

UNCLASSIFIED

2029

JUL 13 1960

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
1st Review Date: 9/28/97	Classification Reason: U
2nd Review Date: 9/28/97	Classification Change: U
Authority: W.C. Payne	Coordinate: 1000
Name: W.C. Payne	Coordinate: 1000

File No: MC-1310, 3.2  
 T-29433  
 Project No. 13.568.10  
 Completed: 6-28-60  
 RS-1611/501

TCG-SAFF-1; TCG-BTS-1

TO: DISTRIBUTION

Re: Vibration Overtest of Two MC-1310 Firing Sets, Manufactured by Bendix, KC

INVENTORIED

AUG 6 1960

Object of Test

This test was a vibration overttest, and was performed to determine if it is possible to extend the limits previously set for this unit without affecting its operation.

3427-1

Authorization for Test

This test was requested by 1624 in a Work Order Authorization dated 5-25-60. Mr. J. Benson was the consultant. The material for test was received 6-7-60.

RECEIVED  
JUL 13 1960  
CENTRAL RECORD FILE

Summary

Two units were subjected to 12 g vibration to 1000 cps for one hour in each of three axes. The units were functionally tested prior to and after vibration by Division 1245.

INVENTORIED

SEP 14 1960

Functional Measurements and Methods

The units were functionally tested prior to and after vibration by Division 1245 in their laboratory.

The equipment used for the vibration is shown in Table I.

CENTRAL RECORD FILE	3428-3
FILE NO. MC-1310	3-2

Procedure and Results

Two units, Serial Numbers AA-5004-CO and AA-5009-CO, were subjected to one hour of vibration cycling in each of three axes. The input accelerations were 0.036 inches double amplitude from 40 to 82 cps, and 12 g from 82 to 1000 cps. The input accelerations were controlled on the mounting jig under the gas reservoir for the X and Z axes. The Y axis input was controlled on the mounting jig at a point under the MC-1085. The axis designations are shown in Figure 4 of TR-311128.

The units were functionally tested prior to vibration by Division 1245 and were returned to them for another functional test after vibration.



SANDIA SYSTEMATIC DECLASSIFICATION REVIEW DOWNGRADING OR DECLASSIFICATION STAMP	
CLASSIFICATION CHANGED TO: U	AUTHORITY: W.C. Payne
PERSON CHANGING MARKING & DATE: Emelda Salas 9/29/98	RECORD ID: 98SN4502
PERSON VERIFYING MARKING & DATE: W.C. Payne 9/29/98	DATED: 9/28/98

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Distribution

-2-

T-23453  
RS-1611/301

No visible structural damage occurred to the units during vibration.  
A description of the vibration table is given in Table I.

*R. L. Kurtz*  
R. L. KURTZ - 1611-3

RWK

RIK:1611-3cd

Distribution:

- 1/7A - J. J. Kane, 1245
- 2/7A - D. M. Bruce, 1282
- 3/7A - J. M. Niesen, 1442
- 4/7A - D. Williams, Jr., 1613
- 5/7A - D. S. Bliss, 1624, Attn: J. J. Benson
- 6/7A - J. R. Harrison, 5523
- 7/7A - R. K. Smeltzer, 3421-3

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NON TEST EQUIPMENT

2031  
1-23-63  
NS-1511/301

TEST NUMBER 23453 DATE 6/24/60 RECORDED BY \_\_\_\_\_

SHAKER USED LING 2 JTG NUMBERS \_\_\_\_\_

CHATTER INDICATOR/RECORDER SER. NOS. NONE CIRCUIT GRID \_\_\_\_\_

VELOCITY COIL (DISPLACEMENT) VS. INPUT ACCELEROMETER CHECKED YES

INPUT CONTROL (g) VOLTMETER 1 5-93101 2 5-98617 3 \_\_\_\_\_

INPUT ACCELEROMETER(S) 1 5691 2 4526 3 \_\_\_\_\_

OUTPUT (g) VOLTMETERS 1 NONE 2 \_\_\_\_\_ 3 \_\_\_\_\_

OUTPUT (g) ACCELEROMETERS 1 NONE 13 \_\_\_\_\_ 25 \_\_\_\_\_

NOTE:

1. The sensitivity of all accelerometers is 10 mv/g unless noted.
2. All accelerometers are Endevco Model 2213 unless noted.
3. All accelerometers were used with the meter under which they are listed unless noted.
4. All voltmeters are Model 320 Ballantines, unless noted.

2	14	26
3	15	27
4	16	28
5	17	29
6	18	30
7	19	31
8	20	32
9	21	33
10	22	34
11	23	35
12	24	36

DESCRIPTION OF OTHER EQUIPMENT USED \_\_\_\_\_

NOTE:

- SYSTEM ACCURACIES AND CALIBRATION PERIODS
1. ACCELEROMETER (g) AMPLITUDE CIRCUIT - - - - - ±10%
    - a. Accelerometers and attenuators calibrated between tests.
    - b. Voltmeters and cathode followers calibrated weekly.
  2. FREQUENCY COUNTERS - - - - - ±2 COUNTS
    - a. Calibrated every 6 months.
  3. VELOCITY COIL (DISPLACEMENT CONTROL) - - - - - ±5%
    - a. Spot checked during all tests.
    - b. Calibrated monthly.
  4. CHATTER INDICATOR/RECORDER RESPONSE TIME - - - - 10 MICROSECONDS ±1
  5. TEMPERATURE CHAMBER CONTROLLER - - - - - ±20
    - a. Calibrated every 2 weeks.