SeaNet

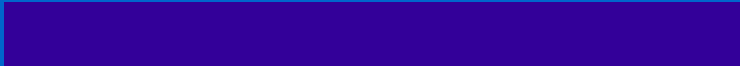## Extending the Internet to the Oceanographic Fleet

RVTEC Meeting - Oct. 18, 2000

SeaNet Partners

- WHOI - Andrew Maffei, Steve Lerner
  - Scott McCue, Cindy Sellers
- LDEO - Dale Chayes
  - Richard Perry
- Geo-Prose - Ellen Kappel

Current Status

- SeaNet installed on six vessels (Knorr added under separate funding)

- Operations and support continue for at least one more year

- Near real-time ship status is available via http://www.seanet.int/. Shows ship position and SATCOM statistics from transfers.

- Now close to one gigabyte of (compressed) files transferred.

1999 SeaNet BHSD Usage Summary per Ship

SCN	Entries	Int	Batch	Elapsed	Bytes
ATL-SCN	223	7	216	08:38:16	81.4MB
EWI-SCN	202	43	159	17:25:03	125.4MB
MEL-SCN	20	4	16	00:34:40	6.0MB
PEL-SCN	202	34	168	07:54:44	61.6MB
SEW-SCN	326	9	317	07:13:48	22.2MB

Total: 973 Transmissions, 97 Interactive, 876 Batch, 296.6MB

2000 YTD as of 05/30/2000 SeaNet BHSD Usage Summary per Ship

SCN	Entries	Int	Batch	Elapsed	Bytes
ATL-SCN	396	24	372	21:22:48	227.7MB
EWI-SCN	108	31	77	05:39:00	30.5MB
MEL-SCN	129	2	127	15:13:21	140.3MB
PEL-SCN	167	77	90	07:46:10	48.6MB
SEW-SCN	823	1	822	22:56:20	50.0MB
KNR-SCN	53	9	44	00:58:14	3.9MB

Total: 1676 Transmissions, 144 Interactive, 1532 Batch, 501.0MB

Note: Bytes listed in the above tables are the actual compressed data bytes
    transferred over the Inmarsat BHSD communication link. The number of bytes
    of user-level data transferred (uncompressed) would be considerably higher.

Example Uses of SeaNet

- Email Transport

- Shoreside Website Maintenence

- Video Transfers

- Regular satellite image service by operators

- Large file transfer

- Ship/Shore scientist collaboration and data analysis

Recent Changes

- SeaNet Operations Center is now at WHOI. LDEO is being setup as backup.

- INMARSAT billing has reverted back to operators but estimated billing with estimated splits of science use are available both on the ship and via http://www.seanet.int/ (email seanet-ops@whoi.edu for assistance)

- Operators will have to pickup more of the install and maintenance costs: travel and SATCOM equipment.

- Operations Hours are officially 9-5 EDT though we keep our eyes on things nights and weekends when possible

Plans for Next 12 months

- Add 3 more vessels -- interested?

- Major effort to educate scientists about SeaNet capabilities so that they use it even more

- SeaNet Newsletter will be distributed to better inform operators, technical folks, scientists on tips and other info.

- A next generation (smaller - PC Notebook) version of hardware will be used for future installations.

- Integrated Email (based on WHOI cmail) available in next release for those who want it. Existing operator-preferred email will still be supported.

Next 12 months (cont.)

- Look at new SATCOM options for ships including M4/F1/F3….

- Look at best future option for providing Internet capabilities for UNOLS vessels -- SeaNet or can we find a commercial service?