DCS Technical Team Repair/Installation Request



1.	Location(s)	Control #
	Avalon Sheriff Station	AVA-16-01
	215 Sumner Ave, Avalon, CA 90704 (310) 510-0174	(supersedes AVA-01)

2. Statement of the Problem(s)

A. Avalon DCS capability is marginal even though there are radios in storage. Avalon DCS currently only has one Yaesu FT-8900R set up and operational on 2m. This radio is connected to an antenna which has a good SWR of 1.2:1 on 220MHz, but only 2:1 on 2m and 440. The current installation in the station gym has insufficient space to support additional radios and multiple operators.

3. Recommended Solution(s)

Avalon DCS Equipment Inventory							
Mfg	Model	Band(s)	Serial #	Prop. Tag			
Yaesu	FT-8900R	10m/6m/2m/440	9G02066	AA006547			
Equipment in Storage in Avalon							
Yaesu	FT-8900R	10m/6m/2m/440	9G020225	AA006564			
ICOM	IC 2200H	2-meter	528316	V0010151			
Alinco	DR-235T	220 MHz		V0010101			
Motorola	CDM 1550-LS+	VHF (2m)					

A. Move the currently installed FT-8900 and power supply from the station gym to the reconditioned Conference Room. Install the other radios that are in storage along will appropriate antennas and power supplies. The exiting antenna exhibits good SWR on 220 and could be reused with the DR-235. VHF Station Masters exist in CFMB stock for use with the 2m radios. Low band ground planes exist in CFMB stock to provide 6m and 10m capability using the two FT-8900s (one each). Coax to be supplied by ISD. Space for antennas may be the limiting factor. If so 2m and 220 are the priority. Astron RS-50A and RS-20A power supplies are required, connected as shown. The RS-20A should be available from the existing installation.

Power Supply Requirements						
Mfg	Model	Continuous Amps Needed	RS-50A (37a cont)	RS-20A (16a cont)		
Yaesu	FT-8900R	8.5		1		
Yaesu	FT-8900R	8.5	1			
ICOM	IC 2200H	15.0	1			
Alinco	DR-235T	8.0		1		
Motorola	CDM 1550-LS+	13.5	1			
			37	16.5		

B. When funds become available and space permitting, a separate Repair Request will be submitted to make the FT-8900s 4 band capable with additional antennas and duplexers. A Yaesu FT-897 HF radio and DX88 antenna with roof radials from CFMB stock could also be added.

4.	Concurrences	Date	
	Technical Team Contact	Deane Bouvier, S-50, n5dq@arrl.net	2/18/2016
	AVA Station	Deputy Doug DeCeasare, drdecesa@lasd.org	2/20/2016
	Technical Ops Officer	Deane Bouvier, S-50, <u>n5dq@arrl.net</u>	2/22/2016
5.	CFMB Approval		