

RST ENGINEERING

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27 November 01

RST-442

DOCUMENT SUMMARY

442-3060 -- Intercom PTT Schematic

442-4000 -- Mechanical Assembly and Chassis Component Identification

442-4060 -- Radio Interface Wiring and Plug Pinouts

442-4070 -- Radio Interface Diagram

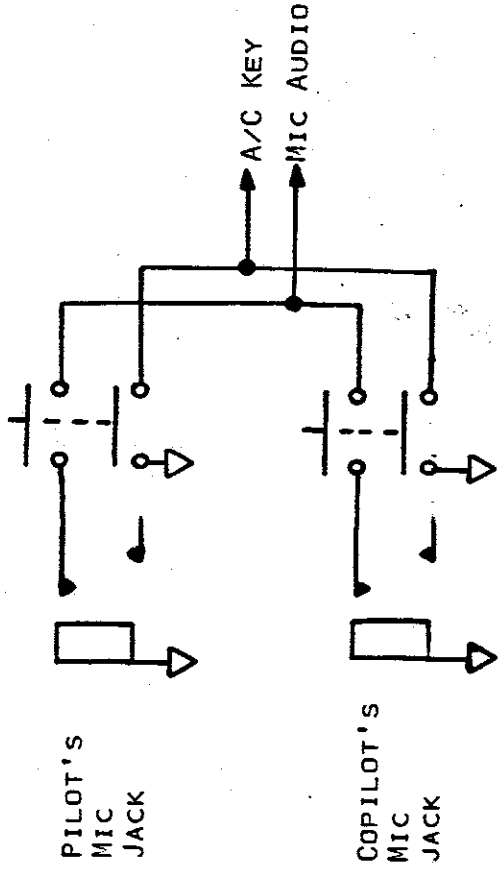
442-4072 -- Intercom Interconnect Diagram

442-5100 -- PC 051 Parts Value, Parts Numbering, and Trace Drawing

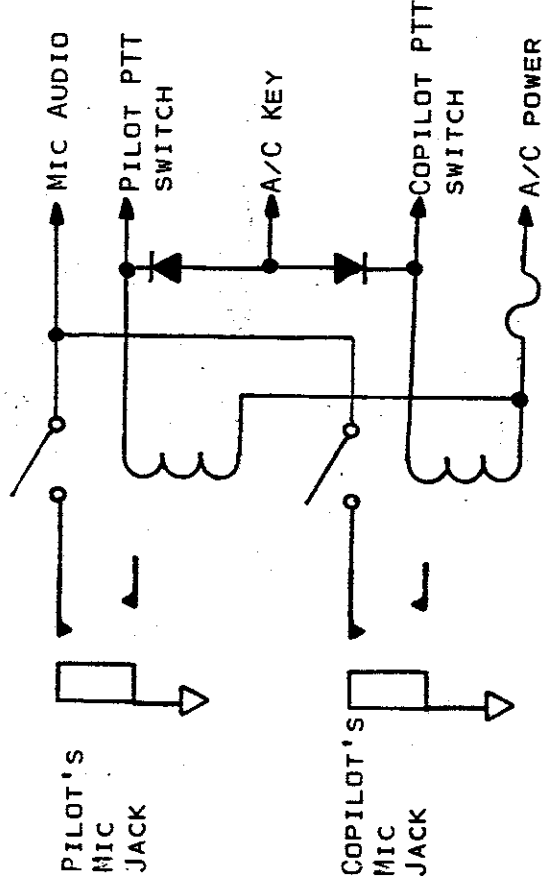
442-7000 -- PC 051F Schematic

442-7800 -- Chassis Schematic

PTT SYSTEM USING DPDT SWITCHES
(SUCH AS C&K 8225 DPDT MOMENTARY
PUSH BUTTON SWITCH)



PTT SYSTEM USING RELAYS



PTT SYSTEMS

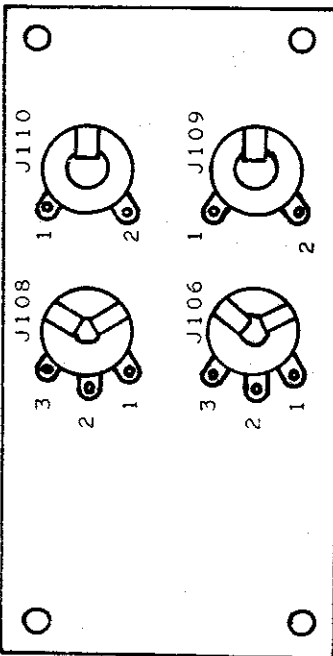
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DATE: 30 NOV 84

APPROVED BY: *[Signature]*
DRAWN BY: BMMW
REVISED:

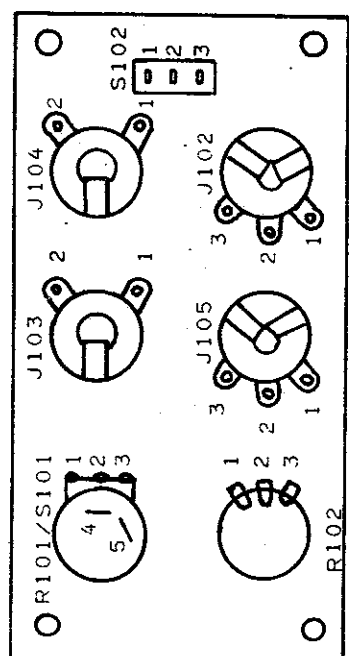
RADIO SYSTEMS TECHNOLOGY
GRASS VALLEY, CALIFORNIA 95945

DRAWING NUMBER
442-3060

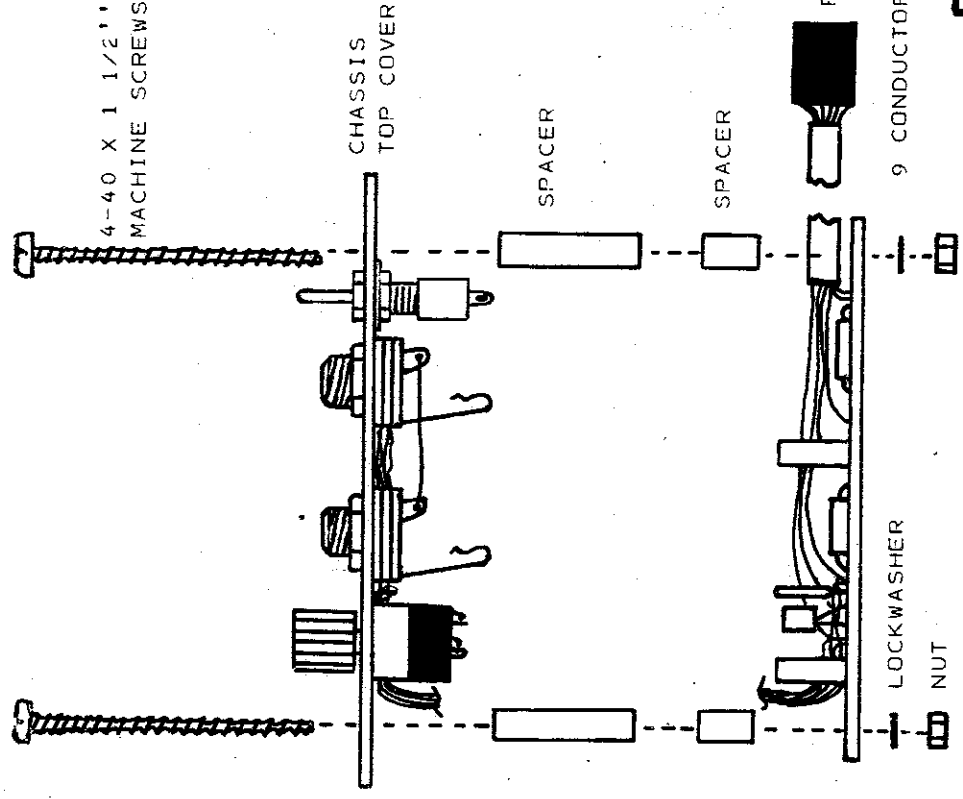
EXTENSION BOX, INSIDE VIEW (445 ONLY)



CHASSIS TOP COVER, INSIDE VIEW



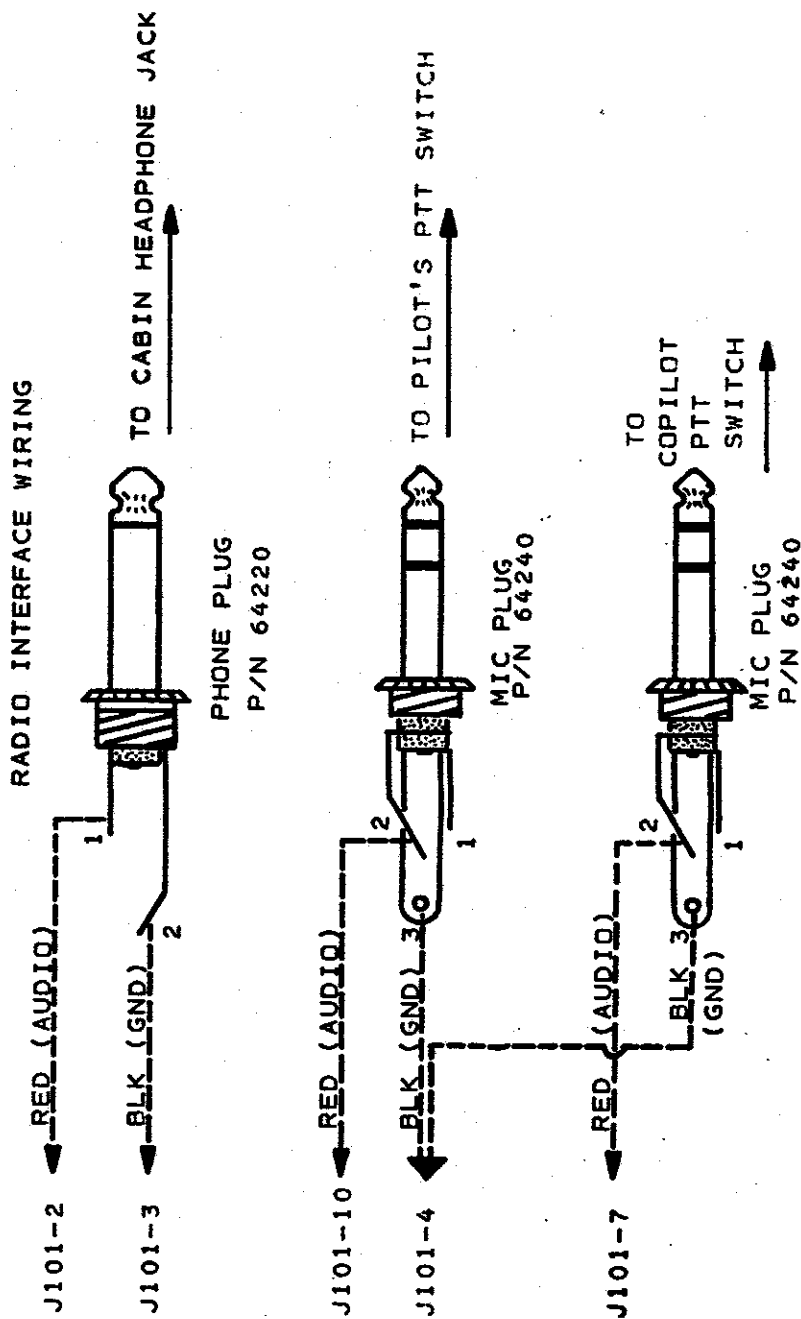
4-40 X 1 1/2" MACHINE SCREWS



9 CONDUCTOR CABLE 2. BREV ECO#18.
 NOTES: 1. AREV ECO#16.

MECHANICAL ASSEMBLY RST-442 / 445

DESIGNED BY	DRIVEN BY MWW
DATE 28 NOV 83	REVISED B15JAN84
RADIO SYSTEMS TECHNOLOGY GRASS VALLEY CALIFORNIA 95945 442-4000	
DRAWING NUMBER 442-4000	



- NOTES**
1. INSULATING COVERS FOR PLUGS ARE NOT SHOWN
 2. Arev: 3/C CABLE USED FOR 'Y', RST P/N'S ADDED
 3. Brev: REDRAWN ON A SIZE SHEET W/O 'Y' ADAPTER

RADIO INTERFACE WIRING: PLUG PIN OUTS

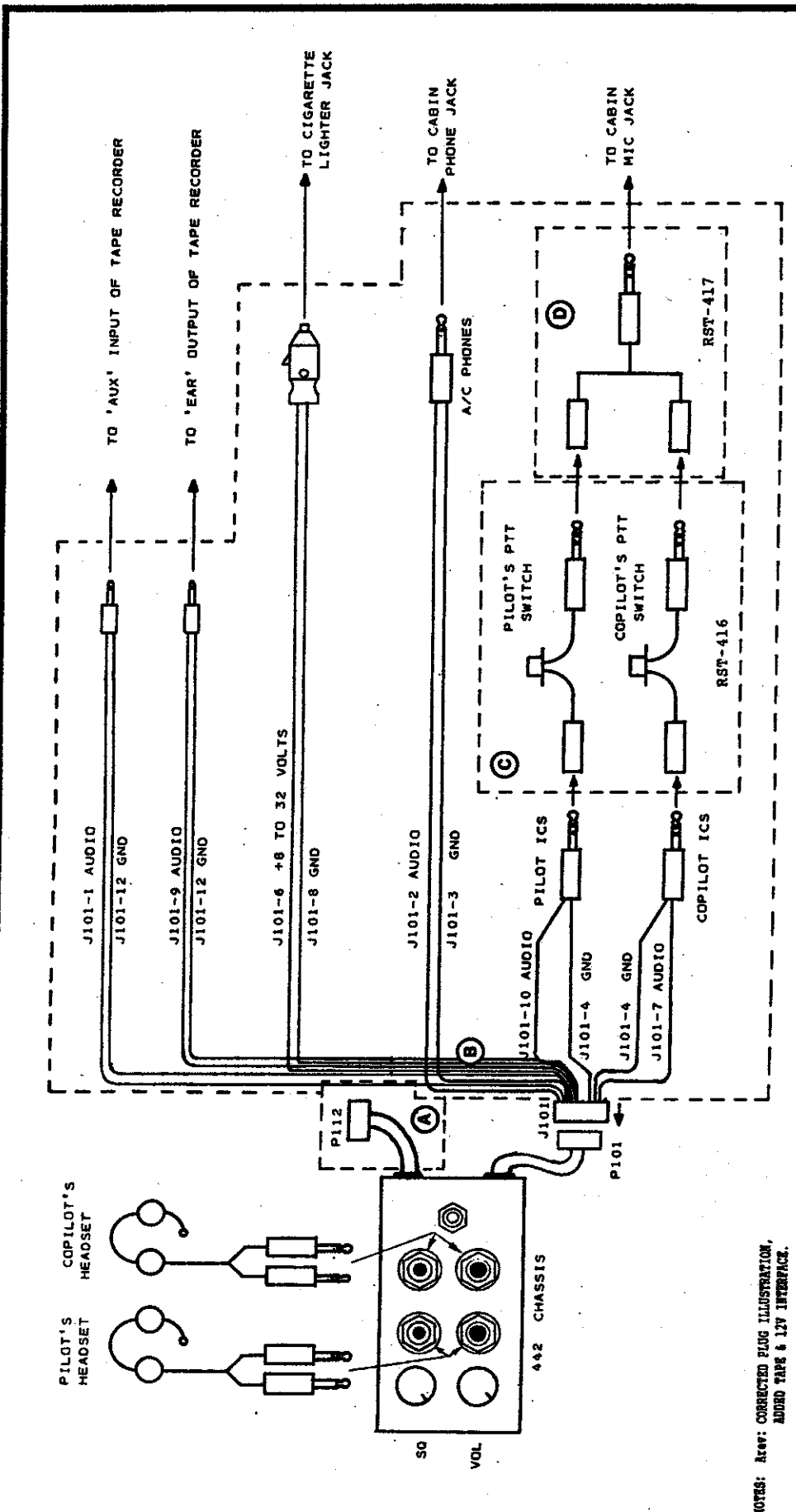
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DATE: 2-15-79

APPROVED BY: *[Signature]*
DRAWN BY TLP
REVISED: B40CT90

RST 442 - 2 CHANNEL INTERCOM

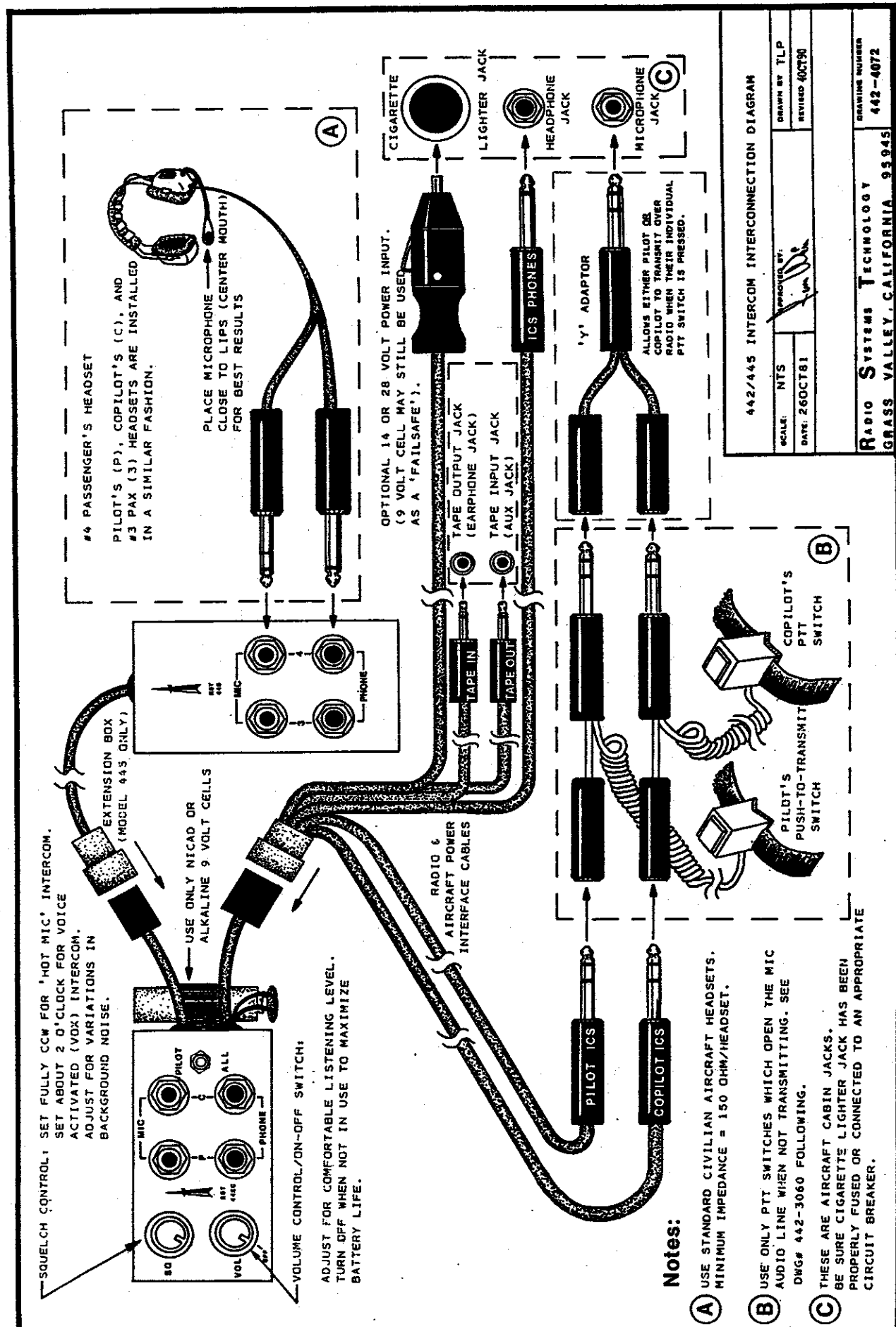
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GRASS VALLEY, CALIFORNIA 95945

DRAWING NUMBER
442-4060



RST-442 / 445 RADIO INTERFACE DIAGRAM	
SCALE: NTS	APPROVED BY: JAM
DATE: 20 MARCH 81	REVISED: 8402130
DRAWING NUMBER: 442-4070	
RADIO SYSTEMS TECHNOLOGY GRASS VALLEY, CALIFORNIA 95945	

NOTES: A: CORRECTED PLUG ILLUSTRATION, ADDED TAP & 12V INTERFACE.
 B: REVISED FACEPLATE & NOTES.
 C: P112 PROVIDED FOR EXTENSION CHASSIS (RST-445 ONLY)
 D: INTERCONNECTING WIRING FOR AIRCRAFT RADIO, AIRCRAFT POWER AND TAPE RECORDER
 E: PTT SWITCHES NOT PROVIDED, PTT SWITCHES MUST OPEN THE HIGH SIDE OF THE MICROPHONE AUDIO SUCH AS THE RST-416
 F: RST-417 'Y' ADAPTER OPTIONAL (NOT PROVIDED IN RST-442 KIT)



SQUELCH CONTROL: SET FULLY CCW FOR 'HOT MIC' INTERCOM. SET ABOUT 2 O'CLOCK FOR VOICE ACTIVATED (VOX) INTERCOM. ADJUST FOR VARIATIONS IN BACKGROUND NOISE.

USE ONLY NICAID OR ALKALINE 9 VOLT CELLS

VOLUME CONTROL/ON-OFF SWITCH: ADJUST FOR COMFORTABLE LISTENING LEVEL. TURN OFF WHEN NOT IN USE TO MAXIMIZE BATTERY LIFE.

#4 PASSENGER'S HEADSET
 PILOT'S (P), COPILOT'S (C), AND #3 PAX (3) HEADSETS ARE INSTALLED IN A SIMILAR FASHION.
 PLACE MICROPHONE CLOSE TO LIPS (CENTER MOUTH) FOR BEST RESULTS

OPTIONAL 14 OR 28 VOLT POWER INPUT. (9 VOLT CELL MAY STILL BE USED AS A 'FAILSAFE').

TAPE OUTPUT JACK (EARPHONE JACK)
 TAPE INPUT JACK (AUX JACK)
 ICS PHONES
 'Y' ADAPTOR
 ALLOWS EITHER PILOT OR COPILOT TO TRANSMIT OVER RADIO WHEN THEIR INDIVIDUAL PTT SWITCH IS PRESSED.

Notes:

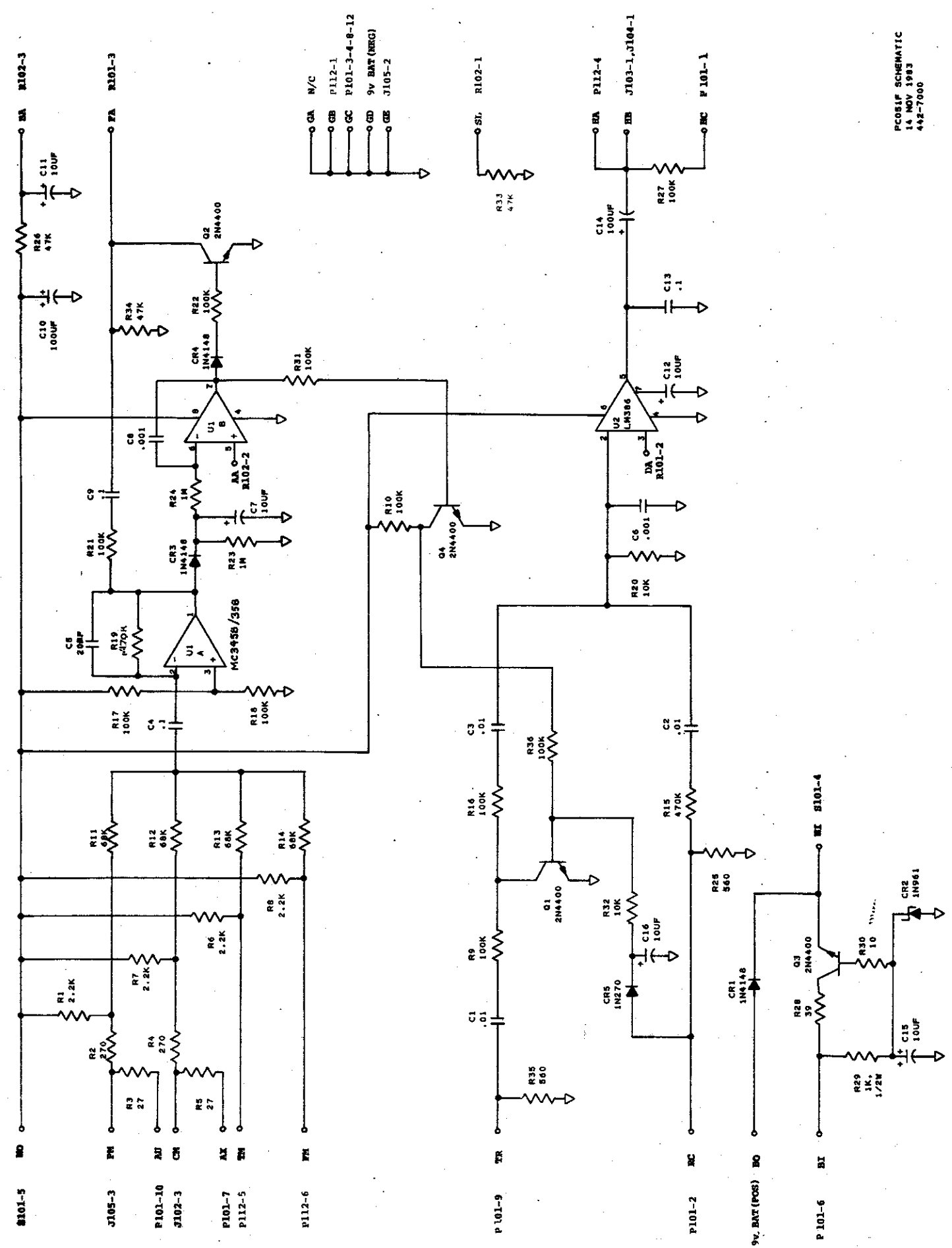
- A** USE STANDARD CIVILIAN AIRCRAFT HEADSETS. MINIMUM IMPEDANCE = 150 OHM/HEADSET.
- B** USE ONLY PTT SWITCHES WHICH OPEN THE MIC AUDIO LINE WHEN NOT TRANSMITTING. SEE DWG# 442-3060 FOLLOWING.
- C** THESE ARE AIRCRAFT CABIN JACKS. BE SURE CIGARETTE LIGHTER JACK HAS BEEN PROPERLY FUSED OR CONNECTED TO AN APPROPRIATE CIRCUIT BREAKER.

442/445 INTERCOM INTERCONNECTION DIAGRAM

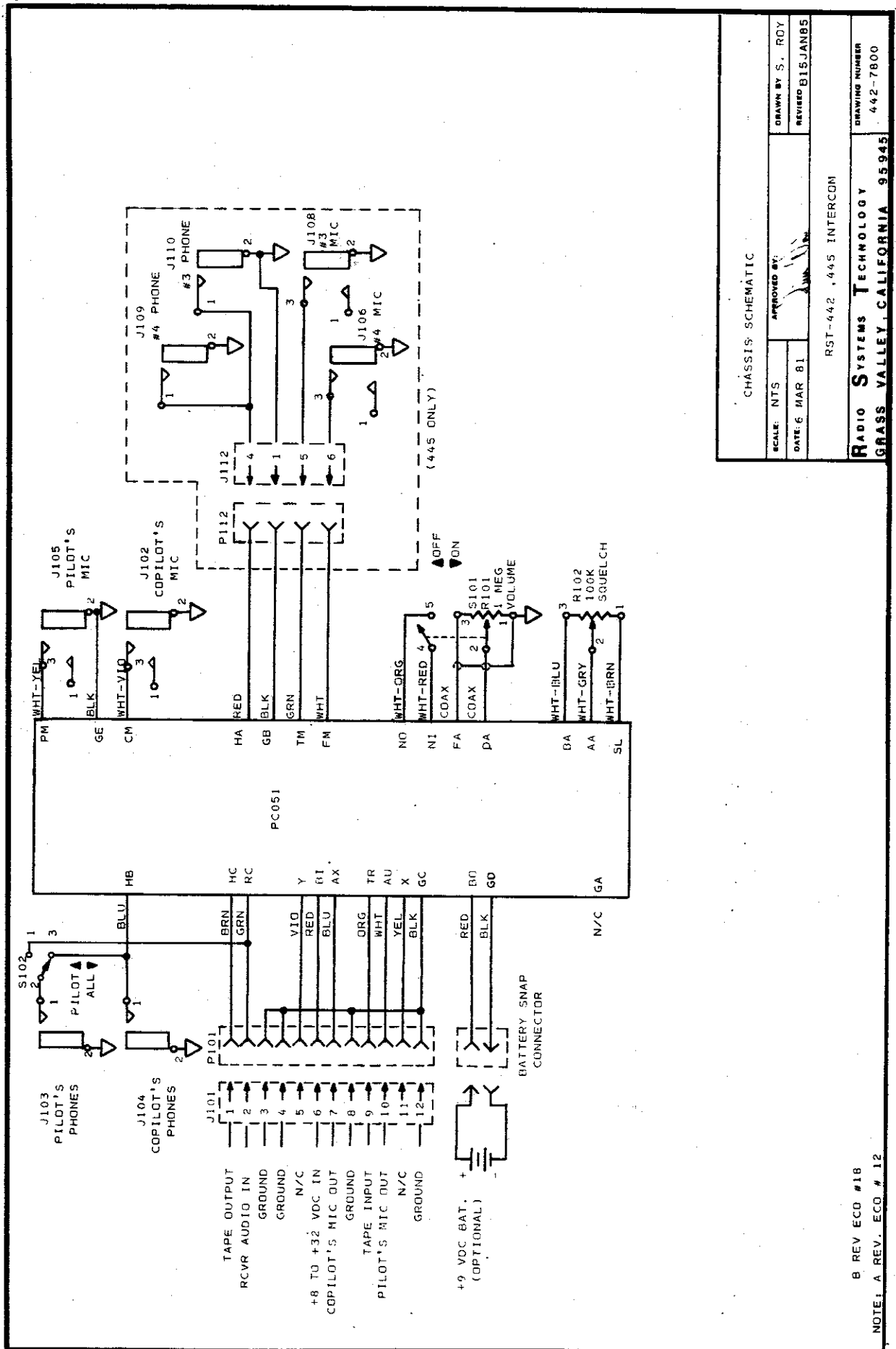
SCALE: NTS
 DATE: 26OCT81
 DRAWN BY: TLP
 REVISED 4OCT90

RADIO SYSTEMS TECHNOLOGY
 GRASS VALLEY, CALIFORNIA 95945

DRAWING NUMBER
 442-4072



PCOSIF SCHEMATIC
14 NOV 1983
442-7000



CHASSIS: SCHEMATIC	
SCALE: NTS	APPROVED BY: <i>[Signature]</i>
DATE: 6 MAR 81	REVISED: 015JAN85
RST-442, 445 INTERCOM	
DRAWING NUMBER: 442-7800	
RADIO SYSTEMS TECHNOLOGY GRASS VALLEY, CALIFORNIA 95945	