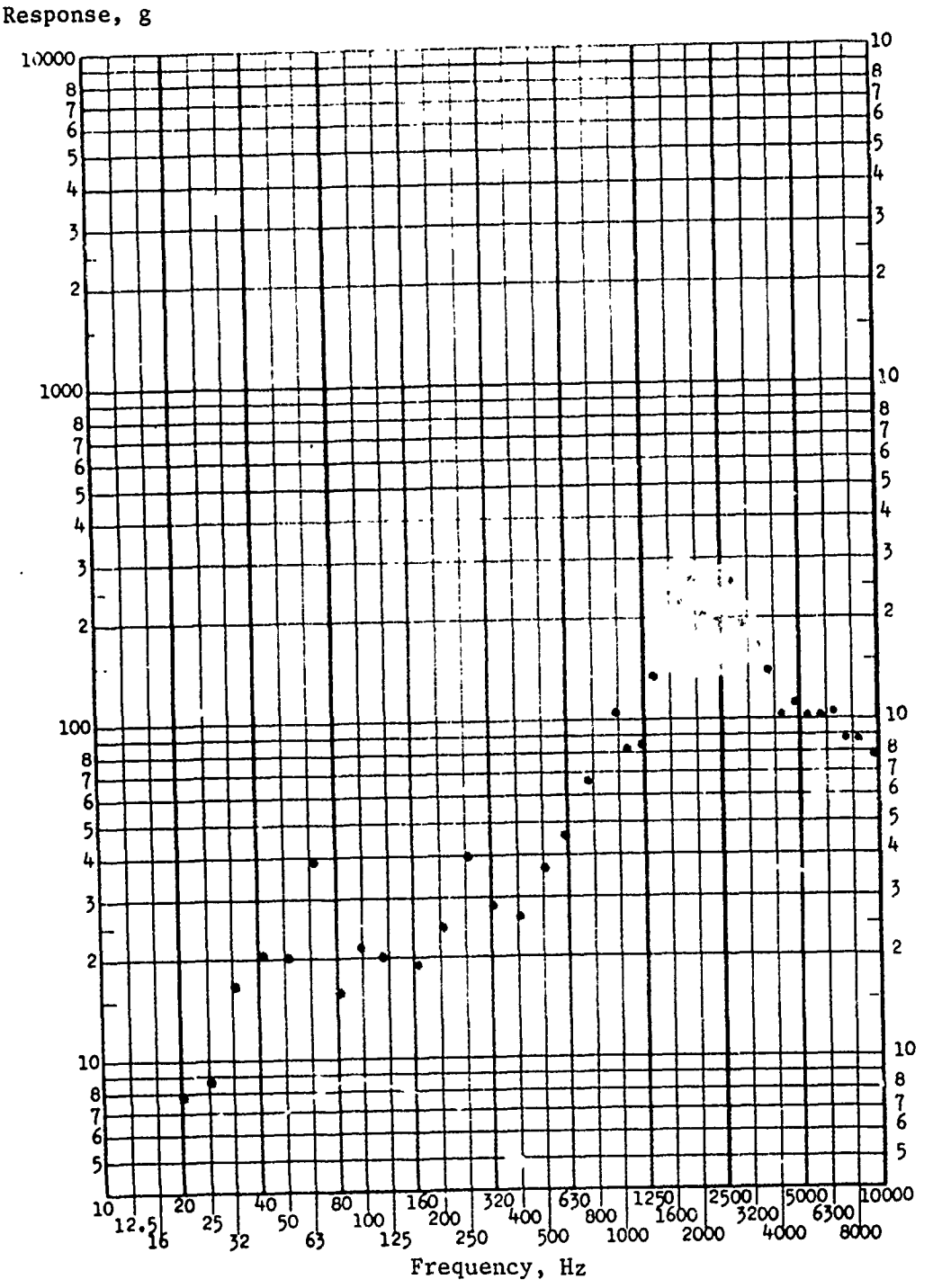
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 45 (cont)



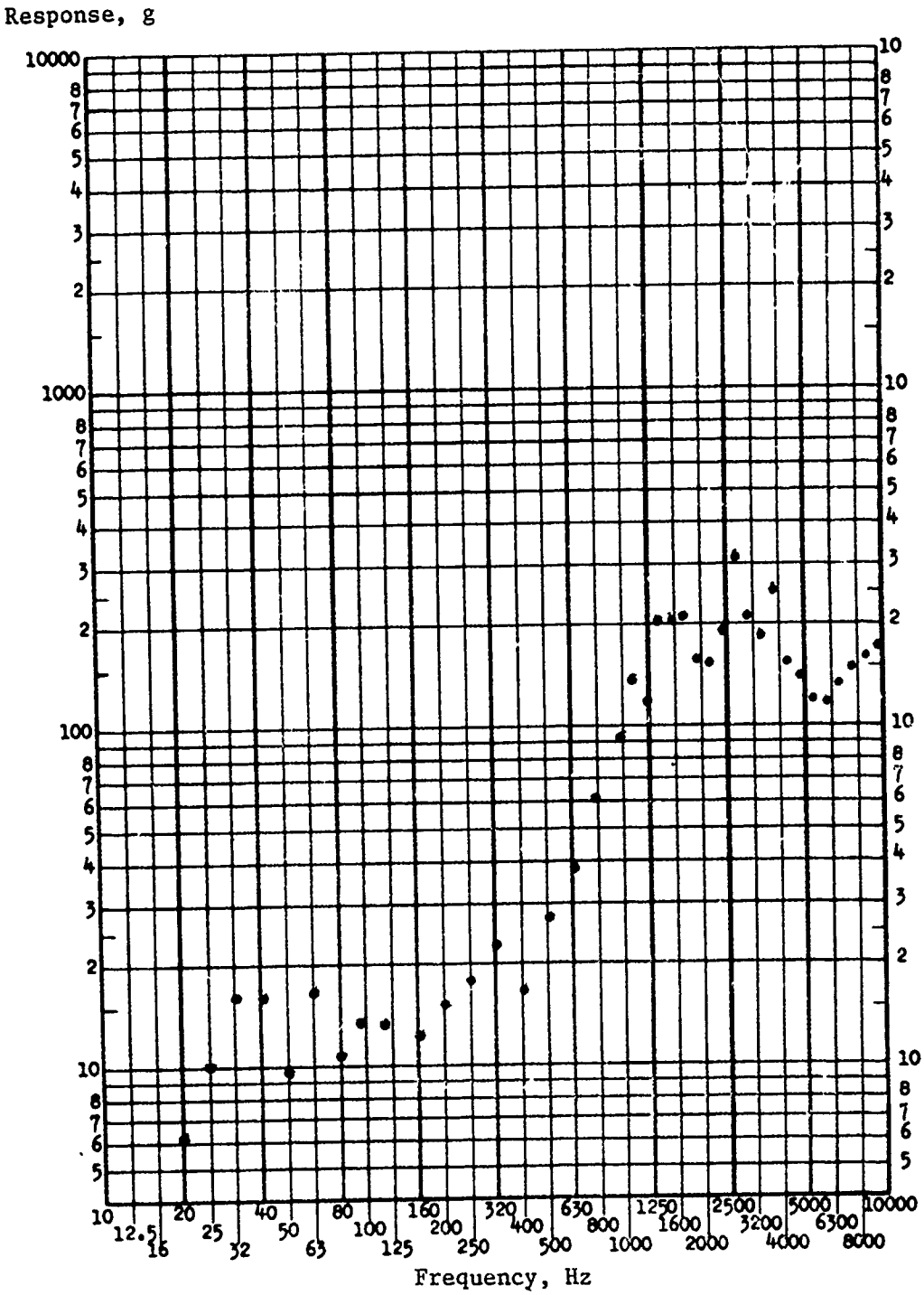
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 13 · Longitudinal axis truss top
near longeron attach point

Figure 45 (cont)



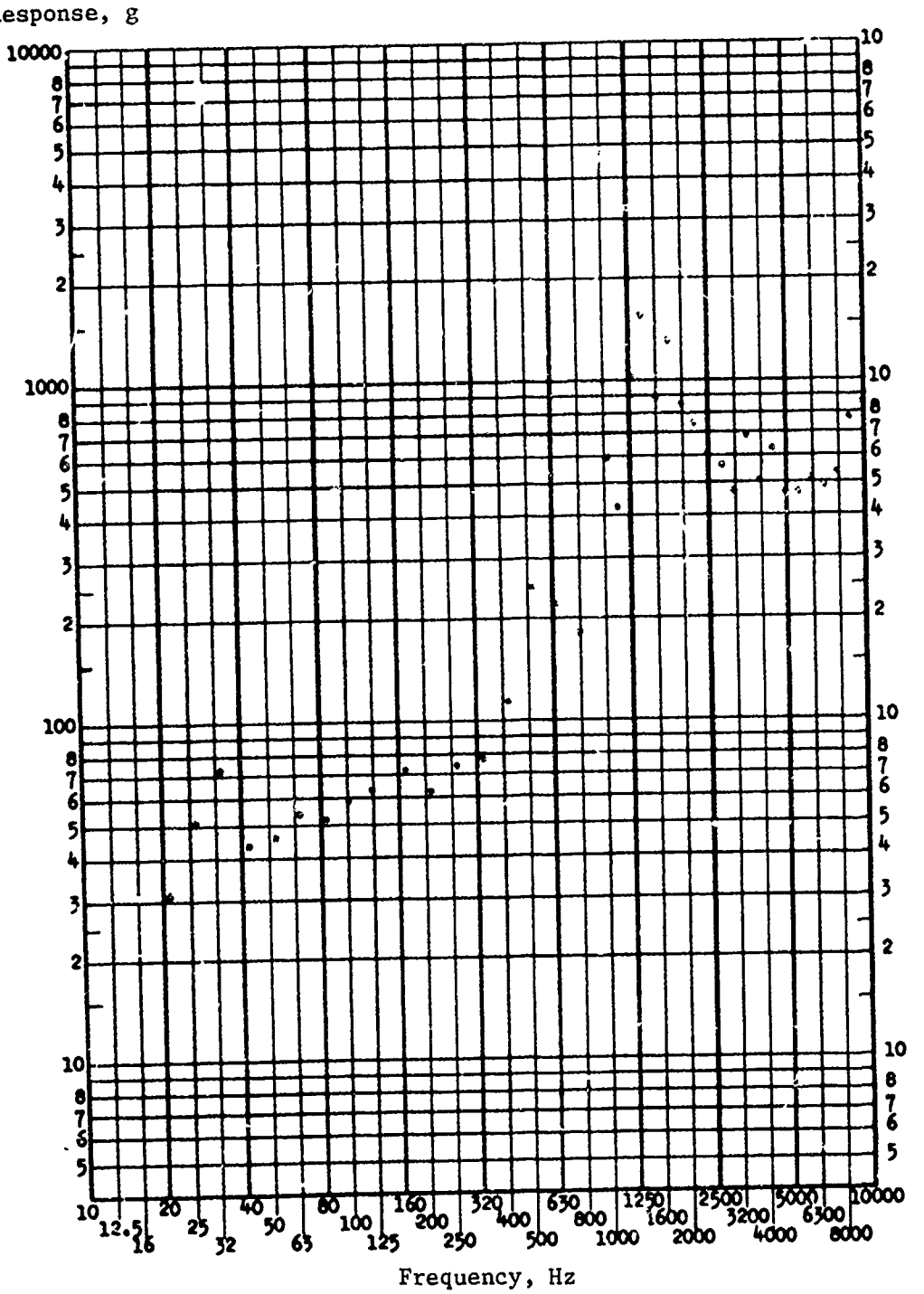
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 45 (cont)



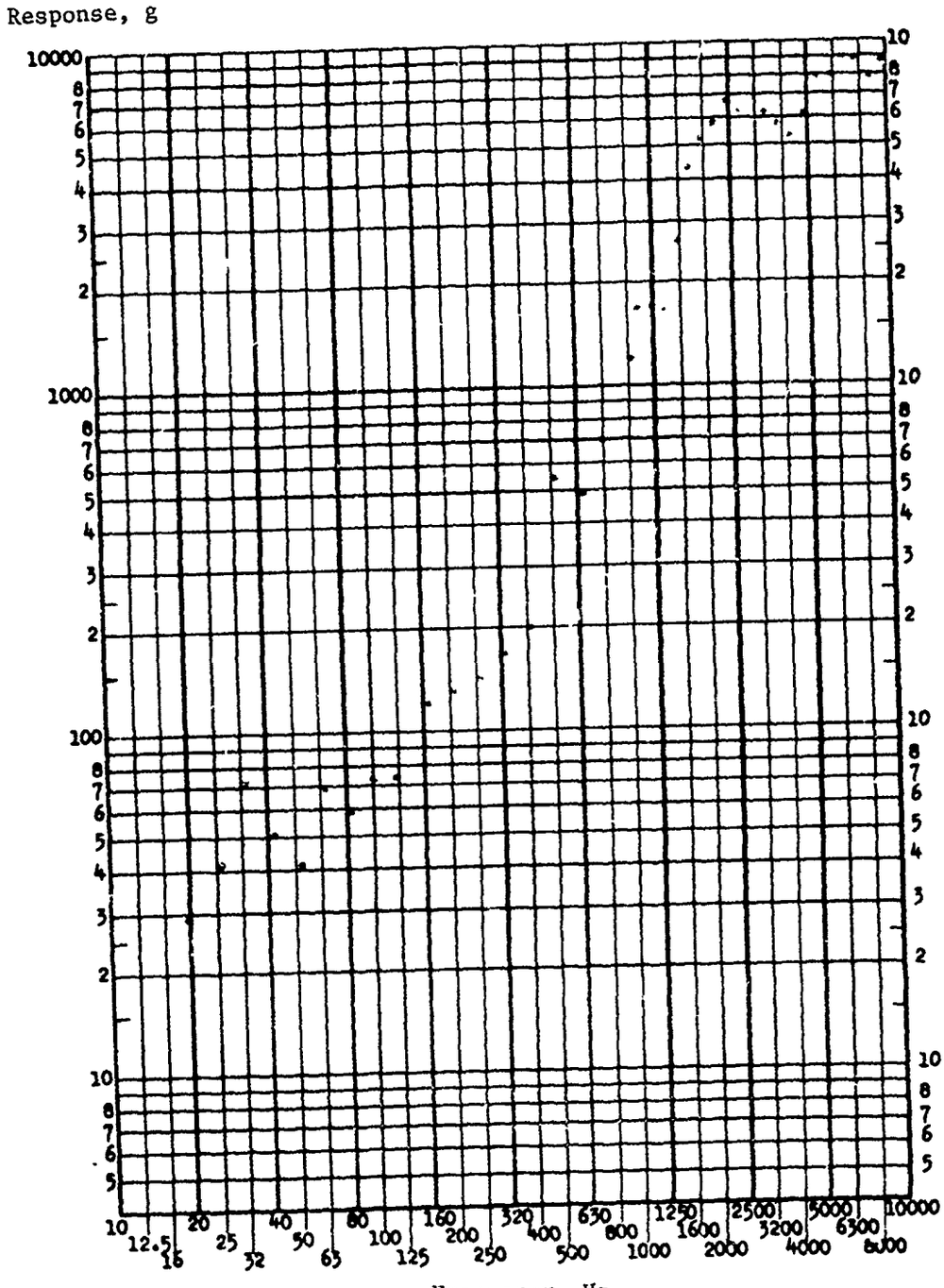
Bench Shock Test - Stage II/III Separation, Run 45
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 45 (concl)



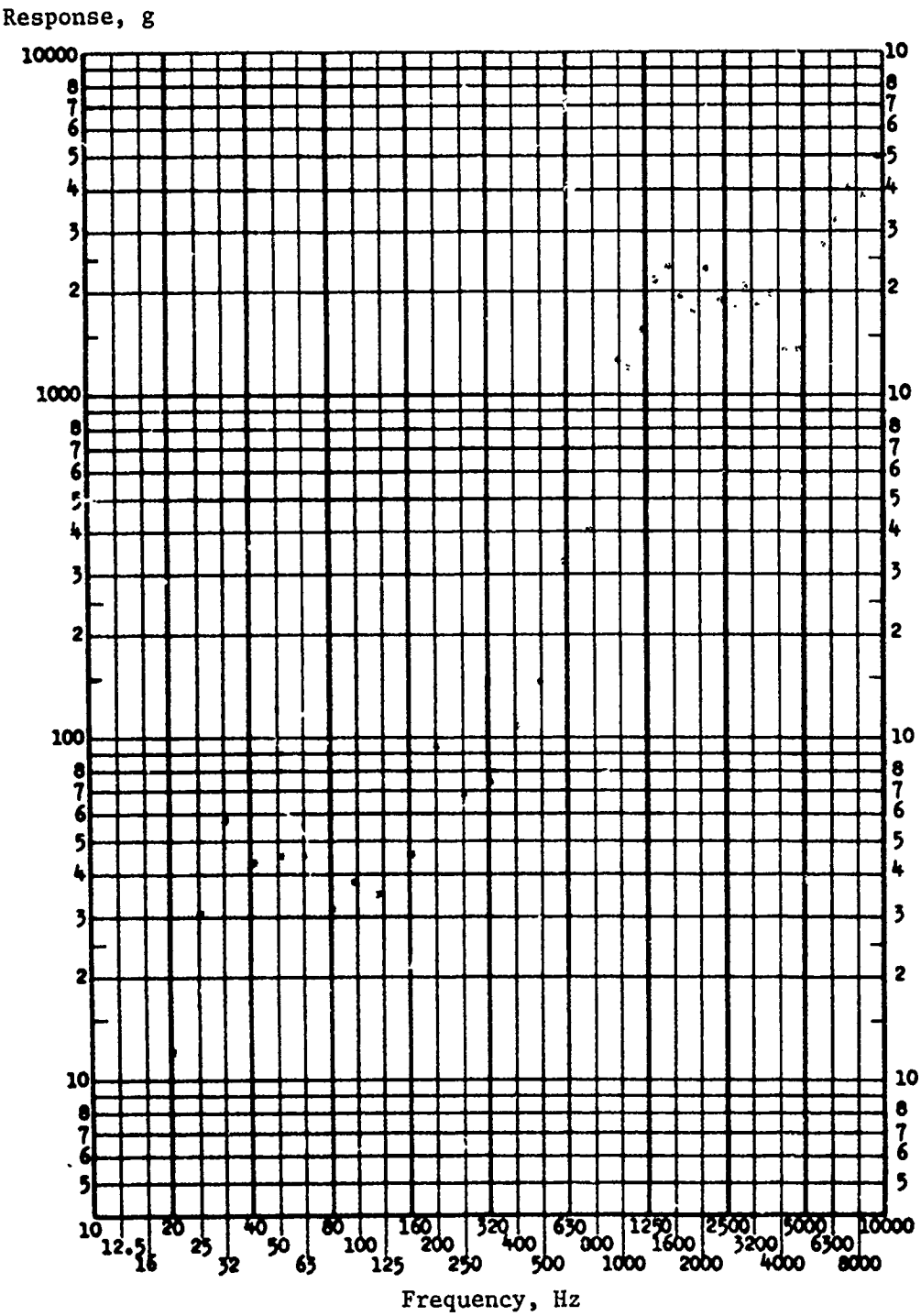
Bench Shock Test - Stage II/III Separation, Run 46 _
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 46 Run 46 Shock Response Spectrum



Bench Shock Test - Stage II/III Separation, Run 46 _
Measurement No. 2 - Tangential axis longeron near station 133

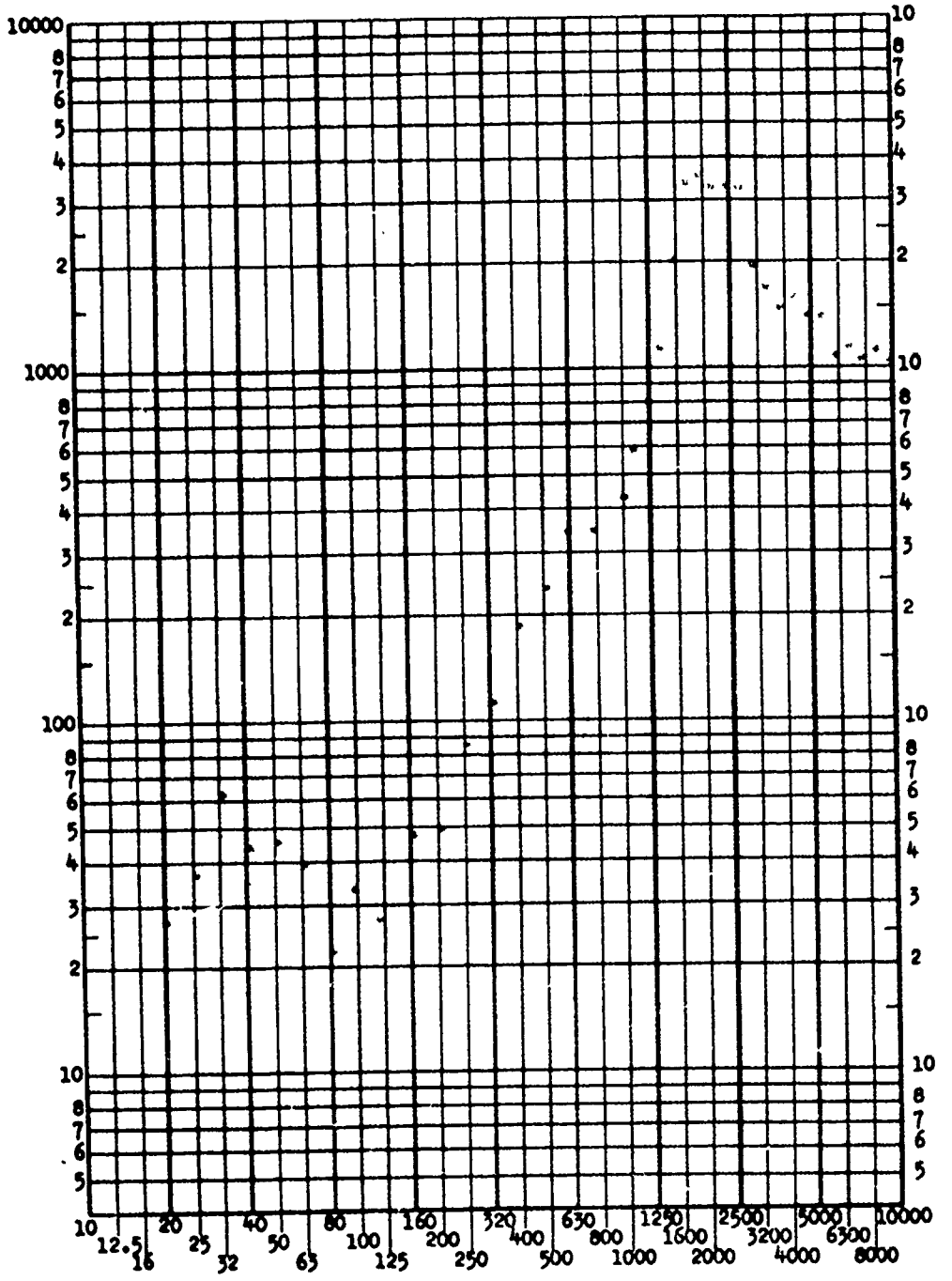
Figure 46 (cont)



Bench Shock Test - Stage II/III Separation, Run 46 _
Measurement No. 3 - Radial axis longeron near station 133

Figure 46 (cont)

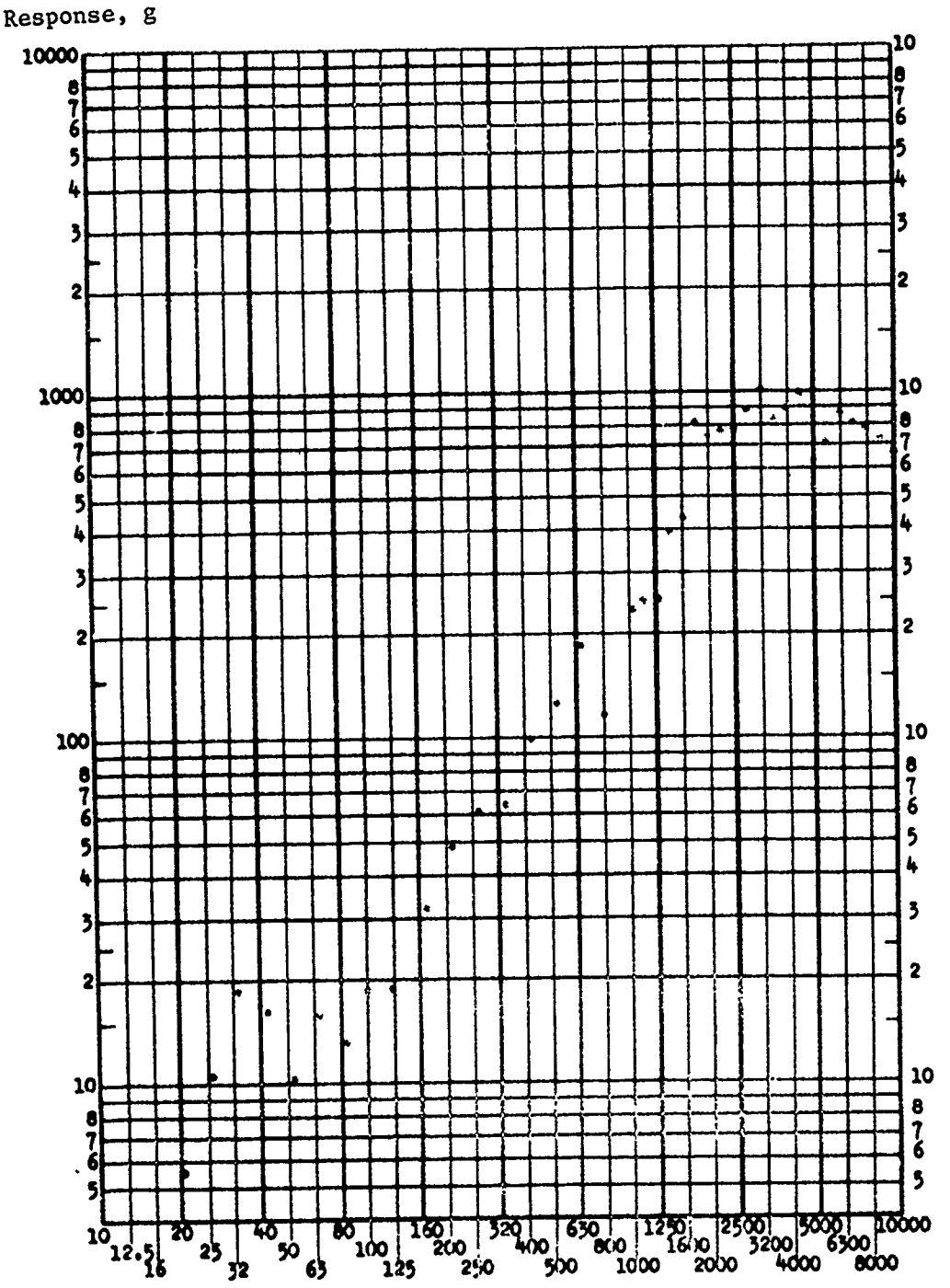
Response, g



Frequency, Hz

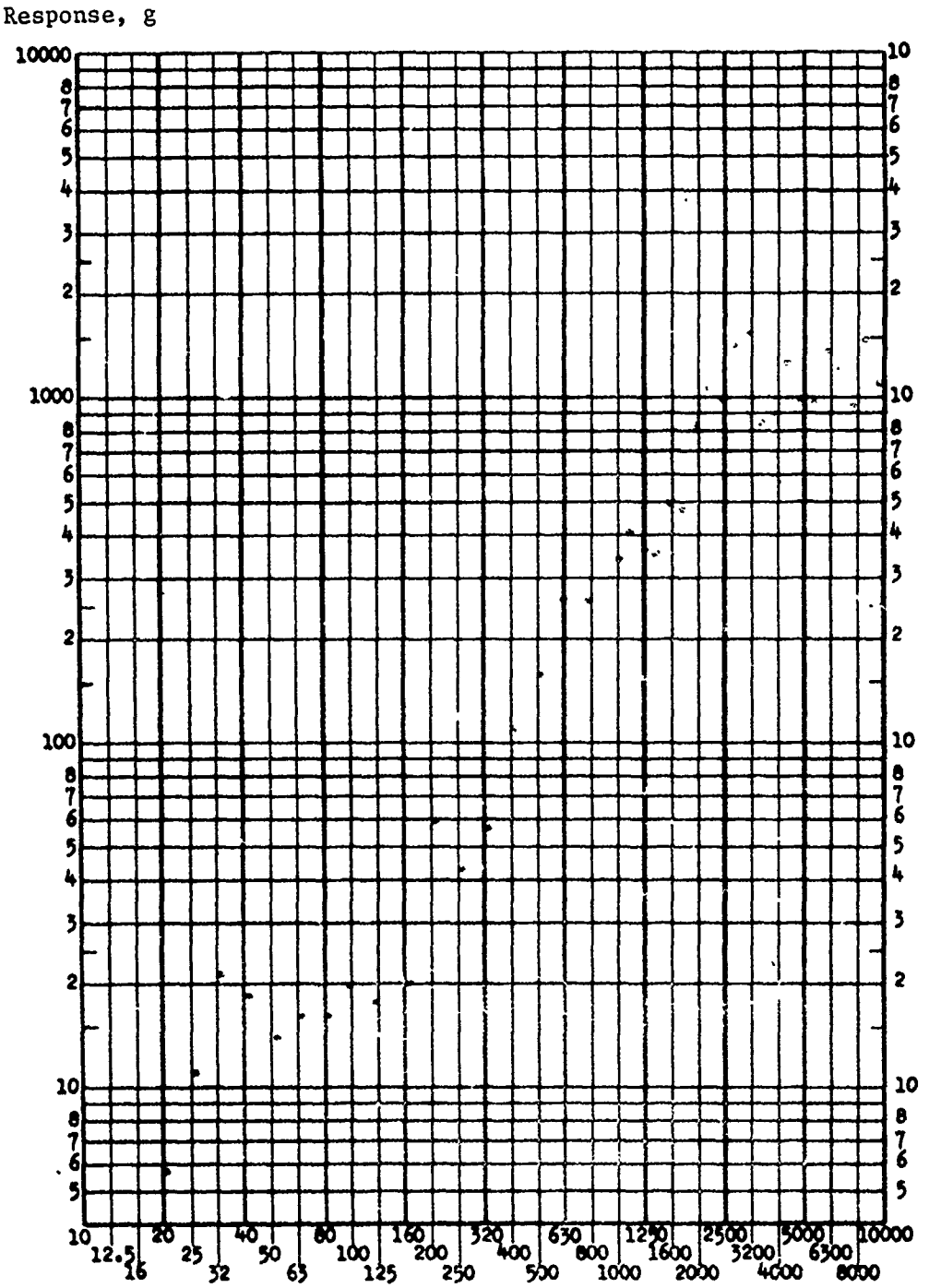
Bench Shock Test - Stage II/III Separation, Run 46 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 46 (cont)



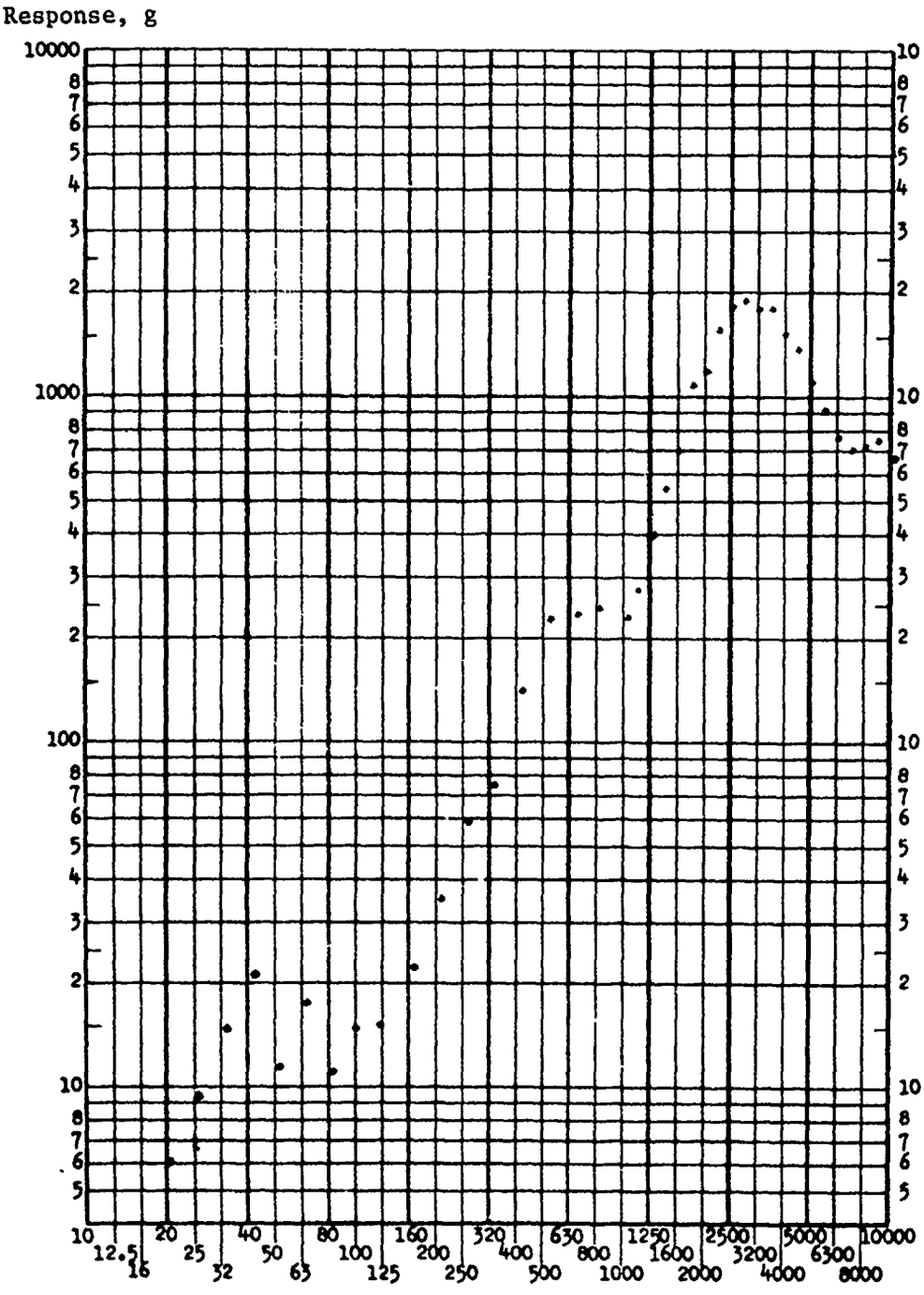
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 5 - Tangential axis longeron near station 117

Figure 46 (conv)



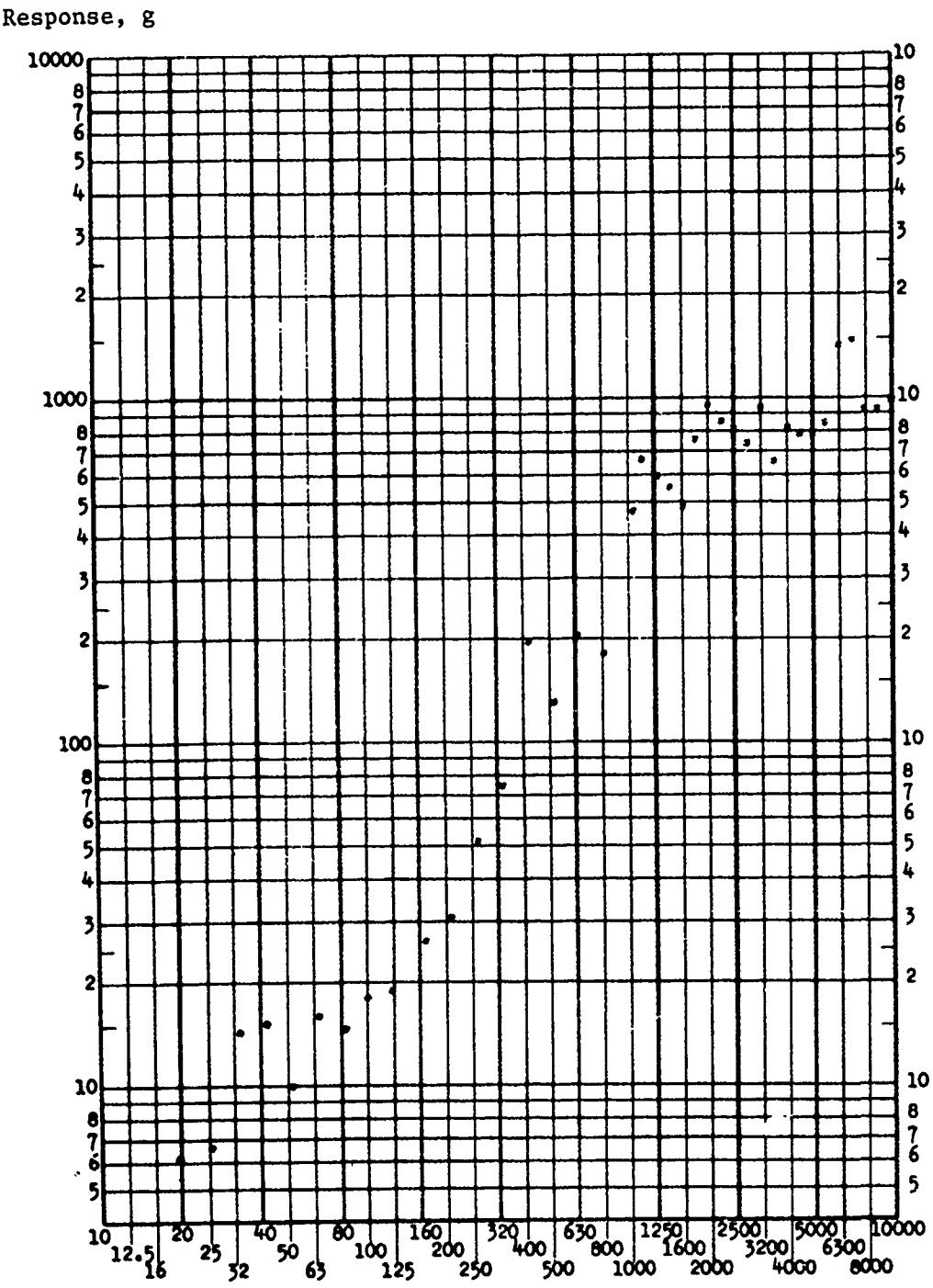
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 6 - Radial axis iongeron near station 117

Figure 46 (cont)



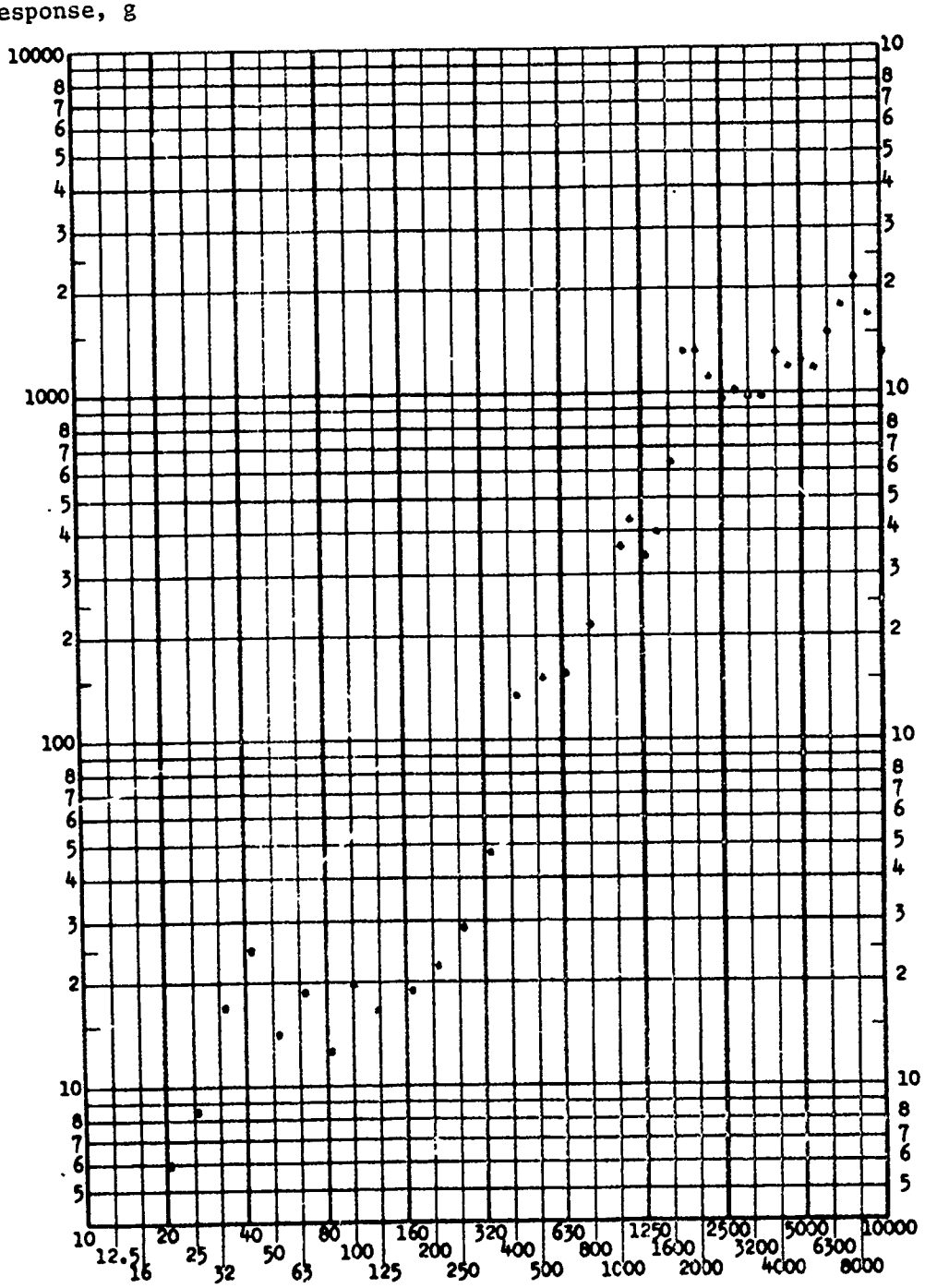
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 16 (cont)



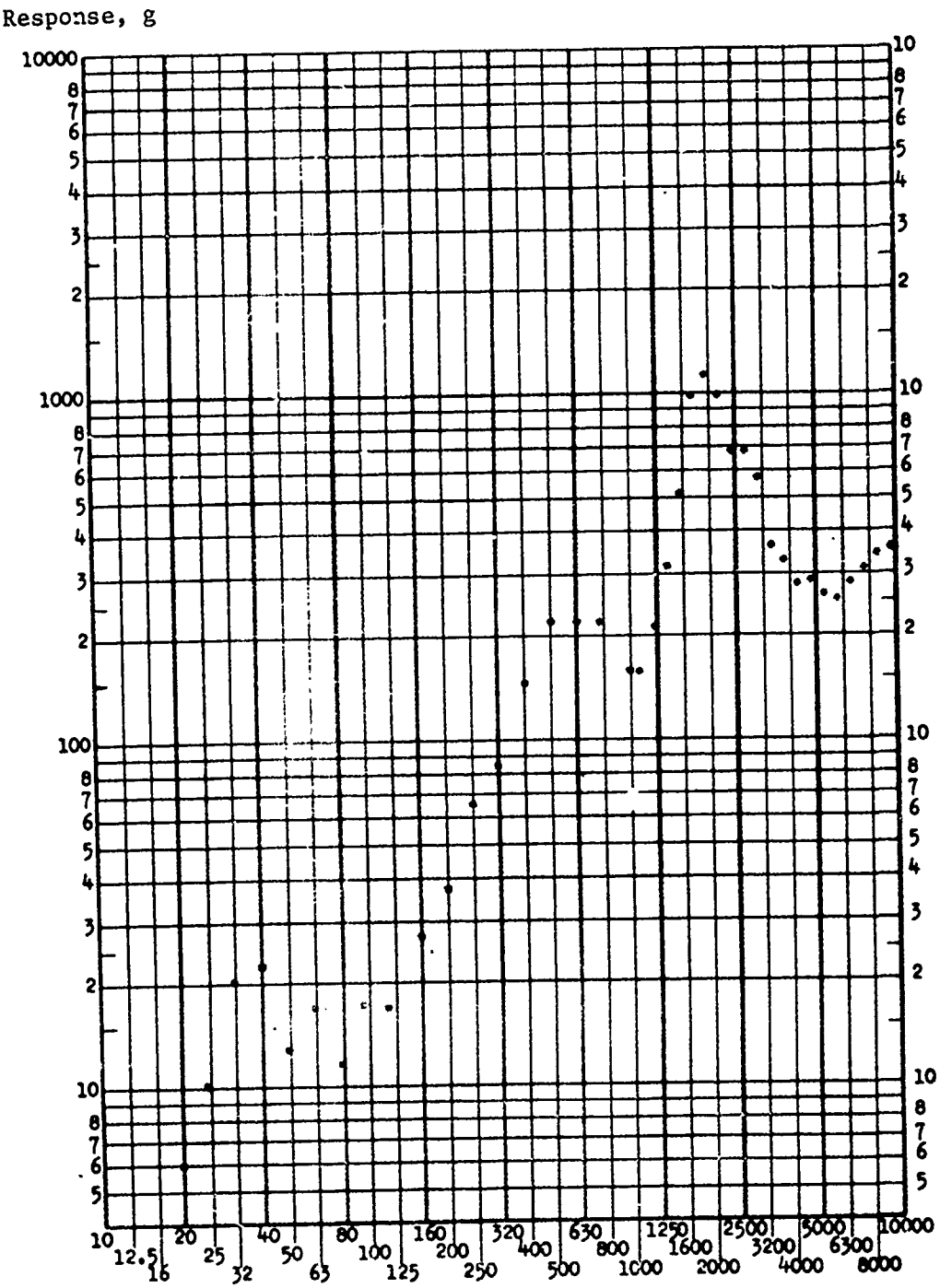
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 8 - Tangential axis longeron near station 77

Figure 46 (cont)



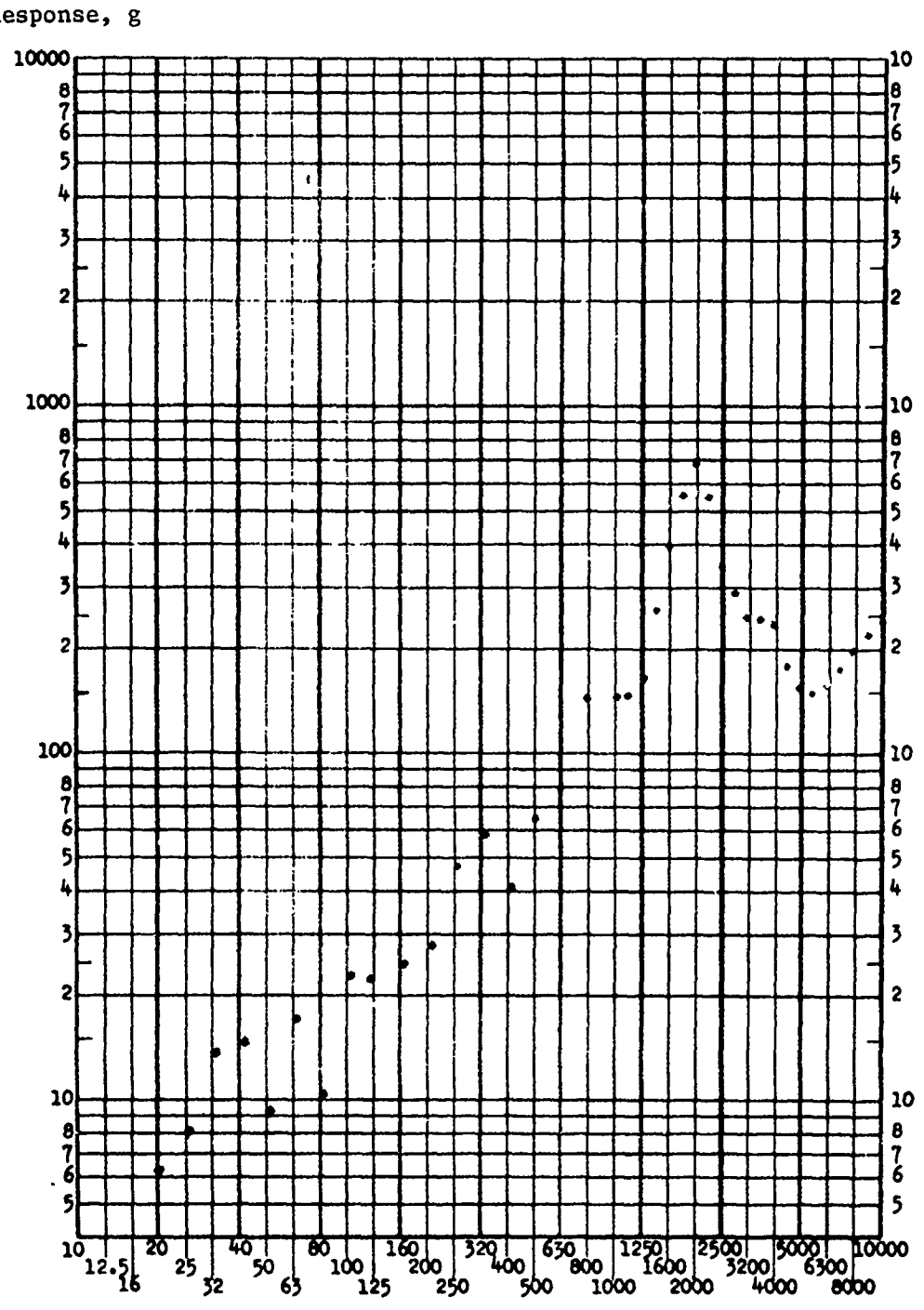
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 9 - Radial axis longeron near station 77

Figure 46 (cont)



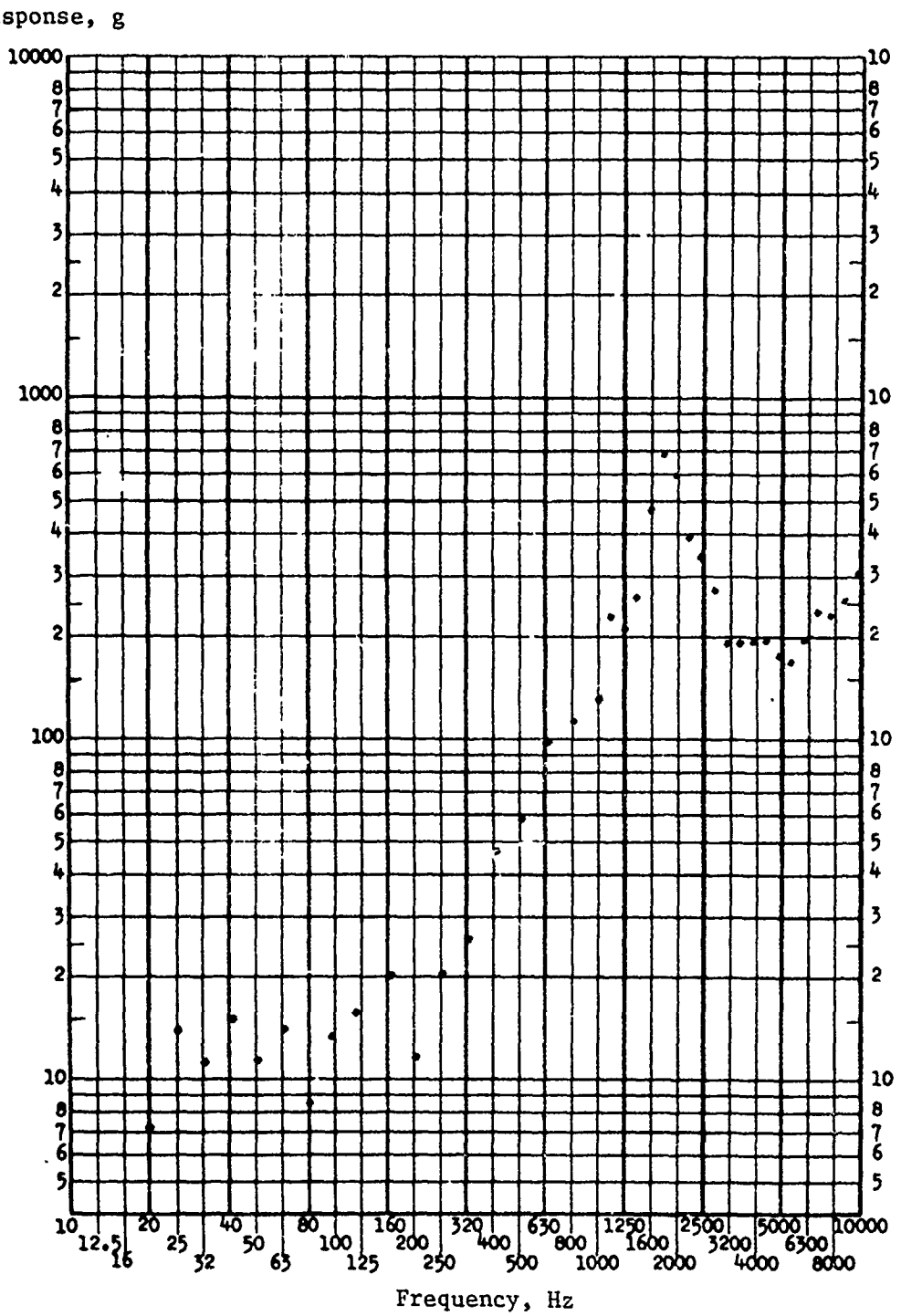
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 46 (cont)



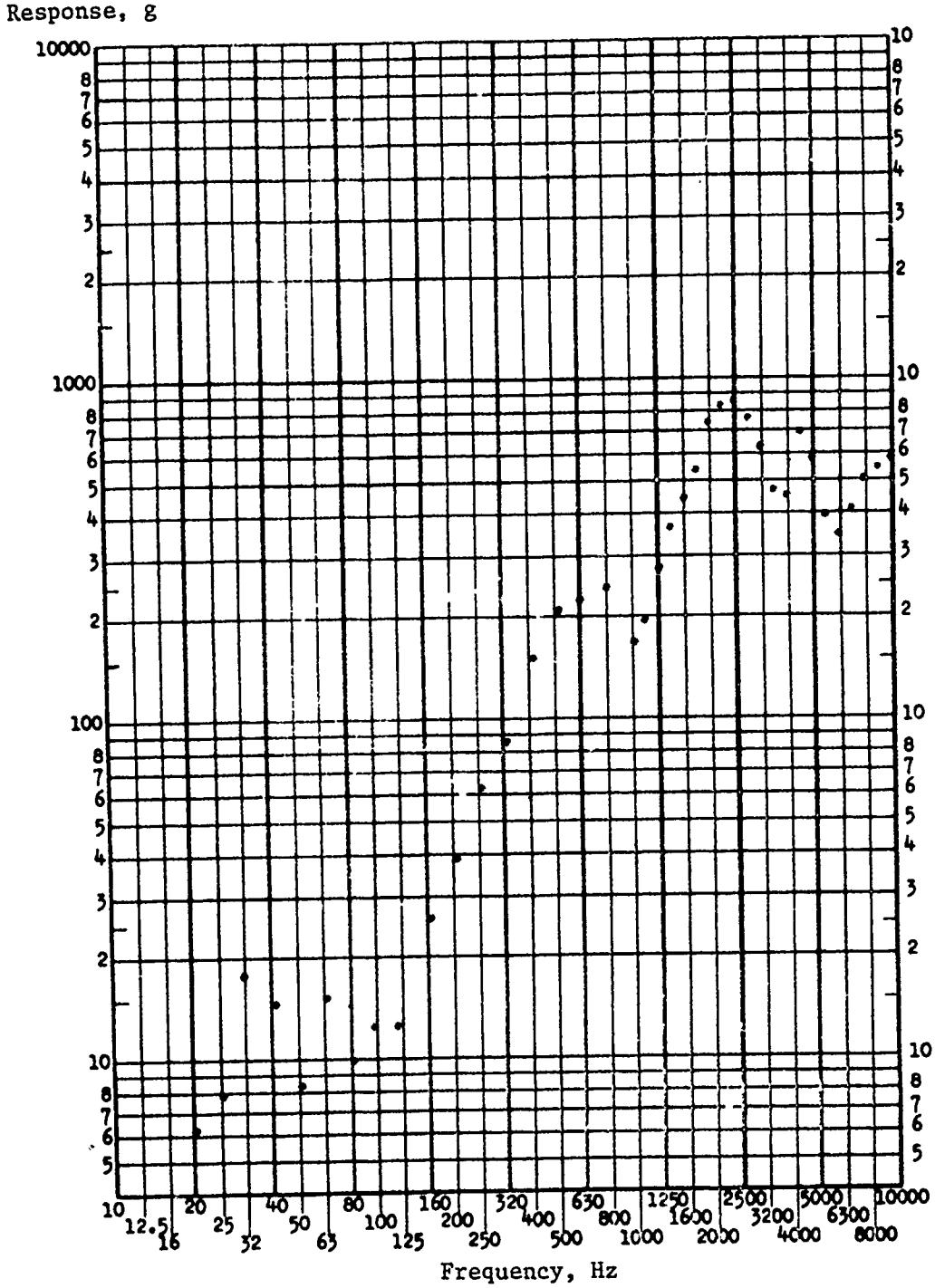
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 46 (cont)



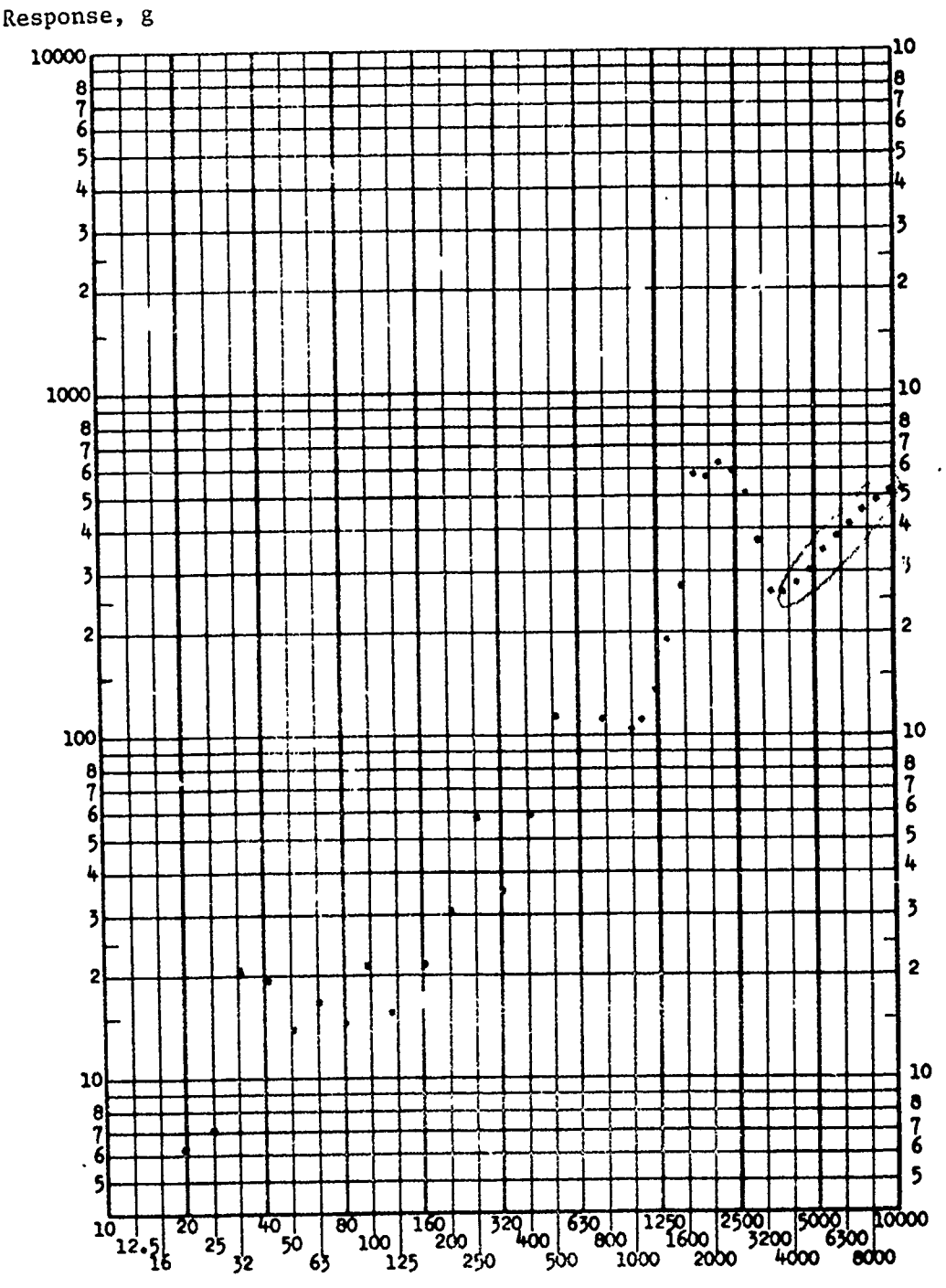
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 46 (cont)



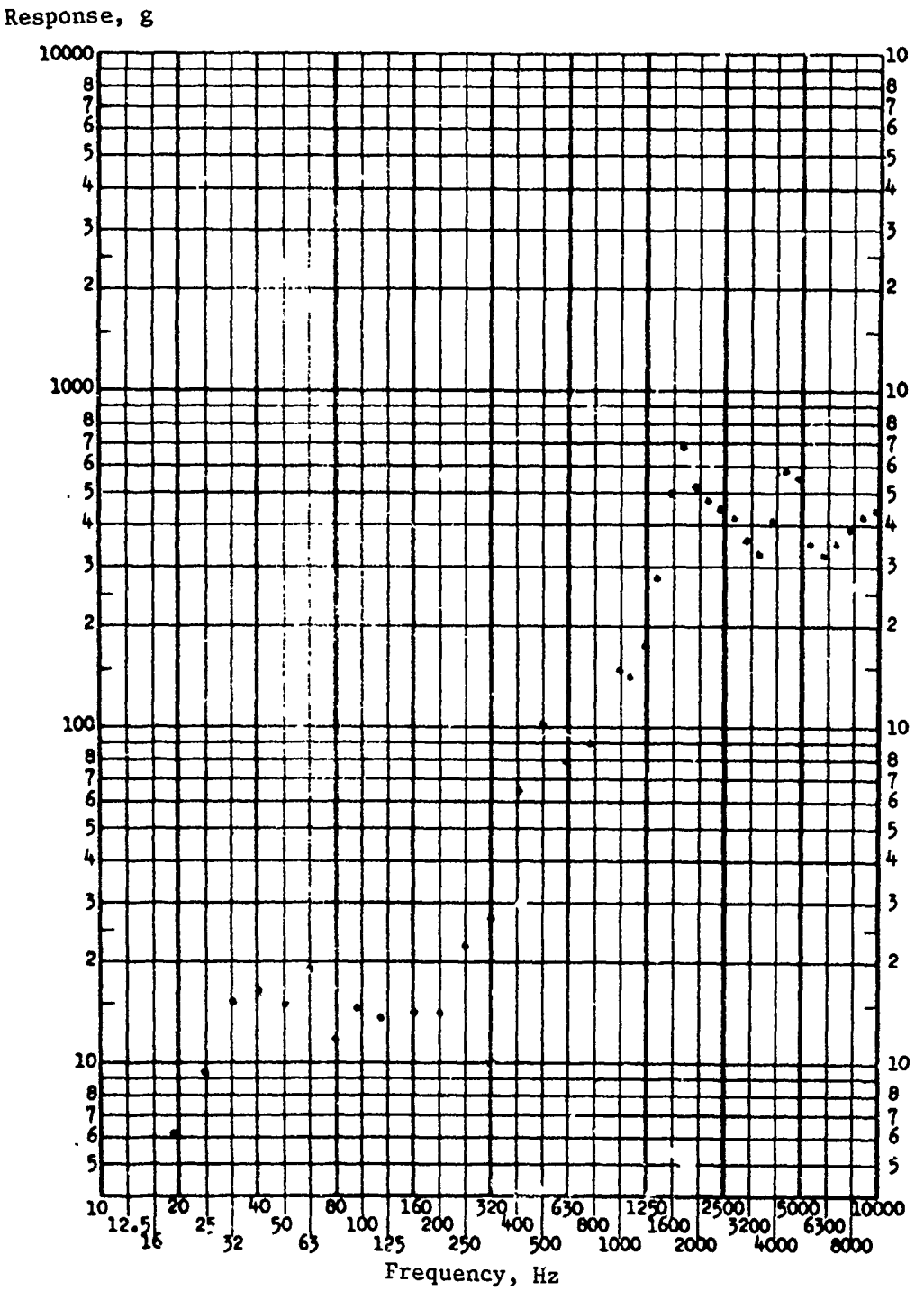
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 46 (cont)



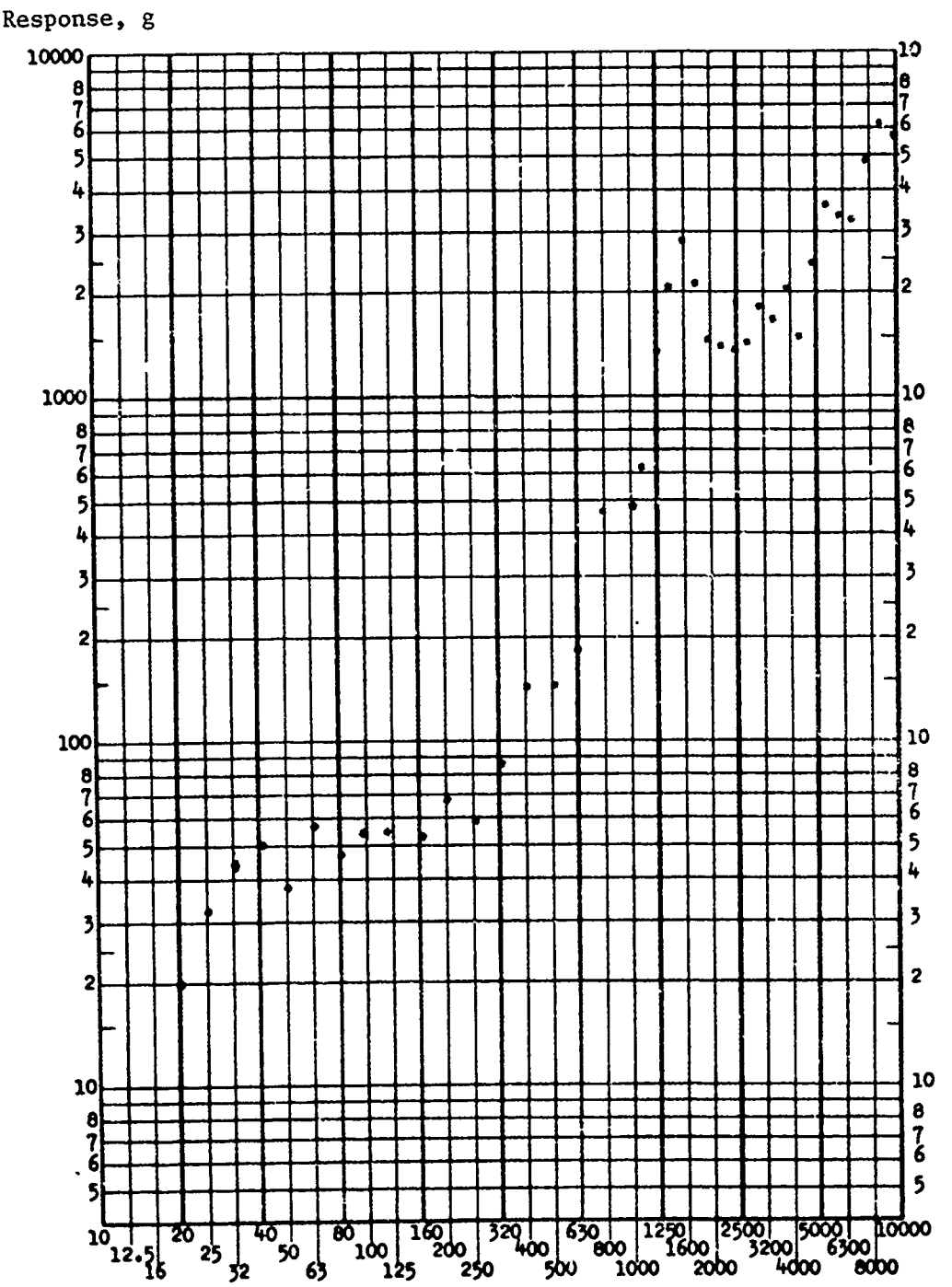
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 46 (cont)



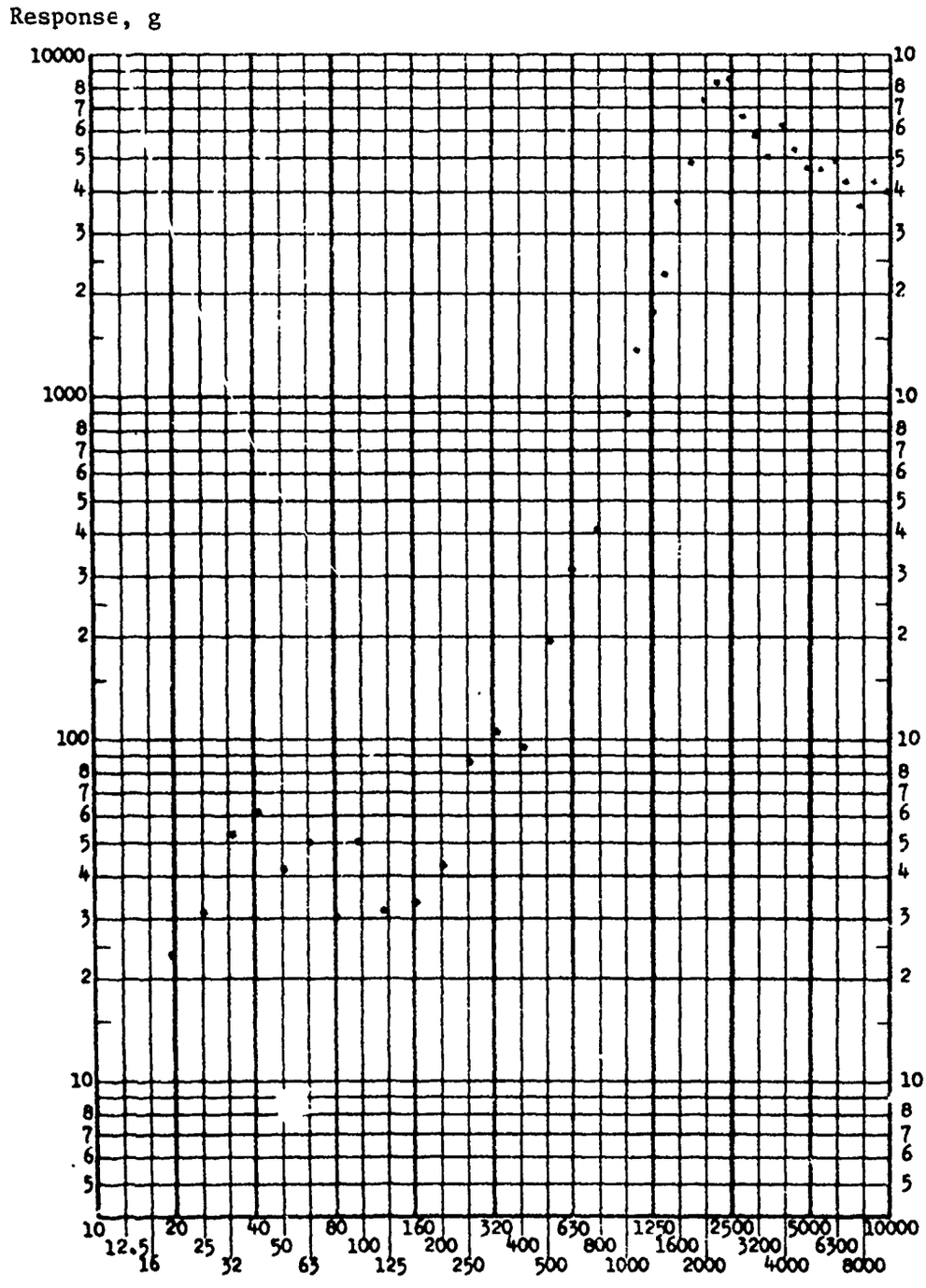
Bench Shock Test - Stage II/III Separation, Run 46
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 46 (concl)



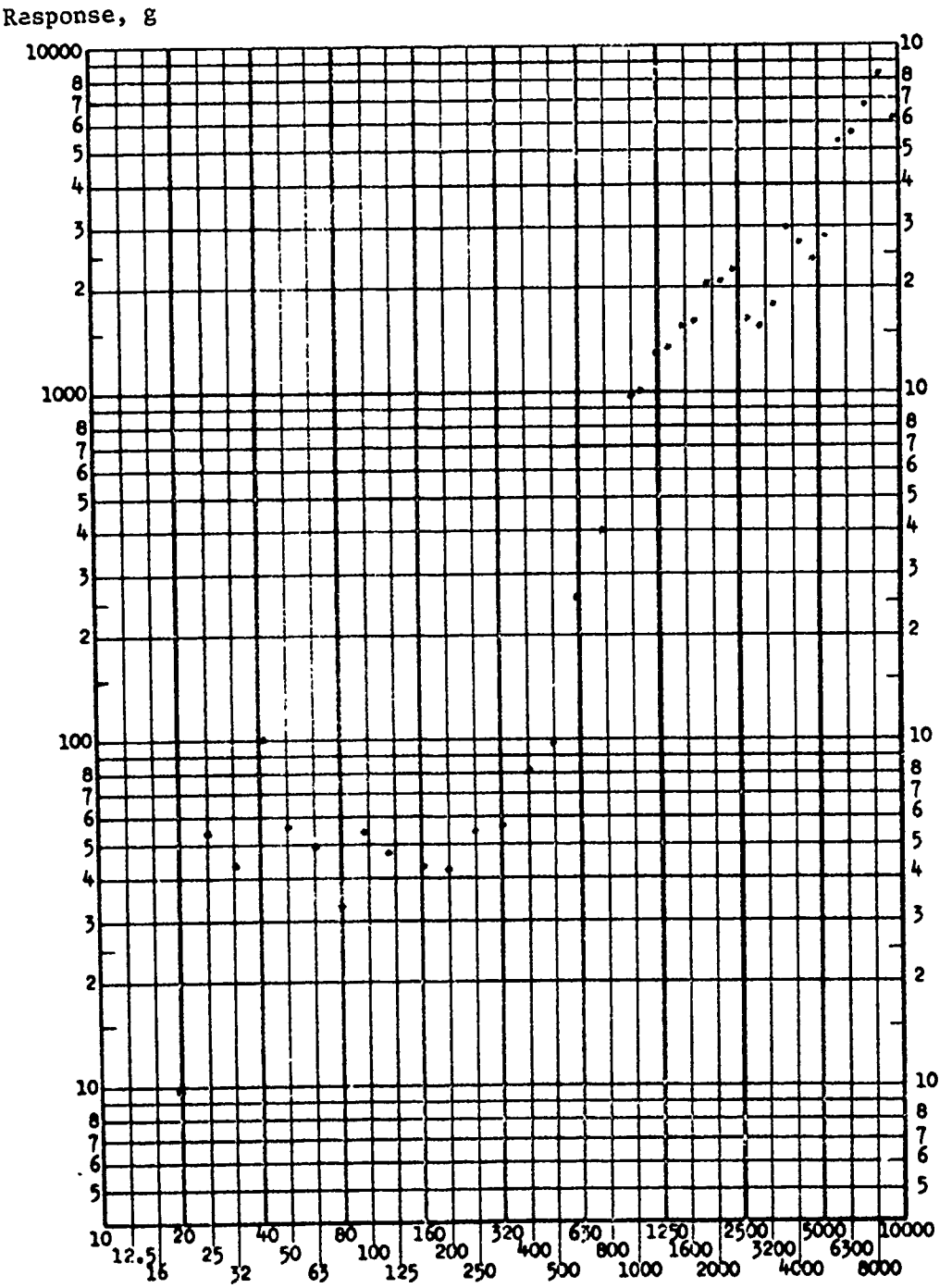
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 47 Run 47 Shock Response Spectrum



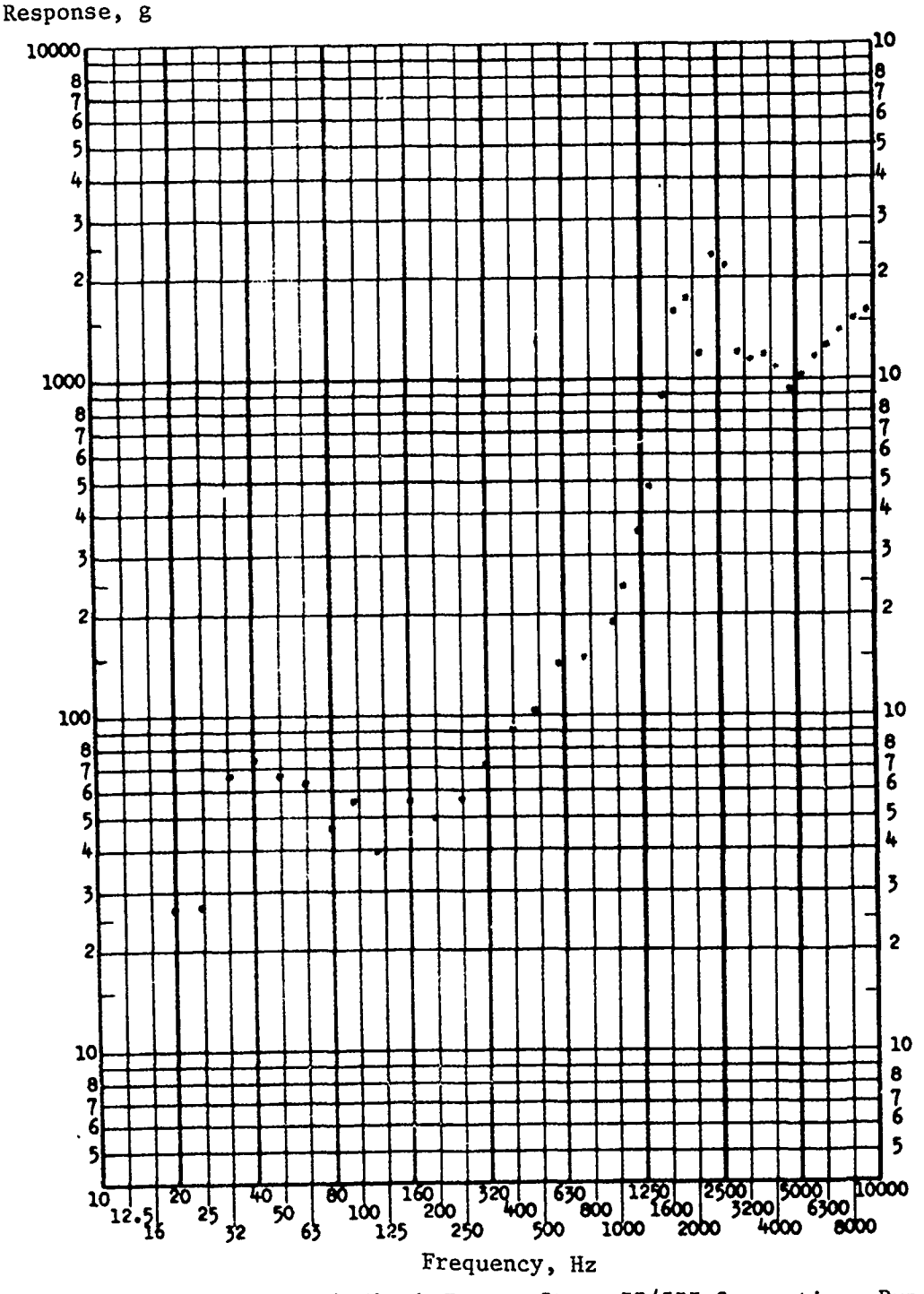
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 2 - Tangential axis longeron near station 133

Figure 47 (cont)



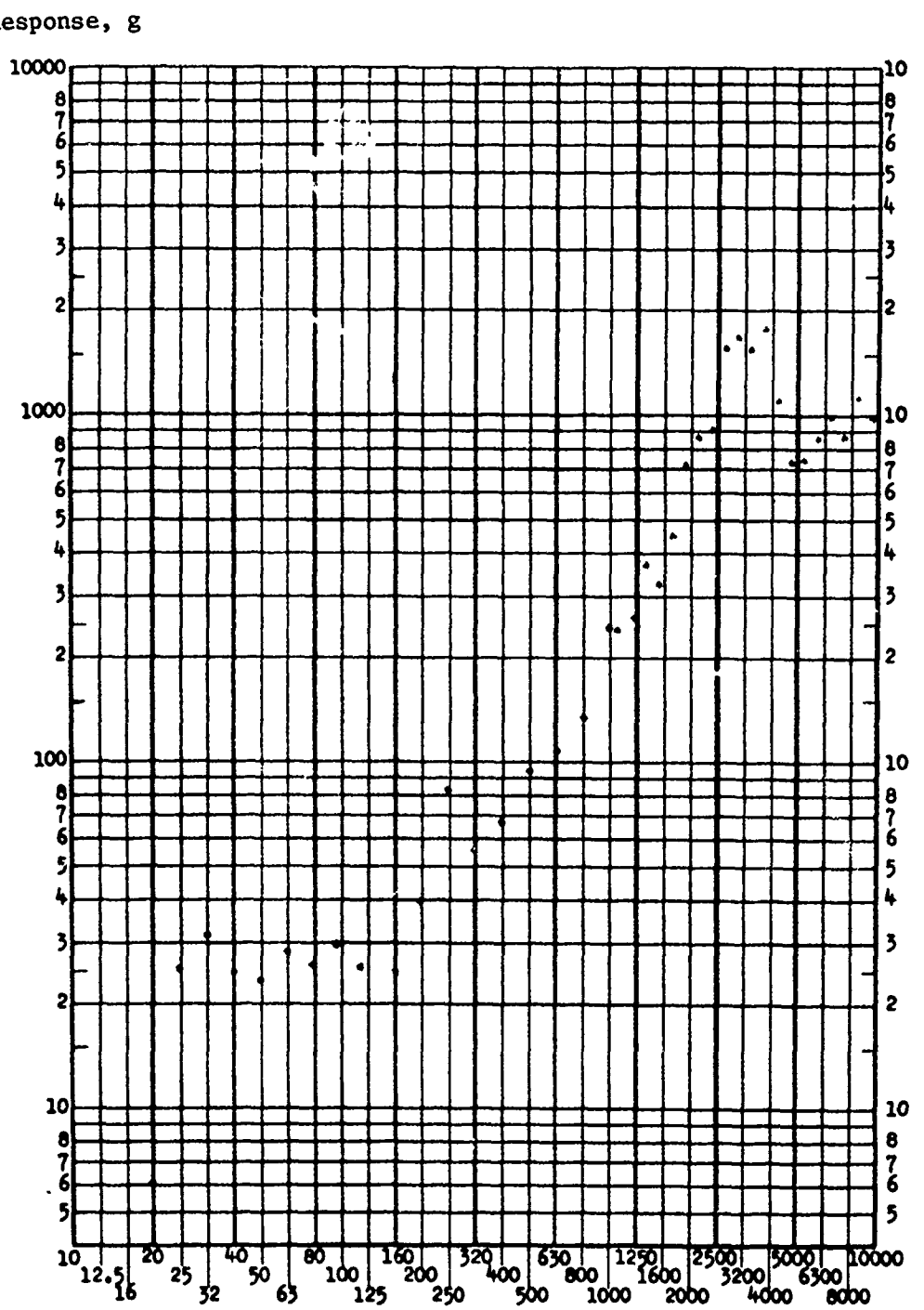
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 3 - Radial axis longeron near station 133

Figure 47 (cont)



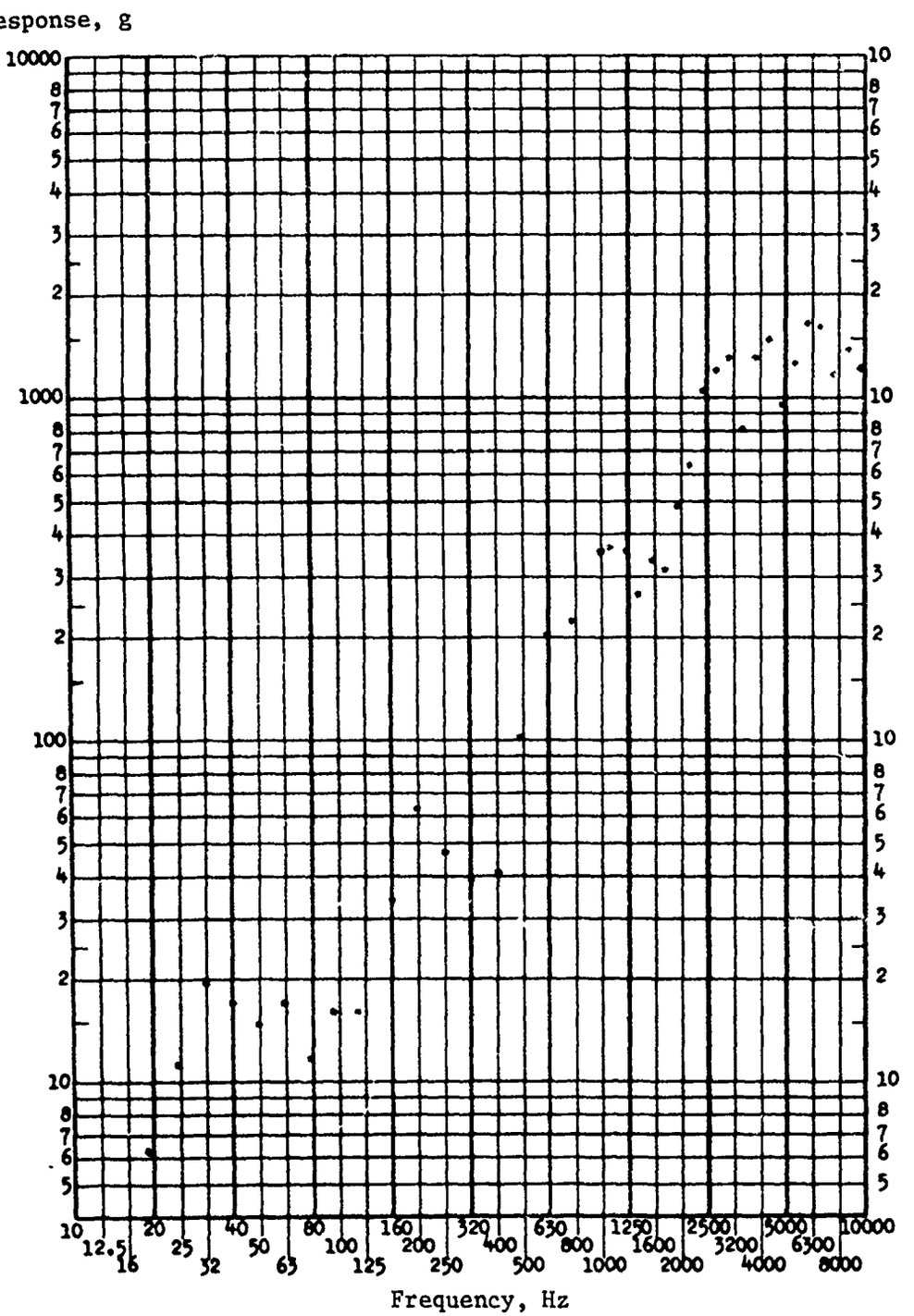
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 47 (cont)



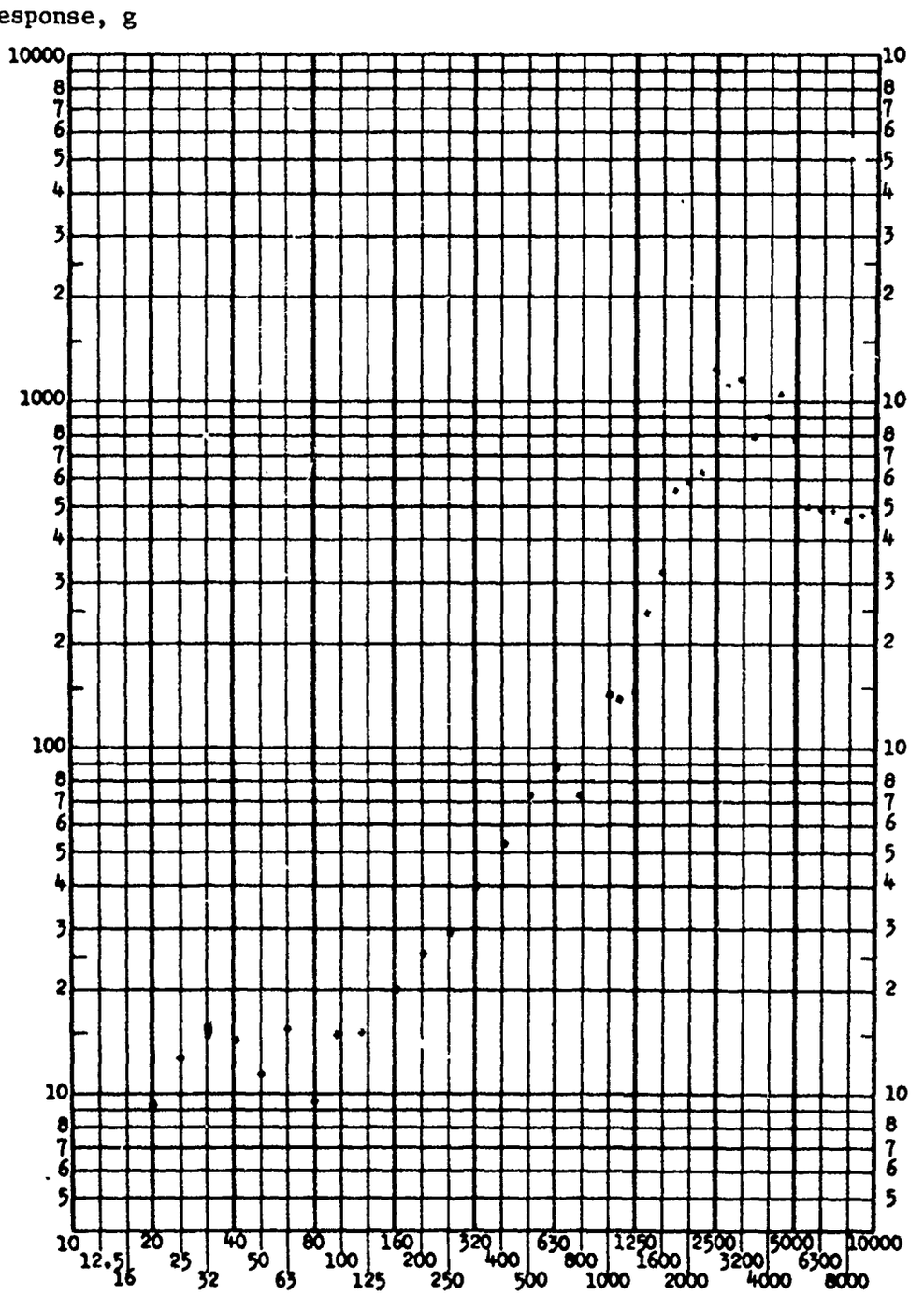
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 5 - Tangential axis longeron near station 117

Figure 47 (cont)



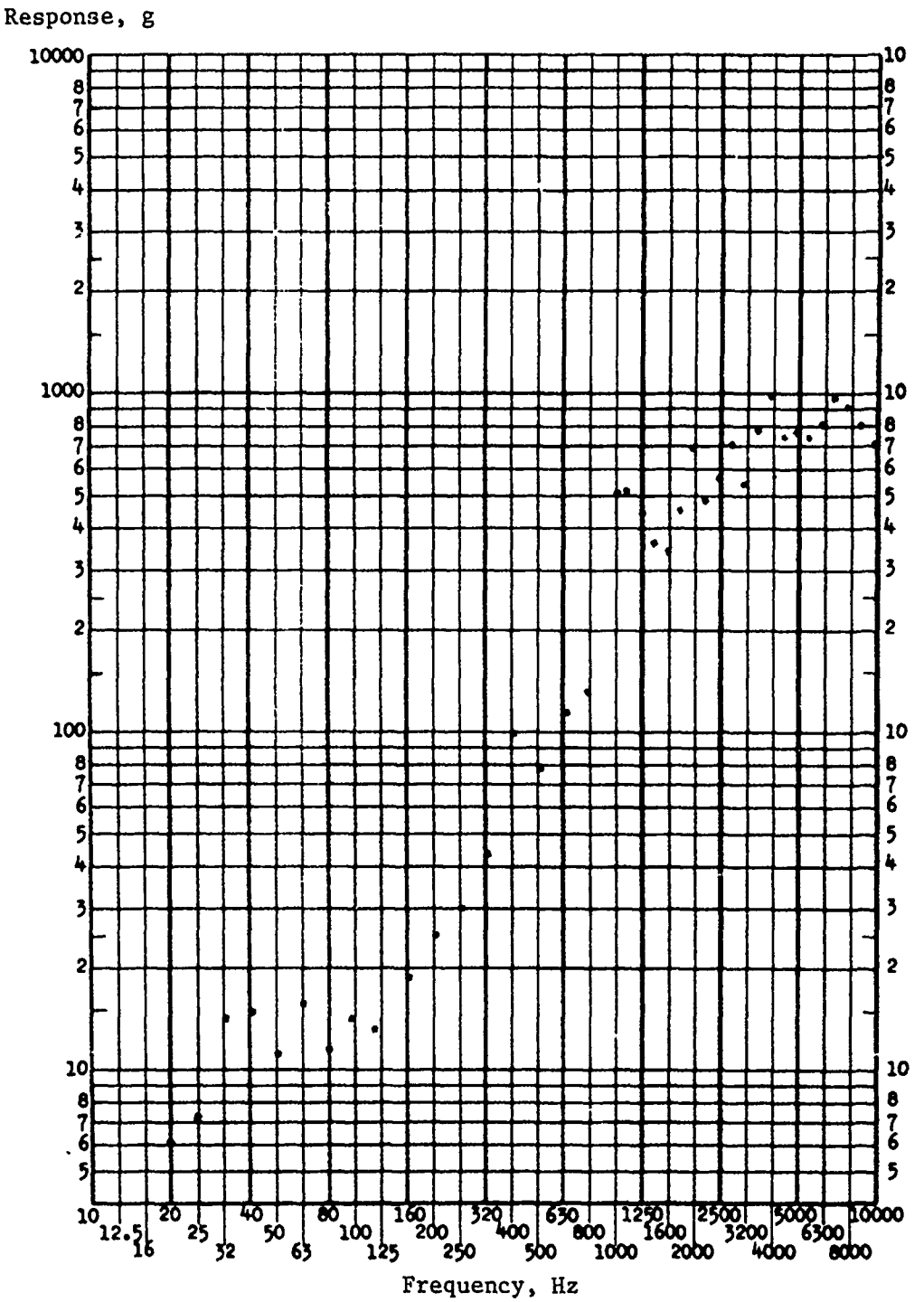
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 6 - Radial axis longeron near station 117

Figure 47 (cont)



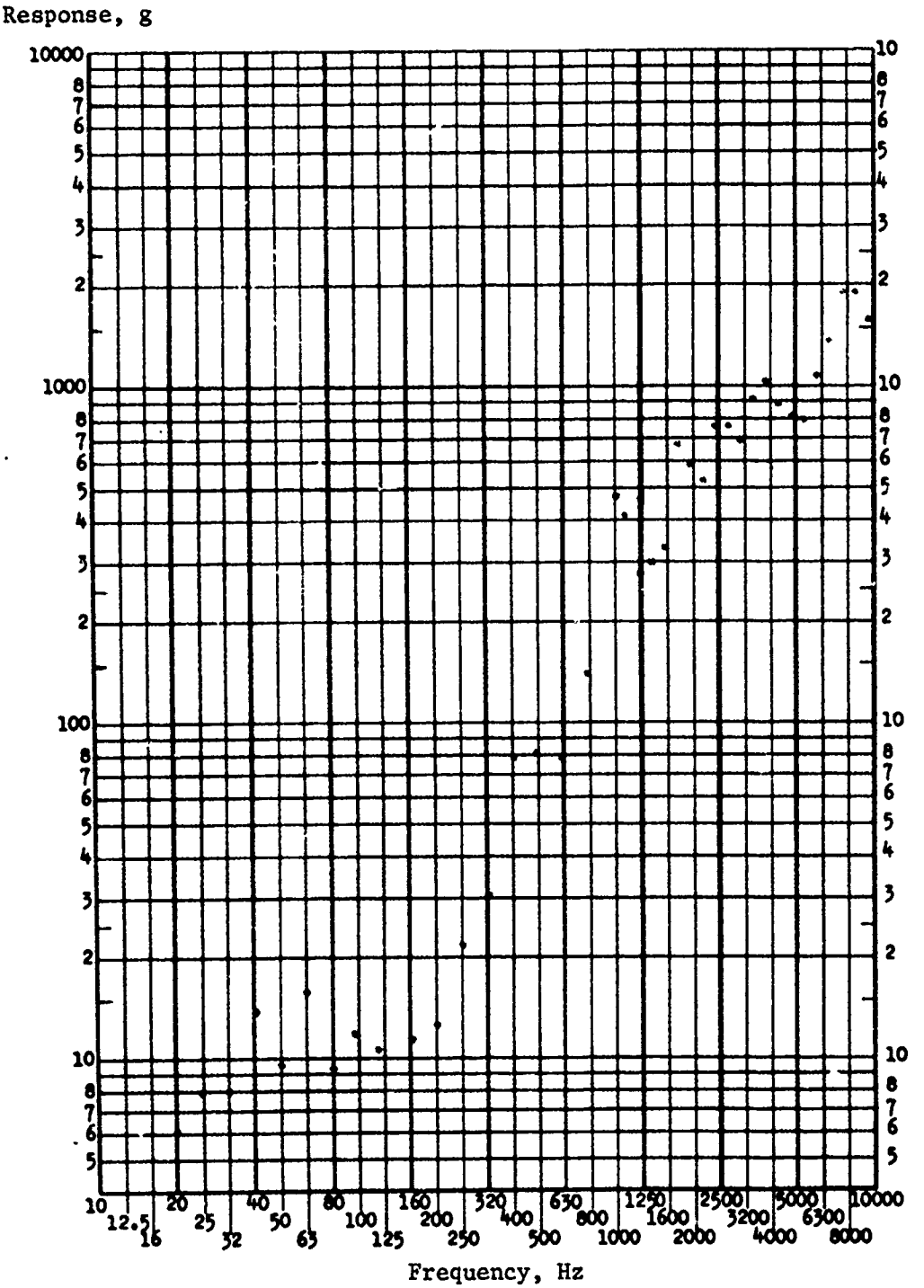
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 47 (cont)



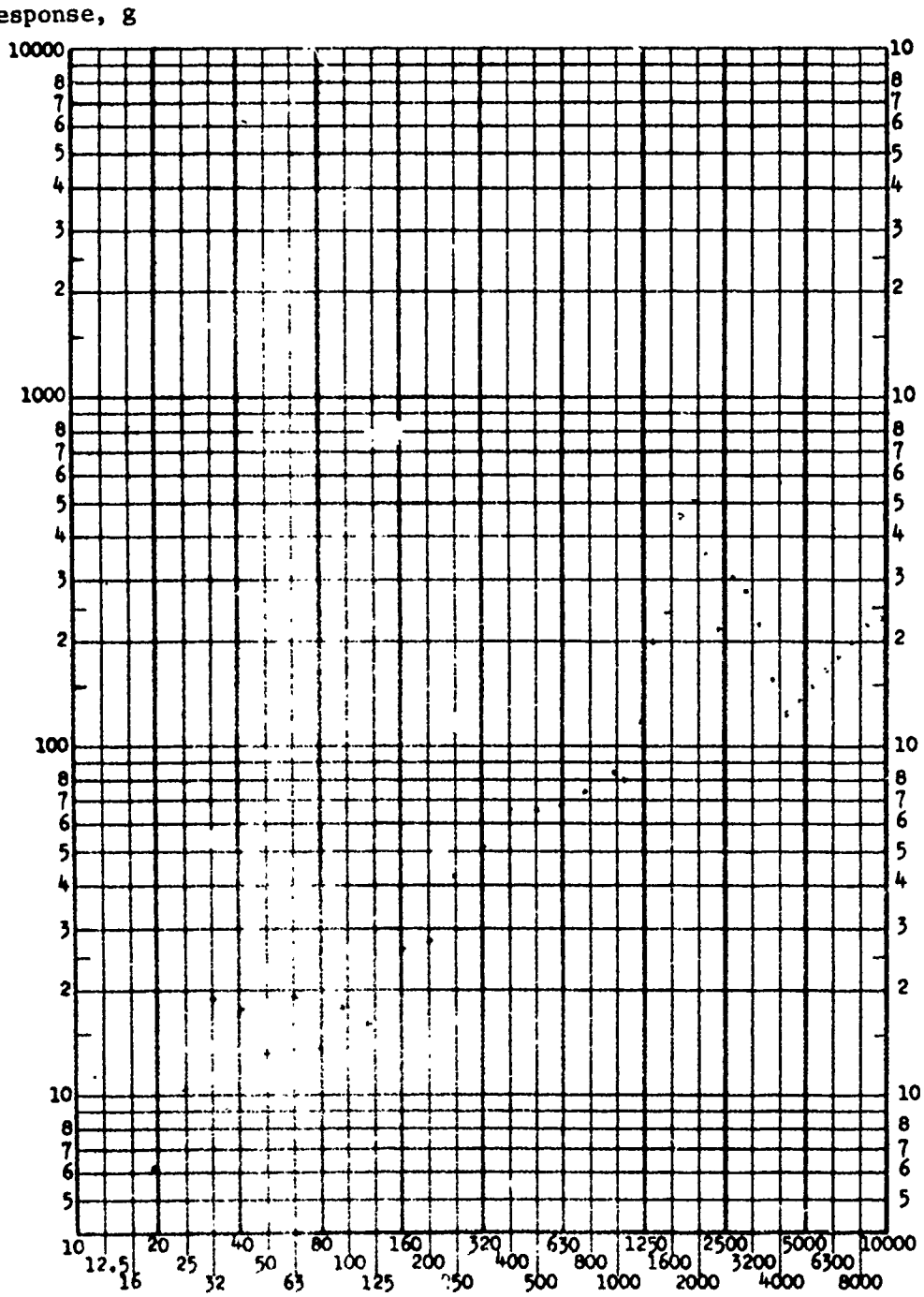
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 8 - Tangential axis longeron near station 77

Figure 47 (cont)



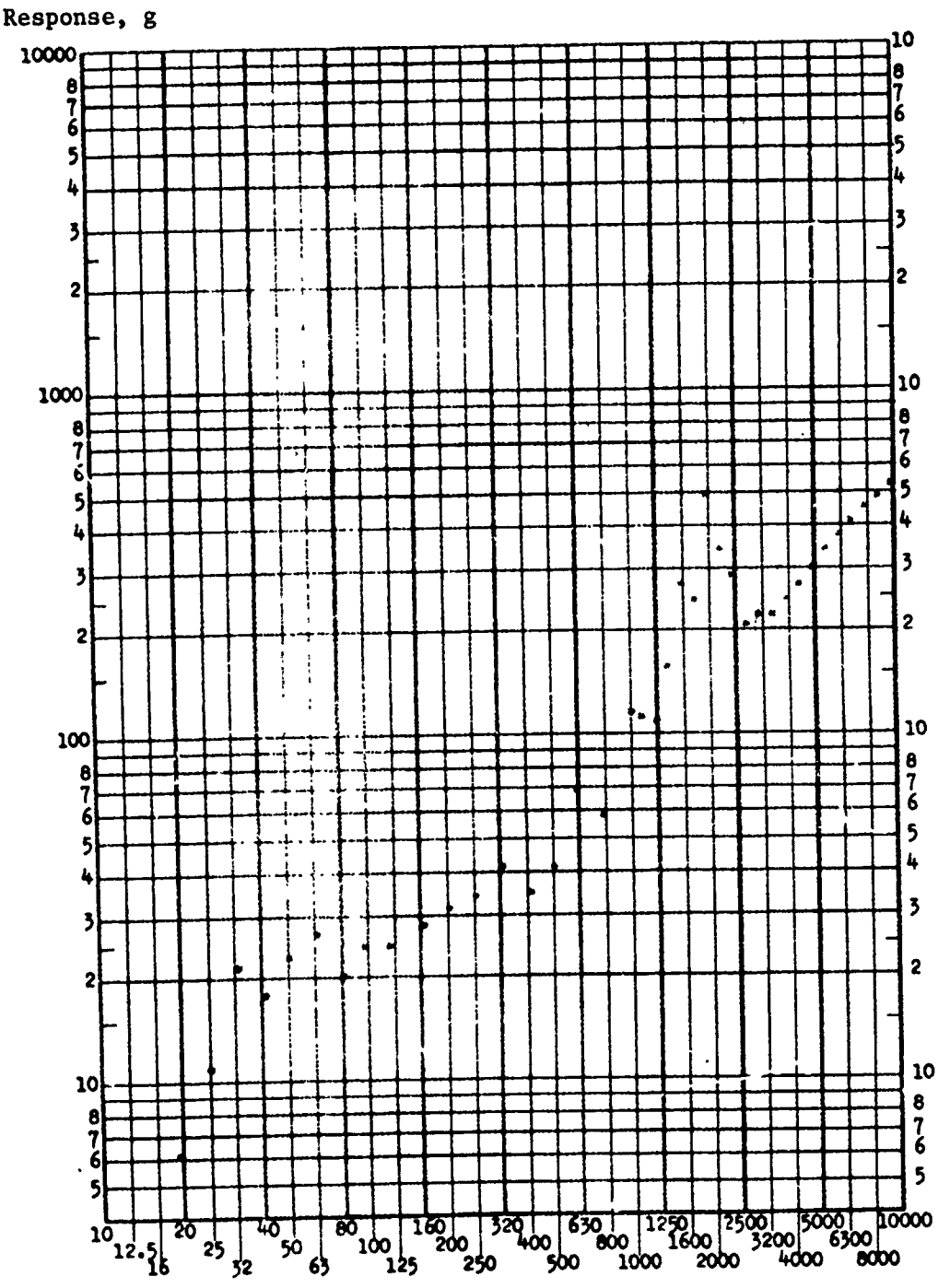
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 9 - Radial axis longeron near station 77

Figure 47 (cont)



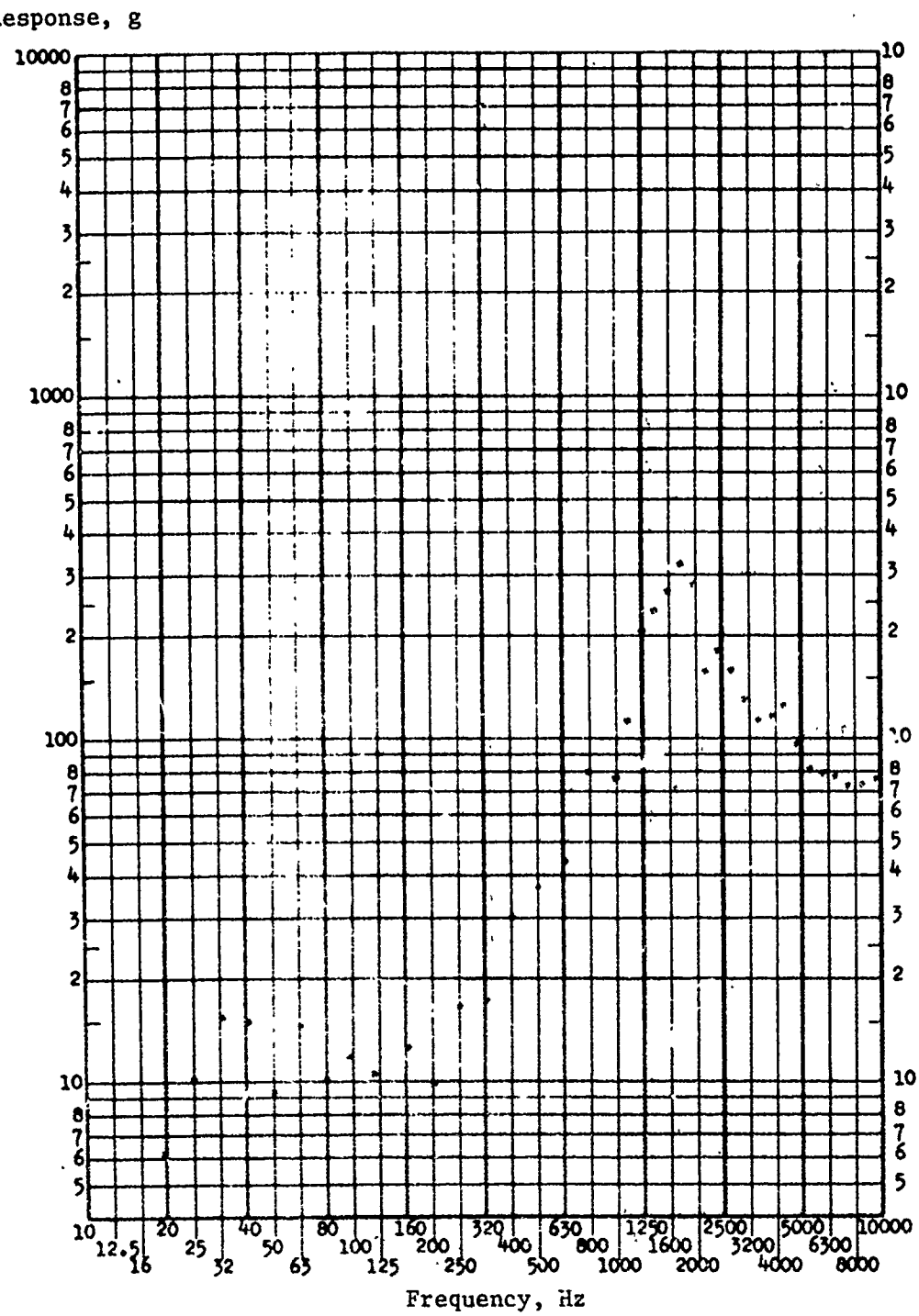
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 47 (cont)



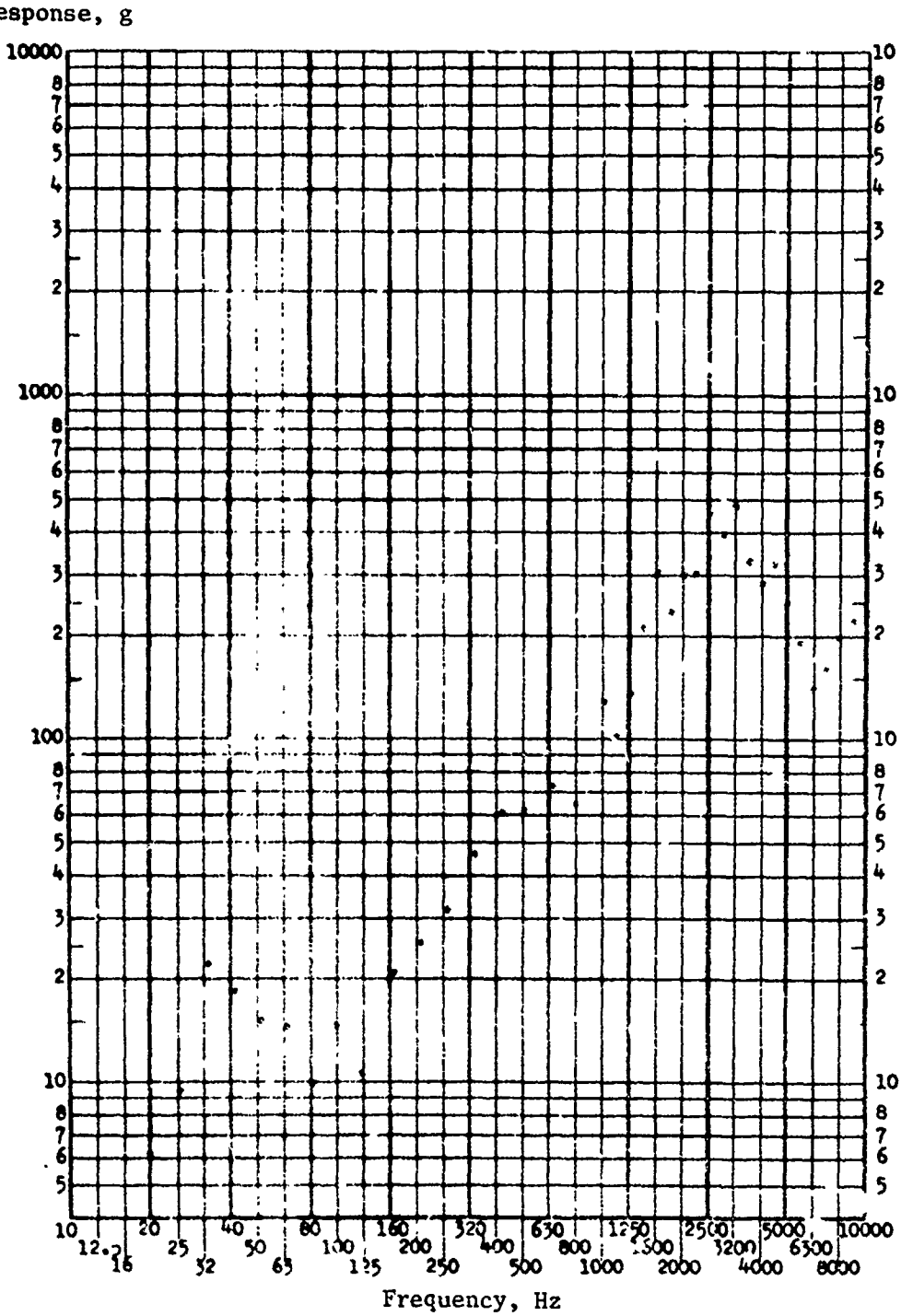
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 47 (cont)



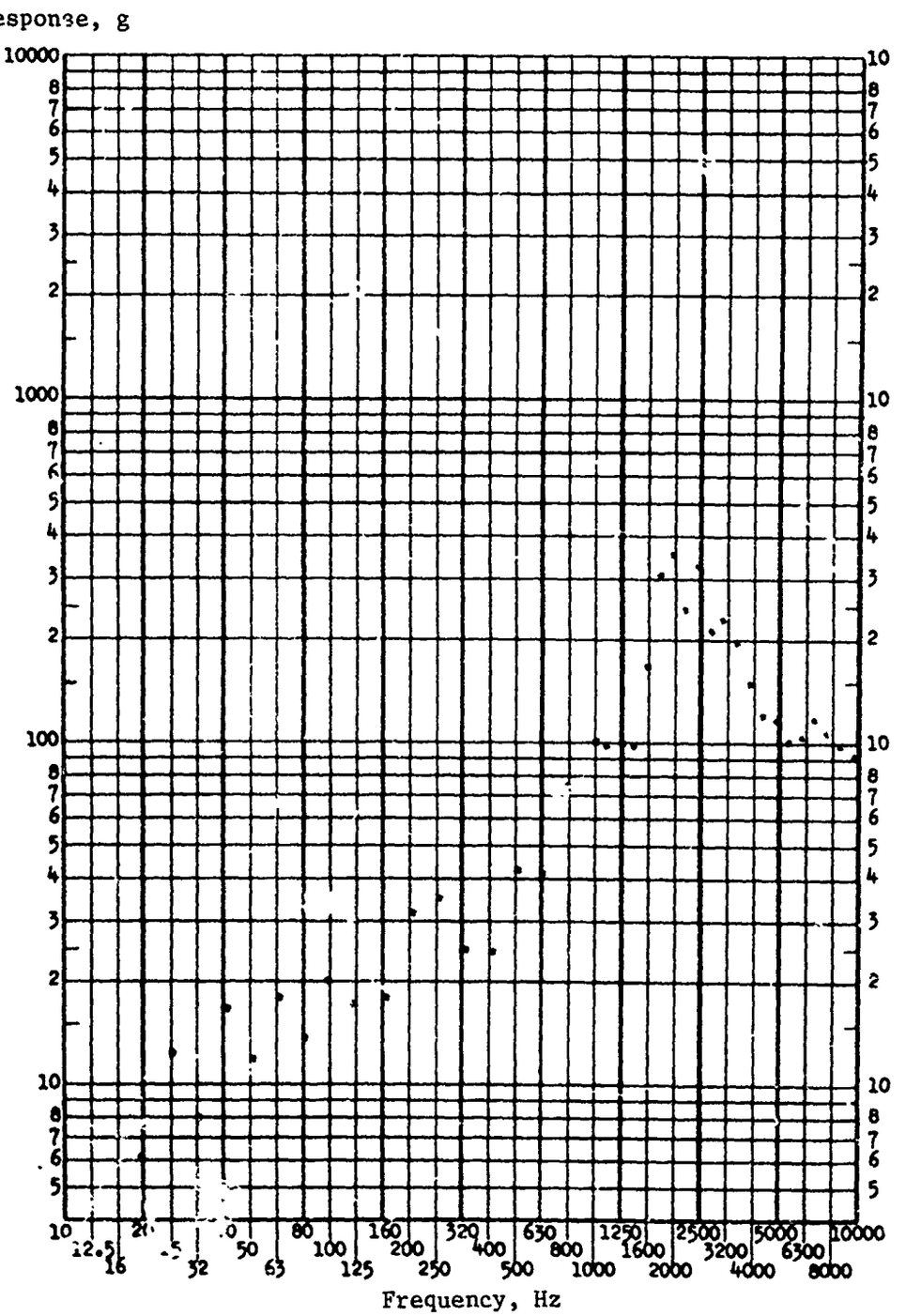
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 12 - Vertical axis truss bottom near station 114 attach point

Figure 47 (cont)



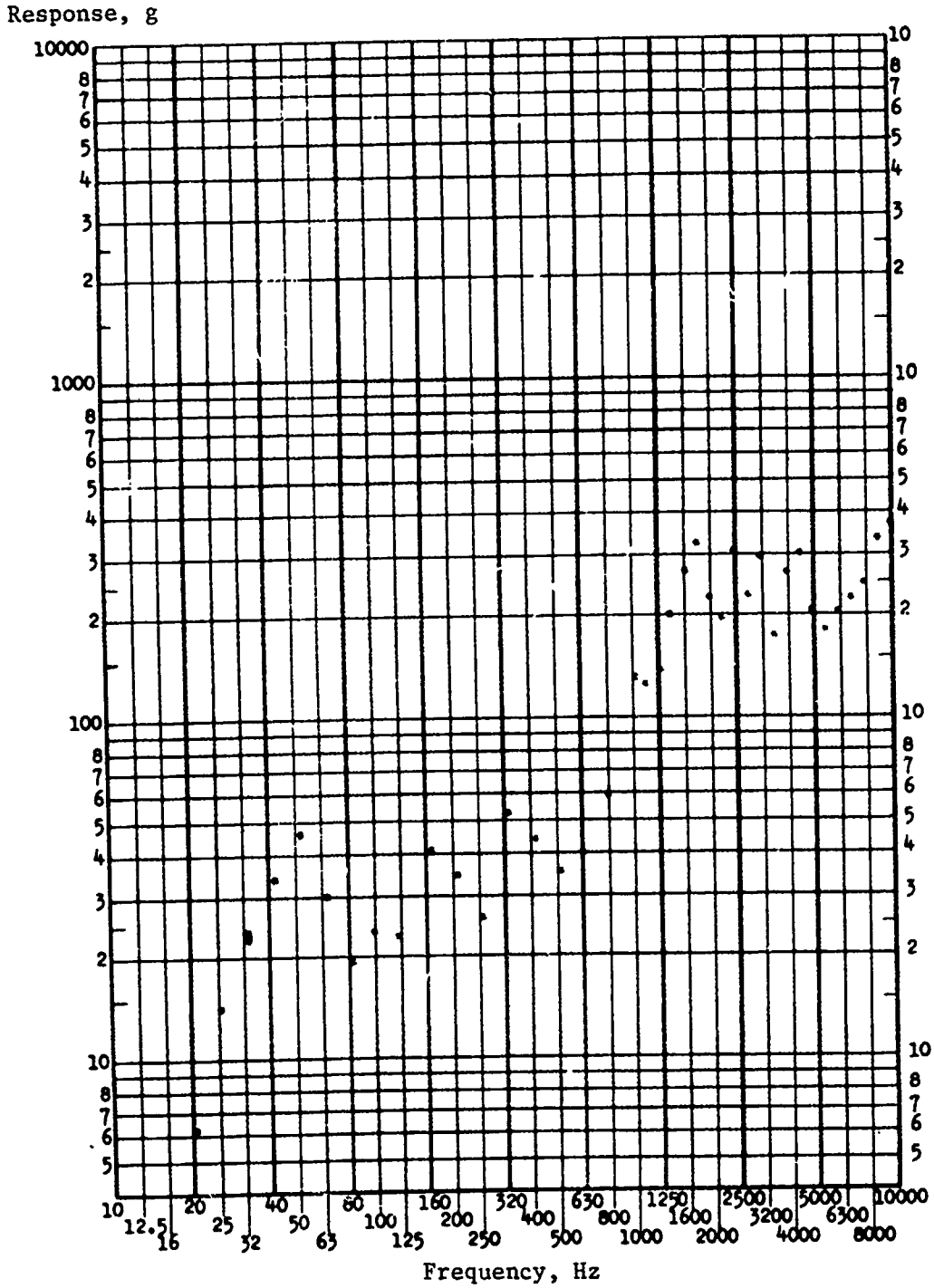
Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 47 (cont)



Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 14 - Lateral axis truss top near longeron attach point

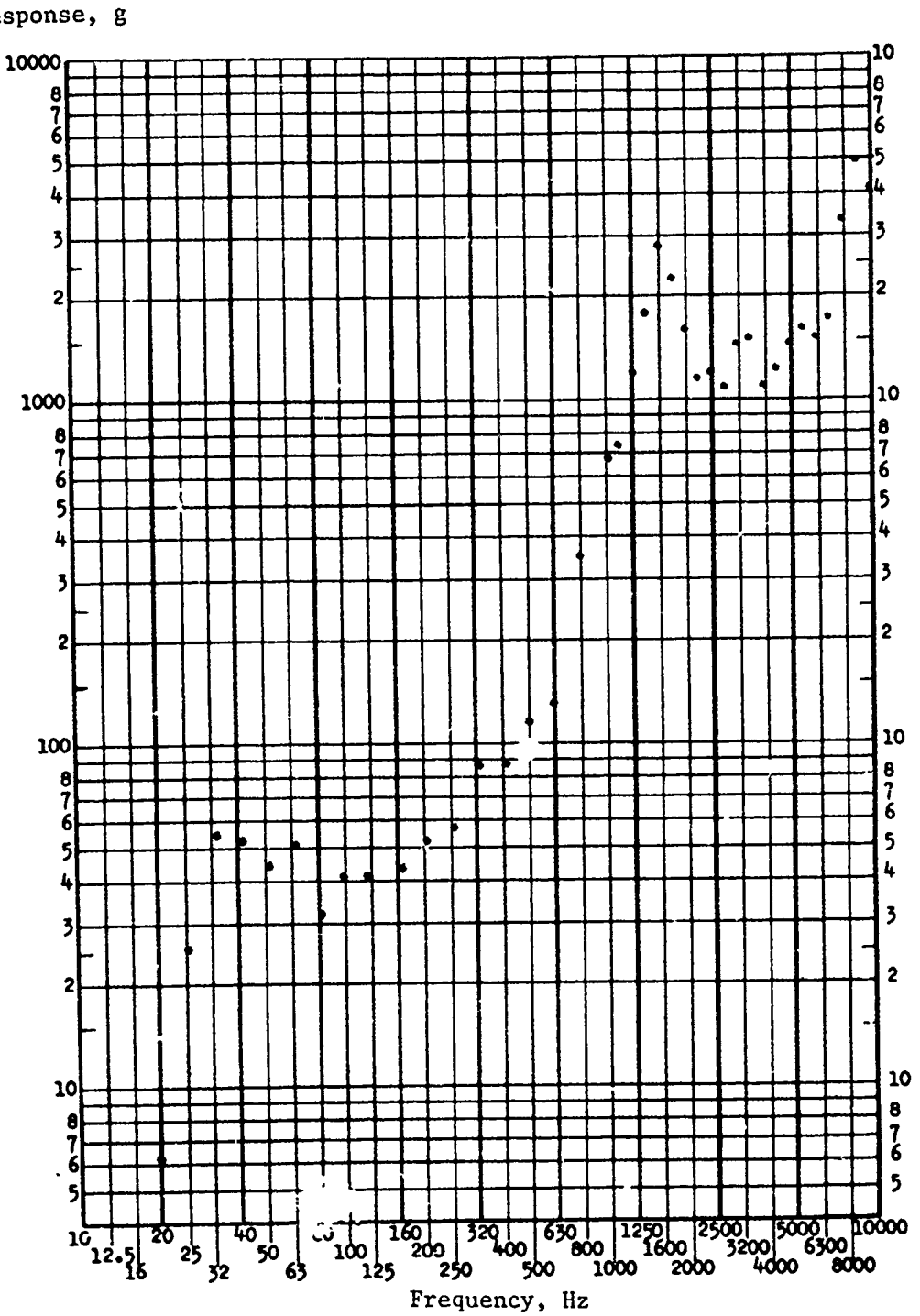
Figure 47 (cont)



Bench Shock Test - Stage II/III Separation, Run 47
Measurement No. 15 - Lateral axis truss top near longeron attach point

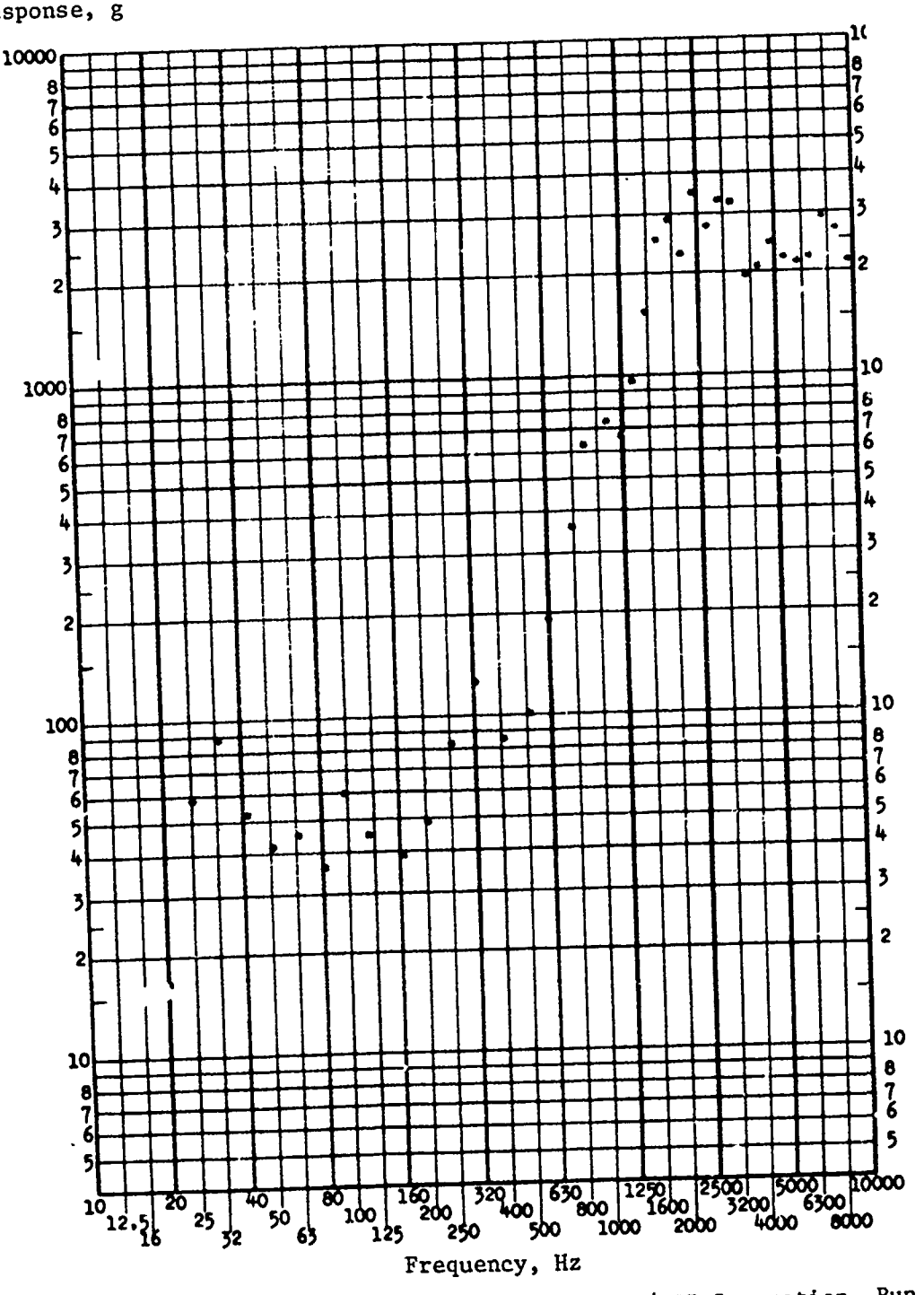
Figure 47 (concl)

Run 48

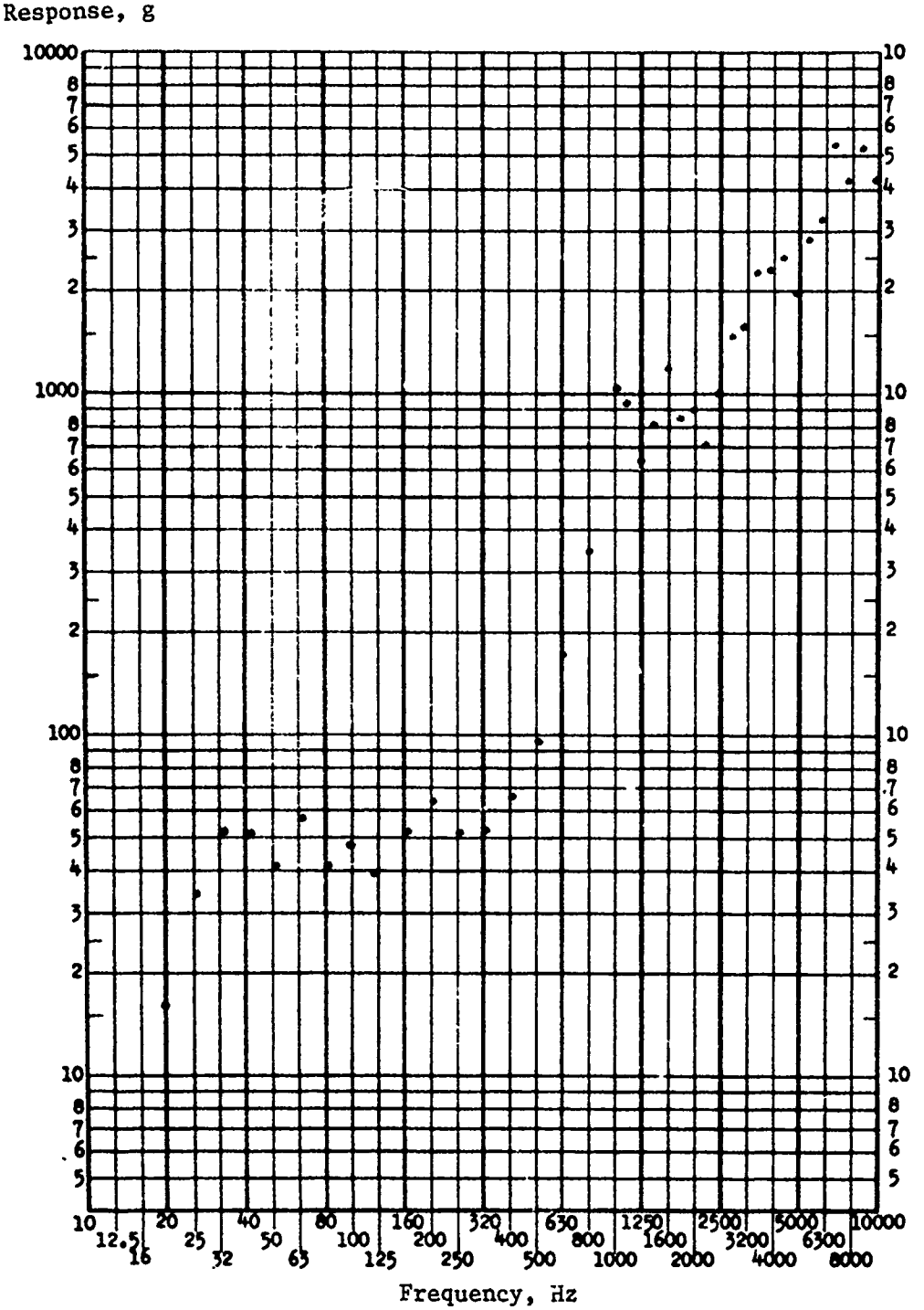


Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 48 Run 48 Shock Response Spectrum

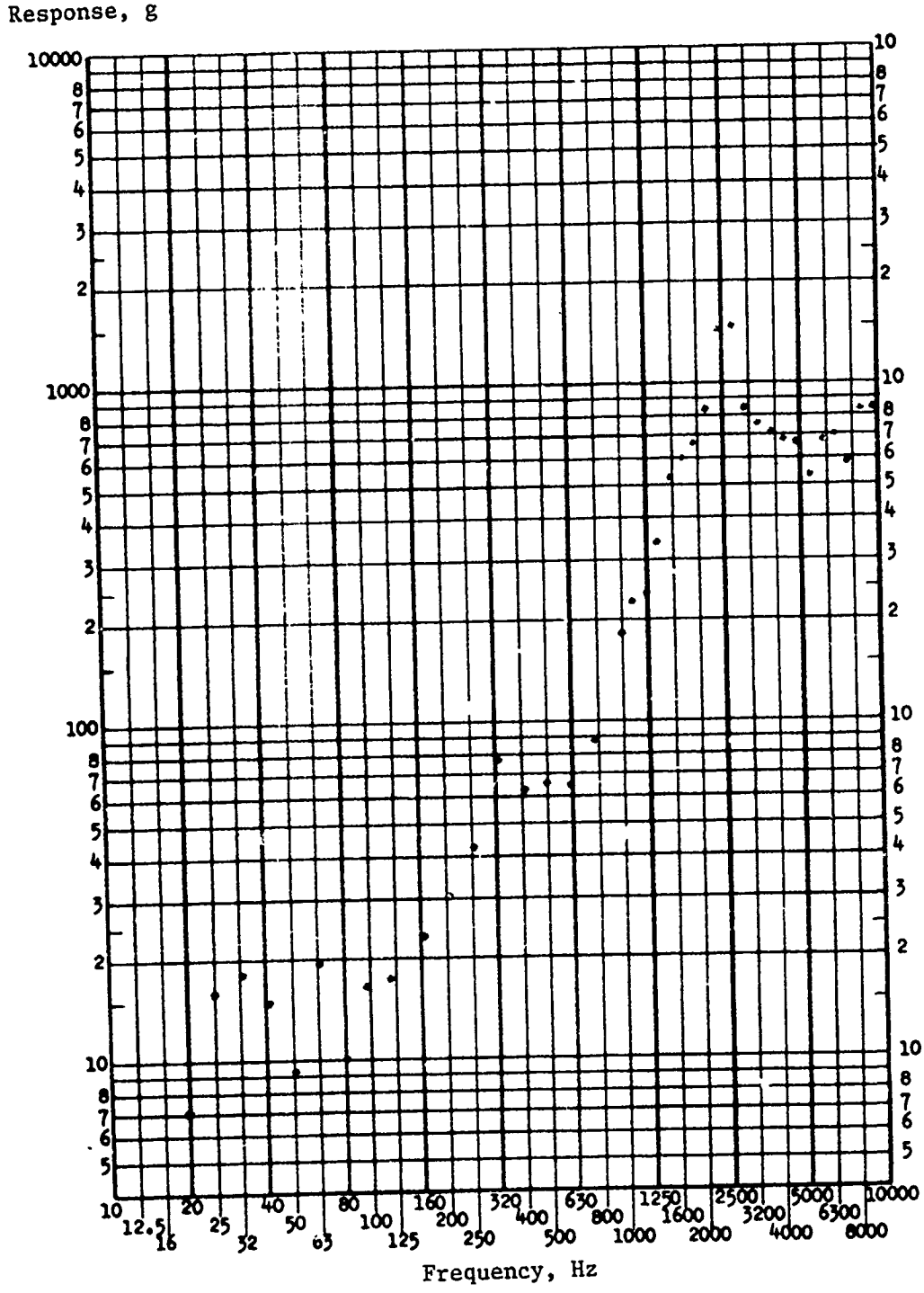


Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 2 - Tangential axis longeron near station 133



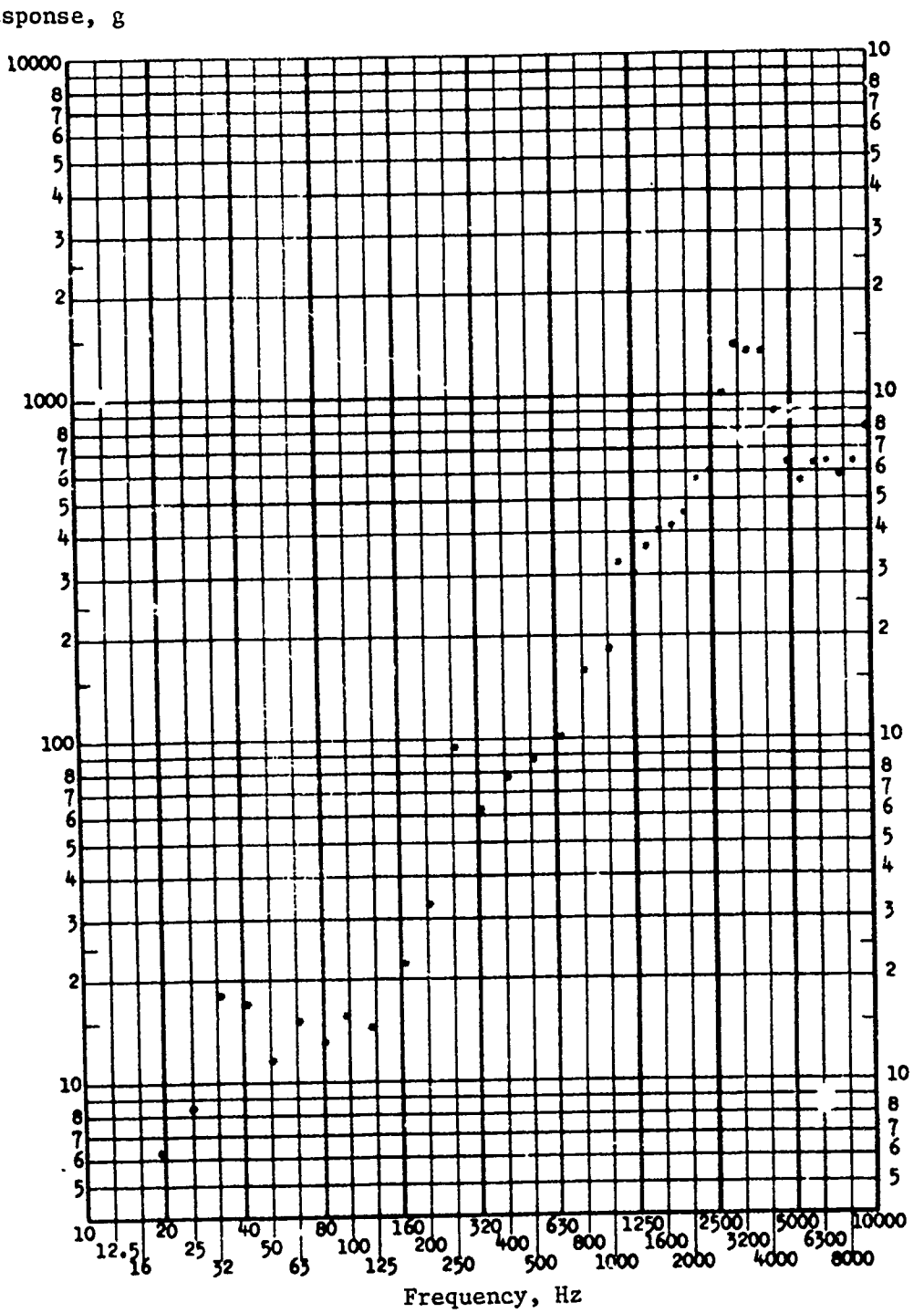
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 3 - Radial axis longeron near station 133

Figure 48 (cont)



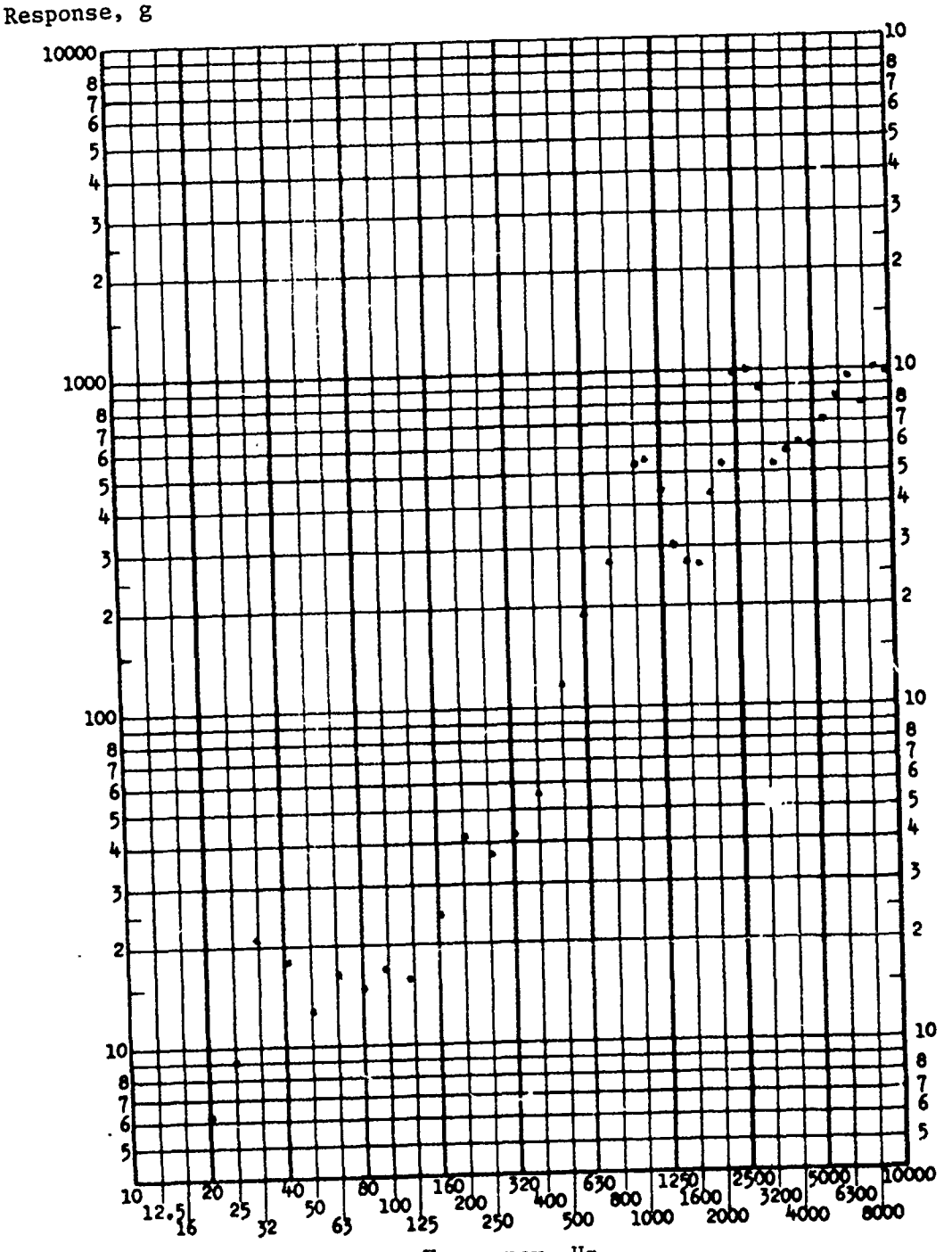
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 48 (cont)



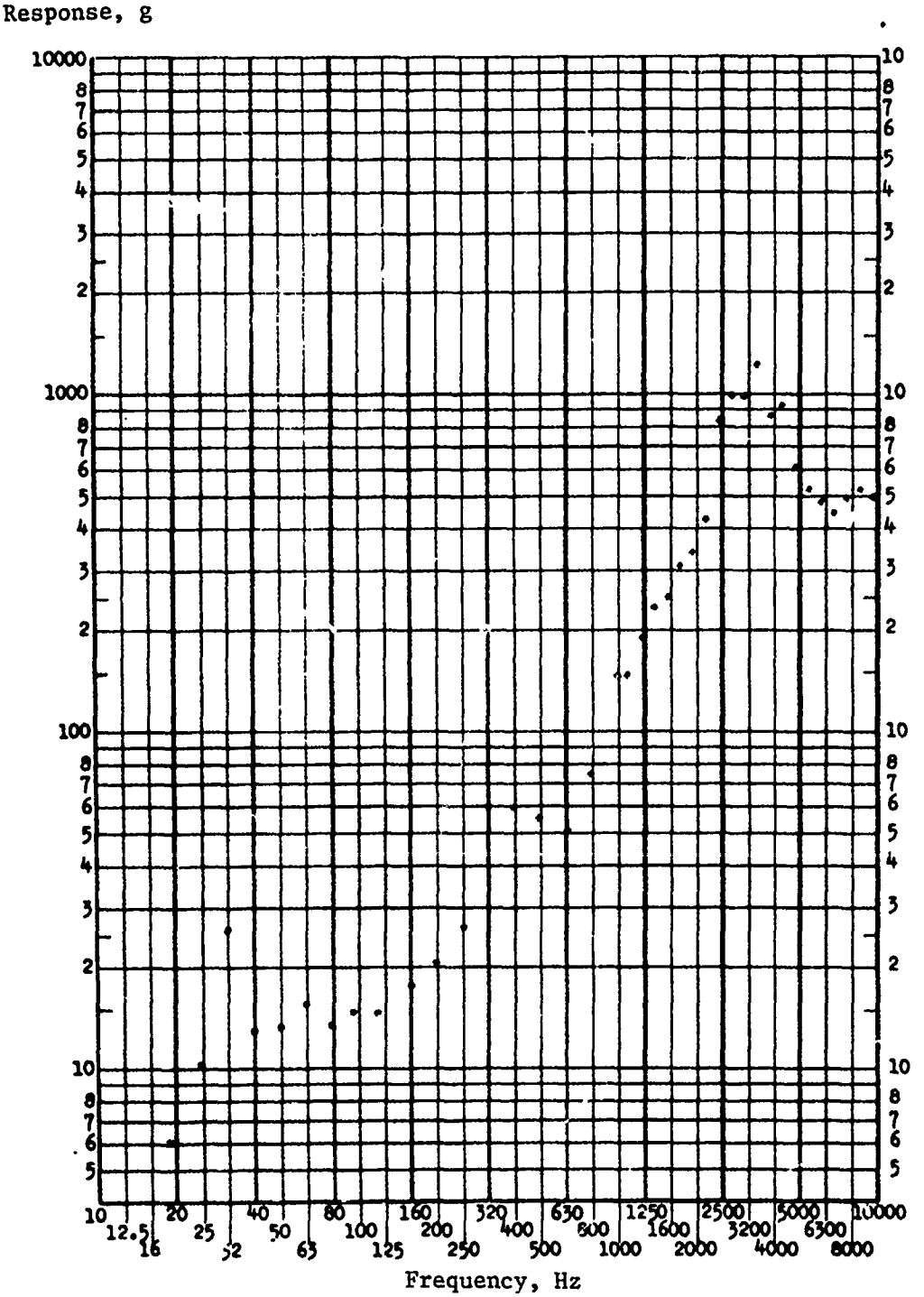
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 5 - Tangential axis longeron near station 117

Figure 48 (cont)



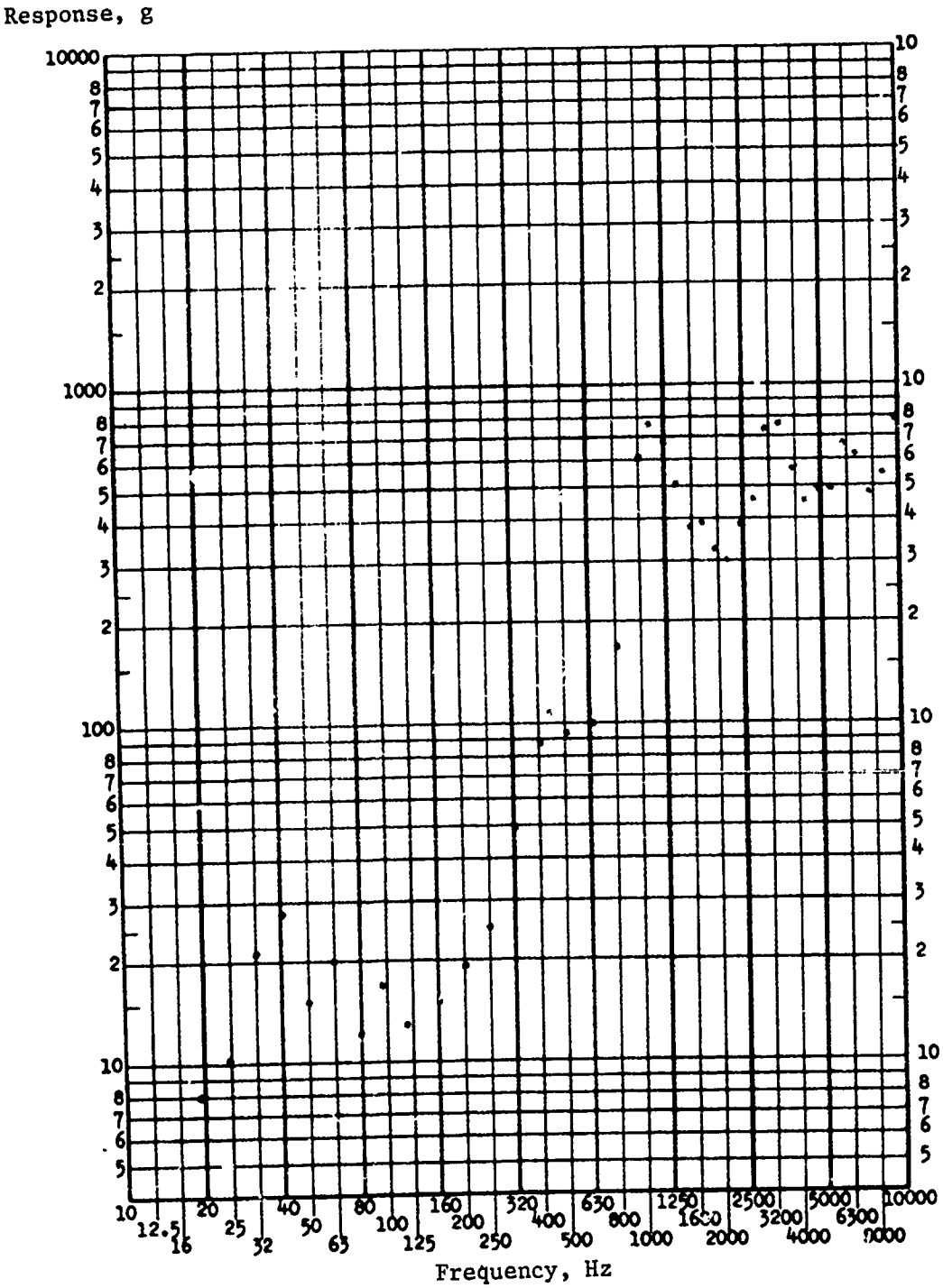
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 6 - Radial axis longeron near station 117

Figure 48 (cont)



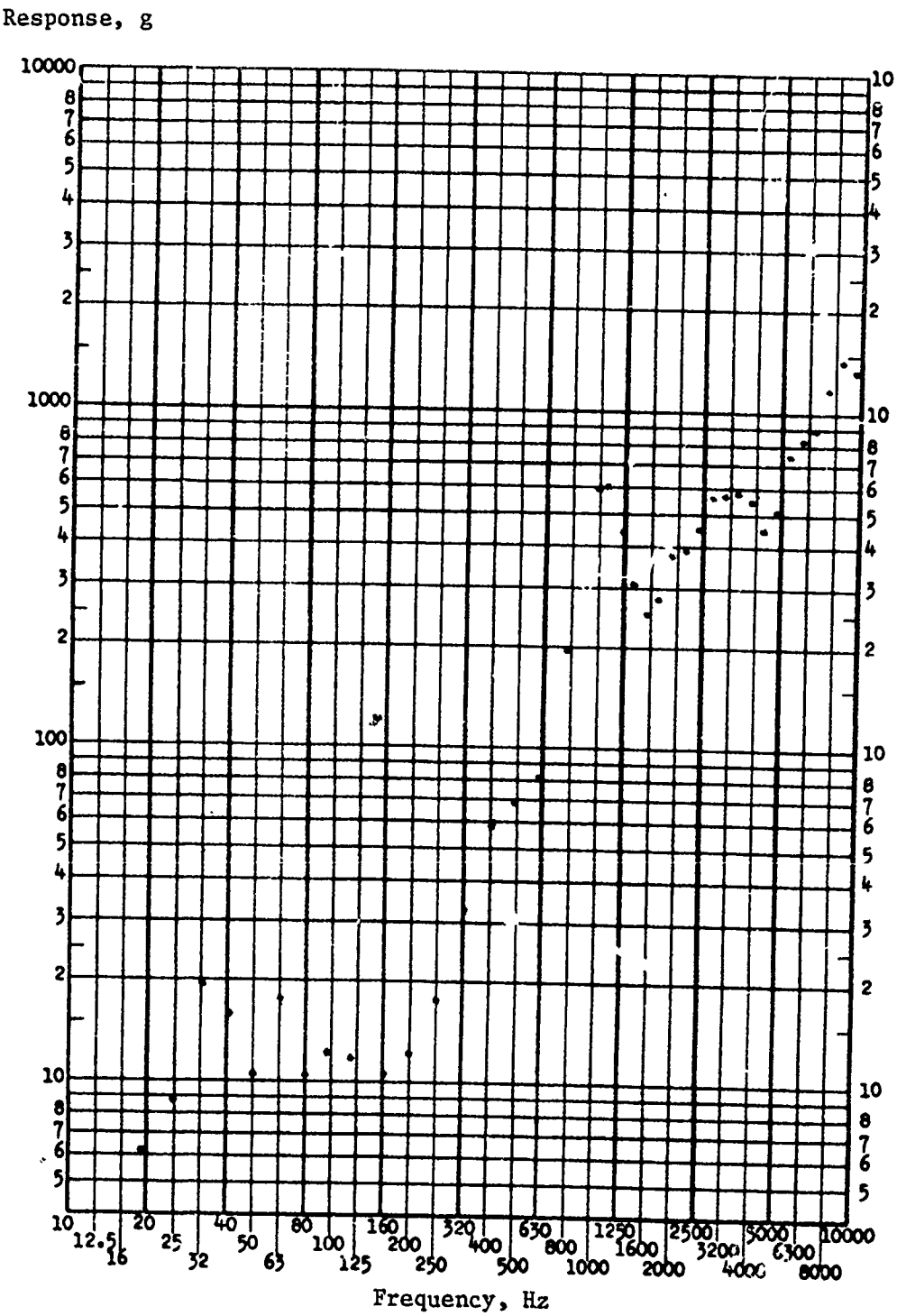
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 48 (cont)



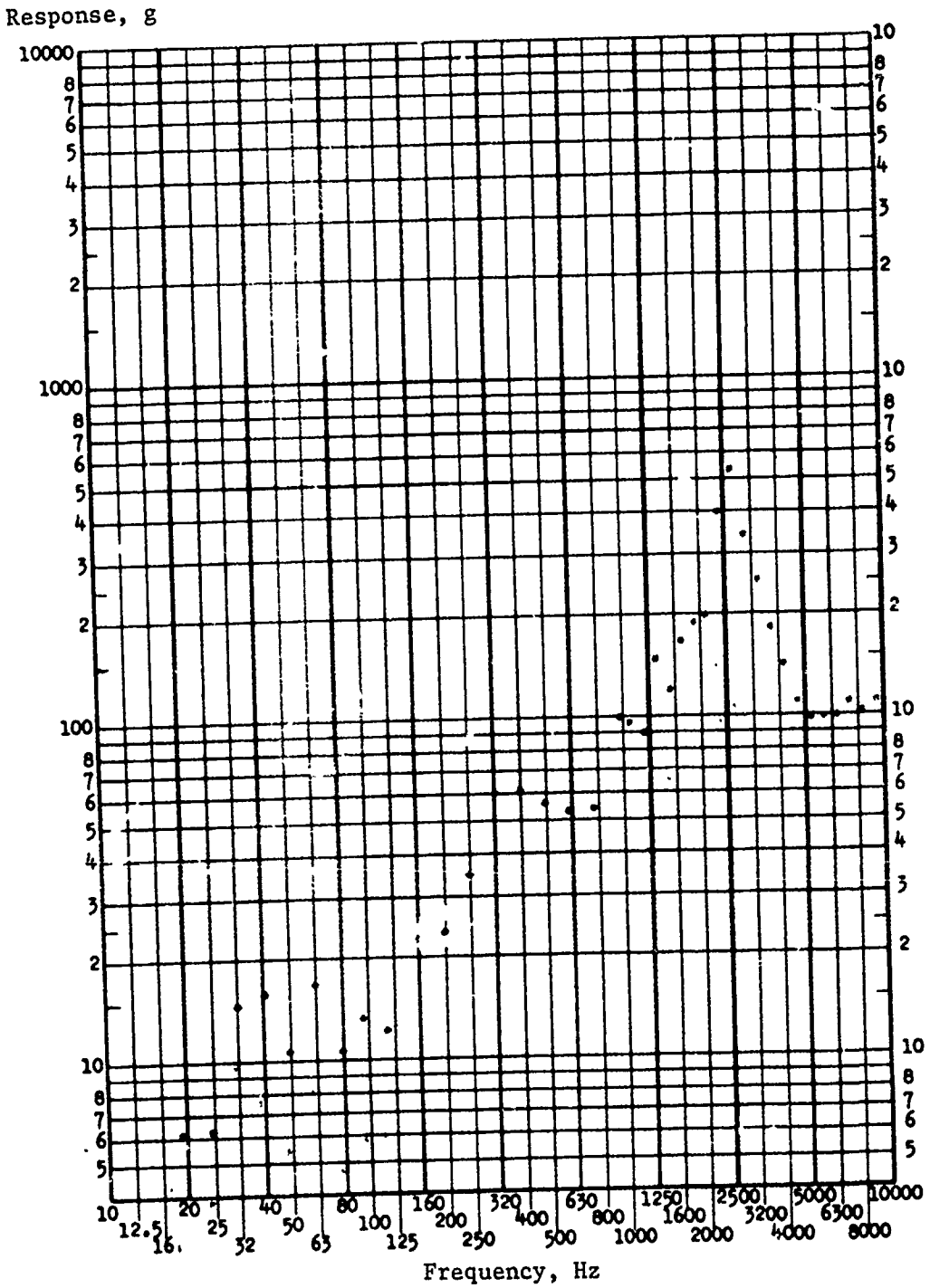
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 8 - Tangential axis longeron near station 77

Figure 48 (cont)



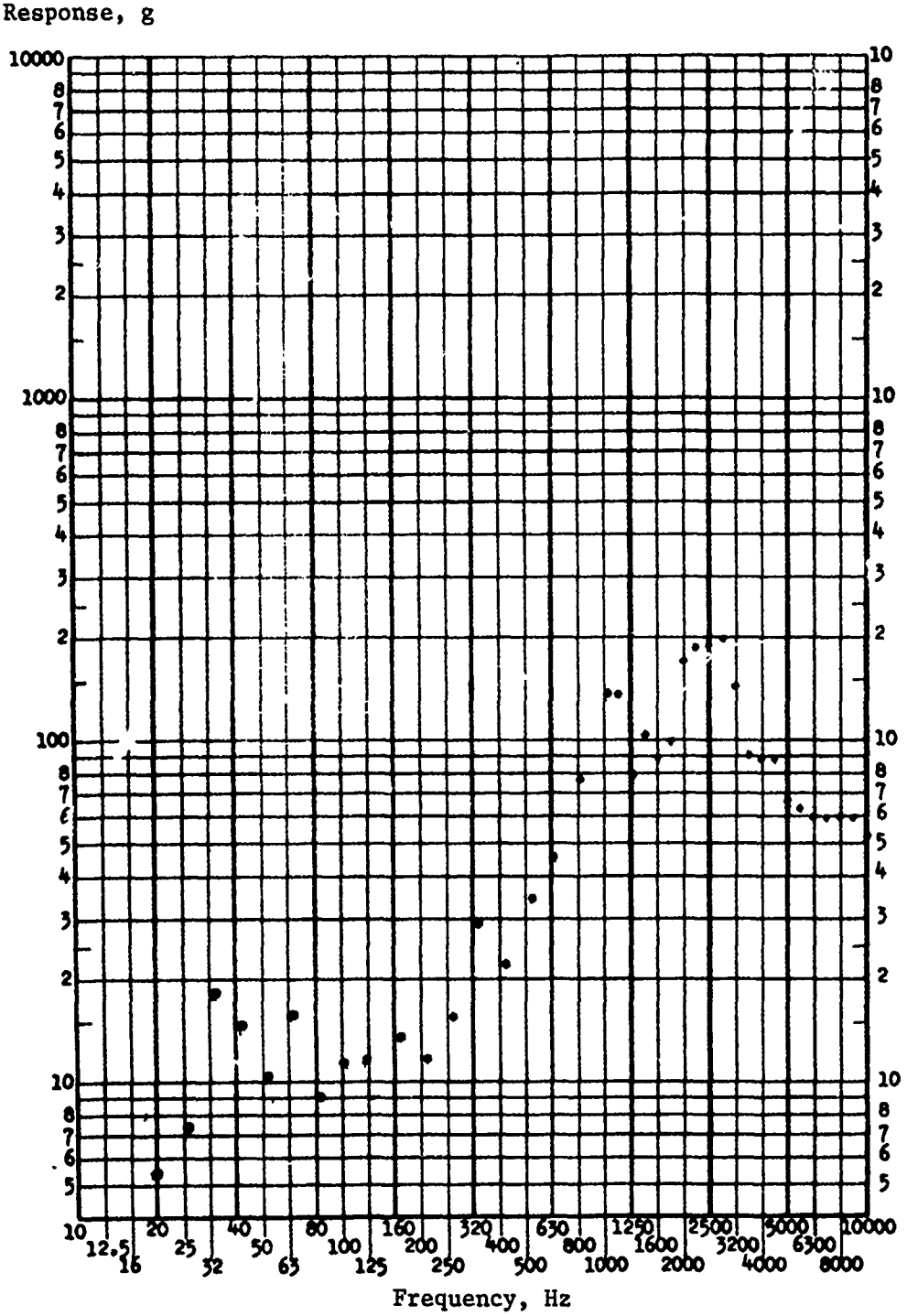
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 9 - Radial axis longeron near station 77

Figure 48 (cont)



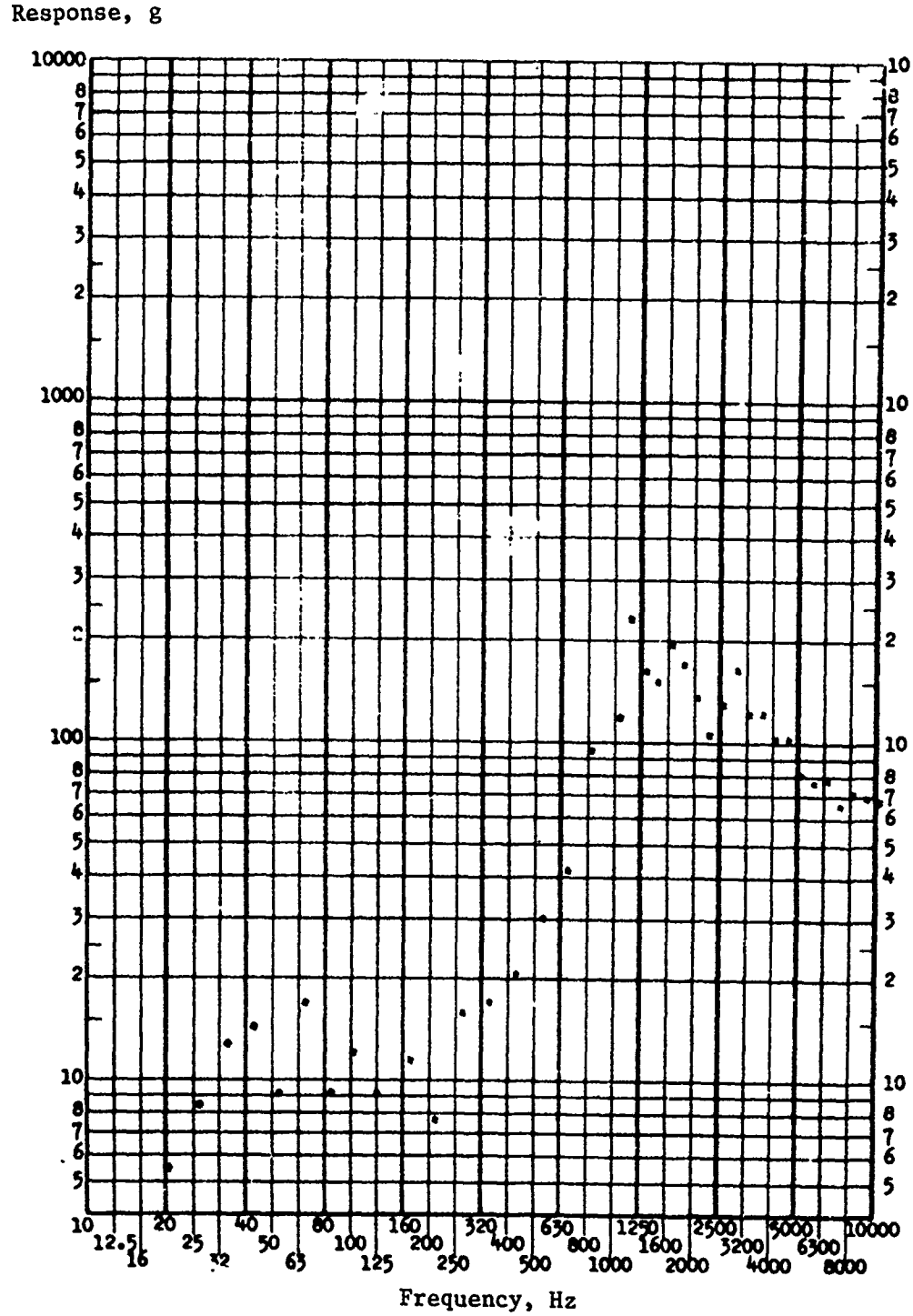
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 48 (cont)



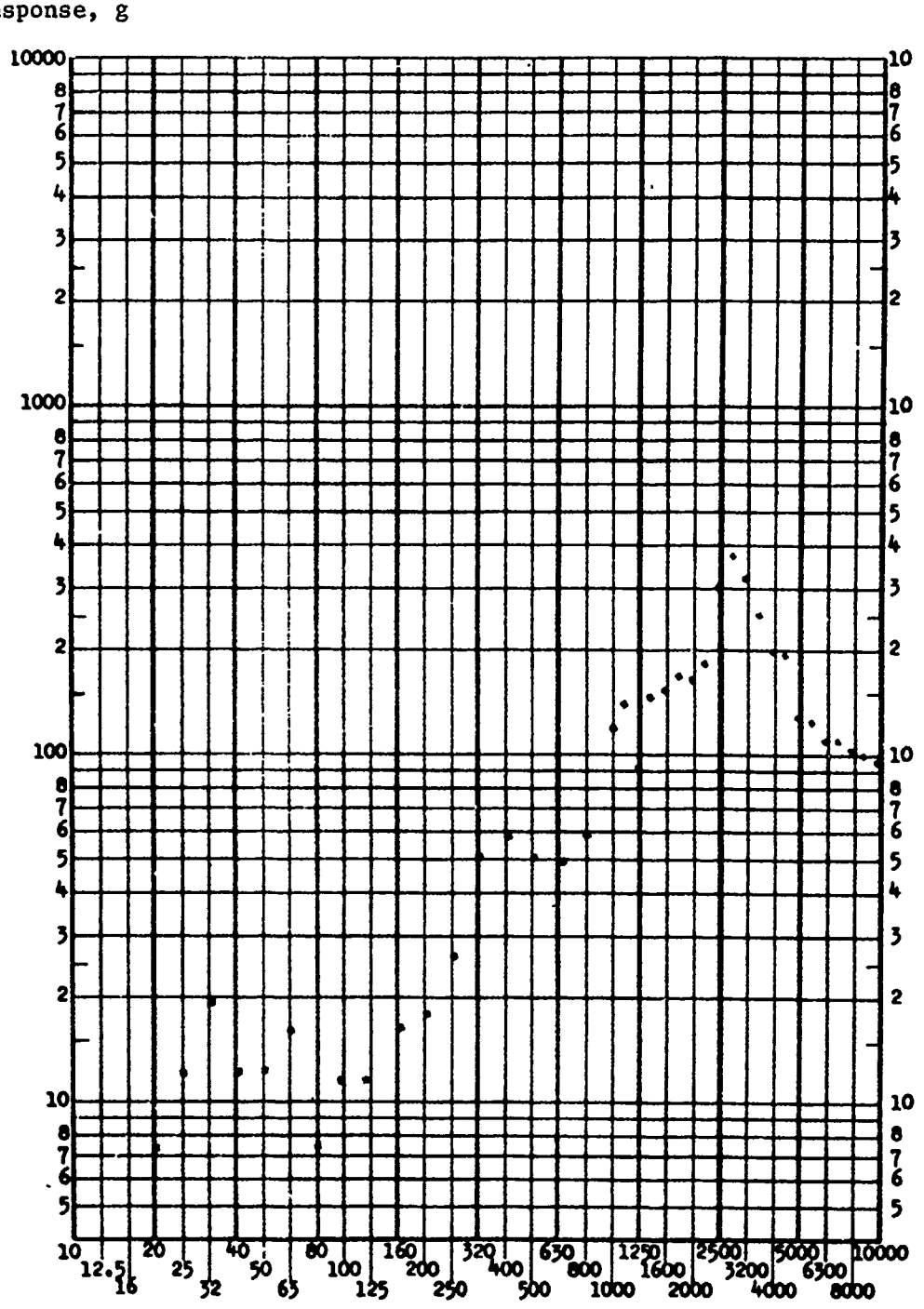
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 48 (cont)



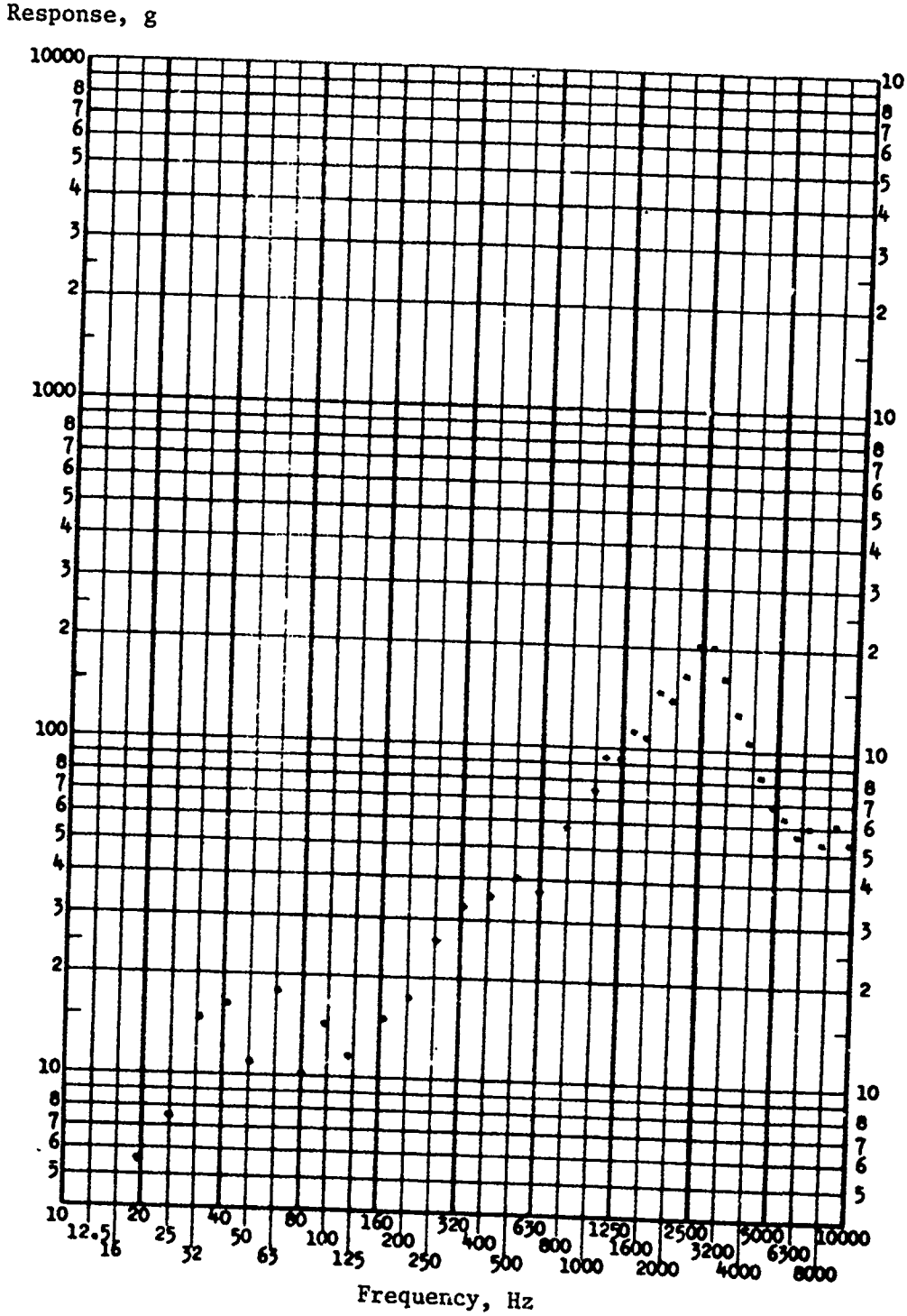
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 48 (cont)



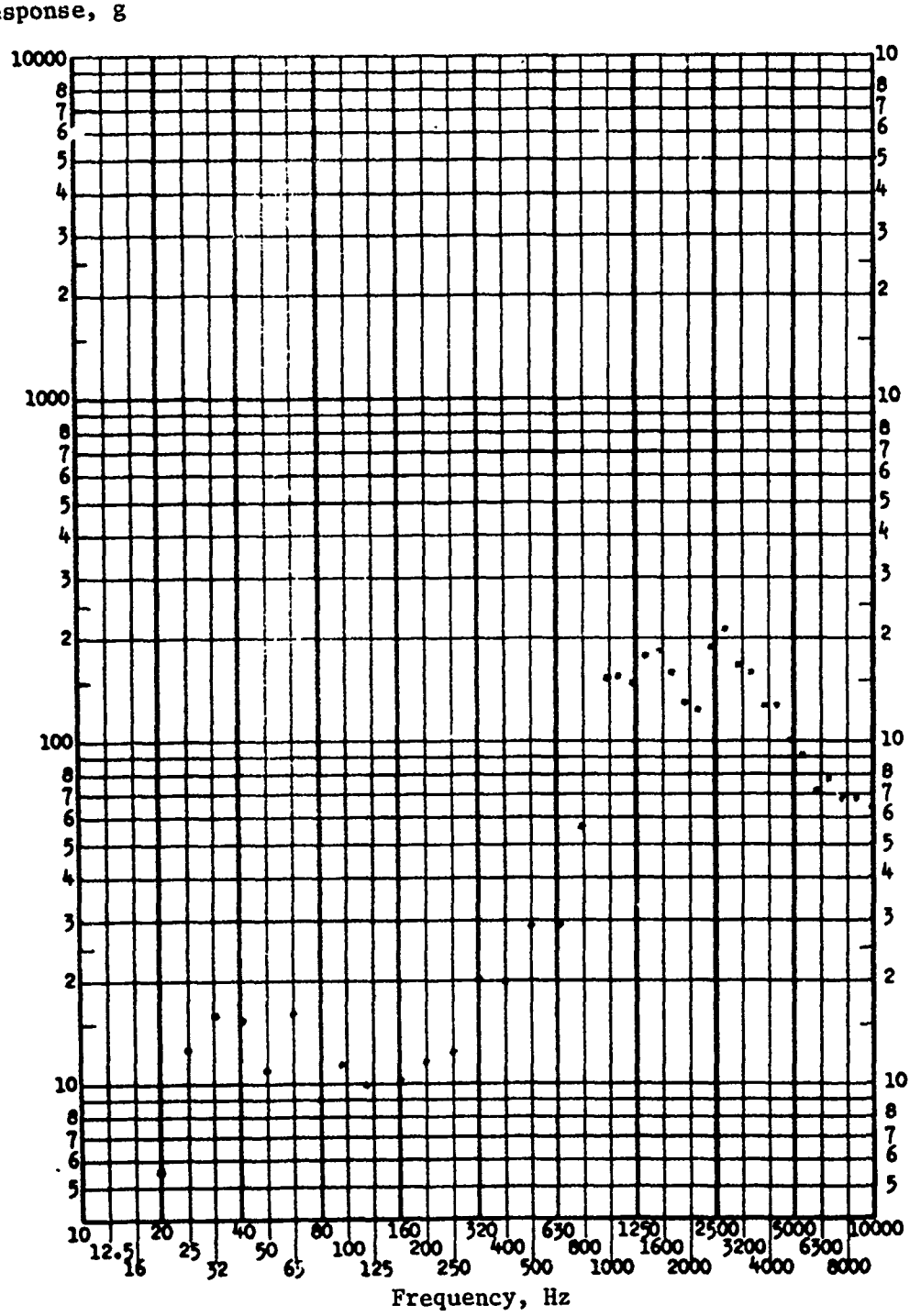
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 13 - Longitudinal axis truss top near longeron attach point

Figure 48 (cont)



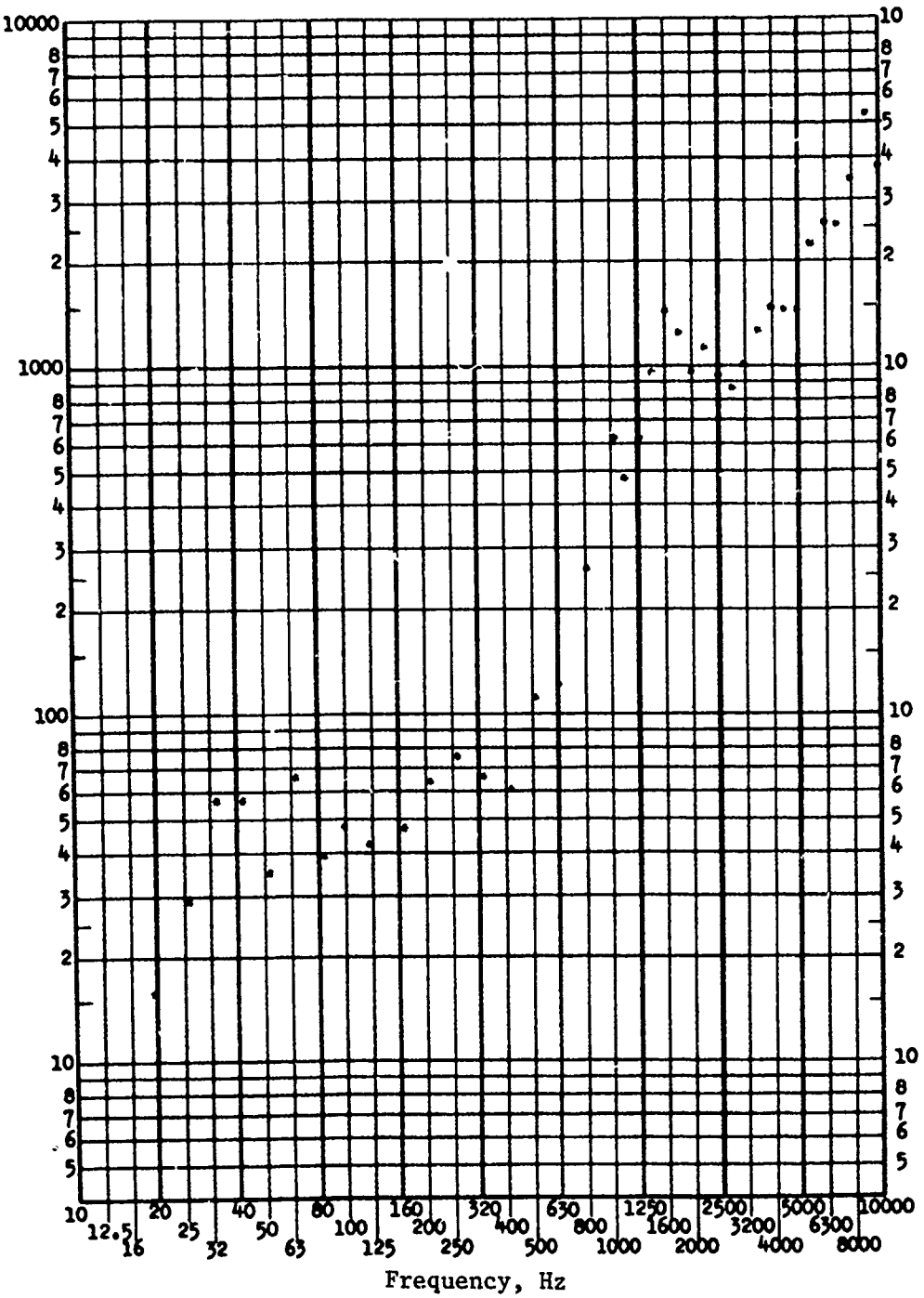
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 48 (cont)



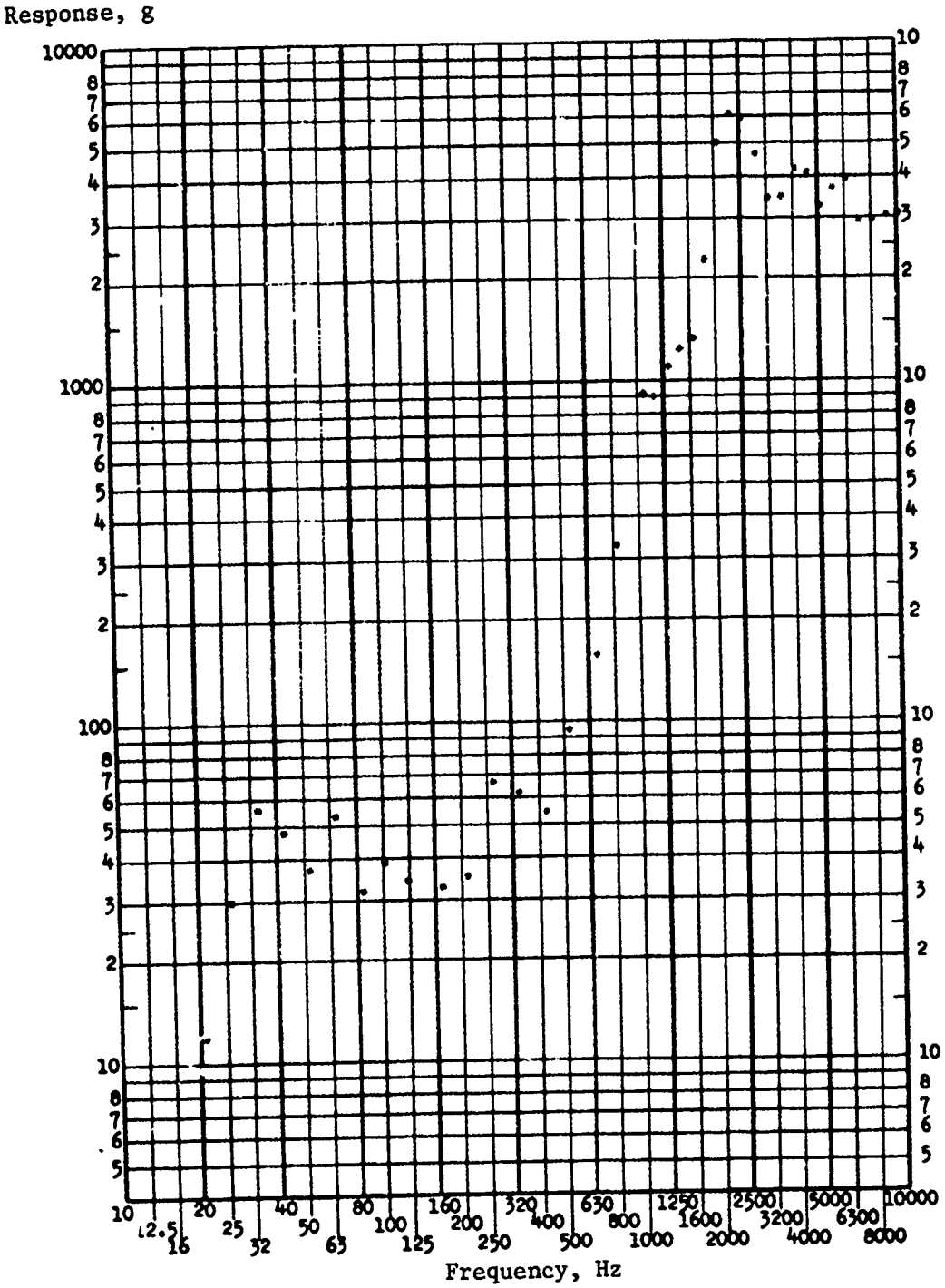
Bench Shock Test - Stage II/III Separation, Run 48
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 48 (concl)



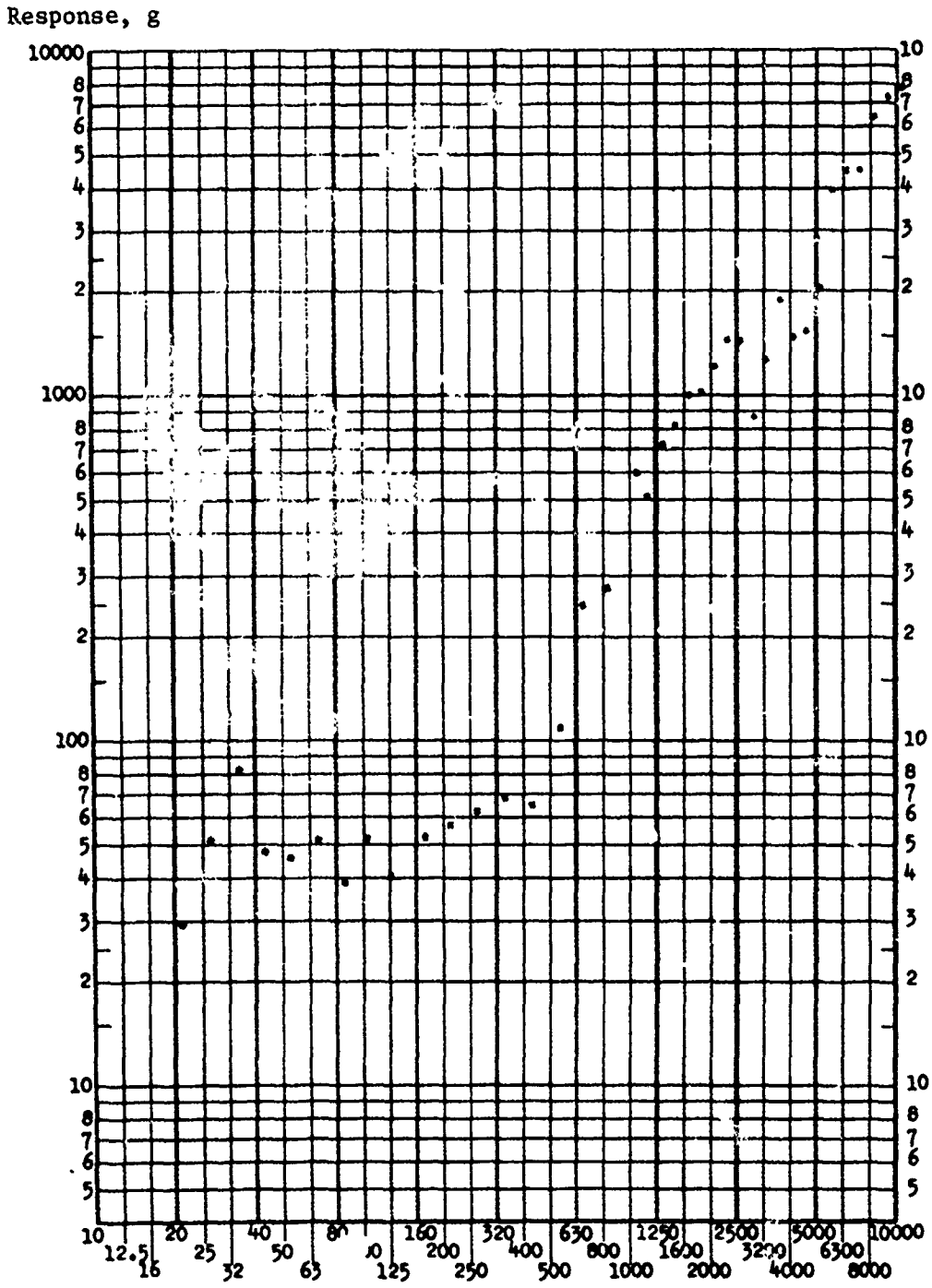
Bench Shock Test - Stage II/III Separation, Run 49_
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 49 Run 49 Shock Response Spectrum



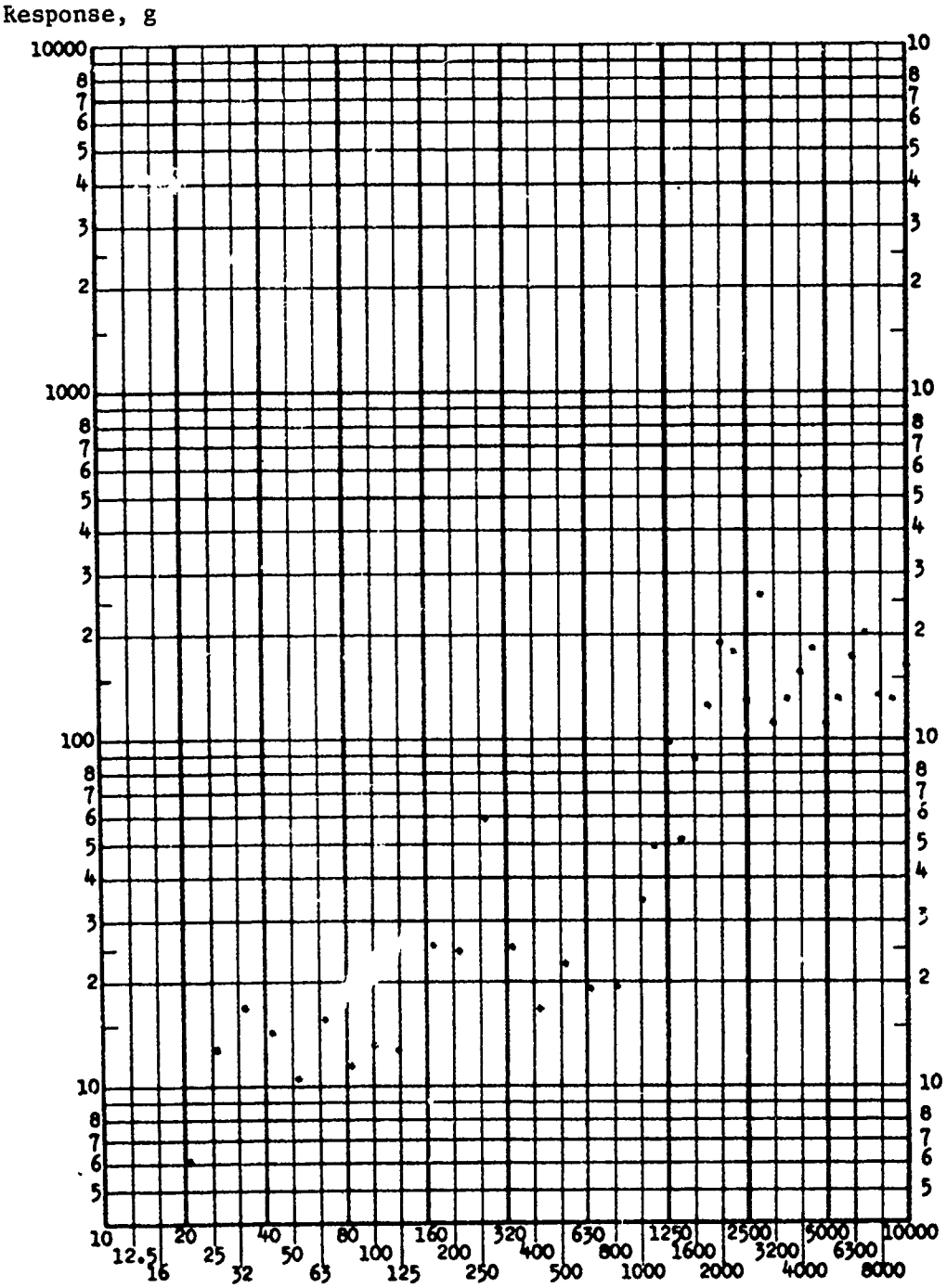
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 2 - Tangential axis longeron near station 133

Figure 49 (cont)



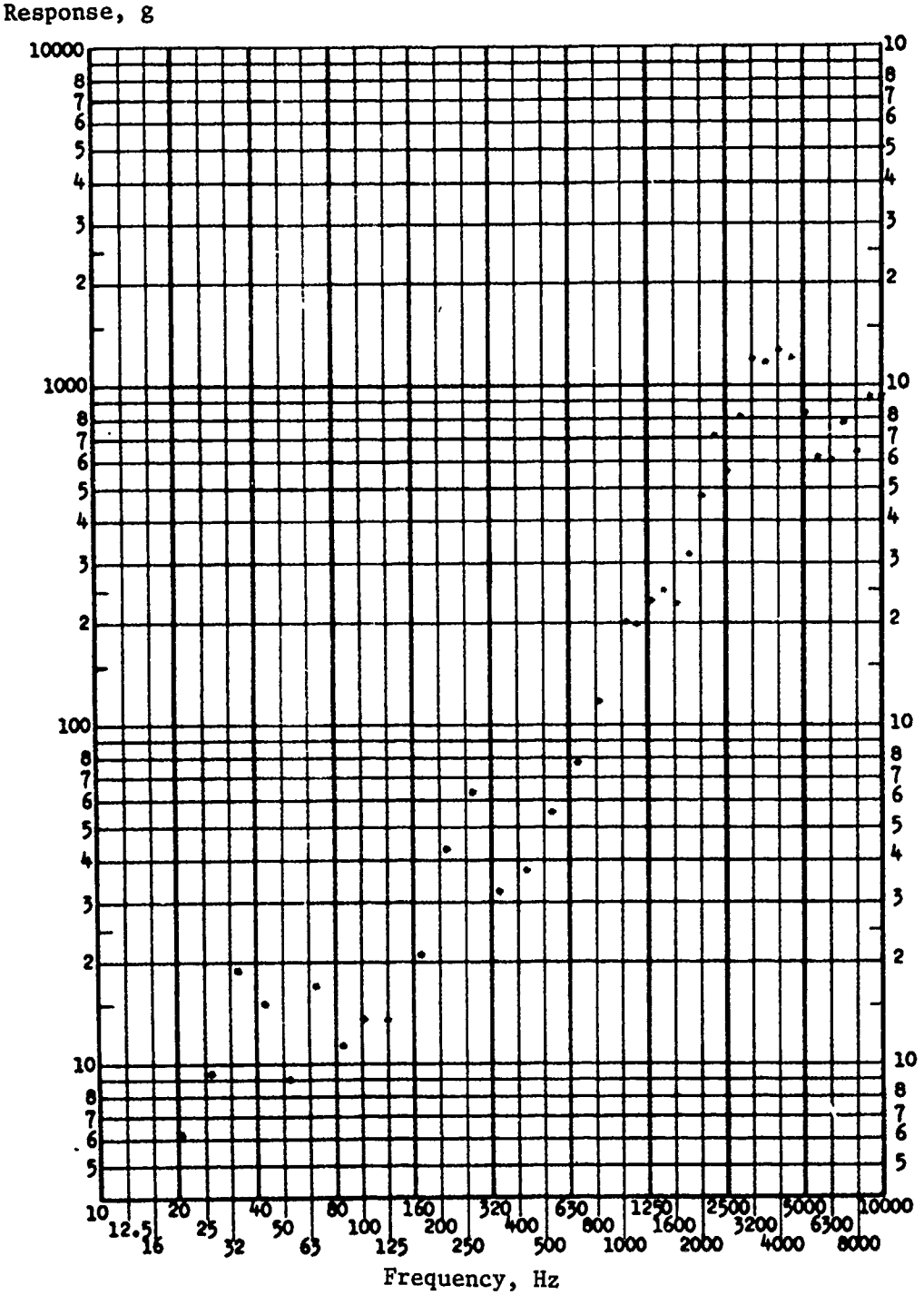
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 3 - Radial axis longeron near station 133

Figure 49 (cont)



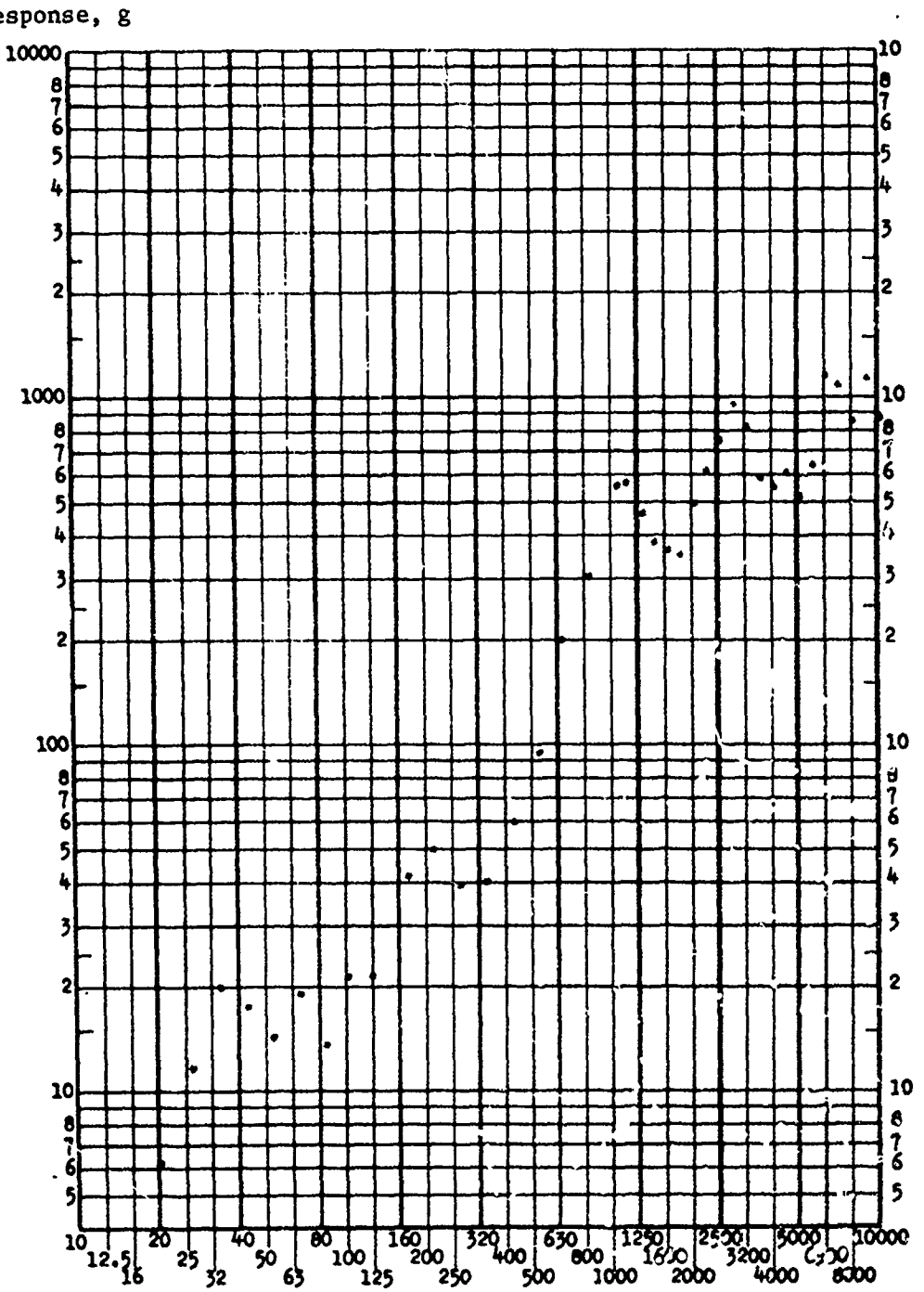
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 49 (cont)



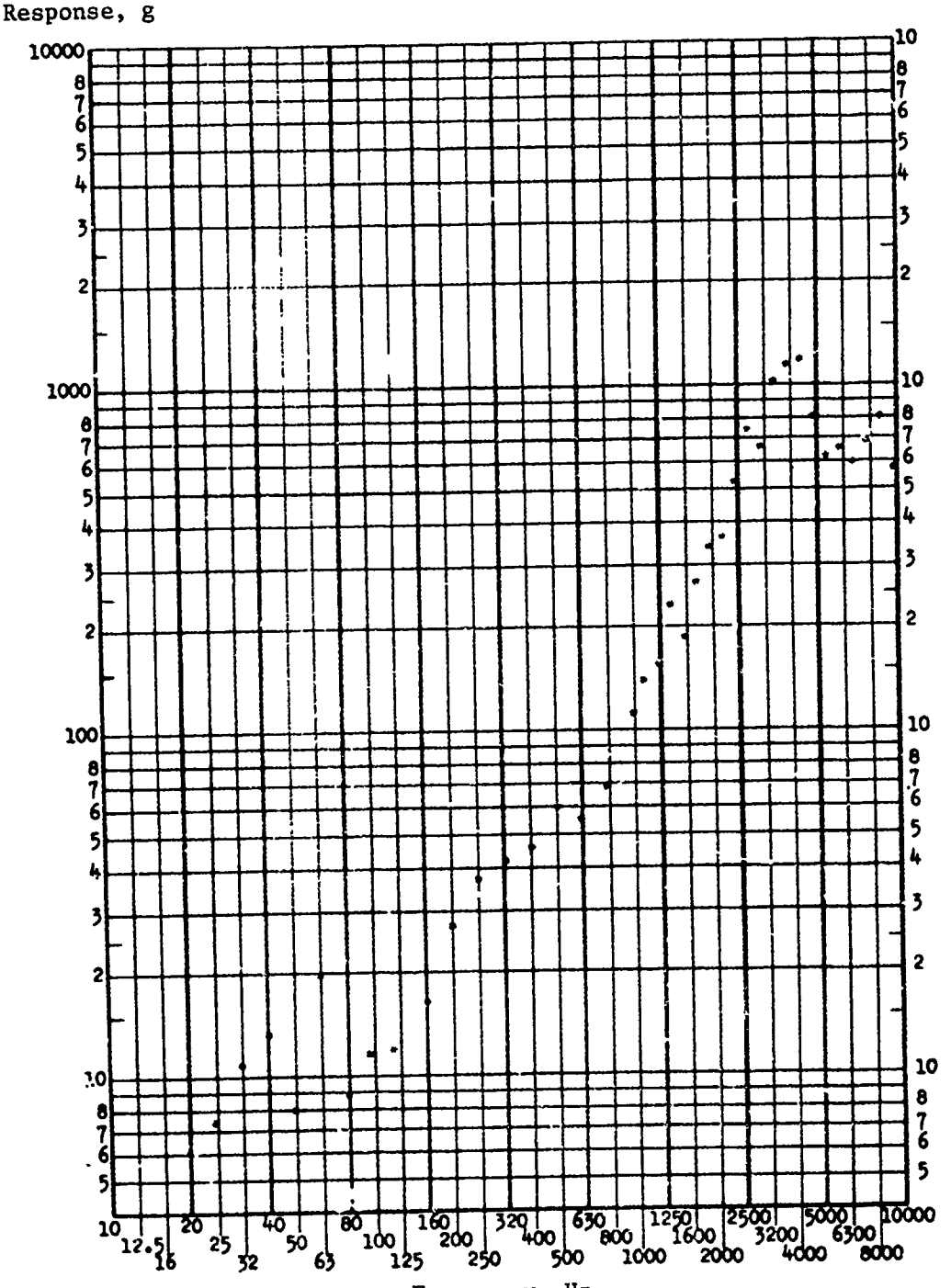
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 5 - Tangential axis longeron near station 117

Figure 49 (cont)



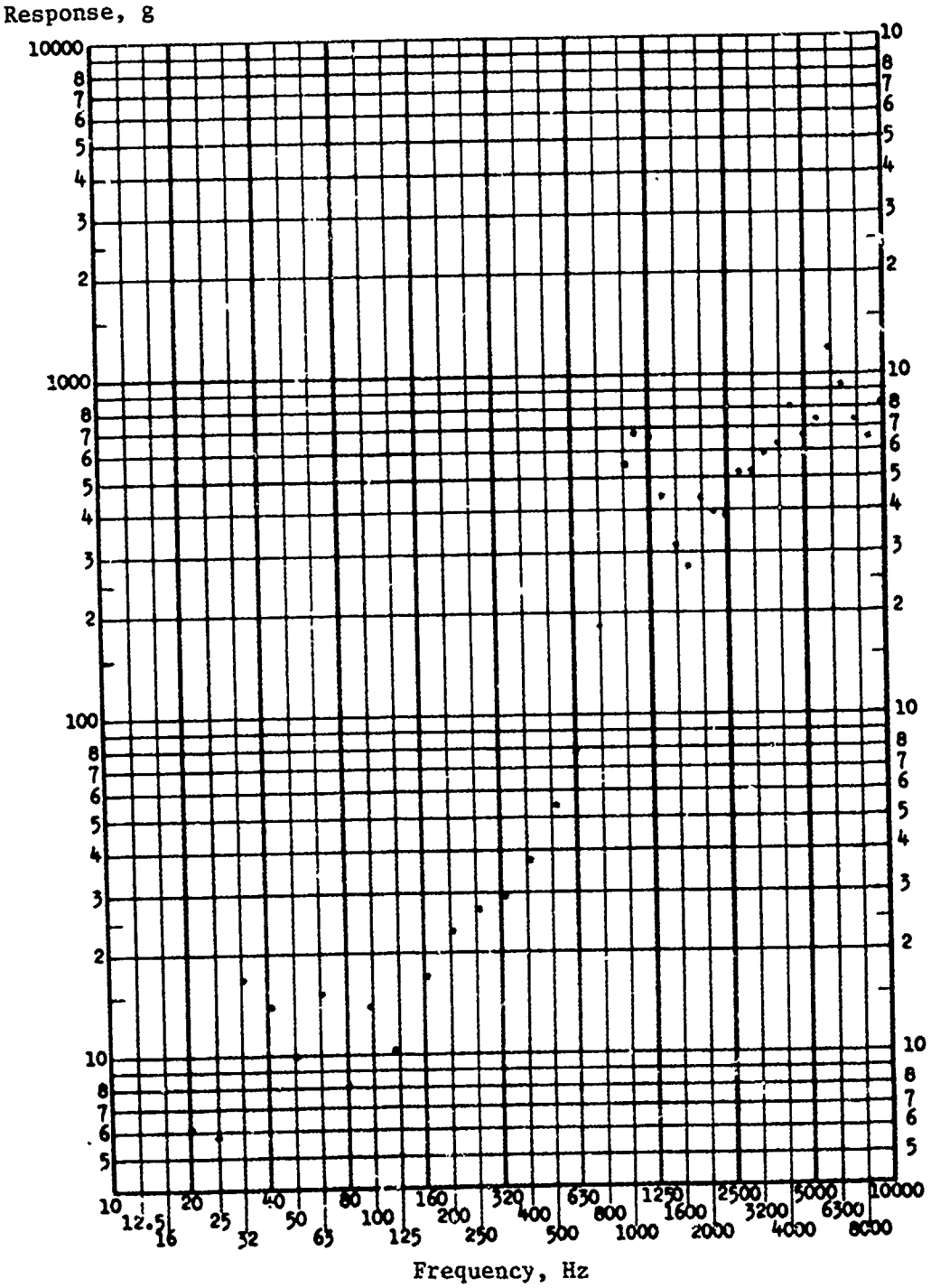
Bench Shock Test - Stage II/III Separation, Run 49_
Measurement No. 6 - Radial axis longeron near
station 117

Figure 49 (cont)



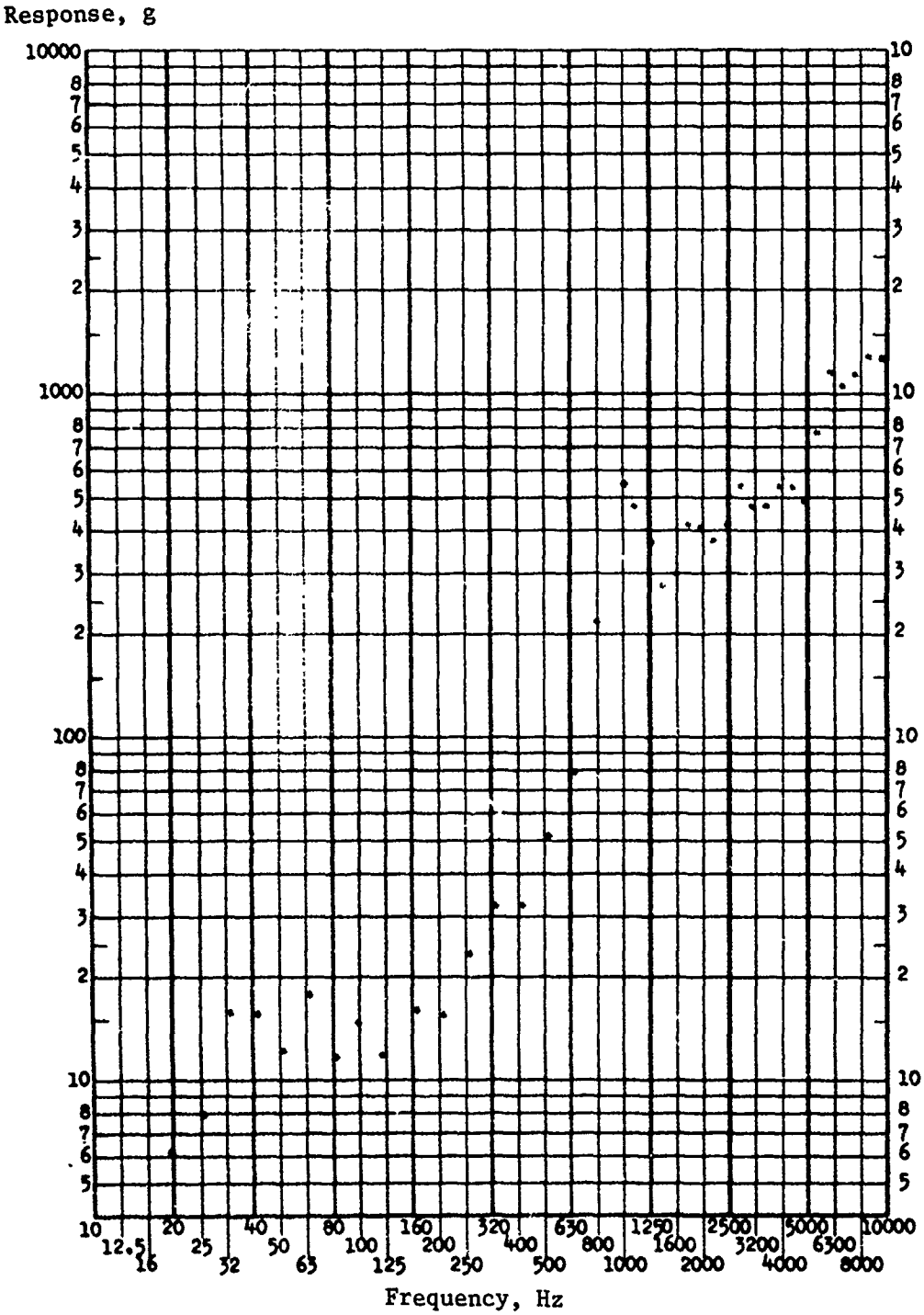
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 49 (cont)



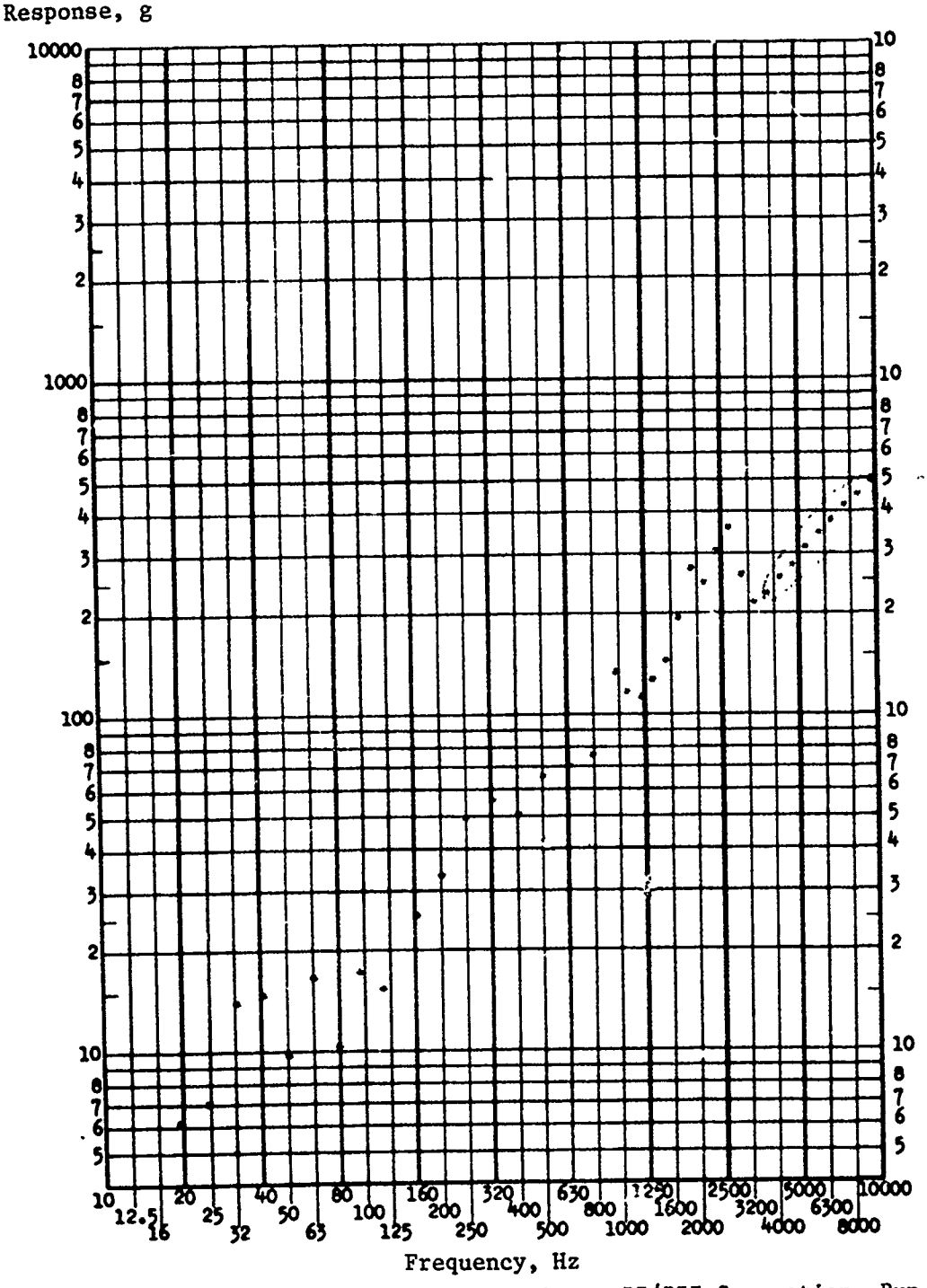
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 8 - Tangential axis longeron near station 77

Figure 49 (cont)



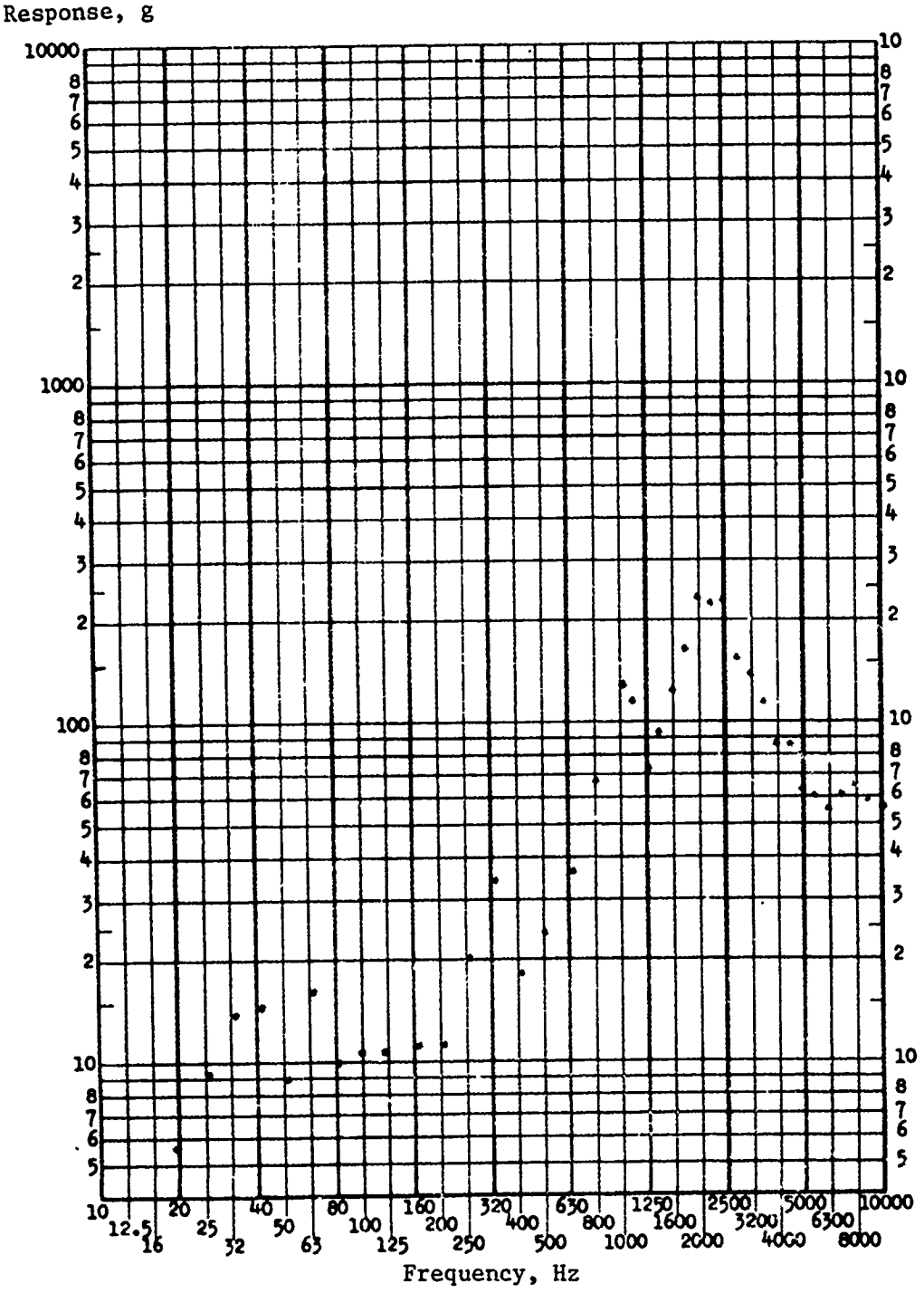
Bench Shock Test - Stage II/III Separation, Run 49_
Measurement No. 9 - Radial axis longeron near
static 77

Figure 49 (cont)



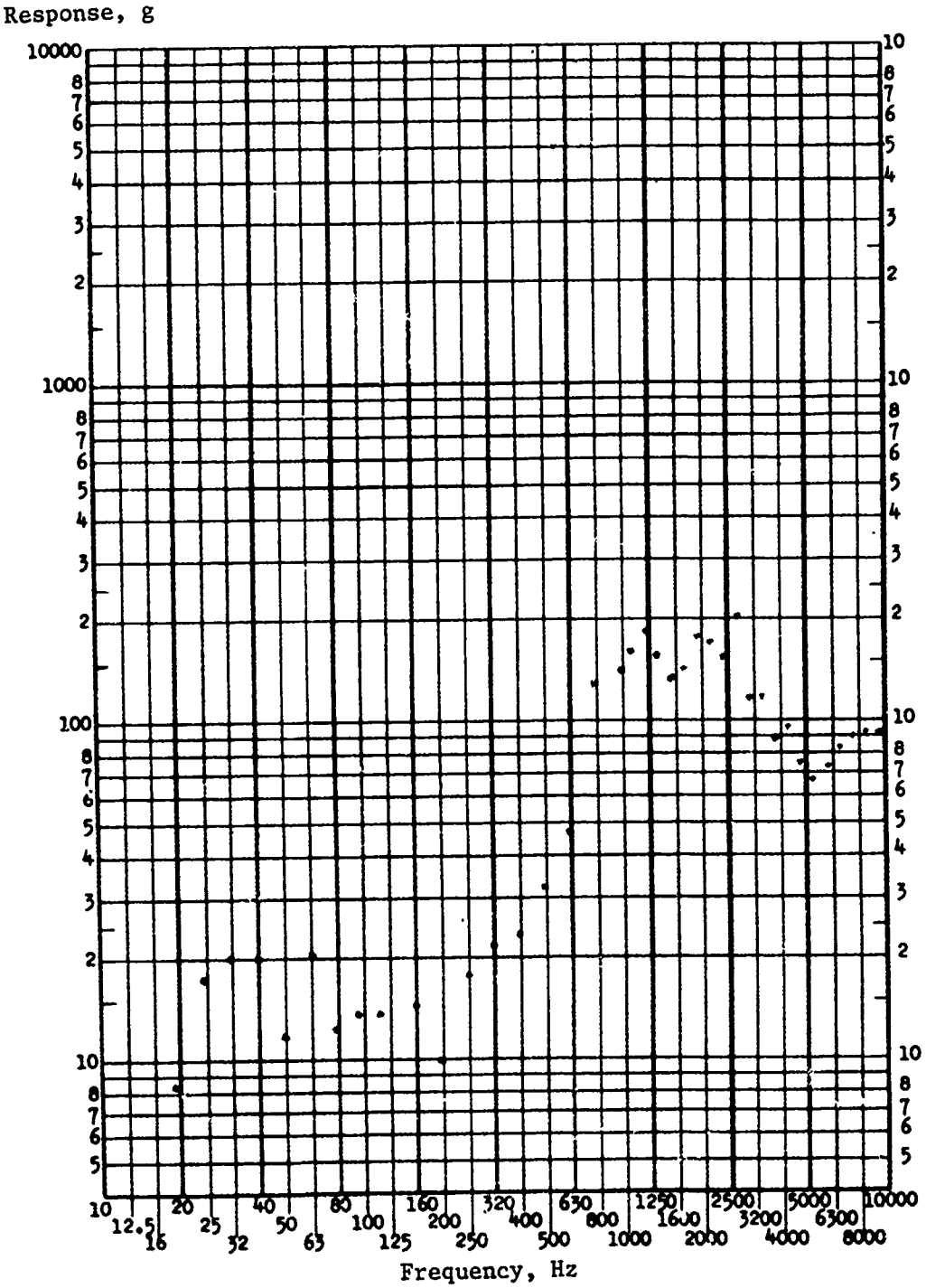
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 49 (cont)



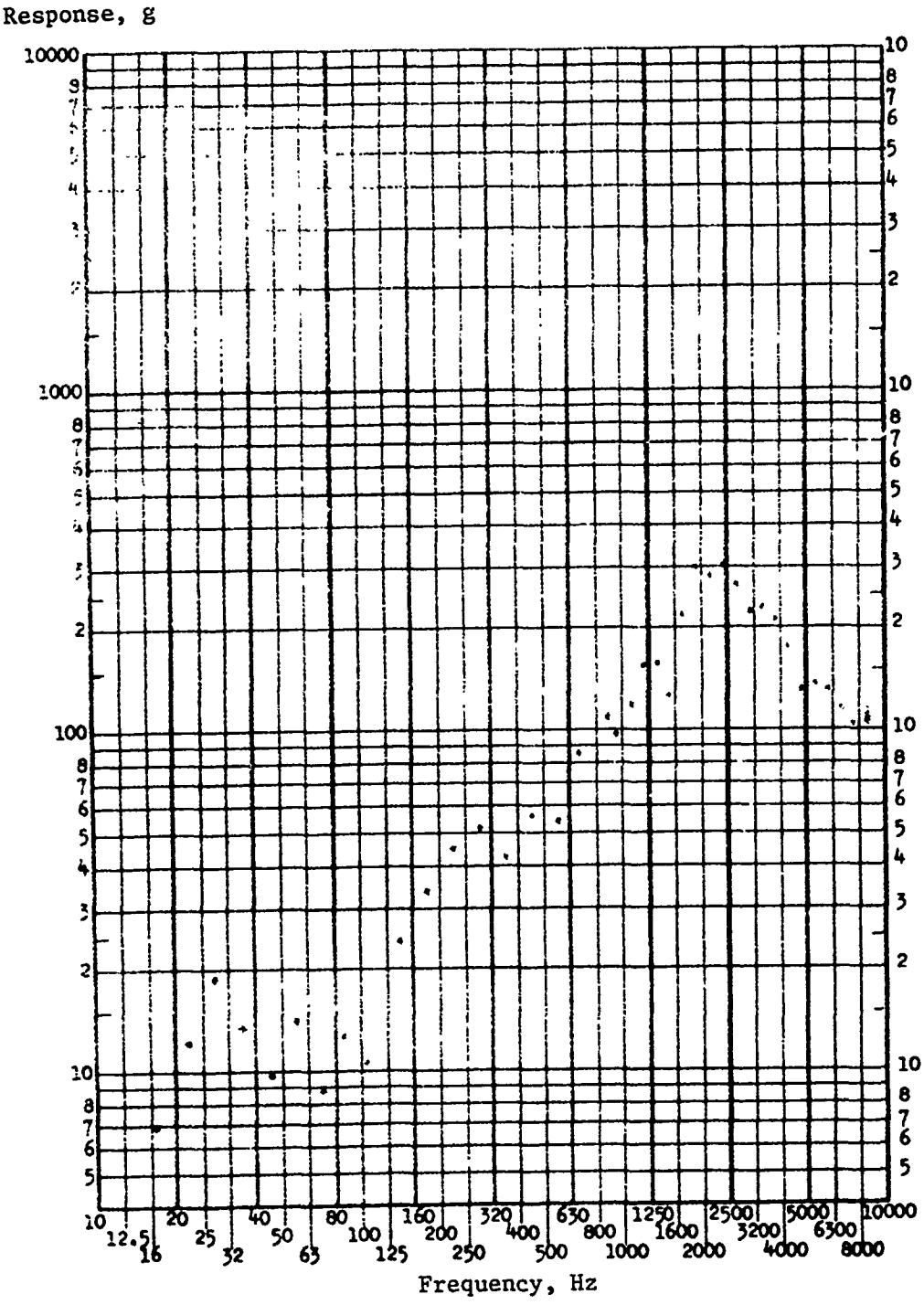
Bench Shock Test - Stage II/III Separation, Run 49 _
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 49 (cont)



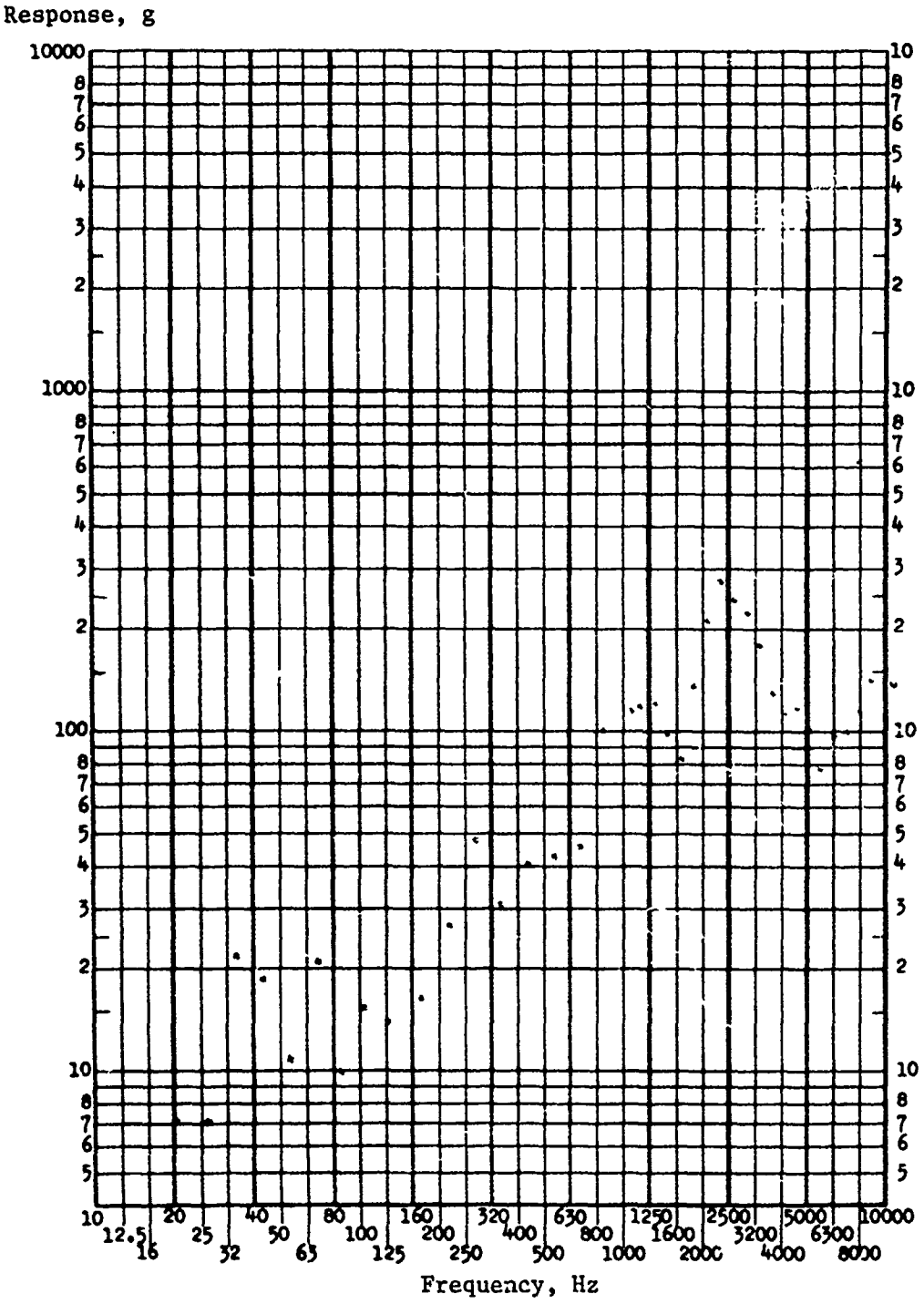
Bench Shock Test - Stage II/III Separation, Run 49 _
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 49 (cont)



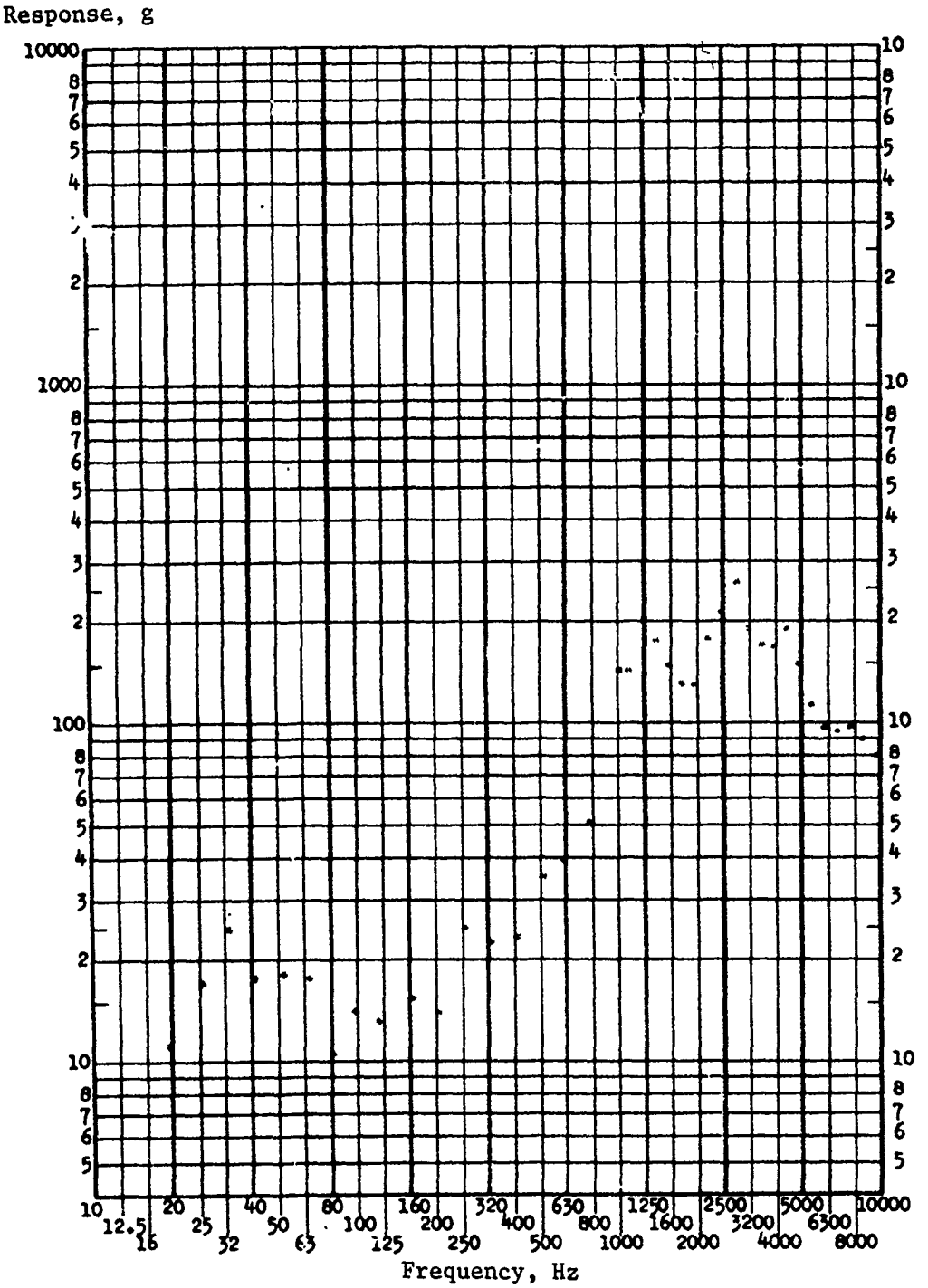
Bench Shock Test - Stage II/III Separation, Run 49 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 49 (cont)



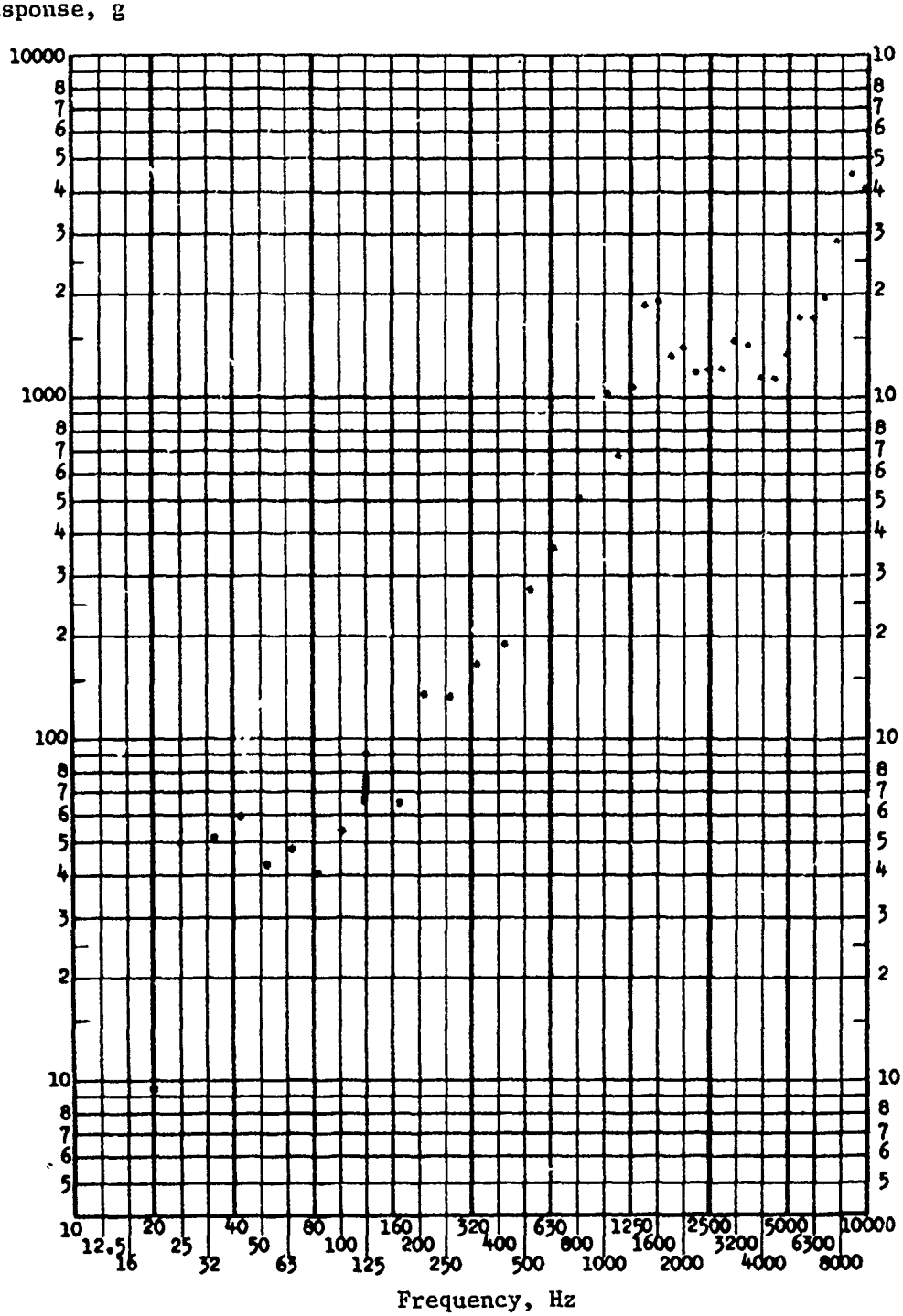
Bench Shock Test - Stage II/III Separation, Run 49
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 49 (cont)



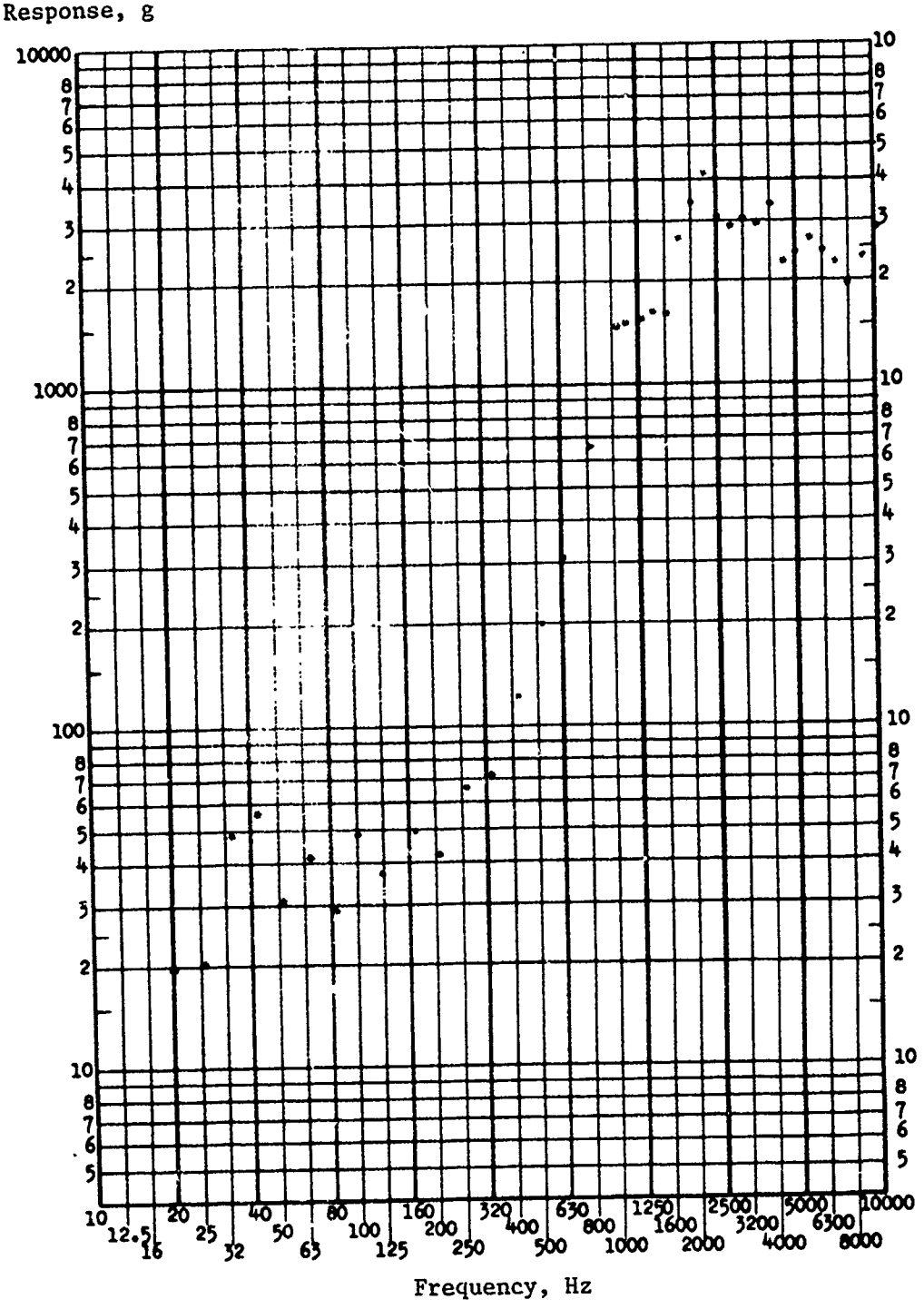
Bench Shock Test - Stage II/III Separation, Run 49 _
Measurement No. 15 - Lateral axis truss top near
longeron attach point

Figure 49 (concl)



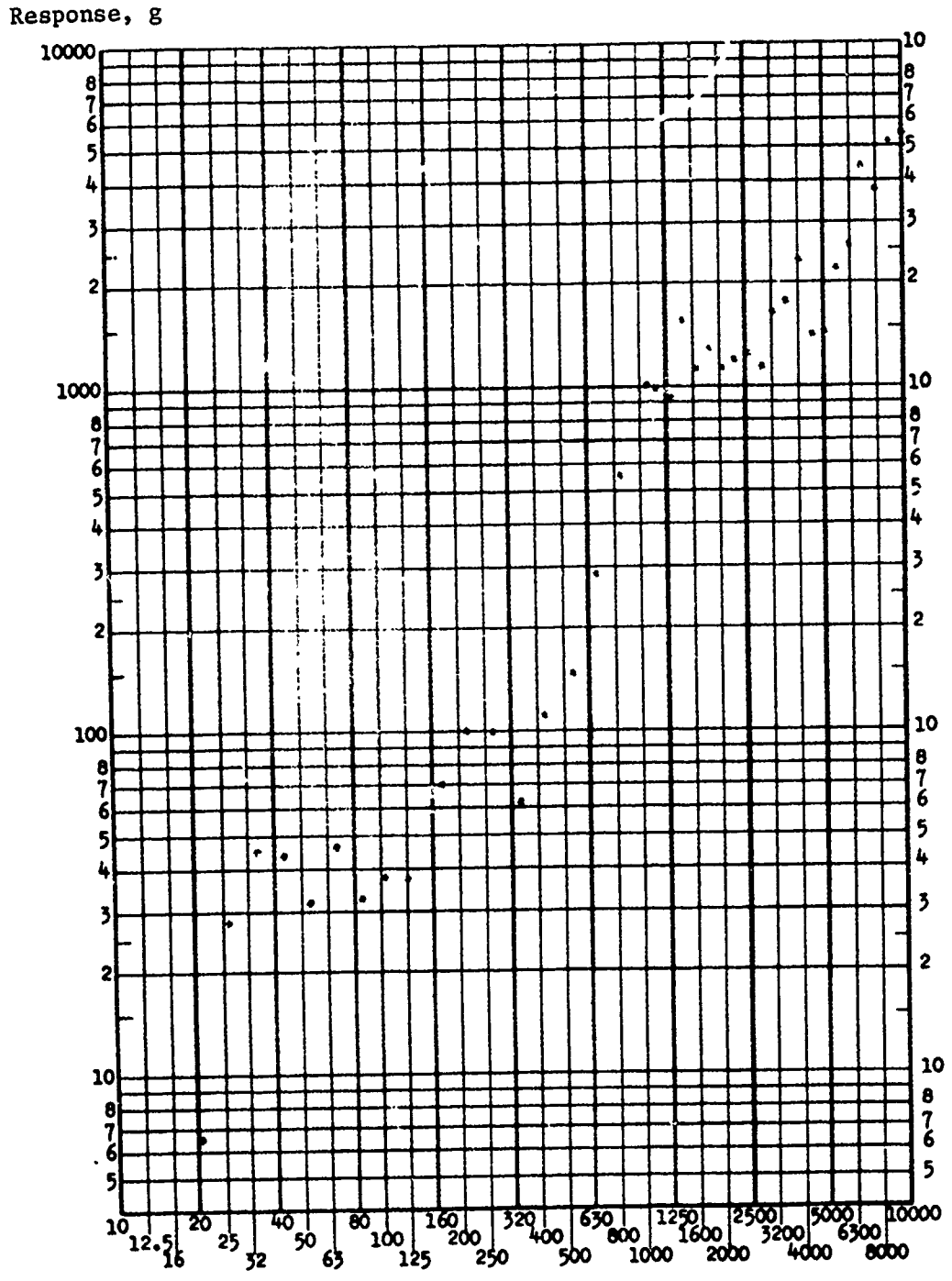
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 50 Run 50 Shock Response Spectrum



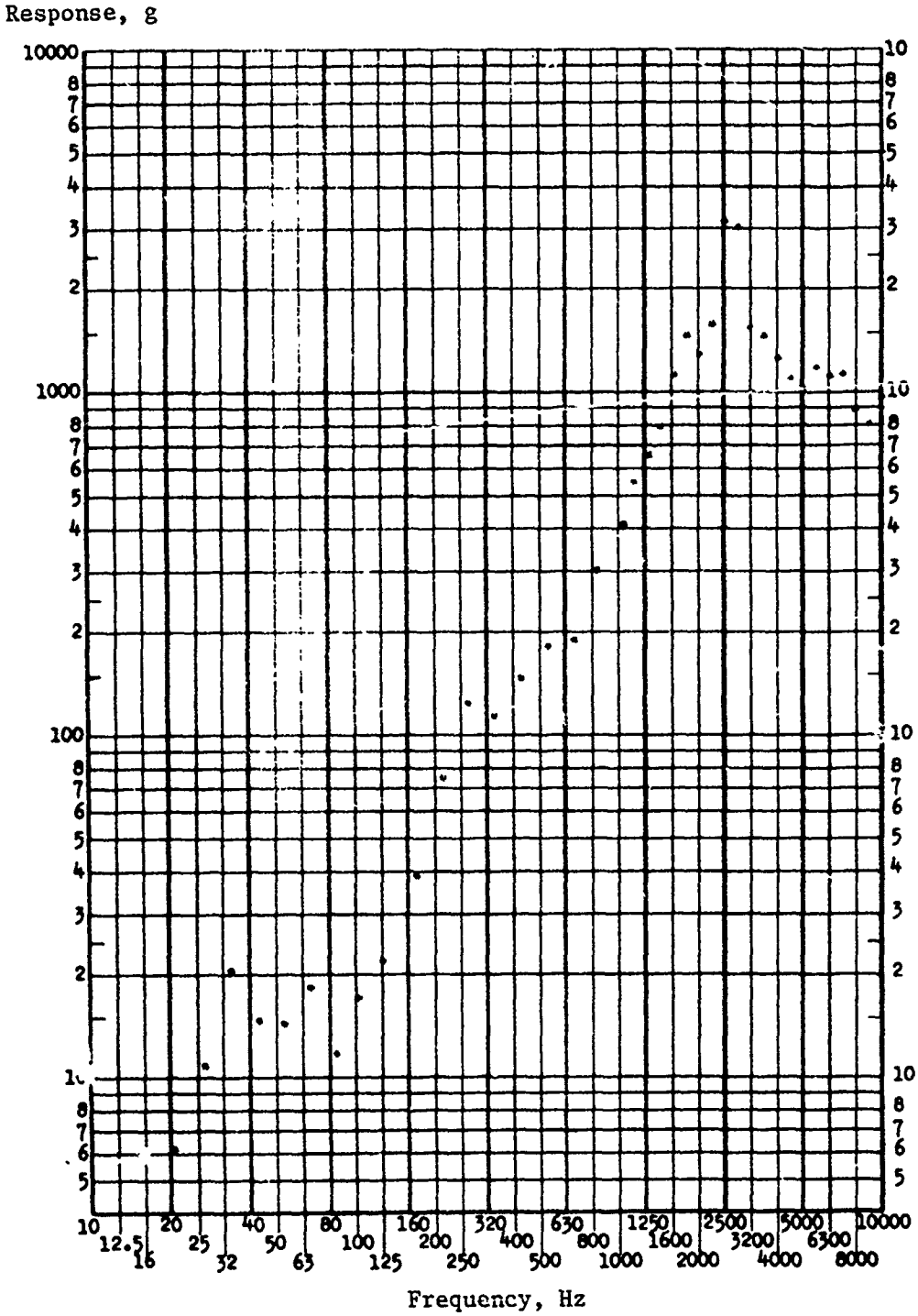
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 2 - Tangential axis longeron near station 133

Figure 50 (cont)



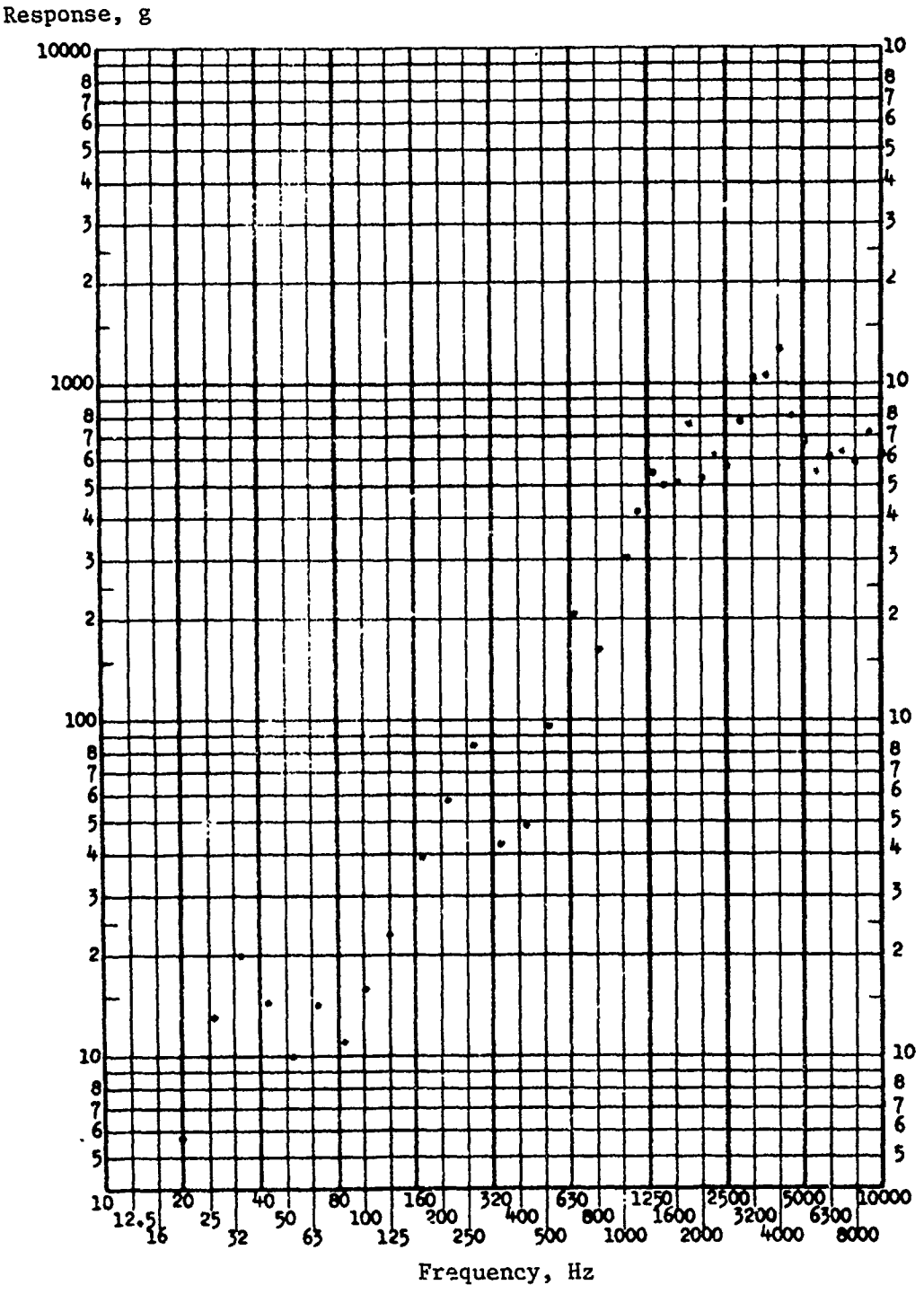
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 3 - Radial axis longeron near station 133

Figure 50 (cont)



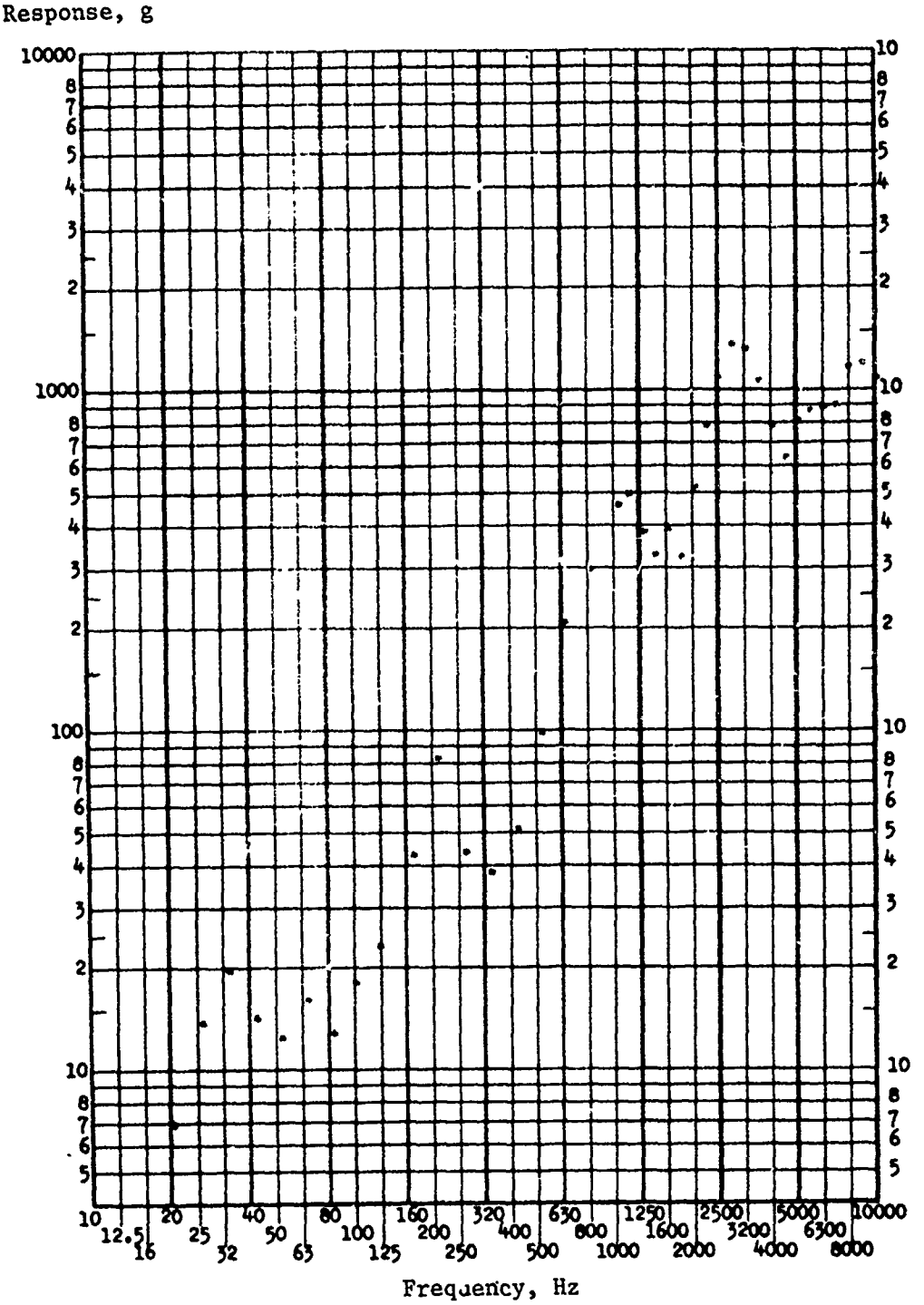
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 50 (cont)



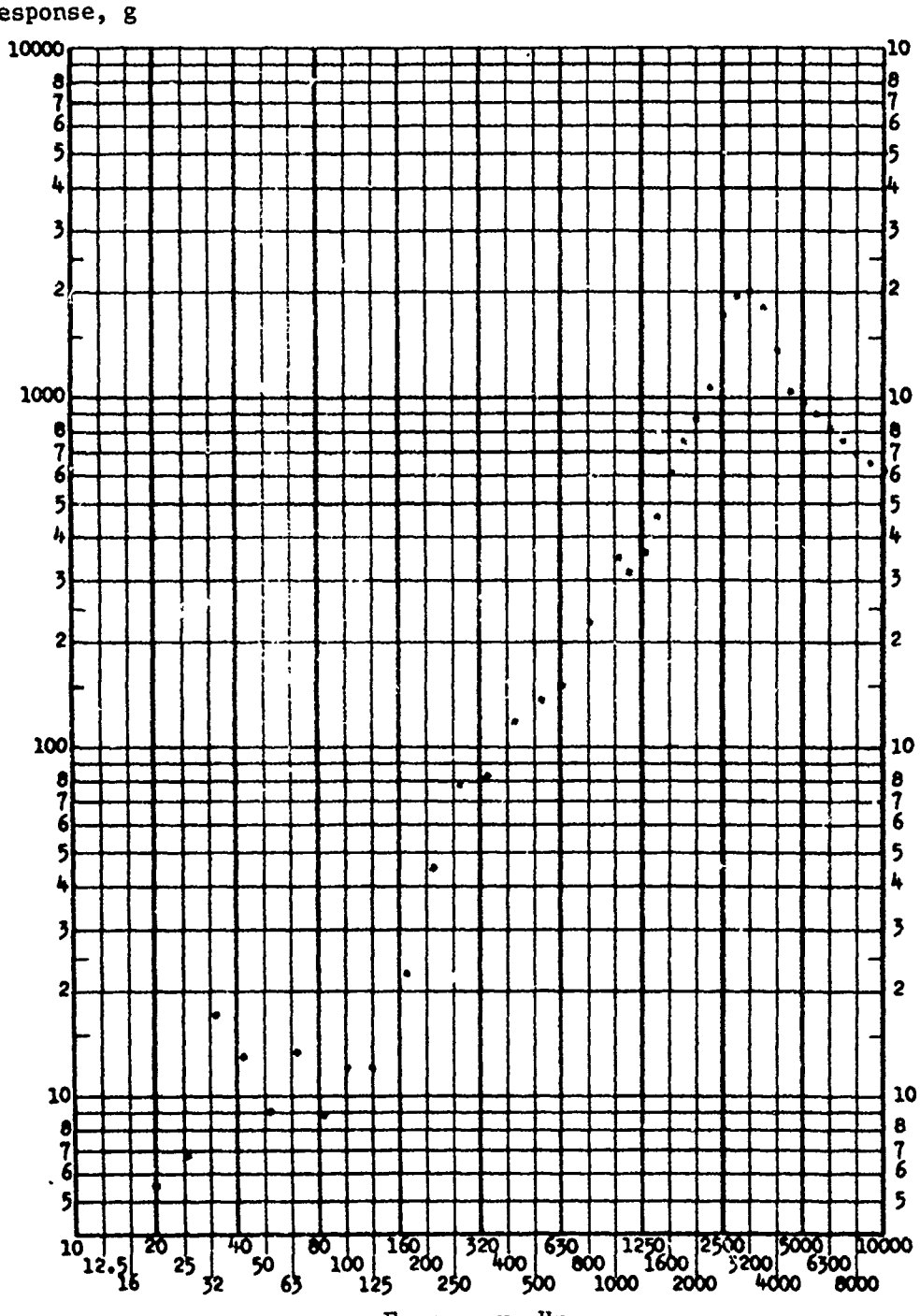
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 5 - Tangential axis longeron near station 117

Figure 50 (cont)



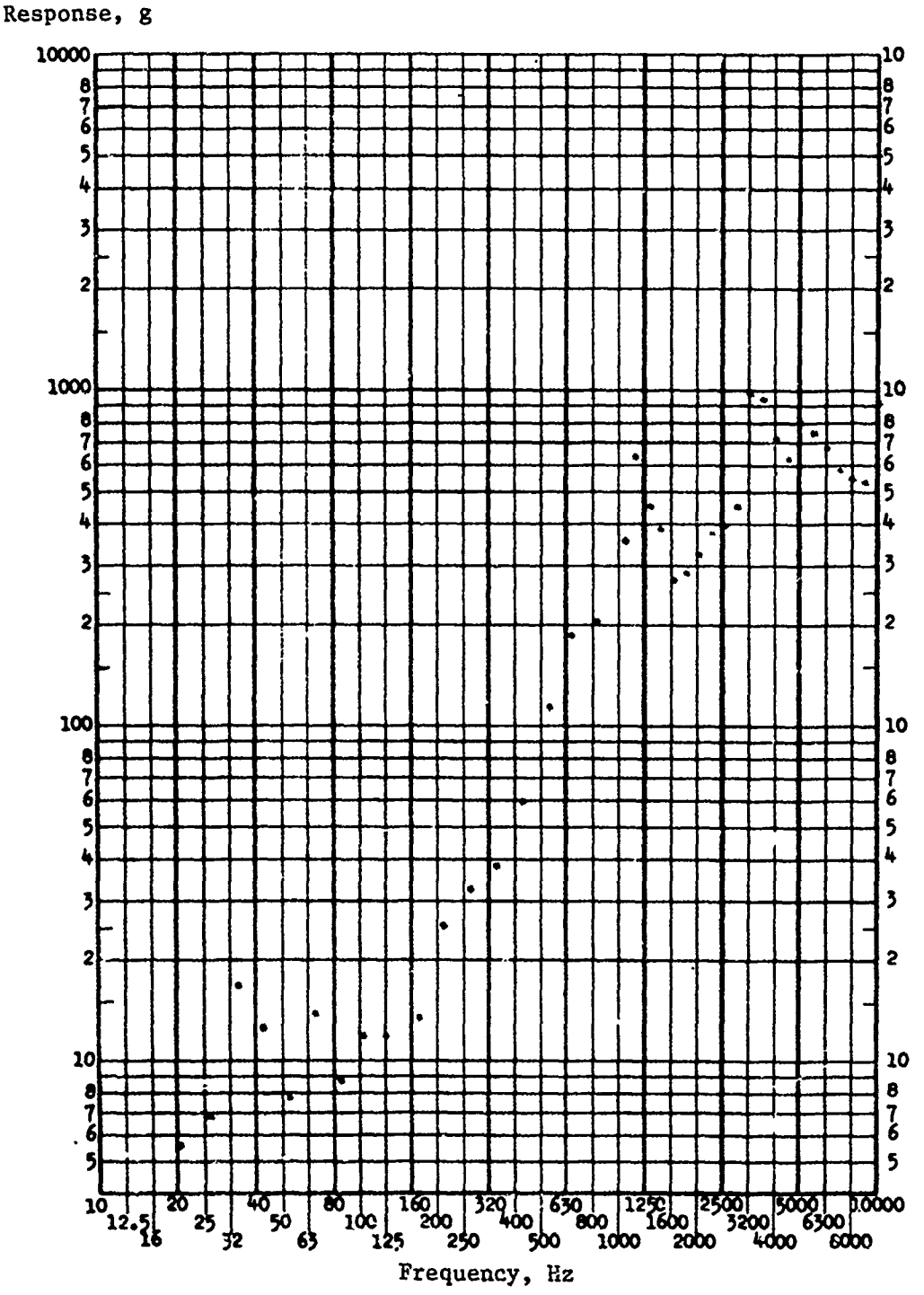
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 6 - Radial axis longeron near station 117

Figure 50 (cont)



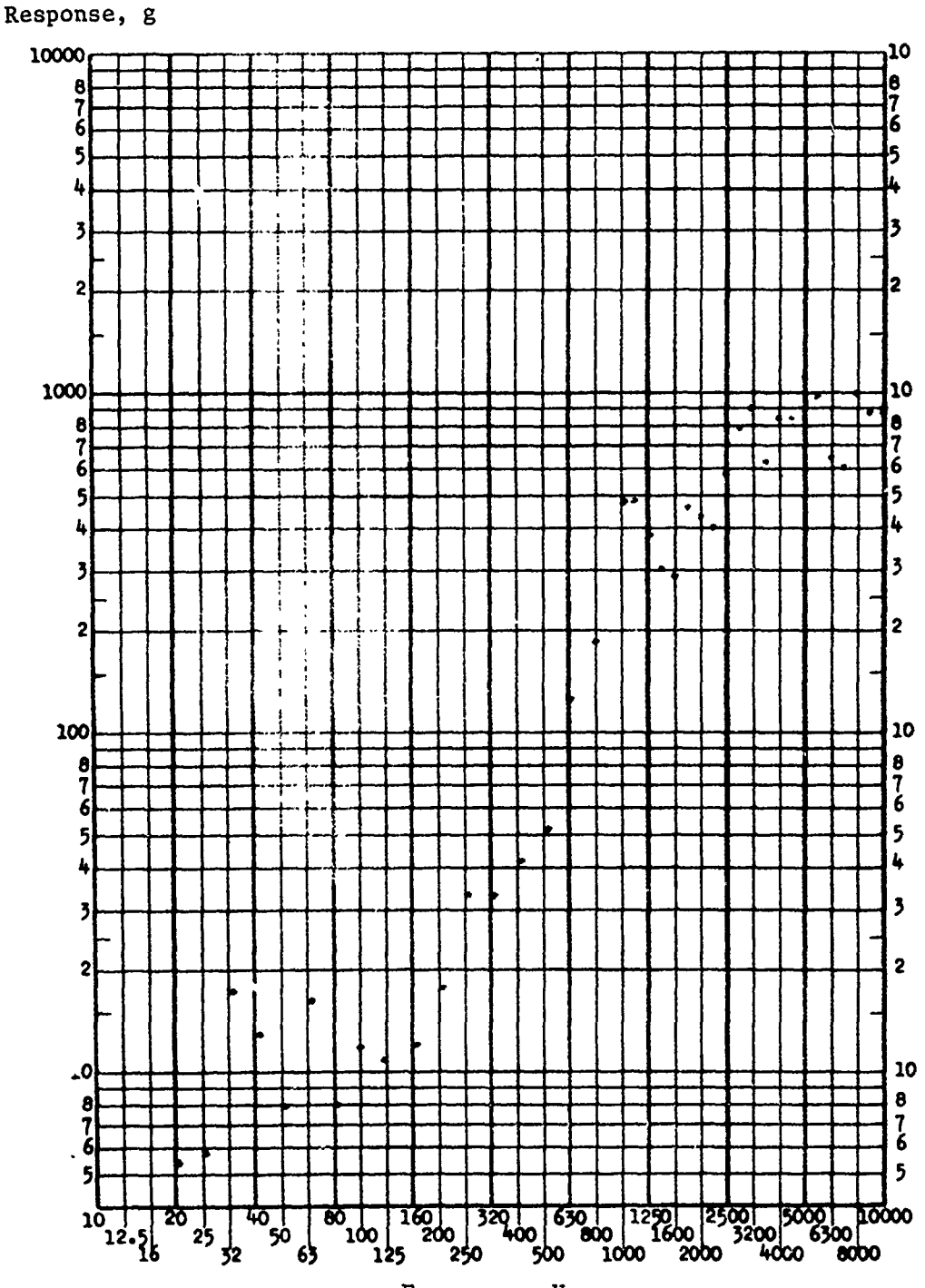
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 50 (cont)



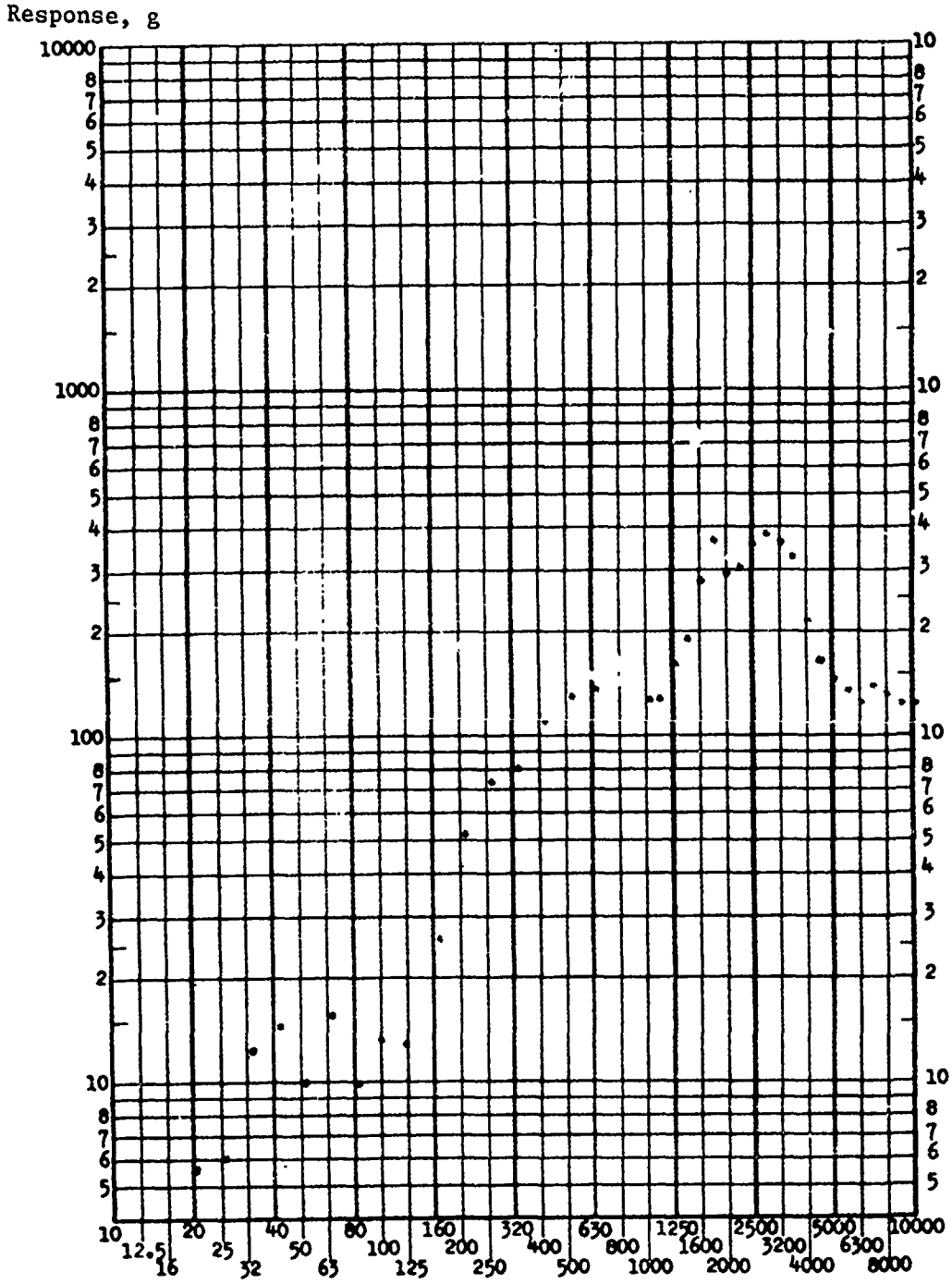
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 8 - Tangential axis longeron near station 77

Figure 50 (cont)



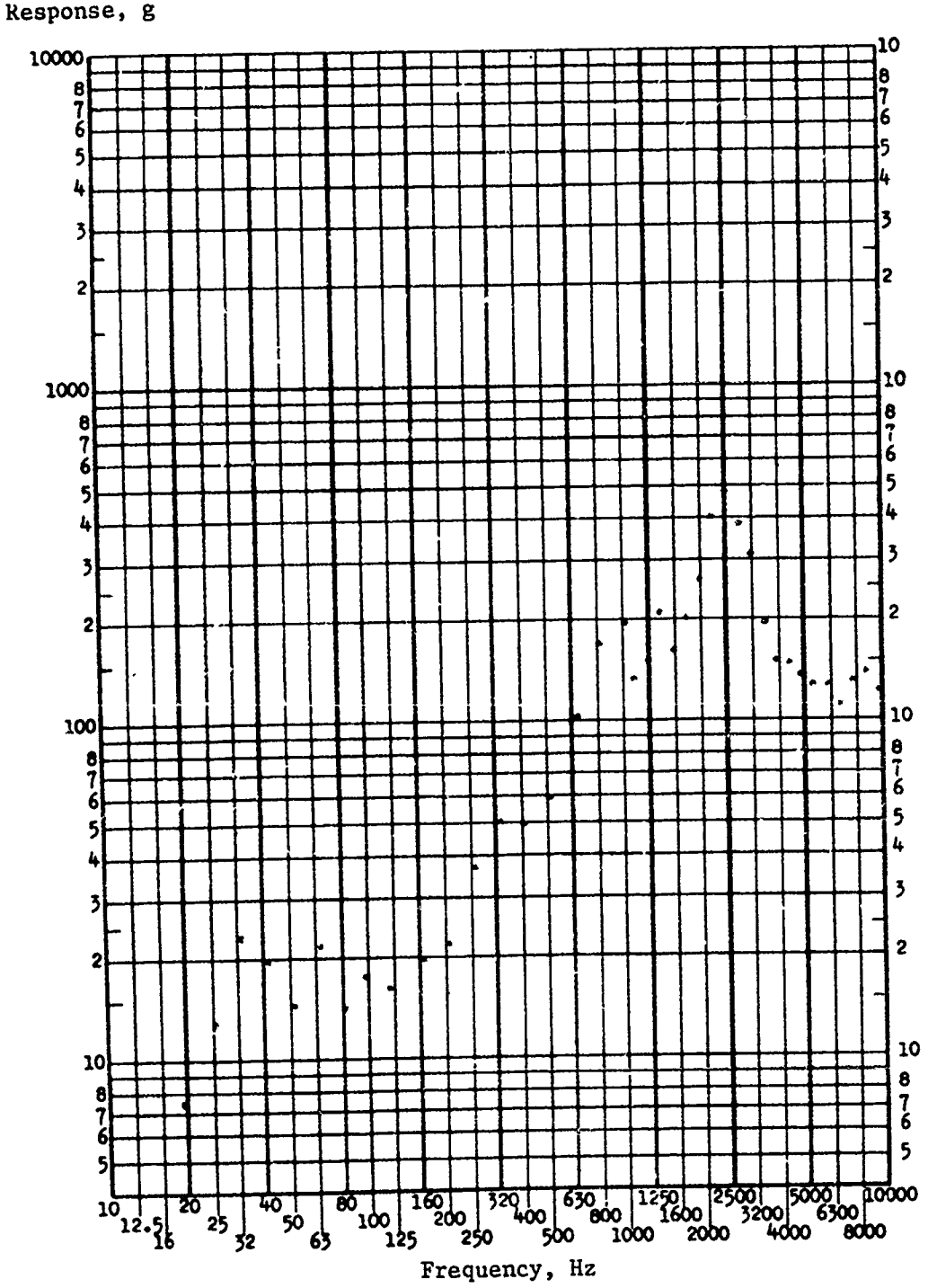
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 9 - Radial axis longeron near station 77

Figure 50 (cont)



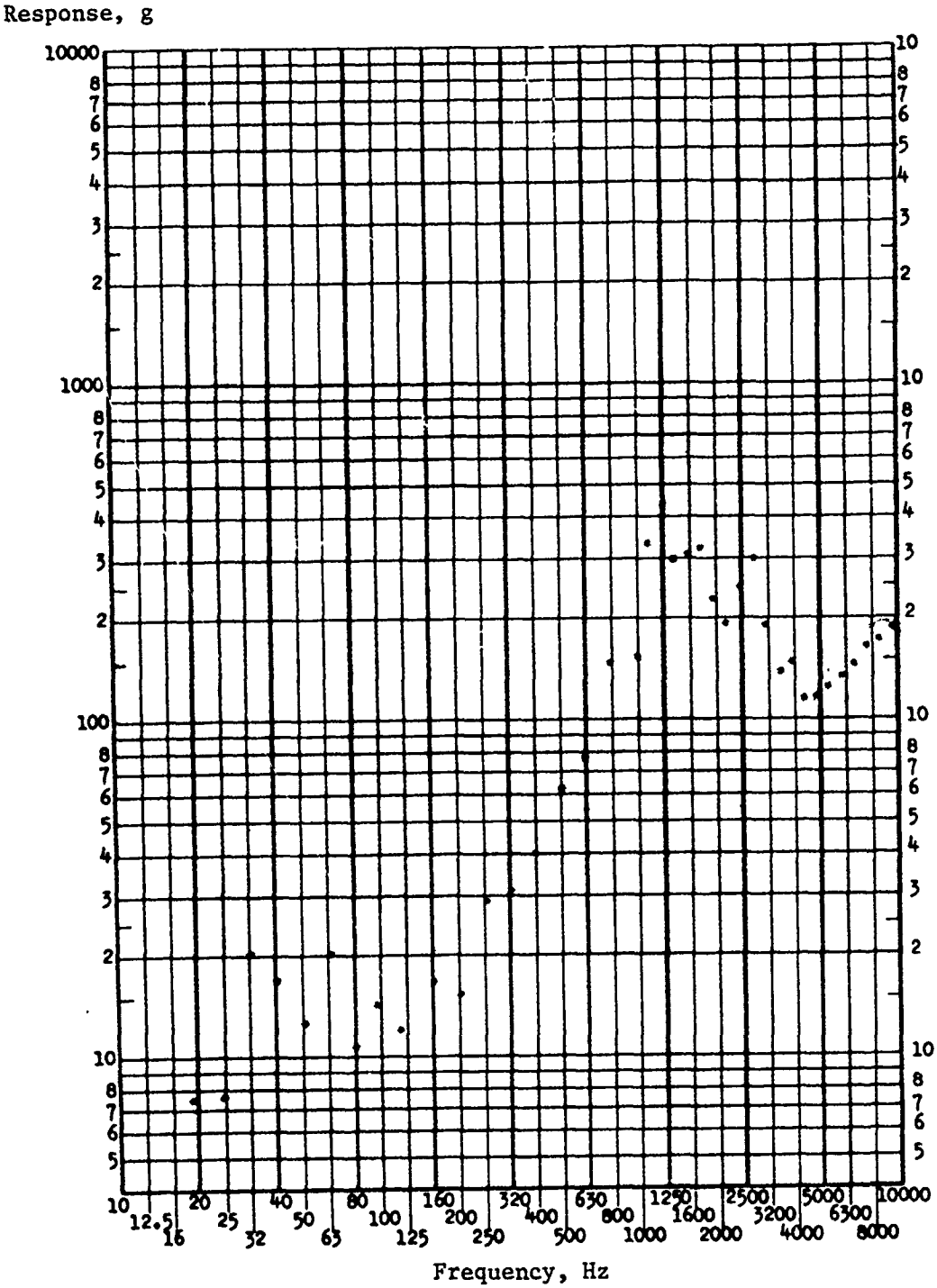
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 10 - Longitudinal axis truss bottom near station 114 attach point

Figure 50 (cont)



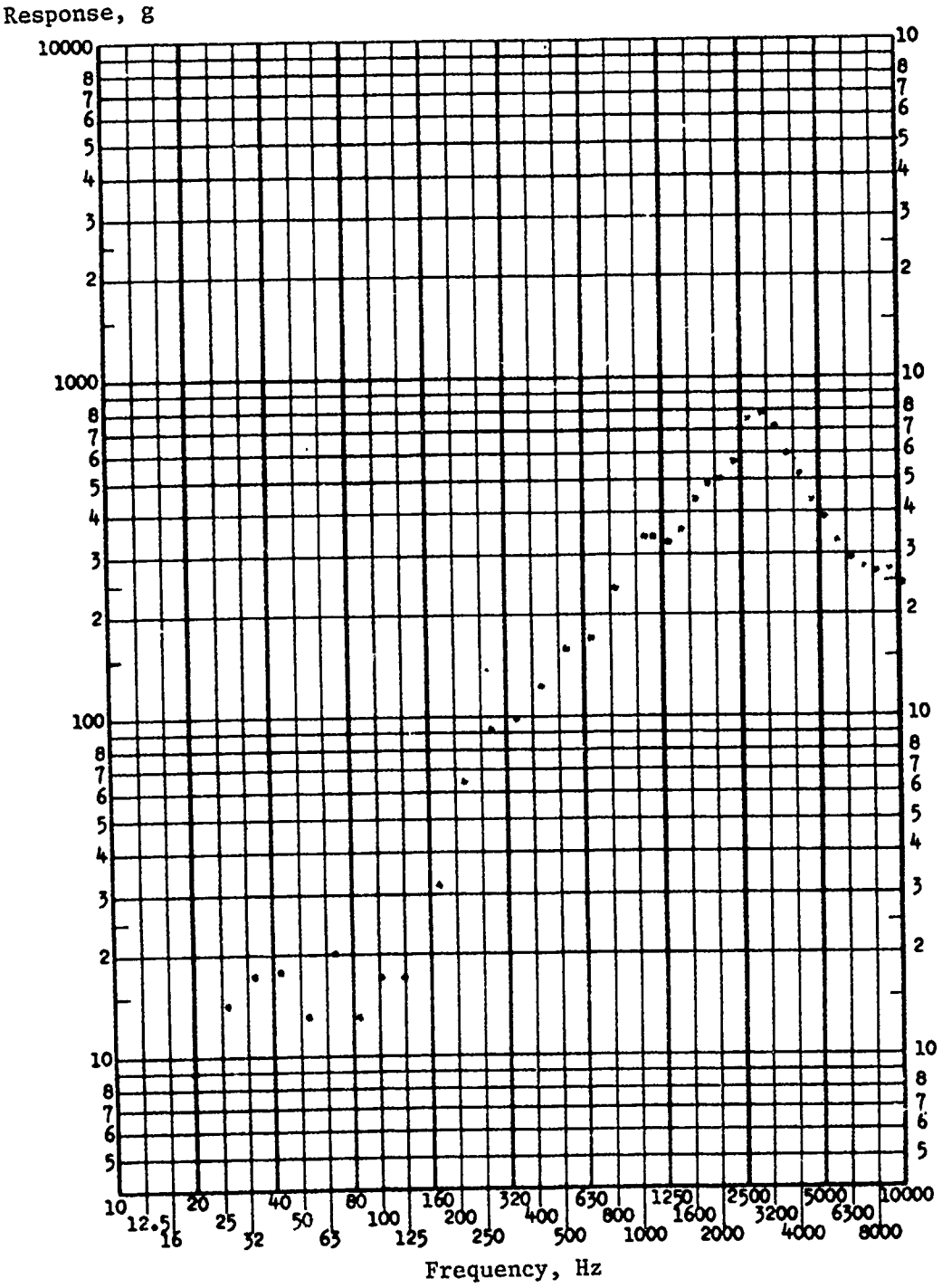
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 50 (cont)



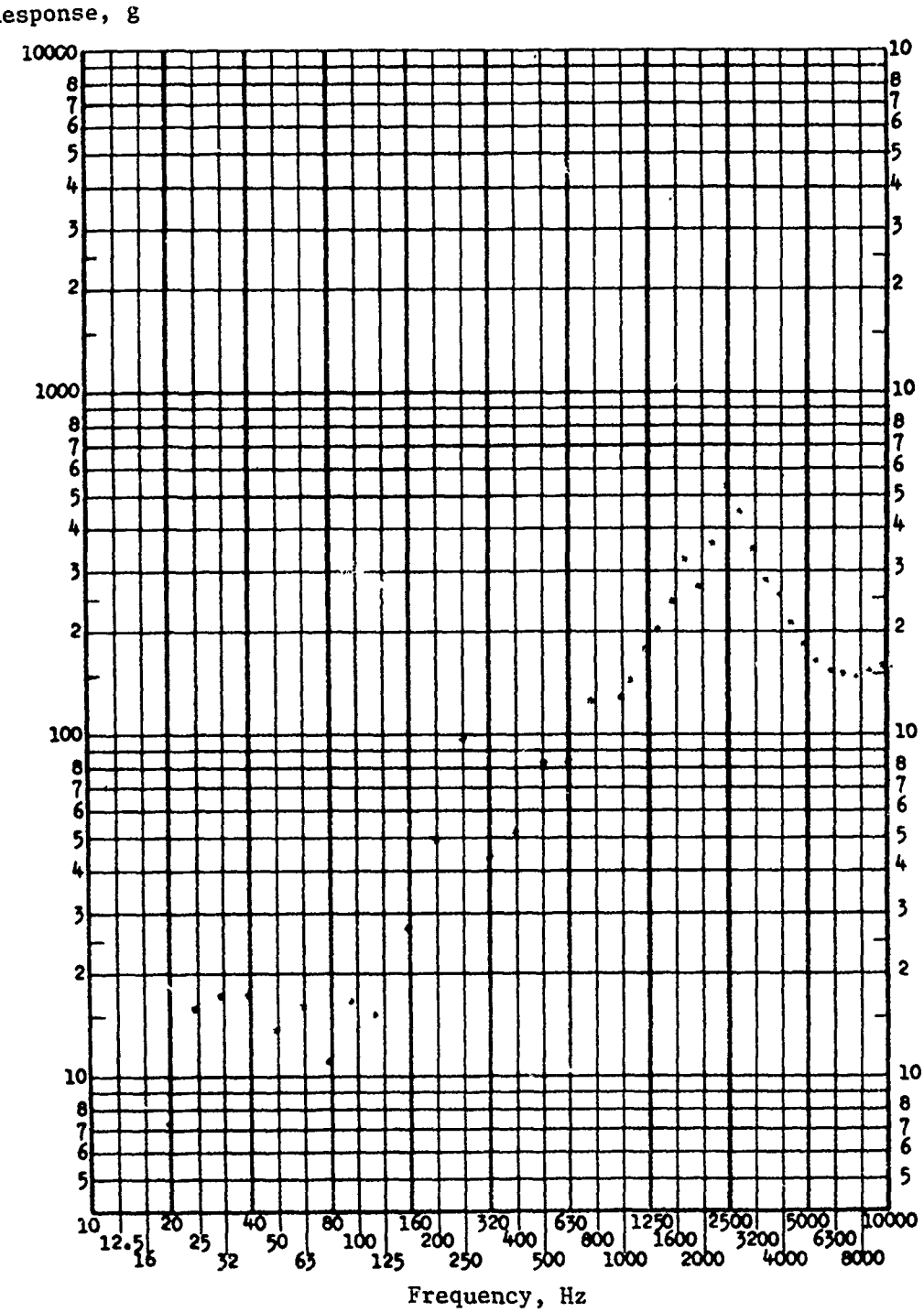
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 50 (cont)



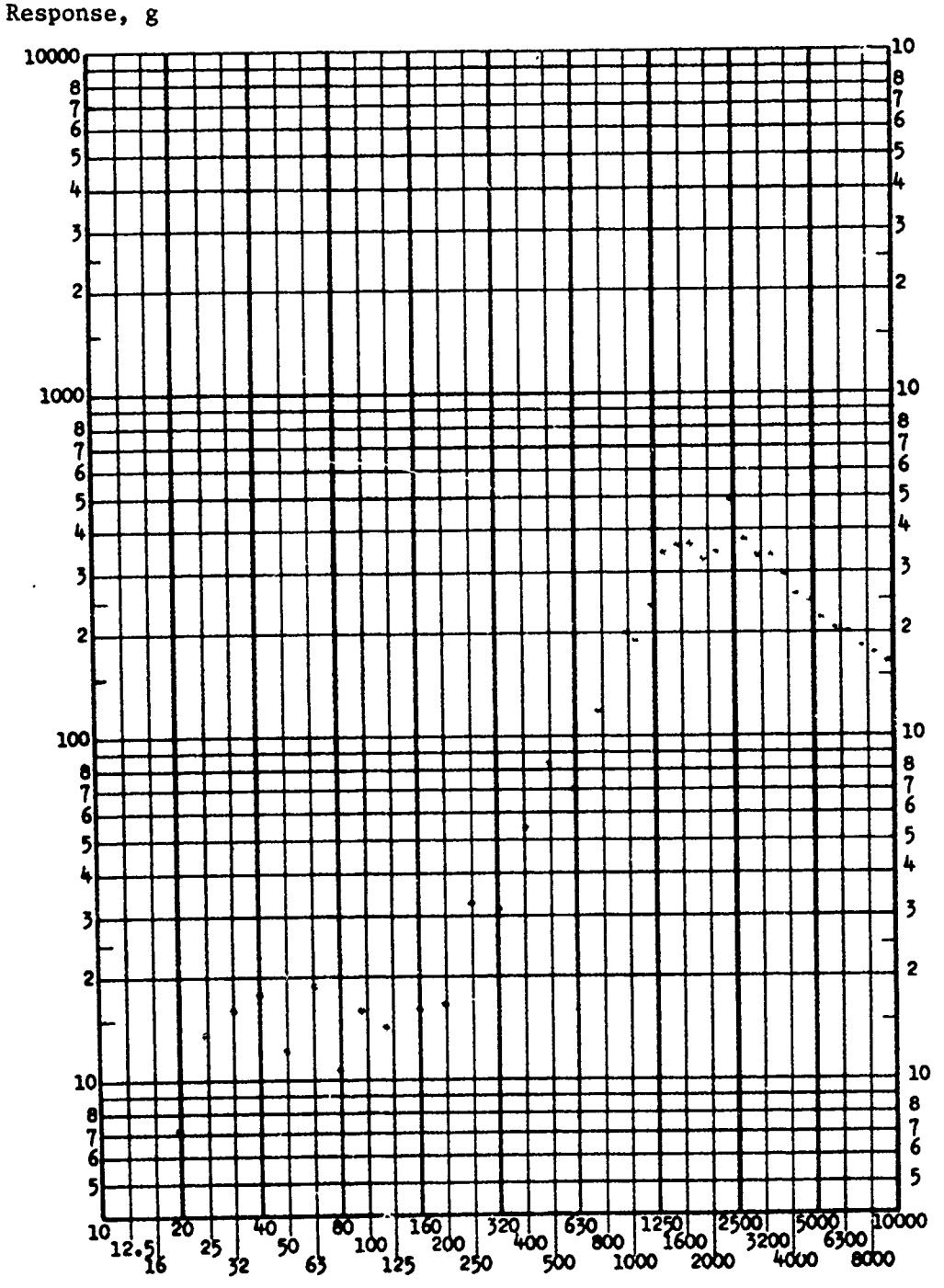
Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 50 (cont)



Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 14 - Lateral axis truss top near longeron attach point

Figure 50 (cont)

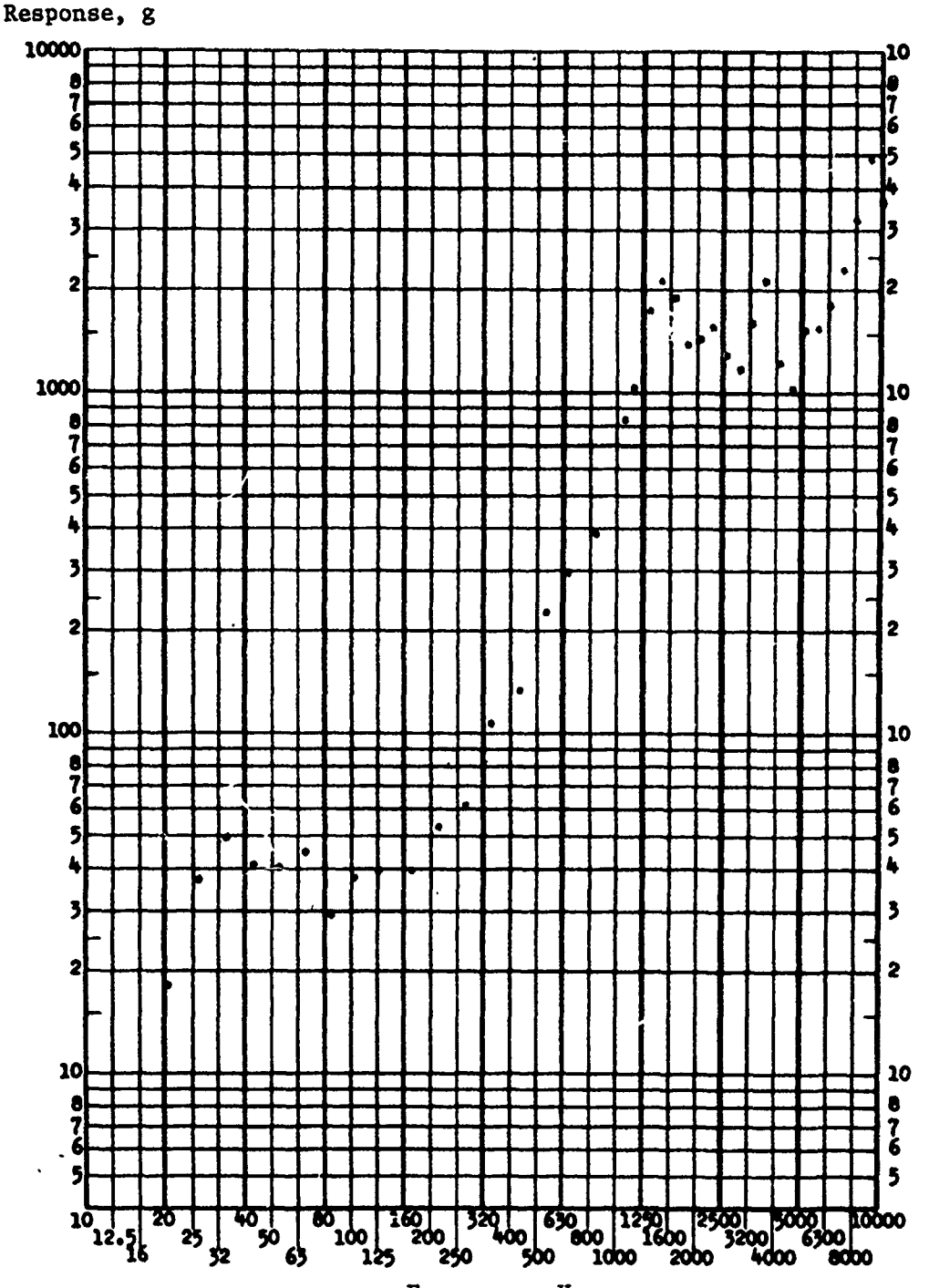


Bench Shock Test - Stage II/III Separation, Run 50
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 50 (concl)

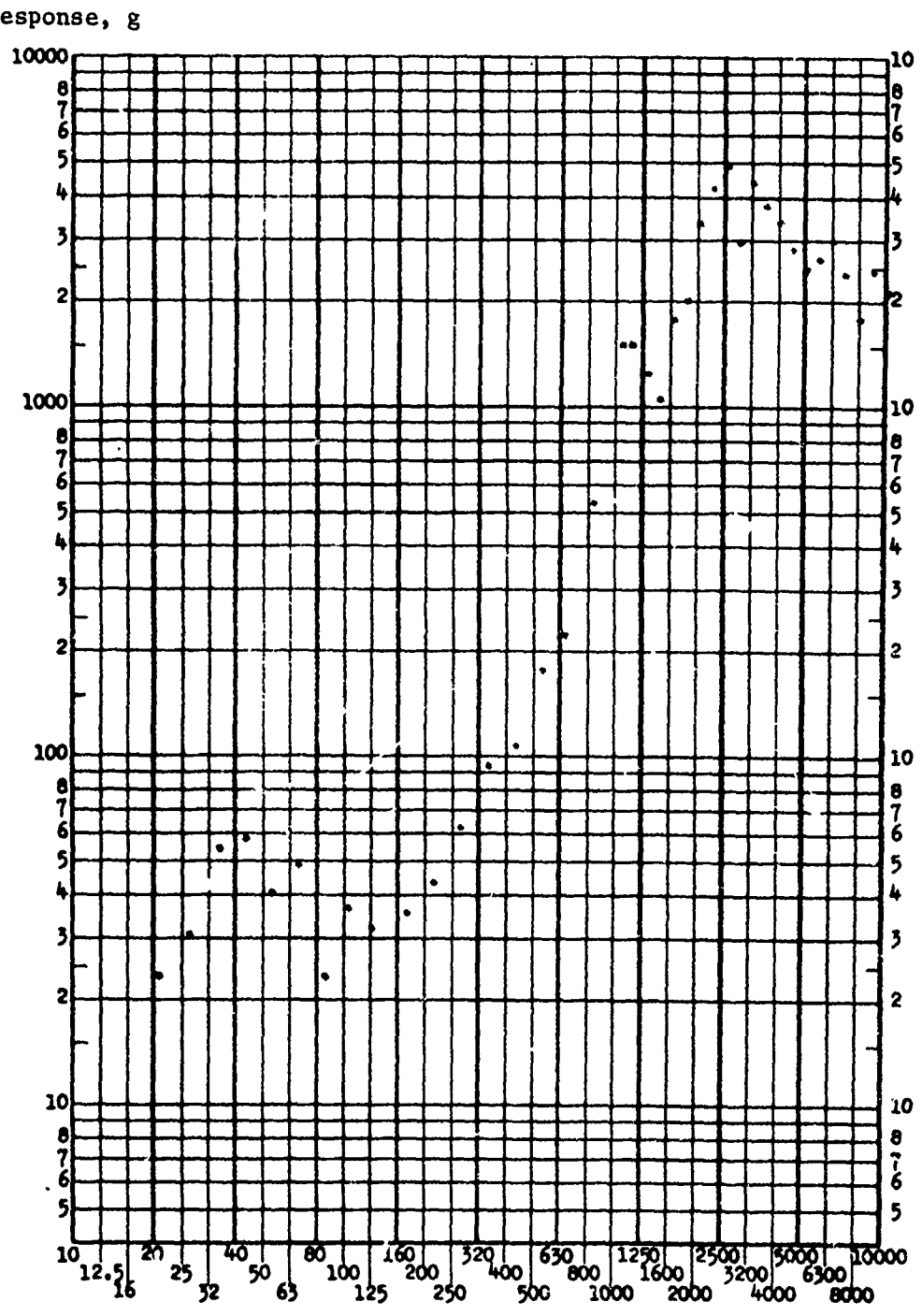
Run 51

blank
108



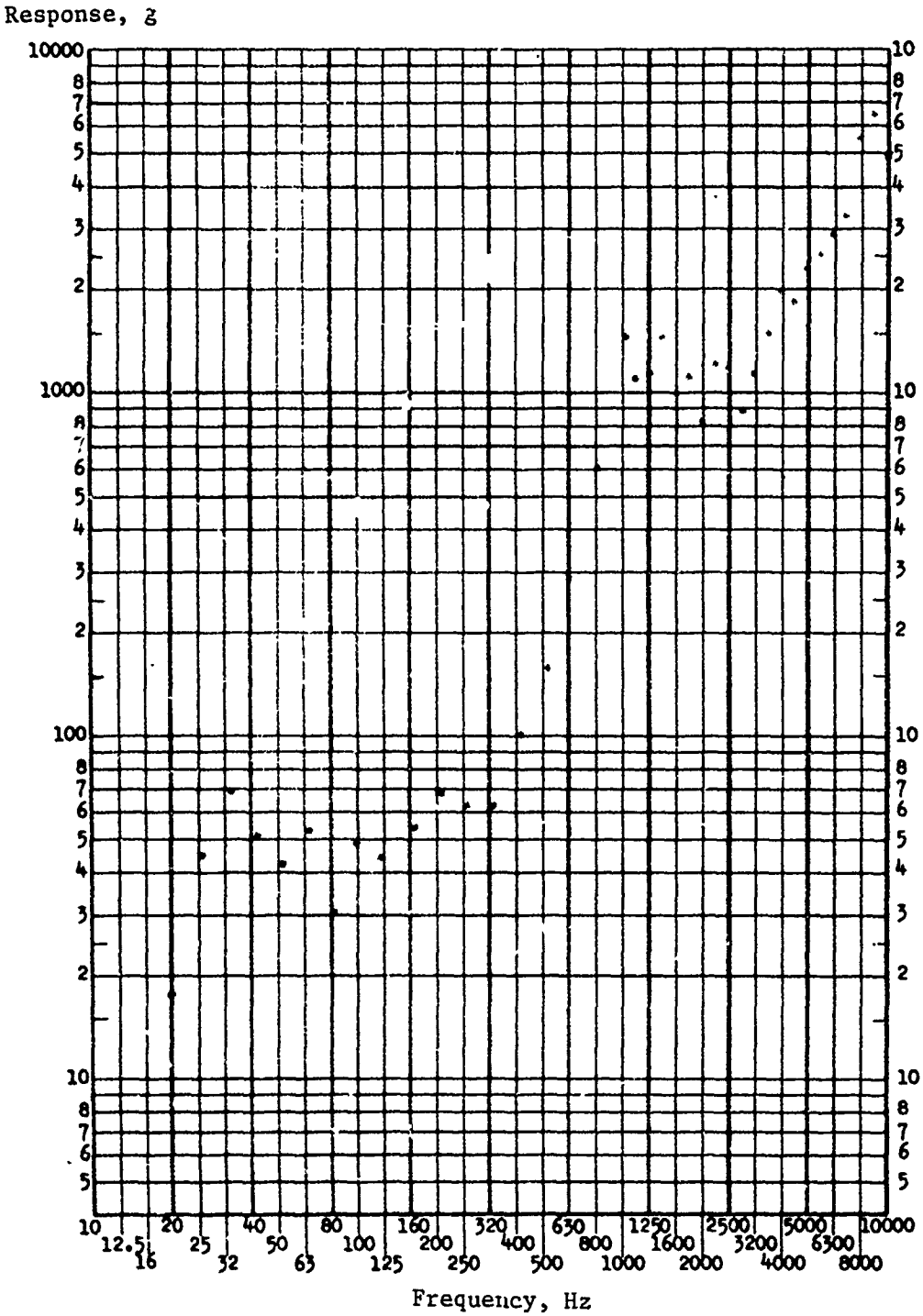
Bench Shock Test - Stage II/III Separation, Run 51
Measurement No. 1 - Longitudinal axis longeron
near station 133

Figure 51 Run 51 Shock Response Spectrum



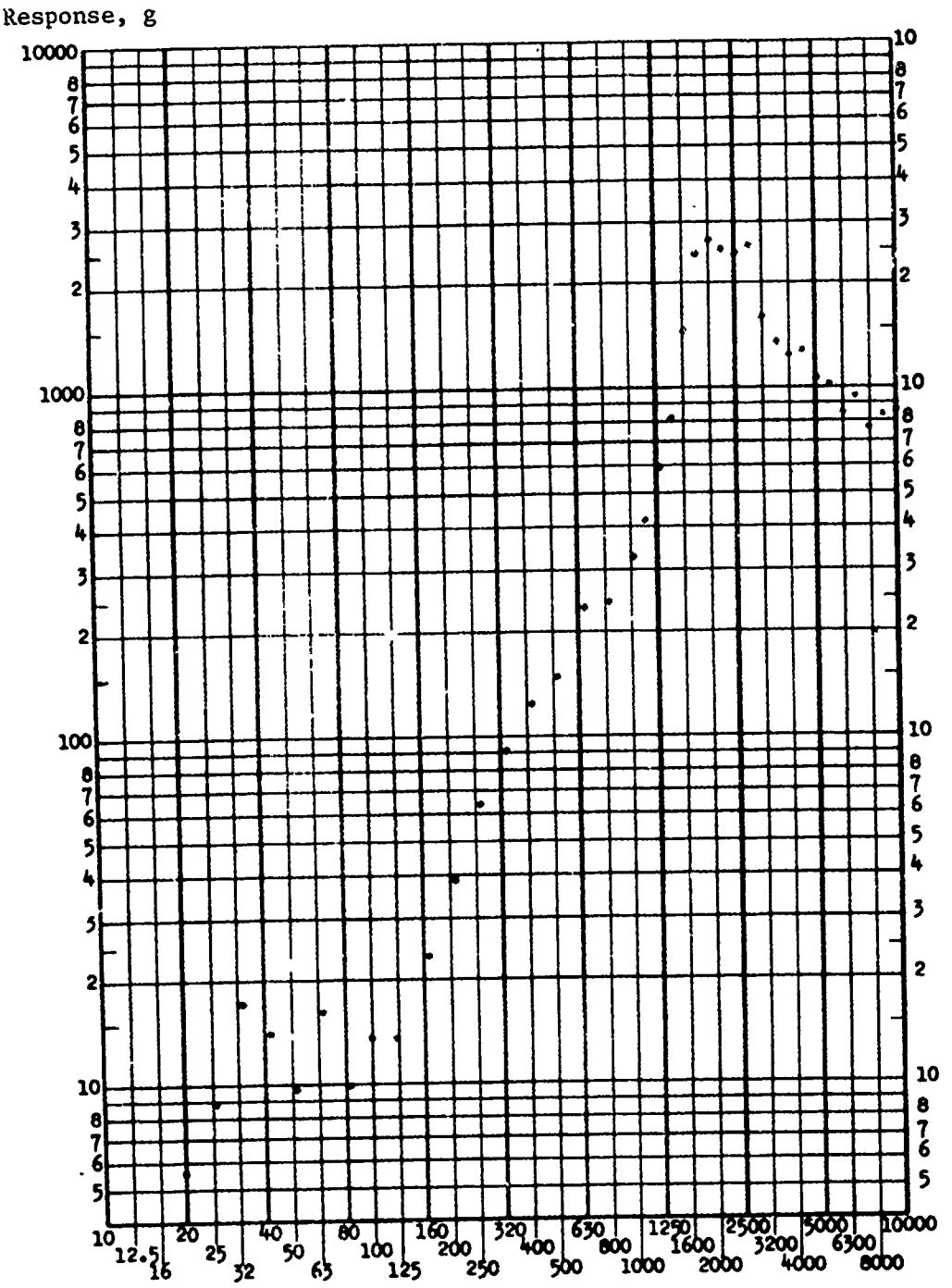
Bench Shock Test - Stage II/III Separation, Run 51
Measurement No. 2 - Tangential axis longeron near station 133

Figure 51 (cont)



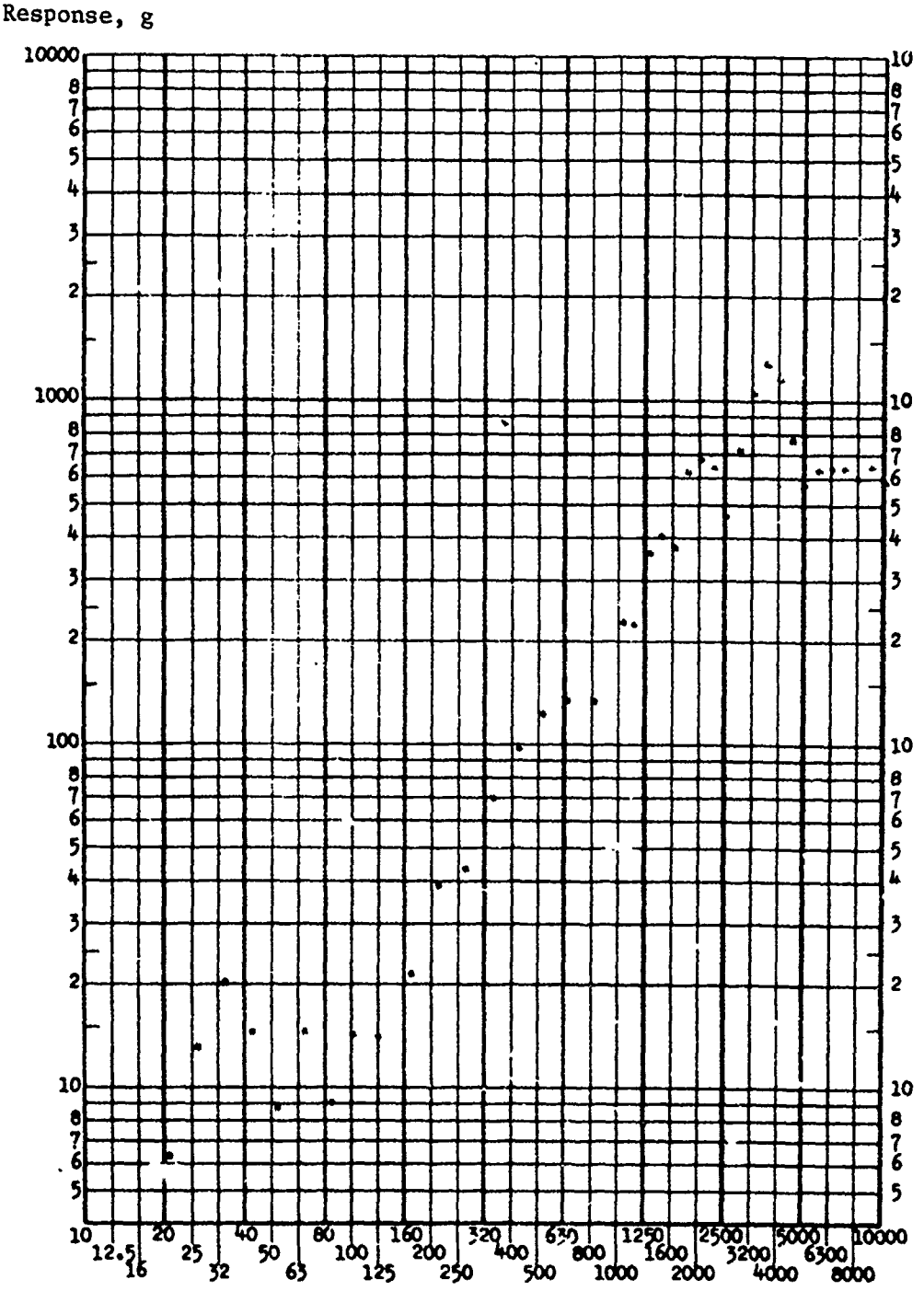
Bench Shock Test - Stage II/III Separation, Run 51
Measurement No. 3 - Radial axis longeron near station 133

Figure 51 (cont)



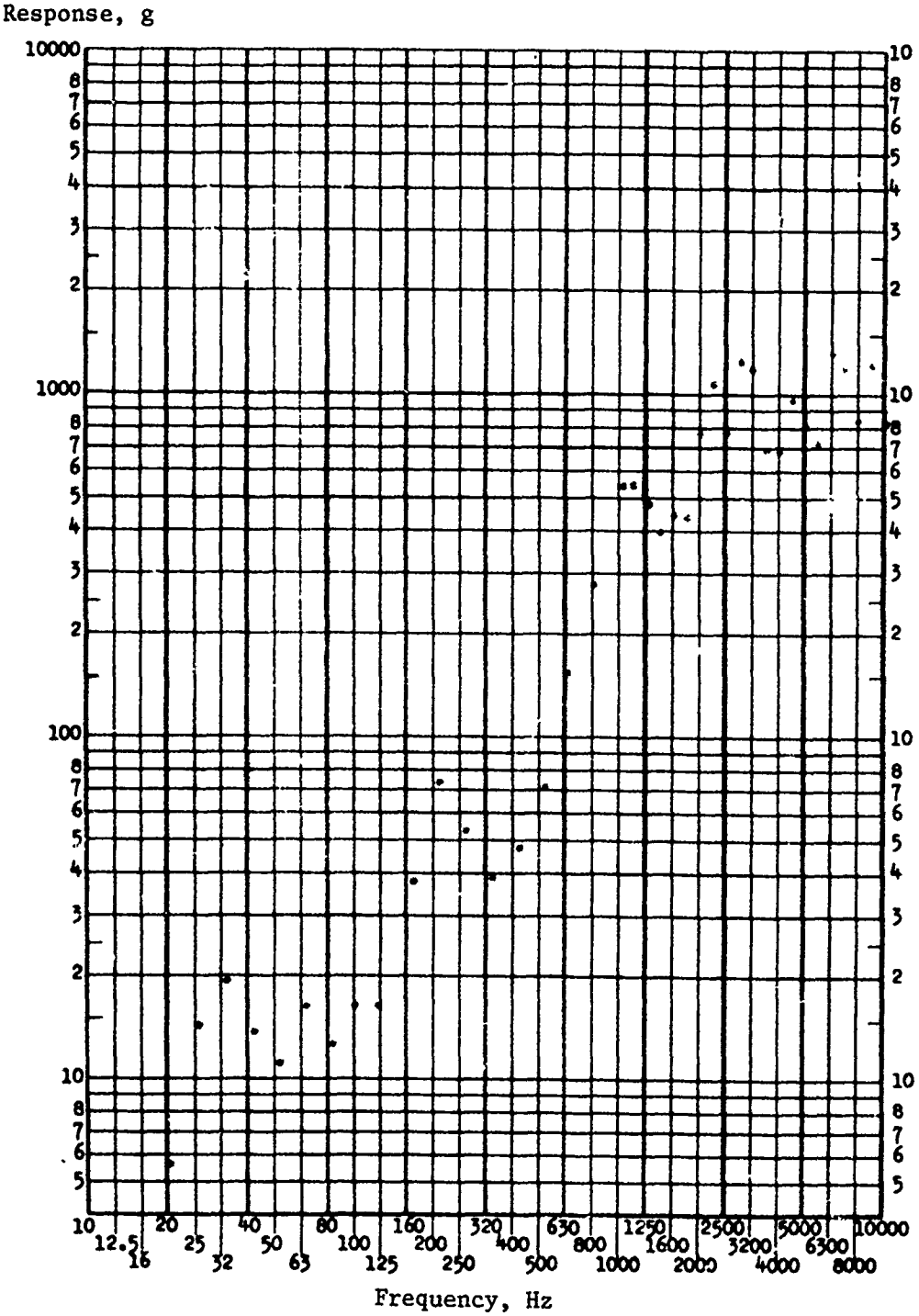
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 4 - Longitudinal axis longeron near station 117

Figure 51 (cont)



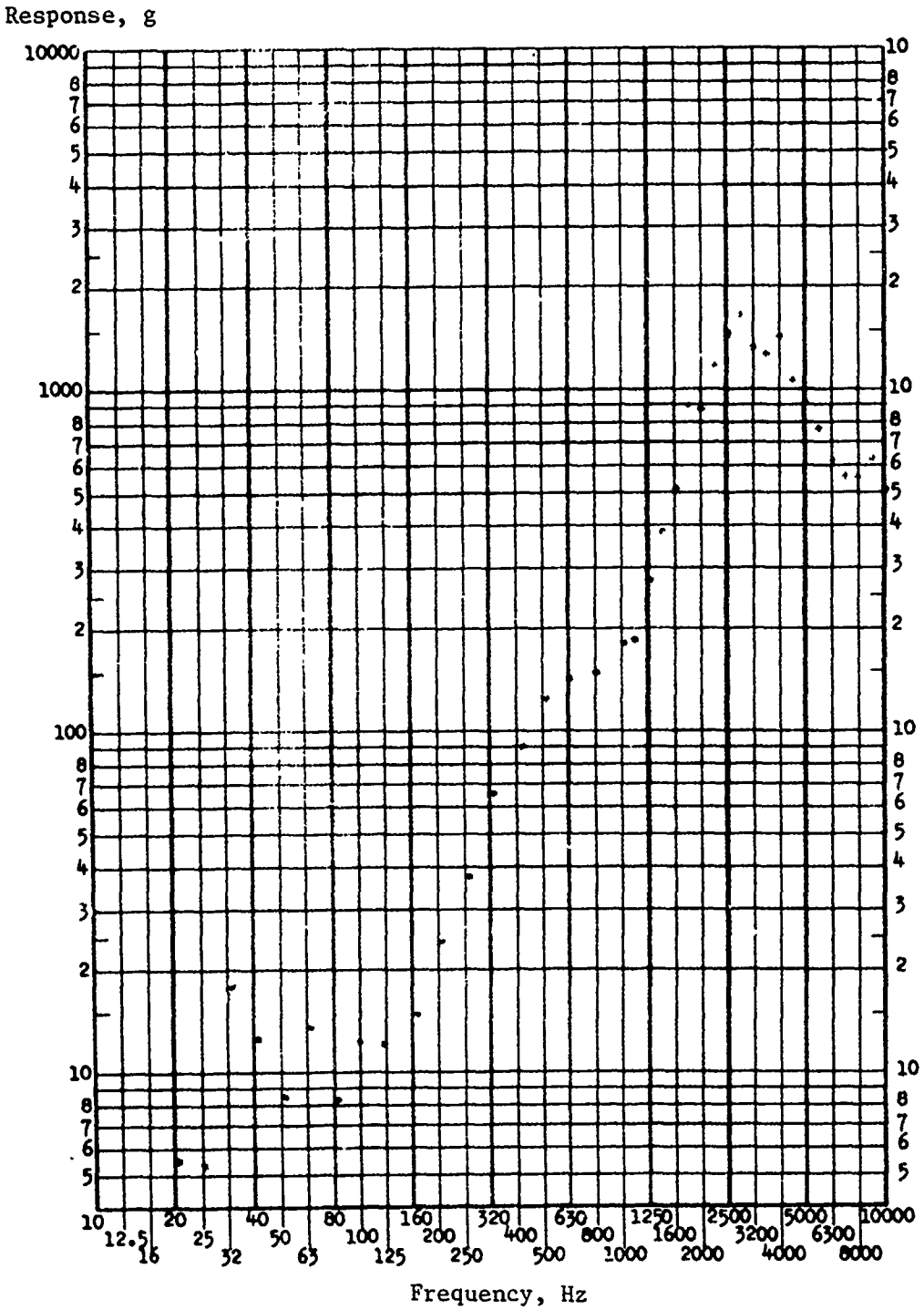
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 5 - Tangential axis longeron near station 117

Figure 51 (cont)



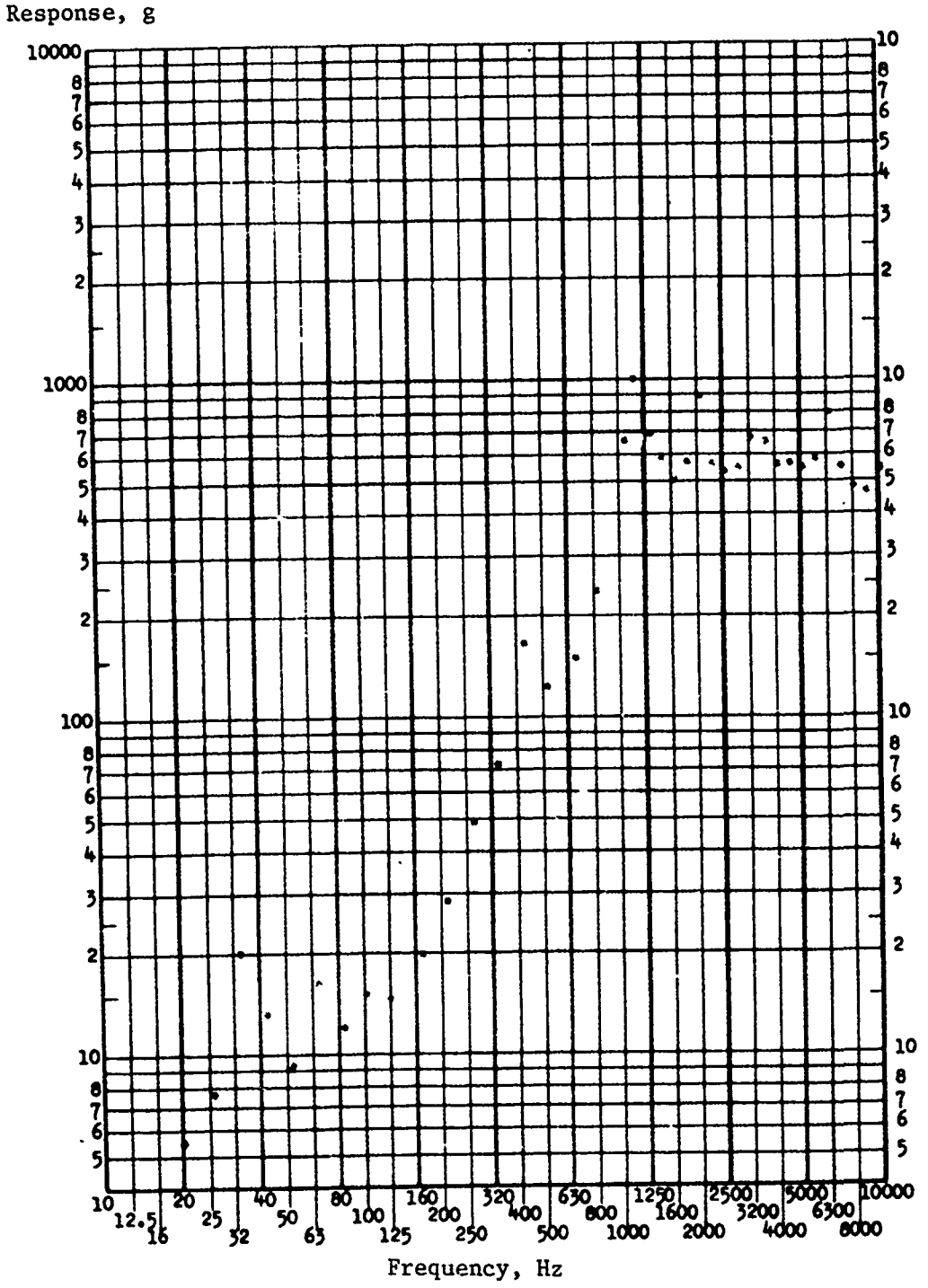
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 6 - Radial axis longeron near station 117

Figure 51 (cont)



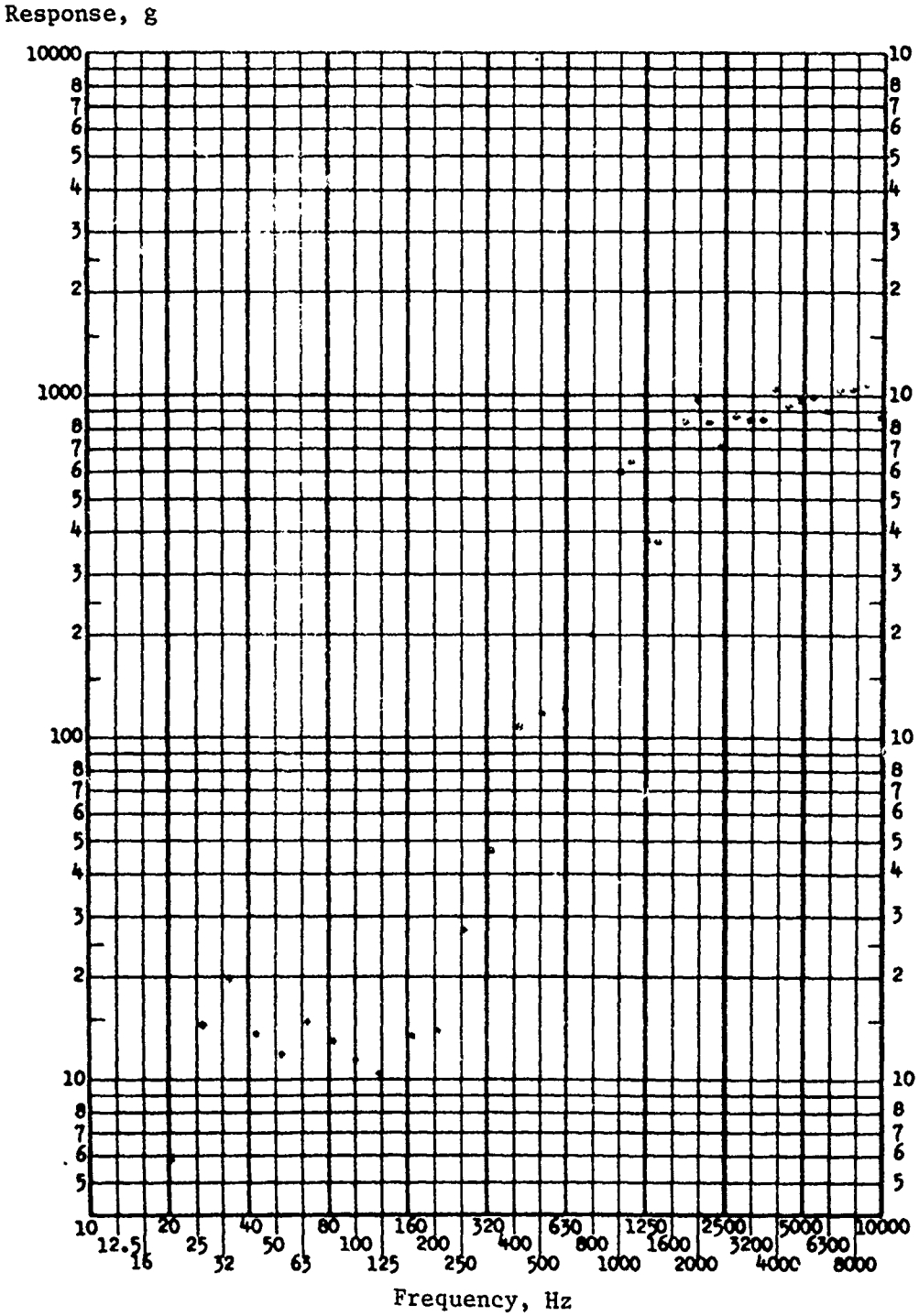
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 7 - Longitudinal axis longeron near station 77

Figure 51 (cont)



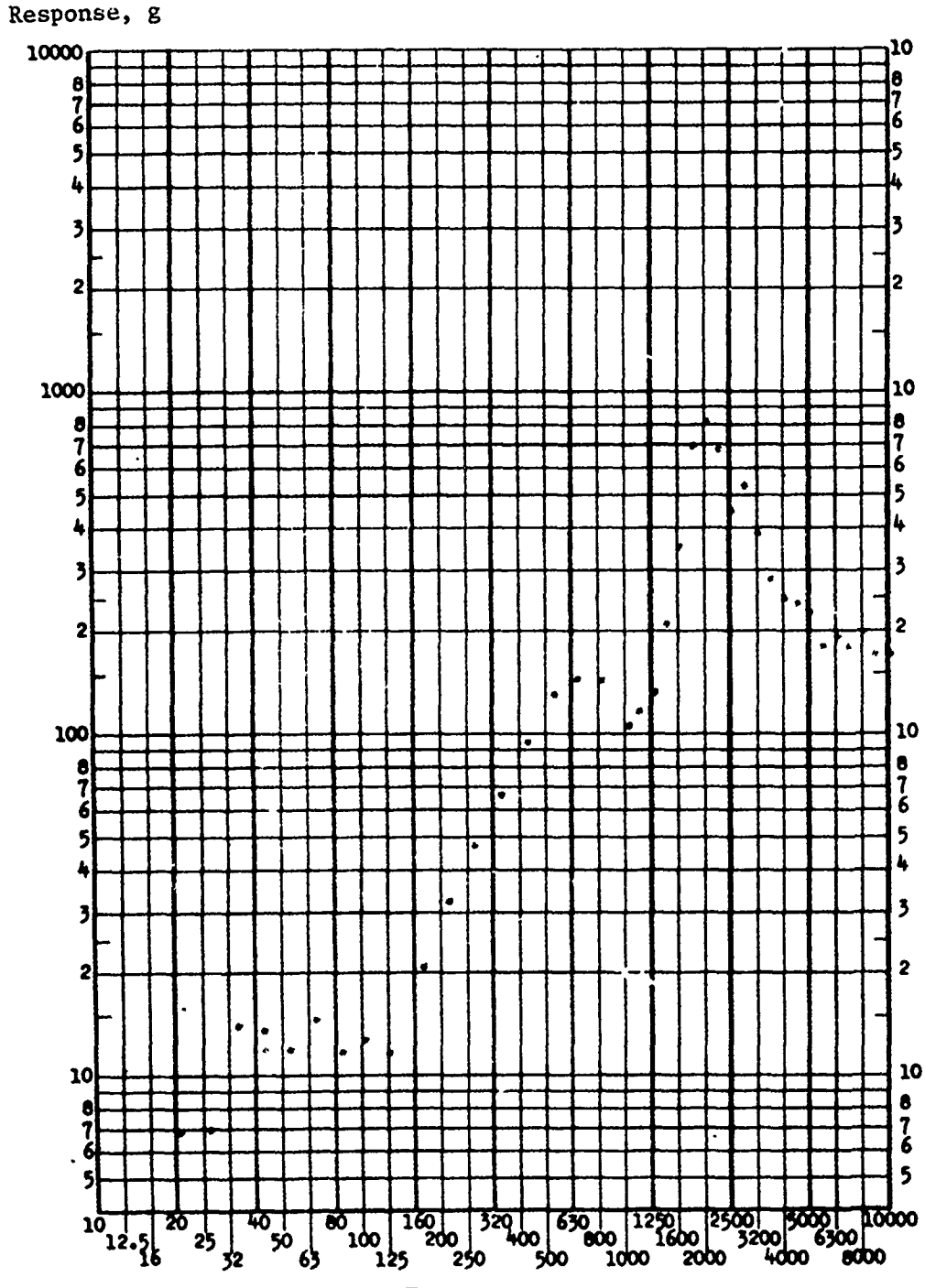
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 8 - Tangential axis longeron near station 77

Figure 51 (cont)



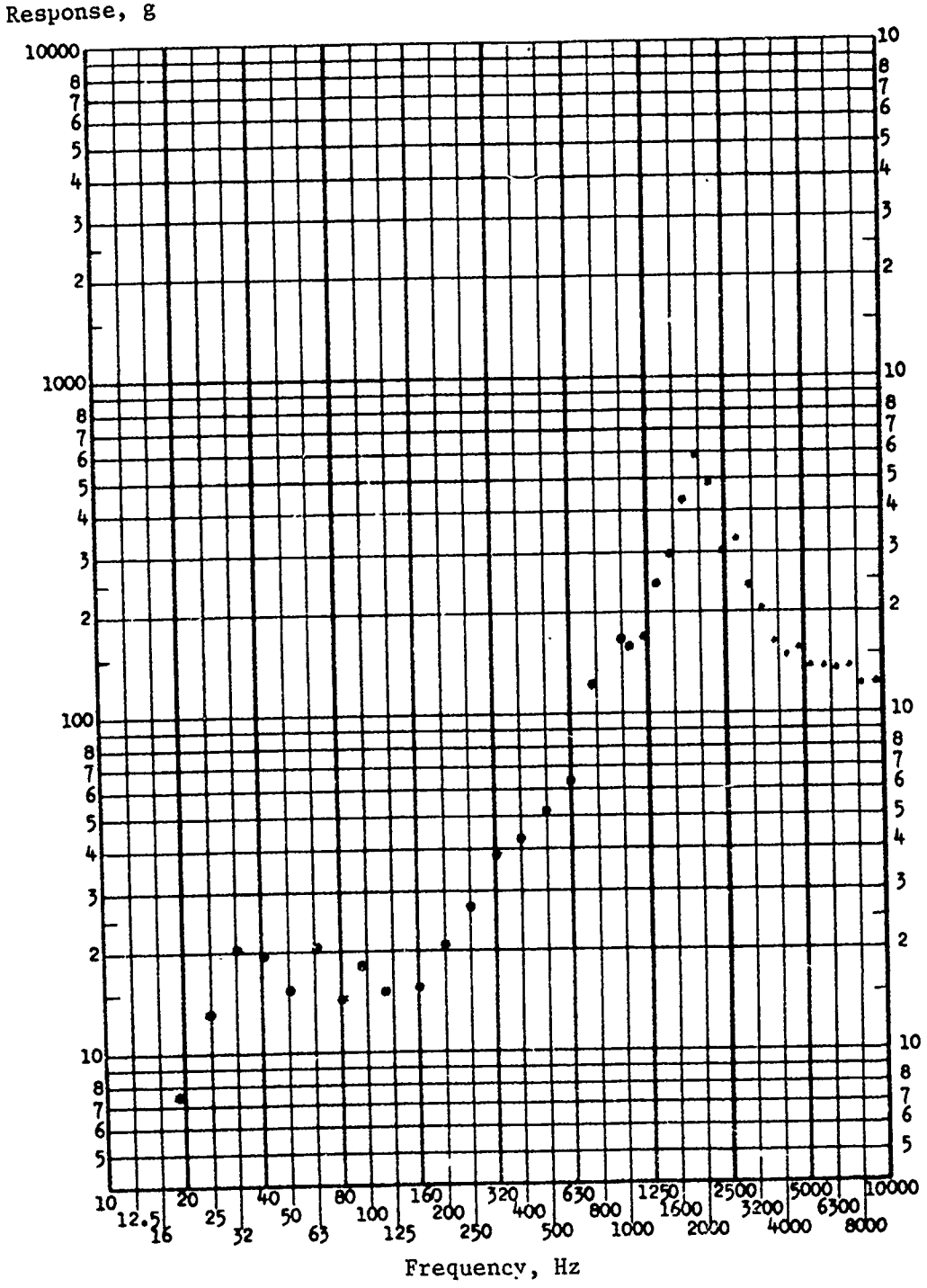
Bench Shock Test - Stage II/III Separation, Run 51
Measurement No. 9 - Radial axis longeron near station 77

Figure 51 (cont)



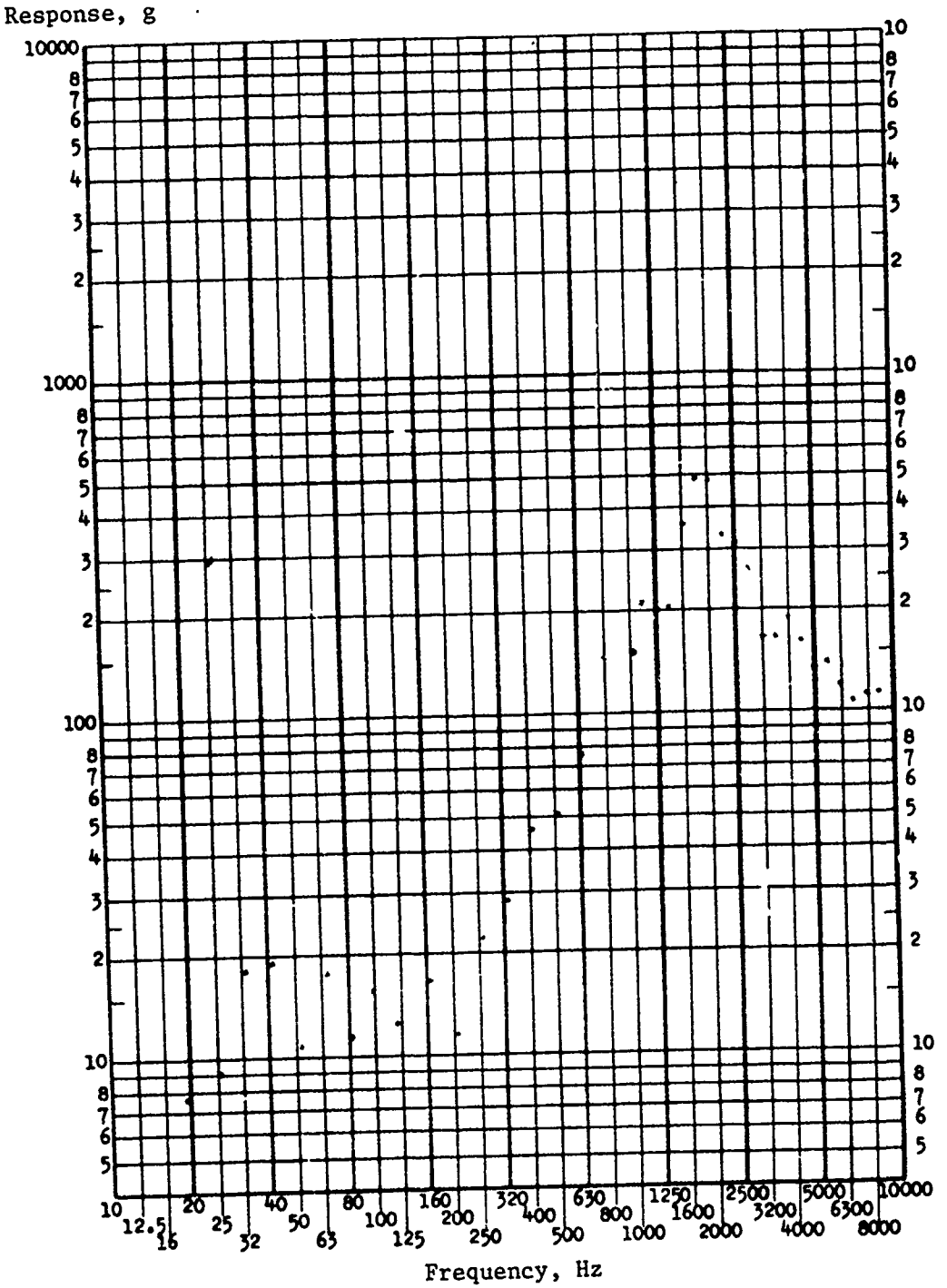
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 10 - Longitudinal axis truss bottom
near station 114 attach point

Figure 51 (cont



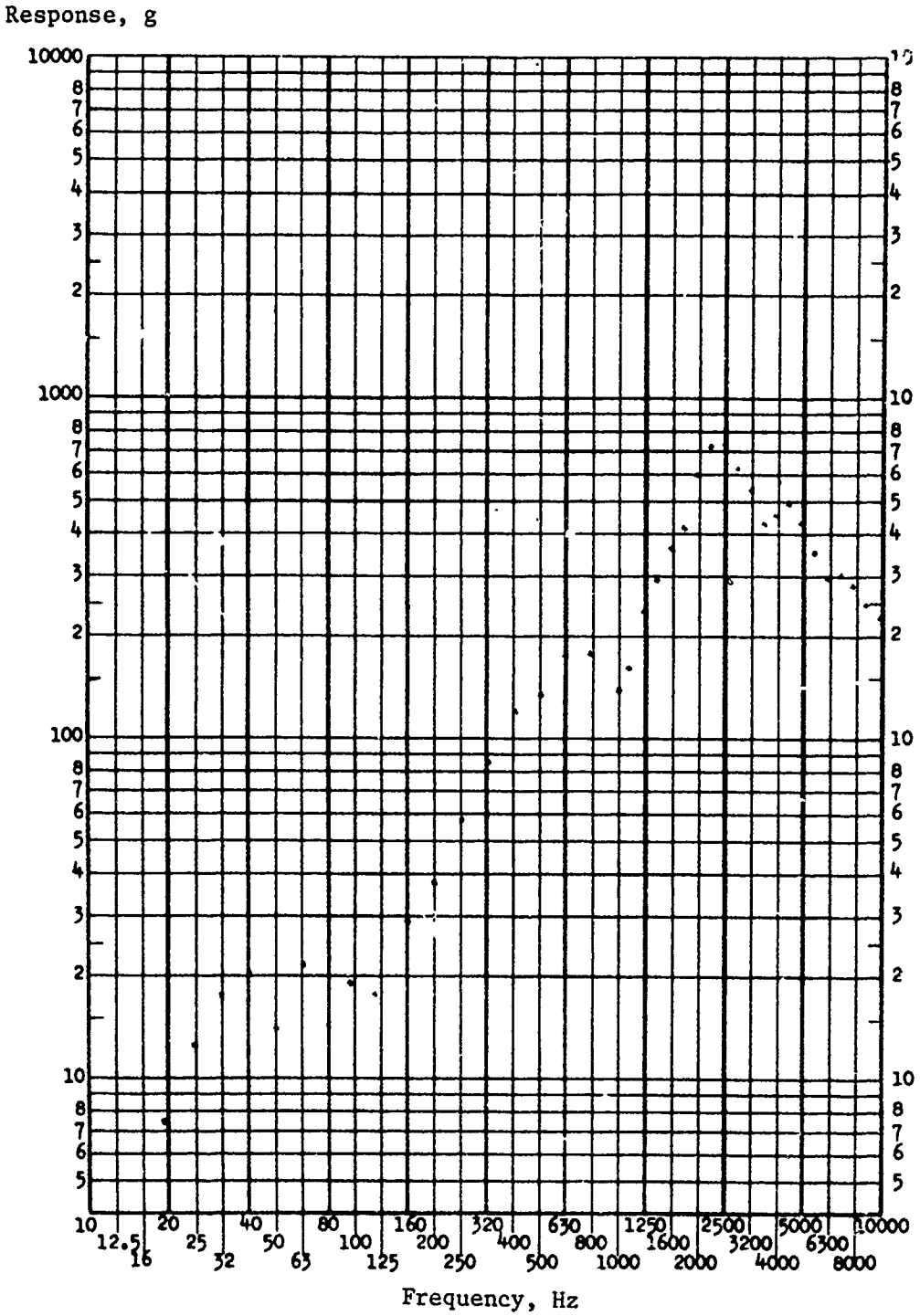
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 11 - Lateral axis truss bottom near station 114 attach point

Figure 51 (cont)



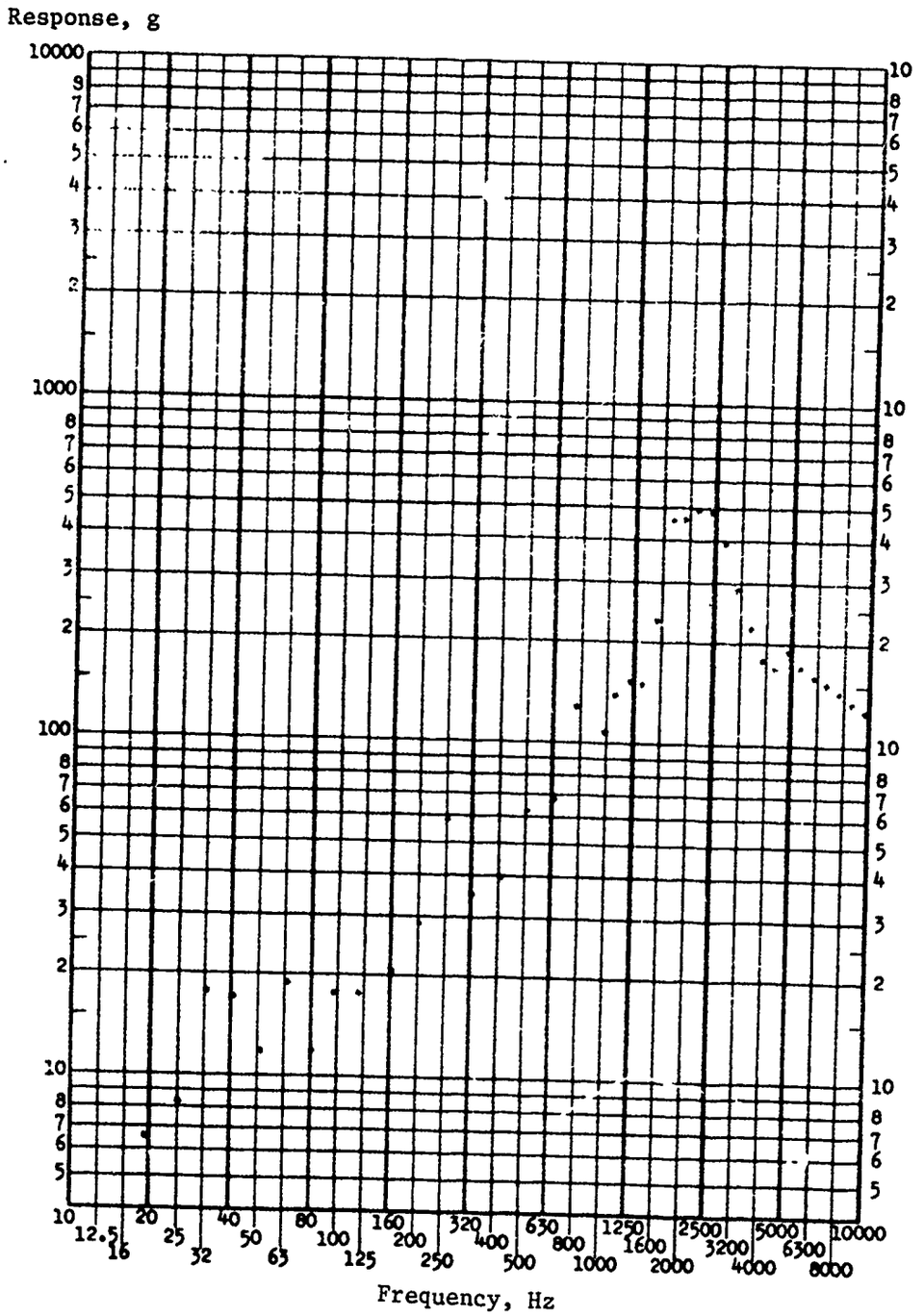
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 12 - Vertical axis truss bottom
near station 114 attach point

Figure 51 (cont)



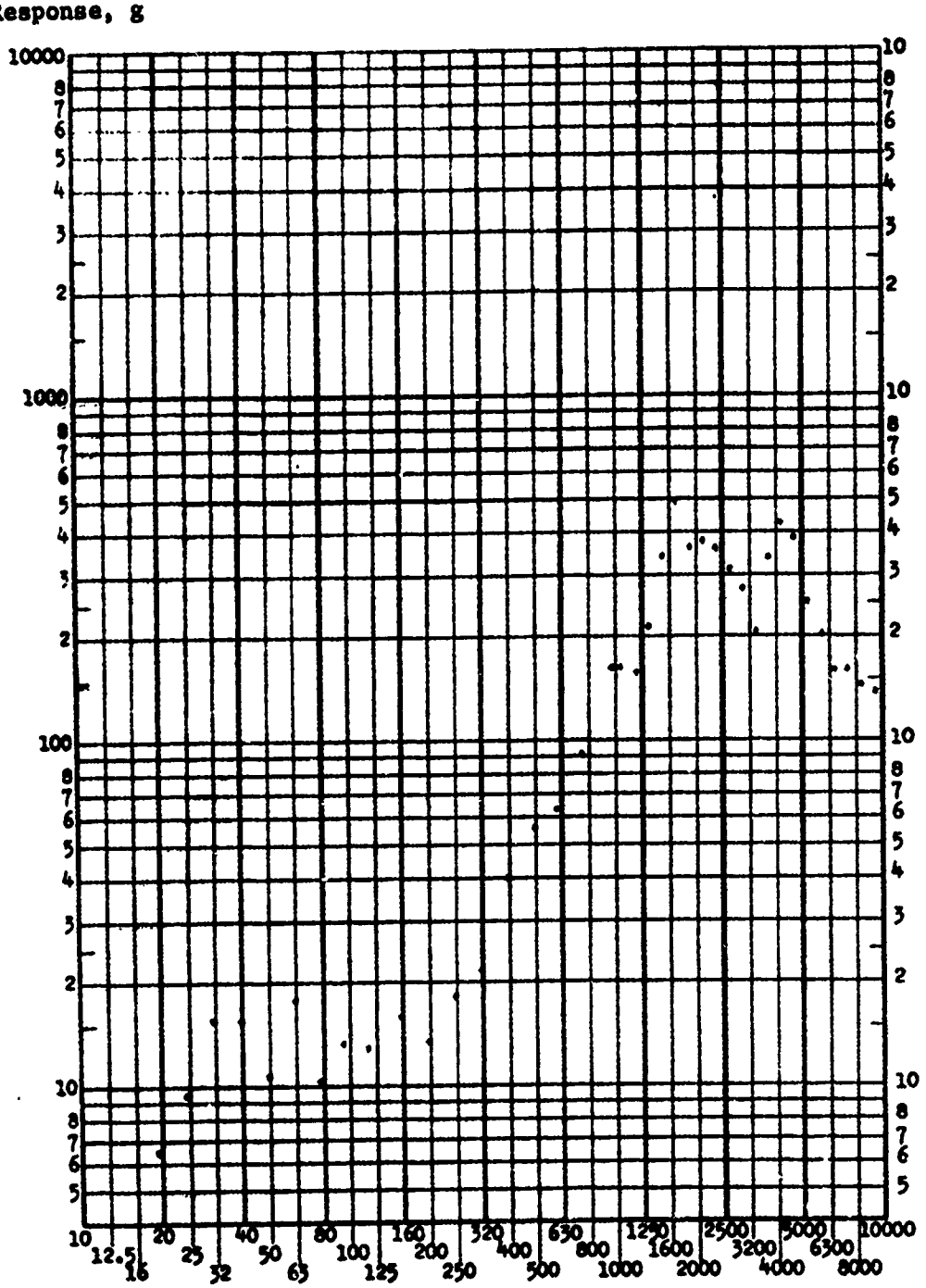
Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 13 - Longitudinal axis truss top
near longeron attach point

Figure 51 (cont)



Bench Shock Test - Stage II/III Separation, Run 51 _
Measurement No. 14 - Lateral axis truss top near
longeron attach point

Figure 51 (cont)



Bench Shock Test - Stage II/III Separation, Run 51
Measurement No. 15 - Lateral axis truss top near longeron attach point

Figure 51 (concl)