

Oceans From a Global Perspective:
Marine Science Information Transfer
(ed) C.P. Winn
IAMS LIC

**Omnet's SCIENCENET
An Electronic Mail System for IAMS LIC**

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Abstract

The libraries and information centers serving the global marine science institutions should be able to communicate quickly, easily, and inexpensively with each other as well as with their clientele. This paper will propose that IAMS LIC and its members subscribe to Omnet's SCIENCENET, the world's largest electronic mail network for the international oceanographic, atmospheric, and earth science community. It will describe some of the features of SCIENCENET, including examples of how one library uses this electronic mail system.

INTRODUCTION, OR ACT I

The date is Monday, December 11, 1987. The place is the Bedford Institute of Oceanography Library in Dartmouth, Nova Scotia. The cast of characters include J. Elizabeth Sutherland, Head, Library Services and her microcomputer. The time is 1:00 P.M. It's a quiet afternoon before the Christmas holiday. Betty makes herself a cup of tea. She hasn't checked her electronic mail messages on SCIENCENET for a few days, so she decides to boot up her personal computer. Then, she dials into DATAPAC, the Canadian data network, logs on, and finds this on her monitor:

Log on to DATAPAC, the Canadian data network

311021200141

User Name? BEDFORD.LIBRARY

Password?

**** Welcome to SCIENCEnet! ****

Please address your questions and ideas to Onnet.Service

CHECK these bulletin boards:

LAMSLIC

| No | Delivered | From | Subject | Lines |
|----|--------------|------------------|-----------------------------------|-------|
| 1 | Dec 10 15:13 | H.HASSENPFEEFFER | Where there's smoke ... Urgent | 11 |
| 2 | Dec 11 1:56 | L.TEMPROSA | RE: So. China Seas Pro, Pub. 189 | 4 |
| 3 | Dec 11 4:22 | GIRO.LIBRARY | REC: Late Notice, Membership Dues | 2 |
| 4 | Dec 11 6:27 | MOSEE.OCE.MONACO | Membership Return Receipt | 3 |
| 5 | Dec 11 7:12 | INBOUND.TELEX | RCA THRU DATA MSG 9952 TO 236901 | 9 |
| 6 | Dec 11 12:27 | CAS.LIBRARY | A modest proposal | 9 |

Command? READ

Posted: Wed Dec 10, 1987 3:12 PM AST

Msg: QGIG-2726-3544

From: H.HASSENPFEEFFER

To: BEDFORD.LIBRARY (URGENT)

CC: C.CASTLEMAN

Subj: Where there's smoke ...

Betty Sutherland — I'm spending a few days in Iceland where there's a bit of unexpected volcanic activity. I remember reading an article on volcanism in Krafla in Iceland some time ago. I'm pretty sure it was in the Journal of Geophysical Research, and expect that it appeared between 1981 and 1983 (give or take a year). I'm sorry I can't remember who it's by. Could you possibly track it down and send a copy with Chuck Castleman? He'll be joining me here on Friday. I know that doesn't give you much time, and I don't know what Chuck's schedule is. Much thanks for all your help in preparing for this cruise.

Bank Hassenpfeffer

Action? ANSWER

Action? ANSWER

Text:

Dr. Hassenpfeffer -- I'll look for the article and send it with Chuck Castleman. But if we misconnect, I'd suggest checking with Eirikur Einarsson at the Marine Research Institute in Reykjavik (mailbox: MRI.ICELAND.LIBRARY). I'll let you know if I succeed or not.
Betty Sutherland

Send? YES

Message posted Dec 11 13:12 AST Msg: KGIG-1458-6891

Action?

Posted: Thu Dec 11, 1987 1:56 AM AST Msg: YGIG-4589-1212
From: L.TEMPROSA
To: BEDFORD.LIBRARY
Subj: RE: So. China Seas Pro, Pub. 189

Betty Sutherland:
ICLARM does have that publication in our collection. I'm forwarding you a photocopy via air mail. Since the monograph runs over 200 pages, we'll be invoicing you for copying and postage costs. Regards ... Linda

Action? ANSWER

Text:

Linda -- Thanks much. I'll look out for your invoice. -- Betty

Send? YES

Message posted Dec 11 13:14 AST Msg: KGIG-1458-6891

Posted: Thu Dec 11, 1987 4:22 AM AST
 From: GIRO.LIBRARY
 To: *UTY3459
 Subj: REC: Late Notice, Membership Dues

Msg: TGIG-2857-9276

MSGN-4589-0982 posted at Dec 6, 1987 12:41 AST
 Return receipt Msg delivered at Dec 10, 1986 14:11 AST

Action?

Posted: Thu Dec 11, 1987 6:27 AM AST
 From: MUSEE.OCE.MONACO
 To: BEDFORD.LIBRARY (RECEIPT)
 Subj: Membership

Msg: UGIG-3597-2370

Betty,
 I did not receive the most recent IAMSLIC newsletter, and I'm wondering if our membership dues have been paid. Would you please check on the status of our membership? Thank you. Cecile

Action? ANSWER

Text:
 Cecile -- The museum library's dues have been paid. Your newsletter must have been lost in the mail. I'll make sure another copy goes out to you.
 Betty

Send? YES

Message posted Dec 11 13:15 AST Msg: OKUH-2367-6512

Action?

Posted: Thu Dec 11, 1987 7:11 AM AST
 From: INBOUND.TELEX
 To: *UTY3459
 Subj: RCA THRU DATA MSG 9952 TO 236901 RECV DEC 11 10:11 GMT

Msg: EGIG-8730-5637

ATTN. ELIZABETH SUTHERLAND

SALES OF BACK ISSUES OF ALL OF OUR PUBLICATIONS
 ARE NOW HANDLED BY PERIODICAL REQUISITIONS, LTD IN LONDON
 TELEX: 78658UK PERREQ

BOLLINGSNORTH-DOLAN LTD

236901 BID UR

Action?

Action?

Posted: Thu Dec 11, 1987 12:26 PM AST
 From: CAS.LIBRARY
 To: MEMBERSHIP.COMM
 Subj: A modest proposal

Msg: RMFG-9678-8634

Marilyn Guin suggested that I contact all the Membership Committee members directly about this. I have found an anonymous benefactor willing to subsidize IAMS LIC membership, including electronic mail, for the Chilean Marine Science Institute. The offer is for one year, subject to renewal. The International Cooperation Committee is excited about this, but they feel the offer should rightly come from the Membership Committee. Would you be willing to make the offer on behalf of IAMS LIC? I'd be happy to answer any questions.

Tom Moritz

Action?

Command? CHECK IAMS LIC

Board Catalog

Command? SCAN

| No | Delivered | From | Subject | Lines |
|----|--------------|-------------|-----------------------------|-------|
| 1 | Dec 10 10:13 | IOS.LIBRARY | Intl Cataloging of Grey Lit | 46 |

Command? CHECK

Your own catalog

Command? BYE

The electronic mail session has lasted less than 15 minutes during which time Betty has received 6 messages, answered 3, and checked the IAMSLIC bulletin board. She does not have time now to read the 46 line message waiting on the bulletin board. She'll cope with that another day.

SCIENCENET

Electronic mail as a medium of communication is not new to marine science libraries. Some of us use centralized library networks such as OCLC, RLIN, and UTLAS. Some of us have mailboxes on national or local networks and some of us are accessible on DIALMAIL, ALANET, ONTYME, and so forth. Some of us can be reached through more than one or two systems. There is a whole "alphabet soup" of e-mail services available now. In the near future, many more will probably appear.

SCIENCENET is the electronic mail service of Omnet, Inc., located in Boston. The SCIENCENET brochure states that it is "the world's largest electronic mail network for the international scientific and engineering community." At present, it has thousands of users in most of the United States, Canada, the United Kingdom, Australia, Iceland, Antarctica, France, Germany, Mexico, Japan, Norway, Brazil, Switzerland, Colombia, Denmark, Bermuda, and so forth - in 40 countries worldwide.

Within SCIENCENET, users are divided into scientific disciplines: OCEAN, AIR, EARTH, POLAR, SPACE, LIFE, TECH. The network allows a user to send messages not only to one's own group, but also to users in other disciplines. Access is through GTE Telenet and any type of terminal that can be used for interactive computing can access SCIENCENET. A local phone call is made to the Telenet access point; the terminal is connected to the phone line; the user enters the mailbox name and password; and the system responds with the contents of the mailbox. Messages may be read, answered, forwarded, filed or removed. They can be sent routinely, marked "urgent", or with a receipt.

Bulletin boards and mailing lists can be set up for specialized activities and groups. One message can then be sent to multiple recipients with just one address entry. Like other electronic mail services, messages are transmitted immediately and can be read within a few minutes, even half a world away. Thus, information turn-around is very rapid, with no regard to time zones. The physical location of the sender and the recipient is irrelevant and, even away from the office, mail can be read or sent from any point and on any compatible equipment. Unlike a long-distance phone call, communication can take place when convenient to both the sender and the receiver.

Long messages and texts can be edited offline. With word processing software, manuscripts can be transmitted in draft form, reviewed and annotated by either an

individual or a group, and returned to the original author for final revision.

Other special features include "Papermail" (electronic mail transformed into printed letters and delivered via U.S. mail), one means of reaching subscribers and non-subscribers at the same time; two-way Telexes (which may be sent and received at less cost than Telex machines); remote mail reading by Omnet, over the phone, if travelling without a computer; "mailbox sitting" (messages temporarily stored or forwarded while on vacation or otherwise away from the office); an online directory which is updated every month; and expanding access to other worldwide scientific networks. Privacy is assured with the password and SCIENCENET commands are simple and easy to learn. The Omnet service personnel in Boston are extremely eager to please - pleasant, knowledgeable, and "user-friendly".

USES

Besides communicating with other individuals, messages can be relayed to groups through a bulletin board or mailing list. This "newsletter" type of information exchange can provide notices for such events as conferences, job openings, new services, and so forth. Electronic mail is also a quick, convenient medium for referral services. For interlibrary loan requests, I have found SCIENCENET particularly useful when ordering documents from foreign suppliers. The documents, themselves, are sent via regular or air mail, but requests and responses are quickly delivered via electronic mail. For example, the Marine Biological Association of the U.K. Library answered my plea for help many months ago when a faculty member needed two articles from the early 1900's in obscure European fishery journals. Also, the FAO Library in Rome has been extremely helpful with both statistical reference questions and with furnishing documents. The ICLARM Library in Manila has also been easy to reach and quick to furnish documents needed by my clientele.

SCIENCENET, in its efforts to please its users, can program online forms. Figure 2 is a model of an interlibrary loan form that could be used to standardize document ordering among marine science libraries around the world.

Command? COMPOSE IASMLIC.LOAN

IASMLIC INTERLIBRARY LOAN REQUEST

Use your break key to return to a Command? prompt.

1 - CAS.Library 2 - MRI.Iceland.Library 3 - RSMAS.Library
4 - Scripps.Library 5 - WHOI.Library ? - I need help!

To which library? (Enter # or ?): 4

Not needed after: 12/21/87

Requester's order no.: WE45689

For the use of: John Scott

Status: Prof

1) Book OR 2) Periodical article: 1

Author: Samantha Smith

Book title: Algae and Other Slimy Green Things

Publisher, City, Date: Powers, London 1983

Verif OR item cited in: 2345655555 ISBN

If non-circulating, supply 1) microfilm 2) hard copy 3) nothing : 1

Not to exceed: \$ 35.00

Notes1: THIS EDITION ONLY

Notes2:

Request complies with: 1) 108(g) (2) guidelines (CCG)
2) other provisions of copyright law (CCL)
3) neither
: 1

Authorized by: Candice Bourbon

Standard Interlibrary Mailing Addresses:

1 - CAS.Library 2 - MRI.Iceland.Library 3 - RSMAS.Library
4 - Scripps.Library 5 - WHOI.Library 0 - any other library

Please send material to: (select #) 0

Address: University of Iowa
School of Oceanography
Sandy Shores, IA 45167

Here is the text of your request:

IAMSLIC INTERLIBRARY LOAN REQUEST

10 To: SCRIPPS.LIBRARY No need after: 12/21/87 Order # WE45689
 20 For: John Scott Status: Prof
 30
 40 Samantha Smith
 50 Algae and Other Slimy Green Things
 60 Powers, London 1983
 70
 80 Var/Cited: 234356555 ISBN
 90
 100 If non-circulating, supply MICROFILM if cost does not exceed \$35.00
 110
 120 THIS EDITION ONLY
 130
 140 Authorized by: Candice Bourbon Complies w/ 108(g)(2) CCG
 150
 160 University of Iowa
 170 School of Oceanography
 180 Sandy Shores, IA 45167

Do you wish to amend any line? Y/N: Y
 Which line number: 20

20 For: John Scott Status: Prof
 For: Joan Scott
 Status: Prof

Here is the text of your request:

IAMSLIC INTERLIBRARY LOAN REQUEST

10 To: SCRIPPS.LIBRARY No need after: 12/21/87 Order # WE45689
 20 For: Joan Scott Status: Prof
 30
 40 Samantha Smith
 50 Algae and Other Slimy Green Things
 60 Powers, London 1983
 70
 80 Var/Cited: 234356555 ISBN
 90
 100 If non-circulating, supply MICROFILM if cost does not exceed \$35.00
 110
 120 THIS EDITION ONLY
 130
 140 Authorized by: Candice Bourbon Complies w/ 108(g)(2) CCG
 150
 160 University of Iowa
 170 School of Oceanography
 180 Sandy Shores, IA 45167

Do you wish to amend any line? Y/N: N

Send? Y

Another loan request? N

If MUSSEL (Union List of Serials in Marine Science Libraries) could be expanded to include more libraries than the United States and Canada, IAMSLIC would have a truly international information resource.

The main reason that SCIENCENET originally attracted my attention is that it is used by the international community of marine scientists. To me, it is as important to "talk" to my patrons as to other libraries and information personnel. A brief survey of the Rosenstiel faculty users of SCIENCENET resulted in: 1) a very positive attitude toward this particular service; 2) the admission that it is used frequently (especially if it is funded from a research grant and especially to communicate with fellow scientists in other locations); 3) but, a rather skeptical response when questioned about accessing a Library for information or documentation. In other words, Professor Hassenpfeffer in Iceland, requesting an article from Betty Sutherland in Nova Scotia, might be out of the ordinary today but, librarians should make the effort to publicize the services that might be offered. For researchers who do not have easy access to library resources, this could be especially valuable. In this regard, SCIENCENET would consider sponsoring a bulletin board called LIBRARY SERVICES for posting information on the kinds of services libraries could provide to their subscribers. This would require a number of libraries willing to participate, and agreements among the libraries as to standardized formats and costs.

COSTS

One time setup fees are U.S.\$75 for the first mailbox (plus \$35 per each additional mailbox). Monthly costs include a flat fee of \$15 plus connect charges: \$.26 per minute weekdays between 7 AM and 6 PM, \$.13 per minute on weekends, major holidays and weekdays from 6 PM to 9 PM, \$.07 per minute everyday from 9 PM to 7 AM. Custom features are extra. International accounts are billed in advance for a year's estimated usage of U.S.\$675 per mailbox. Omnet claims that an average total bill per month is \$50. My own have averaged half that figure. Bulletin boards are charged for storage at the rate of \$.08 per day per 10,000 characters. Estimated monthly fees for this service are from \$5 to \$10.

DISADVANTAGES

COST. Many Libraries cannot afford the monthly fees or would not use it enough to justify the charges. However, almost certainly every IAMSLIC member has a SCIENCENET mailbox operational at his/her institution. Possibly it could be shared through some kind of local arrangement.

JUNK MAIL. Occasionally, some group announcement will be transmitted that is received with resentment due to the costs charged just for reading it. A 35-line

promotion for a journal subscription is not exactly appreciated if it is a journal of no particular interest. However, one day's "junk mail" could be another day's "hot item".

FUTURE ISSUES

Proposing SCIENCENET as an electronic mail service for IAMSLIC is actually redundant. There already is an IAMSLIC trial bulletin board and, as of 15 September, I counted 8 Library mailboxes (not including librarians using institutional mailboxes), plus related addresses at FAO in Rome, Cambridge Scientific Abstracts, NOAA, and Centro de Informacion Cientifica y Humanistica in Mexico City.

My own mailbox materialized as a result of plans to initiate a marine science information network for the Caribbean and Latin America. This network, called MARNET, is still in the gestation period, awaiting funding. The original project outline calls for undertaking the cost of SCIENCENET electronic mail and ASFA CD-ROM subscriptions for 10 pilot sites in the region. In this way, marine institutions without adequate library collections could both search the indexes and order documents of interest.

Personally, I have already made good use of SCIENCENET for reference purposes and for interlibrary loans, both lending and borrowing. On a small scale, I have been willing to furnish photocopies of articles to Third World institutions. Other librarians may not have the means to be so generous and the volume of requests could multiply to uncomfortable proportions. I feel that IAMSLIC should undertake the establishment of an international interlibrary loan service, with a cost structure for participants. As a start, it will cost between \$1,000 and \$2,000 to program an ILL form that would be custom-tailored to our specifications.

To become a truly international association, I feel that IAMSLIC should provide information services to the global marine science community through the vehicle of SCIENCENET.

ACKNOWLEDGEMENT

I gratefully acknowledge the help of Mark Mueller of Omnet, Inc. who cheerfully answered all my questions, furnished the transparencies, and provided general information and practical assistance.

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