

SeaNet Partners

11/22/99

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The slide content is on a blue background. At the top left, there is a vertical dotted line. The "SeaNet" logo is centered in a white box with a blue border. Below the logo is a globe icon. The text "Extending the Internet to the Oceanographic Fleet" is centered below the globe. Below that is the text "UNOLS RVTEC Meeting - Oct. 19, 1998". At the bottom left, it says "August 19, 1998" and "SeaNet Partners". At the bottom right, there is a series of small dots representing a progress bar, with the first dot highlighted.

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- **JOI** - Administration of project funds, liaison to agencies and academic research fleet operators (Ellen Kappel)
- **WHOI** - SeaNet Communications Node (SCN) development to support network functionality (Andrew Maffei, Steve Lerner, Cindy Sellers)
- **LD ED** - Installation and operations management of the shipboard hardware/software package (Dale Chaves and Richard Perry)
- **Naval Postgraduate School** - Liaison with Navy fleet, forward planning, testbed maintenance (Rex Buddenberg)
- **Omnet, Inc.** - Network Operations Center, accounting and billing, value-added services and investigate commercialization.

October 19, 1998

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SeaNet Award Process

- Letter sent to all UNOLS vessel operators in March 1998 asking for proposals on how SeaNet systems would be used.
- Eight proposals received in response
- Review committee established and provided written reviews.
- Conference call to make recommendations to NSF/ONR managers and SeaNet group (excluding WHOI and LDEO representatives).
- Decided on Atlantis, Ewing, Melville, Pelican, and Seward Johnson

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Installation Status

- **ATLANTS** - Beta system installed, gathering statistics, production system installation pending.
- **EWING** - site survey begun, SATCOM ordered, tentative installation in Nov/Dec.
- **SEWARD-JOHNSON** - SATCOM ordered and delivered to HBOI, NERA installation pending (to be done by HBOD), site survey pending, install date not yet scheduled.
- **MELVILLE** - site survey complete, SATCOM ordered, antenna install in Dec., need wire run details for antenna.
- **PELICAN** - site survey pending, SATCOM not yet ordered, install date not yet scheduled.

August 19, 1998 Scot McPerrin

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SeaNet Communications Node (SCN)

- **Hardware** - Linux-based PC, Cisco router, Ethernet switch, NERA Saturn-Bm control unit
- **Software** - SCN v2.1.7 (currently). Written in Perl. Uses WWW interface.
- **Functions** - link operations and management, SeaNet value-added services, detailed accounting.

August 19, 1998 SeaNet Present

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SeaNet Operating Modes

- **DataPipes** - for efficient/automated bulk transfer of files between network-available directories on the ship or on the shore
- **WebMirror** - for efficient mirroring of websites on the ship or on shore
- **Interactive IP** - full IP connectivity (\$\$\$\$)
- (come to INMARTECH talk to learn more)

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Initial wireless systems to be supported

- NERA Satum-B Inmarsat-B system
- AMSC/MSAT 4800 baud
- Cellular Telephone

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Tentative Billing Model for Inmarsat HSD

- SeaNet Institutions setup purchase orders with Omnet for use of the SeaNet services on board the ship.
- COMSAT (or other INMARSAT provider) provides detailed electronic bills to Omnet for all calls made via SeaNet units.
- Omnet will bill for all INMARSAT use that goes through SeaNet. Any other use will still be billed to the institution registered to the NERA unit.
- Omnet will be able to provide authorized users web-access to up-to-date SeaNet usage information, including cost-to-date.
- Omnet will be able to itemize billing by project, individual account, etc. But of course, Omnet will need to know beforehand what the billing breakdown should be.

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Future Plans

- Look for lower cost communications options to integrate into system - possibly shared-use satellite systems.
- Investigate ONR/NSF jointly funding SeaNet continuation
- Add more ships
- Offer tools to better integrate shipboard data systems to shore-based operations

August 19, 1998 SeaNet Future

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