

Mickaël Papineau VA3PAI 769 Laval St CP 693 Casselman, ON K0A 1M0 Email: va3pai@scenicradio.ca Mobile Tel: (613) 227-4088

### VA3CSH Repeater Relocation to the Casselman Water Tower

April 7th, 2025

Dear Mayoress & Councillors,

I'm writing to you in the interest of the Prescott-Russell Amateur Radio Club (PR-ARC) and the Prescott-Russell Amateur Radio EmComm Services (PR-ARES) for the possibility of relocating our new VA3CSH repeater to the Casselman water tower.

Some benefits for the relocation would be improved coverage of our interconnected repeater system with VE3PRV on the Bouvier water tower near Hammond, ON and VA3PRA on the Alfred water tower in Alfred, ON. This interconnected repeater system is key for our ARES deployment duties with the ability to respond to multiple types of situations within the Prescott-Russell area.

At this current time, PR-ARC/PR-ARES is in the process of acquiring the decommissioned analog radio equipment of the fire departments within the Prescott-Russell area which is owned by United Counties of Prescott and Russell (UCPR). This would include the repeaters in the St. Isidore & Hawkesbury water towers, crossband repeaters in the St. Isidore, Vankleek Hill, Alexandria, Alfred, Wendover, Embrun, Moose Creek & Casselman water towers, and all antennas & coaxial cables at those sites.

Our plan for the relocation is to use the existing antenna & coaxial cable from the decommissioned crossband repeater in the Casselman water tower which would reduce the need for anymore antennas on the water tower and would simplify the installation process.

73, Mickaël Papineau VA3PAI Secretary PR-ARC

# VE3PRV

Located at the Bouvier water tower near Hammond, ON. The VE3PRV repeater is part of the PR-ARC Repeater System used in ARES/AuxComm deployments. It uses a Yaesu DR-1X repeater outputting 25 watts into a modified Quintron linear amplifier outputting 100 watts then to a 4-bay folded dipole antenna at the top of the water tower. The antenna stands at about 48 meters above ground level pointing in the azimuth of 90°.

#### VE3PRV Coverage Map:



# VA3PRA

Located at the Alfred water tower in Alfred, ON. The VA3PRA repeater is part of the PR-ARC Repeater System used in ARES/AuxComm deployments. It uses a Yaesu DR-1X repeater outputting 50 watts into a 4-bay folded dipole antenna at the top of the water tower. The antenna stands at about 50 meters above ground level pointing in the azimuth of 160°.

### VA3PRA Coverage Map:



### VA3CSH

Located at the home of VA3PAI in Casselman, ON. The VA3CSH repeater is the newest part of the PR-ARC Repeater System used in ARES/AuxComm deployments. It uses a Motorola MTR2000 repeater outputting 40 watts into a single folded dipole antenna on their tower. The antenna stands at about 6 meters above ground level pointing in the azimuth of 215°.

#### VA3CSH Testing Coverage Map:



With the possible relocation of the VA3CSH repeater to the Casselman water tower and using the already installed 4-bay folded dipole antenna from the fire department's decommissioned analog radio equipment, the antenna would stand at about 50 meters above ground level pointing in the approximate azimuth of 170°.



### VA3CSH Relocation Coverage Map: