

Electronic Support Unit (Base) Seattle

US Coast Guard (C4IT)

Polar IT Branch

Polar Icebreaker Support

USCGC HEALY – Actively operating for science missions.

USCGC POLAR SEA – Identified for decommissioning no science missions

USCGC POLAR STAR – Currently dry docked in yards – all Electronics (Science Network) completed by December 2012



Homeland Security

April 20th and 21st 2011

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Wide Area Network (WAN)

USCGC HEALY

SeaTel 6009 (VSAT)

- 24/7 connectivity
- At 256K (burst 512K)
- Provides Internet and e-mail connectivity up to 75 degrees

IRIDIUM Reachback

- 24/7 E-mail connectivity
- High altitude connectivity
- E-mail only

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Wide Area Network (WAN) HEALY

SeaTel 6009 (VSAT)

- Satellite Service (Multi-year 4 option years)
 - Nine months \$19,722.79 (\$8K less 2 more months)
- 256K bandwidth
 - Phone lines
 - CO, Chief Scientist, and onboard Tech
 - Two lines available for Sailor phone
 - Phone cards



Wide Area Network (WAN)

USCGC POLAR STAR

INMARSAT B (No support Dec 2014)

- 24/7 connectivity (currently not in use)
- At least 64K VPN CGDN (new regulations not available)
- Will request Internet and e-mail connectivity
- Request VSAT install with rest of Coast Guard Ku band upgrade

IRIDIUM Reachback

24/7 E-mail connectivity

- Antennas are installed
- Reachback units transferred from Polar Sea
- High altitude connectivity
- E-mail only

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Wide Area Network (WAN)

IRIDIUM OpenPort

- Temporary installed on HEALY
 - Connected to the Science Network
- Current Access
 - Science missions while underway in the high latitudes
 - Limited to 150mb a month
 - For large file transfers
 - For transfer of images
 - Ice Images



Upgrades Local Area Network (LAN)

USCGC HEALY

Mesh Dynamics

- Mesh nodes use 802.11 standards
Requires minimum of one root node and one relay node
Antennas used were both omni and directional antennas.
- Voice over IP phones
- Healy phones on the bridge, Chief Scientist stateroom, and the watchstander desk in computer lab.
- LSSL phones are on the bridge, Ice Analyst office, and conference room (Install in port this year)



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Upgrades Local Area Network (LAN)

USCGC POLAR STAR

- Map server
 - Contract has been awarded
 - First phase complete
 - Software and Layers installed
 - Next phase
 - Populate data
 - Training

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Science Network - Supports

Network equipment

- WAN
 - SeaTel 6009
 - IRIDIUM Reachback
 - Ship to shore connectivity
- LAN, WLAN, MESH, VLAN
 - Routers and Switches
 - Ship to ship connectivity
 - VoIP
 - Ship to shore connectivity

Servers

- User and E-mail accounts
- Life cycle upgrades
- Workstation
 - Life cycle upgrades
- Printers
- Warranties
- Licenses
- Domain maintenance and services
- Supplies
- Software
- Hardware



Information Technology Division

Polar IT Branch

**ESU – 24/7 contact phone number
1-800-982-2564**

E-Mail Address: James.M.Wilson@USCG.mil

Questions or any support issues



Civilian Personnel

James Wilson



Dave Cohoe



Military Personnel

IT1 Eric Burns



IT1 Whitty

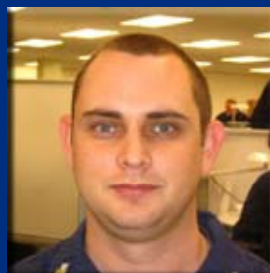


North Star Personnel

David Hassilev



Donny Graham



Sara Kaye (Mike Merchant)



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Home Port – Seattle, WA



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