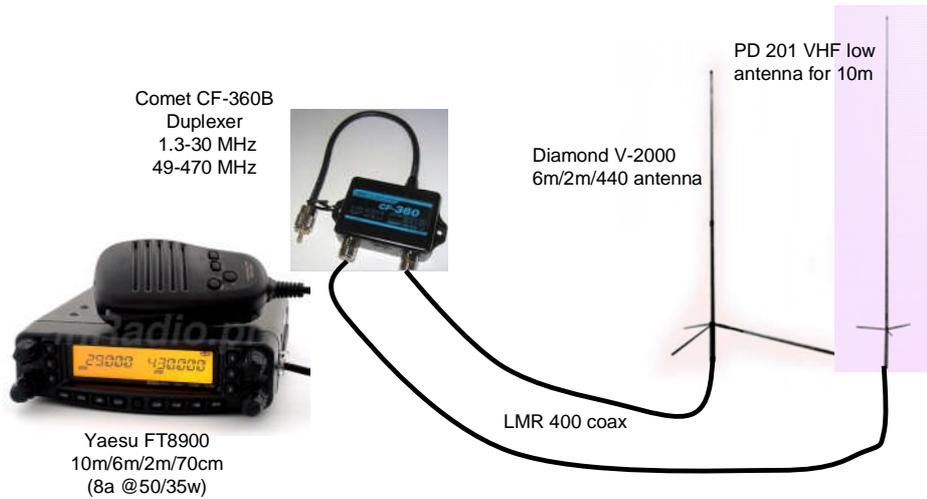


DCS Technical Team Repair/Installation Request



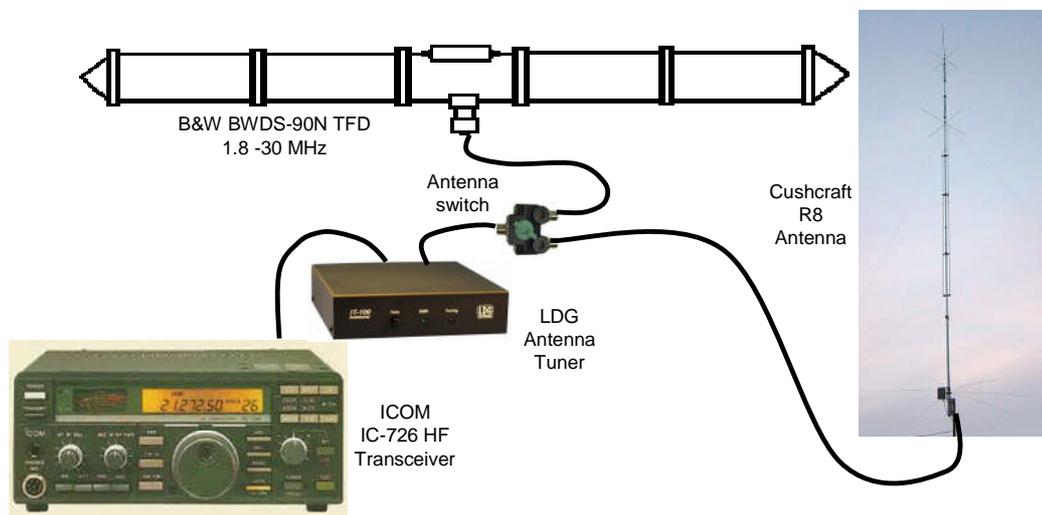
1.	Location(s)	Control #
	Crecenta Valley Station, DCS radio room 4554 Briggs Ave. La Crescenta, CA 91214	CVS-01
2.	Statement of the Problem(s)	
	<p>A. We have an Icom IC-726 HF/6m radio and our Yaesu FT-8900R are connected to the same antenna (Cushcraft R8) via a 2 position Alpha Delta 2B antenna switch. The R8 is atop the roof of the station and is fed by one single coax run. This prevents us from operating 10m and 6m at the same time as only one radio can use the antenna.</p> <p>B. CVS does not have NVIS HF capability.</p>	
3.	Recommended Solution(s)	
	<p>A. Our station owns a new in package Diamond V-2000 (2m/440/6m) vertical antenna; along with two 500 ft spools of Times LMR-400 coax cable. Mount the Diamond V-2000 antenna on the station roof fed by new run of coax. With the addition of a stock VHF low ground plane antenna tuned to 29.5 MHz and a Comet CF-360B duplexer we can support 4 bands with a stock Yaesu FT-8900R transceiver. See attached diagram. This would allow us to operate 2m, 440, 6m and 10m on the Yaesu FT-8900R, and also operate complete HF all bands/all modes via our Icom IC-726 radio connected to the Cushcraft R8 HF vertical. The IC-726 operates very well, communicating with a station in British Columbia on 20m during a previous test.</p> <p>B. Add a B&W BWDS-90N folded dipole to the IC-726 to provide NVIS capability. Use the existing antenna switch to use both the B&W and the R8. See attached diagram.</p> <p>Practical results would then allow us:</p> <ol style="list-style-type: none"> 1. Full HF capability with the Icom IC-726 radio dedicated R8 antenna and NVIS capability with the folded dipole. (We have a LDG antenna tuner inline). 2. With the FT-8900R connected to the Diamond V-2000 2m/440/6m antenna, duplexer and stock low band VHF ground plane antenna we would now be able to simultaneously operate 6m and 10m FM, PLUS be able to communicate on 440. Several CVS cities groups operate on 440: ie: Glendale and Burbank. We have also been given permission by Crescenta Valley ARC to use their club's 440 repeater by request, when needed. 	
4.	Concurrences	Date
	Technical Team Contact	Eric J Christensen M02; k6ejc@att.net
	DCO	Terry Priesont, M-01; priesont2@earthlink.net
	Technical Ops Officer	Deane Bouvier, S-50; n5dq@ARRL.net
5.	CFMB Approval	

CVS FT8900 Configuration



- FT8900 already installed; Diamond V-2000 and LMR400 coax available at CVS
- PD201 VHF low ¼ wave ground plane available in CFMB stock
- Only the Comet CF-360B duplexer needs to be procured
- 4 bands achieved with FT8900 with 2 antennas, both already available

CVS HF Position



- IC-726 HF radio, LDG antenna tuner, antenna switch and R8 antenna already installed
- Add the B&W folded dipole to provide NVIS capability