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11-DC-64-2108X

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THE WURLITZER COMPANY

NORTH TONAWANDA DIVISION
NORTH TONAWANDA NEW YORK

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
FORM GRADING OF DECLASSIFICATION STAMP	
CLASSIFICATION GRADING TO: <u>U</u>	AUTHORITY: <u>W. C. Layne</u>
EMENDED BY: <u>Emuda Sepp</u> 9-12-96	RECORD ID: <u>96SN478</u>
BY: <u>W.C. Layne</u> 9-12-96	PERSON VERIFYING MARKING & DATE: <u>9-5-96</u>

REPORT NUMBER 12

FOR PERIOD ENDING SEPTEMBER 30, 1959

SANDIA PURCHASE ORDER 15-1536 (Item No. 11)

MC-318 IMPROVEMENT PROGRAM

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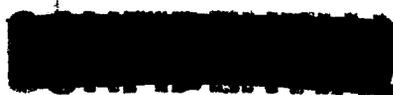


INTRODUCTION

This report covers the experimental work on the MC-818 Battery completed from July 31, 1959 to September 30, 1959.

This work was authorized under Sandia Purchase Order 15-1536, Item No. 11.

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PROCEDURE

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Item 11:

Twenty thermal batteries, MC-818, have been fabricated per instruction in a letter from R.S. Shoberg dated August 14, 1959, for capacitance measurements to determine internal displacement during vibration.

All twenty batteries were assembled from standard parts using normal manufacturing procedures, with the following exceptions.

(Reference: Sandia Drawing No. 310427)

1. Two copper foil sheets (.002" x 2" x 2-1/4") with nickel leads (.005" x .125") were placed between Item 17 (mica wrapper) and Item 7, Liner Battery Case. A small dab of contact cement was used to secure each foil sheet to the battery case liner to prevent shifting during assembly and vibration. The position of each foil sheet and terminal to which connected, was outlined in black lacquer on the outside of the case and cover.

2. A copper foil disc (.002 x 1-3/16" diameter) with nickel lead (.005" x .125") was placed under Item 19 (bottom squib). A small dab of contact cement was used to secure this disc to the bottom of the battery case liner to prevent shifting during assembly. Terminal connection is shown by line from terminal to circle on the bottom of the case in red lacquer.

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3. A copper foil disc (.002" x 1-3/16" diameter) with nickel lead (.005" x .125") was placed between Item 18 (top squib) and Item 15 (mica disc). Terminal connection is shown by line to circle on the cover with red lacquer.
4. Top squib (Item 18) leads were folded flat on the top of the squib.
5. Bottom squib (Item 19) leads had to be trimmed off at the top of liner to complete final assembly due to lack of space for folding over.
6. Stack leads were connected to normal terminals and connections indicated in yellow lacquer on the cover.
7. Parts were dried and weighed in groups to determine total weights acting up (against top foil disc), acting down (against bottom foil disc), and radial (side foil sheets). These weights are shown in Table I. Manufacturing Data is shown in Table II.
8. All units passed leakage and polarity test. Only one unit failed on insulation test and was replaced with a new unit.
9. Lot number and serial number of each unit is marked on the bottom of the case.

These units were packed and shipped by Security Express, to the attention of E. Bruce in care of R.S. Shoberg, Sandia Corporation, Sandia Base, Albuquerque, New Mexico on September 29, 1959.

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TABLE I

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Effective Weight (GMS) Acting

	<u>Against Bottom Disc</u>	<u>Against Top Disc</u>	<u>Against Side Foil</u>	<u>Closing Pressure lbs.</u>
1	123.9	110.2	132.7	130
2	122.5	109.5	131.3	130
3	123.0	109.8	131.8	125
4	123.2	109.6	132.2	125
5	123.5	110.0	132.5	130
6	122.7	109.6	131.6	130
7		REJECT		
8	122.2	109.4	131.0	125
9	123.1	109.9	131.7	130
10	122.7	109.7	131.5	130
11	122.2	109.3	130.9	130
12	123.0	109.9	131.8	135
13	123.2	109.6	132.0	120
14	123.6	109.8	132.3	130
15	123.4	110.0	132.3	130
16	123.4	110.0	132.3	135
17	123.0	110.2	131.7	130
18	123.3	110.4	132.0	120
19	123.2	109.7	131.9	125
20	123.0	109.7	131.9	130
7	125.1	111.4	133.6	135

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MODEL MC-818

MANUFACTURING DATA

LOT NO. ST-261

Serial No.	Code No.	Date Mfg.	BiMetal Lot No.	Electrolyte Lot No.	Stack Pad Lot No.	Weight (Grms) Stack Pads	Weight (Grms) Cell Stack	Stack and Pad Inspector	Time	Final Drying			Prefusion		Remarks
										Temp.	Oven No.	Date	Removed Peak Voltage	Loaded Voltage	
MH 1		9/14	BQ-1421	E-297	BU-161	18.520	81.745		15hr.	140°	5	9/15	535	483	
MH 2						18.577	81.654						535	488	
MH 3						18.498	81.867						535	488	
MH 4						18.514	81.745						535	482	
MH 5						18.554	81.658						535	482	
MH 6						18.650	81.734						535	488	
MH 7						Reject									Shorted foil
MH 8						18.570	81.528						535	483	
MH 9						18.500	81.982						535	488	
MH 10						18.512	81.748						535	488	
MH 11						18.450	81.814						535	488	
MH 12						18.479	81.675						540	490	
MH 13						18.528	81.584						535	488	
MH 14						18.477	81.766						535	488	
MH 15						18.547	81.828						535	486	
MH 16						18.493	81.690						535	488	
MH 17						18.504	81.857						535	485	
MH 18						18.588	81.855						535	483	
MH 19						18.540	81.566						535	490	
MH 20						18.508	81.508						535	488	
MH 7		9/22	BQ-1442	E-299	BU-158	18.550	83.186		15hr.	140°	5	9/23	540	500	Replacement
MH															
MH															

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