Third Annual
FOREIGN ACQUISITIONS WORKSHOP

IMPROVING ACCESS TO FOREIGN GRAY LITERATURE

Sponsors:
Foreign Aerospace Science and Technology Center
U.S. Air Force
Wright-Patterson AFB

Open Source Coordination Office
Director of Central Intelligence
Washington, DC

Scientific and Technical Information Program
National Aeronautics and Space Administration
Washington, DC

September 21-23, 1993
National Airport Holiday Inn
Crystal City, Virginia
TABLE OF CONTENTS

I. AGENDA & ATTENDEES

II. DAY ONE – TUESDAY, SEPTEMBER 21, 1993

KEYNOTE: National High-Performance Computing, Communications, and Information Initiative
Lindberg, Donald

Scope and Value of Gray Literature
Soule, Mason
Carroll, Bonnie
Gelfand, Julia
Ratynski, Maureen
Cumming, Leighton
Hart, Edwin

LUNCHEON: Role of Gray Literature and Non-Traditional Agencies in Informing Policy Makers and Improving National Competitiveness
Steele, Robert D.

New Thrusts in Open Source Activities
Pounder, Michael
Hughes, Ken
Ross, David
Hlava, Marge
Noble, Erika

Specialized Sources of Foreign Gray Literature
Simpson, Donald
Butsch, John
Liszewski, Edward
Newman, Harold

III. DAY TWO – WEDNESDAY, SEPTEMBER 22, 1993

KEYNOTE: Electronic Networked Sources in Western Europe
Huston, Mary

Foreign Sources of Foreign Gray Literature
Humphrys, Edward
Hurst, Brenda
Keil, Ulrike
Sloan, Barbara
Lefebvre, Patrick
Quinn, John
Astroza, Maria
Johnson, Peter
TABLE OF CONTENTS, continued

LUNCHEON: Acquiring Gray Literature from the Commonwealth of
Independent States
Lee, Kent

Intellectual Property Issues in Gray Literature
Schrader, Dorothy
Marling, George
Weiner, Robert
Baker, Paul
Poteat, Robert
Boesch, Brian

Federal Agency Update: Focus on Foreign Gray Literature
Freeman, Robert
Cain, Robert
Auston, Ione
Harrison, Laurie
Nair, Gopi
Cutler, Debbie
Sweeney, John

IV. DAY THREE – THURSDAY, SEPTEMBER 23, 1993

KEYNOTE: Where Networking Technology is Taking Us
Peters, Paul

A Session With Experts in Searching and Sources of Foreign Gray
Literature
Lahr, Thomas
Fiene, Bruce
Zakalik, Joanna
Duston, Beth

New Techniques and Technologies for Access and Evaluation
Scott, Ralph
Dunbar, Richard
Porth, Tricia
Icove, David

LUNCHEON: Electronic Access and Directory Projects
Russell, Judy
Duncan, Russell
Haase, Kenneth
Christian, Eliot
Anderson, James

V. APPENDIX

Database Descriptions
Bibliographies
Articles
1993 FOREIGN ACQUISITIONS WORKSHOP

National Airport Holiday Inn, Crystal City, VA
September 21-23, 1993

THEME: IMPROVING ACCESS TO FOREIGN GRAY LITERATURE

September 21, 1993

8 a.m. Registration and Coffee and Doughnuts

9 a.m. OPENING SESSION

KEYNOTE: National High-Performance Computing, Communications, and Information Initiative

Donald A. B. Lindberg, Director National Library of Medicine, and Director, National Coordination Office for High-Performance Computing and Communication

9:45 a.m.-12:45 p.m.

SCOPE AND VALUE OF GRAY LITERATURE

Chairperson: George Marling, MITRE

* Scope and Value of Gray Literature
  Mason Soule, Battelle

* New Gray Literature of the 1990’s,
  Bonnie Carroll, Information International

10:45-11:15 a.m. BREAK

* Reorienting Acquisitions Policies to Reflect the Importance of Gray Literature
  Julia Gelfand, University of California, Irvine

International Horizon

* Gray Literature in Economic and Social Development at the United Nations
  Maureen Ratynski, Dag Hammarskjold Library

* World Bank and International Monetary Fund as Sources of Economic Gray Literature
  Leighton Cumming, World Bank

* Encoding the World’s Characters: Introduction to the ISO/IEC 10646-1 Universal Coded Character Set Standard and Unicode VI.1 Subset
  Edwin Hart, John Hopkins University, Applied Physics Laboratory
1:45-3:15 p.m. NEW THRUSTS IN OPEN SOURCE ACTIVITIES

Chairperson: Michael Pounder, Foreign Broadcast Information Service (FBIS)

* New Thrusts in Open Source Coordination
  Kenneth Hughes, Open Source Coordination Office

* FBIS Interagency Gray Literature Working Group
  Michael Pounder, Foreign Broadcast Information Service

* Consolidation of State Department Foreign Document Acquisition Program
  David Ross, Foreign Broadcast Information Service

* Developing New Products with the Commonwealth of Independent States
  Marjorie Hlava, Access Innovations

* Special Information Services for the Former Soviet Bloc
  Erika Noble, American Services for Eurasian Trade

3:15-3:45 p.m. BREAK

3:45-5:30 p.m. SPECIALIZED SOURCES OF FOREIGN GRAY LITERATURE

Chairperson: Edward Liszewski, U.S. Geological Service

* Foreign Gray Literature. The Collection of the Center for Research Libraries
  Donald Simpson, Center for Research Libraries

* Agency for International Development Information Program
  John Butsch, Agency for International Development

* Accessing the World’s Geological Gray Literature
  Edward Liszewski, U.S. Geological Service

* International Minerals Program
  Harold Newman, U.S. Bureau of Mines
8 a.m. Registration and Coffee and Doughnuts

8:30 a.m. MORNING SESSION

Keynote: Electronic Networked Sources in Western Europe
Mary Huston, Author of "In the Spirit of 1992--Access to Western European Libraries and Literature"

9:15 a.m. FOREIGN SOURCES OF FOREIGN GRAY LITERATURE

Chairperson: Edward Humphrys, Foreign Aerospace Science and Technology Center

* Canadian Collections
  Brenda Hurst, Canada Institute for Scientific and Technical Information

* European Association for Gray Literature
  Exploitation and FIZ Karlsruhe as Sources
  Ulrike Keil, Fachinformationszentrum, Karlsruhe

* Information Program of the European Community
  Barbara Sloan, European Community

10:30-11 a.m. BREAK

* Foreign Gray Literature in Energy
  Patrick Lefebvre, International Atomic Energy Agency

* Japanese Sources of Gray Literature
  John Quinn

Third World Sources--Focus on Latin America

* Pan American Health Organization As a Source of Biomedical Gray Literature
  Maria Astroza, Pan American Health Organization Library

* Princeton University Libraries Latin American Gray Literature Collections
  Peter Johnson, Princeton University

12:45-1:45 p.m. LUNCH

Luncheon Speaker: Acquiring Gray Literature from the Commonwealth of Independent States
Kent Lee, East View Publications
1993 FOREIGN ACQUISITIONS WORKSHOP
September 22, 1993

1:45-4:30 p.m. INTELLECTUAL PROPERTY ISSUES IN GRAY LITERATURE

Chairperson: Dorothy Schrader, Copyright Office, Library of Congress

* Copyright in Gray Literature
  Dorothy Schrader, Library of Congress

* United States Copyright Clearance Center
  Robert Weiner, Copyright Clearance Center

3-3:30 p.m. BREAK

* Proprietary Rights in Gray Literature
  Robert Poteat, Department of Energy

* Intellectual Property Issues Within Information Exchanges of the NASA International STI Program
  Paul Baker, National Aeronautics and Space Administration

* Electronic Gray Literature Project
  Brian Boesch, Advanced Research Projects Agency

6-8 p.m. FEDERAL AGENCY UPDATE: FOCUS ON FOREIGN GRAY LITERATURE

Chairperson: Robert Freeman, National Technical Information Service

* Non-Print Gray Literature at NTIS
  Robert Freeman, National Technical Information Service

* Foreign Broadcast Information Service New Projects
  Robert Cain, Foreign Broadcast Information Service

* National Library of Medicine Gray Literature Project
  Ione Auston, National Library of Medicine

* Foreign Gray Literature Coverage in Federal Scientific and Technical Collections and Databases
  - NASA Scientific and Technical Information Program
    Laurie Harrison, NASA STI Program
  - Defense Technical Information Center
    Gopi Nair, Defense Technical Information Center
  - Department of Energy, Office of Scientific and Technical Information
    Debbie Cutler, Department of Energy, Office of Scientific and Technical Information
  - Air Force Foreign Aerospace Science and Technology Center
    John Sweeney, Foreign Science Library
1993 FOREIGN ACQUISITIONS WORKSHOP
September 23, 1993

8 a.m.  Registration and Coffee and Doughnuts

8:30-9:15 a.m. Keynote: Where Networking Technology is Taking Us
Paul Peters, Coalition for Networked Information

9:15-11:30 a.m. A SESSION WITH EXPERTS IN SEARCHING AND SOURCES OF FOREIGN
GRAY LITERATURE

Chairperson: Thomas Lahr, NASA Scientific and Technical
Information Program

* Finding Your Way Through the Maze--A User's Technique
  Bruce Fiene, Foreign Aerospace Science and Technology Center

* Special Libraries and Information Centers as Sources
  Joanna Zakalik, Gale Research, Inc.

* Goldmines of Foreign Gray Literature
  Beth Duston, Information Strategists

10:30-11 a.m. BREAK

11 a.m.-3 p.m. NEW TECHNIQUES AND TECHNOLOGIES FOR ACCESS AND EVALUATION

Chairperson: Ralph Scott, Department of Energy, Office of Scientific and Technical Information

Demonstrations: Several of the technologies presented will be available for small group interaction in the Plaza Room from 11 a.m. to 3 p.m.

* NASA Access Mechanism (NAM)
  Richard Dunbar, NASA Scientific & Technical Information Program

* Global Gray Information on INTERNET
  Tricia Porth, National Aeronautics and Space Administration

* Networking Serial Profiles for Violent Crime
  David Icove, Federal Bureau of Investigation

* Shades of Gray in Information Retrieval
  Kenneth Haase, Massachusetts Institute of Technology Media Laboratory
12:45 - 1:45 p.m. LUNCH

LUNCHEON SPEAKER: Electronic Access and Directory Projects
Judy Russell and Russell Duncan, Government Printing Office

* Approaches to Handling Geological Data

* PATHFINDER--A Tool for the End User
  James Anderson, Foreign Science and Technology Center

2:45-3:15 p.m. WORKSHOP WINDUP: WHERE DO WE GO FROM HERE?

Chairperson: Thomas Lahr, NASA Scientific and Technical Information Program

* Suggestions for Future Meetings--Results of an Informal Survey During Workshop
  Mason Soule, Battelle

* Discussion

* ADJOURNMENT AND BON VOYAGE
<table>
<thead>
<tr>
<th>AFFILIATION</th>
<th>REGISTRANT</th>
<th>TELEPHONE</th>
<th>FAX_NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL/TRW</td>
<td>Anderson, Blane F.</td>
<td>(703) 482-2422</td>
<td></td>
</tr>
<tr>
<td>US Army Foreign Science &amp; Technology Ctr</td>
<td>Anderson, Heather A</td>
<td>(408) 738-0588</td>
<td>(408) 743-6081</td>
</tr>
<tr>
<td>FASTC/DXLS</td>
<td>Anderson, James O. III</td>
<td>(804) 980-7580</td>
<td>(804) 980-7699</td>
</tr>
<tr>
<td>Pan American Health Organization</td>
<td>Astroza, Maria</td>
<td>(513) 257-3551</td>
<td>(513) 257-9888</td>
</tr>
<tr>
<td>National Library of Medicine BETAC Corp.</td>
<td>Austin, Ione</td>
<td>(703) 824-3194</td>
<td>(703) 824-0333</td>
</tr>
<tr>
<td>Electronic Knowledge</td>
<td>Bahnson, Peter F.</td>
<td>(703) 742-0466</td>
<td></td>
</tr>
<tr>
<td>NASA STI Program</td>
<td>Bajis, Catherine J.</td>
<td>(703) 685-1750</td>
<td>(703) 271-5669</td>
</tr>
<tr>
<td>NASA/GSFC</td>
<td>Baker, Paul</td>
<td>(301) 286-9230</td>
<td></td>
</tr>
<tr>
<td>NASA - Goddard Space Flight Center, Library -CD252</td>
<td>Banholzer, Gordon S., Jr.</td>
<td>(301) 286-3217</td>
<td>(301) 286-4217</td>
</tr>
<tr>
<td>NASA/Goddard Space Flight Center</td>
<td>Banholzer, Pete</td>
<td>(301) 286-4217</td>
<td>(301) 286-2698</td>
</tr>
<tr>
<td>NASA CASI</td>
<td>Barnes, Cynthia J.</td>
<td>(301) 621-0110</td>
<td>(301) 621-0134</td>
</tr>
<tr>
<td>Information International Assoc., Inc.</td>
<td>Bedford, Denise A.D.</td>
<td>(301) 622-5361</td>
<td>(301) 681-3681</td>
</tr>
<tr>
<td>CIA</td>
<td>Bernholz, David T.</td>
<td>(703) 482-7297</td>
<td>(703) 790-5736</td>
</tr>
<tr>
<td>EG &amp; G WASC Inc.</td>
<td>Bock, Ann R.</td>
<td>(301) 423-1800</td>
<td>(301) 423-9384</td>
</tr>
<tr>
<td>ARPA</td>
<td>Boesch, Brian LT. Col.</td>
<td>(703) 696-2225</td>
<td></td>
</tr>
<tr>
<td>LLNL/NAI</td>
<td>Bollinger, William A.</td>
<td>(510) 422-5002</td>
<td>(510) 422-4563</td>
</tr>
<tr>
<td>National Library of Medicine</td>
<td>Bouton, Jane Philipp</td>
<td>(301) 496-5560</td>
<td>(301) 402-1523</td>
</tr>
<tr>
<td>MYSTECH Assoc Inc.</td>
<td>Bowe, Robert W.</td>
<td>(703) 671-8680</td>
<td>(703) 671-8932</td>
</tr>
<tr>
<td>Seraphic Corporation</td>
<td>Breyer, Thomas P</td>
<td>(703) 823-1342</td>
<td>(703) 908-1336</td>
</tr>
<tr>
<td>SAIC</td>
<td>Buckles, Paige L.</td>
<td>(703) 448-6595</td>
<td>(703) 821-1037</td>
</tr>
<tr>
<td>Missile &amp; Space Intelligence Center</td>
<td>Bucy, Geral T.</td>
<td>(205) 876-1710</td>
<td>(205) 746-7693</td>
</tr>
<tr>
<td>GTE Government Systems</td>
<td>Burgess, Sandy C</td>
<td>(301) 738-8048</td>
<td>(301) 294-8652</td>
</tr>
<tr>
<td>FBIS</td>
<td>Butcher, Maria R.</td>
<td>(301) 621-0183</td>
<td>(301) 621-0134</td>
</tr>
<tr>
<td>U.S. Agency for International Development</td>
<td>Butsch, John</td>
<td>(703) 321-0008</td>
<td>(703) 321-7521</td>
</tr>
<tr>
<td>ENSCO, Inc.</td>
<td>Bykowski, Elisabeth</td>
<td>(703) 496-0976</td>
<td></td>
</tr>
<tr>
<td>National Library of Medicine</td>
<td>Cain, Marjorie</td>
<td>(703) 733-5074</td>
<td>(703) 733-6694</td>
</tr>
<tr>
<td>Foreign Broadcast Information Service (FBIS)</td>
<td>Callahan, J. Kevin</td>
<td>(301) 621-0183</td>
<td>(301) 621-0134</td>
</tr>
<tr>
<td>CASI</td>
<td>Campbell, Judy</td>
<td>(703) 482-3940</td>
<td>(202) 486-1118</td>
</tr>
<tr>
<td>CIA</td>
<td>Carbone, Suzanne M.</td>
<td>(301) 217-3875</td>
<td>(301) 217-3931</td>
</tr>
<tr>
<td>InfoConnect Research Services</td>
<td>Carroll, Bonnie C.</td>
<td>(615) 481-0388</td>
<td>(615) 481-0390</td>
</tr>
<tr>
<td>Information International Associates, Inc.</td>
<td>Chapman, Mark</td>
<td>(301) 763-3722</td>
<td>(301) 763-3528</td>
</tr>
<tr>
<td>ONI</td>
<td>Chin, Bernice M.</td>
<td>(703) 274-4408</td>
<td></td>
</tr>
<tr>
<td>Office of Naval Intelligence</td>
<td>Chiras, Joyce J.</td>
<td>(202) 247-6500</td>
<td>(202) 582-4681</td>
</tr>
<tr>
<td>Defense Technical Info Center</td>
<td>Cholewczynski, George</td>
<td>(703) 648-7245</td>
<td></td>
</tr>
<tr>
<td>AIAA</td>
<td>Christian, Eliot</td>
<td>(301) 688-8121</td>
<td>(301) 688-2066</td>
</tr>
<tr>
<td>Community Management Staff</td>
<td>Cumming, Leighton</td>
<td>(703) 455-9513</td>
<td>(703) 415-8262</td>
</tr>
<tr>
<td>Sectoral Library</td>
<td>Curley, Patrick</td>
<td>(615) 576-1272</td>
<td>(615) 576-3609</td>
</tr>
<tr>
<td>George Mason University</td>
<td>Cutler, Deborah E</td>
<td>(301) 621-0100</td>
<td>(301) 621-0109</td>
</tr>
<tr>
<td>US Dept of Energy</td>
<td>Downing-Conner, Brenda D.</td>
<td>(301) 621-0100</td>
<td>(301) 621-0109</td>
</tr>
<tr>
<td>AFFILIATION</td>
<td>REGISTRANT</td>
<td>TELEPHONE</td>
<td>FAX_NUMBER</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Information</td>
<td>Dunbar, Richard</td>
<td>(703) 271-5665</td>
<td></td>
</tr>
<tr>
<td>NASA STI/JTT</td>
<td>Duncan, Russell</td>
<td>(603) 624-8208</td>
<td>(603) 624-8222</td>
</tr>
<tr>
<td>Government Printing Office</td>
<td>Duston, Beth</td>
<td>(202) 337-2625</td>
<td>(202) 337-1744</td>
</tr>
<tr>
<td>Information Strategists</td>
<td>Eickhoff, Jane C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Assessment Systems, Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Dept of Commerce</td>
<td>Enomoto, Lawrence M.</td>
<td>(301) 763-4586</td>
<td>(301) 736-5828</td>
</tr>
<tr>
<td>TASC</td>
<td>Erikson, Michael</td>
<td>(703) 834-5115</td>
<td>(703) 318-7900</td>
</tr>
<tr>
<td>Counselor for Science and Technology</td>
<td>Fayt, Gilbert</td>
<td>(202) 862-9571</td>
<td></td>
</tr>
<tr>
<td>FASTC/DXLS</td>
<td>Feuene, Bruce R.</td>
<td>(513) 257-3952</td>
<td>(513) 257-9888</td>
</tr>
<tr>
<td>Library of Congress</td>
<td>Flynn, Kathleen W.</td>
<td>(202) 955-2349</td>
<td>(202) 955-2506</td>
</tr>
<tr>
<td>Defense Technical Info Center</td>
<td>Fox, Isaac A.</td>
<td>(703) 274-7493</td>
<td></td>
</tr>
<tr>
<td>Information International Associates, Inc.</td>
<td>Freeman, Janice</td>
<td>(410) 964-4381</td>
<td></td>
</tr>
<tr>
<td>National Technical Information Service</td>
<td>Freeman, Robert R.</td>
<td>(703) 487-4829</td>
<td>(703) 321-8199</td>
</tr>
<tr>
<td>U.S. Army Foreign Science &amp; Technology Center</td>
<td>French, Steven D.</td>
<td>(804) 980-7762</td>
<td>(804) 980-7699</td>
</tr>
<tr>
<td>F.B.I.S.</td>
<td>Gallio, Michele K.</td>
<td>(703) 242-8063</td>
<td></td>
</tr>
<tr>
<td>NASA Headquarters</td>
<td>Garfield, Lawrence E.</td>
<td>(202) 358-0173</td>
<td>(202) 358-8469</td>
</tr>
<tr>
<td>Library/Job-23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA STI Program</td>
<td>Garland, Jennifer</td>
<td>(703) 685-1864</td>
<td>(703) 271-5669</td>
</tr>
<tr>
<td>GTE Government Systems</td>
<td>Geer, Roger</td>
<td>(301)</td>
<td>(301) 294-8652</td>
</tr>
<tr>
<td>University of California</td>
<td>Gelfand, Julia K.</td>
<td>(714) 856-4971</td>
<td>(714) 856-5740</td>
</tr>
<tr>
<td>FASTC/DXLS</td>
<td>Gillam, Elaine M.</td>
<td>(513) 257-4469</td>
<td>(513) 257-9888</td>
</tr>
<tr>
<td>US Air Force Electronic Warfare Center</td>
<td>Gillett, Susan K.</td>
<td>(210) 977-2059</td>
<td>(210) 977-2145</td>
</tr>
<tr>
<td>Petroleum Abstracts</td>
<td>Green, Sharon K</td>
<td>(918) 631-3160</td>
<td>(918) 599-9361</td>
</tr>
<tr>
<td>US Army FSTC</td>
<td>Gregg, Daniel H.</td>
<td>(804) 980-7512</td>
<td>(804) 980-7407</td>
</tr>
<tr>
<td>Scientific Information Service</td>
<td>Guenkel, Patricia</td>
<td>(914) 834-8864</td>
<td>(914) 834-8903</td>
</tr>
<tr>
<td>Writing Chores Writers' Svcs.</td>
<td>Haase, Kenneth</td>
<td>(617) 253-7418</td>
<td></td>
</tr>
<tr>
<td>Office of Research and Development</td>
<td>Hairston, Helen C.</td>
<td>(216) 561-6636</td>
<td>(216) 561-2514</td>
</tr>
<tr>
<td>RMS Associates/NASA</td>
<td>Halpin, Joan E</td>
<td>(703) 351-3703</td>
<td>(703) 527-1153</td>
</tr>
<tr>
<td>John Hopkins University, Applied Physics Lab</td>
<td>Harrison, Laurie K.</td>
<td>(703) 685-1940</td>
<td>(703) 271-5665</td>
</tr>
<tr>
<td>Radian Corporation</td>
<td>Hart, Edwin</td>
<td>(301) 953-6926</td>
<td></td>
</tr>
<tr>
<td>National Photographic Interpretion Center</td>
<td>Hart, Jack D.</td>
<td>(512) 454-4797</td>
<td>(512) 454-0109</td>
</tr>
<tr>
<td>Foreign Broadcast Information Service</td>
<td>Hart, Sherry R.</td>
<td>(202) 863-3232</td>
<td>(202) 554-3019</td>
</tr>
<tr>
<td>National Technical Information Service</td>
<td>Hawald, Florence G.</td>
<td>(703) 482-4076</td>
<td>(703) 482-6240</td>
</tr>
<tr>
<td>HQ DA (DAMITAIF)</td>
<td>Haynes, Frederick L</td>
<td>(703) 487-4080</td>
<td>(703) 321-8533</td>
</tr>
<tr>
<td>Language Analysis Systems, Inc.</td>
<td>Hedges, Lawrence R.</td>
<td>(703) 706-2043</td>
<td>(703) 806-1152</td>
</tr>
<tr>
<td>Science Applications International Corp.</td>
<td>Herrmann, Jack C.</td>
<td>(703) 378-1163</td>
<td>(703) 378-0717</td>
</tr>
<tr>
<td></td>
<td>Herz, Henry L.</td>
<td>(619) 686-5611</td>
<td>(619) 686-5604</td>
</tr>
</tbody>
</table>
# LIST OF PARTICIPANTS FOR THE 1993 FOREIGN ACQUISITIONS WORKSHOP

**Page No. 3**

<table>
<thead>
<tr>
<th>AFFILIATION</th>
<th>REGISTRANT</th>
<th>TELEPHONE</th>
<th>FAX_NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA STI Program</td>
<td>Hill, Linda L.</td>
<td>(703) 685-1041</td>
<td></td>
</tr>
<tr>
<td>Cambridge Scientific Abstracts</td>
<td>Hitti, Angela M.</td>
<td>(301) 961-6744</td>
<td>(301) 961-6720</td>
</tr>
<tr>
<td>Access Innovations, Inc.</td>
<td>Hlava, Marjorie M.K.</td>
<td>(505) 265-3591</td>
<td>(505) 256-1080</td>
</tr>
<tr>
<td>NASA STI Program</td>
<td>Hoekter, Glenn P.</td>
<td>(703) 685-1350</td>
<td>(703) 271-5669</td>
</tr>
<tr>
<td>U.S Government (Air Force)</td>
<td>Holliman, Bruce</td>
<td>(210) 977-2621</td>
<td>(210) 977-2145</td>
</tr>
<tr>
<td>National Technical Information Service</td>
<td>Hounsell, John W.</td>
<td>(703) 487-4819</td>
<td>(703) 321-8199</td>
</tr>
<tr>
<td>FASTC/DXLS</td>
<td>Hughes, Kenneth</td>
<td>(513) 257-4469</td>
<td>(513) 257-9888</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>Humphrys, Edward A.</td>
<td>(202) 623-3216</td>
<td></td>
</tr>
<tr>
<td>CISTI</td>
<td>Hursch, Brenda</td>
<td>(613) 993-2350</td>
<td></td>
</tr>
<tr>
<td>Alliance for Higher Education</td>
<td>Huston, Mary</td>
<td>(214) 713-8170</td>
<td></td>
</tr>
<tr>
<td>SAIC</td>
<td>Hutchins, Rosemary M.</td>
<td>(703) 821-3200</td>
<td>(703) 821-4025</td>
</tr>
<tr>
<td>US Army Research Institute</td>
<td>Hyslop, Carol E.</td>
<td>(703) 274-8653</td>
<td>(703) 274-5674</td>
</tr>
<tr>
<td>Fost Academy</td>
<td>Iceove, David</td>
<td>(703) 640-1176</td>
<td></td>
</tr>
<tr>
<td>NASA Lewis Research Center</td>
<td>Jarabek, Leona T.</td>
<td>(216) 433-5767</td>
<td>(216) 433-5777</td>
</tr>
<tr>
<td>Office of Research and Development</td>
<td>Jean, Betty B</td>
<td>(703) 351-2701</td>
<td></td>
</tr>
<tr>
<td>MITRE Corp.</td>
<td>John, Jane G.</td>
<td>(703) 883-7189</td>
<td>(703) 883-5684</td>
</tr>
<tr>
<td>Princeton University</td>
<td>Johnson, Peter T.</td>
<td>(609) 258-3193</td>
<td>(609) 258-4105</td>
</tr>
<tr>
<td>CMS/OSCO</td>
<td>Johnson, William R.</td>
<td>(703) 482-0541</td>
<td>(703) 482-0684</td>
</tr>
<tr>
<td>US Dept of Commerce</td>
<td>Jones, Alex</td>
<td>(202) 482-4645</td>
<td>(202) 482-4473</td>
</tr>
<tr>
<td>Dept of State</td>
<td>Jones, David M.</td>
<td>(703) 836-1105</td>
<td>(703) 834-3135</td>
</tr>
<tr>
<td>Battelle Memorial Institute</td>
<td>Judy, David R</td>
<td>(614) 424-7205</td>
<td>(614) 424-7312</td>
</tr>
<tr>
<td>Foreign Science</td>
<td>Kampman, Tina</td>
<td>(513) 427-3355</td>
<td></td>
</tr>
<tr>
<td>FACHINFORMATIONSENZENTRUM</td>
<td>Keil, Ulrike</td>
<td>(011) 49-7247-808-300</td>
<td></td>
</tr>
<tr>
<td>KERKLSRUNE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office of Naval Intelligence</td>
<td>Kennedy, Mary E.</td>
<td>(202) 939-5649</td>
<td>(202) 797-0595</td>
</tr>
<tr>
<td>Korean Embassy</td>
<td>Kim, Seung H.</td>
<td>(410) 659-6300</td>
<td></td>
</tr>
<tr>
<td>Center for Communication Programs</td>
<td>Kimm, Victoria J.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSSI/US Dept of Energy, Energy Library</td>
<td>King, Hannah M.</td>
<td>(301) 903-4167</td>
<td>(301) 903-3960</td>
</tr>
<tr>
<td>McKeldin Library, University of MD</td>
<td>King, Natalie S.</td>
<td>(301) 405-9113</td>
<td>(301) 314-9416</td>
</tr>
<tr>
<td>Financial Crimes Enforcement Network</td>
<td>Kock, Patricia A.</td>
<td>(703) 960-3234</td>
<td></td>
</tr>
<tr>
<td>Japan Technology Program, USDA</td>
<td>Kruthaupt, Timothy J.</td>
<td>(703) 905-3507</td>
<td>(703) 905-3765</td>
</tr>
<tr>
<td></td>
<td>Kusuda, Tamami</td>
<td>(202) 482-1288</td>
<td>(202) 482-4826</td>
</tr>
<tr>
<td>U.S. Government Printing Office</td>
<td>Ladd, Donald</td>
<td>(703) 271-5664</td>
<td>(703) 271-5665</td>
</tr>
<tr>
<td>NASA STI Program</td>
<td>Lehr, Thomas</td>
<td>(202) 707-6242</td>
<td></td>
</tr>
<tr>
<td>Library of Congress, HSS - BRS FBIS</td>
<td>Larson, Carolyn S.</td>
<td>(703) 482-3414</td>
<td>(703) 482-6240</td>
</tr>
<tr>
<td>East View Publication</td>
<td>Lederman, Edith</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Atomic Energy Agency</td>
<td>Lee, Kent</td>
<td>(43) 1 2360/28</td>
<td>(43) 1 234564</td>
</tr>
<tr>
<td>Los Alamos National Laboratory</td>
<td>Legaspi, Manuel E.</td>
<td>(505) 665-6471</td>
<td>(505) 665-4334</td>
</tr>
<tr>
<td>GTE Gov't Systems</td>
<td>Leiner, David I.</td>
<td>(415) 966-2774</td>
<td>(415) 966-4552</td>
</tr>
<tr>
<td>FASTC/DXLR</td>
<td>Lindahl, Kathy L.</td>
<td>(513) 257-2248</td>
<td>(513) 257-9888</td>
</tr>
<tr>
<td>National Coordination Office</td>
<td>Lindberg, Donald A.B.</td>
<td>(301) 402-4100</td>
<td></td>
</tr>
<tr>
<td>AT&amp;T Bell Laboratories</td>
<td>Little-Taylor, Patricia A.</td>
<td>(908) 949-7986</td>
<td>(908) 949-8679</td>
</tr>
<tr>
<td>AFFILIATION</td>
<td>REGISTRANT</td>
<td>TELEPHONE</td>
<td>FAX_NUMBER</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Logicon, Inc.</td>
<td>Litwin, Tybel B.</td>
<td>(703) 486-3500</td>
<td>(703) 920-7086</td>
</tr>
<tr>
<td>TASC</td>
<td>Loucks, Michael J.</td>
<td>(703) 834-5000</td>
<td>(703) 318-7900</td>
</tr>
<tr>
<td>Tulsa University, McFarlin Library</td>
<td>Louderback, Pamela</td>
<td>(918) 631-3076</td>
<td>(918) 631-3791</td>
</tr>
<tr>
<td>Lawrence Livermore National Laboratory</td>
<td>Love, Sandra R.</td>
<td>(510) 422-7310</td>
<td>(510) 422-4563</td>
</tr>
<tr>
<td>Law Offices of Patrice Lyons, Chartered</td>
<td>Lyons, Patrice A.</td>
<td>(202) 939-9666</td>
<td>(202) 232-4757</td>
</tr>
<tr>
<td>The MITRE Corp.</td>
<td>Marling, George L.</td>
<td>(703) 883-7931</td>
<td>(703) 883-6801</td>
</tr>
<tr>
<td>CIA</td>
<td>Marsh, Tamara L.</td>
<td>(703) 482-3944</td>
<td>(202) 484-1118</td>
</tr>
<tr>
<td>Dept of Defense</td>
<td>Marucci, Kathleen A.</td>
<td>(410) 859-6766</td>
<td></td>
</tr>
<tr>
<td>USG - CIA</td>
<td>Maruschak, Rose M.</td>
<td>(703) 482-7309</td>
<td>(703) 790-5736</td>
</tr>
<tr>
<td>Defense Technical Info Center</td>
<td>Mawby, Patricia A.</td>
<td>(703) 274-4408</td>
<td></td>
</tr>
<tr>
<td>The MITRE Corp.</td>
<td>Maybury, Mark T.</td>
<td>(617) 271-2317</td>
<td>(617) 271-2352</td>
</tr>
<tr>
<td>Office of Technology</td>
<td>McCurry, Debra J.</td>
<td>(202) 228-6155</td>
<td>(202) 228-6098</td>
</tr>
<tr>
<td>Assessment</td>
<td>McKenney, B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Applications International Corp.</td>
<td>McLaughlin, Barbara L.</td>
<td>(301) 394-2536</td>
<td>(301) 394-1465</td>
</tr>
<tr>
<td>US Army Research Laboratory</td>
<td>Mooers, Judith K.</td>
<td>(703) 448-6409</td>
<td>(703) 448-5746</td>
</tr>
<tr>
<td>SAIC</td>
<td>Moore, David G.</td>
<td>(410) 850-0030</td>
<td>(410) 850-0406</td>
</tr>
<tr>
<td>TASC</td>
<td>Morgan, Thomas E.</td>
<td>(301) 763-1249</td>
<td>(301) 763-3528</td>
</tr>
<tr>
<td>Office of Naval Intelligence</td>
<td>Mulholland, Laura M.</td>
<td>(703) 329-7127</td>
<td>(703) 329-7198</td>
</tr>
<tr>
<td>Kaman Sciences Corp</td>
<td>Nair, Gopi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense Technical Information Center</td>
<td>Needleman, Harry</td>
<td>(703) 271-5542</td>
<td>(703) 271-5669</td>
</tr>
<tr>
<td>NASA STI Program</td>
<td>Neikoba, Barbara K.</td>
<td>(703) 640-5864</td>
<td>(703) 640-2026</td>
</tr>
<tr>
<td>Marine Corps Intelligence</td>
<td>Newman, Harold R.</td>
<td>(202) 501-9269</td>
<td></td>
</tr>
<tr>
<td>U.S. Bureau of Mines</td>
<td>Noble, Erika</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Services for Eurasian Trade</td>
<td>Nornymle, Ann E.</td>
<td>(703) 271-5700</td>
<td>(703) 271-5669</td>
</tr>
<tr>
<td>NASA/STI Program</td>
<td>Oberlin, Niel P.</td>
<td>(703) 733-6494</td>
<td>(703) 733-6494</td>
</tr>
<tr>
<td>FBIS</td>
<td>Olsson, Pamela B.</td>
<td>(804) 980-7561</td>
<td>(804) 890-7699</td>
</tr>
<tr>
<td>U.S. Army Foreign Science &amp; Technology Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESL, Inc.</td>
<td>Omen, George</td>
<td>(408) 743-6414</td>
<td>(408) 743-6081</td>
</tr>
<tr>
<td>USAIDAC</td>
<td>Parins, Anita M.</td>
<td>(301) 782-4277</td>
<td></td>
</tr>
<tr>
<td>TASC</td>
<td>Paska, Joseph V.</td>
<td>(703) 358-9090</td>
<td>(703) 524-6666</td>
</tr>
<tr>
<td>Foreign Aerspace Science &amp; Technology Center</td>
<td>Pedtke, Thomas R.</td>
<td>(513) 257-6121</td>
<td>(513) 257-9888</td>
</tr>
<tr>
<td>TASC</td>
<td>Pelletier, Robert R.</td>
<td>(703) 834-5106</td>
<td>(703) 318-7900</td>
</tr>
<tr>
<td>Coalition of Networked Information</td>
<td>Peters, Paul</td>
<td>(202) 358-0171</td>
<td></td>
</tr>
<tr>
<td>AFMTC</td>
<td>Peterson, Ellen F.</td>
<td>(301) 619-7214</td>
<td>(301) 619-2409</td>
</tr>
<tr>
<td>National Agricultural Library</td>
<td>Pletsch, Ellen</td>
<td>(703) 271-5625</td>
<td></td>
</tr>
<tr>
<td>NASA Library</td>
<td>Porth, Tricia</td>
<td>(202) 358-0171</td>
<td></td>
</tr>
<tr>
<td>U.S. Dept. of Energy</td>
<td>Potest, Robert</td>
<td>(615) 576-1070</td>
<td></td>
</tr>
<tr>
<td>FBIS</td>
<td>Pounder, Michael A.</td>
<td>(703) 733-6438</td>
<td>(703) 733-6494</td>
</tr>
<tr>
<td>North Carolina State</td>
<td>Pozo, Orion F.</td>
<td>(919) 515-7557</td>
<td>(919) 515-7854</td>
</tr>
<tr>
<td>AFFILIATION</td>
<td>REGISTRANT</td>
<td>TELEPHONE</td>
<td>FAX_NUMBER</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>--------------------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>BDH Federal, Inc.</td>
<td>Price III, William T.</td>
<td>(703) 848-5203</td>
<td>(703) 848-6683</td>
</tr>
<tr>
<td>AIAA</td>
<td>Purdy, David J.</td>
<td>(212) 315-5413</td>
<td>(212) 582-4861</td>
</tr>
<tr>
<td>U.S. Dept of Transportation Library</td>
<td>Quinn, John</td>
<td>(202) 366-0763</td>
<td>(202) 366-3670</td>
</tr>
<tr>
<td>Dag Hammarskjold Library</td>
<td>Ram, Dale B.</td>
<td>(212) 963-7414</td>
<td>(212) 963-0077</td>
</tr>
<tr>
<td>Defense Intelligence Agency</td>
<td>Ratynski, Maureen V.</td>
<td>(703) 284-0643</td>
<td>(703) 284-1081</td>
</tr>
<tr>
<td>NASA Headquarters/CASI</td>
<td>Richman, Anita M.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense Intelligence Agency</td>
<td>Ridgeway, Roland M.</td>
<td>(301) 621-0315</td>
<td>(301) 621-0134</td>
</tr>
<tr>
<td>FBIS</td>
<td>Robinson, Judith M.</td>
<td>(202) 373-3837</td>
<td>(202) 373-3838</td>
</tr>
<tr>
<td>FBIS</td>
<td>Rooney, Christine W.</td>
<td>(703) 733-6500</td>
<td>(703) 733-6494</td>
</tr>
<tr>
<td>Central Intelligence Agency</td>
<td>Ross, David K.</td>
<td>(703) 482-3252</td>
<td>(703) 482-6240</td>
</tr>
<tr>
<td>The MITRE Corp.</td>
<td>Rova, Ed J.</td>
<td>(703) 264-9726</td>
<td>(703) 264-0546</td>
</tr>
<tr>
<td>Defense Technical Information Center</td>
<td>Ryan, Paul R.</td>
<td>(703) 274-6882</td>
<td>(703) 617-7718</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>Sadak, Luz S.</td>
<td>(202) 623-2164</td>
<td>(202) 623-2352</td>
</tr>
<tr>
<td>TASC</td>
<td>Saher, Laura H</td>
<td>(703) 834-5000</td>
<td>(703) 318-7900</td>
</tr>
<tr>
<td>FASTC/DXL</td>
<td>Santiago, Flor</td>
<td>(703) 733-6074</td>
<td>(703) 733-5974</td>
</tr>
<tr>
<td>NASA STI Program</td>
<td>Sawdy, Jack O.</td>
<td>(513) 257-4469</td>
<td>(513) 257-9888</td>
</tr>
<tr>
<td>Defense Technical Info Center</td>
<td>Scanlan, LouAnn</td>
<td>(703) 271-5648</td>
<td>(703) 271-5669</td>
</tr>
<tr>
<td>Department of Defense</td>
<td>Schlag, Gretchen A.</td>
<td>(703) 274-7493</td>
<td></td>
</tr>
<tr>
<td>Library of Congress</td>
<td>Schneider, Harriet R.</td>
<td>(301) 688-7392</td>
<td>(301) 688-0011</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>Schrader, Dorothy</td>
<td>(202) 707-8380</td>
<td></td>
</tr>
<tr>
<td>NASA Center for Aerospace Information</td>
<td>Schreiber, Marina</td>
<td>(202) 623-3521</td>
<td></td>
</tr>
<tr>
<td>U.S. DOE</td>
<td>Schroer James A</td>
<td>(301) 621-0154</td>
<td>(301) 621-0134</td>
</tr>
<tr>
<td>FBIS</td>
<td>Scott, Ralph</td>
<td>(615) 576-1196</td>
<td></td>
</tr>
<tr>
<td>NASI STI Program</td>
<td>Seemann, Janice S.</td>
<td>(703) 733-6332</td>
<td>(703) 834-3847</td>
</tr>
<tr>
<td>Battelle Memorial Institute</td>
<td>Sepic, Ronald P.</td>
<td>(703) 271-5519</td>
<td>(703) 271-5665</td>
</tr>
<tr>
<td>SAIC</td>
<td>Sharp, Paul (Pete)</td>
<td>(614) 424-3811</td>
<td>(614) 424-7312</td>
</tr>
<tr>
<td>Center for Research Libraries</td>
<td>Shields, John M.</td>
<td>(703) 448-6595</td>
<td>(703) 821-1037</td>
</tr>
<tr>
<td>The Analytic Sciences Corp.</td>
<td>Simpson, Donald B.</td>
<td>(312) 955-4545</td>
<td>(312) 955-4339</td>
</tr>
<tr>
<td>European Community Science Applications</td>
<td>Simpson, Richard L.</td>
<td>(410) 850-4925</td>
<td>(410) 850-0404</td>
</tr>
<tr>
<td>International Corp.</td>
<td>Sloan, Barbara</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battelle Memorial Institute</td>
<td>Sluzar, N.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandia National Laboratories, Dept. 5913</td>
<td>Soule, Mason H</td>
<td>(614) 424-6191</td>
<td>(614) 424-7312</td>
</tr>
<tr>
<td>LLA</td>
<td>Sozanski, Katharine K.</td>
<td>(505) 844-2505</td>
<td>(505) 844-7593</td>
</tr>
<tr>
<td>Open Source Solutions, Inc.</td>
<td>Spejewski, Norma B.</td>
<td>(615) 481-0386</td>
<td>(615) 481-0390</td>
</tr>
<tr>
<td>Science Information Service</td>
<td>Steele, Robert D.</td>
<td>(703) 536-1775</td>
<td>(703) 536-1776</td>
</tr>
<tr>
<td>Foreign Science Library</td>
<td>Stein, David A.</td>
<td>(914) 834-8864</td>
<td>(914) 834-8903</td>
</tr>
<tr>
<td>Office of Naval Intelligence</td>
<td>Sweeney, John J.</td>
<td>(513) 427-3355</td>
<td>(513) 527-3360</td>
</tr>
<tr>
<td>SAIC</td>
<td>Tartt, Debra A.</td>
<td>(703) 821-3100</td>
<td>(703) 821-4025</td>
</tr>
<tr>
<td>Defense Technical Information Center</td>
<td>Thomson, Allen B.</td>
<td>(703) 617-7931</td>
<td>(703) 617-7940</td>
</tr>
<tr>
<td></td>
<td>Tozier, Marjorie C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFFILIATION</td>
<td>REGISTRANT</td>
<td>TELEPHONE</td>
<td>FAX_NUMBER</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>AFMIC</td>
<td>Tran-Knechtges, T. Minh</td>
<td>(301) 619-7314</td>
<td>(301) 619-2409</td>
</tr>
<tr>
<td>Sandia National Laboratories</td>
<td>Van Berkel, Joyce A.</td>
<td>(505) 845-9565</td>
<td>(505) 845-9565</td>
</tr>
<tr>
<td>U.S. Army Foreign Science &amp; Technology Center</td>
<td>Vanthiel, Michael J.</td>
<td>(804) 980-7235</td>
<td>(804) 980-7699</td>
</tr>
<tr>
<td>Office of Naval Intelligence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA Center for Aerospace Information</td>
<td>Vicino, Elizabeth A.</td>
<td>(301) 621-0189</td>
<td>(301) 621-0134</td>
</tr>
<tr>
<td>BDM Federal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMS/OSCO Science Applications</td>
<td>Vogel, Eric J.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Corp.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ONI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WL - Armament Directorate, MNOI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copyright Clearance Center, Inc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Institutes of Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Broadcast Information Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRW Environmental Safety Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naval Warfare Analysis Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA STI Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Dept. of Commerce, Japan Technology Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MYSTECH Assoc Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute for Defense Analyses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZED Associates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Donald A. B. Lindberg, M.D., was named the first Director of the National Coordination Office for High Performance Computing and Communications in August 1992. He has served as Director of the National Library of Medicine since 1984. In addition to an illustrious medical career in pathology, Dr. Lindberg has made notable contributions to information and computer activities in medical diagnosis, artificial intelligence, and educational programs. Before his appointment as Director, Dr. Lindberg was Professor and Chairman, Director of Information Science; University of Missouri School of Library and Information Science, Professor of Pathology, University of Missouri School of Medicine, 1969-1984; and Director, Information Science Group, University of Missouri School of Medicine, 1971-1984.

Dr. Lindberg was elected the first President of the American Medical Informatics Association (AMIA), 1988-1991 and in 1992 began serving as a member of the AMIA Board of Directors. He has also been called upon to serve on many boards including the Computer Science and Engineering Board of the National Academy of Sciences, the Symposium on Computer Applications in Medical Care (SCAMC), the American Association for Medical Systems and Informatics (AAMSI), the Organizing Committee for MEDINFO 86, the National Board of Medical Examiners, the Institute of Medicine Advisory Council of the National Academy of Sciences and the Advisory Council of the International Hospice Institute.

Dr. Lindberg is the author of three books: The Computer and Medical Care: Computers in Life Science Research; and The Growth of Medical Information Systems in the United States, several book chapters, and more than 150 articles and reports. He has served as editor and editorial board member of nine publications, including the Journal of the American Medical Association.

Dr. Lindberg graduated Magna cum Laude from Amherst College and received his M.D. degree from the College of Physicians and Surgeons, Columbia University. Among the honors he has accrued are Phi Beta Kappa; Simpson Fellow of Amherst College; Markle Scholar in Academic Medicine; Surgeon General's Medallion; recipient of the First AMA Nathan Davis Award for outstanding Member of the Executive Branch in Career Public Service, the Walter C. Alvarez Memorial Award, American Medical Writers Association; the Presidential Senior Executive Rank Award; Founding Fellow, American Institute of Medical and Biological Engineering; the Outstanding Service Medal, Uniformed Services University of the Health Sciences; and honorary doctorates from Amherst College, the State University of New York at Syracuse and the University of Missouri-Columbia.
The High Performance Computing and Communications Program (HPCC) is a multiagency Federal initiative designed to foster the rapid development of high performance computers and networks and the use of these resources throughout the Nation. The HPCC Program has already led to significant advances in computing architectures, software development, and advanced networking capabilities.

Because of the National Library of Medicine’s deep commitment to fostering advanced computing and communications networks, it was the first component of the National Institutes of Health to participate in the Program. Under the program NIH supports advanced molecular drug design and imaging of chemical sequences; sequencing of the human genome; the creation of databases of medical images for research and education, including a 3-D digital anatomy project; and provides training in medical informatics, as well as grant assistance to medical centers to connect to the Internet.

In support of the Administration’s efforts to establish a National Information Infrastructure, the HPCC Program has expanded its focus to include applications in the areas of health care, education and lifelong learning, digital libraries, advanced manufacturing systems, and government information.

The recent addition of a fifth component, Information Infrastructure Applications and Technology, will support integrated systems technology for critical applications through development of intelligent systems interfaces, including support for virtual reality, image understanding, language and speech understanding, and data and object bases for electronic libraries and commerce.

NLM’s extensive outreach program helps medical institutions make connections through the Internet, and facilitates training in medical informatics and HPCC technologies. NLM’s Unified Medical Language System allows users to overcome the differences in vocabulary between the scientific literature, expert knowledge-based systems, and factual data bases.

Today’s Internet has already revolutionized the way scientists work, enabling international collaborations and the sharing of vast amounts of data. While Internet offers tremendous opportunities for global information sharing, including gray literature, solutions are needed to help users identify and assess the thousands and thousands of knowledge sources available. Internet search tools such as Gopher, Archie and Veronica are widely used systems that don’t use sophisticated search algorithms or require sophisticated user interfaces. These and other new intelligent agents being developed, such as "Knowbots," will clearly help in the identification and retrieval of relevant literature from around the world.
Mr. Marling is currently with the MITRE Corporation in Mclean, Virginia. His duties there include: Project Leader for programmatic and technical support to the newly formed office of the DCI Open Source Coordinator on activities relating to the strategic planning and execution, budgeting, requirements and collection systems, and technology for the exploitation of open source information within the Intelligence Community and Coordinator of the Government Advisory Panel, comprising senior manager representatives from over forty components of the Intelligence Community and R&D Community. He has also served as Project Officer for programmatic and technical support to the Intelligence Community Staff (ICS) on subjects relating to the effective exploitation of open source information.

He has served in other capacities both for the ICS Staff and as an independent consultant studying effective use of modern information technology and has been an adjunct Professorial Lecturer at American University.

Mr. Marling was educated at University of Nebraska, Johns Hopkins, Albertus Magnus University of Cologne, Germany and The American University.
Mr. Soule is a Research Scientist in the Foreign Science and Technology Department at Battelle Memorial Institute, Columbus, Ohio. As an analyst, he has authored over a dozen reports on S&T-related topics concerning Russia, Europe, or the Third World, primarily for U.S. Government sponsors. His knowledge of Soviet information policy, foreign information sources, and electronic S&T databases have led to his participation in studies of information sources and software systems to exploit foreign S&T information. Mr. Soule was the Principal Investigator (PI) on a project to identify new published and electronic sources of foreign S&T information, and on a Battelle-funded program to create a searchable database of such sources. He currently is the PI on a project examining foreign gray information sources, and is a participant on the interagency working group on gray information. On another internally-funded program, he is examining the use of scanners and optical character recognition software for database input processes. He was the PI on a project comparing the CIRC and NASA/RECON databases, and has worked closely with Government agencies to bring about the joint exploitation of foreign information.

Mr. Soule has a B.A. in Russian and Soviet Area Studies, M.A. in Geography (Kent State University), and Ph.D. Candidacy in Economic Geography (Indiana University). In addition to his work at Battelle, Mr. Soule is a Lecturer in the Department of Geography at The Ohio State University. He teaches courses on world geography, the geography of Russia, the geography of Canada, and physical geography. He has published papers on Soviet manpower and the Soviet use of mathematical economics, and has presented several papers on foreign advanced manufacturing activities.
"The Scope and Value of Gray Literature"
Mason H. Soule
BATTELLE

The library and information science field lacks consensus regarding the definition of gray literature — the central theme of this year's Foreign Acquisitions Workshop. A presentation on scope was suggested to launch the forum, not to predefine gray literature for the group, but rather to stimulate discussion concerning gray literature's domain. Presented here are various conceptual descriptions of gray literature (a.k.a. grey, fugitive, nonconventional, unconventional, informally published, informal, invisible, half-published, or little information) cited in the literature, as well as information types operationally considered to be gray. Keeping the broadest view possible of gray literature's scope, we seek to identify core points that underlie these descriptions. These core elements are:

1. gray literature is material that is not well-covered by conventional book trade channels and, because of this,

2. gray literature is intrinsically more difficult to identify, acquire, process, access, and otherwise handle than conventional literature.

The implications of this second point are especially acute where gray literature is to be exploited systematically, and will require new approaches to acquire this "hard-to-get" information. In the meantime, awareness of topical and regional gray sources is relative, varying among information specialists and analysts. The first step to learning more about foreign gray literature's availability, therefore, is to share our existing knowledge. Many sources of foreign gray information will have been "lightened" by the time this workshop concludes. Though these sources may remain gray conceptually, they will no longer be as hard-to-get.

There would be no reason to distinguish a gray literature category if information sources exhibiting these characteristics were not of value. The second part of the presentation utilizes cases studies to illustrate the importance of gray information in research. Examples are shown where the author used conference papers, trade literature, electronic bulletin boards, and foreign government reports as sources in technical studies of advanced manufacturing technologies, demographic processes, and foreign trade relationships within the old Soviet Bloc. The methodological discussions and level of detail provided in these gray sources, coupled with their timeliness, significantly and even pivotally benefitted the research. Therefore, the most significant point to make about the value of gray literature is that the information it contains often is not available in any other kind of source.
The importance of gray literature expands as a larger share of the world's information becomes available in gray form, and as priorities shift in the intelligence community to regions and topics better covered in gray literature than in conventional open sources. Even in the CIS countries, the collapse of the formal Soviet publication system has led to a growing volume of information available through gray or nonconventional channels. Exploiting this large body of nonconventional literature requires a new exploitation system to augment conventional open source channels.
Ms. Carroll is President of Information International Associates, Inc. (IIa), an information policy and management consulting firm. She is also the Secretariat Director of CENDI (Commerce, Energy, NASA, NLM, Defense Information Managers Group), an interagency cooperative effort of the STI managers of these five major science and engineering agencies.

Ms. Carroll has participated in a major assessment of STI in the U.S. for the National Science Foundation, the development of a topography of science and technology information systems for the Library of Congress, and the development of a system to provide input to the DOE's Energy Science and Technology Database.

Before going into private business, Ms. Carroll worked at the Department of Energy's Office of Scientific and Technical Information as Director of Program Development and International Activities and Deputy and Acting Assistant Manager for Information Services. She spent seven years at the Oak Ridge National Laboratory as Information Center Coordinator, Staff of Program Planning and Analysis, and as Information Specialist and Librarian.

Ms. Carroll is a past President of the American Society for Information Science. She is the 1993-94 Chairperson of the American Association for the Advancement of Science Section on Information, Computing and Communications. Ms. Carroll also is on the Board and past Chairman of Documentation Abstracts, Inc., owner of Information Science Abstracts. She is the vocabulary liaison in software engineering under the International Standards Organization, Joint Technical Committee on Information Technology. She has lectured and published widely on the value of information, information policy and management, and information analysis centers.

Ms. Carroll has an MSLS in Library and Information Science from Columbia University and a BA from Cornell University.
NEW GRAY LITERATURE OF THE 1990'S

Bonnie C. Carroll
Information International Associates, Inc.
Oak Ridge, Tennessee

The results of a 1991 study for the National Science Foundation entitled "Assessment of Scientific and Technical Information Dissemination in the U.S." identified changing patterns in traditional forms of Scientific and Technical communication. Whereas both per capita scientist and engineer reading and technical report writing per federal R&D dollar showed decreasing trends, there was evidence that electronic communications is replacing both printed documentation and even oral interpersonal communication. Today, less than three years later, when we look at the statistics for new forms of electronic and multimedia documentation and communication, we see incredible growth rates. The thesis of this paper is that the 1990's is seeing the emergence of a new paradigm in scientific and technical communication. The questions of printed gray literature of the post World War II world will increasingly give way to questions resulting from a new electronic gray literature of the next decade. The electronic, networked world cannot be viewed only as a linear extension of the print world. Issues of management, control, and access to this new gray literature have some of the same characteristics of previous forms but they also have some characteristics that are different. The presentation will explore the background, issues, and opportunities associated with the new gray literature of the 1990's.

Julia Gelfand has been a member of the staff of the University of California, Irvine Libraries since August 1981, and is currently the Applied Sciences Librarian, where she is responsible for developing the collections to support research and instruction in the fields of information and computer science, environmental sciences & analysis, applied engineering, technology, developmental psychology, law and criminal justice, and the multidisciplinary research units on campus. She also has hold appointments at the University of Denver Libraries, and Case Western Reserve University Libraries. Having just returned from living in England for six months as the 1992-93 US-UK Fulbright Librarian at the Imperial College/Science Museum Libraries in London, she also participated in several lecture circuits while abroad to Sweden and Poland, where she lectured on cooperative and collaborative collection development, academic libraries in transition, scholarly communication in the sciences, information fee-based services, and obviously gray literature in the sciences. She has written and lectured extensively on those topics and is involved in many professional associations ranging from ALA, the Society of Scholarly Publishing, AAAS, and others, and is immersed in planning the move to the now Science Library at UCI, presently under construction with anticipated occupancy in March 1994. She received her AB degree from Gaucher College, the MA and MLS from Case Western Reserve University. Currently, she serves as an adjunct assistant professor at the Fullerton Campus of the Graduate Division of Library & Information Science at San Jose State University.
My paper on "Incorporating Collection and Acquisition Policies to Reflect the Importance of Gray Literature," will concentrate on the current experiences in the University of California/Stanford University Libraries in defining the scope of nontraditional and multidisciplinary collections and how they are consistently addressed in collection statements and policies. The range is great as are the levels of bibliographic control and access and the concentrated output of staff energy in seeking out gray literature for the collection. Issues related to academic libraries and composing collection policies will be introduced as they are relevant to the literature of gray literature.
Maureen Ratynski has been a Reference Librarian at the Dag Hammarskjold Library since 1981 and the Coordinator of the United Nations/Specialized Agency Reference Desk there since 1983. At the United Nations Library, she regularly organizes and conducts training programs to familiarize both delegates and staff with reference tools and research techniques essential for researching United Nations documentation. In the past, she regularly contributed a column entitled "International Documents Roundup" to Documents to the People, published by the Government Documents Round Table of the American Library Association. She will be contributing an article to the forthcoming second edition of International Information to be published by Libraries Unlimited and edited by Peter Hajnal.
GREY LITERATURE AVAILABLE FROM THE UNITED NATIONS

At the United Nations, there are a number of offices and departments for which unpublished reports and studies are produced or which themselves produce such reports and studies. It is in the field of economic and social development, however, that the UN has taken the most initiative to bring this body of grey literature to the attention of a target audience (i.e., UN officials, interested Governments, experts in the field, training and research institutions).

A database, the Development Information System (DIS), was established in 1981 to identify the unpublished works (primarily mission reports, consultants reports, project reports, conference/seminar/workshop reports) produced in this broad subject area. DIS is managed by the Reports Unit of the Department for Development Support and Management Services (DDSMS), which additionally provides the service of conducting on-line subject searches for interested users as well as making available photocopies of the reports themselves. Development Information Abstracts, the printed by-product of DIS, is issued three times a year and is available from:

Reports Unit, DDSMS
Room DC1-1090, United Nations
New York, NY 10017
Tel.: (212) 963-4296

Some offices produce specialized spin-off publications of their own highlighting grey literature.

- **Catalogue of transport studies, 1970-1990: unpublished studies and reports with abstracts by organizations of the United Nations system** (document symbol: ST/ESA/225; sales No.: E.91.II.A.16; $25.00) is issued biennially and supplies addresses from which all cited reports and studies may be directly requested. A supplement to the catalogue covering the period 1991-1992 will be issued later this year.

- The Public Administration and Finance Reference Unit has issued **Publications on public administration and finance, 1992**, listing titles emanating from the work programme in that specific subject area during the period 1971-1992. The catalogue itself and all seminar reports listed within are available from:

Public Administration and Finance Reference Unit
Public Administration and Development Management Div.
DDSMS
Room DC1-917, United Nations
New York, NY 10017
Tel.: (212) 963-2306; FAX: (212) 963-2916
The Programme on Transnational Corporations of UNCTAD has compiled *Workshop papers on foreign direct investment and transnational corporations: annotated bibliography with indexes. 1978-92*. All of the papers cited are available upon request from the Reports Unit of DDSMS. The former United Nations Centre on Transnational Corporations published *Documents of the Joint Units of UNCTC and the regional commissions. 1975-1991*, which provides addresses of the five regional joint units from which the unpublished works cited may be directly requested. Both of the above titles are available from:

United Nations Conference on Trade and Development
Programme on Transnational Corporations
Palais des Nations
1211 Geneva 10, Switzerland

Since 1990, the Office for Outer Space Affairs has issued annually *Seminars of the United Nations Programme on Space Applications: selected papers on remote sensing, satellite communications and space science*. This annual constitutes the only published source for most of the papers, which were presented at various United Nations-sponsored seminars, workshops, training courses and expert meetings. As the Office itself will shortly be transferred to Vienna, requests should be forwarded to its future address at the Vienna International Centre (P.O. Box 500, A-1400 Vienna, Austria).

As far as non-print access to elusive grey literature is concerned, perhaps the most exciting prospect lies in the context of an agreement concluded between Readex and the United Nations Development Programme (UNDP). UNDP is a multilateral grant development organization financed by voluntary contributions. Drawing on the expertise of 40 specialized and technical agencies, it supports over 6000 projects in more than 150 developing countries. The projects are designed to build skills and develop resources in sectors such as agriculture, industry, health, education, finance, science and technology, economic planning and transport and communications. The findings and recommendations and technical and terminal (evaluative) reports generated by these projects have always proven to be of considerable interest to researchers but previously have neither been easy to identify nor to obtain. Readex has entered into an agreement with UNDP to (1) provide bibliographic access to the project reports (1972 to the present) through a CD-ROM index and (2) make available microfiche sets of the project reports themselves. The microfiche sets will be divided into four categories: (a) Africa; (b) Asia and the Pacific; (c) Latin America; (d) Arab States/Europe/Interregional/Global. Retrospective conversion of the index and companion microfiche is projected for completion in 1997.
WORLD BANK FUND AS SOURCES OF GRAY LITERATURE

Outline of talk:

1. The work of the World Bank
   a. role of publications in carrying out that work
   b. availability of publications

2. World Bank gray literature
   a. Working papers
   b. Newsletters

3. Future access through Internet
Encoding the World's Characters:  
Introduction to the ISO/IEC 10646-1 
Universal Coded Character Set Standard 
and the Unicode Version 1.1 Subset

Edwin Hart  
Johns Hopkins University Applied Physics Laboratory

The ISO/IEC 10646-1 international standard and Unicode Version 1.1 implementations of the standard provide a unifying technology to improve access to foreign grey literature. What the ASCII standard is to the United States, the ISO/IEC 10646-1 standard will be to our multilingual world. The goal of the ISO/IEC 10646-1 standard is to encode every character in the world into one multibyte code. Although this goal is not yet achieved, ISO/IEC 10646-1 encodes about 34,000 characters and this set covers the most common writing systems and a rich set of symbols. Characters from additional writing systems will be encoded as they can be identified and verified.

This coded-character-set standard has tremendous advantages for multilingual information processing and retrieval.

- the multilingual text can be stored in one database  
  - searches can be conducted against all entries, regardless of language or writing system  
  - only one application, instead of several, need to be used to search for information  
- the data is integrated  
  - multilingual data is stored in one code instead of several different codes for which software must manage conversions  
  - data retrieved from the database is in the same code and therefore it may be included in reports without conversion to a different code  
  - interchange of the data is easier  
- one application needs to be developed and maintained  
  - the application uses one code instead of several codes  
  - the application need not manage conversions between different codes for every operation on the database (however, until 10646-1 compliant workstations, terminals and printers are available, the input/output software must manage code conversion, but this is much easier than managing it for every operation in the application.)  
- overall, costs are reduced because people are more productive  
  - simpler application software  
  - better application performance  
  - reduced maintenance  
  - easier for customers to use

This presentation will describe the current situation and the technical benefits that a universal multilingual code will bring to storage and retrieval of multilingual text data. It will then describe the characteristics of the ISO/IEC 10646-1 international standard and how Unicode Version 1.1 complies with the international standard. It will conclude with some projections about implementation of ISO/IEC 10646-1 and Unicode Version 1.1 into products and how you might proceed to exploit them.
Edwin Hart is chairman of the U.S. X3L2 technical standards committee for coded character sets, such as 7-bit and 8-bit ASCII. He represents the IBM user association, SHARE Inc., to X3L2. He has been a member of X3L2 since 1990. He has also served on the U.S. delegation to the working group responsible for the development of the ISO/IEC 10646 standard.

Mr. Hart has been active in the development of ISO/IEC 10646 since 1990. When he joined X3L2, two incompatible multilingual multibyte codes were being developed: 10646 by an ISO/IEC working group and Unicode by a consortium of international U.S. organizations. His experience with problems in converting between the hundred-character ASCII and EBCDIC codes led him to believe that having two incompatible multilingual codes, each with tens of thousands of characters, would be a disaster for the information industry. In May after the 10646 Working Group meeting in San Francisco, Mr. Hart moderated discussions between delegates to the 10646 Working Group and representatives of the Unicode Consortium. The ad hoc group reached consensus on a number of basic issues and demonstrated that a merger into one code was achievable. Later, delegates to the 10646 Working Group reached consensus on the details of the merged code and issued a new draft of 10646 for international ballot. In 1992, the draft was approved as an international standard and then published in May, 1993. In 1994, Unicode, Inc. plans to publish Unicode Version 1.1 that is compliant with the ISO/IEC 10646-1 standard.

Since 1973, Edwin Hart has been a systems engineer in the McClure Center of the Johns Hopkins University Applied Physics Laboratory. During this time, he has been responsible for mainframe communications at the Laboratory (requirements development, procurement, installation, system integration, configuration, etc.) and performed system integration for an office automation system for the Army. Most recently, he defined the system and customer requirements for the system infrastructure of a management data warehouse at the Laboratory and is now coordinating its development.

From 1970 to 1973, Mr. Hart was a systems programmer at Bell Telephone Laboratories.

Mr. Hart has a M.S. in Computer Science from the Johns Hopkins University (1981), a M.S. in Electrical Engineering from Columbia University (1969), and a B.E.S. in Electrical Engineering from the Johns Hopkins University (1968).

---

1. The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) created Joint Technical Committee 1 (JTC1) for the standardization of information technology. Working Group 2 (WG2) under Subcommittee 2 (SC2) of JTC1 is responsible for the development of ISO/IEC 10646.

2. He wrote and edited the SHARE position paper, "ASCII and EBCDIC Character Set and Code Issues in Systems Application Architecture."
Encoding the World's Characters: Introduction to ISO/IEC 10646-1

International Standard
ISO/IEC 10646-1
Universal Multiple-Octet Coded Character Set (UCS) and Unicode V1.1

Edwin Hart
Johns Hopkins University
Applied Physics Laboratory

Outline

- Background
- Characteristics
- Product Delivery
- Conclusion
Background

- Characteristics of International Standard 10646-1
- Product Delivery
- Conclusion

Tower of Babel

The advantage of standards is we have so many to choose from.

Anonymous

<table>
<thead>
<tr>
<th>ASCII</th>
<th>ISO 8859-x</th>
<th>National and Industry 16-bit Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Introduction to ISO/IEC 10646-1 and Unicode Version 1.1

Integration via 10646 Coded Data

What Does 10646 Do for You?

Application: Information Retrieval for Multilingual Text

• One Source
  One Multilingual Information Source versus Multiple Sources

• Simplified Software
  One Application with One Code versus Multiple Applications and Managing Different Codes and Conversions

• Integrated Data
  Integrate All of Your Multilingual Data Using One Code
  (Integrate Information from Several Sources with One Code)

• Integrated Retrieval
  Integrate Retrieved Information Using One Code

• Higher Productivity ➔ Reduced Costs
  Development, Performance, Maintenance, Usability, Training
Introduction to ISO/IEC 10646-1 and Unicode Version 1.1

Characteristics

- Background
- Characteristics of International Standard 10646-1
  - Scripts Encoded
  - Architecture
  - Three Options
- Product Delivery
- Conclusion

Scripts Encoded in 10646-1:1993

<table>
<thead>
<tr>
<th>Latin</th>
<th>Kannada</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Phonetic Alphabet</td>
<td>Malayalam</td>
</tr>
<tr>
<td>Greek</td>
<td>Thai</td>
</tr>
<tr>
<td>Cyrillic</td>
<td>Lao</td>
</tr>
<tr>
<td>Armenian</td>
<td>Georgian</td>
</tr>
<tr>
<td>Hebrew</td>
<td>Hangul</td>
</tr>
<tr>
<td>Arabic</td>
<td>Symbols</td>
</tr>
<tr>
<td>Devanagari</td>
<td>Mathematical Operators</td>
</tr>
<tr>
<td>Bengali</td>
<td>Optical Character Recognition</td>
</tr>
<tr>
<td>Gurmukhi</td>
<td>Hiragana</td>
</tr>
<tr>
<td>Gujarati</td>
<td>Katakana</td>
</tr>
<tr>
<td>Oriya</td>
<td>Bopomofo</td>
</tr>
<tr>
<td>Tamil</td>
<td>Chinese/Japanese/Korean</td>
</tr>
<tr>
<td>Telugu</td>
<td>Unified Ideographs</td>
</tr>
</tbody>
</table>
Introduction to ISO/IEC 10646-1 and Unicode Version 1.1

Additional Scripts (late 1995 or 1996?)

- Burmese
- Cree and Inuktitut
- EthiopIan
- Extensions to various scripts for Indo-European languages
- Hieroglyphics
- Khmer
- Maldivian
- Mongolian
- Runic
- Sinhalese
- Syriac
- Tibetan
- Yi

In addition, Unicode Inc. has identified nearly 80 other scripts that may eventually be encoded in 10646.

ISO/IEC 10646-1:1993, Annex II

IS 10646: Code Architecture

- 128 Groups of
  - 256 Planes of
    - 256 Rows of
      - 256 Cells

Plane 00 of Group 00 is the Basic Multilingual Plane (BMP)
Unicode V1.1 implements the BMP
Introduction to ISO/IEC 10646-1 and Unicode Version 1.1

IS 10646: 3 Options

- Coded Representation Forms (Code Width)
  - 4-bytes/32-bit Canonical Form (UCS-4)
  - 2-bytes/16-bit Basic Multilingual Plane–BMP (UCS-2)
- Implementation Levels (Combining Sequences)
  - Level 1: Only Characters, No Combining Characters
  - Level 2: Restricted Combining Sequences
  - Level 3: Unrestricted Combining Sequences
- Subsets
  - Limited Subset (List of Characters)
  - Selected Subset (Select from Prespecified Subsets)

Unicode V1.1 implements: UCS-2, Levels 1, 2 or 3, BMP Subset

Combining Characters & Marks

Combining Characters Are Non-Spacing Diacritics & Marks (Needs Intelligent Display Process)

[Composed or Precomposed] Character [é] Named
LATIN SMALL LETTER E WITH ACUTE
Is Coded as 0000 0065 and Displays as é

Combining Sequence 0000 0065 0000 0301
Codes the Characters [é] Named
LATIN SMALL LETTER E, COMBINING ACUTE ACCENT
and Displays as é
Introduction to ISO/IEC 10646-1 and Unicode Version 1.1

Characteristics Summary:
ISO/IEC 10646-1 & Unicode V1.1

<table>
<thead>
<tr>
<th>Design Criteria</th>
<th>ISO/IEC 10646-1</th>
<th>Unicode V1.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Width</td>
<td>4 Bytes (UCS-4)</td>
<td>2 Bytes (UCS-2)</td>
</tr>
<tr>
<td></td>
<td>2 Bytes (UCS-2)</td>
<td>2 Bytes (UCS-2)</td>
</tr>
<tr>
<td>Capacity</td>
<td>2.1 Billion Characters</td>
<td>65471 Characters</td>
</tr>
<tr>
<td>CO/C1 Control Code Positions</td>
<td>65 (UTF-1 for Compatibility)</td>
<td>65 (UTF-1 for Compatibility)</td>
</tr>
<tr>
<td>Characters in 2-byte BMP</td>
<td>65,471 (of 65,536)</td>
<td>65,471 (of 65,536)</td>
</tr>
<tr>
<td>Number of the BMP Plane</td>
<td>Group 0, Plane 0</td>
<td>Group 0, Plane 0</td>
</tr>
<tr>
<td>CJK Ideographic Characters</td>
<td>Unified</td>
<td>Unified</td>
</tr>
<tr>
<td>Combining Characters</td>
<td>Allowed with Levels 2/3 Implementations</td>
<td>Allowed with Levels 2/3 Implementations</td>
</tr>
</tbody>
</table>

Product Delivery

Who is developing products?
What will they look like?
When will they be available?

Hart's W.A.G.
Who’s Developing Products?

Unicode Members (August, 1993)

Aldus
Apple Computer
Borland International
DataStorm Technologies
Digital Equipment
Hewlett-Packard
IBM
Lotus
Microsoft
Next
Novell
Research Libraries Group
Symantec
Taligent
Unisys
WordPerfect

What Will You Need?

- High-Resolution Bit-Mapped Displays
- Fonts for Each Script Used
  - Purchase Fonts
  - Purchase Computer & Printer Storage for Fonts
  - Tradeoff: Full Set versus Subsets
- Increased RAM, Disk and Tape Storage
- Increased Communication Bandwidth (with Compression)
- Higher-Speed Processors for More Complex, Multiple Script, Character Processing and Printing
- Enhanced Compilers / Common Procedure Libraries
- Upgraded and New Applications
**Introduction to ISO/IEC 10646-1 and Unicode Version 1.1**

### 10646 Products

**10646 Compliant Applications**
- Multilingual Database Management Systems
- Cultural-Sensitive Multilingual Searching and Sorting
- Development Tools
- Database Query Tools
- Electronic Mail
- File Transfer
- Word Processors
- Spreadsheets

**10646 Compliant Input/Output Products**
- Keyboard (data entry)
- Display (fonts/rendering)
- Printer (fonts/rendering)
- File Storage Systems
- Communications Systems

### How Will the Pieces Fit Together?

**10646** for *New Data and New Applications*

**Future 10646 Compliant Input/Output Products**
- Keyboard, Display, Printer

**Conversion**
(for coexistence)

**Older Applications and Data**
(Using Existing Character Codes)

**Input/Output Products**
(Using Existing Character Codes)
- Keyboard, Display, Printer, Storage
Introduction to ISO/IEC 10646-1 and Unicode Version 1.1

When will we see 10646 products?

Increased Types of Products

Phase 1: Deliver a Full Set of Products (1995-1996)
Database, Development Tools, Fonts, Printers, Word Processors, etc.

Increased Function of Products

Phase 2: Increase Functionality of Products (after 1995, 1996)
More Scripts, Combining Characters, etc.
Introduction to ISO/IEC 10646-1 and Unicode Version 1.1

What Do You Need First?

- Applications
  - Database Management Systems?
  - Development Tools, Compilers?
  - Others?
- Writing System (Script) Support
  - European
    - Western Europe (Latin-1, Turkish, Greek)?
    - Eastern Europe (Latin-2, Cyrillic)?
  - Others?
- Conversions

Some Recommendations for Proceeding

- Buy the International Standard and the Unicode Book
  - Watch for Updates and New Parts
- Evaluate the Value of 10646/Unicode to Your Enterprise
- Define Your Needs and Communicate Them to Your Vendors
- Look for Products that Support Unicode V1.1 or 10646-1
- Carefully Consider the Potential Need for a Migration from 16-bit UCS-2 to 32-bit UCS-4 Mode
- Join the Unicode Consortium and/or Your National Standards Committee
Conclusion

- Background
  - Motivation for a Universal Code
  - Resolution of ISO/IEC 10646 vs. Unicode
- Characteristics of ISO/IEC 10646-1:1993
  (and Unicode Version 1.1)
  - Scripts
  - Architecture
  - 3 Options
- Product Delivery

Supplementary Material

- References
- Electronic Distribution Lists
- Organizations
- Feedback
References

The Unicode Standard,
Worldwide Character Encoding,
Version 1.0
The Unicode Consortium, Addison-Wesley, Volumes 1 & 2
(Version 1.1 Planned for 1994)

ISO/IEC 10646-1:1993,
Information Technology —
Universal Multiple-Octet Coded Character Set (UCS) —
Part 1: Architecture and Basic Multilingual Plane
available from American National Standards Institute (ANSI)
in New York City (212) 642-4900

Electronic Distribution Lists

unicode @ sun.com

to subscribe, send a mail message to

unicode-request @ sun.com

ISO10646 @ jhuvm.hcf.jhu.edu

to subscribe, send the following one-line mail message

sub iso10646 your_first_name your_family_name
to

listserv @ jhuvm.hcf.jhu.edu
Organizations

X3 Secretariat
Computer and Business Equipment Manufacturers Association
1250 Eye Street, NW, Suite 200
Washington, DC 20005
+1 (202) 626-5747 (voice)
+1 (202) 638-4922 (facsimile)

Unicode, Inc.
1965 Charleston Avenue
Mountain View, CA 94043
+1 (415) 961-4189 (voice)

Feedback

Edwin Hart
McClure Center
Johns Hopkins University
Applied Physics Laboratory
11100 Johns Hopkins Road
Laurel, Maryland 20723-6099
USA
+1 (301) 953-6926 (voice)
+1 (410) 792-6926 (voice)
+1 (301) 953-1093 (telecopier/facsimile)
Edwin.Hart @ jhuapl.edu
KEYWORDS: Information policy, "reinvention" of national and defense intelligence; author, editor, publisher, and producer of works on "open source intelligence" (OSCINT); originator of national knowledge strategy, strategy of "National Engagement", developer of "information continuum" concepts and solutions; specialist in unconventional threat, opportunity, and net assessment theory and practice; manage global network of contacts interested in OSCINT; of Hispanic heritage, speak fluent Spanish; twenty years abroad.

PRESENT DUTIES: Founding President and owner of OPEN SOURCE SOLUTIONS, Inc., the International Public Intelligence Clearinghouse. Sponsor annual international symposium on "National Security & National Competitiveness: Open Source Solutions". Publish bimonthly 40 page newsletter circulated world-wide. Consult with governments on establishment of national knowledge strategies, with corporations on improving information practices and lowering costs, and with universities on marketing their knowledge bases.

PUBLIC PERSONA: Named one of top 100 individuals in the information industry for 1992 by Microtimes, in recognition of year-long campaign to bring together intelligence community, traditional (corporate) information community, and non-traditional information community (brokers, hackers). Author of numerous articles on national intelligence restructuring and failures; editor of book of readings on intelligence used by Marine Corps Command & Staff College; producer of sixteen hour educational video-tape series on "National Security & National Competitiveness: Open Source Solutions".

PROFESSIONAL HISTORY: Eighteen years experience in national security, intelligence, and information arena. Most recently served as a senior civilian in Command, Control, Communications, Computer, and Intelligence (C4I) Department, Headquarters Marine Corps (1990-1992). Represented Marine Corps on the Foreign Intelligence Priorities Committee, the Requirements Working Group, the Advanced Information Processing and Analysis Steering Group, the Information Handling Committee, the General Defense Intelligence Program, and the Council of Defense Intelligence Producers, among other top-level forums. Founding Special Assistant and Deputy Director of new national intelligence production facility, the Marine Corps Intelligence Center (1988-1990). Six assignments with Central Intelligence Agency, including three operational tours in Latin America and three tours in Washington including assignments dealing with overhead systems and advanced information technology (1979-1988). Four years experience as an infantry officer (1975-1979). Adjunct faculty member, Marine Corps Command & Staff College (1992-)

EDUCATIONAL HISTORY: Distinguished graduate, Naval War College (1990), Marine Corps Command & Staff College (Reserve, 1990); MPA University of Oklahoma (1987), MA Lehigh University (1976), AB Muhlenberg College (1974).

HONORS: Three personal awards, unit citation, Meritorious Honor Award for valor, Pi Alpha Alpha (national honor society for public administration).

FAMILY: Spouse Kathy Lynette; children Patrick James, Matthew Brian.
THE ROLE OF GREY LITERATURE AND NON-TRADITIONAL AGENCIES IN INFORMING POLICY MAKERS AND IMPROVING NATIONAL COMPETITIVENESS

Robert D. Steele, President
OPEN SOURCE SOLUTIONS, Inc.

Abstract

A global revolution has begun. All of our most cherished assumptions have been called into question: assumptions about what constitutes war, peace, domestic, international, intelligence, information; assumptions about the role of the intelligence professional, the information professional, the end-user; and assumptions about what constitutes national security and national competitiveness.

The scientific & technical information community, and especially that portion that is outside the intelligence community, is especially well-suited to recognizing the elements of this revolution, to adapting its capabilities to meet new demands from policy-makers and an expanded consumer base for intelligence, and in this way, to setting the stage for a radical redefinition of how our Nation "does" intelligence, how our Nation informs the policy maker, the corporate chieftain, and the citizen.

Within the intelligence community, those elements such as the Foreign Broadcast Information Service, which have traditionally been on the margin of a community obsessed with secrets, now face a dilemma. They can be consumed in the fires set by recalcitrant bureaucrats who have barricaded themselves in at Langley—or they can break free and form a new community, in league with others not traditionally recognized as elements of the intelligence community.

What we are about is this—creating a new intelligence community: a "virtual" intelligence community, in which the emphasis shifts from collecting secrets to informing policy; from classified sources to open sources; from stovepiped systems to open systems; from exclusion of the public to inclusion of all elements of the Nation's "information continuum; and finally, from a focus on nuclear and conventional military threats, to a focus on more fundamental threats to our Nation's well being, threats the existing intelligence community is not well-suited to recognize, much less understand. We are leading this revolution.
Mr. Pounder has served as the Chairman of the Foreign Broadcast Information Services, Gray Literature Working Group since its formation early in 1991. In this position he is responsible for developing a strategic plan for gray literature collection, exploitation, dissemination, and storage. This working group has developed a definition of gray literature and is creating an online directory of gray literature information sources. Mr. Pounder began his federal service in 1973, in the CIA's Office of Strategic Research and held a number of analytical and managerial positions in CIA. He moved to FBIS in 1992 where his assignments included managing a large publications procurement operation to purchase open source materials and making economic information from large data bases available for analysis by users. He is a Russian area studies and defense industry specialist.

Mr. Pounder attended public schools in Topton, Pennsylvania. He received his B.A. from Gettysburg College in 1968 and an M.A. from Purdue University in 1969. Upon graduation, he was commissioned in the US Army and served two years on active duty from 1970 - 1972. He is almost complete with the requirements for an MBA from George Mason University. He is a Lieutenant Colonel in the US Army Reserve. He worked for a time as a manager with the Budd Company in Philadelphia, Pa.
NEW THRUSTS IN OPEN SOURCE ACTIVITIES

Topics:
* New Thrusts in Open Source Coordinator's Office (Hughes)
* FBIS Interagency Gray Literature Working Group (Pounder)
* Consolidation of State Department FPPP (Ross)
* New Database Services from Russia (Elava)
* New Analytical Services from Russia (Noble)

Opening Remarks by Mike Pounder

This distinguished panel of representatives from public and private organizations will give the conference a sample of the new initiatives underway in government and private industry to open the full potential of open source information.

- One of the co-sponsors of this conference, the Open Source Coordinator's Office, will speak on the broad objectives of his office to share open source information with all users. (Ken Hughes)

- Mr. Dave Ross will speak about making current publications procurement operations more efficient for federal agencies.

- I will discuss new initiatives underway in the government to coordinate gray literature activities between private and government organizations.

- Ms. Margie Elava will review new programs in Russia to make available open source material to users.

- Ms. Erika Noble will discuss a broad range of new services users can take advantage of to tap the potential of open source in Russia.
David K. Ross

David Ross has been chief of Publications Procurement Division of the Foreign Broadcast Information Service (FBIS) since August 1992. Prior to his current assignment he served as the DCI representative to the North American Aerospace Defense Command (NORAD) and US Space Command in Colorado Springs.

A native of Washington State, Mr. Ross received a BA in History from Western Washington University. He received an MA in History from the University of Wisconsin, where he also successfully completed the Slavic and East European Studies Program.
SUMMARY

Since 1953 the Foreign Publications Procurement Program has coordinated the procurement of foreign-produced publications for a number of US Government components. Using field support from US embassies and consulates, the program has been an effective and low-cost means to obtain publications world-wide for a large number of consumers.

As of 1 October 1993 management of the FPPP will be transferred to the Foreign Broadcast Information Service (FBIS) where it will reside within the Publications Procurement Division. FBIS will continue to have access to the worldwide infrastructure provided by the State Department while being supplemented by FBIS' own foreign infrastructure of overseas bureaus. The collection and exploitation of the foreign media has been the FBIS mission for over 50 years. Moving management of the FPPP to FBIS will add to FBIS' current role of collecting and providing openly available information to a broad set of consumers.

The FPPP mission remains the same. FBIS/PPD will continue to exploit and explore various ways of collecting foreign publications to meet customer demands. In addition to continuing to obtain foreign publications that are available commercially, the FPPP will continue to expand its emphasis on the collection of gray literature. Working with other FBIS components PPD will use the overseas infrastructure provided by the State Department, work with FBIS bureaus overseas, tap into its extensive network of foreign commercial vendors, and send staff employees on overseas procurement missions focusing on gray literature collection.

Gray literature collection in FY93 was the FPPP's most significant growth area. Two trips to Latin America focused on gray literature requirements and were extremely successful collecting a wide variety of gray literature information. That emphasis will continue in FY94.
Ms. Hlava is President of Access Innovations, Inc., an international database and information services company she founded in 1978.

**Operations** - As President, she is responsible for directing overall corporate operations, especially production and marketing activities. These involve extensive public relations, contract negotiations, analyzing and transacting acquisition and joint venture negotiations, hiring and training personnel, purchasing equipment and participating in short-term and long-range planning. Other responsibilities at Access Innovations, Inc. include consulting in the areas of information management and database design and development. Clients include national and international corporations, small businesses, associations, government offices and departments. Consulting areas have included project design, workflow analysis, project administration, database design, software development and problem solving in all areas of corporate activity.

A frequent speaker on database construction, she has been involved in creating more than 200 text files of them commercially available. She has contributed to more than 100 publications.

**Research** - Her current research area is Machine Aided Indexing (MAI). In order to create high quality, overall consistency and effective production for any topic or subject area, she instituted a MAI system for the company and then at client sites. To date, there are two implemented systems and a new prototype with a direct thesaurus maintenance module tied in under development.

**Access Russia** - Ms. Hlava is actively involved in bringing Russian literature and related information services to the Western, and especially American, Market. The company has a percentage of the VINITI (All Russian Institute for Scientific & Technical Information - a division of the Russian Academy of Sciences) already imported to Albuquerque with additional data arriving regularly. A joint venture with the International Center for Scientific and Technical Information (ICSTI) to produce English language databases in Moscow became operational on August 1, 1992. The three data files are SCI-TECH, BUSINESS, and LEGAL.

**Access Zuni** - a partially owned R & D status division of the company is at Zuni Pueblo in Western New Mexico. This installation provides high quality, rapid turn-around data entry, scanning, imaging, and conversion services in those instances where security or other considerations preclude sending data outside the country.

**National Information Center for Educational Media (NICEM)** - the publishing division of Access Innovations, Inc. NICEM maintains and develops A-V Online, the world's largest bibliographic database of nonprint educational media, NICEM print indexes, the A-V Online CD-ROM on SilverPlatter, and NICEM A-V MARC on BiblioFile CD-ROM.

**Professionally Related Activities** - Ms. Hlava has been very active at local, regional, and national levels in support of professional organizations. At the national level is currently, or has recently served on the Board of Directors for the following organizations:

- American Society for Information Science - Current President-Elect
- Association for Information Dissemination Centers (Twice President)
- Documentation Abstracts, Inc. (Twice President)
- National Information Standards Organization
- Special Libraries Association
Edward H. Liszewski currently serves as the Acting Chief Librarian at the United States Geological Survey Library in Reston, Virginia. He is responsible for overall management of the survey Library System with libraries located in Arizona, California, Colorado, and Virginia. He has also worked as Assistant to the Director at the George Washington University Library, Head Librarian at the Center for Naval Analyses, Assistant Professor at the U.S. Naval Academy, librarian at the U.S. Army Chemical Research and Development Laboratories, the Edgewood Arsenal Special Services Library and the Enoch Pratt Free Library in Baltimore. Mr. Liszewski received his undergraduate degree from Loyola College, Baltimore, and his Master of Science in Library Science degree from Syracuse University. He has also done graduate work at the Catholic University of America. He has served as a member and chair of the FLICC Education Working Group, chair of the LS/2000 Users Group, was a delegate at the 1990 Maryland Governor’s Conference on Libraries and Information Services, and has served in various capacities in professional library and information organizations.
SYNOPSIS

The U.S. Geological Survey Library System collects large quantities of gray literature. The gray literature consists of maps, dissertations, theses, geologic field trip guidebooks, research newsletters and state and local open-file reports are some of the types of items which are collected. The professional scientists who work at the U.S. Geological Survey (USGS) find the information connected with gray literature is valuable and useful. Examples of the types of gray literature of interest to the USGS Library System include maps, research newsletters, open-file reports, dissertations, theses, and geologic field trip guidebooks.

The sources of gray literature are found outside of the main stream of traditional library acquisitions channels. This presents unique and challenging opportunities to include these materials in the collection development program of the Library.

Once acquired these relatively obscure pieces of information must be given full attention by the cataloging staff for adequate bibliographic control. While not all items will be given full bibliographic identification by the Library, professional organizations in the geoscience information community actively promote improved access to this valuable bag of information.

The Survey Library actively pursues the collection, control and access to earth science gray literature both domestic and foreign. Hundreds of exchange agreements have been made with institutions throughout the world. These constitute the chief means of acquiring the vast body of gray literature associated with the earth sciences.
Donald B. Simpson

Biographical Statement

Since 1980, Donald Simpson has been the chief executive officer of The Center for Research Libraries, founded in 1949 as an international consortium of research institutions dedicated to making available library materials needed for serious scholarship in all fields and languages. In this capacity, he directs the activities of a multi-faceted program including a five million volume research library located in Chicago. Over a 25 year career, he has held positions managing state and regional interlibrary cooperatives.

During graduate studies in public administration and library science, Donald Simpson focused on the management of information systems at Ohio State University and Syracuse University, respectively. His undergraduate degree was earned in English Literature at Alfred University.

Donald Simpson has published more than 25 articles on interlibrary cooperation and four editions of a book on state library agencies. His experiences include numerous consulting engagements, a delegate to a UNESCO world congress on libraries, and a division president of the American Library Association.

His current interests include improving North American scholars' access to foreign acquisitions, enhancing the use of research libraries via the Internet, and beginning the digitization of research library collections.
PRESENTATION SUMMARY

SPECIALIZED SOURCES FOR FOREIGN GRAY LITERATURE:
THE COLLECTIONS OF THE CENTER FOR RESEARCH LIBRARIES
Presented to the 1993 Foreign Acquisitions Workshop, Crystal City, Va.

I. Introduction to CRL

The Center for Research Libraries is a membership-based, cooperative research library, whose mission is to make available research materials for serious scholarly purposes. The Center provides a means by which the member institutions can work together to practice that part of cooperative collection development which involves little-used and rarely-held library collections. Members save money by avoiding the full costs of acquiring, processing, and storing collections used infrequently at their institutions.

Founded in 1949 by ten midwestern universities, the Center has grown to more than 132 members in the US and Canada and dozens of subscribing libraries around the world. The Center's collections are categorized into nine major components and over 220 sub-components, each collected narrowly and deeply according to collecting policies established by the membership. The library contains over 3 1/2 million volumes and 1 1/2 million microforms in a carefully maintained preservation environment. Each year, the Center delivers over 100,000 items from its collections to both members and non-members.

The Center plays a major role in acquiring and improving access to library materials that are difficult to obtain by providing:

• acquisitions expertise and long-standing agreements/business arrangements with foreign publishers, especially non-commercial publishers;
• cataloging expertise;
• efficient use of resources to store and provide document delivery from a large collection of materials dedicated to lending;
• cooperative collection development programs that maximize the effect of acquisitions dollars;
• stable acquisition programs (no local clientele) that include long-term commitments to specific collection components.

II. Collection components

Essentially, the Center's collection is one of gray literature, both domestic and foreign. Here follows a few of examples of notable collections:
Dissertations

Collection Scope: The Center attempts to provide comprehensive coverage of Ph.D.-level dissertations written at universities outside of the US and Canada. The collection consists of deposits from other libraries and current acquisitions, so it contains dissertations written since the early 1800s through the present. The collection includes dissertations on all subjects and in many languages.

In January 1990, the Center began receiving abstracts of dissertations written at universities in the (now former) USSR. The Institute for Scientific Information in the Social Sciences (INION) of the Russian Academy of Sciences sends microfiche copies of dissertations listed in Knizhnaia letopis', Dopolnitel'nyi vypusk. Avtoreferaty dissertatsii, under the subject headings "Philosophy" (which includes political science), "History," "Economics," and "Juridical Sciences." CRL receives about 4,000 abstracts each year. As INION's capability to microfilm these abstracts increases, the Center expands its exchange agreement into additional subject areas. The Center is negotiating with VIN1TI to acquire abstracts of dissertations in the sciences.

Collection Size: 650,000 titles in hard copy, microfilm and microfiche.

Acquisition Policy: The Center accepts deposits of dissertations from other libraries. Most new acquisitions are through gift and exchange agreements with over 100 foreign universities and through the CRL demand purchase program. The regularly-depositing foreign universities are chiefly western European. Dissertations from British universities must be acquired on a title-by-title basis, since British copyright law requires each user to sign a copyright declaration form; the Center has added a substantial number of British thesis by ordering individual titles.

The demand purchase program is available only to member libraries: the Center attempts to obtain any dissertation requested through the interlibrary loan process, either filling the request from its holdings or purchasing a copy of the dissertation.

Bibliographic Access: Dissertations are not cataloged as yet, but are arranged on the shelves by authors' last names.

Preprints

Collection Scope: The Center receives preprints of research reports from institutes of the Russian Academy of Sciences. These cover physics, mathematics, electronics, astronomy, and most other sciences.

Bibliographic Access: Preprints are cataloged under uniform titles for series; some series also have title analytics. Series titles are included in the biennial list Soviet serials currently received at the Center for Research Libraries.

Short Print Run Monographs from the Russian Academy of Sciences

Collection Scope: Since 1958, the Center has maintained an exchange agreement with the Russian Academy of Sciences in which CRL receives all monographs published by the Academy. The exchange agreement was modified in 1989, to increase the number of short-print-run titles (usually those under 500 copies) acquired by the Center.

Bibliographic Access: All RAS publications are cataloged.
RARELY-HELD JOURNALS

collection scope: The Center maintains subscriptions to 13,000 journal titles in the humanities and social sciences and the sciences. The journal collection, by definition, consists of rarely-held titles, and many of the journals are held by five or fewer North American libraries. The Center focuses on journals published in Eastern Europe, South Asia, Southeast Asia, and East Asia, principally by non-commercial sources.

bibliographic access: All journal titles are cataloged.

HISTORICAL SCI/TECH REPORTS

collection scope: The Center holds sets of technical reports on research conducted during World War II:

German and Axis technology reports. This collection includes reports on technology, engineering and industries, chiefly in Germany, during and immediately following World War II. The information was collected by various governmental intelligence agencies, and the reports cover subjects such as the German clock and watch industry, chlorine plants, pharmaceuticals, viscose rayon plants, radar, chemical industries:

Allied Forces. Supreme Headquarters. Report [of the] Combined Intelligence Objectives Sub-committee (C.I.O.S.) file, no.1-33 [incomplete]. (Includes about 500 reports)


Great Britain. British Intelligence Objectives Sub-committee. B.I.O.S. final report, no.1-1874 [incomplete]. (Includes about 1,500 reports)

Great Britain. British Intelligence Objectives Sub-committee. B.I.O.S. miscellaneous report, no.1-113 [incomplete]. (Includes 15 reports)

U.S. Joint Intelligence Objectives Agency. J.I.O.A. [report], no.1-174 [incomplete]. (Includes 75 reports)

U.S. Joint Intelligence Objectives Agency. J.I.O.A. final report, no.68 only.

U.S. Office of Scientific Research and Development. OSRD reports. OSRD reports are technical reports of research conducted during World War II on warfare (for example, ballistics, fire control, radar, optics) and on medical topics. The reports were declassified and distributed to libraries beginning in 1946; the Center's collection resulted from deposits by member libraries and is not complete but is extensive and includes about 4,100 reports.

bibliographic access: The reports are not cataloged; they are accessed through various bibliographies compiled about specific report series.

III. Document delivery procedures

Bibliographic information is available in CRL's online catalog, which can be searched on the Internet in the fall of 1993 and is integrated into the OCLC and RLIN databases. CRL's interlibrary loan/document delivery service is dedicated to rapid order fulfillment. While CRL is a membership organization, non-members may submit a limited number of requests annually for a prepaid fee of $14 each in North America.
John E. Butsch is currently Coordinator of the Development Information Center at the U.S. Agency for International Development (A.I.D.), where he has worked as a librarian and a research analyst for more than 3 years. He has worked as a librarian in a variety of international organizations in the Washington, D.C., area, including the United Nations Environment Programme's INFOTERRA program at the U.S. Environmental Protection Agency, the International Monetary Fund's Joint Bank Fund library, and the Johns Hopkins School of Advanced International Studies. He served as a Peace Corps Volunteer in Mali, West Africa. He received both an MSLS and a BA in International Relations from the Catholic University of America.
Agency for International Development Information Program

The U.S. Agency for International Development (A.I.D.) was created in 1961 for the purpose of coordinating U.S. international economic and development assistance.

A.I.D. established the Office of Development Information (DI) in 1983, as a result of a 1982 U.S. General Accounting Office (GAO) report requiring A.I.D. to apply lessons learned from its own experience to its project and program design and implementation. The GAO report also suggested that A.I.D. should consider the usefulness of providing an information-analysis capability to assist AID project designers and program managers.

One of the goals of DI is make A.I.D.'s program and project information available to the general public. There are two key access points for this information: the A.I.D. Development Information Center (formally the A.I.D. Library) and the A.I.D. Development Information Services Clearinghouse (DISC).

The A.I.D. Development Information Center (DIC) is located in Rosslyn, VA, and is open to the general public between the hours of 10:00 and 4:00, Monday through Friday. Telephone reference service is also available during these hours. Users of the facility include U.S. government employees and contract staff, members of international development organizations, and university students.

The DIC houses a collection of more than 80,000 A.I.D. documents in microfiche format, more than 9,000 non-A.I.D. commercially produced materials covering a variety of international development topics, and more than 400 serials and newsletters. The DIC also maintains a collection of historical materials that covers the history of U.S. foreign assistance back to the early 1940s, including A.I.D. and its predecessor agencies.

The DISC maintains a database of A.I.D. program and project materials dating back to the early days of the Agency. The Development Information System (DIS) is a database of over 80,000 Agency-funded technical documents and more than 7,000 project descriptions. Copies of these reports may be purchased through the DISC.

The information included in the DIS is also available on a CD-ROM product called "CD-DIS," which is updated quarterly. The yearly subscription price for this CD-ROM product is only $130.00.

Queries concerning A.I.D. documents and general information about the Agency should be directed to the A.I.D. Development Information Center. The reference staff will assist patrons identify A.I.D. reports and will work with visitors in accessing the available resources.

Information concerning the Development Information System or the CD-DIS product should be directed to the A.I.D. Development Information Services Clearinghouse.
A.I.D. Development Information Center

Mailing Address:  POL/CDIE/DI
           SA-18, Room 105
           U.S. Agency for International Development
           Washington, D.C.  20523-1801

Physical Location:  1601 North Kent Street
          Room 105
          Rosslyn, VA

Telephone:  (703) 875-4818
Fax:  (703) 875-5269

A.I.D. Development Information Services Clearinghouse

Address:  1500 Wilson Boulevard
          Suite 1010
          Arlington, VA  22209-2404

Telephone:  (703) 351-4006
Fax:  (703) 351-4039
Mr. Harold R. Newman is a country specialist in the Branch of Europe and Central Eurasia. He has more than 25 years experience, including 3 years as a civil engineer with the State of Texas, 2 years as a mining engineer with HPE Consultants in Mexico, and 9 years with the U.S. Army Corps of Engineers. Mr. Newman joined the Research Directorate of the U.S. Bureau of Mines in 1981 as a mining engineer working on improved efficiency in materials handling. He joined the Division of International Minerals in 1983 as a country specialist. Mr. Newman holds a B.S. degree in Geology and an M.S. degree in Engineering, both from the University of Texas. He is a registered professional engineer.
ACQUISITION OF FOREIGN MINERAL RESOURCE INFORMATION

Harold R. Newman, P.E.
Division of International Minerals
U.S. Bureau of Mines

ABSTRACT

The Division of International Minerals within the Office of the Associate Director, Information and Analysis, U.S. Bureau of Mines (USBM), is responsible for collecting and publishing mineral resource data on more than 160 countries. The international data are published in USBM's Mineral Yearbook Volume III. The acquisition of foreign information as a basis for preparing USBM's publications is complex and diverse, involving a wide variety of types of information, sources, and methods of acquiring this information. The acquisition of information takes a variety of forms, including but not necessarily limited to: personal communication, either verbal or written; published material, either gratis or on an exchange basis; published material on a subscription basis; and contracts to consultants for special studies.

The actual original sources of information may be broken down into major groups. These groups include: companies that produce mineral commodities; periodical publishing houses that produce information about mineral commodities; various government agencies of each foreign country and agencies of the U.S. government; international commodity-oriented study groups; and professional societies. A substantial amount of information acquired is through well-established, and often long established channels which ranges from professional relationships established through personal contacts to formal Memoranda of Agreements covering the exchange of information.

The information acquisition process is continually undergoing changes as the availability of computers and computer data bases becomes more widespread. It is necessary to adapt to these changes to maintain a dynamic acquisition program.
Since 1992, Mary M. Huston has served as Executive Director of the Education Information Service programs at the Alliance for Higher Education in Dallas, Texas. From 1989 to 1992, Dr. Huston served as Associate Professor in the School of Library and Information Studies at Texas Woman's University in Denton, Texas. There she taught courses in library automation, systems analysis and design, online information systems, and user education. Earlier, she worked for fourteen years as an academic research librarian with increasing levels of responsibility for technology implementation and user orientation.

An avid writer, she has published and presented in both North America and Europe. In 1992, while a Fulbright Visiting Lecturer/Research Scholar in Sweden, she completed compilation of *In the Spirit of 1992: Access to Western European Libraries and Literature* (with Maureen Pastine, Southern Methodist University).
Electronic Networked Resources in Western Europe

Mary M. Huston, M.L.S., Ph.D.
Executive Director
Education Information Services
Alliance for Higher Education
Dallas, Texas

To an astonishing degree, the super highways of the 21st century won't be roads at all, but narrow strips of optical fiber cabling. Physical storage and transportation of intellectual materials will be replaced by electronic access to and transmission of complex digitized data. The significance of this Screen Revolution, enabled by the convergence of computing and telecommunications technologies, depends on the ability of this multinational infrastructure to heighten the availability of heretofore "grey information." Ease of access to electronic forms of harder-to-get scientific, engineering, and technology documents, databases, and multimedia will drastically alter technical communication.

Western Europe's drive to forge an integrated single market has hastened the development of an advanced information-based society. Replete with social and political issues, including the safeguarding of Europe's cultural integrity/national practices, this catalyst for revitalization has created significant opportunities and challenges for acquisition of foreign resources. How do we locate them? How do we access them? How can we use them?

The issues informing these questions involve much more than high-tech hardware. Using the example of the international high energy physics community, the professional "cultural cement" supporting scientific communication and data exchange across geo-political borders will be explored. Within the framework of scientific communication, aspects of the Western European situation will be described, including library and information networking in the Nordic Countries and the United Kingdom, advances in information technology and OPACs in Europe, and electronic document interchange, as they relate to grey information acquisition. Finally, the knowledge-generation purposes necessitating the elaboration of this World Wide Web will be reviewed and trends projected.
Edward Humphrys
Foreign Aerospace Science and Technology Center

After completing his studies in history at Wright State University and working briefing for the U.S. Department of Health and Human Services in Chicago, in 1983 Mr. Humphrys returned to his native Dayton, Ohio to take a job with the U.S. Air Force Foreign Aerospace Science and Technology Center (FASTC). Working first with the Central Information Reference and Control (CIRC) database system in the Information Research office attached to the FASTC library, he began working with library collection development in 1986. It was also at this time that he began working directly with the Foreign Science Library, a contract library managed by FASTC, like the CIRC system, for the Scientific and Technical Intelligence Information Services Program (STIISP) serving Army, Navy, Air Force, and Defense Intelligence Agency (DIA) technical centers. Moving into the FASTC library proper in 1990, Mr. Humphrys's present duties include technical oversight of the Foreign Science Library, and of the CIRC system's data input contract. He represents FASTC on several inter-agency information science committees and working groups, including STIISP, and co-chairs FASTC's library collection development committee.
Ulrike Keil

Manager, bibliographic Service of FIZ Karlsruhe.

Ulrike Keil was educated as a documentalist. In her current position, she is responsible for literature acquisition for all tasks of FIZ Karlsruhe. She is responsible for providing input to the databases and for the supply of grey literature, and coordination with SIGLE in the subject fields covered by FIZ.

Ms. Keil has 25 years experience in the technical procedures of establishing and offering databases in the field of energy, aerospace, physics and mathematics.
SUMMARY

European Association for Grey Literature Exploitation and FIZ Karlsruhe as Sources

Ulrike Keil, FIZ Karlsruhe

FIZ Karlsruhe is the biggest German national center for specialized scientific information.

The German grey literature in the subject fields energy (including atomic energy) and aerospace science is collected since the fifties by its predecessors. Representing Germany in international information systems like INIS, ETDE and via ESA to the NASA database, FIZ Karlsruhe offers international grey literature to German users for many years.

FIZ Karlsruhe is also representing Germany in the international databases for grey literature SIGLE and NTIS and for the databases in the fields of physics and mathematics special emphasis on grey literature is tradition.

Since nearly 10 years FIZ Karlsruhe is the European Service Center of STN International offering all kinds of databases. Databases on grey literature or including a great portion were among the first to offer.

SIGLE, the European database on grey literature is built by members of the European Association for Grey Literature Exploitation. Each country is represented by a national information or document supply center actively involved in collecting and supplying grey literature produced within its boundaries. In order to fulfill all the tasks of collecting, announcing and providing access to their grey literature some countries have chosen cooperative ventures. For example Germany is represented by TIB (Technische Informationsbibliothek) Hannover, collecting and providing among all other publications grey literature in all fields of technology, chemistry, physics and mathematics, and FIZ Karlsruhe building the database and providing literature in its subject fields.

The main aim of SIGLE is to provide access to European grey literature and it is a condition of input to the database, that each document must be available. The database is available in the USA via STN International and on CD-ROM on SILVERPLATTER, a tape service is available, too. The document supply is organized decentralized by the national centers.

The contents of this database and the mechanisms of the document supply are described in the talk.
National SIGLE centres

EAGLE Secretariat:
PO Box 90407, NL-2509 LK Den Haag, The Netherlands,
Tel: (+31)(0)70 3140506; Fax: 3140493

BELGIUM
Laborelec - UCL/BSE
Centre de documentation
125, rue de Rhode
B-1630 Linkebeek
Tel: (+32)(0) 2 3820217
Fax: 2 3820241

FRANCE
CNRS-INIST
2, allee du Parc de Brabois
F-54514 Vandoeuvre-lee-Nancy cedex
Tel: (+33) 83 504600
Fax: 83 504666

ITALY
Consiglio Nazionale delle Ricerche
Biblioteca Centrale
Ple Aldo Moro 7
I-00185 Roma
Tel: (+39)(0) 6 49933276
Fax: 6 4461954
6 49933834

GERMANY
Fachinformationszentrum Karlsruhe GmbH
W-7514 Eggenstein-Leopoldshafen 2
Tel: (+49)(0) 7247 808104
Fax: 7247 808666

LUXEMBOURG
Bibliotheque Nationale
Boulevard Roosevelt 37
L-2450 Luxembourg
Tel: (+352) 226255
Fax: 475672

THE NETHERLANDS
Koninklijke Bibliotheek
Postbus 90407
NL-2509 LK Den Haag
Tel: (+31)(0) 70 3140451
Fax: 70 3140450

UNITED KINGDOM
The British Library
Document Supply Centre
Boston Spa, Wetherby,
West Yorkshire LS23 7BQ
United Kingdom
Tel: (+44)(0) 937 546044
Fax: 937 546453

SPAIN
Centro de Información y Documentación Científica (CINDOC)
Calle Joaquín Costa, 22
ES-28002 Madrid
Tel: (+34)(0) 9 546 2493
Fax: 546 2644

REPUBLIC OF IRELAND (through UK)
Associated Institution: Commission of the European Communities
Ms. Sloan has served as Head of Public Inquiries at the Commission’s Washington office since 1984.

Ms. Sloan graduated from Mount Holyoke College in 1966 with a B.A. in Political Science. After working with the American Society of International Law as Assistant Editor of International Legal Materials, she joined the Commission’s Washington office in 1969. She held positions as Assistant Information Officer, Librarian, and Head of Library Services before assuming her current responsibilities.

Ms. Sloan has published papers on EC documentation and publications and has given presentations at meetings sponsored by the DC Law Librarians Association, the Special Libraries Association, the American Library Association, the New York Public Library, the North Carolina Library Association, and the University of Minnesota Libraries.
NUCLEAR LITERATURE

IAEA - INIS Grey Literature

The International Nuclear Information System (INIS) is the world's leading bibliographic information system on the peaceful uses of nuclear energy. INIS is operated by the International Atomic Energy Agency (IAEA) in collaboration with its Member States (85 Member States) and co-operating international organizations (17 international organizations). The IAEA implements the INIS Secretariat functions, most of which are vested in the INIS Section, Division of Scientific and Technical Information of the IAEA.

Each INIS member is responsible for the collection of nuclear information and the preparation of input from their country or international organization, as well as for dissemination of INIS products through its information services. The INIS national centre for USA is DOE-OSTI (Oak Ridge).

The input processing and output production are centralized in the INIS Secretariat. Input submitted by the INIS Members to the INIS Secretariat consists of bibliographic data plus copy of non-conventional literature (NCL), i.e. publications which are not available to the public through commercial channels.

Bibliographic data (conventional and grey literature) in electronic or paper forms is processed by INIS Secretariat using IBM mainframe and thus an INIS master file is compiled. A wide range of outputs is produced from the INIS master file. These include the abstract journal, INIS Atomindex plus indices to the Atomindex, and the INIS database on magnetic media and on CD-ROM.

The Atomindex is produced in a variety of cycles. These include the single issues (24 times p.a.), semi-annual cumulative index, the annual cumulative index (once p.a.) and the cumulative indices. Of these varieties, all are available on COM fiche and all but the semi-annual index is available in hard copy.

Bibliographic data is used to reference the NCL (or grey literature) using the report number allocated by the report generator.

The Clearinghouse unit of INIS Section is responsible for the receipt of NCL in hard copy form and converting this into microfiche. Other activities of the Clearinghouse include the production of the Atomindex on COM microfiche and the maintenance of a Clearinghouse database - the CLIN database, for details of NCL.

Currently INIS Secretariat receives NCL from world wide sources. Approximately 50% of the NCL received on paper and 50% on microfiche (from the USA). INIS Clearinghouse convert the paper copies to microfiche and then distribute sets of the microfiche. The NCL received in fiche form from the USA is handled separately from other NCL and is distributed to members in separate sets. Both sets of the fiche are distributed in 24 issues per year (i.e. 24 sets of non-USA fiche and 24 sets of US fiche) with typical annual volumes of 6,900 reports (8,800 fiche) from non-USA sources and 5,200 reports (7,600 fiche) from the USA.

Copies of the NCL are sent to INIS Members either as a complete set, as a subset of an individual issue or as individual reports.

INIS non-conventional literature concerns mainly the conferences, proceedings, theses, patents, reports, etc.
The INIS system started in 1970 and presently the collection of INIS non-conventional literature consists of over 300,000 documents from which over 275,000 are available on microfiche from INIS Clearinghouse in original language. Most of the literature is in English, French, German, Spanish. A large part of the documents that are not directly available from INIS are US, French and Japanese patents. The US patents are available from Department of Commerce. However, the availability of those non-available documents is stated in INIS Atomindex.

The major inputters are the USA, Russia, the Netherlands, Germany, Japan, UK, France, Brazil, China, Canada and the IAEA. Other countries represent around 10% of the total input received.

The INIS non-conventional literature is a 'public' product therefore documents on microfiche are available to everyone sending a request to

IAEA - INIS Clearinghouse
Wagramerstrasse 5,
P.O. Box 100,
A-1400 Vienna, Austria.
fax: 43 1 234564
e-mail: NIZ@IAEA1.IAEA.ORG.AUT

The request should quote the document number or bibliographic data (title, author, date of publishing, etc.).

For more information, you may contact Mr. Patrick Lefebvre, Head INIS Clearinghouse.

According to the IAEA procedures, a prepayment for every ordered document is required. The 1993 price is US$ 9.- including airmail delivery per document requested. The easiest way is to send a cheque with the order, since bank transfers may take several months. The delivery time is around one week. Should you require more information on the availability of documents, please send us a fax or e-mail message.

INIS is presently conducting a feasibility study for storage of grey literature on optical media with the assistance of an external consultant (CIMTECH, UK). The INIS Member States agreed that a pilot project be implemented in 1994.

PATRICK LEFEVBRE after completed Business School and computer studies worked 17 years in Paris as responsible of input/output in a large computer centre. Was also lecturer in computer and information sciences in a Business School. Joined IAEA in 1974 as responsible in the INIS Clearinghouse for the development of the INIS grey literature.
PERSONAL PROFILE

John F. Quinn attended Sophia University in Tokyo where he majored in Far Eastern Studies and Japanese History. He has extensive experience both in the government and private sector. As a former career officer with the Central Intelligence Agency (CIA), Mr. Quinn collected, analyzed and reported on business, economic and technological developments in Japan and the Far East.

As a consultant he has assisted numerous firms with market research and business intelligence collection for specific high technology areas and has developed strategic alliances between U.S. and Japanese firms.

A native of Springfield, Massachusetts, Mr. Quinn has lived and worked in Tokyo for nearly two decades. He is fluent in the Japanese language.

John F. Quinn
79 Riverview Terrace
Springfield, MA 01108

TEL: 413-734-4836
FAX: 413-746-3422
CompuServe: 71543, 1340
Japanese Sources of Grey Literature

Introduction:

Sources:

Government of Japan (GOJ) Sources.
- GOJ Ministries.
- Local Government.

Private Sector Sources.
- Banks & Financial Institutions.
- Japanese Corporations.
- Research Organizations.
- Industry Specific Organizations.
- Trade Organizations (Bōekikai).
- Consulting Firms.
- Trade Shows.

Accessing Japanese Grey Literature Sources.
- How do I Begin?
- Developing Contacts.
- What about Japanese Language Sources?

Japanese government organizations and private corporations in particular are renowned for their ability to gather, process and utilize information. A wealth of Japanese language information is available from a wide variety of open sources. This presentation will examine available Japanese Sources of "Grey Literature" as well as methods of effectively locating, accessing and utilizing such sources.
Maria Teresa Astroza received her first Library Science degree in Santiago, Chile, where she practiced the profession at the Food and Agriculture organization of the United Nations. In 1978 she received her M.L.S. from The Catholic University, Washington, D.C. She is currently the Chief Librarian at the Pan American Health Organization (PAHO), Regional Office of the World Health Organization, where she started working in 1972.

During her years at the PAHO Library, she has been designing, organizing and developing information services for the 28 PAHO Country Representative Offices in Latin America and the Caribbean providing consultanship services to national institutions in this Region. Additionally, her present responsibilities include developing the computerized PAHO/INFO Information System, introducing applications of new technology, promoting cooperative indexing of the PAHO literature, providing training and advisory services in all aspects of information management. As of 1993 she is conducting a users' survey that will allow the Library to evaluate its services and challenge its users.
THE PAN AMERICAN HEALTH ORGANIZATION AS A SOURCE OF
BIOMEDICAL GRAY LITERATURE

To understand the Pan American Health Organization as a source of biomedical gray literature, it is necessary to mention first what this Organization does. This gives meaning to its collection and information sources.

The Pan American Health Organization (PAHO) is the Regional Office of the World Health Organization (WHO) for the Americas. It was officially born in 1902 and has more than 90 years of experience in providing technical cooperation to promote health in the countries of the Americas. At present PAHO employs around 1,000 biomedical scientists and technical experts: half of them are stationed in Washington, D.C. (the Headquarters office), the others stationed in a network of 28 country offices (serving 35 Member Governments) and in 9 specialized centers dealing with priority health issues.

PAHO's Library collection deals with subjects related to the Organization's technical cooperation programs covering all aspects of public health, from building or improving health facilities to manpower training. These subjects are: Maternal and Child Health, Family Planning, Communicable Diseases (e.g. AIDS, cholera, etc.), Environmental Health, Human Resources, Health Systems and Services, Health Promotion, Protection and Nutrition, Veterinary Public Health, Health Technology, Health Policy, etc.

The PAHO Headquarters Library documents collection, located in Washington, D.C., is mostly composed of gray literature. This covers the following types of material: The PAHO collection, the WHO collection (including its Regional Offices around the world), UN documents, (including documents of the UN family), other international organization documents, and Latin American government documents.

Each documents collection at PAHO HQ Library is tinted of gray literature. Everyday, PAHO offices at HQ and in the field and the Latin American governments, are originating this type of literature which consists mostly of information presented to its meetings, technical reports, projects reports, research papers, conference papers, translations, consultants reports, etc.

Publications received from Latin American sources are mainly produced by Government institutions, (e.g. reports from the Ministries of Health or other Ministries, statistical reports, meeting documents and reports, etc.)

What is PAHO doing to identify, gather, and make accessible these evasive experiences? I am sharing with you today these secrets so you can start building your own collection and/or accessing our sources.
PAHO COLLECTION: We have a PAHO collection that represents our institutional memory. In this collection only, you will find more gray literature than the one officially published. We have been enforcing with all PAHO offices originating this kind of information, not only that they send a copy to the main library but to help us to build the Institutional Memory Database by establishing cooperative indexing agreements with us. When agreements are not reached, we process the material. It also covers information from our nine centers in the Region. This literature is available for consultation in a database called PAHO/INFO (when it is not for restricted use).

WHO COLLECTION: The WHO collection at the PAHO Library is also unique in U.S. because we gather: a) all documents from the two most important yearly health meetings of world impact: the World Health Assembly and the WHO Executive Board (where you can have access to all resolutions and decisions affecting health issues in the world); b) documents produced by the Technical Programs in Geneva, not found in any other place; c) documents from the other WHO Regional Offices (Europe, Africa, etc). Most of them are indexed in our PAHO/INFO database.

LATIN AMERICAN COLLECTION: Another unique collection is the one related to Latin America health issues. We not only have contacts to receive the gray literature from health government agencies but also from other institutions dealing with subjects that would affect health policies (technology, sociology, economics, education, etc.). Our collection emphasizes the present health situation of the countries in our Region. These documents are also indexed in our PAHO/INFO database.

PAHO/INFO DATABASE: This database corresponds to the computerized catalogue of the PAHO HQ Library. It not only covers PAHO information, but also the other collections already mentioned to you. This database is run on IBM compatible microcomputers and is also published as a separate database, under the same name, in a compact disk called LILACS. In the future we expect to include full text and make it available through INTERNET.

LILACS CD-ROM DATABASE (Latin American and Caribbean Health Sciences Literature): This is a compact disk produced by BIREME, a PAHO Center dealing exclusively with health sciences information subjects in our Region. It is produced four times a year. This is the most widely used source of health gray literature in Latin America and the Caribbean. This disk also has other databases generated by PAHO and of interest to you: LEYES (Basic Legislation in the Latin American and the Caribbean and Health Sector), ECO (Human Ecology and Health), CDD (Disasters Documentation Center), REPIDISCA (Pan American Network on Sanitary Engineering and Environmental Sciences). It also includes a database generated by the World Health Organization Library in Geneva called WHOLIS, that is beginning to include WHO technical documents.
USEFUL INFORMATION

1. PAN AMERICAN HEALTH ORGANIZATION (PAHO) HQ LIBRARY
   525 23RD ST., N.W.
   Washington, D.C. 20037
   Chief of the Library: Ms. Maria Teresa Astroza
   Reference Librarian: Ms Magda Ziver
   Phone: (202) 861-3305
   FAX: (202) 861-8474
   BITNET: ASTROZAM@PAHOHQ.BITNET@GWUVM.GWU.EDU

   (The library is open to the public Mondays-Fridays
   9:00 A.M. to 4:00 P.M.)

2. PAHO REGIONAL OFFICES AND PAN AMERICAN CENTERS
   (Please see the list of names and addresses in Annex 1)

3. PAHO/INFO DATABASE  (For consultation at the PAHO Library)
   It is also published on LILACS CD-ROM.

4. LILACS CD-ROM
   Can be purchased from:
   BIREME
   Rua Botucatu, 862
   04023 SAO PAULO, BRAZIL
   FAX: (011) 571-1919
PAHO Regional Offices

Page 1

13 August 1993

PAN AMERICAN SANITARY BUREAU
Regional Office of the World Health Organization
525 Twenty-third Street, N.W., Washington, DC
Cable Address: OFSANPAN
Telex: 248338, 64152, 892744
Fax: (202) 223-5971

PAHO/WHO REPRESENTATIVES

ARGENTINA

Dr. Enrique Nájera
Representante de la OPS/OMS
Oficina Sanitaria Panamericana
Marcelo T. de Alvear 624, 4o. piso
(1395) Buenos Aires, Argentina
Cable: OFSANPAN BAIRRES (ARGENTINA)
Telex: 33351
Fax: 311-249
311-9151

BANANAS

(and Turks and Caicos)

Dr. Claudette Mary
PAHO/WHO Representative
P. O. Box N 9111
Nassau, Bahamas
Cable: OFSANPAN NASSAU (BANANAS)
Telex: 20191
Fax: 326-7012

BARBADOS

(see "Caribbean Program Coordination" on P. 9)

BELIZE

Dr. Vladimir Rathaeuer
PAHO/WHO Representative
P. O. Box 430
Belize City, Belize
Cable: OFSANPAN BELIZE CITY (BELIZE)
Fax: 369-17
PAHO/WHO REPRESENTATIVES (cont.)

BOLIVIA

Dra. Mirta Roses
Representante de la OPS/OMS
Casillas Postales 9790 y 2504
La Paz, Bolivia

Cable: OFSANPAN LA PAZ (BOLIVIA)

Telex: 3343
Fax: 391-296

BRAZIL

Dr. David Tejada de Rivero
Representante Interino da OPAS/OMS
Repartição Sanitária Panamericana
Caixa Postal 08-729
70912-970 Brasília, D.F., Brasil

Cable: OFSANPAN BRASILIA (BRASIL)

Telex: 61-1293
Fax: 321-1922

CANADA

General PAHO-Canada relations are handled through the Office of the Deputy Director at PAHO Headquarters.

Technical Representation in Canada

Mr. Charles Shields, Jr.
Executive Director
Canadian Society for International Health (CSIH)
170 Laurier Ave., W.
Suite No. 902
Ottawa, Ontario
Canada K1P 5V5

Phone: (613) 230-2654
Fax: (613) 230-8401

CHILE

Dr. Gustavo Mora
Representante de la OPS/OMS
Casilla 9459
Santiago, Chile

Fax: 6363-728
PAHO/WHO REPRESENTATIVES (cont.)

COLOMBIA

Dr. Víctor Saraiva-Vieira
Representante interino de la OPS/CMS
Carrera 95 No. 9-80
Apartado Aéreo 252267
Santa Fe de Bogotá, D.E., Colombia

Cable: OFSANPAN BOGOTA (COLOMBIA)

Telex: 41310
Fax: 257-3578

COSTA RICA

Dr. Raúl José Penna Melo
Representante de la OPS/CMS
Apartado 3745
San José, Costa Rica

Cable: OFSANPAN SAN JOSE
       (COSTA RICA)

Telex: 2568
Fax: 338-061

CUBA

Dr. Miguel Angel Márquez
Representante de la OPS/CMS
Calle 4 No. 407, entre 17 y 19 Vedado
La Habana, Cuba

Cable: OFSANPAN HABANA (CUBA)

Telex: 511681

DOMINICAN REPUBLIC

Dra. Melba Franky de Borrero
Representante de la OPS/CMS
Apartado 1464
Santo Domingo, República Dominicana

Cable: OFSANPAN SANTO DOMINGO
       (DOMINICAN REPUBLIC)

Telex: 0146
Fax: 544-0322
PAHO/WHO REPRESENTATIVES (cont.)

ECUADOR

Dr. Italo Barragán Arenas
Representante de la OPS/CMS
Apartado 17-07-8982
Quito, Ecuador

Cable: OFSANPAN QUITO (ECUADOR)

Telex: 2370
Fax: 436-372

EL SALVADOR

Dr. Hugo Villegas
Representante de la OPS/CMS
Apartado 1072, Sucursal Central
San Salvador, El Salvador

Cable: OFSANPAN SAN SALVADOR (EL SALVADOR)

Telex: 20338
Fax: 981-168

GUATEMALA

Dr. Jacobo Finkelman
Representante de la OPS/CMS
Oficina Sanitaria Panamericana
Apartado Postal 383
Ciudad de Guatemala, Guatemala

Cable: OFSANPAN GUATEMALA (GUATEMALA)

Telex: 5950
Fax: 343-804

GUYANA

Mr. Peter R. Carr
PAHO/WHO Representative
P.O. Box 10969
Georgetown, Guyana

Cable: OFSANPAN GEORGETOWN (GUYANA)

Telex: 2264
Fax: 666-54
PAHO/WHO REPRESENTATIVES (cont.)

HAITI

Dra. Marie-Andrée Diouf
Représentante par intérim de l’OPS/OMS
Boîte Postale 1330
Port-au-Prince, Haïti

Cable: OFSANPAN PORT-AU-PRINCE
(HAITI)

Fax: 45-1732

HONDURAS

Dr. César Hermida
Representante de la OPS/OMS
Apartado Postal 728
Tegucigalpa, D.C., Honduras

Cables: OFSANPAN TEGUCIGALPA
(HONDURAS)

Telex: 1138
Fax: 315-877

JAMAICA

(and Bermuda and Caymans)

Mr. Samuel Aymer
PAHO/WHO Representative
P.O. Box 384, Cross Roads
Kingston 5, Jamaica

Cable: OFSANPAN KINGSTON
(JAMAICA)

Telex: 2489
Fax: 929-1182
PAHO/WHO REPRESENTATIVES (cont.)

MEXICO

Dr. Juan Manuel Sotelo
Representante de la OPS/OMS
Oficina Sanitaria Panamericana
Apartado Postal 10-880
México, D.F., México

Cable: OFSANPAN MEXICO, D.F. (MEXICO)

Fax: 520-88-68

NICARAGUA

Dr. Carlos Linier
Representante de la OPS/OMS
Apartado 1309
Managua, Nicaragua

Cable: OFSANPAN MANAGUA (NICARAGUA)

Fax: 973-24

PANAMA

Dr. Juan Antonio Casas
Representante de la OPS/OMS
Casilla Postal 7260, Zona 5
Ciudad de Panamá, Panamá

Cable: OFSANPAN PANAMA (PANAMA)

Telex: 3127
Fax: 272-270

PARAGUAY

Dr. Armando López Scavino
Representante de la OPS/OMS
Casilla 839
Asunción, Paraguay

Cable: OFSANPAN ASUNCION (PARAGUAY)

Telex: 22130
Fax: 213-611
PAHO/WHO REPRESENTATIVES (cont.)

PERU

Dr. Luis Antonio Loyola  
Representante de la OPS/CMS  
Oficina Sanitaria Panamericana  
Casilla 2117  
Lima 100, Peru  

Cable: OFSANPAN LIMA (PERU)  
Telex: 20260  
Fax: 424-634

PUERTO RICO

General PAHO-Puerto Rico relations are handled through the Office of the Deputy Director at PAHO Headquarters.

UNITED STATES OF AMERICA

General PAHO-United States relations are handled through the Office of the Deputy Director at PAHO Headquarters.

SURINAME

Dr. Michael O'Carroll  
PAHO/WHO Representative  
P.O. Box 1863  
Paramaribo, Suriname

Cable: OFSANPAN PARAMARIBO (SURINAME)  
Telex: 230  
Fax: 471-568

TRINIDAD AND TOBAGO

Mr. Paul Ellis  
PAHO/WHO Representative  
P.O. Box 898  
Port-of-Spain, Trinidad and Tobago

Cable: OFSANPAN PORT-OF-SPAIN (TRINIDAD)  
Telex: 22398  
Fax: 624-5643
PAHO/WHO REPRESENTATIVES (cont.)

URUGUAY

Dr. Juan Carlos Veronelli
Representante de la OPS/OMS
Casilla de Correo 1821
Montevideo, Uruguay

Cable: OPSANPAN MONTEVIDEO (URUGUAY)

Fax: 773-530

VENEZUELA

(and Netherlands Antilles)

Dr. Hernán Málaga
Representante de la OPS/OMS
Oficina Sanitaria Panamericana
Apartado 6722, Carmelitas
Caracas 101, Venezuela

Cable: OPSANPAN CARACAS (VENEZUELA)

Telex: 23148
Fax: 261-6069
CARIBBEAN PROGRAM COORDINATION

Dr. Karen Sealey
Caribbean Program Coordinator and
PAHO/WHO Representative in Barbados
P. O. Box 508
Bridgetown, Barbados

Cables: OFSANPAN BRIDGETOWN
(BARBADOS)

Telex: 2336
Fax: 436-9773

(Antigua and Barbuda; Barbados; Dominica; France:
French Antilles (Guadeloupe, Martinique, half of
St. Martin, St. Bartholomew), French Guiana;
Grenada; Saint Kitts and Nevis; Saint Lucia;
Saint Vincent and the Grenadines; United Kingdom;
British Virgin Islands and British West Indies
(Anguilla and Montserrat)

OTHER PAHO/WHO OFFICES

FIELD OFFICE:
US-MEXICO BORDER

Dr. Ignacio Gosset
Chief
Field Office, US-Mexico Border
Pan American Sanitary Bureau
6006 N. Mesa St., Suite 600
El Paso, Texas 79912

Cables: OFSANPAN EL PASO (TEXAS)

Telex: 749342
Fax: 833-4768
PAHO Centers

CENTERS

CARIBBEAN EPIDEMIOLOGY CENTER (CAPEC)
Dr. Franklin M. White, Director
Caribbean Epidemiology Center
P.O. Box 164
Port-of-Spain, Trinidad and Tobago
Cable: CAREP PORT-OF-SPAIN (TRINIDAD)
Telex: 22398
Fax: 622-2792

CARIBBEAN FOOD AND NUTRITION INSTITUTE (CFNI)
Dr. Adeline W. Patterson, Director
Caribbean Food and Nutrition Institute
P.O. Box 140, Mona
Kingston 7, Jamaica
Cable: CAJANUS KINGSTON (JAMAICA)
Telex: 3705
Fax: 927-2657

INSTITUTE OF NUTRITION OF CENTRAL AMERICAN AND PANAMA (INCAP)
Dr. Hernán Delgado, Director
Instituto de Nutrición de Centro América y Panamá
Apartado Postal 1188
Ciudad de Guatemala, Guatemala
Cable: INCAP GUATEMALA (GUATEMALA)
Telex: 5636
Fax: 736-529

PAHO Centers

LATIN AMERICAN CENTER FOR PERINATOLOGY AND HUMAN DEVELOPMENT (CLAP)
Dr. Ricardo L. Schwarz, Director
Centro Latinoamericano de Perinatología y Desarrollo Humano
Casilla 627
Montevideo, Uruguay
Cable: CLAP MONTEVIDEO (URUGUAY)
Telex: 23023
Fax: 472-593

PAN AMERICAN CENTER FOR HUMAN ECOLOGY AND HEALTH (ECO)
Dr. Vicente M. Wirt, Director Interino
Centro Panamericano de Ecología Humana y Salud
Apartado Postal 27-473
06696 México, D.F., México
Cable: ECOTOL TOLUCA (MEXICO)
Telex: 174414
Fax: 644-04

PAN AMERICAN CENTER FOR SANITARY ENGINEERING AND ENVIRONMENTAL SCIENCE (CEPS)
Ing. Alberto Flores Muñoz, Director
Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente
Casilla Postal 4327
Lima 100, Peru
Fax: 378-289
PUBLIC HEALTH AUTHORITIES

CENTERS (cont.)

PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER (PANAPTOSA)

Dr. Vicente M. Astudillo, Director
Centro Pan-Americano de Febre Aftosa
Caixa Postal 589
(20001) Rio de Janeiro, RJ, Brasil
Cable: PANAPTOSA RIO DE JANEIRO (BRASIL)
Telex: (21) 30253 CPFABR
Fax: (005521) 771-2387
(005521) 771-3128 Ext. 249

PAN AMERICAN INSTITUTE FOR FOOD PROTECTION AND ZOONOSES (INPPAZ)

Dr. Raúl Longo, Director
Instituto Panamericano de Protección de Alimentos y Zoonosis
Casilla de Correo No. 44
(C.P. 1640) Martinez
Buenos Aires, Argentina
Cable: INPPAZ MARTINEZ (ARGENTINA)
Telex: 24577
Fax: 112328

LATIN AMERICAN AND CARIBBEAN CENTER ON HEALTH SCIENCES INFORMATION (BIREME)

Dra. Celia Zaker, Directora
Centro Latinoamericano y del Caribe para Información en Ciencias de la Salud
Organización Panamericana de la Salud
Caixa Postal 20381
CEP.05022-002 São Paulo, SP, Brasil
Cable: BIREME SÃO PAULO (BRASIL)
Fax: 571-1919

PROGRAM FOR HEALTH TRAINING FOR CENTRAL AMERICA AND PANAMA (PASCAP)

Dr. Rodrigo Barahona, Director
Programa de Adiestramiento en Salud para Centro América y Panamá
Avenida 10, Calle 13-15, No. 1364
San José, Costa Rica
Cable: PASCAP SAN JOSE (COSTA RICA)
Telex: 2742
Fax: 218-518
PETER T. JOHNSON, Bibliographer for Latin America, Spain and Portugal and a Lecturer in the Program in Latin American Studies at Princeton University, maintains an active interest in non-commercial publishing, particularly grey literature. As the Chair of the Seminar on the Acquisitions of Latin American Library Material's Subcommittee on Marginalized Peoples and Ideas (1987-1990), he organized various panels and workshops concerning collection development, acquisition, cataloging and preservation questions germane to these primary sources. Over the course of more than 20 years he has made acquisition trips to most Latin American countries and conducted field research in Chile, Argentina, Brazil and Cuba. Among his publications are:


PRINCETON UNIVERSITY LIBRARIES
LATIN AMERICAN GREY LITERATURE COLLECTIONS

Introduction

There exists a diverse and extensive written record concerning virtually all aspects of Latin American society over the last 150 years. Because many of these publications have found their way into research libraries, today it is possible to study various dimensions of Latin America using the books, newspapers, journals, pamphlets, and posters of the period in addition to secondary sources. Even so, a comprehensive collection of publications with research value continues to prove an elusive goal because of the complexities of Latin American societies, changing governments, unstable economies, turbulent political life, and social inequities that affect significant proportions of the population of most countries. Furthermore, much of the documentation that is readily available to libraries emanates from those public or private sector organizations which compile and distribute publications advancing particular perspectives or arguments representative of groups in power.

Scholars have long recognized that not all voices important for understanding Latin America are readily accessible in research library collections because of acquisition difficulties, collection development policies, processing costs, and preservation considerations. Such constraints do not diminish the worth of the information but rather highlight the fact that relatively few libraries are in a position to collect consistently the documentation from marginalized groups, political opposition forces in countries that are not democratically ruled and various non-mainstream organizations devoted to a wide range of socioeconomic and cultural activities at local and regional levels. Such primary sources, as well as specialized government publications, when combined with secondary sources such as working papers from research institutes constitute an invaluable source of documentation for future study. Toward meeting current and future research needs, the Princeton University Libraries have endeavored to acquire, on a selected basis, those publications which provide access to perspectives on and information from such groups involved with different aspects of Latin American life.

Collection Contents

Emphasized throughout are those publications providing substantive content with only samples of documentation containing limited information. Such publications are useful in that they provide a direct and often intimate insight on a particular historic moment, such as a political party campaign or a strike. Depending on the content and issuing agencies, serial publications are included either because of a title's particular importance for documenting a situation or as a sampling within that subject area. Posters are included in the collection primarily for the information they convey and only occasionally for solely aesthetic value. Government publications are usually the type intended to convey procedures (e.g., for elections), present or evaluate government plans that deal primarily with a broad range of development issues, report on the activities of particular agencies within a ministry, and address topics of importance to foreign relations (e.g., speeches and declarations).

Working papers from research institutes and activist groups constitute an important body of data representing scholarly thought through microlevel studies. In many cases, these publications are the only works that address topics with scarce or non-existent primary sources. Particularly in the areas of gender studies and race issues, working papers draw extensively from interviews and related fieldwork. In instances of military or other forms of non-democratic rule, research organizations often are the only truly independent scholarly bodies permitted to write and publish without censorship. Under these circumstances, working papers become valuable critiques of contemporary circumstances as well as reflective essays on the relevant political, social and economic issues.
Selection

Amidst a substantial variety of publications, selection has emphasized substantive works that also reflect the needs and interests of potential readers. As resources permitted, every attempt was made to include as many perspectives on an issue as possible. Special attention to the “voz popular” ensures the presence of works written by, or for, those at the margins of economic, political and social power (e.g., women residents of squatter settlements, guerrillas). As appropriate, such perspectives are balanced by the inclusion of available government and other “official” agencies’ publications, and by studies from research institutes.

For socioeconomic topics, collecting emphasis is on development issues ranging from feasibility studies to evaluations. A limited number of reports of a restricted circulation nature from multi-national lending agencies are also included.

The countries best represented are Argentina, Brazil, Chile, and Cuba with emphasis on materials that document socioeconomic and political conditions. Often, extensive coverage exists for the different points of view advocated by interest groups, and in the case of Cuba, by the government. For the time period represented for each topical group of materials, researchers will find publications in substantial quantity that address different levels of readers. Such a panorama of perspectives and consideration of different potential audiences make the complete country collections particularly rewarding for those seeking inclusiveness. More narrowly defined coverage is present for Peru, Nicaragua, Bolivia, and Uruguay, where emphasis is on fewer topics but still with substantial representation of the interest groups writing for different levels of readers. For the remaining Latin American countries overall coverage is not comprehensive but rather has emphasized particular topics or periods.

Oral Presentation

The oral presentation accompanied by appropriate informational sheets covers:

1. methods for identification of issuing bodies
2. acquisition strategies
3. organizing, cataloging, and preserving
4. access issues

Reference to other collecting libraries as reported to the Seminar on the Acquisition of Latin American Library Materials (SALALM) Subcommittee on Marginalized Peoples and Ideas Survey identifies the scope of collecting efforts and the existing deficiencies. Given the dynamic qualities of Latin American groups and the importance of their materials for understanding contemporary issues, greater cooperation and collaborative efforts will be necessary to ensure adequate coverage for scholarly and immediate informational needs. Through SALALM, the Latin American Studies Association, regional cooperative arrangements and institutional agreements, libraries will continue to grapple with mixed success toward meeting the challenge Grey Literature presents. Much more work remains for true mastery.

Peter T. Johnson
TEL 609-258-3193
FAX 609-258-5571 or 609-258-4105
E-Mail: petertj@phoenix.princeton.edu

PTJ_GreyLiteratureConference_0793
Human rights in Argentina, II [microform]: a collection of pamphlets.--
138 items: ill., maps, charts.

Some items in English.
Includes maps, posters, broadsides, newspapers.

Box 1
Brazilian Federal and State Elections 1986, 1988, 1989:
	pamphlets III

1986 Elections
Folder 1 - Partido Democrático Social (PDS)
Partido Frente Liberal (PFL)
Partido do Movimento Democrático Brasileiro (PMDB)
Partido da Social Democracia Brasileira (PSDB)
Partido dos Trabalhadores (PT)
Partido Trabalhista Brasileiro (PTB)
unidentified campaign literature

1988 Elections
Folder 2 - Aliança Popular Progresiva (APP)
Partido Comunista do Brasil (PCdoB)
Partido Democrático Cristão (PDC)
Folder 3 - Partido Democrático Trabalhista (PDT)
Folder 4 - Partido Democrático Social (PDS)
Partido Frente Liberal (PFL)

Folder 5 - Partido Liberal (PL)

Folder 6 - Partido do Movimento Democrático Brasileiro (PMDB)
Folder 7 - Partido Mobilização Nacional (PMN)
Partido Socialista Brasileiro (PSB)
Partido Social Democrático (PSD)
Partido da Social Democracia Brasileira (PSDB)
<table>
<thead>
<tr>
<th>Country</th>
<th>Contact Person</th>
<th>Address</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>García Cambeiro, Fernando</td>
<td>Box 014, Skyway USA 7331 NW 35th Street Miami, FL 33122</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Roass, Nicolás</td>
<td>C.C. 51 Suc. 12B 1412 Buenos Aires, Argentina</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Guttenaz, Werner</td>
<td>Los Amigos del Libro Casilla 450 Cochabamba, Bolivia</td>
<td>1, 2, 3, 5</td>
</tr>
<tr>
<td></td>
<td>Montalvo, Alfredo, Manager</td>
<td>P.O. Box 18400 Miami, FL 33116</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td>Brazil</td>
<td>Araujo, Vera de Susan Bach, Ltd.</td>
<td>Rua Visconde de Caravelas 17 22271 Rio de Janeiro, Brazil</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Ehlers, Lucia, Manager</td>
<td>Calça Postal 21206 04698 São Paulo-SP, Brazil</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td>McCarthy, Katia</td>
<td>Calça Postal 4107 51.022-970 Recife, PE, Brazil</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Herrera, J. Noé</td>
<td>Calça Postal 101126 Calça Postal 12053</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Viñolo, Alfonso J.</td>
<td>Libros Latino P.O. Box 1103 Redlands, CA 92373</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Villegas, Sandra</td>
<td>Literatura de Vientos Tropicales P.O. Box 16176 Chapel Hill, NC 27516-6176</td>
<td>1, 2, 3, 5</td>
</tr>
<tr>
<td></td>
<td>Villegas, Sandra</td>
<td>Central America P.O. Box 16176 Chapel Hill, NC 27516-6176</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Chile</td>
<td>Berenguer León, Herta H. B. Publicaciones Box 16598, Correo 9 Santiago, Chile</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Ehlers, Lucia, Manager</td>
<td>Portugal 12, Depto. 46 Santiago, Chile</td>
<td>1, 2, 3, 5</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
<td>Herrera, J. Noé Libros de Colombia Apantados 101126 y 12053 Bogotá, Colombia</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Paraguay</td>
<td>Libraría Comuneros Editorial Coro Coro No. 289, Casa Iturbe Casilla Correo 930 Asunción, Paraguay</td>
<td>1, 3, 5</td>
</tr>
<tr>
<td></td>
<td>Peru</td>
<td>E. Iturraga &amp; CIA.S.A. Casilla 4840 Lima, Peru</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Spain</td>
<td>Sánchez Cuesta, León Librero, S.A. Apodaca, 1</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td>Uruguay</td>
<td>Retta, Luis A. Skyway USA 6 7331 NW 35th Street Box #MVD 110 Miami, FL 33122</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Venezuela</td>
<td>Editorial Inca P.O. Box 18400 Miami, FL 33116</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Central America</td>
<td>P.O. Box 16176 Chapel Hill, NC 27516-6176</td>
<td>1, 2, 3, 5</td>
</tr>
<tr>
<td></td>
<td>MACH</td>
<td>Apartado Postal 13-319 Deleg. Benito Juárez 03500 México, D.F., México</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>E. Iturraga &amp; CIA.S.A. Casilla 4840 Lima, Peru</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Mexico Norte</td>
<td>E. Iturraga &amp; CIA.S.A. Casilla 4840 Lima, Peru</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Bolivia</td>
<td>P.O. Box 1103 Redlands, CA 92373</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Ecuador</td>
<td>Libros Ecuadorianos Apo. 3 Cuenca, Ecuador</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Uruguay</td>
<td>Editorial Inca P.O. Box 18400 Miami, FL 33116</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
<td>Herrera, J. Noé Libros de Colombia Apantados 101126 y 12053 Bogotá, Colombia</td>
<td>1, 2, 4, 5</td>
</tr>
<tr>
<td></td>
<td>CENAC</td>
<td>P.O. Box 16176 Chapel Hill, NC 27516-6176</td>
<td>1, 2, 3, 5</td>
</tr>
<tr>
<td></td>
<td>MACH</td>
<td>Apartado Postal 13-319 Deleg. Benito Juárez 03500 México, D.F., México</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>E. Iturraga &amp; CIA.S.A. Casilla 4840 Lima, Peru</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td></td>
<td>Uruguay</td>
<td>Editorial Inca P.O. Box 18400 Miami, FL 33116</td>
<td>1, 2, 5</td>
</tr>
</tbody>
</table>
BIOGRAPHY

OF

DOROTHY SCHRADER

Current position: Associate Register of Copyrights for Legal Affairs (General Counsel) U.S. Copyright Office

Educational background:

J.D. Harvard Law School
A.B. University of Southern California

Bar membership:

District of Columbia bar
Supreme Court bar

Copyright experience:

Various legal and administrative positions in the U.S. Copyright Office, including Assistant Chief of the Examining Division; member or head of many U.S. Delegations to international copyright meetings; author of several published articles; former Adjunct Professor of Copyright Law at Georgetown University Law Center
"INTELLECTUAL PROPERTY ISSUES IN GRAY LITERATURE"

Topic: Copyright in Gray Literature

by

Dorothy Schrader
General Counsel
U.S. Copyright Office
I. BASIC PRINCIPLES OF THE CURRENT COPYRIGHT ACT

A. "Automatic" copyright from creation
   - single national system
   - ideas not protected
   - broad subject matter protection

B. Duration
   - life plus 50 for individual author's works; the shorter of 75 years from publication or 100 years from creation for corporate works

C. Formalities
   1. Copyright notice (optional)
      - evidentiary significance
   2. Registration
      - voluntary; encouraged by several incentives including presumption of copyright validity and extra remedies
   3. Recordation
      - documents, such as licensing agreements, security interests, and wills
   4. Deposit
      - for registration (optional)
      - for Library of Congress (mandatory)
D. Exclusive rights
   - five: reproduction; adaptations; public distribution; public performances; public display

E. Exemptions
   - fair use; library photocopying; certain performances

F. Compulsory licenses

G. Remedies

1. Civil
   - injunction
   - actual damages
   - lost profits
   - seizure of infringing copies
   - statutory damages and attorney's fees for registered works

2. Criminal
   - for willful infringement for the purpose of commercial gain
   - up to 5 years in jail or up to $250,000 in fines if an individual infringer, or $500,000 in fines if an organization
II. BASIC PRINCIPLES OF INTERNATIONAL COPYRIGHT

A. Introduction

Copyright protection is dependent upon national laws. International copyright conventions have created uniformity on some points of copyright law and have greatly simplified the formal requirements for obtaining copyright in countries of which the author is not a national. "International copyright" is not a body of uniform laws; the term encompasses the treaties and conventions, both bilateral and multilateral, between nations that require them to accord copyright protection in their own territories to the works of nationals of the other contracting nations, and sometimes to works first published in a foreign country.

Since copyright has no extraterritorial effect, an aggrieved author or other copyright owner must establish his or her rights under the national law of the forum, which law includes the forum country's treaty obligations in the field copyright.

B. International Copyright Protection: In General

There is no such thing as an "international copyright" that will automatically protect an author's writings throughout the entire world. Protection against unauthorized use in a particular country depends, basically, on the national laws of that country. However, most countries do offer protection to foreign works under certain conditions, and these conditions have been greatly simplified by international copyright treaties and conventions.

The United States is a member of the Berne Convention (effective March 1, 1989) and of the Universal Copyright Convention (the UCC) (effective September 16, 1955). Generally, a work by a national or domiciliary of country that is a member of Berne or of the UCC or a work first published in a member country may claim protection under the respective conventions. If the work bears the notice of copyright in the form and position specified by the UCC, this notice will satisfy and substitute for any other formal conditions a UCC member country would otherwise impose to secure copyright. Formalities are not permitted under the Berne Convention.

An author who wishes protection for his or her work in a particular country should first find out the extent of protection of foreign works in that country. If possible, he or she should do this before the work is published anywhere, since protection may often depend on the facts existing as the time of first publication.

If the country in which protection is sought is a party to one of the international copyright conventions, the work may generally be protected by complying with the conditions of the convention. Even if the work cannot be brought under an international convention, protection under the specific provisions of the country's national laws may still be possible. Some countries, however, offer little or no copyright protection for foreign works.

Copyright relationships between two countries may be based either upon a multilateral agreement (a treaty or convention) involving many countries, or upon a bilateral agreement between the two countries.
The nature of the obligations assumed may be either based on national treatment or upon material reciprocity. National treatment means that Country A agrees to accord the same copyright protection to works by nationals of, or works first published in, Country B as Country A gives to works of its own nationals. That is, the foreigner is assimilated fully to the rights of the national author without any discriminatory treatment. Both the Berne and Universal Copyright Conventions require national treatment as the cornerstones of protection, subject to a slight measure of reciprocity in calculating the term of copyright (i.e., a country may generally apply the term of the country of origin if it is shorter than the term set by national law).

Material reciprocity means that country A accords copyright protection to works by nationals of, or works first published in, Country B to the same extent as Country B protects works emanating from Country A. Many bilateral agreements provide for reciprocity.

C. Summary of Eligibility Provisions of Current U.S. Law

Copyright protection is available for all unpublished works, regardless of the citizenship or domicile of the author.

Published works are eligible for copyright protection in the U.S. if any one of the following conditions is met:

- on the date of first publication, one or more of the authors is a national or domiciliary of the U.S. or of a country that is a party to a copyright treaty
to which the U.S. is also a party, or is a stateless person wherever that
person may be domiciled; or
the work is first published in the U.S. or in a foreign nation that, on the date
of first publication, is a party to Berne Convention or the Universal
Copyright Convention

D. Sources of Protection for U.S. Works in Foreign Countries
1. Berne Convention
2. Universal Copyright Convention
3. Mexico City Convention of 1902
4. Buenos Aires Convention of 1910
5. Presidential Proclamation System of Bilateral Agreements and Treaties
Robert S. Weiner

Director, U.S. Sales
COPYRIGHT CLEARANCE CENTER

Mr. Weiner is responsible for United States sales and service of CCC's Annual Authorization Service (AAS) licensing program, and CCC's Electronics Program. He also manages the company's Marketing activities.

Previously, Mr. Weiner has had more than 20 years experience in management, marketing and sales at such "Fortune 50" companies as the Xerox Corporation, at which he was Northeast Region Manager, and the Digital Equipment Corporation, where he was Senior Marketing Executive.

He has also been a Senior Vice President of Sales and Marketing and a Partner at Technology Concepts, a computer networking company now a subsidiary of the Bell Atlantic Corporation.

Mr. Weiner attended the University of Texas and Fairleigh Dickinson University from which he received a bachelor's degree in Economics and an MBA in International Marketing.
The presentation will focus upon 3 primary areas:

1) copyright issues pointing up the need for a copyright policy;

2) a summary of the recent court decision in AGU v. Texaco;

3) a brief description of the services offered by the Copyright Clearance Center to facilitate copyright policy.

(Handouts will be available after the presentation.)

N.B. The Copyright Clearance Center does not deal in "gray literature" in the traditional sense, but rather is an agent of publishers in the exchange of photocopy permissions and royalties between users and publishers, many of whom are foreign publishers.

* REQUIRE AN OVERHEAD PROJECTOR, PLEASE.
Paul Baker is a Presidential Management Intern on special assignment to the NASA HQ STI Program for studying intellectual property rights issues involved in international information exchanges. He is employed as a management analyst at NASA - Goddard Space Flight Center in the Homer E. Newell Library, where he oversees all the information technologies used in the library. He received his Masters of Public Management from University of Maryland, and worked formerly for the Institute for International Economics, University of Maryland Chemistry Electronics Facility, and the U.S. Navy.
Robert R. Freeman

Mr. Freeman is Director of Acquisitions at NTIS, where he has been employed since 1990. His previous post was with the Food and Agriculture Organization of the United Nations. He has worked in the information services and systems field for 34 years, including 25 in the Government. He was educated at the University of Rochester, Massachusetts Institute of Technology, and the University of Washington.
NTIS Views on Gray Literature and Foreign Acquisitions

Robert R. Freeman

September 1993
"Old" Gray Literature

- Results of Government-sponsored research and development
- Disseminated in printed form on paper or microfiche media
- Market failure:
  - Recognized public benefit in having permanent availability
  - Inadequate incentives to the private market
  - Leads to dissemination through Government-operated clearinghouses rather than commercial and scholarly publishers
Four Eras in STI*

- Era 1 - Results of Government-sponsored research and development
- Era 2 - Support to large, single-agency, mission-oriented science & technology
- Era 3 - Complex, multi-agency social and environmental programs
- Era 4 - Information Age -
  » STI supporting economic strength and quality public services
  » distinction between STI and other information blurred

* After V. Giuliani, Into the Information Age, 1978
Causes of Change from "Old" to "New" Gray Literature

- Expanded role of public sector as producer and provider of technical information
- Blurred distinction between technical information and other kinds
- New storage media
- New dissemination media
“New” Gray Literature - Expanded Role of Government

- Government regulation of technology impacts
  » Regulatory reports
  » Risk analyses
  » Inventories
  » Compliance reports

- Economic globalization - market development and export promotion
  » Market and technology surveys
  » Country legal profiles and analyses
  » Interpretation of standards and specifications
"New" Gray Literature - Broader Concept of Tech. Information

- U.S. Comptroller General, 1954, interpreting definition in NTIS organic act (15 USC 1151-7):
  - Since industry, business, and the public are beneficiaries,
  - technical information to be disseminated
  - goes beyond applied science and mechanical arts
  - and includes all types of information bearing on business and industry,
  - including economic and market information
"New" Gray Literature - Blurred Borderlines of Tech. Information

- OMB Circular A-130, June 1993
  - Information:
    - any communication or representation of knowledge
    - in any medium or form, including
      - textual
      - numerical
      - graphic
      - cartographic
      - narrative
      - audiovisual
"New" Gray Literature - Blurred Distinction of Tech. Information

- OMB Circular A-130, June 1993
  - Information dissemination product: any
    - book
    - paper
    - map
    - machine-readable materia
    - audiovisual production
    - other documentary material
  - regardless of physical form or characteristic
  - disseminated by an agency to the public
"New" Gray Literature - New Storage & Dissemination Media

- Videotapes
- Data files
- Software
- Multimedia packages
- Electronically published documents
- Distributed via diskettes
- Distributed via bulletin boards
- Distributed via Internet FTP
"New” Gray Literature and Foreign Acquisitions

- Videotapes of Conferences
- Training tapes
- Software
- Data files


Example: Agrostat PC - worldwide agricultural, forestry, and fishery statistics on diskette with software from FAO
Comparative Productivity of Foreign Acquisitions at NTIS

- Data cover products announced by NTIS in FY1991, excluding those that sold over 500 copies
- Four reports prepared:
  » All products announced
  » Products published in the U.S.
  » Products published outside the U.S.
  » Products published in foreign languages
- Each report listed, by source and subject category:
  » All products announced
  » All products with at least one copy sold through 2/93
    Total copies sold
  » Total dollars gross sales
<table>
<thead>
<tr>
<th>Demand for Non-U.S. Documents</th>
<th>Acquired Directly by NTIS as a % of All Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources</td>
<td>Foreign Documents</td>
</tr>
<tr>
<td>Titled Announced</td>
<td>37.2%</td>
</tr>
<tr>
<td>Titled with Sales</td>
<td>22.6%</td>
</tr>
<tr>
<td>Copies Sold</td>
<td>12.8%</td>
</tr>
<tr>
<td>Sales</td>
<td>13.2%</td>
</tr>
<tr>
<td></td>
<td>Foreign Language Documents</td>
</tr>
<tr>
<td>Titled Announced</td>
<td>12.1%</td>
</tr>
<tr>
<td>Titled with Sales</td>
<td>5.1%</td>
</tr>
<tr>
<td>Copies Sold</td>
<td>2.2%</td>
</tr>
<tr>
<td>Sales</td>
<td>2.3%</td>
</tr>
</tbody>
</table>
Acquisitions Source Performance Index

= 

Sales Dollars Per Title Acquired from Source X

Avg. Sales Dollars Per Title Acquired from All Sources
<table>
<thead>
<tr>
<th>Document Characteristic</th>
<th>Acquisition Source</th>
<th>Performance Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Publications</td>
<td>NTIS Direct</td>
<td>3.61</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>All Sources</td>
<td>1.38</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>NTIS Direct</td>
<td>1.28</td>
</tr>
<tr>
<td>Baseline: All Publications</td>
<td>All Sources</td>
<td>1.00</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>Source #3</td>
<td>0.84</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>Source #2</td>
<td>0.74</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>Source #3</td>
<td>0.63</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>Source #1</td>
<td>0.58</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #1</td>
<td>0.56</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #3</td>
<td>0.41</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>All Sources</td>
<td>0.35</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>NTIS Direct</td>
<td>0.35</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #5</td>
<td>0.32</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>All Sources</td>
<td>0.19</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #4</td>
<td>0.14</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>Source #4</td>
<td>0.10</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #2</td>
<td>0.09</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>Source #2</td>
<td>0.05</td>
</tr>
<tr>
<td>Document Characteristic</td>
<td>Acquisition Source</td>
<td>Index</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Baseline: All Publications</td>
<td>All Sources</td>
<td>1.00</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>All Sources</td>
<td>1.38</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>Source #1</td>
<td>0.58</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>Source #2</td>
<td>0.74</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>Source #3</td>
<td>0.84</td>
</tr>
<tr>
<td>U.S. Publications</td>
<td>NTIS Direct</td>
<td>3.61</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>All Sources</td>
<td>0.35</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #1</td>
<td>0.56</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #2</td>
<td>0.09</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #3</td>
<td>0.41</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #4</td>
<td>0.14</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>Source #5</td>
<td>0.32</td>
</tr>
<tr>
<td>Foreign Publications</td>
<td>NTIS Direct</td>
<td>1.28</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>All Sources</td>
<td>0.19</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>Source #2</td>
<td>0.05</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>Source #3</td>
<td>0.63</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>Source #4</td>
<td>0.10</td>
</tr>
<tr>
<td>Foreign Language Publications</td>
<td>NTIS Direct</td>
<td>0.35</td>
</tr>
</tbody>
</table>
### Percentage of Sales by Subject Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Pollution and Control</td>
<td>30.6</td>
</tr>
<tr>
<td>Technology, Engineering, and Materials</td>
<td>22.3</td>
</tr>
<tr>
<td>Medicine and Health</td>
<td>8.2</td>
</tr>
<tr>
<td>Management and Social Sciences</td>
<td>7.7</td>
</tr>
<tr>
<td>Energy Sources, Services, and Technology</td>
<td>7.0</td>
</tr>
<tr>
<td>Computers, Control, and Information Sciences</td>
<td>5.6</td>
</tr>
<tr>
<td>Transportation</td>
<td>4.0</td>
</tr>
<tr>
<td>Communication</td>
<td>3.7</td>
</tr>
<tr>
<td>Basic Sciences</td>
<td>3.7</td>
</tr>
<tr>
<td>Natural Resources, Earth and Atmospheric Sci.</td>
<td>3.6</td>
</tr>
<tr>
<td>Business and Economics</td>
<td>2.2</td>
</tr>
<tr>
<td>Agriculture and Food</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Sales of Products from All Sources by NTIS Super-Category

- Environmental Pollution and Control
- Medicine and Biology
- Administration and Management
- Computers, Control, & Information Theory
- Energy
Sales of Foreign Products from All Sources

- Communication
- Environmental Pollution and Control
- Computers, Control, & Information Theory
- Aeronautics and Aerodynamics
- Materials Sciences
- Energy
- Space Technology
- Transportation

NTIS Super-Category

45 68 82 51 71 97 84 85 46 48 41 77 57 47 50 74 81 49 89 99 98 96 72 79 91 70 55 75 95 63 76 92 94 88 54 43 44 82
Sales of Foreign Products Acquired Directly by NTIS

- Communication
- Computers, Control, & Information Theory
- Environmental Pollution and Control

NTIS Super-Category

45 82 69 46 41 71 85 50 96 47 49 97 57 89 99 70 48 70 51 72 74 94 95 81 88 77 92 91 98 84 63 55 54 75 44 43 76 82
Sales of Foreign Language Products from All Sources

Space Technology
Materials Sciences
Aeronautics and Aerodynamics
Energy
Environmental Pollution and Control
Transportation

NTIS Super-Category
Sales of Foreign Products from Source #1 by NTIS Super Category

Aeronautics and Aerodynamics

Materials Sciences

Computers, Control, and Information Theory

Navigation, Guidance, and Control

Medicine and Biology

0.0% 5.0% 10.0% 15.0% 20.0% 25.0% 30.0% 35.0% 40.0%

51 71 62 76 57 41 81 45 46 85 63 79 41 92 49 99 47 70 48 50 68 75 95 88 94 72 55 94 97 88 98 43 44 54 77 82 91 96
Sales of Foreign Products from Source #3 by NTIS Super-Category

- Space Technology
- Aeronautics and Aerodynamics
- Computers, Control, and Information Theory
- Materials Sciences
Sales of Foreign Products from Source #4 by NTIS Super-Category

Materials Science
Environmental Pollution and Control
Transportation
Natural Resources and Earth Sciences
Aeronautics and Aerodynamics
Energy

0.0%  2.0%  4.0%  6.0%  8.0%  10.0%  12.0%  14.0%  16.0%

1971 68 85 48 51 97 77 46 47 41 81 99 79 75 89 57 94 63 48 45 78 62 84 74 55 50 91 92 70 82 95 54 72 44 88 98 98
Sales of Foreign Products from Source #5 by NTIS Super-Category

Environmental Pollution and Control
Energy
Transportation
Natural Resources and Earth Sciences
Summary Statement:

For more than 52 years the Foreign Broadcast Information Service (FBIS) has played a leading role in the acquisition, processing, and dissemination of open-source foreign media. As alternative sources of information are becoming more readily available, and because of the growing need to collect, process, and disseminate foreign-source gray literature, FBIS is reexamining its "traditional" role and beginning to explore not only new sources of open-source information, but also new methods for the handling and processing of this information. Although the topic of this presentation is "New Projects at the Foreign Broadcast Information Service," I will limit my focus to three prototype projects at FBIS which address problems specifically associated with gray literature: the Economic Security Prototype; the Russian-Language Exploitation System; the Internet. The objective of our work is to produce a focused approach and operating systems that take full advantage of commercial-off-the-shelf hardware and software while maintaining full compatibility with the developing architecture of the FBIS electronic dissemination system, "FEDS." Our work now focuses on the establishment of a standards-based information technology that will allow FBIS to process a broad range of open source information and to disseminate that information to our customers. Confronted with a changing media environment, FBIS is stepping up to these unique challenges, in part, through the following projects:

- The Economic Security Prototype (ESP) Project --

Funded from "Humint in the 90's" and "Open Source Initiatives" monies, this FBIS project was established to address a growing need to more quickly and efficiently process and disseminate Japanese gray literature. ESP was established as a five-phase program with follow-on activities leading to pilot systems:

1. Image scanning and text recognition processes for English-language gray literature from Japan;
2. Exploitation of Japanese-language databases;
3. Image scanning and text recognition processes for Japanese-language gray literature;
5. Application of a Japanese-language database "browser."

-- The Russian-Language Exploitation System (RULES) --

Funded from "Humint in the 90's" monies, the RULES prototype was designed initially to exploit the Russian "VINITI" (All-Union Institute for Scientific & Technical Information) database, which was acquired in soft-copy form by FBIS. The RULES workstation is at the prototype stage and is being developed to incorporate several other Russian databases, hard-copy materials scanned in through a Cyrillic optical character recognition system, and soft-copy files downloaded from computer networks such as the Internet.

-- The Internet --

FBIS is initializing a pilot project to implement the Internet into select field bureau sites to access foreign press information and publications. Although this project is very new and still at the prototype stage for the FBIS Warsaw Bureau, it is expected to expand to several other field sites as well. In addition to this on-line collection activity, the FBIS Engineering Services Group is also exploring the feasibility of using the Internet to host FBIS products in electronic format for easy access by our consumers.

--608187348-704686330-748200113:#27059--
NLM'S HEALTH SERVICES RESEARCH INFORMATION PROGRAM:
Highlights of Activities

The Office of Health Services Research Information (OHSRI) was established in 1990 as the focal point at the National Library of Medicine (NLM) for responding to an amendment to the Public Services Act that created the Agency for Health Care Policy and Research (AHCPR). P.L. 101-239 calls for AHCPR and NLM to work together to develop and enhance information services in the field of health services research (HSR), encompassing health technology assessment and the development of practice guidelines. AHCPR and NLM have an Interagency Agreement to support these efforts.

OHSRI, part of the Public Services Division (PSD) in NLM's Division of Library Operations (LO), includes a Special Expert in HSR, two Research Librarians, and one Technical Support staff. This core staff is substantially expanded as needed by the contribution of other LO/PSD staff, as well as staff from other NLM divisions including the Bibliographic Services Division, Technical Services Division, Office of Computer and Communication Systems, and the Lister Hill National Center for Biomedical Communications (LHNCBC), to NLM's HSR-related projects.

Improve and expand the collection, organization, and dissemination of HSR information.

NLM's Collection Development staff are obtaining input from OHSRI, AHCPR, and others to establish appropriate selection policy and acquisitions procedures for HSR literature, including technical reports. The revised Collection Development Manual includes subject statements of direct relevance to HSR (e.g., need, demand, supply, organization, utilization, cost, financing, quality, outcome).

NLM has already begun expanding the collection in HSR. Staff have reviewed over 2,000 guideline-related items supplied by AHCPR and others to identify in-scope materials not in the collection. Indexing of those items not already in the collection is under way. Staff have also been reviewing Government Printing Office, National Technical Information Service, and Dissertation Abstracts sources for possible expansion of the collection.

To further augment and improve NLM's information databases in the HSR area, NLM awarded a contract to ECRI (formerly the Emergency Care Research Institute). The purpose of this contract is to index and create machine-readable records for literature in the field of health services research, to maintain and augment the HSR subfile of NLM's DIRLINE (Directory of Information Resources Online) database, and to provide expert review and editing of NLM's UMLS® (Unified Medical Language System®) Metathesaurus® records for terms from ECRI's Universal Medical Devices Nomenclature System.

OHSRI staff have found that much HSR literature is already in the collection. Addition of new HSR literature will be in the neighborhood of approximately 2,500 items per year. Work is under way to have NLM's HSR literature specially organized and online in MEDLARS (the MEDical Literature Analysis and Retrieval System). In March 1993, HSTAR (Health Services/Technology Assessment Research), a new mechanism for storage of selected HSR citations in MEDLARS, was made available on a test basis to enable volunteer HSR users to search and identify literature of interest more easily. Results from this test should be available early in fiscal year 1994.

Enhance DIRLINE's coverage of organizations involved in health services research and the development of practice guidelines.

Additional and updated DIRLINE records will number approximately 200 per year. The first of these were added in January 1992, with additions on a quarterly basis thereafter. New records focus on technology assessors and current producers of guidelines. Input for this comes from AHCPR, ECRI, and other sources identified by OHSRI outreach to the HSR community. Organizations interested
Ione Auston is Research Librarian in the Office of Health Services Research Information (OHSRI) at the National Library of Medicine located in Bethesda, Maryland. OHSRI was established in 1990 as the focal point for the development and enhancement of information services in the field of health services research (HSR). Health Services Research is the study of the scientific basis and management of health services and their effect on access, quality, and cost of health care. HSR includes evaluation, planning, quality assessment and assurance, health technology assessment, clinical practice guidelines and health services research methods. Among other activities, this new office has provided comprehensive literature searches to nationally selected panels of health professionals for the development of clinical practice guidelines. The guidelines will become available in full text form through the National Library of Medicine's international biomedical communications network.

Ione has represented the National Library of Medicine at numerous exhibits and workshops for scientific professional societies. She has worked in academic, hospital, and specialized (international health) medical libraries.

Prior to her current position at NLM, Ione participated in the ALA Library Book Fellows Program (1988/89) as an instructor at the East African School of Librarianship, Makerere University, Kampala, Uganda.

In 1986, Ione was administrative assistant to the Second International Symposium on Neuroimmunomodulation held in Dubrovnik, Yugoslavia, and in 1987, was editorial assistant to the First Stromboli Workshop on Aging and Cancer, Stromboli, Sicily, Italy.

Ione is currently secretary/treasurer of the American Society for Information Science (ASIS) Special Interest Group on International Information Issues and is assistant chair of the ASIS Potomac Valley Chapter.

She has a bachelor's degree in Economics from the University of Georgia and an M.L.S. from the University of Maryland. Her special interests include technology transfer and small enterprise development (for both developed and developing countries).
in being included in the DIRLINE database are encouraged to contact OHSRI.

Review and revise HSR terminology in MeSH, and expand the UMLS® Metathesaurus®.

A joint NLM/AHCPR Task Force advised on revising MeSH (Medical Subject Headings) terminology in the area of HSR. "Guidelines" as a publication type was added in 1990 and expanded in November 1991 to distinguish "practice guidelines" which have a clinical focus. Nearly 60 new terms were added to the 1992 MeSH vocabulary and a restructuring of the HSR trees is included in the 1993 MeSH. In addition, the HSTAR test should provide ideas for new MeSH terms that may be needed in this area.

The current UMLS® Metathesaurus® includes terms for subjects addressed by AHCPR’s guideline panels and major research studies. Coverage of technology terminology identified by a 1989 Institute of Medicine (IOM) study, ICD9 revisions, and ECRI’s Universal Medical Device Nomenclature System will be added.

Support AHCPR-sponsored panels charged with developing clinical practice guidelines.

Since 1990, NLM has provided extensive support to the initial AHCPR guideline panels (urinary incontinence, pain (acute and cancer), HIV, low back pain, cataracts, depression, BPH, sickle cell, pressure ulcers (prevention and treatment), mammography, and Alzheimer’s). As of 1993, NLM longer provides comprehensive literature searching and literature management services to guideline panels but continues to consult on the literature search process. In addition, NLM will continue to support dissemination of AHCPR-sponsored clinical practice guidelines.

Research and develop online access to the full-text of AHCPR-approved clinical practice guidelines.

The lead for this effort has been LHNCBC’s Information Technology Branch. A state-of-the-art working prototype system has been developed and will soon be available in a test version. This system will allow for full-text retrieval of AHCPR and other practice guideline documents and "user-friendly" searching within or across documents. Individuals or organizations interested in participating in testing this system should contact OHSRI for further information.

Enhance NLM’s products, services, and outreach activities to better meet the information needs of health services researchers.

In addition to the products, services, and outreach activities described above, NLM has refined its HSR goals in response to the September 1991 report of a special IOM advisory committee of producers and users of HSR information charged with defining the information needs in this field and recommending new or enhanced services to meet these needs. Some of the activities defined in NLM’s Health Services Research Information Program: FY 1992-95 Plan include:

- Continue to participate in DHHS-wide efforts on the development of computer-based patient records;
- Expand exhibiting at national meetings to include more HSR-related organizations (e.g., AAMC, AHSR/FHSR, AMRRC, AUPHA, NAHDO);
- Advise and provide technical assistance to FHSR on the development of an HSR research-in-progress database (HSRProj) that may be mounted on the NLM system;
- Further explore the desirability of and begin planning for establishing a "Database of Datasets" on the NLM system;
- Continue to develop NLM guides, fact sheets, bibliographies, and other products targeted to the HSR community.

For more information on NLM’s HSR Information Program, contact:

Marjorie A. Cahn
Head, OHSRI
National Library of Medicine
Building 38, Room B2W24, Stop 20
Bethesda, MD 20894
cahn@lihc.nlm.nih.gov (internet)
Laurie Harrison is an International Program Analyst for the NASA Scientific and Technical Information Program. Prior to this, she held the position of Foreign Documents Acquisitioner at the NASA Center for Aerospace Information, and worked as a bilingual abstractor for the American Institute of Aeronautics and Astronautics. She earned her bachelor's degree in International Relations and Russian at Bucknell University and holds an MA in Russian Area Studies from Indiana University.
The NASA Aerospace Database contains over 2 million records. One third of these refer to documents which can be considered gray literature, including conference papers, technical reports, industry reports, preprints, theses, dissertations, and other difficult-to-obtain material. These documents are collected from over 50 countries. Many of them come to NASA with electronic citations including English abstracts. In 1992 alone, 24,171 documents were added to the database. Of these, 7,616 records were collected from outside the U.S. In the coming years this number will grow through the continuing activities of the NASA International Program. The speaker will give a brief overview of the Program, profiling the foreign gray literature collection and the methods used in its acquisition.
I am Gopi Nair. I graduated from Syracuse University, NY, with an M.S. in Information Resources Management (IRM). I worked as a Librarian in various Army libraries such as ARDEC (Army Research Development and Engineering Center), NJ; RSIC (Redstone Scientific Information Center), AL; and Pentagon. Now I am working for the Defense Technical Information Center (DTIC) as the Chief of the Cataloging and Selection branch.
DTIC and Foreign Grey Literature

Grey literature, foreign or domestic, is open source material which is usually available through specialized channels and consequently does not enter the normal systems of publication, distribution, acquisition, or bibliographic control by publishers. Grey literature include reports, technical notes and specifications, conference proceedings, reprints, translations, official publications, supplementary publications and data, trade literature, dissertations and theses, unofficial government publications, and so on. It is even known as report literature.

The Defense Technical Information Center (DTIC) is the central focal point within the Department of Defense (DoD) for acquiring, storing, retrieving, and disseminating grey literature for the DoD scientific user community. DTIC collects scientific, technical, engineering, management and other types of information, in any media or format, which meets the needs of the Defense community. DTIC has an active collection development program of grey literature whose goal is to promote the timely and continuous submission of scientific and technical publications pertinent to Defense research, development, test and evaluation, and related efforts.

DTIC's collection program focuses on domestic as well as foreign grey literature. In many instances, contributors to DTIC collections are also users of DTIC. Primary contributors of DTIC are DoD organizations and DOD contractors. Additional contributors are foreign governments and other U.S. Governments agencies and their contractors.

DTIC has also an active collection development program of foreign grey literature. DTIC has international agreements with countries like Canada, United Kingdom, Australia, Germany, Netherlands, Israel etc., for data/document exchange. DTIC obtains foreign documents either directly or through the embassy of these countries. DTIC's present Technical report database includes more than 122,000 foreign documents from over 92 countries. The number of foreign translated documents exceeds 57,000. DTIC actively seeks international cooperation among countries for information interchange. The following data shows the current foreign literature collection by country and U.S. Translation Centers.
<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>23216</td>
</tr>
<tr>
<td>Netherlands</td>
<td>8066</td>
</tr>
<tr>
<td>France</td>
<td>6702</td>
</tr>
<tr>
<td>Belgium</td>
<td>2944</td>
</tr>
<tr>
<td>Italy</td>
<td>3722</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3162</td>
</tr>
<tr>
<td>Germany</td>
<td>1934</td>
</tr>
<tr>
<td>Argentina</td>
<td>3513</td>
</tr>
<tr>
<td>Japan</td>
<td>1279</td>
</tr>
<tr>
<td>Norway</td>
<td>1376</td>
</tr>
<tr>
<td>Egypt</td>
<td>1626</td>
</tr>
<tr>
<td>Australia</td>
<td>1626</td>
</tr>
<tr>
<td>Other Countries</td>
<td>5004</td>
</tr>
<tr>
<td>U.S. Translation Centers</td>
<td>57725</td>
</tr>
</tbody>
</table>

But more than 47% of DTIC's foreign literature collection comes from translation centers such as the Army Foreign Science & Technology Center (FSTC), VA; the Foreign Technology Div (FTD), Wright Patterson AFB, OH; the Foreign Aerospace Science &Technology (FASTC), and the Foreign Technology Center (FTC), WPAFB, OH; the Defense Mapping Agency Center, MO; etc. These centers play a key role in the information interchange process.

The scope of DTIC's data collection is extensive, covering classic military subjects and a broad spectrum of other subjects such as aeronautics, missile technology, space technology, navigation and nuclear science. Because DoD's interests are widespread, such subjects as biology, chemistry, energy, environmental sciences, oceanography, computer science, sociology, and human factors engineering are also included. The benefit of having documents in one central location ensures the continuous and ready transfer of information and guards against duplication of efforts and resource expenditures. Historically, material submitted to DTIC has been in either paper or microfiche print formats. Now DTIC will accept any document in any format including nonprint products such as videorecordings, computer diskettes, and CD-ROMs. Contributors control the security classification and establish the pre-approved distribution of their documents. Contributors are assured that their documents are safely stored, and that the information may be recalled quickly for their own use whenever desired.

DTIC's holdings include technical reports (TR); management information summaries at the work unit level (WUIS); independent research and development (IR&D) efforts; and special collections such as a referral database and World War II documents which are in manual files searchable by DTIC personnel.

TR Bibliographic Database is a collection of nearly 2 million citations of technical reports and products submitted to DTIC. The WUIS database is a collection of ongoing DoD research...
and technology efforts at the work unit level. NASA efforts are also included. This database includes information concerning the what, where, when, how, at what costs, by whom, and under what sponsorship research is being performed. The IR&D database contains descriptions of technical programs which are initiated and performed by DoD contractors and are not fully funded by DoD. This database is proprietary and is made accessible only to DoD personnel with classified access. WUIS and IR&D database are designed to identify on-going research and development efforts in areas significant to DoD programs and thus avoid duplication of efforts.

Documents received in the Mail Room are barcoded and stamped and forwarded to cataloging. Documents are reviewed for pagination, legibility, distribution statements and are checked for duplicate entry in the system. Documents are then cataloged creating bibliographic citation of the record assigning Accession numbers (AD) for each document. The accession number range varies depends the classification of documents. ADA stands for documents with unlimited access, ADB for documents with limited access, ADC for classified documents and ADM for nonprint products. Documents are sent to Micrographics where they are stored on microfiche.

DTIC products and services includes

Technical reports: Provides technical reports on a demand basis in paper copy, microfiche, and nonprint format.

Automatic Document Distribution (ADD): Users establish profiles of their subject interest and receive microfiche copies of newly acquired reports twice a month.

Automatic Magnetic Tape Distribution (AMTD): Provides citations on a semimonthly basis for all DTIC accessioned technical reports on magnetic tape.

Bibliographies: Provides bibliographies on a request as the result of a search or automatic on a semimonthly basis based on a profile already setup.

Management Information System (MIS) reports (WUIS and IR&D): Demand and recurring MIS summary reports on individual requests or on the basis of a profile already set up.

Defense RDT&E Online System (DROLS): The DROLS links remote terminals located across the U.S., Canada and Europe to DTIC's central computer.

SearchMASTERO: SearchMASTERO (menu Aided Easy Searching Through Relevant Options) is DTIC's menu-driven search tool designed to help access commercial and government databases. With SearchMASTERO, there is no need to know how to conduct a search in any of the databases.
Department of Defense Gateway Information System (DGIS): DGIS, DTIC's newest technological development, offers convenient access to more than 1000 unclassified commercial and Government databases.

Manpower and Training Research Information System (MATRIS): MATRIS is an automated online DoD R&D management support database, providing a centralized source of unclassified information on planned, ongoing, and recently completed research within the Manpower, Personnel, Training, Simulation, Human Factors, and safety technology areas.

DTIC releases unclassified/unlimited technical reports to the general public through the National Technical Information center (NTIS). DTIC does not serve foreign requesters directly. DTIC assists foreign requesters through their embassies by providing information on document sources in the public domain (eg., NTIS, GPO [Government Printing Office], LC [Library of Congress]) from which services and unclassified/unlimited documents may be obtained. Information concerning procedures and channels for foreign requesters to use to obtain classified and unclassified limited documents is provided by the office of the Deputy Under Secretary of Defense for Acquisition, Director for Defense Research and Engineering, Research and Advanced Technology. There is an ongoing effort within DTIC to have international agreements with more countries for data interchange.
Ms. Cutler has worked at the Office of Scientific and Technical Information for 13 years. During her tenure at OSTI, she has held various computer-related positions, including several years of programming experience, with particular expertise in processing data from foreign sources, and the position of Chief of the Systems Analysis and Programming Development branch. In recent years, Ms. Cutler has worked in the Director's office as a program analyst for international activities. In 1993, she assumed the role of International Activities Manager for OSTI.
Grey Literature in the Department of Energy's Databases

Deborah E. Cutler
International Activities Manager
U.S./DOE Office of Scientific and Technical Information

Introduction

This paper presents statistical and historical information on the U.S. Department of Energy’s (DOE’s) foreign grey literature collection and is intended as a companion paper to the papers presented by the National Aeronautics and Space Administration (NASA) and the Defense Technical Information Center (DTIC). Each agency agreed to describe its grey literature collection in terms of historical and more recent collections. Broader statistics are given for the historical portion of the collection, with more detailed information on the most current data.

The definition of grey literature may differ slightly for each agency. For DOE’s definition, grey literature includes the following types of documents: report literature, dissertations, computer media, audio-visual materials, and other miscellaneous, not generally available materials. The report literature may include some conference literature, when the proceedings were not formally published. Thus, if publisher information was available, the document was generally not classified as grey literature. Also considered grey literature would be some translations of foreign documents. These are generally not included in the total numbers but are given as separate figures. Finally, ongoing research (or research in progress) information could also be considered grey literature, although no physical document exists. The last section of this paper discusses DOE’s foreign collection in ongoing research.

Background

The Department of Energy and its predecessor agencies have collected international scientific and technical information (STI) since the 1940’s at the Office of Scientific and Technical Information (OSTI) in Oak Ridge, Tennessee (OSTI has also undergone a number of name changes over the years). The database/publication Nuclear Science Abstracts was produced from 1948 to 1976 and included 944,236 total citations to all types of literature. In the 1950’s, the program enacted many bilateral publication exchanges with foreign organizations, with all documents coming to OSTI. Staff at OSTI had to translate the documents to the extent needed to create the bibliographic citation and English abstract. The foreign content of the total NSA database is uncertain, as much of the data about the information collected exists only in printed form. A representative sample of the records announced in NSA in 1968 indicates that for input into NSA that year, 58% was foreign research results.

To achieve a more equitable sharing in the costs and responsibilities for such a collection, in the late 1960’s the United States supported the development of an International Nuclear Information System (INIS) under the aegis of the International Atomic Energy Agency and the United Nations, with headquarters in Vienna, Austria. (The OSTI facility provides U.S. information in the INIS exchange and represents the United States as Liaison Officer.) With INIS under way, Nuclear Science Abstracts ceased publication in 1976, and INIS became the source of foreign nuclear STI for the United States. INIS membership now includes 85 countries and 15 international organizations, resulting in worldwide nuclear coverage for OSTI. The bibliographic records now come from INIS in computerized form,
enabling OSTI to cease the translating, abstracting, and cataloging of the foreign nuclear material. INIS is now also the source for foreign nuclear reports and other printed grey literature in microfiche form.

As U.S. energy interests grew in the 1970's, OSTI expanded coverage into the nonnuclear areas and in 1974 created the broader-scope Energy Science and Technology Database (EDB; formerly the Energy Data Base). Since the mid to late seventies, the primary vehicle for gathering nonnuclear foreign STI (particularly the grey literature) has been the international information exchange agreement. In 1987, OSTI played a lead role in establishing an International Energy Agency (IEA) Implementing Agreement called the Energy Technology Data Exchange (ETDE). This agreement essentially combines most of the bilateral agreements into one larger umbrella agreement currently involving 14 countries. Not only does OSTI represent the United States in the agreement, it also serves as Operating Agent. OSTI thus has full nonnuclear energy coverage from the following countries: Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, and the United Kingdom. Because the agreements specify adherence to format, bibliographic and indexing standards, OSTI receives the bibliographic data digitized and ready to pass through checking programs. Grey literature is currently received from countries in printed form.

OSTI also receives energy information from other sources such as the IEA Coal Research agreement and the IEA Greenhouse Gases R&D Programme. These two programs collect information in these specialized energy areas from over 40 countries. Additional sources of foreign STI have been other government agencies, such as NASA and the Department of Commerce's National Technical Information Service (NTIS). Magnetic-tape exchanges with these agencies have also yielded additional citations to foreign grey literature when the information was energy-related.

From bilateral and multilateral agreements and other mechanisms, the foreign information content of EDB from 1974 to present has been 52%. The percentage of foreign versus U.S. information continues to grow. For the past five years, the ratio has been 53%. In 1992, the ratio was 54% foreign.

Grey Literature Content

The exchange of grey literature has been made an explicit part of the international information-exchange agreements. Countries are required to provide computer-readable, standardized citations to grey literature and provide either a copy of the document or an availability statement for the document. Quite often, the document is not in English, but the citation will contain descriptive key words in English and an English abstract. The foreign literature has been identified by using the country of publication field. Many more documents may certainly reflect foreign research results, and studies could be done to identify this additional percentage. With regard to translations, these documents actually show the United States for country of publication, although they describe foreign literature. In the last 5 years, approximately 900 translations have been announced on EDB, including 160 in 1992 and 140 in 1993 through August. Statistics are based on when the citations were announced on the database, not on the publication date of the document.

Table 1, and Charts A and B, show statistics regarding the foreign and grey literature content of the database over time. Total foreign citations, grey literature citations, and the number of individual grey literature documents are given for each time period. Numbers also show how many documents are available domestically and how many are in English.
The statistics in the following tables are shown for various time periods:

- "Total EDB" represents the total DOE collection announced in the *Energy Science and Technology Database (EDB)* from 1974 to the present.
- "Recent Five Years" represents the records announced in the last five years on the *Energy Science and Technology Database (EDB)* from mid-1988 through mid-1993.
- "1993 To Date" represents new database records announced in 1993 through mid-August.

### Table 1. Summary of Foreign STI

<table>
<thead>
<tr>
<th></th>
<th>Total EDB</th>
<th>Recent 5 Years</th>
<th>1992</th>
<th>To Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Records</td>
<td>2,986,000</td>
<td>925,000</td>
<td>183,866</td>
<td>101,549</td>
</tr>
<tr>
<td>Foreign Records</td>
<td>1,565,500</td>
<td>487,000</td>
<td>98,755</td>
<td>59,454</td>
</tr>
<tr>
<td>Foreign Grey Literature</td>
<td>321,890</td>
<td>133,139</td>
<td>25,126</td>
<td>16,079</td>
</tr>
<tr>
<td>Individual Documents</td>
<td>177,680</td>
<td>68,000</td>
<td>12,173</td>
<td>8,685</td>
</tr>
<tr>
<td>Available in U.S.</td>
<td>* 60,000</td>
<td>38,500</td>
<td>6,918</td>
<td>5,165</td>
</tr>
</tbody>
</table>

* The earlier information was not always coded for language; this is the number known for certain that are in English.

### Chart A. Foreign STI and Foreign Grey Literature in Total EDB (1974-present)

### Chart B. Grey Literature Summary for Recent Five Years (mid-1988 to mid-1993)
Since mid-1988, EDB has included citations from approximately 90 countries or international organizations. Table 2 shows totals for the countries/international organizations with more than 1,000 foreign grey literature citations.

### Table 2. Total Citations to Grey Literature from Foreign Sources

<table>
<thead>
<tr>
<th>Country/Organization</th>
<th>5 Years</th>
<th>1992</th>
<th>1993 to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian Federation</td>
<td>19,300</td>
<td>3,510</td>
<td>630</td>
</tr>
<tr>
<td>Germany</td>
<td>18,380</td>
<td>3,490</td>
<td>2,670</td>
</tr>
<tr>
<td>Canada</td>
<td>17,830</td>
<td>3,070</td>
<td>2,330</td>
</tr>
<tr>
<td>Japan</td>
<td>11,210</td>
<td>1,870</td>
<td>1,840</td>
</tr>
<tr>
<td>Brazil</td>
<td>10,170</td>
<td>2,000</td>
<td>660</td>
</tr>
<tr>
<td>IAEA</td>
<td>7,600</td>
<td>1,350</td>
<td>1,150</td>
</tr>
<tr>
<td>France</td>
<td>7,390</td>
<td>1,590</td>
<td>540</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5,000</td>
<td>880</td>
<td>500</td>
</tr>
<tr>
<td>Denmark</td>
<td>3,800</td>
<td>710</td>
<td>720</td>
</tr>
<tr>
<td>Sweden</td>
<td>3,130</td>
<td>490</td>
<td>370</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>3,010</td>
<td>600</td>
<td>180</td>
</tr>
<tr>
<td>Israel</td>
<td>2,340</td>
<td>430</td>
<td>100</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2,240</td>
<td>380</td>
<td>380</td>
</tr>
<tr>
<td>Italy</td>
<td>2,180</td>
<td>330</td>
<td>380</td>
</tr>
<tr>
<td>Finland</td>
<td>2,080</td>
<td>370</td>
<td>470</td>
</tr>
<tr>
<td>Australia</td>
<td>1,870</td>
<td>370</td>
<td>300</td>
</tr>
<tr>
<td>Austria</td>
<td>1,760</td>
<td>310</td>
<td>130</td>
</tr>
<tr>
<td>India</td>
<td>1,500</td>
<td>600</td>
<td>450</td>
</tr>
<tr>
<td>Norway</td>
<td>1,440</td>
<td>280</td>
<td>210</td>
</tr>
<tr>
<td>South Africa</td>
<td>1,300</td>
<td>290</td>
<td>90</td>
</tr>
<tr>
<td>China</td>
<td>1,280</td>
<td>340</td>
<td>200</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1,250</td>
<td>250</td>
<td>320</td>
</tr>
<tr>
<td>Other</td>
<td>6,940</td>
<td>1,490</td>
<td>1,380</td>
</tr>
</tbody>
</table>

### Chart C. Foreign Sources for Grey Literature (Past 5 Years)
Document Language

Non-English documents are represented by a variety of languages. For the most recent information (since mid-1988) a tally of the top languages for the individual documents was possible. Table 3 shows the languages most used and the number of documents in each language.

Table 3. Language of Documents

<table>
<thead>
<tr>
<th>Language</th>
<th>5 Years</th>
<th>1992</th>
<th>1993 To Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>38,500</td>
<td>6,920</td>
<td>5,160</td>
</tr>
<tr>
<td>German</td>
<td>9,250</td>
<td>940</td>
<td>1,320</td>
</tr>
<tr>
<td>Russian</td>
<td>4,100</td>
<td>770</td>
<td>330</td>
</tr>
<tr>
<td>French</td>
<td>2,820</td>
<td>430</td>
<td>270</td>
</tr>
<tr>
<td>Portuguese</td>
<td>2,720</td>
<td>320</td>
<td>310</td>
</tr>
<tr>
<td>Japanese</td>
<td>2,320</td>
<td>310</td>
<td>280</td>
</tr>
<tr>
<td>Swedish</td>
<td>1,400</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>Finnish</td>
<td>940</td>
<td>150</td>
<td>120</td>
</tr>
<tr>
<td>Danish</td>
<td>800</td>
<td>310</td>
<td>210</td>
</tr>
<tr>
<td>Other</td>
<td>5,150</td>
<td>1,700</td>
<td>430</td>
</tr>
</tbody>
</table>

Chart D. Non-English Languages (Past 5 Years)

Availability of Citations/Documents

Access to the database is limited to the 14 member countries of the IEA Energy Technology Data Exchange program. The database is available in many forms and subsets including online databases: Energy Science & Technology file on Dialog Information, Energy on STN International, and OSTI's own online Energy Science and Technology Database. The database is available on compact disc from SilverPlatter Information as ETDE Energy Database. NTIS provides the database and foreign grey literature for which microfiche is available via its database/publication Government Research Abstracts. Compact disc versions of the Dialog Information databases EDB and NSA should be available soon.

Grey-literature documents are stored mainly in microfiche form. As shown in Table 1, a large percentage (approximately 70%) of the grey literature cited in EDB is available from a source within the United States. OSTI provides copies for DOE and its contractors, while the public source for the documents is NTIS. For the other citations, an availability statement is provided that tells where the document can be obtained.

Grey Literature for Ongoing Research

OSTI also has bilateral exchange agreements with a few countries for records on ongoing research, otherwise known as research in progress (RIP) information. Currently, OSTI has agreements with Germany, the Nordic Consortium (Denmark, Finland, Norway, and Sweden) and Australia. OSTI also receives RIP information from the IEA Coal Research agreement. These records are included on the FEDRIP file on Dialog, as well as OSTI's online system, but are limited to U.S. access only.
FSL - ZAI's Third Year and Optimistic

Mr. Sweeney has been Assistant Administrator of the Foreign Science Library since 1991 when it was moved to Dayton and Zimmerman Associates Inc. (ZAI) assumed its management and operation. His principal responsibilities of interest to this conference are in the acquisition field where he handles the procurement of books, conference proceedings, professional society papers, journals, etc. that are requested by STIISP agencies for their retention. In most cases these items must be purchased.

Upon his discharge from the Army Air Corps in 1946, he re-joined the Air Materiel Command at Wright-Patterson and was involved with the identification and processing of captured foreign laboratory equipment and technical libraries, along with research files and papers of scientists and engineers. These holdings later proved to be invaluable to the US R&D and intelligence communities.

As an intelligence analyst with the Air Technical Intelligence Center (ATIC) during the period 1951-1959, he made extensive use of foreign open source S&T literature while preparing estimates and surveys of aerospace R&D capabilities of the Sino-Soviet block countries, as well as of selected Free World countries.

He joined McGraw-Hill, Inc. in 1959 as an in-house contractor at the Foreign Technology Division where he served as Chief Scientific Coordinator and Program Director for 22 years. These efforts were primarily devoted to the review, evaluation and eventual use of foreign S&T literature in support of specific FTD programs. This was accomplished through the use of an average of 200-225 annual sub-contracts with major US aerospace companies, universities, research organizations and prominent scientists and engineers.

Following the termination of the McGraw Hill contract in 1981, Mr. Sweeney held management positions with GTE Systems, Western Division, Zimmerman Associates, Inc. and CORVUS Research. All three were under contract to FTD, thus enabling him to continue his association with the intelligence community.

During his long association with the US intelligence community and the US R&D complex, including academia, he has developed invaluable contacts for the acquisition of grey literature.

He has been a member of the Aeronautical Institute of Aeronautics and Astronautics (AIAA) since 1959 and was a member of the International Federation for Documentation (FID) 1971-1981.
The COALITION FOR NETWORKED INFORMATION was founded in March 1990 to promote the creation and use of networked information resources and services that advance scholarship and intellectual productivity. The Coalition was established and is sponsored by three associations: the Association of Research Libraries (ARL), CAUSE, and EDUCOM. ARL promotes equitable access and effective use of recorded knowledge in support of teaching, research, and scholarship. CAUSE and EDUCOM are dedicated to different aspects of introducing, using, and managing information technology and related resources in research and education communities, particularly higher education communities. A task force of over 180 institutions and organizations provides the Coalition with many of the insights, initiatives, and resources it needs to pursue its mission. Members of the Task Force include higher education institutions, publishers, network service providers, computer hardware, software, and systems companies, library networks and organizations, and public and state libraries. It is a truly diverse partnership of institutions and organizations with a common interest in realizing the promise networked information resources and services.

WHERE NETWORKING TECHNOLOGY IS TAKING US

Less than ten years after the big bang in cyberspace that created it, the Internet information environment has become home to a diverse and rapidly growing population of communities. Many of these networked communities create and use information in ways that represent modernized versions of strategies and practices that were well-established before the emergence of the Internet information environment. Other communities are striving to actualize the genuinely innovative, even transformational, potential of the Internet as a communication medium and publication channel. This talk will survey the large features of the current and relatively close horizon Internet information landscape. It will also explore a number of areas in which fundamental shifts in thinking are possible, even necessary, by creators and users of networked information resources and services. Furthermore, the speaker will be pleased to address questions about the politics and economics of the contemporary Internet, the National Research and Education Network (NREN) program, and the National Information Infrastructure (NII) initiative.
PAUL EVAN PETERS is executive director of the Coalition for Networked Information. Before founding the Coalition in March 1990, Mr. Peters was Systems Coordinator at the New York Public Library from 1987 through 1989, and was Assistant University Librarian for Systems at Columbia University, where he also earned a masters degree in sociology, from 1979 through 1986. From 1970 until 1978, Mr. Peters was a principal in a variety of research and development projects and he earned a masters degree in library and information science at the University of Pittsburgh. Mr. Peters work briefly as a Retail Systems Engineer for the National Cash Register Corporation immediately following the completion of his undergraduate studies in computer science and philosophy at the University of Dayton in 1969. Mr. Peters is a former president of the Library and Information Technology Association, is a former chair of the National Information Standards Organization, and serves on the editorial boards of a number of networking, networked information, and library technology journals.
As Program Manager for NASA's International STI Programs, Thomas F. Lahr has been responsible for formulating NASA policies on acquisition of international aerospace STI, as well as for negotiating, implementing, and monitoring exchange agreements with NASA partners worldwide. Prior to joining the STI Program, Mr. Lahr was Chief of the User Liaison Division where he was responsible for user services, special outreach programs, conferences, online system training, and user documentation. He is the recipient of the NASA Superior Accomplishment Award and the Defense Technical Information Institute's Commendable Service Certificate and Sustained Superior Performance Awards. His professional associations include American Institute of Aeronautics and Astronautics, and the American Society for Information Science. Mr. Lahr holds a master in library science degree from Catholic University in Washington, D.C.
Upon completion of graduate studies at the University of Arizona in 1971, Bruce Fiene served as an Air Force analyst at the Foreign Aerospace Science and Technology Center (FASTC), at Wright-Patterson Air Force Base. Upon leaving the Air Force in 1976, he continued working at FASTC as a civilian physicist. He specialized in reporting on developments in foreign laser weapon technology. In 1993 Mr Fiene took a position in the Literature Exploitation Division at FASTC to participate in the development of the Open Source Service Agent. Mr Fiene is the FASTC member of the STIC Open Source Subcommittee, for which he also chairs the National Open Source Requirements System Working Group. Mr Fiene is a member of the Advanced Information Processing and Analysis Steering Group and the Interagency Gray Literature Working Group, for which he also chairs the Collection Subgroup. In 1991, Mr Fiene became an Adjunct Professor for the Joint Military Intelligence College (FASTC Branch) teaching a class on the analytical exploitation of open source information.
Finding Your Way Through The Maze - A User's Technique

Bruce Ronald Fiene

Foreign Aerospace Science & Technology Center
Literature Exploitation Division
4115 Hebble Creek Road, Suite 9
Wright-Patterson AFB, OH 45433-5613

Phone: 513-257-6298
E-mail: brf53%sysa@fastc-issu.wpafb.af.mil

Introduction. Typically, intelligence programs (identified by the various INT terms) have associated with them systematic management of all components of the program - requirements, collection, processing, reporting, and dissemination of the reporting. For the greater part, substantial resources have been allocated at the national level to coordinate these activities, largely because the cost of the programs has necessitated such coordination to assure optimum allocation of collection resources to the community requirements. Open source information (which includes gray literature as a subset) is a form of reporting itself. Individual "reports" can be treated as a commodity making acquisition costs relatively flexible. While organized intelligence collection efforts for open source information have on occasion been necessitated, the majority of open source information is acquired commercially by the agency that needs it. One result has been fragmentation of the open source information acquisition effort. Except for limited coordination, multiple acquisitions of the same open source information document often occurs. The various studies of open source information have recognized this, but no effective solution has yet been implemented. However, under the auspices of the Director of Central Intelligence Open Source Coordinator Office (OSCO), the Intelligence Community (IC) is on the threshold of obtaining better value from open source information by establishing a comprehensive architecture and mechanisms to manage access, acquisition/collection, processing, distribution, storage, and retrieval. While progress is being made on open source information in general, gray literature acquisition has a number of remaining challenges. One of these is selection and systematization of gray literature acquisition methodologies from the maze of possible paths.

Opportunity. Under OSCO supported programs, the IC is taking steps to formulate an approach to the challenges that face the Community. For example, the IC is undertaking the development of a strategic plan for gray literature acquisition/collection, exploitation, dissemination, and storage. Under this effort the Community is taking the opportunity to review analysts' gray literature acquisition methodologies for adaptation and systematization.

Context. Systematization of analysts' gray literature acquisition methodologies will be carried out in the following context:

---

1 The term "collection" is herein reserved for intelligence collection activities and the term "acquisition" to those activities which treat open source information as a commodity.
The IC will not be able to control sources and methods in the open source arena as it does in the formal intelligence collection programs.

Open source information will be treated, to the greatest extent possible, as a commodity rather than an intelligence collection product.

Analysts will continue to get the information they need through whatever channels are available.

Acquisition Methodologies. Analysts' acquisition methodologies span the spectrum from passive to active. Some of the methods, in no particular order, are:

(1.) Sponsor a Symposium,
(2.) Delegation Member,
(3.) Professional Meeting Attendance,
(4.) Networking,
(5.) Contracted Acquisition,
(6.) Contracted Books,

(7.) Peer Editing,
(8.) Bulletin Board Systems,
(9.) Mailing Lists,
(10.) By Request,
(11.) No Cost Contracts, and
(12.) Information Exchanges.

Some of these activities can border on operational intelligence collection. In this context, current IC guidelines and directives are being reviewed in this new era of openness and in the face of a rapidly expanding volume of open source information.

Observations. Systematizing analytical acquisition methodologies could achieve some or all of the following:

1. Analysts, by spending less time on acquisition, will have more time to spend on analysis.
2. Acquisition becomes person independent relative to the analyst, i.e. when an analyst leaves, the acquisition system does not collapse.
3. More information will tend to be acquired than through intelligence collection channels.
4. Intelligence collection activities will be able to focus on their main mission.
5. Treated as a commodity rather than an intelligence collection product, the material will tend to be unclassified and have a broader user base.
6. Treated as a commodity rather than an intelligence collection product, the material will tend to be delivered more timely and at less cost.
7. Acquisition methodologies will be applied to a broader number of areas, since the acquisition will not be dependent upon analytical initiatives.
8. The analysts will tend to find what they need on the shelf as opposed to having to initiate acquisition activities.
Upon completion of graduate studies at the University of Arizona in 1971, Bruce Fiene served as an Air Force analyst at the Foreign Aerospace Science and Technology Center (FASTC), at Wright-Patterson Air Force Base. Upon leaving the Air Force in 1976, he continued working at FASTC as a civilian physicist. He specialized in reporting on developments in foreign laser weapon technology. In 1993 Mr. Fiene took a position in the Literature Exploitation Division at FASTC to participate in the development of the Open Source Service Agent. Mr. Fiene is the FASTC member of the STIC Open Source Subcommittee, for which he also chairs the National Open Source Requirements System Working Group. Mr. Fiene is a member of the Advanced Information Processing and Analysis Steering Group and the Interagency Gray Literature Working Group, for which he also chairs the Collection Subgroup. In 1991, Mr. Fiene became an Adjunct Professor for the Joint Military Intelligence College (FASTC Branch) teaching a class on the analytical exploitation of open source information.
FINDING YOUR WAY THROUGH THE MAZE

A USER'S TECHNIQUE

(Systematizing Analytical Acquisition Methodologies)

Bruce Ronald Fiene

23 September 1993

Foreign Aerospace Science & Technology Center
Literature Exploitation Division
WPAFB, OH 45433
OPPORTUNITY

Strategic Plan For Gray Literature

Reviewing Analysts’ Acquisition Methodologies
INTRODUCTION

Intelligence Programs - Components

Requirements
Collection
Processing
Reporting
Dissemination

Open Source - Architecture and Mechanism

Open Source Coordinator Office
## ACQUISITION METHODOLOGIES

<table>
<thead>
<tr>
<th>Sponsor a Symposium</th>
<th>Peer Editing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delegation Member</td>
<td>Bulletin Board System</td>
</tr>
<tr>
<td>Professional Meeting Attendance</td>
<td>Mailing Lists</td>
</tr>
<tr>
<td>Networking</td>
<td>By Request</td>
</tr>
<tr>
<td>Contracted Acquisition</td>
<td>No Cost Contracts</td>
</tr>
<tr>
<td>Contracted Books</td>
<td>Information Exchanges</td>
</tr>
</tbody>
</table>
CONTEXT

Intelligence Community Will Not Control Open Source Sources and Methods

Open Source Will be Treated as a Commodity

Analysts Will Continue to get Information Through Available Channels
OBSERVATIONS

BENEFITS OF SYSTEMATIZING ANALYTICAL ACQUISITION METHODOLOGIES:

Analysts - More Time for Analysis

Acquisition - Person Independent

More Information Acquired Than Through Intelligence Channels

Intelligence Collection - Focus on Main Mission

As a Commodity - Unclassified and Broader User Base

As a Commodity - More Timely and Less Cost

Acquisition - Broader Number of Areas

Information - On the Shelf
Editor of the Directory of Special Libraries and Information Centers at Gale Research Inc. (Detroit, MI).
Graduate of St. Mary's College; studied two years at Warsaw University, Poland.
Special Libraries and Information Centers as Sources

Joanna Zakalik, Gale Research Inc. (Detroit, MI)

Abstract

For three decades, the Directory of Special Libraries and Information Centers (DSL) published by Gale Research Inc. has provided contact and descriptive information on special collections in U.S., Canada, and elsewhere. The directory was started in 1963 by Anthony Kruzas, Professor of Library Science at the University of Michigan. Since its first edition the purpose of DSL has been not so much to provide a definition of a special collection but to identify a variety of types of specialized resources unique in their subject matter or form. Those specialized resources often include different forms of gray literature, such as technical and scientific reports, studies, theses, dissertations, unofficial government publications, proceedings and publications of research institutions, and others.

Over the last six years, DSL editors have made a special effort to meet the demand for a more global information base by increasing DSL's international coverage. The 17th edition of DSL provides information on more than 2,200 special collections located outside the United States and Canada and 2,350 profiles of resources located in Canada. All of the existing entries are verified and updated annually and approximately 500 new international libraries are identified and listed in each edition. DSL furnishes information on over 600 foreign academic institutions and more than 700 foreign government libraries. Entries provide in-depth information on subject matter, format, and quantitative data concerning collections as well as full contact information, including phone and fax numbers, electronic mail address, and names of head librarians and other professional staff. Locating a library maintaining a collection on a specific topic is facilitated by DSL's Subject Index, which contains more than 4,000 terms and cross-references.
Beth Duston, president of Information Strategists (Manchester, N.H.) provides information services specifically to scientific and technical corporations. These services include the organization and coordination of internal and external information, the development of information centers, database creation, and advising about new information technologies. In addition, she has 16 years experience in online searching.

Before Information Strategists, she was the corporate librarian for 10 years at Aerodyne Research, Inc. (Billerica, MA) and a bibliographer for the Physics Department at the State University of New York (Albany).

She currently works with the CENDI Secretariat and is the chairman of the Depository Library Council. She was a Presidential appointee to the Advisory Board of the White House Conference on Libraries and Information Services (1991) and chaired its Technology subcommittee.

She hold a Bachelor's degree from Simmons College and an M.L.S from SUNY (Albany).
Biosketch

Mr. Scott has, since October 1987, held the position of Assistant Director for Technology Systems Management here at the Office of Scientific and Technical Information. In this position Mr. Scott has the lead responsibility for Information Resource Management to support the accomplishment of Department of Energy missions, including: acquisition/implementation of new technology, telecommunications, systems, operations, request services, dissemination to the public, printing, graphics, electronic publishing, Energy Science and Technology Software Center, software life cycle, information systems, software management and online systems. In his career, over 20 years, he has worked as a scientist and manager in areas as diverse as industrial environmental pollution control programs and managing major DOE technology initiatives in Fossil Energy. Currently, he also chairs an intergovernmental committee on information standards. He has advanced degrees, and has received numerous awards for academic as well as professional achievement.

Within the last two years, R.L. participated as a principal in the development of the DOE Strategic Planning Initiative, SEN-25; was the Team Leader for the K-25 Site Tiger Team, as well as Team Leader for the Savannah River Environment Safety and Health Progress Assessment; he is a graduate of the DOE Senior Executive Service Candidate Program.
Raised in Richmond, Virginia, Ms. Porth graduated from the University of Virginia in 1989 with a Bachelor of Arts in History. In August 1991, she received her MLIS from the University of Texas Graduate School of Library Science. While attending classes at the University of Texas, Ms. Porth did online searching and electronic reference in her position as an assistant librarian at the Advanced Micro Devices Technical Library.

Ms. Porth accepted a position as Reference Librarian at the NASA Headquarters Library (staffed by Labat-Anderson, Inc.) in September 1991. She initiated the library's access to the Internet in June 1992 and began training library staff and patrons on its resources shortly thereafter. In June 1993, Ms. Porth became Head of Reference at NASA Headquarters.

During the past year, Ms. Porth has participated in three NASA and DC-SLA roundtables discussing the library's use of Internet resources. She has also helped members of the NASA Headquarters community to make full use of their Internet access by doing subject-oriented training sessions for patrons.
Introduction

"Internet" refers to the union of several large research computer networks including the ARPANET, BITNET, NSFNET, UUNET, and others within the United States and around the world. These networks share a common routing protocol known as "TCP/IP". Services available on the Internet include electronic mail, electronic file transfer, remote terminal access, information retrieval services, bulletin board systems, and teleconferencing.

SELECTED PUBLISHED RESOURCES


THE INTERNET
9/1/93

This bibliography has been provided by the Reference Staff of the NASA Headquarters Library.
Professor Ken Haase has been at the MIT Media Laboratory for three years, focussing on the design of content-aware media systems. He is trained in Artificial Intelligence with a focus on knowledge representation and the ways that a computer's representations can autonomously evolve in interaction with its domain. His doctoral thesis (done at the MIT AI Lab under Professor Marvin Minsky) explored representational invention in the context of mathematical concept formation.
Shades of Grey
in
Information Retrieval

Ken Haase
MIT Media Lab

One of the characteristics of visual and audio media are the multiplicity of interpretations which can be imposed on any particular fragment of material. A particular image or video sequence will be interpreted in very different ways when embedded in different contexts; this characteristic makes the retrieval of such media both more valuable and more difficult. A given fragment of video (for instance) may be used for many different purposes in different contexts and thus its 'market' is larger than for a text which offers a narrower range of interpretation. But getting to this value is complicated by the indexing problem: how do we find the fragments we can use without being deluged by the fragments we cannot. For multi-media indexing, the problem of retrieval is tightly bound to the problem of interpretation.

I discuss a variety of projects at MIT's Media Lab which explore ways of indexing images and video. These include: stream-based descriptions of video material; the use of an iconic visual language for describing images and image sequences; a variety of visual interfaces to descriptions of various sorts; the automatic and semi-automatic extraction of objects and textures from visual scenes; browsing tools for audio media. All of these are built (though in varying degrees) upon a knowledge representation and media annotation language called FRAMER.

While interpretation is a vital element of multimedia retrieval, it is also important to deep text retrieval. I will also discuss some ongoing work in textual information retrieval based on grammatical analyses of input text.
Eliot Christian works with the U.S. Geological Survey in Reston, Virginia. He has been active in issues of Data Management, especially in the context of the Global Change Research Program and the Spatial Data Infrastructure. From that work, he has become involved in the international movement toward a standards-based approach to information discovery and retrieval exemplified by the technology known as Wide Area Information Servers (WAIS). He is now working with the Office of Management and Budget to promote the establishment of an agency-based Government Information Locator Service.
Abstract of Presentation by Eliot Christian, entitled:
Toward a Government Information Locator Service

The outline of a National Information Infrastructure is beginning to take shape, encouraged by the U.S. Federal Government. In this presentation, the organization of efforts within the Executive Branch of the Government will be described. The focus of attention will be on the component being called the Government Information Locator Service, GILS.

Current discussions of the GILS are directed toward building consensus on the broad characteristics of the overall service and on the content standards for the highest level of locator information, or "metadata." Draft documents for both the characteristics and the content standards for GILS will be presented and discussed.
A few supplementary materials participants may find useful in pursuing the acquisition of foreign gray literature
ONLINE DATABASES CONTAINING GRAY LITERATURE

DATABASE: Acopline/Urbanline.
PRODUCER: London Research Centre.
HOST(S): European Space Agency Information Retrieval Service
TYPE: bibliographic.
SUBJECT: Urban-Studies.
Contains approximately 200,000 citations, with abstracts, to the worldwide literature related to urban studies. Covers population, social planning and services, housing, employment and unemployment, industrial development, environment, civil engineering, traffic engineering, transportation, landscaping, energy, architecture and architectural design, building sciences, structural engineering, fire protection and building materials, waste management, industrial relations, policy and management, finance, and local government. Sources include books, pamphlets, journal articles, national and local government press releases and publications, conference proceedings, reports, theses, bibliographies, and grey literature.
Coverage: United Kingdom, with some international coverage
Time Span: 1973 to date
Updating: Monthly

DATABASE: Baltic.
PRODUCER: Sweden Statens Naturvardsverk (SNV).
HOST(S): DAFA Data AB Rattsbanken DINDI (Deutsches Institut fur Medizinische Dokumentation und Information).
TYPE: bibliographic.
LANGUAGE: ORIGINAL LANGUAGE OF PUBLICATION, WITH TITLES ALSO IN EN; KEYWORDS IN EN ONLY.
SUBJECT: Aquatic-Sciences; Environment.
Contains approximately 3800 citations to literature on the Baltic Sea. Covers hydrography, biology, natural resources, pollution, environmental impact, research, planning, and administrative measures. Sources include books, journals, conference proceedings, research reports, dissertations, and grey literature.
CONDITIONS: initiation fee of approximately $500 to DAFA Data required.
Coverage: Baltic Sea area
Time Span: 1980 to date
Updating: Twice a year

DATABASE: COMPUSCIENCE.
PRODUCER: FIZ Karlsruhe.
HOST(S): STM International.
TYPE: bibliographic.
SUBJECT: Computer-Science.
Contains more than 241,000 citations, with abstracts, to European and North American literature on computer science. Covers theory, methodologies, mathematics of computing, computer systems organization, information systems, hardware, software, artificial intelligence, new generation computers, computer graphics, and related topics. Sources include journals, books, reports, conference proceedings, and grey literature. Corresponds to the computer science section from Mathematics Abstracts since 1972, and Computing Reviews and the ACM Guide to Computing Literature since 1977.
CONDITIONS: initiation fee of $25 to STM International required.
Coverage: International
Time Span: 1972 to date
Updating: Monthly

C-3
DATABASE: Econos.
PRODUCER: Portugal Departamento Central de Planeamiento.
HOST(S): Portugal Departamento Central de Planeamiento.
TYPE: bibliographic; full-text.
LANGUAGE(S): PT; EN.
SUBJECT: Economics; Laws-Regulations-Portugal; Library-Holdings-Portugal.

Comprises 3 files of information on economics, social development, and Portuguese legislation.

Bibliography--contains more than 25,000 citations, with abstracts, to Portuguese and foreign literature on economic and social development, regional and urban planning, agricultural and industrial policy, and the integration of Portugal into the European Community (EC). Sources include books, periodicals, reports, and governmental grey literature.

Catalog--contains citations, with abstracts, to Portuguese and foreign economics journals held by the Departamento Central de Planeamiento.

Legislation--contains citations to social and economic legislation published in series I and II of the Diario de Republica.

Corresponds in part to Informacao Economico-Social.

Coverage: Portugal, Portuguese-speaking Africa, and the European Community

Time Span: 1953 to date

Updating: 500 records a month

DATABASE: ELECTROENERGIA (Database on the Electric Power Industry).
PRODUCER: INFORMENERGO.
HOST(S): International Center for Scientific and Technical Information (ICSTI).
TYPE: bibliographic.
LANGUAGE: RS.
SUBJECT: Energy-industry.

Contains citations to literature on all aspects of electric power generation. Covers supply and demand issues, hydroelectric, thermal, nuclear, solar, and wind power, power plant engineering, and energy conversion. Sources include periodicals, technical regulations, patents, catalogs, reports, and grey literature.

Coverage: Bulgaria, Cuba, Czechoslovakia, Hungary, Poland, Romania, and C.I.S.

Updating: 12,000 records a year

DATABASE: Environment Protection and Rehabilitation of Natural Resources.
PRODUCER: VINITI (Vsesoyuznyi Institut Nauchnoy i Teknicheskoy Informatsii).
HOST(S): International Center for Scientific and Technical Information (ICSTI).
TYPE: bibliographic.
LANGUAGE: RS.
SUBJECT: Environment.

Contains citations, with abstracts, to the worldwide literature on environmental protection. Covers human health, wildlife protection and reserve management, natural disasters, pollution control and waste management, natural resources conservation, and soils protection. Sources include periodicals, monographs, dissertations, conference proceedings, patents, and grey literature.

Coverage: International

Updating: 20,000 records a year

DATABASE: European Aerospace Database.
PRODUCER: European Space Agency Information Retrieval Service
HOST(S): European Space Agency Information Retrieval Service
TYPE: bibliographic.
SUBJECT: Aeronautics-Astronautics.

Contains citations to European grey literature on the aerospace industry. Covers reports and publications from European Space Agency (ESA) programs, governments, industry, research institutes, and
universities within the ESA member nations.

CONDITIONS: Access is restricted to ESA member nations.
Coverage: Europe
Time Span: 1962 to date
Updating: monthly

DATABASE: Forensic Science Database.
PRODUCER: Great Britain Home Office Forensic Science Service, Central
Research Establishment and Support (CRSE), Information Services.
HOST(S): Data-Star
TYPE: BIOSIS Life Science Network.
SUBJECT: Forensic-Sciences-Services.

Contains more than 35,000 citations, with some abstracts, to the
worldwide literature on forensic sciences. Covers forensic biology,
chemistry, pathology, documents and firearms examination, drugs and
toxicology, case law, information management and use of computers,
and management of forensic science laboratories and programs. Sources
include some 250 journals and more than 1500 books, periodicals,
conference proceedings, technical reports, government documents, and
grey literature.
Coverage: International
Time Span: 1976 to date, with some earlier materials
Updating: Monthly

DATABASE: Grijsse Literatuur in Nederland.
PRODUCER: Netherlands Koninklijke Bibliotheek.
HOST(S): Netherlands Centrum voor Bibliotheekautomatisering Pica.
TYPE: bibliographic.
LANGUAGE: NL.
SUBJECT: Library-Holdings-The-Netherlands.

Contains approximately 56,000 citations to Dutch dissertations,
reports from local and national government agencies and scientific
institutes and other grey literature held by the Koninklijke
Bibliotheek. Corresponds to Dutch Bibliography/B-List.
CONDITIONS: Annual minimum of 550 guilders to Pica required.
Coverage: The Netherlands
Time Span: 1982 to date
Updating: Monthly

DATABASE: IBISCUS (Systeme d'information sur les pays en developpement).
PRODUCER: Association IBISCUS.
HOST(S): SUNIST.
TYPE: bibliographic.
LANGUAGE: FR.
SUBJECT: Area-Studies; Economic-Development.

Contains approximately 50,000 records of factual data and citations
to French-language literature on technical and socio-economic
projects in developing countries. Covers agriculture, commerce,
culture, economics, education, energy, environment, finance,
government, infrastructure, labor, natural resources, and transport.
Sources include periodicals, area studies, reports, and grey
literature. Also includes information on approximately 800 French
organizations in developing countries, and a list of employment
opportunities for development specialists.
Coverage: Africa, Latin America, Middle East, and Southeast Asia
Time Span: 1973 to date
Updating: 320 items every 2 weeks
DATABASE: Japanese Information on Scientific and Technical Topics.
PRODUCER: Eurobrokers S.A.R.L.
TYPE: bibliographic.
SUBJECT: Science-Technology.
Contains English-language references and abstracts of scientific and technical grey literature published in Japan.
Coverage: Japan
Time Span: 1987 to date
Updating: Monthly

DATABASE: JAPINFO.
PRODUCER: Eurobrokers S.A.R.L.
TYPE: bibliographic.
SUBJECT: Science-Technology.
Contains more than 47,000 citations, with abstracts, to the scientific and technical grey literature (e.g., reports, conference papers, and other literature not issued through conventional channels) published in Japan. Covers automotive engineering, aviation and space technology, biology, biotechnology, chemistry, communications, electronics, energy, engineering, environment, food and agriculture, information systems, materials, medicine, photographic techniques, refrigeration and heating, robotics, textiles, and transportation. Sources include more than 80 institutions and organizations. Abstracts are produced by automatic translation.
CONDITIONS: initiation fee of 100 DM to FIZ Technik required.
Coverage: Japan
Time Span: 1987 to date
Updating: Monthly

DATABASE: LOGOS.
PRODUCER: La Documentation Francaise, Banque d'Information Politique et d'Actualite (BIPA).
HOST(S): Questel.
TYPE: bibliographic; directory; full-text.
LANGUAGE: FR.
SUBJECT: Government-France.
Contains bibliographic and textual coverage of governmental information from publications issued by La Documentation Francaise since 1970 and from publications issued by the French government and grey literature published since 1982. Also includes political information from the complete texts of all speeches delivered by French presidents; speeches by major political figures, members of government, and leaders of trade unions; the full texts of releases issued by the French Conseil des Ministres; chronicles of French political events; and selections from the French national press.
CONDITIONS: annual service fee of 835 to Questel required.
Coverage: France
Time Span: Varies by file
Updating: Weekly; 2000 records a month

DATABASE: PISHEPRONFORM (Database on Food Industry and Technology).
PRODUCER: AGROMITEIP.
HOST(S): International Center for Scientific and Technical Information (ICSTI).
TYPE: bibliographic.
LANGUAGE: RS.
Subject: Food-Beverages-Industry; Food-Sciences-Nutrition.
Contains citations, with abstracts, to the worldwide literature on food science and technology. Covers the production of raw and semi-processed foods, bakery products, canned, dried, and frozen foods, meat and dairy products, wine and beverages, and perfumes and cosmetics. Sources include periodicals, reports, monographs, conference proceedings, patents, catalogs, and grey literature.
Coverage: International
Updating: 1500 records a year

Database: PSYTKON.
Producer: Universität Regensburg, Lehrstuhl Psychologie VI.
Host(s): DIMDI (Deutsches Institut für Medizinische Dokumentation und Information).
Type: Bibliographic.
Language: GE.
Subject: Educational-Materials; Psychology; Tests-Measurements.
Contains descriptive information on more than 2100 psychological and educational testing methods. Covers tests, scales, questionnaires, instruments, and computer-assisted diagnosis. Sources include published tests and unpublished tests from the grey literature.
Coverage: Austria, Germany, and Switzerland
Time Span: 1945 to date
Updating: 5 times a year

Database: RUSGREY.
Producer: USSR National Public Library for Science and Technology.
Host(s): USSR National Public Library for Science and Technology.
Type: Bibliographic.
Language: EN; RS.
Subject: Science-Technology; Library-Holdings-C-I-S; Science-Technology.
Provides bibliographic records on domestic scientific and technical grey literature acquired by Soviet libraries. Covers literature published in all languages and includes collections of scientific meetings, manuals and methodological guides, company and association publications, technical normative documents, directories, dictionaries, bibliographies, and reviews.
Coverage: Commonwealth of Independent States (C.I.S)
Time Span: 1986 to date
Updating: Monthly

Database: SOLIS.
Producer: Arbeitsgemeinschaft Sozialwissenschaftlicher Institut, Informationszentrum Sozialwissenschaften (IZ).
Host(s): DIMDI (Deutsches Institut für Medizinische Dokumentation und Information) Gesellschaft für Betriebswirtschaftliche Information mbH (GBI) STN International.
Type: Bibliographic.
Language: GE.
Subject: Social-Sciences-Humanities; Sociology.
Contains more than 125,000 citations, with abstracts, to social science literature. Covers sociology, social research methods, social psychology, social history, social problems, demography, and social science contributions in labor and employment and communications. Each record includes data on methodology and, where applicable, on the period covered and the availability of relevant published quantitative data. Sources include monographs, grey literature (e.g., reports, conference proceedings), and journals.
Conditions: Initiation fee of $25 to STN International required.
Coverage: Austria, Germany, and Switzerland
Time Span: 1945 to date
Updating: 1000 records a month
DATABASE: SOMED
PRODUCER: Institut fur Dokumentation und Information, Sozialmedizin und Öffentliches Gesundheitswesen (IDIS).
HOST(S): DIMDI (Deutsches Institut für Medizinische Dokumentation und Information).
TYPE: bibliographic.
LANGUAGE: GE; EN.
SUBJECT: Health-Care; Social-Sciences-Humanities.
Contains more than 220,000 citations, with abstracts (in about 60 percent of the records), to worldwide literature on social medicine. Covers epidemiology, evaluation and quality assurance in public health, health politics, organization of health care, industrial hygiene, industrial toxicology, vital statistics, medical rehabilitation, preventive medicine, school health, social pediatrics, social psychology, drug abuse and misuse, alcoholism, smoking, and environmental toxicology. Sources include journals, books, German dissertations, technical reports, and the grey literature.
Coverage: International
Time Span: 1978 to date
Updating: 1500 records a month

DATABASE: Suicide Information and Education.
PRODUCER: Suicide Information and Education Center (SIEC).
HOST(S): Suicide Information and Education Center (SIEC).
TYPE: bibliographic.
SUBJECT: Educational-Materials; Psychology.
Contains approximately 16,000 citations, with abstracts, to English-language materials on suicide. Covers predisposing and precipitating factors, epidemiology, assessment and treatment of suicidal behaviors, prevention and education, research, legal issues, and suicide in literature. Sources include monographs, periodicals, articles, dissertations, conference proceedings, audiovisual materials, book reviews, and grey literature.
Coverage: International
Time Span: 1955 to date
Updating: Daily

DATABASE: SWIDOC.
PRODUCER: Sociaal-Wetenschappelijk Informatie- en Documentatiecentrum (SWIDOC).
HOST(S): Nederlands Centrum voor Bibliotheekautomatisering Pica.
TYPE: bibliographic.
LANGUAGE: NL; EN.
SUBJECT: Social-Sciences-Humanities.
Contains more than 12,000 citations to Dutch dissertations, reports from government agencies, research organizations, and universities, and other grey literature in social sciences, economics, and law.
CONDITIONS: Annual subscription fee of 550 guilders to Pica required.
Coverage: The Netherlands
Time Span: 1987 to date, with earliest information from 1974
Updating: Every 2 weeks

DATABASE: System for Information on Grey Literature in Europe (SIGLE)
PRODUCER: European Association for Grey Literature Exploitation (EAGLE).
HOST(S): British Library BLAISE-LIME
TYPE: bibliographic.
LANGUAGE: EN; TITLES ALSO IN ORIGINAL LANGUAGES.
SUBJECT: Science-Technology; Social-Sciences-Humanities.
Contains more than 241,000 citations to the grey literature (e.g., reports, conference papers, and other non-conventional literature issued informally and not available through normal channels) published in most European Community (EC) member countries. Covers the fields of aeronautics; agriculture; behavioral and social sciences; biology and medicine; chemistry; earth science; electronics and electrical engineering; energy; materials; mathematics;
mechanical, industrial, civil, and marine engineering; methods and equipment; military science; missile technology; navigation, communications, detection, and counter measures; physics; propulsion and fuels; and space technology.

**CONDITIONS:** annual subscription to BLAISE-LINE required, with various subscription options available. Initiation fee of $25 to $100 international required.

**Coverage:** European Economic Community

**Time Span:** 1981 to date

**Updating:** monthly

**DATABASE:** TSVETMETINFORM (Database on the Non-Ferrous Metals Industry).

**PRODUCER:** TSNIIYTVEMET.

**HOST(S):** Canada Institute for Scientific and Technical Information (CISTI).

**TYPE:** bibliographic.

**LANGUAGE:** RS.

**SUBJECT:** Metallurgy; Mining-Industry.

Contains citations, with abstracts, to Russian literature on mining, metallurgy, and processing of non-ferrous metals. Covers mining and ore concentration, engineering, production of light and heavy metals, production of rare metals, environmental protection, and secondary metallurgy. Sources include periodicals, reports, monographs, catalogs, licenses, conference proceedings, and grey literature.

**CONDITIONS:** CAN/OLE accessible only in Canada.

**Coverage:** Commonwealth of Independent States (C.I.S.)

**Updating:** 1500 records a year

**DATABASE:** Ugol'nya Promyshlennost (Database on the Coal Industry).

**PRODUCER:** TSNIIIEUGOL.

**HOST(S):** Canada Institute for Scientific and Technical Information (CISTI).

**TYPE:** bibliographic.

**LANGUAGE:** RS.

**SUBJECT:** Energy-Industry.

Contains citations to literature on coal mining and processing. Covers geology and hydrogeology, mining engineering, open and underground quarrying technologies, rock blasting, ore processing, environmental protection, land rehabilitation, waste management, safety, and coal industry economics in the C.I.S., Eastern Europe, and Mongolia. Sources include periodicals, monographs, reports, patents, technical regulations, catalogs, and grey literature.

**CONDITIONS:** CAN/OLE accessible only in Canada.

**Coverage:** International

**Updating:** 10,000 records a year

**DATABASE:** VINITI, Database of the All-Union Institute for Scientific and Technical Information.

**PRODUCER:** VINITI (Vsesoyuznyi Institut Nauchnoy i Tekhnicheskoj Informatsii).

**HOST(S):** International Center for Scientific and Technical Information (ICSTI).

**TYPE:** bibliographic.

**LANGUAGE:** RS.

**SUBJECT:** Science-Technology.

Contains citations, with abstracts, to scientific and technical literature published in the former Soviet Union. Major areas covered include electronics, machine engineering, nuclear power, robotics, superconductivity, environmental protection, biotechnology, bioengineering, computer technology, and information sciences. Sources include monographs, serials, technical specifications, conference proceedings, dissertations, patents, industrial catalogs, and grey literature.

**Coverage:** Commonwealth of Independent States (C.I.S.)

**Updating:** 65,000 records a year
DATABASE: Volnet UK.
PRODUCER: The Volunteer Centre UK.
HOST(S): The Volunteer Centre UK.
TYPE: bibliographic.
SUBJECT: Social-Services; Funding-Sources-Contracts-Awards.
Provides more than 50,000 citations, with abstracts, to journal articles and other literature relating to community work and volunteering. Covers social policies, disadvantaged groups, community care, employment, local programs, recreation, grants, voluntary work, inner cities, citizenship volunteer bureaus, crime prevention, women's rights, self-help counselling, rural areas, young people, economic initiatives, community projects, government policy, racism, health, community arts, bereavement, ethnic groups, hospitals, housing, child care, local development, community enterprise, and privatization. Sources include journals, books, grey literature, and other material compiled in cooperation with the Community Projects Foundation.
Coverage: United Kingdom
Time Span: 1985 to date
Updating: 200 records a week

DATABASE: VRMODOC.
PRODUCER: Netherlands Ministry of Housing, Physical Planning and Environment.
HOST(S): Rijks Computer Centrum.
TYPE: bibliographic.
LANGUAGE: NE.
SUBJECT: Architecture; Construction-Industry; Environment; Urban-Regional-Planning.
Contains more than 47,000 citations, with abstracts, to Dutch literature on housing, architecture, construction engineering, renovation, urban and spatial planning, environmental issues, and land registry. Sources include books, technical reports, periodicals, grey literature, and Ministry press releases.
Coverage: The Netherlands
Time Span: 1982 to date
Updating: 500 records a month
JOURNAL ARTICLES

Grey Literature online: the GLC experience
Owen, Tim
Aslib Proceedings, 34 (11/12) Nov/Dec 82, 480-486

ABSTRACT: Paper presented at the Aslib conference on Availability and bibliographic control of non-conventional literature London, May 82. The GLC Research Library subscribes to 600 periodicals and newspapers. All are scanned for interesting items of news and pamphlets and papers of a kind that will almost certainly slip through the more conventional bibliographic nets. Discusses the GLC's publicly available data base ACOMPLINE. The library's job is to collect documentation that will enable GLC members to do their job more effectively, and to make it retrievable in the most efficient way. Currently with a limited coverage it is hoped that funds from the European Commission will allow it to cover urban documentation in the rest of the country and abroad [NOTE: Greater London Council (UK)]

Applied social scientists in the United Kingdom: information and communications.
Behavioral and Social Sciences Librarian, Vol. 9, Issue 1, p. 5-20, 1990, 12

Findings and implications for the applied sector of a recent qualitative study of information and communications problems in the social sciences are described. Inter-related problems of lack of funds, staff, and time are found to hinder supply, uptake, and exchange of information. Recommendations include online referral directories and bibliographic control of gray literature.

The use of grey literature in health sciences: a preliminary survey.
Alberani, V. (Istituto Superiore di Sanita, Rome); Mezza, A.M.R.; Pietrangeli, P.D.

The paper describes some initiatives in the field of grey literature (GL) and the activities, from 1985, of the Italian Library Association Study Group. The major categories of GL are defined; a survey that evaluates the use of GL by end users in the health sciences is described. References in selected periodicals and databases have been analyzed for the years 1987-1988 to determine the number of articles citing GL, the number of GL citations found in selected periodicals, the various types of GL found, and the number of technical reports cited and their country of origin and intergovernmental issuing organization. Selected databases were also searched to determine the presence of GL during those same years. The paper presents the first results obtained.

In the context of the structure, function and mission of the General Motors Research Laboratories Library, the authors present end-user needs for online systems. Statistics are presented showing the systems, databases, and query types for the 1984 "model" year. Procedures used in end-user interfaces are described and search examples are given. Problems are identified with respect to the baud rates for online searching, availability of 'grey' literature, limiting search output, combining search
results (and sorting them), document delivery and uniform access protocols. Possibilities for direct end-user searching are noted.

ISA #9801161
INIS: a computer-based international nuclear information system. Balakrishnan, M.R. (Bhabha Atomic Research Centre, Trombay, Bombay)
Information Services and Use, Vol. 6, Issue 2/3, p. 51-73, 1986

The author presents a description of a cooperatively produced system involving both hard-copy and machine-readable outputs, the International Nuclear Information System (INIS)---its history and organizational structure, as well as more detailed accounts of its subject classification scheme, the INIS Thesaurus, input standards, and the various products/services generated by the system: the printed INIS Atomindex and Cumulative Index, the magnetic tape distribution service, the online data base, and on-demand supply in microfiche of grey literature documents cited by INIS, through its Clearinghouse. The INIS data base now contains more than 880,000 records. Coordination of the system is the responsibility of a secretariat located at the Vienna headquarters of the International Atomic Energy Agency.

ISA #8504571

The CEC has embarked on a two-year program to encourage the creation of new systems in electronic document delivery and electronic storage---the DOCDEL program, which is co-financed by the CEC and independent consortia. Ten experiments have been selected for support: TRANSDOC; Electronic Publishing of Patent Information; EURODOCDEL: The Electronic Magazine; Electronic Journals in Chemistry; a CEA proposal to place a mathematical journal online with Guestel; two electronic newsletters in the fields of information technology and the information industry; a project to devise standardized methods for handling complex texts and difficult character sets within an integrated electronic publishing system; a proposal to create a system which will reduce the costs of printing low volumes of scientific documents; and a network of electronic invisible colleges for the rapid circulation of grey literature and pre-published material. The experiments have raised several issues of concern, one of which is standards. CEC will identify these areas, draft standards and encourage their early adoption. Another area of concern is the need to build up experience of microcomputers on international public data networks. A full evaluation program of the experiments will be undertaken by an independent team over a period of at least 15 months.

LISA #887-3611
From interlibrary loan to on-line database with document backup
Braybrook, Penny; Stodeton, Jim
Interlending & Document Supply, 14 (3) July 86, 82-85, illus. 4 refs

ABSTRACT: Discusses trends which have emerged over the last 4 years from interlibrary loan data collected by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO) Central Library. Patterns of use of this library and other Australian libraries for interlibrary lending has been altered by the availability of holdings data. Outlines the use of the experimental Renewable Energy Index which covers 20 Commonwealth Countries of Asia and the Pacific. It actively pursues grey literature and is supported by Liaison Centres in each country which collect these documents.
Synopsis: Publishing for improving the accessibility of 'grey' scholarly information.

Vanderheij, D.G. (Pudoc (Center for Agricultural Publishing and Documentation), Wageningen)

Most experiments in synopsis publishing so far have been based on full papers used as back-up for the synopses. Grey literature as back-up to synopses has hardly been discussed in the literature. This paper discusses the applicability of the synopsis publishing principle to grey reports which might improve the accessibility and availability of this literature, which is a large proportion of the world's scientific literature. The author suggests that the dissemination functions could be improved by bridging the gap between the bibliographic information in databases and the full documents in depositories.

LISA #80-159
A better fate for the grey, or non-conventional literature
Gibb, J.M.; Phillips, E.
Journal of Research Communication Studies, 1 (3) May 79, 225-234

ABSTRACT: Grey literature is non-conventional material not issued through normal commercial publishing channels e.g., scientific and technical reports, theses and conference papers. Access is often difficult. A seminar at York on 13-14 Dec 78 organised by the Commission of the EEC in cooperation with the British Library Lending Division recommended: the creation of guidelines in the presentation of grey literature ensuring legibility and the provision of bibliographic information; a unique code for each document; a separate grey literature bibliography; improvement in the flow of information between states by establishing national authorities and a national or European database; publicity and training for any new arrangements; and sponsoring a study into supply alternatives for material from countries outside the EEC.

LISA #8903465
Document supply with particular reference to agriculture.

The author discusses a more business-like approach to document supply which is developing among libraries and in particular, the role which AGLINET is playing in this activity. Services which are examined include the location and access to documents, online holding lists, and union catalogs, as well as online ordering facilities. A brief history of document delivery service in the United Kingdom is given, with the emergence of international services demonstrated. The AGLINET Union List of Serials is explained as it relates to other such listings in the international arena; for example PICA (Dutch), SPOT (Scandinavian), OCLC (US), and SIGLE (Grey literature in Europe). Also discussed are postal services, payment, copyright and future directions.

LISA #85-5279
Automation at the British Library Lending Division: present situation and future plans
Wheatley, Michael L.
Program, 19 (2) Apr 85, 127-139, 4 refs

ABSTRACT: Describes the main automation systems at the British Library Lending Division which are based on 3 minicomputers. A Digital Equipment minicomputer is used for the Automated Request Transmission system; the Address Database system and a Unit Accounting system...
be added to service users' deposit accounts. The Systime minicomputer runs the Serials system and serials check-in and invoicing functions may be implemented. It also supports part of a system to produce a publication as well as a system for record creation of UK input to the System for Information on Grey Literature in Europe (SIGLE). The Geac minicomputer has been installed to implement the Monographs Acquisitions and Records system. The minicomputers may eventually be linked to the British Library Wide Area Network recently extended to the Lending Division.

Geologists and grey literature: access, use, and problems.

This paper examines the concept of "gray literature" within the category of geoscience. The forms of gray literature in this field are reviewed. Problems of physical quality, access, bibliographic control, and acquisitions that arise from inadequate coverage in bibliographies and databases are studied. Poor service from vendors, and producers' lack of knowledge are also examined. Recent improvements achieved by the American Geological Institute and its professional services are reviewed.

The role of SWIDOC, the Social Science Information and Documentation Centre of the Royal Netherlands Academy of Arts and Sciences, Amsterdam, is presented. The Centre has been appointed by the Ministry of Education a national infrastructural facility of social sciences. SWIDOC consists of three departments: the department of current research, the documentary information department, and the data archive. The documentation department contains a report centre specialized in grey literature, an international online literature service and a reference library.

A new library resource of grey literature in the Central Library for Technology (CLT) of GDR.

This paper studies the functions of the Central Library for Technology (CLT) at the Technical University Library of Dresden. Two functions are focused upon: PROBIB (PROGRAM (Program Bibliothek), which uses computer software in science and education, and the CDS/ISIS database system. The database contains all computer programs located at the University, providing a record of a new type of grey literature.
USE OF EXTERNAL INFORMATION SERVICES.
NORTON, T. (ROYAL AIRCRAFT EST., FARNBOROUGH, ENG.)
IN: AGARD CONFERENCE PROCEEDINGS, NO. 294. INFORMATION SERVICES: THEIR
ORGANIZATION, CONTROL AND USE (AGARD-CP-294), LISBON, PORTUGAL, 5-6 NOV.
1980 (NEUILLY-SUR-SEINE, FRANCE: AGARD 1981), P. 5/1-6

EXAMINES SOME OF THE EXTERNAL INFORMATION SERVICES WHICH WOULD BE OF USE
TO A DEFENSE-AEROSPACE ORGANIZATION IN THE UK. SOURCES FOR REPORTS
LITERATURE, SERIAL PUBLICATIONS, TRANSLATIONS, AND CONFERENCE PROCEEDINGS,
ARE DISCUSSED AND DIFFERENCES BETWEEN THE VARIOUS SOURCES ARE EXAMINED.
ATTEMPTS TO IMPROVE THE DETECTION, IDENTIFICATION AND COLLECTION OF
NON-CONVENTIONAL OR 'GREY' LITERATURE ARE DESCRIBED. REASONS FOR CONTINUING
TO SUBSCRIBE TO PRINTED INDEXES AND ABSTRACTS COVERING FIELDS OF MAJOR
IMPORTANCE TO AN ORGANIZATION, EVEN WHEN ONLINE EQUIVALENTS ARE AVAILABLE,
ARE DISCUSSED AND FINALLY, THE IMPORTANCE OF INFORMAL CONTACTS (THE 'OLD
BOY' NETWORK) IN MAKING EFFECTIVE USE OF EXTERNAL INFORMATION SERVICES IS
EMPHASISED.

LISA #85-6371
A new technocommercial service for the chemical industry. I. Database design
Barker, Frances H.
IN 8th International Online Information Meeting: London, 4-6 December 1984,
pp. 395-399. 1 ref

ABSTRACT: Many people in industry, commerce and government need to know
about the production and consumption of chemicals and about the
companies that do the producing and consuming. The Royal Society of
Chemistry is launching a new secondary service to cover the
conventional and grey literature about Chemical Industries in Europe.
Explores the concepts considered in design of the service and how a
compromise between user requirements, production methods and costs has
been reached

LISA #87-1555
Online bibliographic data bases and grey literature: a Dutch approach
van der Meer, Kees
IN the future of information resources for science and technology and
the role of the library, pp. 157-164, illus. 7 refs. Edited by Nancy
Fjallbrant, Goeteborg, Sweden, IATUL

ABSTRACT: A major problem with grey literature in science and technology
is how to draw the attention of the user to the existence of the grey
literature that may be relevant. Active acquisition of reports and
other species of grey literature within science and technology, by a
number of technology-related institutes collaborating on this topic,
such as in the Netherlands, is advocated. After the reports are
acquired, these must be made accessible on subject. For this the
international on-line bibliographic data bases can perform a prominent
role. Thus one copy of the report and/or bibliographic description has
to be offered to an on-line data base producer, and it has to be
accepted by that data base. The advantages and profits of this to the
users and to the collaborating institutes are highlighted
Papers presented at the 1983 International Federation of Library Associations (IFLA) conference include: (1) "Patents as Information: An Unused Resource" by Richard D. Walker (United States); (2) "Survey of the Information Services of the Library of the German Patent Office" by Eckhard Dersy (West Germany); (3) "Prospects of Development of the Automated System of the State Public Library for Science and Technology within the Framework of the State Automated System of Scientific and Technical Information" by I. M. Kharina (USSR); (4) "A Progress Report on the Multi-Lingual Information Systems Project," in which Yasushi Sakai and Yoichi Terashita (Japan) describe the experimental processing of Arabic texts using LINKIT (the Kanazawa Institute of Technology library online catalog system based on 16-bit encoding and currently accommodating Japanese characters and symbols, as well as Latin, Cyrillic, and Greek alphabets in upper and lower case); (5) "Access to French Grey Literature: The Contribution of the Centre de Documentation Scientifique et Technique (CDST) du CNRS (Centre National de la Recherche Scientifique)," in which Jacques Keriguy (France) describes CDST activities in providing access to research reports, patents, standards, theses, translations, and other unpublished scientific and technical literature; and (6) "Research and Development Challenge: Better Services in Scientific and Technical Libraries," in which Peng Guiyuan (China) describes the operation and activities of the Library and Information System of the Chinese Academy of Sciences (LISCAS). (ESR)

This work suggests that better organization of existing sources of information available in Europe and better application of these sources to training can result in improved understanding of how information systems work, and it provides an annotated list of some of these sources. The guide opens with an introduction to public policy and urban planning in the context of developing countries, and explains that because this subject area is so focused and interdisciplinary it is difficult to locate information in a consistent manner; thus, the information needs of the people living in urban areas of developing countries are little known or catered to. Definitions for the field are explored, and the prospective users of information networks within this field are identified, e.g., academics and researchers, funding agencies, students in Europe, consultants, and planners in the third world. Subsequent sections of the guide describe the types of materials included as reference sources (e.g., people, grey literature, and geospatial databases), and then list the resources by international organization or geographic location (United Kingdom, Scandinavia, Germany, France, Italy, Eastern Europe and the Benelux countries) from which the resources originate. An appendix presents a prototype information network. (SD)
This report, based on a field study made in Japan, provides a first look at the Japanese S&T grey literature. It describes the various categories of Japanese grey literature, and the reference sources and databases that provide at least a partial entree to these materials. The places where some of the documents themselves are housed are also described. Consideration is given to how, where and why S&T grey literature is produced in Japan, and to various aspects of its distribution (or non-distribution). Various problems associated with locating and obtaining the literature are discussed, and advice is provided for non-Japanese interested in gaining access to Japanese grey literature publications.
U.S. - Japan Task Force
on
Scientific and Technical Information

Interim Report

April 1993
U.S.-JAPAN AGREEMENT FOR COOPERATION IN SCIENCE & TECHNOLOGY
TASK FORCE ON SCIENTIFIC AND TECHNICAL INFORMATION

AN INTERIM REPORT

INTRODUCTION

In April of 1989, the Task Force on Scientific and Technical Information established its four primary goals. Those goals, which were re-confirmed at the Fourth Meeting of the Task Force in September 1992, are: (1) to improve awareness and understanding of organizations and systems established to improve the use of scientific & technical information (Mutual Understanding); (2) to increase the quantity and quality of scientific & technical information (STI); (3) to reduce impediments to the flow of scientific & technical information (Japan Reprographic Right Center, JRRC); and (4) to increase the translation of scientific and technical information (Translation). This Task Force has been co-chaired on the U.S. side by Dr. Joseph Clark, and on the Japanese side, by Mr. Setsuo Matsuzawa, Mr. Yasutsugu Takata, and Mr. Junichi Yamaji.

PROGRESS TOWARD THE GOALS

(1). IMPROVE AWARENESS AND UNDERSTANDING OF ORGANIZATIONS AND SYSTEMS ESTABLISHED TO IMPROVE THE USE OF SCIENTIFIC & TECHNICAL INFORMATION (MUTUAL UNDERSTANDING).

The first step by the Task Force toward this goal was to develop a comprehensive report on the current status of distribution of scientific and technical information between Japan and the United States. Both sides reported on a) basic government policy toward effective distribution of Scientific and Technical Information (STI), b) the status of STI information centers, and c) international distribution and cooperation in STI.

Several reports and studies were undertaken in order to understand the process by which Japanese STI can be accessed by technical experts from the United States. Survey results from the Science & Technology Agency (STA) and Mitsubishi Research Institute indicated the need to improve access to Japanese technical reports, doctoral dissertations and technical bulletins/newsletters.

At the request of the U.S. side, the Japan Information Center of Science and Technology (JICST) has been providing the National
Technical Information Service (NTIS) with videotapes that describe the capabilities and facilities at Japanese laboratories and that portray other related information helpful to American scientists planning to visit, live or work in Japan. Overall, the tapes have been found to be of significant value to the small number of individuals who have thus far used them prior to visiting Japan.

JICST and NTIS have co-sponsored Annual Conferences on Improving Access to Japanese Scientific & Technical Information. The purpose of these conferences is to provide useful information on Japanese database producers, on-line information services and other information sources. The participants have not only described their services, but also share their information search techniques and procedures. The high level of participation and the very positive evaluations from hundreds of participants clearly indicate the success of the conferences. Thus, a Third Conference was held in San Francisco in March 1993. This was the first such conference held outside the Washington, DC area, and was considered to be as successful as the previous conferences.

2) INCREASE THE QUANTITY AND QUALITY OF SCIENTIFIC AND TECHNICAL INFORMATION (STI).

The Task Force has defined its scope of activities by listing the types of scientific and technical reports produced by government agencies or through major government-sponsored or government-supported R&D programs that are not published in readily available professional literature. Thus the focus of the second goal has been more clearly defined and the Task Force able to concentrate its efforts on the exchange of STI. In pursuing this goal, the National Center for Science Information System (NACSIS), the Japanese academic information network, has provided 18 databases containing information on grants, university doctoral theses, conference papers and other such information to the National Science Foundation (NSF) and the Library of Congress.

The National Diet Library (NDL) has added staff and increased its budget by $1 million for collection of such literature. NDL is distributing its information to the Library of Congress, the University of California at Berkeley, and the University of Chicago. Such material includes large quantities of technical books, periodicals, and related materials.

The Japan Information Center for Science and Technology (JICST) has played a large role in facilitating Japanese information for U.S. consumption. It has begun doing machine translation of its bibliographic database into English, and produced and distributed a referral database (J-Grip File) which covers ongoing and completed research publications at public research organizations in Japan. The JICST files are accessible electronically on the
JICST Online Information System (JOIS) and STN International. In addition, JICST has increased distribution in the U.S. of the annual White Paper and the monthly publications of STA Today.

(3) REDUCE IMPEDIMENTS TO THE FLOW OF SCIENTIFIC & TECHNICAL INFORMATION (JAPAN REPROGRAPHIC RIGHT CENTER).

Many years ago, Japan began exploring the establishment of a "copyright clearance center" similar to those established in other industrialized nations. With the aid and encouragement of the Task Force, a public-private consensus developed on the need for such an organization in Japan. Thus the Japan Reprographic Right Center (JRRRC) was established in September 1991, and announced at the March 1992 annual conference mentioned above. Publishers, authors and academic societies in Japan were active in its start-up. About 1200 Japanese companies have completed agreements with the Center. This major accomplishment is due in large part to the excellent cooperation and open dialogue fostered by the Task Force.

(4) INCREASE THE TRANSLATION OF SCIENTIFIC & TECHNICAL INFORMATION (TRANSLATION).

Obtaining proper legal rights to distribute English translations of Japanese publications has been a concern of Americans interested in U.S. distribution of Japanese publications. JICST and NTIS have initiated an experimental mechanism to assist those seeking permission from Japanese authors to distribute translations of their technical works. Contrary to initial expectations, there have been few requests to use this arrangement yet. The few cases that have been handled under this arrangement have been processed successfully but slowly.

JICST has begun using machine-aided translation (MAT) extensively, in order to increase the English-language content of the JICST bibliographic database.

Cooperation between Japanese and American MAT researchers has been initiated, and the lead responsibility for fostering this cooperation has been transferred to this Task Force from the Information Science & Technology Liaison Group. In addition, a Japan Technology Evaluation Center (JTEC) study team visited Japan in 1990, and published a report on the state-of-the-art of machine translation. The report has helped both the U.S. and Japan to explore cooperation in R&D on the next generation of MAT technology.

New ways of cooperation between the two countries are being explored for the future development of MAT technology. In November 1992, Japanese researchers participated in a U.S. conference in San Diego on the evaluation of MAT systems. A joint U.S.-Japan workshop is tentatively scheduled for 1993.
Another milestone under this goal is that two U.S. government sponsored research consortia have been established. The first is the Lexical Development Consortium based at the University of Pennsylvania, and the second is the Consortium for Lexical Research based at the New Mexico State University. There has also been discussion of possible cooperation and resource-sharing with Japan's Electronic Dictionary Research Institute.

As a step toward streamlining the organization of activities under the Agreement, the Liaison Group on Joint Databases Development recommended transfer of all their responsibilities to this Task Force. The Japanese side intends to have the Director of the Science and Technology Information Division, current chair of the Liaison Group on Joint Databases Development, become their next co-chair of the Task Force on Scientific and Technical Information.

CONCLUSION

The U.S. and Japan have mutually recognized the importance of maintaining an equitable exchange of information as defined in the Science and Technology Agreement. The Task Force on Scientific and Technical Information ensures that programs and other mechanisms of information exchange are established and properly executed. The Annual Conferences on Japanese S&T Information have been evaluated very positively by the participants, and serve as an excellent model for additional efforts to improve mutual understanding of STI systems and their use. The Task Force plans to continue to establish similar programs and improve on the ones already in progress.

The program to collect videotapes, as presented in the First Goal, has had significant value; however, this service is currently under-utilized. In addition, difficulty in acquiring good quality tapes with significant technical relevance has been experienced.

Under the Second Goal, the National Diet Library should be encouraged to continue to expand its U.S. distribution of material to other universities and research centers. In addition, the U.S. and Japanese sides need to continue to investigate ways to improve the use of NACSIS and other online databases available at the National Science Foundation and the Library of Congress.

In regard to the Third Goal, Japan is heartily congratulated on the establishment of the Japan Reprographic Right Center. The JRRC and the Copyright Clearance Center of the U.S. should be actively encouraged to conclude a reciprocal agreement on the exercise of the right which they administer.
The Fourth Goal needs the most action and attention. Translation of materials is crucial and essential to an equitable exchange of information with the United States. The Task Force needs to actively pursue ways to cooperate on machine-aided translation, to research and develop the next generation of this technology and related technologies such as Optical Character Recognition, and we need to ensure that the funds are available to utilize this technology. The U.S.-Japan workshop tentatively scheduled for 1993 is an exemplary step toward cooperation in this area.