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JANL-TME-420

SUPPLEMENT 2

August, 1963

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JANL-TME-420 - SUPPLEMENT 2
MODIFICATIONS TO FINAL TEST SPECIFICATIONS
ON NOS. 23/W004 (ACCELEROMETERS) AND
23/W503 (PRESSURE TRANSDUCERS)

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WANL-TME-420

SUPPLEMENT 2

INTRODUCTION

The attached information provides modifications necessary to the Final Test Specifications on Test Nos. 23/W004 (Accelerometers) and 23/W503 (Pressure Transducers), which were initially issued under WANL-TME-420, "Final Test Specifications for Candidate NRX-A Diagnostic Transducer to be Irradiated at the Ground Test Reactor During July 29 - August 2, 1963."*

The technical aspects of these changes have been discussed with GD/FW and WANL personnel at the GTR site and have mutually been found feasible.

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*This date has been deferred to August 19, 1963.

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Test No. 23/W004 - Accelerometers

- 1.1 On the tandem vibration generator that contains two Endevco accelerometers, remove the unit with serial number GE06 and replace it with a Statham accelerometer, Model A515TC-25-350, serial number 32, Instrumentation Data Book Code No. Gr-5. Attached is a wiring diagram for the Statham accelerometer.
- 1.2 A fourth tandem vibration generator is to be added to the cryostat containing the accelerometers and pressure transducers. Mounted on this fourth tandem vibration generator are two accelerometers as described below:

<u>Quantity</u>	<u>Manufacturer</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Inst.Data Book Code No.</u>
1	Gulton	3D434601	101	Gr-18
	Physical Sciences	VT-100	001	Gr-17

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NOTE: HOOK-UP WIRE TO BE IRRADIATED POLYOLEFIN
INSULATED No. 20 AWG, FOUR-CONDUCTOR
SHIELDED WIRE.

WIRING DIAGRAM, STATHAM ACCELEROMETER

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WATL-2-1-433

Wiring Diagram for Physical Sciences Vibrometer

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WIRING DIAGRAM FOR GULTON ACCELEROMETER

Test No. 23/W503 - Pressure Transducers

Add a Physical Sciences pressure transducer to the cryostat containing the accelerometers and pressure transducers. This unit should be suspended from the cryostat lid such that it will be immersed in the liquid nitrogen. This pressure transducer is identified as follows:

<u>Quantity</u>	<u>Manufacturer</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Inst.Data Book Code No.</u>
1	Physical Sciences	PT-1001	3	DPr-9

Attached is a pressure hook-up drawing.

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TUBING & PRESSURE DIAGRAM
PHYSICAL SCI. TRANSDUCER (0-70 PSID)
(DIFFERENTIAL)

REACTOR
AREA

PROCEDURE

ASSUME HUMIDITY REMOVED (BY VACUUM PUMP) AND LINES PURGED PROPERLY WITH He GAS AND ALL CONNECTIONS ARE LEAK PROOF.

- 1- OPEN V_1 & V_2 (V_3 CLOSED)
- 2- ADJUST He REGULATOR TO RAISE PRESSURE ON G_1 & G_2 SIMULTANEOUSLY TO 600 PSIG
- 3- CLOSE V_2
- 4- INCREASE PRESS. IN 10 PSI INCREMENTS ON G_1 UP TO 670 PSIG. READOUT MV AT EACH STEP
NOTE: PRESS. ON G_2 MUST REMAIN 600 PSIG
- 5- USING V_3 , SLOWLY LOWER PRESSURE BY BLEEDING OFF. READOUT MV AT 10 PSI INCREMENTS
- 6- AT 600 PSIG OPEN V_2 & LOWER ON BOTH SIDES TOGETHER