

# VE9POTA's Grindstone Island Expedition: Bridging History, Conservation and Amateur Radio

## Stuart Crawford, VE9CF

On October 12, 2024, Canadian Amateurs Stuart Crawford, VE9CF and Pierre Jolin, VE2GT, embarked on an ambitious expedition to Grindstone Island in the Bay of Fundy off the coast of New Brunswick.

The Bay of Fundy is renowned for having the highest tides in the world, with water levels rising and falling by up to 52 feet (16 metres) twice daily. These extreme tidal variations create unique challenges for navigation and coastal activities, making precise timing crucial for any expedition to islands like Grindstone, as the landscape can dramatically transform from vast mudflats to deep waters within hours.

Grindstone Island is renowned for its rich maritime history, including its 19th century sandstone quarries and the lighthouse established in 1832 that guided ships through treacherous waters for over 150 years. The lighthouse was automated in 1986, marking the end of permanent human presence on the island.

A majority of Grindstone Island is the preserve of the Anglican Church, Parish of Sackville, which is managed by the Nature Trust of New Brunswick through an easement. The island is a crucial nesting site for various seabird species including the endangered Peregrine Falcon.

## Battling Challenging Conditions

Stuart and Pierre meticulously prepared their equipment, ensuring every item was weatherproofed and secure. The team's determination remained unshaken despite forecasts predicting near-tropical storm force winds. Led by Search and Rescue professional Cedric Mallais, the team embarked on a treacherous 30-minute journey across the Bay of Fundy. The Zodiac battled against strong winds and choppy waters, testing the team's resolve and equipment security.

Upon landing, Stuart and Pierre swiftly set up their portable station. Operating under the special event call sign VE9POTA, they began making contacts across multiple Amateur Radio programs including:

- Parks On The Air (POTA): Activated as CA-1239
- World Wide Flora & Fauna (WWFF): Designated as VEFF-1276
- Islands On The Air (IOTA): Part of group NA-014
- Amateur Radio Lighthouse Program (ARLHS): Registered as CAN-711

The VE9POTA expedition marked a significant milestone in Amateur Radio history. It represented the first-ever activation of Grindstone Island for both the Parks On The Air (POTA) and



World Wide Flora and Fauna (WWFF) programs, establishing it as an "All-Time New One (ATNO)" and generating immense excitement within the global Amateur Radio community.

Its uninhabited status and difficult access made this activation particularly valuable for Amateur Radio operators seeking contacts with rare locations.



Stuart and Pierre faced significant hurdles during their Grindstone Island expedition including harsh weather conditions and less-than-ideal HF band conditions. Solar activity had been particularly volatile in the days leading up to the activation, resulting in unstable propagation across multiple bands. The team encountered periods of deep fading, elevated noise levels and just poor propagation.

## Powering Through

The success of the VE9POTA Grindstone Island expedition was dependent on the carefully selected and robust equipment used by Stuart and Pierre.

Their setup included:

- HF transceivers, bandpass filters and other essential radio gear
- Portable antennas for all bands that wouldn't disturb the sensitive environment
- Lithium-powered batteries which are made to last the day and the elements
- Weatherproof cases for protecting sensitive equipment

At the heart of their setup were Yaesu FT-891 radios chosen for their compact size, durability and versatile performance. These radios were run "barefoot" (without external amplification), relying on their native 100-watt output power, which proved sufficient for the challenging conditions.



To ensure clean transmissions and optimal reception, the team employed VE6AM bandpass filters, which effectively reduced interference and improved overall signal quality. They utilized a multi-pronged approach for antennas. An end-fed half-wave (EFHW) antenna provided by myantennas.com offered excellent multiband capabilities, while a Wolf River coil vertical provided additional flexibility. Power management was critical in this remote location and the team relied on Eco-Worthy 50 ah lithium batteries, chosen for their high energy density, lightweight and ability to deliver consistent power throughout the activation.

### Skillful Operating

Despite the significant challenges they faced, Stuart and Pierre skillfully adapted their tactics, frequently switching between bands to find the most effective communication frequency. They relied heavily on their experience and the versatility of their equipment to overcome these propagation issues. The operators' persistence paid off as they managed to work through the difficult conditions, employing a mix of SSB, CW and digital modes to maximize their contact opportunities.

Activating Grindstone Island using VE9POTA as a special event call sign for POTA, WWFF, IOTA and the Amateur Radio Lighthouse Program simultaneously, the team provided a rare opportunity for radio enthusiasts worldwide to log a contact for multiple awards with a single QSO. The ATNO status significantly contributed to the high participation rate.

Throughout their six-hour stay, the team achieved impressive results:

- Over 400 QSOs were made
- Contacts spanning multiple continents and bands

- New locations added for the RAC Canadian Portable Operations Challenge

### Conservation Efforts

The VE9POTA expedition to Grindstone Island successfully merged Amateur Radio operations with environmental conservation awareness. It not only connected radio enthusiasts around the globe, but also drew attention to the critical conservation work being done on Grindstone Island by the Nature Trust of New Brunswick:

- Conserving ecologically significant lands in New Brunswick
- Establishing nature preserves that are protected, forever.
- Preserving and making possible nesting sites for various seabird species
- Diverse coastal flora adapted to the island's rugged environment
- Historical structures maintained for their cultural significance

### A Heartfelt Thank You

As the Amateur Radio community celebrates this achievement, we're reminded of the power of technology to bridge distances, the importance of preserving our natural and historical heritage, and the indomitable spirit that drives Radio Amateurs to explore and connect, no matter the obstacles.

The success of the VE9POTA expedition to Grindstone Island would not have been possible without the generous support of our sponsors and the Amateur Radio community. Their contributions were instrumental in overcoming the logistical challenges of activating this remote and historically significant location.

The VE9POTA team would like to express their deepest gratitude to the following sponsors.

- Acom Amplifiers
- GPS Central in Calgary
- Numberswise
- Tektonic Managed Services
- Sysoft Computer Consultants
- MSP Sites
- Alvarez Technology Group
- On-site Computer Services
- Fuelled Networks
- Aspire Technical Services

These sponsors provided financial backing and cutting-edge equipment, technical expertise, and logistical support that were crucial to the expedition's success. Their commitment to Amateur Radio and environmental conservation aligns perfectly with this project's goals.

We also thank the countless Amateur Radio operators who supported this unique event by participating in QSOs, spreading the word, and cheering us on. Your enthusiasm and involvement made this activation truly special.

Special appreciation goes to the Nature Trust of New Brunswick for their cooperation and support in allowing us to conduct this expedition while respecting the island's protected status. Their work in preserving Grindstone Island's unique ecosystem is invaluable.

Lastly, we thank Cedric Mallais and his crew for their expert navigation and for ensuring our safe passage to and from Grindstone Island.

We hope that the success of this expedition will inspire future endeavours that combine the excitement of radio communications with the promotion of natural and historical conservation.