

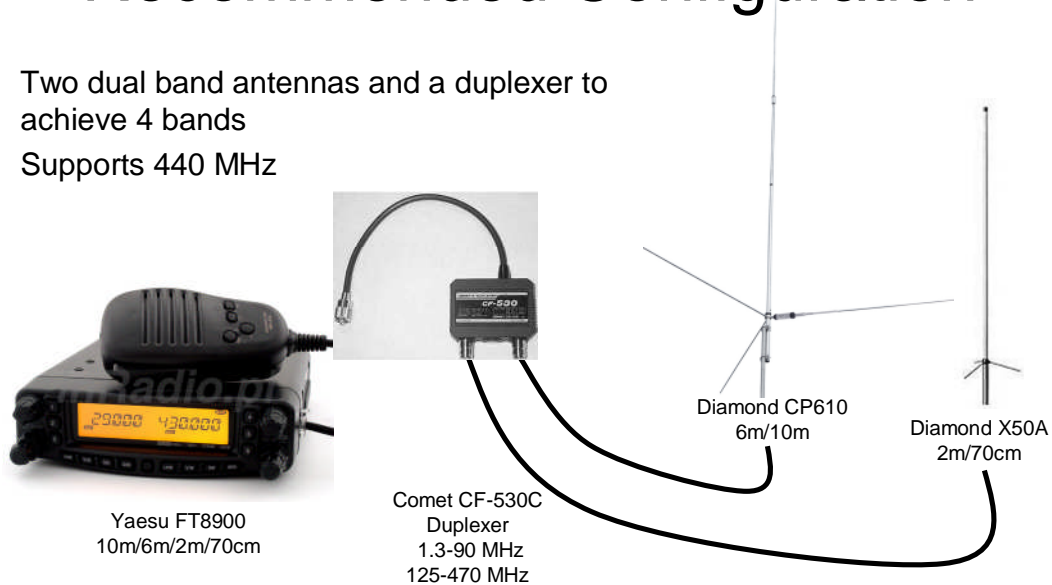
# DCS Technical Team Repair/Installation Request



<b>1.</b>	<b>Location(s)</b>	<b>Control #</b>
	Lomita Sheriff DCS Room and Antennas 26123 S. Narbonne Avenue, Lomita CA 90717	LMT-01 rev3
<b>2.</b>	<b>Statement of the Problem(s)</b>	
	<p>A. Position #1: 2m antenna has phase distortion and intermodulation on simplex signals and varying SWR probably due to visible contact with tree limbs and vines. Antenna seems to have one of the three radials missing.</p> <p>B. Position #2: 2m antenna has poor performance at the top of the 2m amateur band (WA6ZTR input freq); SWR 1.2 @ 144 MHz; 1.25 @ 145 MHz; 1:40 @ 146 MHz; 2.0 @ 147.5 MHz; 2.4 @ 147.87 MHz. Antenna seems to have one of the three radials missing.</p> <p>C. Position #4a: IC-726 HF radio, LA Co. tag 55068 (the primary 6m radio) with 6m/10m dual band antenna exhibits poor performance. On 6m SWR is 1.7 but exhibits 60dB over 9 noise level @ 50.62MHz and the output power is 4 watts. On 10m SWR is 3.1 @ 29.63 MHz.</p> <p>D. Position #4b: IC-726 HF radio, LA Co. tag 55080 (the primary 10m radio) with the vertical wire HF Antenna and tuner is poor on 10-meters: SWR 5.1 @ 29.63 MHz.</p> <p>E. Lomita cannot support NVIS.</p>	
<b>3.</b>	<b>Recommended Solution(s)</b>	
	<p>A. Position #1: Trim tree limbs and vines away from VHF StationMaster, 2m antenna and retest. Inspect and replace if necessary. Tune the antenna to 146.00 MHz, the middle of the 2m band.</p> <p>B. Position #2: Remove any obstructions. Tune the antenna to 146.00 MHz, the middle of the 2m band.</p> <p>C. Position #4a: Replace the IC-726 LA Co. tag 55068 with a FT8900. Place the FT8900 at Position #2 and adjust the position of the ICOM 2m radio there. Test the existing 6m/10m dual band antenna. If necessary replace with a Diamond CP 610 to solve the 6m problem. Add a Diamond X50A 2m/440 antenna and a Comet CF-530C duplexer to complete the 4 band capability of the radio and provide 440 capability to communicate with the contract cities without having to bring personal equipment.</p> <p>D. Position #4b: Replace the IC-726 LA Co. tag 55080 with a FT8900. Place a second FT8900 at Position #4. Add a Diamond CP 610 to solve the 10m problem. Add a Diamond X50A 2m/440 antenna and a Comet CF-530C duplexer to complete the 4 band capability. Add an Astron RS35A power supply for the two FT8900s. (The existing Astron RS20A power supplies will continue connected to the ICOM IS-2200H and the Alinco DR 235 respectively).</p> <p>E. Install a new Yaesu FT897D all band transceiver with a new LDG AT897 Plus Tuner at Position 4. Install a new B&amp;W BWDS-90N antenna, connect to the HF/50 MHz antenna port on the FT897D. Install a new Diamond X50A 2m/70cm antenna and connect to the 144/430 antenna port on the FT897D. Add an Astron RS35A power supply dedicated to the FT897D.</p> <p>The FT 8900s and FT897 are in CFMB stock.</p>	
<b>4.</b>	<b>Concurrences</b>	<b>Date</b>
	<b>Technical Team Contact</b>	Norm Thorn, T-219, <a href="mailto:norm@noroc.com">norm@noroc.com</a>
	<b>DCO</b>	Diana Feinberg, T-01, <a href="mailto:dfeinberg@att.net">dfeinberg@att.net</a>
	<b>Technical Ops Officer</b>	Deane Bouvier, S-50, <a href="mailto:n5dq@arrl.net">n5dq@arrl.net</a>
<b>5.</b>	<b>CFMB Approval</b>	

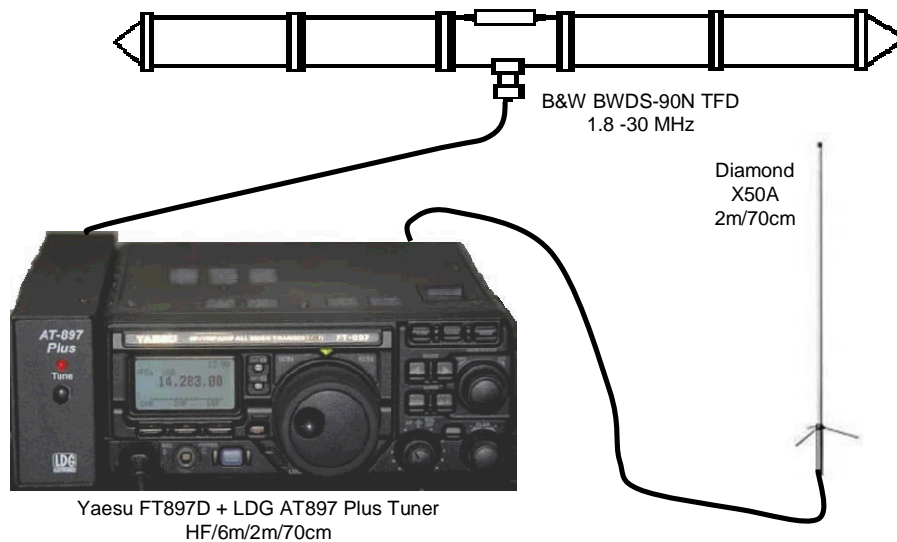
# FT 8900 for 6m and 10m Recommended Configuration

- Two dual band antennas and a duplexer to achieve 4 bands
- Supports 440 MHz



- Radios are in stock, but not the duplexer or antennas

## HF Position



- HF bands with horizontal polarization to support NVIS
- Second antenna port for 2m/70cm dual band antenna
- Radio in stock, but not the tuner or other antennas



Yaesu FT897D HF/6m/2m/70cm Rear Connectors

### Power Supply Alignment

Model	PS#	Peak	Cont.	CDM 1550*	IC-2200H	DR235	FT8900	FT897	Load
				13.5	15	8	8.5	22	
RS-20A	1	20	16		1				15
RS-20A	2	20	16			1			8
RS-35A	3	35	25				2		17
RS-35A	4	35	25					1	22

\* Motorola CDM 1550 has its own power supply @ LMT