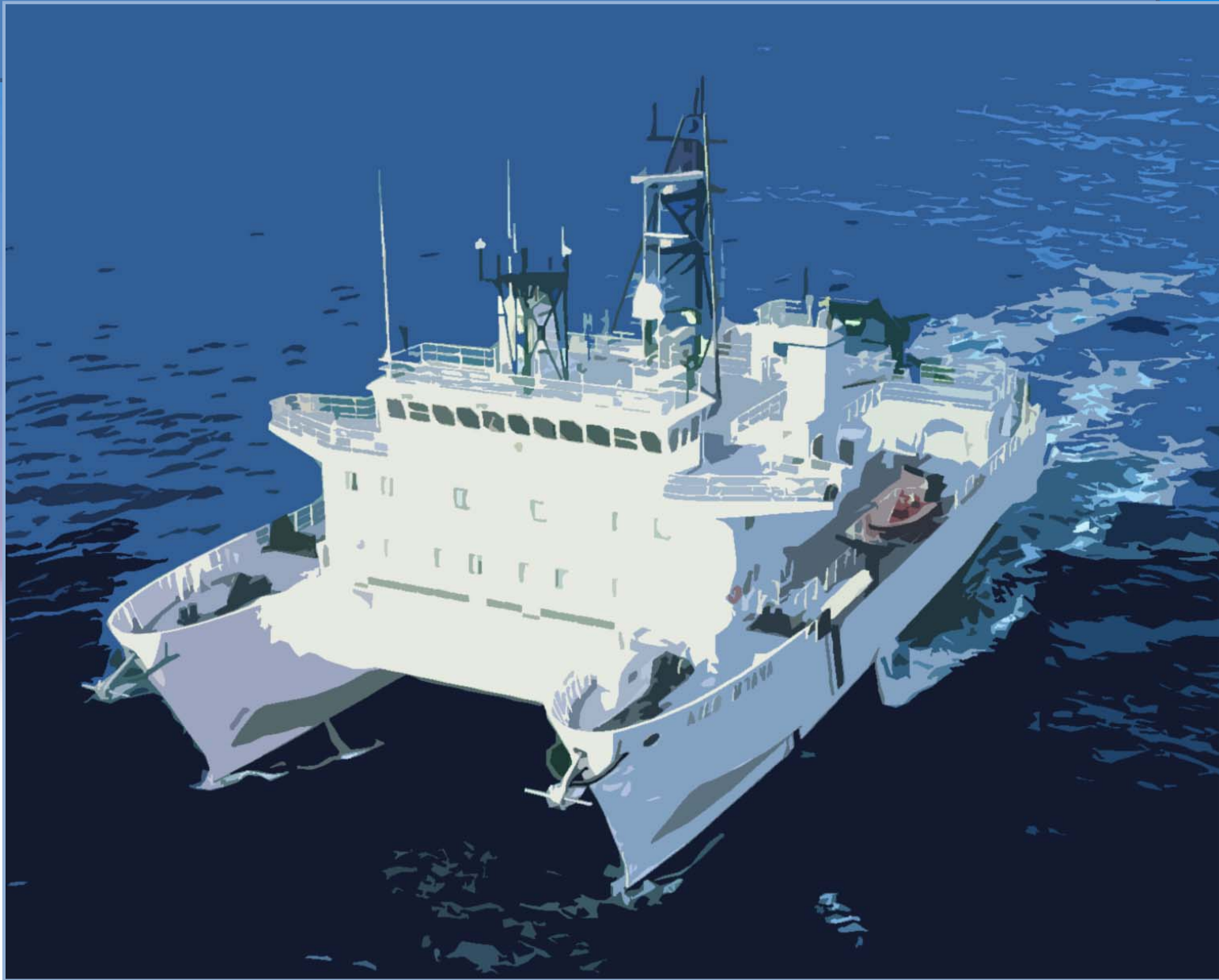


R/V Kilo Moana HiSeasNet

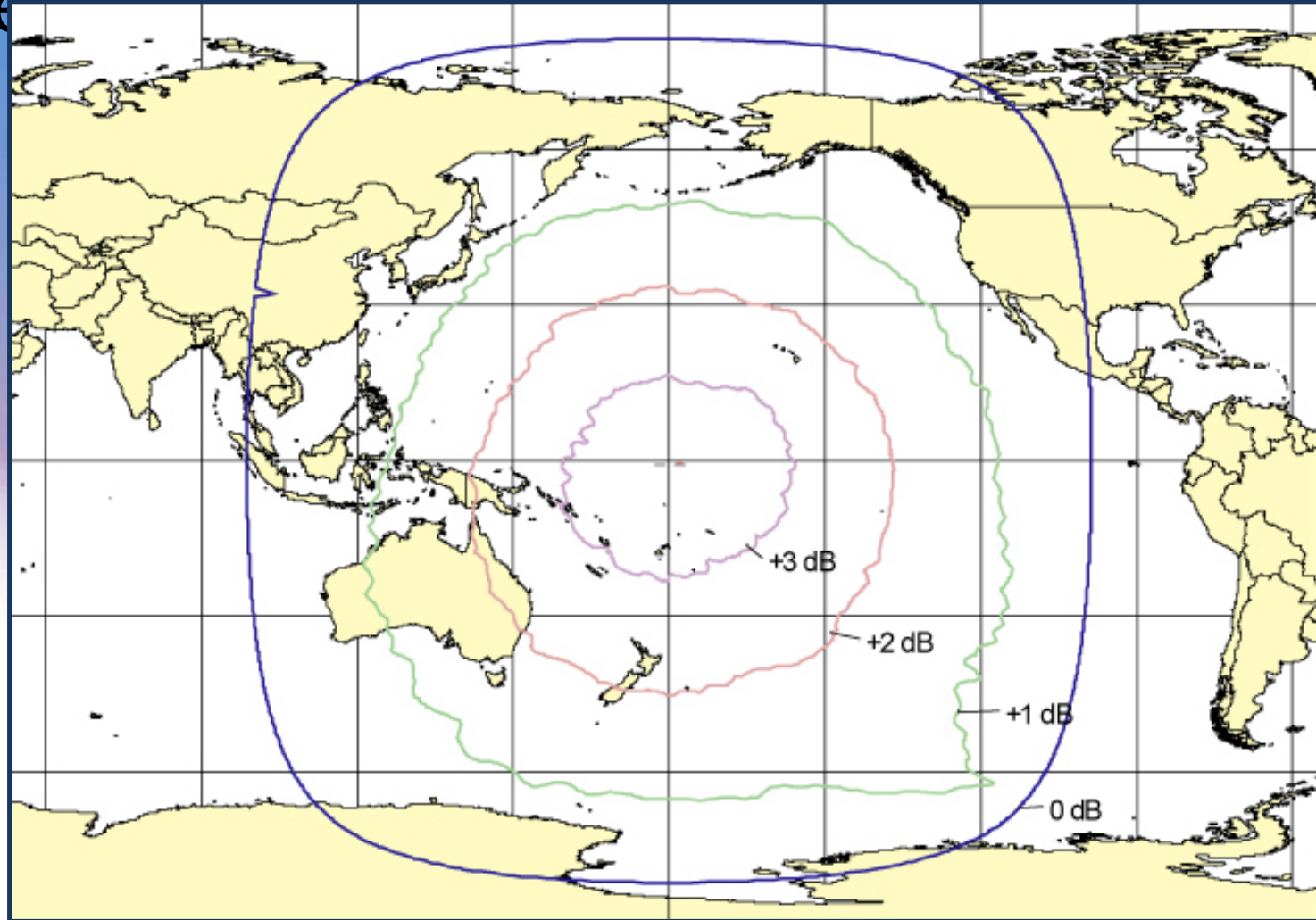


✖ OTG-01-Banner.jpg



March 2005, installation of HiSeasNet
complete

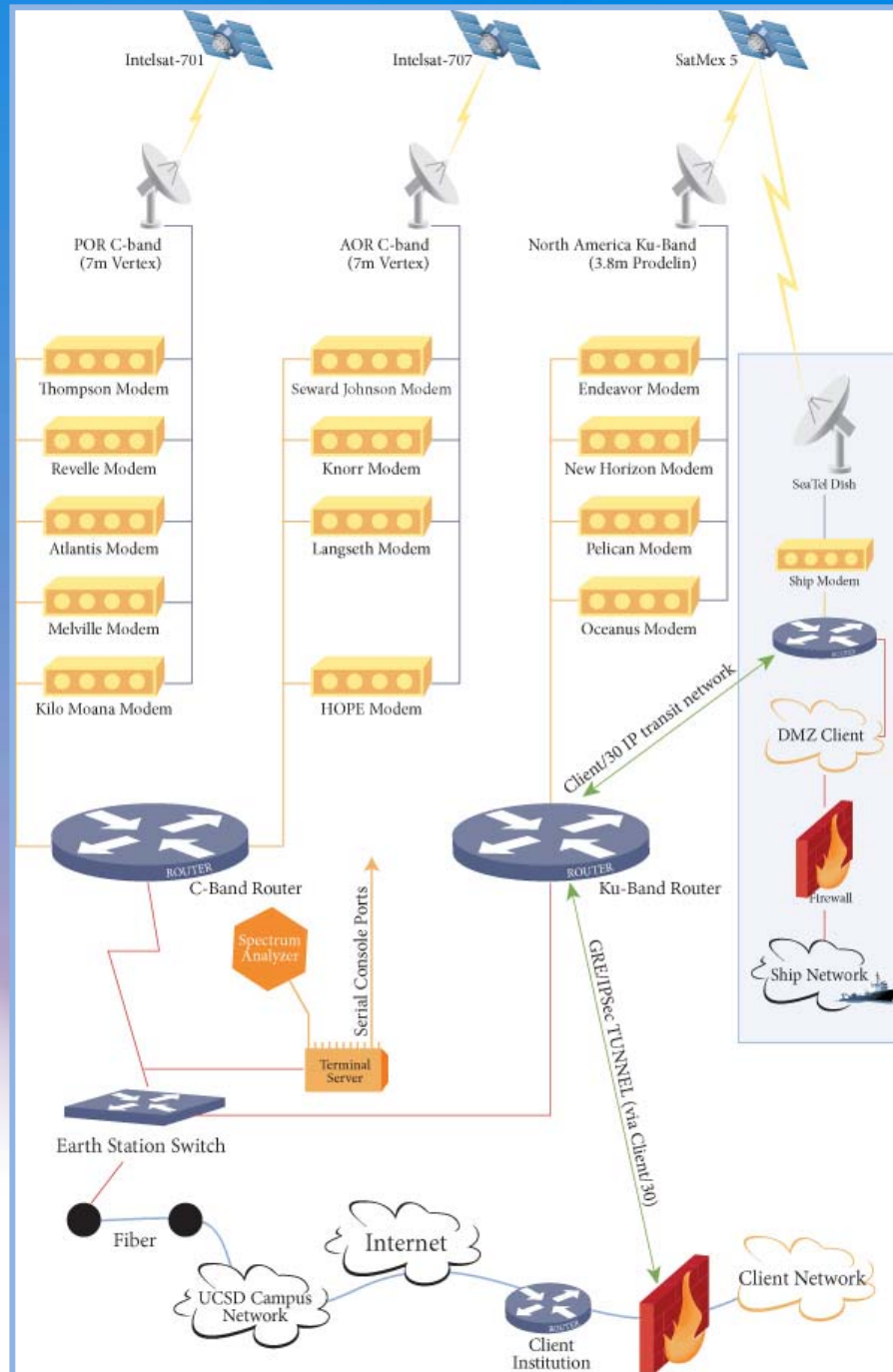
Internet traffic begins using C-Band Pacific



....and life at sea was never the same again

Installation





CODAN

5582B Power Supply Unit
5700 C Band Converter
5740 Feedhorn, C Band 40
Watt

DMZSeaTel Inc.

Tracking Antenna Control
Unit
Model TAC-92 DAC 97

Comtech EF Data

CDM-550 Satellite Modem

Cisco

2600 Router

Milan Technology

MIL-S801ST 10/100
Ethernet switch

Sipura Tech. Inc.

SPA-3000
Analog Telephone Adapter
(VoIP)

Ship-wide fiber
optic network

AlliedTelesyn

AT-8224XL 10/100
Fast Ethernet F/O
Switch

Dell

PowerEdge 1550
Routing Computer



Comparison of Internet Speeds

CNET's Bandwidth Meter Speed Test

http://reviews.cnet.com/Bandwidth_meter/7004-7254_7-0.html?tag=ont.int.band

Average Number of Users at Given Moment:

10

HiSeasNet

Average Wired¹ Speed: 66 kbps

Maximum Wired Speed: 106.7 kbps

Average Wireless² Speed: 58 kbps

Maximum Wireless Speed: 113.5 kbps *(during the breakfast rush)

HOME / OFFICE

Average Wired³ Speed: 1262kbps

Average Wireless⁴ Speed: 766
kbps

1 –HiSeasNet access using 802.11 b/g wireless card, Belkin N1 Wireless Router, XXXX Switch

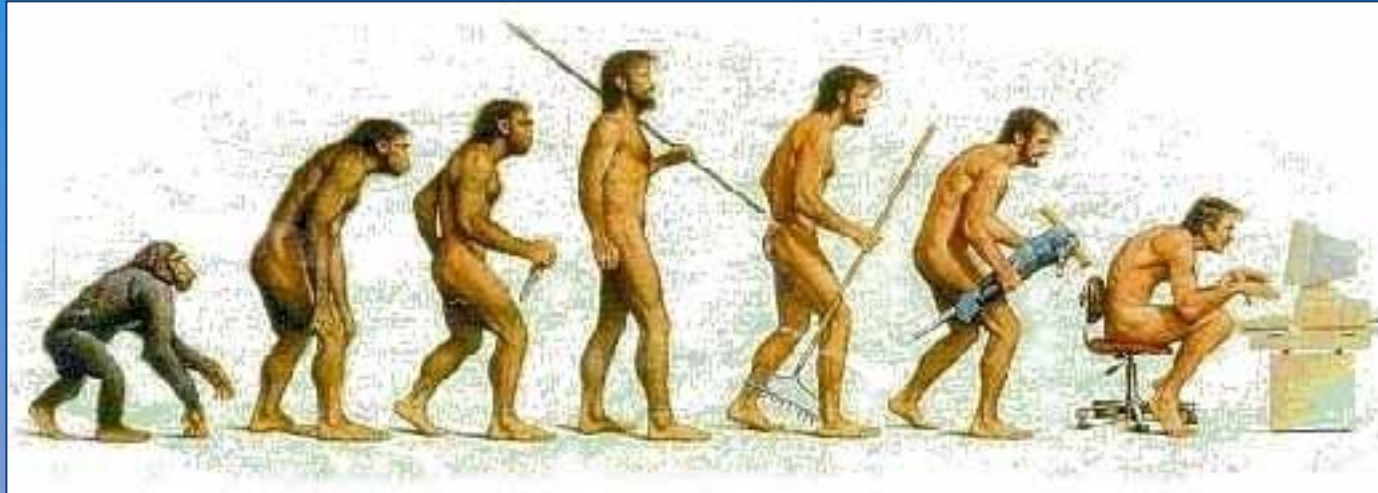
2– HiSeasNet access using Milan Technology MIL-S801ST 10/100 fiber optic switch, XXXX Switch

3 – EarthLink high speed access using digital cable modem

4 – EarthLink high speed access using digital cable modem and U.S. Robotics 802.11 b/g Wireless Turbo Router

Shipboard Internet Set-Up and Policies

- Three (3) IP addresses for off-ship access provided to on-coming science parties
 - Variations:
 - Chief/Co-Chief Scientist
 - Public computer in science lab, available to all science party
 - Wireless router in conference room and/or science lab, available to all
 - Video conferencing using iChat, Macintosh computer & iSight portable camera
 - Other internet access points:
 - Two public computers in library (one Mac, one PC) available to science and crew
 - Other Users with access:
 - Master
 - Chief Engineer
 - Chief Mate
 - Bridge Computer (weather reports, Notice to Mariners, etc.)
 - Marine Technicians
- ## Restrictions
- No FTP, only Secure FTP/SSH access (FTP available through DMZ)
 - No POP3 access
 - No Skype or instant messaging on public computers
 - Currently parental controls are active on new Windows Vista PC's
 - No restrictions on viewing content, but websites visited are logged



Thanks!

National Science Foundation

Steve Foley, Scripps Institution of Oceanography

Mike Simpson, Research Computing Facility, University of
Hawaii

