SeaNet

Extending the Internet to the
Oceanographic Fleet

RVTEC Meeting - Oct. 24, 2001

SeaNet Partners

- WHOI - Andrew Maffei, Steve Lerner, Laura, Goepfert, Scott McCue, Cindy Sellers

- LDEO - Dale Chayes, Richard Perry, Dan Weiss

- Geo-Prose - Ellen Kappel, Jennifer Ramarui

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Current Status

- Laura Goepfert joined Summer 2001

- SeaNet installed on six vessels (Atlantis, Ewing, Melville, Pelican, Seward Johnson, and Knorr)

- One portable system available (currently on Revelle)

- Future installs planned for Endeavor, Jason2, and other interested operators

- Operations and support continues thanks to NSF

- Email now available

- Video-conferencing tested and supported

- Smaller Notebook configuration now being deployed

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2000 SeaNet BHSD Usage Summary per Ship
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  SCN      Entries Int Batch  Elapsed     Bytes
ATL-SCN     803     26   777   46:23:29  339 MB
EWI-SCN     123     37    86   06:24:33   34 MB
KNR-SCN     383     18   365   09:54:53   61 MB
MEL-SCN     131      2   129   15:16:17  141 MB
PEL-SCN     207     89   118   09:54:53   61 MB
SEW-SCN     828      2   826   23:03:12   51 MB
Total:     2475 Transmissions,174 Interactive,2301 Batch, 687 MB


2001 YTD as of 10/23/2001 SeaNet BHSD Usage Summary per Ship
--------------------------------------------------------------
  SCN      Entries Int Batch  Elapsed     Bytes
ATL-SCN     285      2   283   12:54:46  186 MB
EWI-SCN     166     42   124   04:58:20   29 MB
KNR-SCN    1010     44   966   31:37:35  419 MB
LUG-SCN     391     23   368   21:08:59  244 MB
MEL-SCN     ???      ?   ???   ??:??:??  ??? MB
PEL-SCN      55     32    23   02:53:34   15 MB
SEW-SCN     251      9   242   06:12:12   23 MB
Total:     2158 Transmissions,154 Interactive,2006 Batch, 916 MB
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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.

SeaNet Cmail

- Available as upgrade to SeaNet SCN Software

- Adaptation of WHOI cmail package

- Web interface to administrative functions and billing

- Per-user accounting supported

- IMAP/POP/Pine email clients

- Send email to seanet-support@seanet.int for more info

Examples of SeaNet Science Use

- Email

- Craig Cary (Website, live teleconferencing, educational/outreach)*

- Monty Graham (Video, website)

- ONR and NOAA (ship-shore remote modeling)

- Fornari and others (Dive Discover)

- Send email to seanet-support@seanet.int for more info

SeaNet Videoconferencing

- Have tested Scotty and NetMeeting over NERA-B System. Plans to test two more (KlasHopper and Livewire)

- Also looking at commercial products that might replace the SeaNet Communications Node (SCN) system but no obvious candidates yet.

- Immediate plans to continue testing of NetMeeting with LUMCON.

- Others interested should contact seanet-support@seanet.int.

Future Plans

- Ship installations as requested
- Continue encouraging science use of SeaNet on SeaNet-supported vessels and assist operators with SeaNet operations
- Keep an eye on Iridium and other wireless technologies
- Submit 3-year proposal to NSF for ongoing operations.

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1999 SeaNet BHSD Usage Summary per Ship
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  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
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  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
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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.