



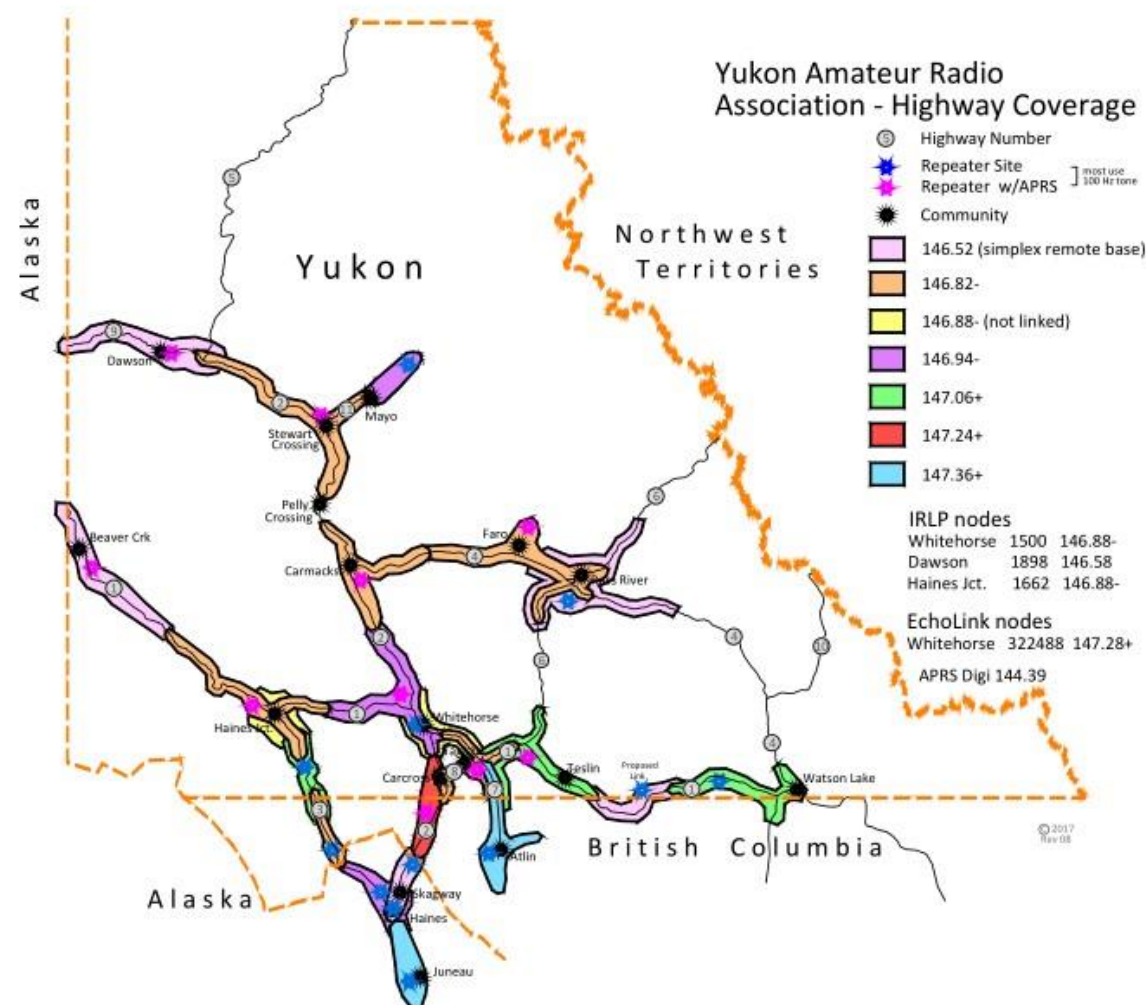
Amateur Radio Repeater Builds Above 7000 Feet YARA's Klukshu Repeater

Presentation to West Carleton Amateur Radio Club

Ron McFadyen VE3YXY/VY1RM

January 15, 2018

YARA Repeater Coverage (WAN)



YARA Partnerships

- Partners that YARA Supports
 - Scotiabank MS Walk
 - Klondike International Road Relay
 - Kluane Chilkat International Bike Relay
 - Mount Sima Ski Hill
 - Whitehorse Cross Country Ski Club
 - Sport Yukon
- YARA's Partners, Sponsors and Benefactors
 - Bird Technologies
 - Burnaby Radio Communications Ltd.
 - Icom Canada
 - Kilrich Industries
 - New Horizons for Seniors Program
 - NorthwesTel
 - Parks Canada
 - Temsco Helicopters
 - White Pass and Yukon Route
 - Government of Yukon – Community Development Fund
 - ATCO Electrical Company Limited
 - Yukon EMO
 - Yukon Lotteries Commission
 - Yukon Wildland Fire Management

Decoeli Site



Decoeli Repeater 146.82



Decoeli: 17 Daniels VHF/UHF Duplexers



- Daniels is now Codan, located in Victoria, BC.
- YARA has all spare parts for MT-2 repeaters.
- Six repeaters at site.

Why a new repeater at the Klukshu location?

- Radio coverage required for the area
- Parks Canada has repeater inside Kluane National Park
- Restricted access to site
- YARA partnered with Parks Canada
- New repeater provided vital communications link for general use and Kluane Chilkat International Bicycle Race

Kluane Chilkat International Bike Relay

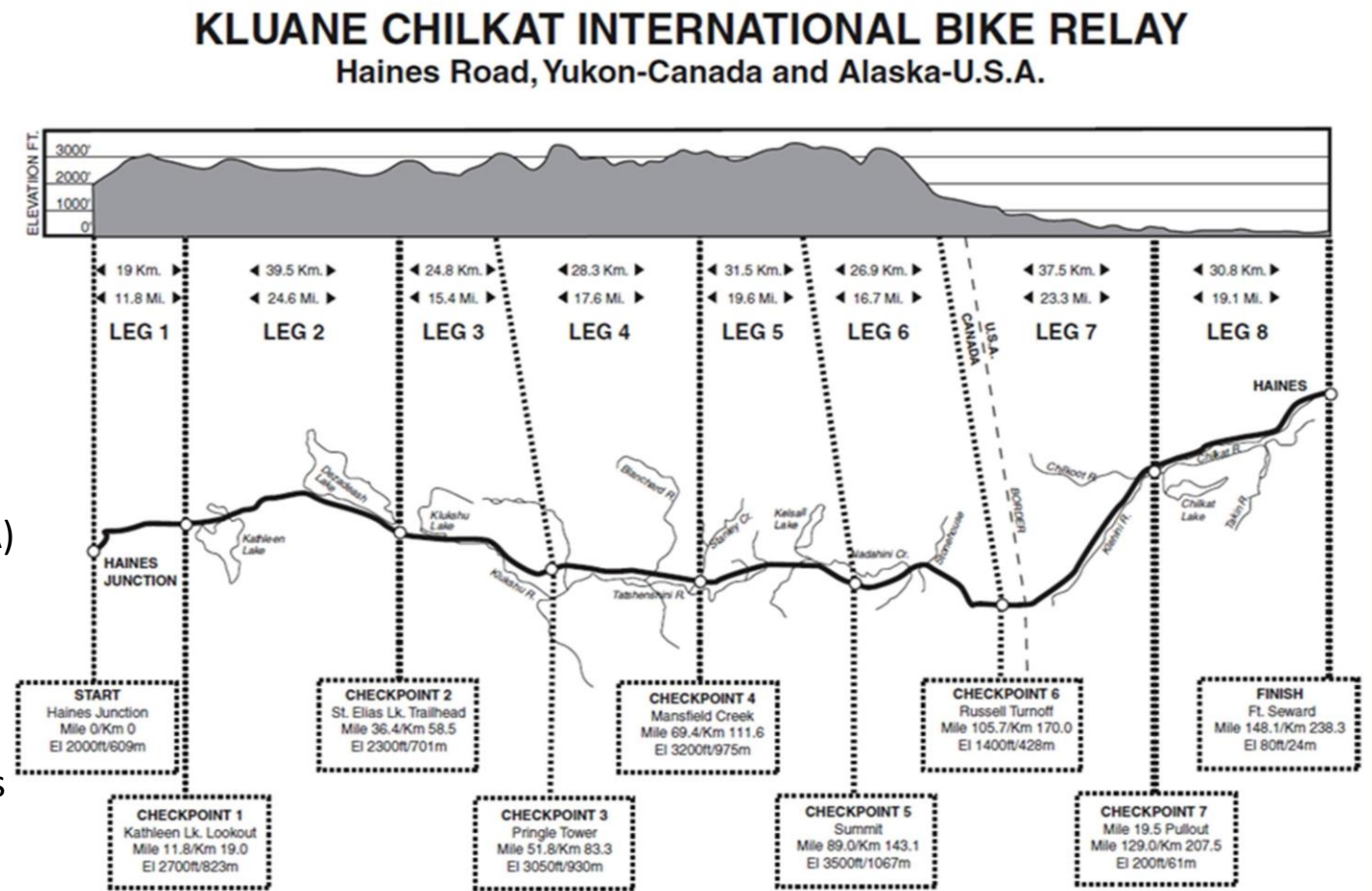
Course distance of approximately 150 miles

Race began in 1992 to promote tourism and fitness

1500 participants in teams of 2, 4 and 8 and individual riders

The Yukon Amateur Radio Association (YARA) provides emergency and general communications coverage for the 150-mile bicycle race from Haines Junction, Yukon to Haines, Alaska.

YARA uses their network repeaters at Haines Junction, Klukshu, Chilkat, and in Alaska - Chilly Ridge and Haines for this event.



How did we get to the repeater site?



Why this helicopter?



Spectacular Yukon Scenery in the St. Elias Mountain Range



Spectacular Yukon Scenery in the St. Elias Mountain Range



Spectacular Yukon Scenery in the St. Elias Mountain Range



Spectacular Yukon Scenery in the St. Elias Mountain Range



Spectacular Yukon Scenery in the St. Elias Mountain Range



Spectacular Yukon Scenery in the St. Elias Mountain Range

Can you spot the repeater?



Approaching Repeater Site



Arrival at Repeater Site



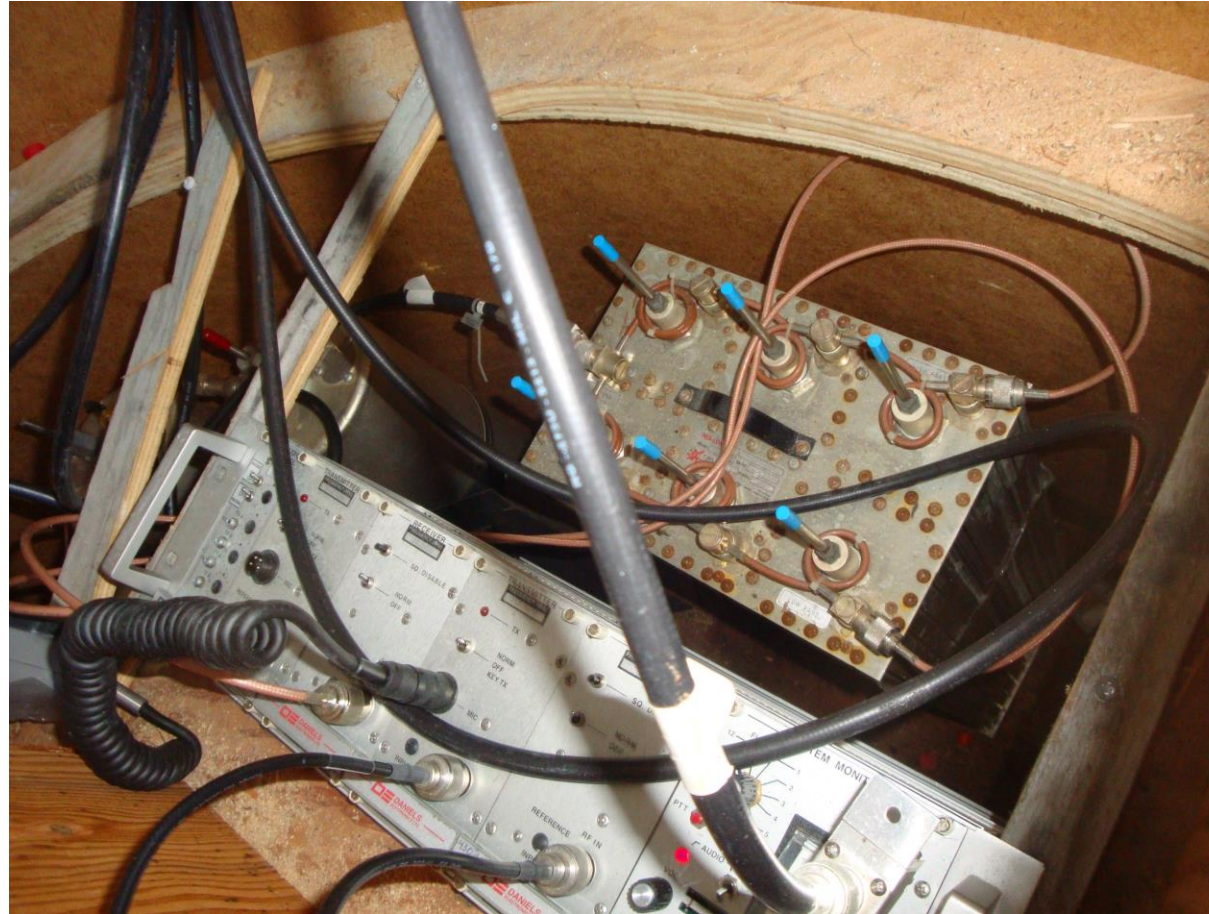
The Heavy Sling



Where Are We?



Daniels Repeater Duplexer

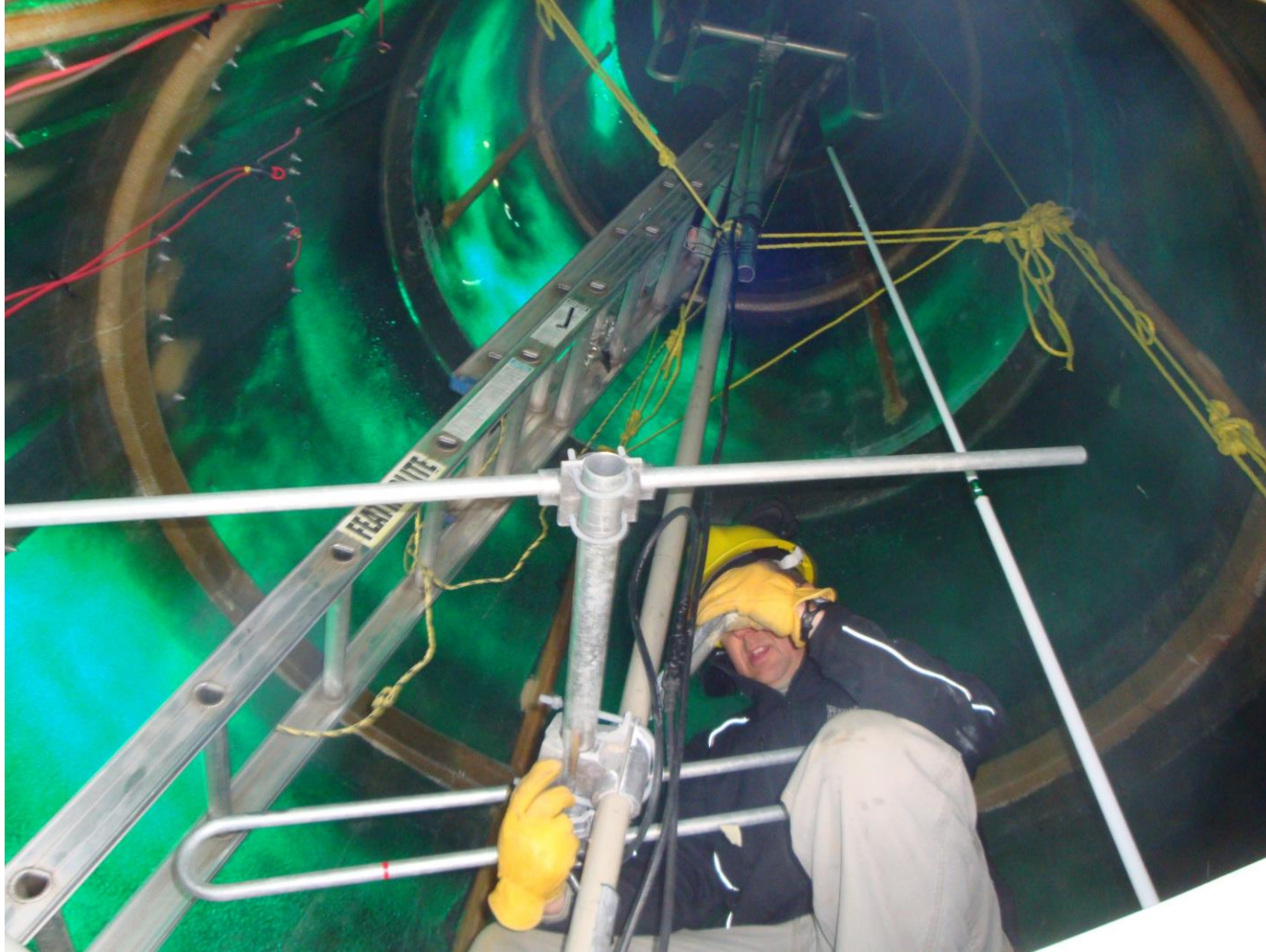


VY1TL and VY1JS with Power Supply



- Batteries used:
Exide Absolyte 6-90G15
- Stackable battery modules designed for long life remote solar battery backup and other alternative energy applications.
- Specifications: 20 year design life, 1200 cycles, op temperatures -40 to +50C.
- Two banks of 6: \$6,000.

VY1SW with Sinclair Antennas



VY1BG Installing Solar Panels



YARA Team Work



Work Complete



Thanks!



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal



Additional Video Footage Panacea Install and Removal

