W5DSC Victoria Amateur Radio Club Repeaters

1. VHF 145.190 MHz - PL Tone 103.5 Hz (Encode and decode)

Purpose: The 145.190 MHz repeater is the flagship repeater on the Victoria Amateur Radio Club providing wide-area, critical emergency communications, as well as public service events such the Texas Water Safari race, and daily ham communications. It is the primary repeater for weekly combined nets for the Victoria Amateur Radio Club and the Coleto Creek Amateur Radio Club. The effective communication radius is about 32 miles to a 50-watt mobile station.

Location: The repeater is located at Citizens Medical Center (CMC) hospital, which provides a secure, accessible, weather protected and temperature-controlled environment, with emergency power.

Equipment - Primary: The repeater is made from a General Electric Mastr II base station repeater. It has a power output of about 100 watts. The Controller is a hybrid of a GE Mastr II controller combined with a CAT 300DX controller. Transmit/Receive frequency separation is provided by an VHF ??? duplexer.

Equipment - Backup: The club also maintains a complete backup repeater at CMC, made from two GE MVS mobile radios which can easily be swapped out with the primary Master II repeater when needed. The MVS repeater has a power output of about 30 watts. The Controller is a John Bell, Model AP4800.

Antenna System: The antenna is a commercial DB224 at the top of a 100' tower, with the tower base on top of CMC's seventh floor, providing an above ground height of about 200' and antenna altitude above sea level of about 300 feet. The feedline is hardline coax.

Photos:

W5DSC Victoria Amateur Radio Club Repeaters

Last updated 2021 AUG 4th

W5DSC Victoria Amateur Radio Club Repeaters

2. VHF 145.130 MHz – PL Tone 103.5 Hz (Encode only)

Purpose: The 145.130 MHz repeater is the secondary repeater of the Victoria Amateur Radio Club providing wide-area, critical emergency communications, as well as public service and daily ham communications. This repeater provides an alternate supplement to the 145.19 and can step up to the plate to take over amateur radio communications including net operations, if the 145.19 repeater is not available. The effective communication radius is about 26 miles to a 50-watt mobile station.

Location: The repeater is currently located at Detar Hospital North (DHN), which provides a secure, accessible, weather protected and temperature-controlled environment, with emergency power.

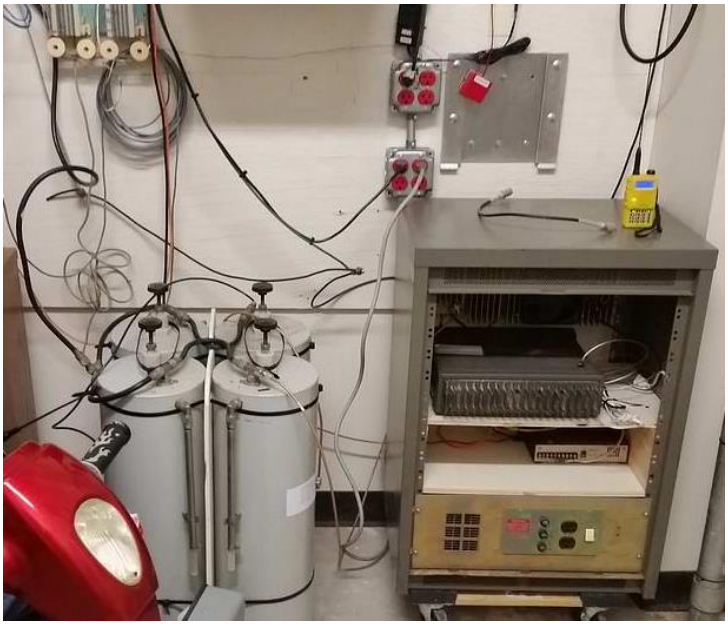
Equipment - Primary: The repeater is made from a GE exec II radio and it has a GE continuous duty PA which outputs around 65 watts. The Controller is Connect Systems Inc, (CSI) CS800. Transmit/Receive frequency separation is provided by an VHF ??? duplexer.

Equipment - Backup: There is not a readily available backup system.

Antenna System: The antenna is a commercial VHF DB224 at the top of a 10’ tower, with the tower base on top of the fifth floor, providing an above ground height of about 100’ and antenna altitude above sea level of about 200 feet. The feedline is hardline coax.

Photos:

W5DSC Victoria Amateur Radio Club Repeaters



Last updated 2021 AUG 4th

W5DSC Victoria Amateur Radio Club Repeaters

3. UHF 443.800 MHz – PL Tone 103.5 (Encode and decode)

Purpose: The 443.800 MHz repeater is the primary UHF repeater of the Victoria Amateur Radio Club providing wide-area, critical emergency communications, as well as public service and daily ham communications. This is the oldest of the VARC repeaters which has been in continuous use for over 30 years. During Hurricane Harvey this repeater was the only repeater in the seven-county area that remained in operation. The effective range of communication is about the same as the 145.19 repeater.

Location: The repeater is located at Citizens Medical Center (CMC) hospital, which provides a secure, accessible, weather protected and temperature-controlled environment, with emergency power.

Equipment - Primary: The repeater is made from a GE Exec II mobile radio cut into a repeater. The repeater went through a short and much needed maintenance in July 2021. Power output was increased to 40 watts and tone decode was repaired and placed back into operation. The Controller is an Advanced Computer Controls, (ACC) RC-85. Transmit/Receive frequency separation is provided by an UHF ??? duplexer.

Equipment - Backup: There is not a readily available backup system.

Antenna System: The antenna is a commercial UHF antenna up 80’ on the 100’ tower, with the tower base on top of CMC’s seventh floor, providing an above ground height of about 180’ and antenna altitude above sea level of about 280 feet. The feedline is hardline coax.

Photos:

W5DSC Victoria Amateur Radio Club Repeaters

Last updated 2021 AUG 4th

W5DSC Victoria Amateur Radio Club Repeaters

4. UHF 444.325 MHz - PL Tone 103.5 (Encode and decode)

Purpose: The 444.325 MHz is the newest of the VARC repeaters which began service in Spring of 2021. This repeater is our experimental repeater for testing new or different technologies, in addition to handling public service and daily ham communications. The effective communication radius is about 29 miles to a 50-watt mobile station.

Location: The repeater is located on the Victoria County Sheriff Office (VCSO) tower, which provides a secure, accessible, weather protected and temperature-controlled environment, with emergency power. (It is on the same tower as the Sheriff's office communications.)

Equipment - Primary: The repeater is made from two Motorola CDM1550 mobile radios which outputs around 35 watts. The Controller is a Raspberry Pi 3B+ with a Master Communications Model RA-40 interface board running All Star Link (ASL) software. Transmit/Receive frequency separation is provided by an UHF ??? duplexer. As this is an experimental repeater, the components may change more frequently than the other repeaters.

Equipment - Backup: There is not a readily available backup system.

Antenna System: The antenna is a Diamond X50A at the top of a 150' tower, with the tower based on the ground and antenna altitude above sea level of about 250 feet. The feedline is 9913 coax.

Photos: