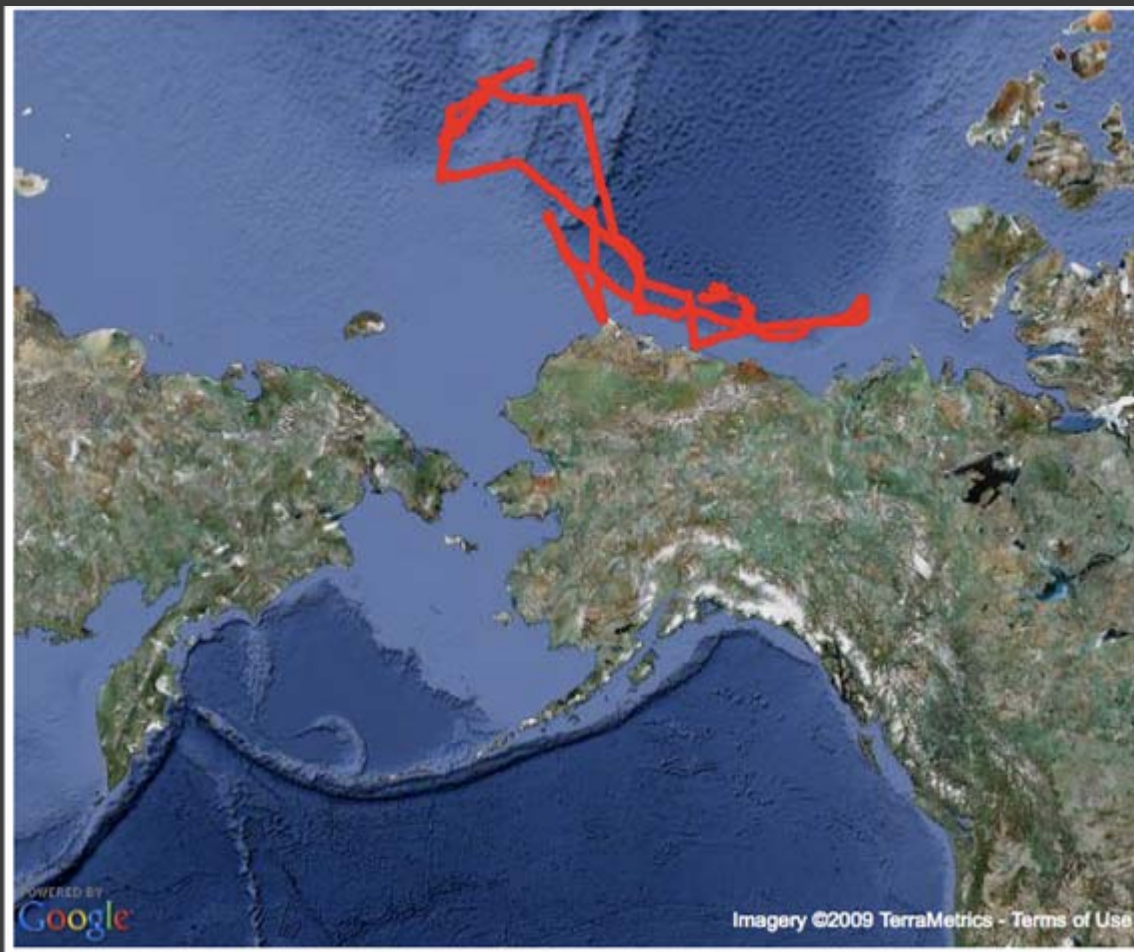


IRIDIUM OPEN PORT REAL WORLD TESTING



On Board the CGC Polar Sea – September 25 –
November 1 2009 Beaufort and Chukchi Seas

OPAREA 72 - 74 N



Open Port Features

- Ease of installation
- No antenna stabilization required
- Suitable Bandwidth 32, 64, 128 KB/s
- 3 POTS lines simultaneous with data

BDE



ADE



Seven Antennas + GPS



Deficits

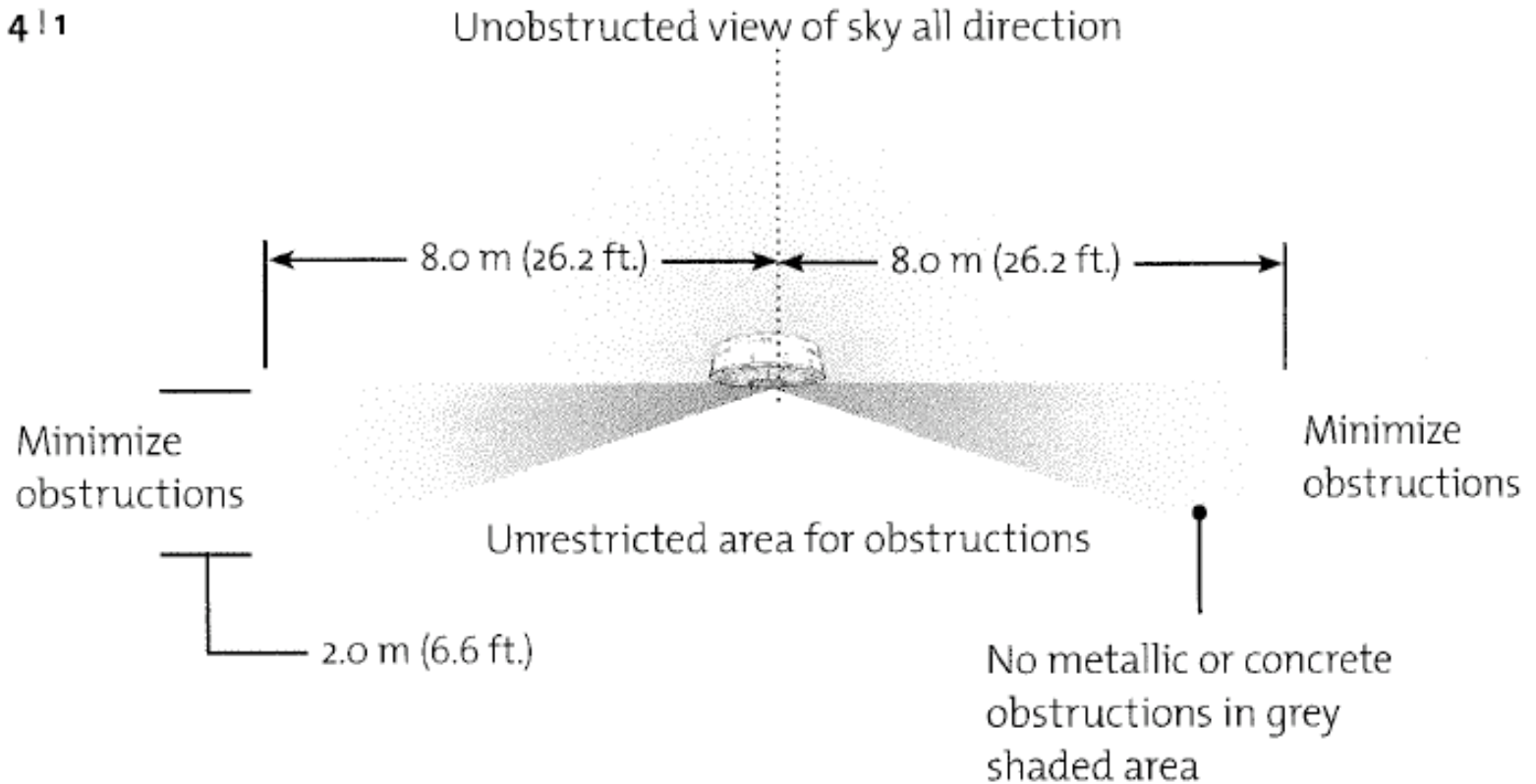
- ⦿ One way data initiation
- ⦿ HTML only interface
- ⦿ HTML interface occasionally fails
- ⦿ No direct management control
- ⦿ No support for 802.11q tagging
- ⦿ Connections subject to failure
- ⦿ Upper level protocols must be efficient
- ⦿ You'll still pay for overhead.

Usage

- ⦿ FTP
- ⦿ Email
- ⦿ Telnet or SSH sessions.
- ⦿ Web (if you really have to) = \$\$\$
- ⦿ VPN (supported, not tested)
- ⦿ Speeds of 32, 64, 128 KB

Installation Requirements

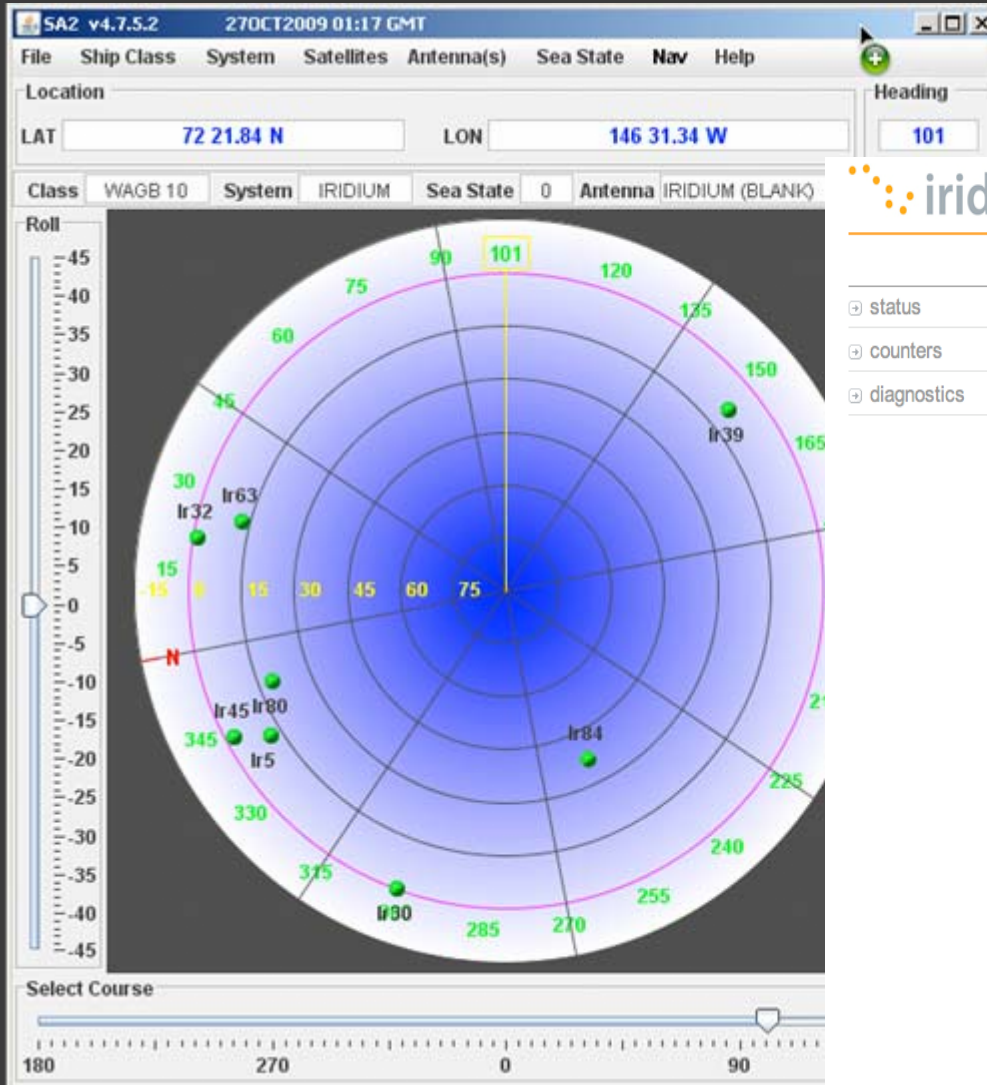
Figure 4 ! 1



Our Installation location



Lost Connection 5 sats visible



27/10/09 01:17:16 guest Sign In

status

- status
- counters
- diagnostics

LEDs

Power	Status	Signal	GPS	Data	Handset 1	Handset 2	Handset 3

Signal Strength

Signal Strength

SIM

Installed yes
Errors no

GPS

Status GPS SPS mode, fix valid
Latitude 72:21.849
Longitude -146:31.291

Satellite Connection

Connected False
Access denial cause none

Voice Lines

Type	Number	Voice Mail
#1 Captain	881677705606	no
#2 Captain	881677705607	no
#3 Captain	881677705608	no

Email

- ⦿ Requires a shore side gateway
- ⦿ Must support store/forward de-spooling
- ⦿ Strict quota management on both ends

File Transfers

- ⦿ Highly variable success and speeds
- ⦿ Many stalled transfer sessions
- ⦿ Asynchronous throughput
- ⦿ Latency of roughly 1000 – 1300msec

My Experience

- Good solution for high latitudes
- Placement of ADE Critical
- 128Kb is generally not necessary
- Sweet spot for FTP around 4mb/file at high latitudes
- Quickly deployable network solution for smaller platforms or camps.
- It will (generally) get the job done.