

# High Latitude Comms on USCGC Healy North Pole 2022

## U.S. Coast Guard C5I Polar IT



# **Commercial VSAT: IS19 (166E)**

**Lost northbound at 80 33N 150W**

**First seen southbound at 80 57N 180W**

**Stable at 79 29N 178W**

**Service level: 1.5Mbps CIR, 2Mbps BIR**

**Latency 700-800ms**



# Iridium Certus

- Acceptable data leakage allowed for automating jobs
- Size limited email via ssh tunnel
- File transfer: ice and weather imagery
- VOIP phone
- Browsing
- Data reporting learning curve – 10GB/mo
- Session drops right at the Pole
- Avg bw down 400Kbps, up 1Mbps, variable latency 71ms-10sec

# Starlink: ???

- **Very small testing footprint at this time**
- **Avg bw down 133Mbps, up 5Mbps**
- **Variable latency 19-99ms**

