

Engineering Division
OA/W5141

ADDENDUM TO MODIFICATION NOTE NO. 21
(For Electronics Technicians)

SUBJECT : Addendum to Modification Note No. 21 correction to schematic, battery cable and radiosonde cable wiring

PURPOSE : To modify the radiosonde power supply and battery tester, for use with the new series of radiosondes and batteries.

EQUIPMENT AFFECTED : Radiosonde Power Supply and Battery Tester, Model 1271-420

PARTS REQUIRED :

<u>Quantity</u>	<u>Description</u>
1	Female 29" pigtail cable
1	Male 29" pigtail cable
1	Adapter cable 1271-181
1	Adapter cable 1271-182

MOD PROCUREMENT : CLSC will supply a modification assembly kit to all NWS upper air stations.

SPECIAL TOOLS REQUIRED : Normal Complement of Electronics Technician's Hand Tools.

TEST EQUIPMENT : Volt Ohm Meter or Digital Volt Meter.

TIME REQUIRED : Two Work-Hours.

MANUAL CHANGES : Insert Schematic into SOLID STATE RADIOSONDE BATTERY TESTER MANUAL

GENERAL: This modification will update the radiosonde power supply and battery tester, for use with the new series of radiosondes and batteries.

PROCEDURE:

1. Remove AC power.
2. Remove cover from Power Supply and Battery Tester, Model 1271-420.
3. Remove cord relief bushings on cables, front panel.
4. Battery Cable: Male Plug
 - a) Remove green wire at position 7 of S1 switch (meter select switch).
See figure 1.

- b) Remove white wire at position 3 of S1 switch (meter select switch).
See figure 1.
 - c) Remove black wire at printed circuit board, reference designator number 1. (See figure 2.)
 - d) Remove cable.
 - e) Remove one set of 29" pigtail cables from kit or package.
5. Battery Cable: Male
- a) Feed male cable through remaining hole in front panel.
 - b) Solder white wire to position 7 of S1 switch (meter select switch).
 - c) Solder black wire to reference designator number 1 on printed circuit board.
 - d) Install cord relief bushing.
 - e) Dress green lead.
6. Radiosonde Cable: Female Plug
- a) Remove green wire at position 6 of S1 switch (meter select switch).
(See figure 1.)
 - b) Remove white wire at ground side of R-11.
 - c) Remove black wire at printed circuit board, reference designator number 4. (See figure 2.)
 - d) Remove cable.
7. Radiosonde Cable: Female
- a) Feed female cable through front panel hole (the one nearest corner of unit).
 - b) Solder white wire to position 6 of S1 switch (meter select switch).
 - c) Solder black wire to reference designator number 4 on printed circuit board.
 - d) Install cord relief bushing.
 - e) Dress green lead.

8. Continuity Check

- a) Refer to figure 3 for Molex connector layout.
- b) Check continuity between the following points.

Battery cable male connector.

<u>From</u>	<u>To Molex Connector</u>
Position 7, S1 (white lead)	Pin C
Green wire; no connection	Pin B
P. C. board, ref. designator number 1, black	Pin A

Radiosonde cable female connector

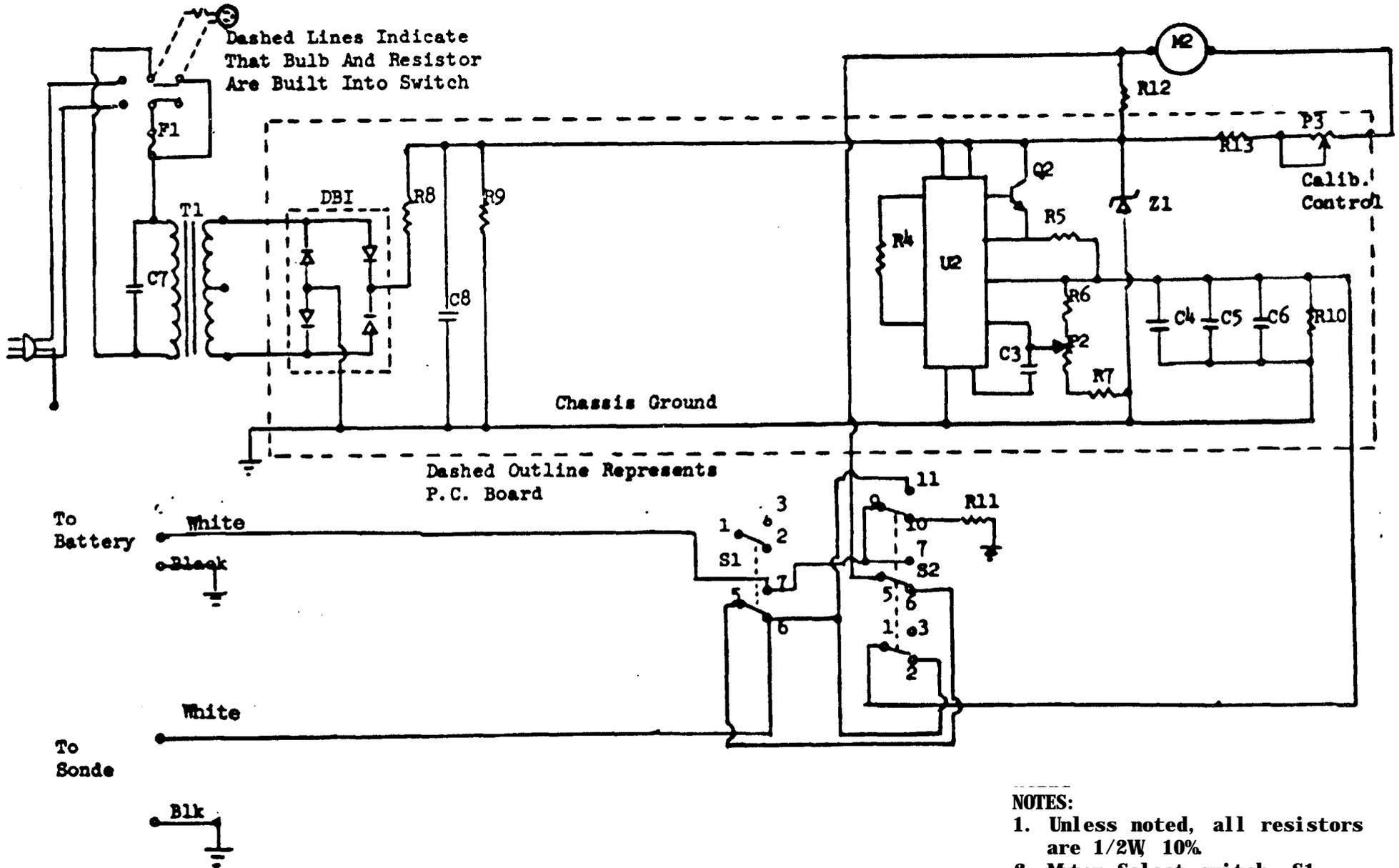
<u>From</u>	<u>To Molex Connector</u>
Position 6, S1 (white lead)	Pin C
Green wire; no connection	Pin B
P. C. board, ref. designator number 4, black	Pin A

NOTE: Schematic for model 1271-400/1271-420 included.
Schematic is the same for both models.

Manual Changes:

Insert schematic into SOLID STATE RADIOSONDE BATTERY TESTER MANUAL.

Attachments: Figure No. 1, Meter Select Switch
Figure No. 2, Printed Circuit Board
Figure No. 3, 29" Pigtail Cable
Schematic: VIZ Model 1271-400/1271-420



C3	.47/50	R4	1.5 K	R10	10K	DBI	G.I.75BPO4
C4	50/25	R5	4.7Ω	R11	140Ω, 10W	P2	5K
C5	50/25	R6	2.9 K	R12	10K	P3	100K
C6	1000/35	R7	3.6 K	R13	120K	Q2	TIP-29
C7	.5/200	R8	16Ω, 5W			U2	μa 723
C8	1000/35	R9	1.3 K, 2W			Z1	12.8V Zener
						M2	50 μA

- NOTES:**
1. Unless noted, all resistors are 1/2W 10%
 2. Meter Select switch, S1, shown in Radiosonde position.
 3. Mode switch, S2, shown in Test/Actuate position.

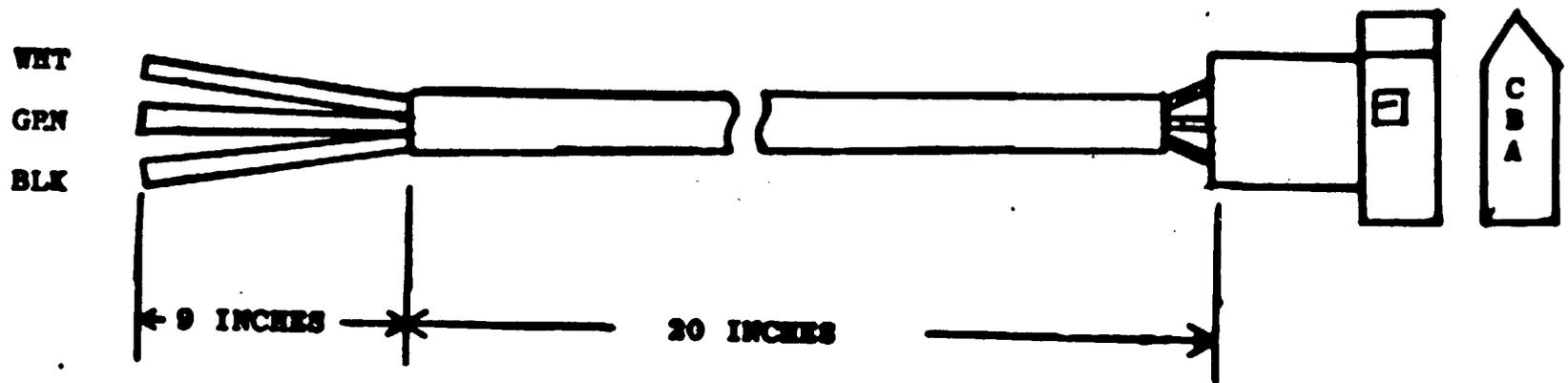


FIG. 3
PIGTAIL CABLE ASSEMBLY

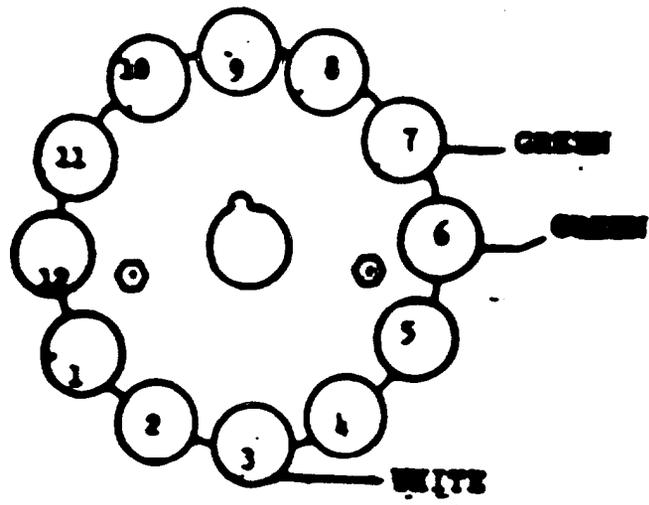


FIG. 1
S1, REAR VIEW
METER SELECT SWITCH

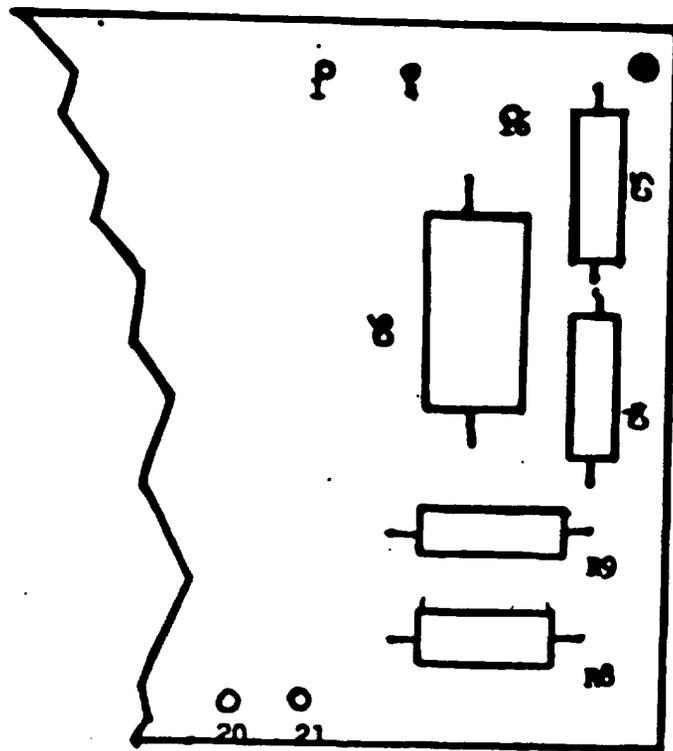


FIG. 2
PRINTED CIRCUIT BOARD
TOP VIEW

1. ORG	2. PAY PERIOD <i>(Last day)</i>			3. STATION			4. AREA SECTOR		5. INITIALS		6. HOURLY SALARY		7. REPORTED BY:			8. GENERAL PURPOSE		WS FORM H-28 (7-73)		U. S. DEPARTMENT OF COMMERCE NOAA NATIONAL WEATHER SERVICE	
	YEAR	MONTH	DAY	REG.																	

ENGINEERING PROGRESS REPORT

S E Q	9. STATION			10. AREA SECT	11. CATEGORY PROGRAM	12. WORK TYPE	13. TOTAL - TIME (Hours)					14. TRAVEL MILES	15. PER DIEM <i>(Travel wh. 3)</i>	16. COST CODE	17. COST <i>(Dollars)</i>	18. ORDER NUMBER	19. NOTES	
	REG.						Rt	Rt	Ft	Et	Ot							
1A					R FIR	M O D												MODIFICATION # 21 DATE Completed
1B																		
1C																		
1D																		
1E																		
1F																		
1G																		
1H																		
1I																		
1J																		
1K																		
1L																		
1M																		
N					ADMIN.													FOR LEAVE ENTER WORK TYPE: LVA = Annual Leave LVC = Compensatory Leave LVH = Holiday LVS = Sick LVM = Military or Other LVN = Combination of Above
O					LEAVE													

20. REMARKS
REPORT THIS MOD INTO EMRS BEFORE 12-1-80

C = CONTRACTS P = PURCHASED LOCALLY M = MISCELLANEOUS
G = GOVERNMENT FURNISHED

ENTER HOURS HERE