Every MSF5000 board schematic is prefaced by a component location diagram, which shows the test points, connectors, and other parts. There are several SSCB schematics on the repeater-builder web site, but apparently some people are too lazy to look at them or READ.

The various test points are scattered all over the SSCB but mostly around the perimeter of the board. Each one is clearly marked, however sometimes it's hard to tell if a digit is a 6, 8, or 9. There are three common SSCB layouts that have been included with this file:

- The "Old" layout covers the TLN3043, TLN3059, and TLN3090.
- The "Mid" layout covers the TLN3182, TLN3188, and TLN3189.
- The "New" layout covers the TLN3384, TLN3385, TLN3386, and TLN3387.

There have been some "New" SSCB board replacements, as follows:

- The TLN3384 replaced the TLN3182 and TLN3318 (VHF/UHF).
- The TLN3385 replaced the TLN3189 and TLN3319 (VHF/UHF).
- The TLN3386 replaced the TLN3204 and TLN3320 (800 MHz).
- The TLN3387 replaced the TLN3205 and TLN3342 (896 MHz).

TP	Signal	Test Point	Location [note 1]		
#	Name	Function and Notes	Old	Mid	New
1	Select Audio	Gated audio to local volume control	T-L	T-C	T-C
2	Logic Ground	Ground for all digital logic signals	B-R	M-R	M-R
3	Quad Audio	Detected audio from RF tray	T-C	T-C	T-C
4	TX Audio	Modulation audio to RF tray	T-R	M-R	M-R
5	+9.6V	Source of +9.6 volts DC	T-R	T-R	T-R
6	+5V	Source of +5 volts DC	M-R	M-R	M-R
7	Analog Ground	Ground for all analog signals	B-R	B-R	B-R
8	MIC Audio	Local microphone audio (+9.6v bias)	T-L	T-L	T-L
9	MIC PTT	Local microphone PTT (gnd=PTT)	T-L	T-L	T-L
10	Reset	Reset signal source (gnd=RESET)	M-L	M-L	M-L
11	Analog Ground	Ground for all analog signals [note 2]	N/A	T-L	T-L
12	AGC Reference	Only on 800/896 MHz stations [note 3]	N/A	N/A	N/A
13	IF Envelope	Only on 800/896 MHz stations [note 3]	N/A	N/A	N/A

NOTES:

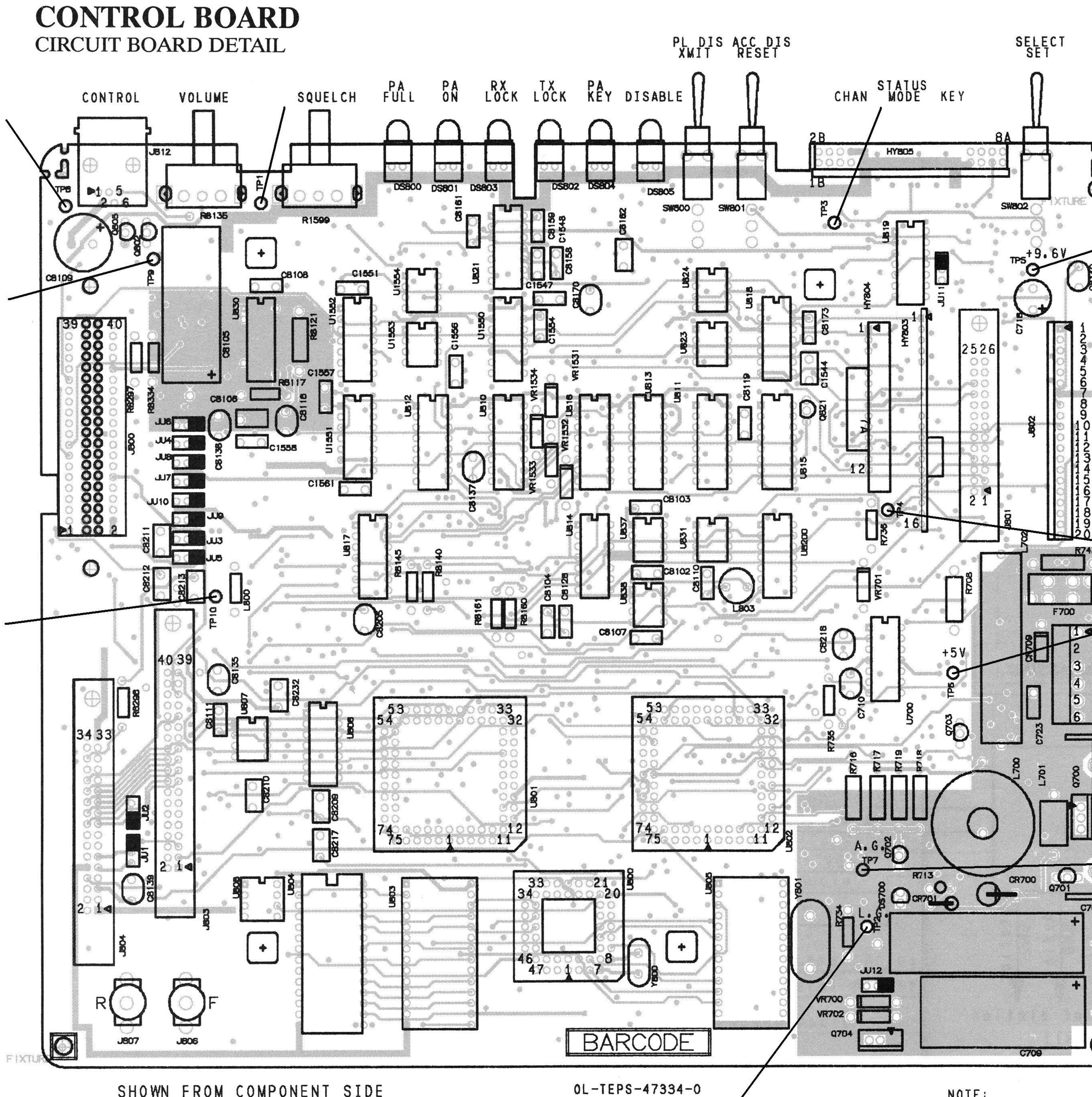
- 1. In the "Location" columns, the first letter refers to Top, Middle, or Bottom; the second letter indicates Left, Center, or Right, as viewed on the attached layout diagrams. Top is the front of the SSCB, where the LEDs, pots, switches, and display are located. Long black lines have been added to the layouts to make them more visible.
- 2. There is no TP11 on the "Old" SSCB board. On the other boards it's the same as TP7 but located at the opposite corner.

MSF5000 Digital-Capable SSCB Test Points Compiled by Robert W. Meister WA1MIK

3. TP12 and TP13 are only present on the 800/896 MHz stations. Both test points are located in the M-R area, near the DC Input connector. See the photo below. None of the available 896 MHz manuals have an SSCB layout that shows TP12 and TP13.



SECURE CAPABLE STATION



BD-TEPS-47335-0

OLD

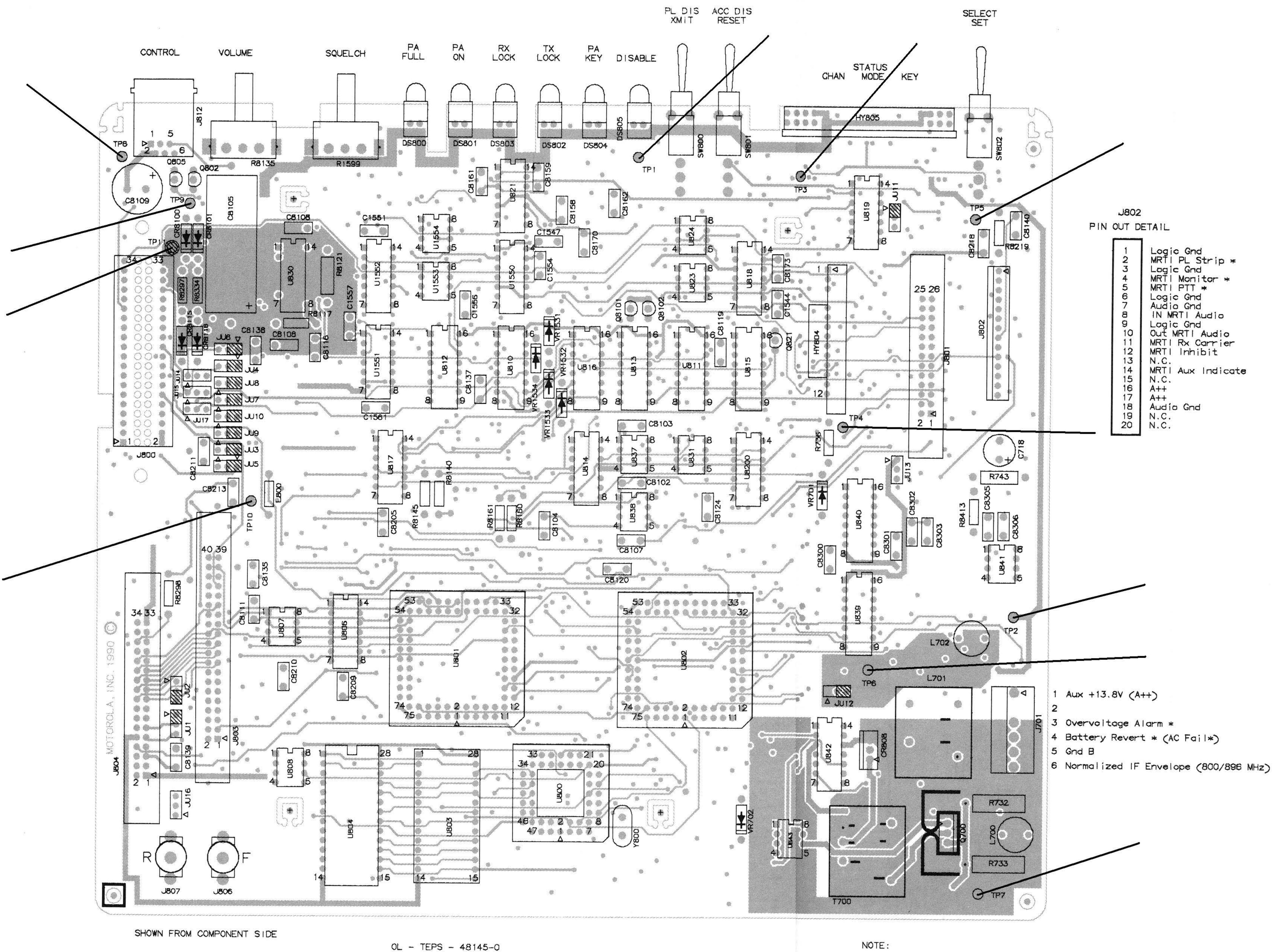
SHOWN FROM COMPONENT SIDE

12/29/89

NOTE: AN ASTERISK (*) FOLLOWING A SIGNAL NAME INDICATES AN ACTIVE LOW LEVEL SIGNAL

J B B B B B B B B B B B B B B B B B B B	
Je B	
890	LOGIC GND MRTI PL STRIP* LOGIC GND MRTI MONITOR* MRTI PTT* LOGIC GND AUDIO GND IN MRTI AUDIO LOGIC GND OUT MRTI AUDIO MRTI RX CARRIER MRTI INHIBIT N.C. MRTI AUX INDICATE N.C. A++ A++ AUDIO GND N.C. N.C.
	AUX +13,8V (A++) OVERVOLTAGE ALARM* BATTERY REVERT* (AC FAIL*) GND B NORMALIZED IF ENVELOPE (800/896 MHz)

SECURE CAPABLE STATION CONTROL BOARD CIRCUIT BOARD DETAIL



68P81083E92

BD - TEPS - 48146-0

8/31/90

MID

NOTE :

AN ASTERISK (*) FOLLOWING A SIGNAL NAME INDICATES AN ACTIVE LOW LEVEL SIGNAL.

