Military Librarians Workshop '97
41st Annual Military Librarians Workshop
18-20 November 1997
Marriott Hotel
Dayton, Ohio

VISION 2000:

Strategies for a New Millennium

Proceedings

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13. ABSTRACT *(Maximum 200 words)*

These are the proceedings of the 41st Military Librarians Workshop, sponsored by the Military Librarians Division of the Special Library Association, held in Dayton, Ohio, 18-20 Nov 97. Keynote speeches stressed the challenges military and other librarians are facing in the current workplace: increased expectations, reduced staffs, economic pressures, rapidly changing technology and partnering with other specializations to survive. A three-hour session on OMB Circular A-76 drew the largest crowd. A panel discussion provided information on the factors influencing A-76 activity and the impediments involved, as well as perspectives from the government and contractor sides of the issue. Other sessions included: marketing --not only a plan but an attitude; the wide variety of relevant information available on military web sites; gray literature and the recent addition of access to the Canadian Institute for Scientific and Technical Information; using benchmarking to implement "best practices" in military libraries; and, a frank, detailed presentation on retirement planning for military librarians.

14. SUBJECT TERMS

Libraries, Military Librarians Workshop, , A-76 studies, Contracting-out studies, Information transfer, Internet, Grey literature, Library benchmarking, Library marketing

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TABLE OF CONTENTS

Military Librarians Workshop 1997, Pre-program

Military Librarians Workshop 1997, Program

Panel on OMB Circular A-76 (Contracting for Government services)

Wednesday, 19 Nov 97

Service Updates:

Thursday. 20 Nov 97

Foreword

Predictions about the future of military libraries are rife with words that could have been copied from any of a multitude of management re-engineering textbooks: challenge, change, chaos, closure, commercialization, commitment, competition, contracting out, cost-benefit, creativity, customization. The future promises to reflect the most recent past: a turbulent re-examination, retooling and, at times, complete abandonment of the status quo.

Military libraries have become inextricably caught up in the sweeping redesign of how the federal government does business. What should our "Strategies for a New Millennium" be? Our Vision 2000? One hundred and forty-seven participants met in Dayton, Ohio, at the 41st Military Librarians Workshop*, November 18-20, 1997 to listen, discuss, and contemplate a whirlwind of factors that will have a lasting effect on tomorrow's military libraries and their librarians.

After an inspiring welcome from General David A. Herrelko, Vice Commander, Aeronautical Systems Center, our keynote speaker, Dr. Toni Carbo, Dean of the School of Information Studies at the University of Pittsburgh, and Dr. Len Simutis Director of the Eisenhower National Clearinghouse for Science and Mathematics Education at The Ohio State University, offered their personal insights into the changing, evolving roles of librarians/information professionals. Emerging technologies, vast information networks and the public's embracing of instant information equate to unlimited opportunities for those professionals astute enough to market their skills and capabilities.

Because of the diverse nature of the military libraries, the topics and subjects presented covered a wide variety of subjects and interests: distance education, library marketing, contracting for government services, the Philips Laboratory virtual library, OCLC, OhioLINK, web technology, military internet sites, gray literature, library benchmarking, and retirement in the 21st century. The various services updates had a common element: military libraries are in a state of flux and are entering a new chapter in their long and productive histories.

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* The Workshop was sponsored by the Special Libraries Association, Military Librarians Division, and hosted by Wright-Patterson Air Force Base's libraries, which include the Wright Laboratory Technical Library, the Air Force Institute of Technology, the National Air Intelligence Center Technical Library and the Air Force Materiel Command Librarian.

Preface

The Military Librarians Division of the Special Library Association would like to thank the following organizations and companies for their generous support of this workshop:

Dialog

Lexis-Nexis

The United States Air Force Museum

Dayton Convention Center

Supportability Investment Decision Analysis Center (SIDAC)

Wright-Patterson Air Force Base Motor Pool

Cambridge Scientific Abstracts

Esther Price Candies

Faxon

1997 MLW Program Committee Members

MLW Hospitality Committee
Susanne Burritt (Chair), Kathleen Lindahl, National Air Intelligence Center
Barry Boettcher, Air Force Institute of Technology

MLW Logistics Committee
Bill Benson (Chair), Peri Switzer, Jeannie Stewart and Sandy Whitney, WPAFB
Technical Information Branch

MLW Program Committee
Gail Hodge, AFMC Command Librarian; Carolyn Ray and Joe Burke,
WPAFB Technical Information Branch

MLW Website Manager
Dan Carrigan, National Air Intelligence Center

Chair, Military Library Division, SLA
Janet Burke, National Air Intelligence Center

MLW Executive Board Chair
Barbara Wrinkle

Many thanks to our colleagues at the Wright Laboratory Technical Information Branch, the National Air Intelligence Center Library, and the Air Force Institute of Technology Library.

Military Librarians Workshop, 18-20 Nov 97, Dayton Marriott Hotel, Dayton, Ohio
Vision 2000 - Strategies for a New Millennium

Monday, Nov 17 - Pre-workshop

8:00 a.m. - 9:15 a.m.

"A Library's Role in Declassification"
Jolaine Lamb
Main Salons A, B, C

8:00 a.m. - 4:00 p.m.

CONSATL Meeting (Council of Navy
Scientific & Technical Librarians)
Oakwood Room

8:00 a.m. - 5:00 p.m.

Air Force Library Steering Committee
Wright Bros. Room 170

9:15 a.m. - 11:30 a.m.

STINFO Offices/Library Partnership
Sharon Serzan, DTIC
Main Salons A, B, C

11:30 a.m. - 1:00 p.m. -- Lunch (on your own)

1:00 p.m. - 4:30 p.m.

"How to Reduce Information Anxiety:
Marking DoD Technical Documents
For Distribution"
A. M. Lindsey, ORISE
Main Salons A, B, C

1:00 p.m. - 4:00 p.m.

Army Library Service Meeting
Deeds Room 370

4:00 p.m. - 7:00 p.m.

MLW Executive Board Meeting
Newcomb Room 470

4:00 p.m. - 7:00 p.m.

Registration
Foyer

7:00 p.m. - 9:00 p.m.

Event: No Host mixer
Dunbar Suite 573

Tuesday, Nov 18

7:00 a.m. - 7:50 a.m. -- Continental Breakfast
Foyer

7:00 a.m. - 4:00 p.m. -- Registration
Foyer

8:15 a.m. - 8:30 a.m. - Welcoming Remarks

Barbara Wrinkle, Director, AF Library and
Information System; MLW Executive Board Chair
Brigadier General David Herrelko, Director,
Joint Logistics Systems Center
Salons A, B, C, D

8:30 a.m. - 9:40 a.m. - Key Note Speech

"Just for You Service: Challenges in Customizing
Library and Information Services in the Future"
Dr. Toni Carbo, Dean of School of Information
Sciences, University of Pittsburgh
Salons A,B,C,D

10:00 a.m. - 11:00 a.m.

"The Future Isn't What It Used To Be: Librarians
and Educators in the New Millennium"
Dr. Len Simutis, Director, Eisenhower National
Clearinghouse for Mathematics & Science Education
Salons A,B,C,D

11:00 a.m. - 11:30 a.m.

"Distance Education in the Army"
Janet Scheitle, TRADOC Command Librarian
Salons A,B,C,D

11:30 a.m. - 1:30 p.m. -- Lunch (on your own)

1:30 p.m. - 4:30 p.m. (break 2:45)

Marketing Workshop
Corilee Christou, Lexis-Nexis
Salons A,B,C

1:30 p.m. - 2:45 p.m.

Panel on OMB Circular A-76 (Contracting
for Government Services)
- DoD Overview - Doug Hansen, Director,
  Installations Requirements & Management
- Wright-Patterson AFB Briefings - Harvey Brewster,
  AFMC A-76 Program Manager;
  Capt Deborah Muldoon, Acquisition Attorney,
  Directorate of Contract Law, WPAFB
Salon D

Military Librarians Workshop, 18-20 Nov 97, Dayton Marriott Hotel, Dayton, Ohio
Vision 2000 - Strategies for a New Millennium

Tuesday, Nov 18 (continued)

3:00 p.m. - 4:30 p.m.

Panel on OMB Circular A-76 follow-up
- Doria Grimes (NOAA) - "The Pros & Cons of Contracting Library Functions"
- Bonnie Carroll & Patricia Powell, Information International Associates

Salon D

5:00 p.m. - Bus begins to load

5:30 p.m. - Bus leaves for USAF Museum Event
Museum Tour, Dinner & Guest Speaker Wes Henry, Chief, Research Division, USAF Museum
(cost included in registration)

9:00 p.m. - Bus returns to hotel

Wednesday, Nov 19

7:00 a.m. - 8:00 a.m. -- Full Breakfast
(MLD Business Meeting)
Salons E,F,G,H

8:15 a.m. - 11:30 a.m. (break 9:45 - 10:00)

Marketing Workshop
Corilee Christou, Lexis-Nexis
Salons A,B,C

8:15 a.m. - 9:00 a.m.

"US Military Internet Sites"
Carol Ramkey, References & Retrieval Services, DTIC
Salon D

9:00 a.m. - 9:45 a.m.

"ALIVE - Philips Lab - Virtual Library System"
Marsha Dreier, Acting Chief, Air Force Research Laboratory Library, Kirtland AFB
Salon D

9:45 a.m. - 10:00 a.m. - Break

10:00 a.m. - 11:30 a.m.

"What the Future Holds"
Dr. Keith Shafer, Online Computer Library Center
Tom Sanville, OhioLINK   *Salon D*

11:30 a.m. - 1:30 p.m. -- Lunch - sponsored by Faxon

Speaker: Rob Young, National Air Intelligence Center, on UFOs
Salons E,F,G,H

1:30 p.m. - 3:00 p.m.

- Gray Literature - Bonnie Klein, DTIC
- Update: "How to get it - Librarians' Edition"
  Barbara J. Fox, DTIC
- Intelink - Mark Kelly, Defense Intelligence Agency
Oakwood Room

Wednesday, Nov 19 (continued)

1:30 p.m. - 3:00 p.m.

"Using the Web to Organize Resources"
Sheila Shellabarger & Jeff Trzeciak (Wright State University - Libnet)
Kathleen Webb & Kathleen Tiller (University of Dayton - Daynet)
Salons A,B,C

1:30 p.m. - 2:15 p.m.

"US Military Internet Sites" (repeat of morning session)
Salon D

2:15 p.m. - 3:00 p.m.
"ALIVE - Philips Lab" (repeat of morning session)
Salon D

3:00 p.m. - 3:15 p.m. - Break

3:15 p.m. - 4:35 p.m. Service Updates
Salons A,B,C,D

5:15 p.m. - Bus begins to load

5:45 p.m. - Bus to Lexis-Nexis
Dinner sponsored by Lexis-Nexis
Event -- Tour of Lexis-Nexis

9:00 p.m. - Bus returns to hotel

Thursday, Nov 20

7:00 a.m. - 7:50 a.m. -- Continental Breakfast
Foyer

8:00 a.m. - 11:30 a.m.

"Library Benchmarking"
Annette Gohlke, Library Benchmarking International
Salons A,B,C

8:00 a.m. - 11:30 a.m.

"Retirement in the 21st Century"
David C. Darkow, Quail Hollow Services
Salon D

11:45 a.m. - 12:15 p.m.

Closing Remarks and Announcements,
Barbara Wrinkle
Salons A,B,C,D

12:15 p.m. - 1:15 p.m. -- Lunch (on your own)

1:15 p.m. - Bus begins to load
1:30 p.m. - 4:15 p.m. - Bus leaves for
Tour of Libraries (optional)
Air Force Institute of Technology Library
Foreign Science Library
Air Force Research Laboratory Library at WPAFB
Wright Patterson Air Force Base

4:45 p.m. (Approximately) Bus returns to hotel

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Dayton, Ohio

Vision 2000 - Strategies for a New Millennium

List of Workshop Speakers

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Last modified: 14 November 1997 (BB)

SPEAKER PROFILES

HARVEY BREWSTER

AFMC OMB Circular A-76 Program Manager and AFMC Manpower and Quality Wartime, FORSIZE and Manpower Requirements Team Leader. Mr. Brewster spent 19 years in the Air Force as an Enlisted Member and 17 years in the Civil Service. He has worked 26 years in the Manpower and Quality Career Field. He has been the AFMC A-76 Program Manger for 14 years and has worked FORSIZE Wartime Requirements for over 24 years. While in the Military received the Air Force Commendation Medal (w/2 Oak Leaf Clusters, Air Force Meritorious Medal w/2 Oak Leaf Clusters; Selected as Airman of the Quarter (1978 and 1980), Air Force Maintenance, Supply and Munitions Functional Manpower Office; Selected as Air Force Materiel Command Manpower and Quality Civilian of the Year (1996); Selected as Air Force Manpower and Quality Civilian of the Year (1996).

TONI CARBO

Toni Carbo has been the Dean of the School of Information Sciences at the University of Pittsburgh since September, 1986. For the previous six years, she was Executive Director of the U.S. National Commission on Libraries and Information Science (NCLIS). She has an AB from Brown University and M.S. and Ph.D. from Drexel University. She is President of the Association for Library and Information Science Education (ALISE) and chair of the ALISE 1998 Conference Committee. Dr. Carbo was a member of the U.S. Advisory Council on the National Information Infrastructure (NII) 1994-1996, and was named a U.S. representative to the G-7 Round Table of Business Leaders to the G-7 Information Society Conference, February 1995, in Brussels, Belgium. She was selected by Drexel University as one of the 100 most distinguished of its 60,000 alumni and was awarded its Centennial Medal. She received the Distinguished Service Award from the Pennsylvania Library Association (PLA) in 1995 and was named to the American Library Association's (ALA) Fiftieth Anniversary Honor Roll of Legislative and Grass Roots Library Champions. There are many other awards, fellowships, board and conference chairs that are too numerous to mention here. Author of more than 100 articles, speeches, and technical reports in library and information science, Dr. Carbo is the Editor of The International Information and Library Review (IILR), published by Academic Press, and has served on the editorial boards of several publications.

BONNIE C. CARROLL

Ms. Carroll is President of Information International Associates, Inc. (IIa), an information resource management company whose mission is to support government and industry in managing information as a strategic resource. She has participated in an assessment of STI in the U.S. for the National Science Foundation, the development of a topography of STI systems for the Library of Congress, and the development of a system to provide input to the DOE's Energy Science and Technology Database. She recently completed a study of how to simplify the record structure for the International Nuclear Information System's Database and a project to develop a reference catalog of Internet resources in area studies. She is consultant to foreign and international organizations, including the Kingdom of Jordan, UNESCO, and the International Council for Scientific Information (ICSTI). Ms. Carroll has a Master of Science degree in Library and Information Science from Columbia University and a Bachelor's degree from Cornell University.

CORILEE CHRISTOU

Corilee Christou, Director of International Products for LEXIS-NEXIS, is responsible for support of product acquisition, design and interface development for non-US data. Prior to this, she served as the Director of Corporate Librarian Relations, developing marketing, support, and new products for LEXIS-NEXIS' corporate librarian customers. She also managed the Information Professional Support Group, field based former librarians who help LEXIS-NEXIS' librarian customers use the LEXIS-NEXIS services more efficiently. In this role, she developed several workshops geared at marketing the information center and creating value propositions for upper management. Corilee has been with LEXIS-NEXIS for fifteen years, during which she has held several management positions. Prior to coming to LEXIS-NEXIS, Corilee worked in several corporate and academic libraries in the Boston area. An active member of the Special Libraries Association, Corilee has held numerous positions with SLA including Marketing Chair, Library Management Division. She received her MLS from Simmons College in Boston and a BA from Brandeis University in Waltham, Massachusetts.

DAVID C. DARKOW

David C. Darkow is owner and instructor for Quail Hollow services. He specializes in teaching Pre-Retirement Planning seminars and seminars on other benefit issues. He has taught over two hundred classes for the Office of Personnel Management and the USDA Graduate School. He has taught for dozens of different federal agencies at their own request. He received his academic training from the University of Akron (BA) and his graduate school training at the University of Michigan. During his federal career he completed over 27 post graduate classes in a variety of business, management and social work related fields. He worked in numerous management positions for the Social Security Administration and took an early Retirement in January 1989. He then taught Social Work courses at Cedarville College before resuming benefit seminars in 1991. David was selected by the USDA Graduate School from approximately 1000 faculty members to receive one of the ten "1995 Faculty Excellence Awards". He is the most requested instructor in his field in the Mid-West and his reputation has spread from coast to coast. He is also a member of the following professional organizations: International Society of Retirement Planners; American Association of Retired Persons; National Association of Retired Federal Employees; Chicago Region Social Security Management association (Retired); and the National Social Security Management Association (Retired).

MARSHA DREIER

Acting Chief, Technical Library, Phillips Laboratory, Kirtland AFB, NM, PL/TL. Ms. Dreier has over seventeen years of library experience and has been a USAF Librarian since 1988. She has brought networking and automation expertise to the Library from Air Combat Command, where she was also on the Automation Steering Committee. At Phillips Lab she has been instrumental in the system upgrade for the Phillips Lab Optical Imaging Program as well as actively involved in the American Libraries Association (ALA) and the Special Libraries Association (SLA). She is a past president of AFLRT (Air Force Libraries Roundtable) within ALA. She also served the State of New Mexico on their Automation Committee and has acted in an advisory capacity for all the state libraries. She received her Master's degree in Library Science from the University of Arizona.

ANNETTE GOHLKE

Annette Gohlke is president and co-owner of Library Benchmarking International (LBI), a small publishing training and consulting firm dedicated to helping librarians achieve excellence in their libraries. Annette became active in LBI in January 1996 after a long and successful career as a federal librarian. She has over 31 years experience directing military school, general, and technical libraries. Her specialties include marketing, acquisitions, financial management, team building, and using technology to streamline and improve processes. She strongly believes in the value of libraries in peoples lives and spent her career improving customer service and reengineering library operations to make them more effective and efficient and gaining outstanding support for library services. Always known as a strong advocate for libraries, Annette is now putting her knowledge and experience to work helping other library staffs achieve excellence through her bi-monthly newsletter on library benchmarking and her workshops.

DORIA GRIMES

Mrs. Grimes is currently Chief, Library Contract Operations Branch, at the National Oceanic and Atmospheric Administration Central Library in Silver Spring, MD. In addition to overseeing the library functions performed by both federal and contract staff, she manages the Collection Development, Rare Books, and technical processing areas. From 1988 to 1991, she was the Database Manager at the National Technical Information Service, and has been a Network Librarian at FEDLINK/Library of Congress from 1981 through 1987. Doria was elected President of the District of Columbia Library Association in 1989; and President of the Federal Librarians Round Table of the American Library Association in 1988. She currently serves as a Federal representative to the White House Conference on Library and Information Services Task Force. Mrs. Grimes received her M.S. in library science from the University of Illinois at Champaign-Urbana, and her B.A. from the University of Delaware.

DOUGLAS B. HANSEN

Doug Hansen is the Director for Installations Requirements and Management within the Office of the Deputy Under Secretary of Defense (Industrial Affairs and Installations). He is responsible for stewardship of the Department of Defense's military base structure. Installations is focused on achieving three objectives: (1) supporting military readiness and quality of life with sufficient high-quality facilities; (2) appropriately sizing the domestic and overseas base structures; and (3) improving installation management in the face of changing requirements, while meeting energy and environmental mandates. Doug was the Principal Director for Installations under the Deputy Assistant Secretary of Defense (Installations) before assuming his current position in November of 1996. Prior to that service, he was Director, Base Closure and Utilization, within the Office of the Secretary of Defense from 1989 to 1995. Doug has a Bachelor of Science Degree in Statistics from Montana State University, a Masters Degree in Public Financial Management from American University, and completed the Senior Managers in Government Program at Harvard University. Doug is a member of the American Society of Military Comptrollers and the Federal Executive Institute Alumni Association.

MARK KELLY

Mark Kelly is head of the Production Support Team of the Intelink Management Office's Information Management Directorate. He is currently the leader of the Intelink metadata effort and has recently started the Intelink Advanced Systems Interoperability Group. Mr. Kelly was previously a Senior Technical Officer and an Information Services Specialist with the Defense Intelligence Agency. Prior to coming to DIA in 1987, Mr. Kelly was a cataloger at Georgetown University for nine years. Mr. Kelly has served as chair of the Potomac Technical Processing Librarians and co-chair of the Intelligence Community Librarians' Committee. He has a degree in Russian Language and Literature from the College of Wooster, an MLS from Kent State University, and an M.S. in Accounting from Georgetown University. He is most interested in systems interoperability in the Intelligence Community. He maintains an internationally-known Web page on Z39.50 (www.markkelly.com/z3950) and well as a home page (www.markkelly.com).

BONNIE KLEIN

Bonnie Klein is Program Manager for Gray Literature and Copyrighted Information in the Collections Division, Acquisitions Branch, at the Defense Technical Information Center (DTIC), Ft. Belvoir, VA. Since arriving at DTIC in 1992, Ms. Klein has held a variety of positions, including Non-Print Product Program Manager, Acting Chief of the Cataloging Branch, and Chief of the Special Programs Branch, User Services Division. Prior to coming to DTIC, Ms. Klein had 16 years of service as an Administrative Librarian with the U.S. Army Library Program, working in Hohenfels and Heidelberg, Germany, for the U.S. Army Library Program Europe (USAREUR) and in Uijonbu, South Korea, for U.S. 8th Army. Ms. Klein holds both a BA in Russian Language and Area Studies and a MLS from the University of Illinois, Urbana-Champaign, and also a M.S.Ed. in Instructional Systems Technology from Indiana University, Bloomington.

JOLAINE LAMB

Ms. Lamb is currently Chief Librarian of the Air Force Flight Test Center (AFFTC) Technical Library and AFFTC STINFO, Edwards AFB, CA. She received her B.A. Degree from Chapman University and a M.L.S. in Library Science from the University of California at Los Angeles, CA. Ms. Lamb has served as a Librarian with the Navy, Marine Corps, and Air Force in general, academic, and technical libraries. She is a member of the Special Libraries Association (SLA) and American Library Association (ALA).

A.M. LINDSEY

A.M. Lindsey is a training and development specialist at the Oak Ridge Institute for Science and Education. Since 1988, she has developed, delivered, and evaluated training on various environment, safety, and health topics, served as an organizer and facilitator for public outreach workshops, and conducted regulatory and performance needs analysis. Her current projects include development of a self-assessment program for training, web pages for training offices, competency-based training programs for the Department of Energy, and a course for the Department of Defense Office of Scientific and Technical Information Policy, How to Reduce Information Anxiety: Marking DoD Technical Documents for Distribution. Ms. Lindsey holds a Master's Degree in Human Resource Development from the University of Tennessee.

DEBORAH MULDOON

Captain Deborah Muldoon is an Acquisition Attorney for the Operations Division of the Directorate of Contract Law at Wright-Patterson AFB, Ohio. She was stationed at Wright-Patterson in July of 1995 after serving as an Assistant Staff Judge Advocate at Space and Missile Systems Center, Los Angeles Air Force Base, CA for 2 1/2 years. In the Operations Division, Captain Muldoon has encountered all facets of contract formation, to include advising on the largest A-76 study ever undertaken by Aeronautical Systems Center. Captain Muldoon received a Bachelor of Arts degree in Mathematics from Syracuse University. She then received an educational delay of her active duty commitment to attend law school at Western New England College School of Law in Springfield, Massachusetts. She received her Juris Doctor degree in 1992. She entered active duty in October 1992 and was assigned as an Assistant Staff Judge Advocate, Space and Missile Systems Center, Los Angeles Air Force Base, California.

PAT L. POWELL

Ms. Powell has 20 years experience in administration and information services in state and federal government as well as small business program and contract management. Her responsibilities at Information International Associates, Inc. (IIa) include interaction with senior level information officials in federal agencies and businesses. She is involved in developing all programmatic activities relating to information projects performed by IIa including reference and research work through traditional and electronic sources. In recent months, her oversight and management responsibilities for IIa's Information Services Division has carried her to taking the lead in developing a new niche for the company in managing libraries on Air Force Bases across the country and she is leading the transition from government to contractor management at Cannon AFB Library, Clovis, NM, and Eglin AFB Library, Ft. Walton Beach, FL. Ms. Powell served as Commissioner of the New Mexico State Library System making policy decisions regarding programmatic, budgetary matters, and development of an Affirmative Action Statement for the Library. Ms. Powell has a master's degree in Information Science and a bachelor's degree in English and Business Administration.

CAROL RAMKEY

Chief, Reference & Retrieval Services Branch, Defense Technical Information Center. Carol has a BA in Sociology/Anthropology from Wilson College, PA and an MLN from Emory University in Atlanta. She was the Chief of Army Studies and Military Documents at the Pentagon Library prior to coming to DTIC in September 1996. At DTIC, Carol is the Branch Chief for Reference and Retrieval Services under the User Services Division. Her staff is responsible for preparing the demand bibliographies in The Technical Reports, Work Units and Independent Research and Development databases, managing the Current Research Summaries and Current Awareness Bibliographies, identifying and ordering documents for users, and tracking order status and complaints. As a native Virginian, Carol is happy to be back living and working in her home state.

TOM SANVILLE

As Executive Director of OhioLINK since July 1992, Tom Sanville is leading the installation of the OhioLINK system at the member libraries. It became operational in November 1992 with 6 libraries in the union catalog and 2 journal citation databases. It now includes the libraries of 57 higher education institutions and access to a variety of over 65 reference and research databases He is shaping the continuing development of OhioLINK as a vital provider of advanced information services to the Ohio higher education community. OhioLINK will be aggressive in statewide provision of journal and other full text and digitized non-text based materials. It was the first US consortium to license Academic Press' 175 electronic journals and Elsevier Science's +1000 electronic journals for all its members. To accomplish its work OhioLINK has a staff of 14 and works extensively with committees comprised of member library staff. OhioLINK serves a student and faculty population in excess of 500,000 in the 57(and growing) universities and colleges. Sanville, of Worthington, Ohio, was formerly Vice President of Marketing for Online Computer Library Center (OCLC), Inc., Dublin, Ohio, where he participated in the successful expansion of OCLC's product line and the tripling of OCLC's customer base over a ten year period of employment. He has a B.S. from the Georgia Institute of Technology and an MBA from the University of Michigan.

SHARON L. SERZAN

Ms. Sharon L. Serzan is the manager of DTICs DoD Scientific and Technical Information (STINFO) Manager training program. She joined DTIC in 1988 as the head of the DTIC collection development program and assumed her responsibility for the STINFO training program in 1991. Prior to coming to DTIC, Ms. Serzan was head of the Acquisitions Division at the Naval Postgraduate School Library for eight years and for many years worked as a librarian for the Pennsylvania State University. Ms. Serzan holds a BA from the State of New York at Albany and a MLS from Rutgers University.

KEITH SHAFER

Keith Shafer received the B.A. degree in computer science and mathematics in 1986 from Mount Vernon Nazarene College, Mount Vernon, OH, USA, and the M.S. and Ph.D. degrees in computer science from The Ohio State University, Columbus, OH, USA in 1988 and 1992, respectively. Dr. Shafer is currently a Consulting Research Scientist at OCLC Online Computer Library Center, Inc., Dublin, OH USA. His research interests include automatic subject analysis, name resolution systems, methods for automatically constructing corpus grammars and tools for manipulating tagged text.

SHEILA GLANTON SHELLABARGER

Sheila Glanton Shellabarger is Head of Reference and Research Services at Wright State University's Fordham Health Sciences Library. She joined WSU in 1992 after serving five years as Library Director at Kettering College of Medical Arts. At Wright State, she has assisted in the design, implementation, and on-going refinement of LIBNET, the University Libraries' information and research network. She is very active with the Academic Library Association of Ohio (ALAO) and recently completed four years of service as the ALAO Newsletter co-editor. She hold the following degrees: B.S. (Miami University), M.Ed. (Wright State University), and M.L.S. (Kent State University).

LEN SIMUTIS

Len Simutis is Director, Eisenhower National Clearinghouse for Mathematics and Science Education (ENC) at The Ohio State University. He joined Ohio State in 1992 when ENC was created with funding from the U. S. Department of Education. From 1990 to 1992, he served as Interim Director of the Ohio Library and Information Network (OhioLINK) while on leave from Miami University in Oxford, Ohio. From 1984 to 1990 he served as Dean of the Graduate School and Research and Special Assistant to the Provost for Academic Information Systems at Miami University, and Professor of American Studies and Geography. At Miami, he was a member of the faculty team that received the 1992 EDUCOM award for software in the social sciences. He has recently completed six years of service with the Ohio Humanities Council, with the last two years as chair, and has served on the technology advisory committees of the National Endowment for the Humanities, and the Federation of State Humanities Councils. He has an A. B. from the University of Illinois, and an M. A. and Ph. D. from the University of Minnesota.

KATHLEEN TILLER
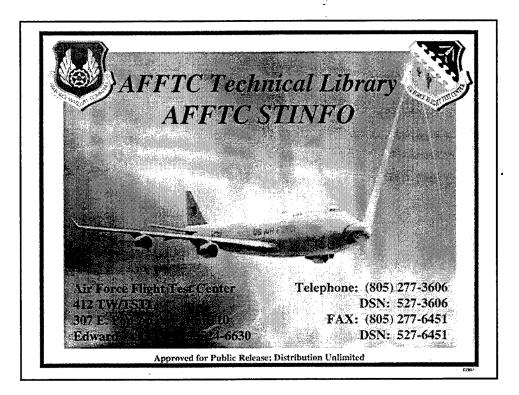
Kathleen Tiller is a Reference Librarian at the University of Dayton Library. She is part of the reference team that has been developing the UD Library's web pages, and has provided library instruction for both on-campus and off-campus students for the past 14 years here at UD. Prior to this position she taught English (grades 7-12) for 12 years. Most recently she has co-developed a Web-based library research skills tutorial for use by freshman composition classes.

JEFF TRZECIAK

Jeff Trzeciak has been involved in library automation for more than 11 years. For the past seven years, he has been Head of Automation Services for the Wright State University Libraries. His responsibilities include support of the local OhioLINK system for WSU and its seven Dayton-area hospital libraries. He is also responsible for managing LIBNET, the University Libraries' information and research network. Access within the University Libraries is provided through a Novell network with more than 200 workstations. External access is provided via the World Wide Web. LIBNET was one of the first systems of its kind in Ohio. As a result, Jeff has had many opportunities to speak at local, regional, and national conferences.

KATHLEEN WEBB

Kathleen Webb is the Government Documents Librarian at the University of Dayton Library. She has taken a leading role in the reference team developing the UD Library's web pages. Most recently she has co-developed a Web-based library research skills tutorial for use by freshman composition classes.

AFFTC Technical Library
AFFTC STINFO

Air Force Flight Test Center
412 TW/TSIL
307 E. Po...
Edward... ...-6630

Telephone: (805) 277-3606
DSN: 527-3606
FAX: (805) 277-6451
DSN: 527-6451

Approved for Public Release; Distribution Unlimited

Executive Order 12958 Review Process

Presented by:
Jolaine Lamb, Chief
AFFTC Technical Library/STINFO

Tasking Chain

- EXECUTIVE ORDER 12958 - -
  President Clinton
- Department of Defense
- Department of the Air Force
- Air Force Materiel Command
- Acquisition Security
- Directorate Security
- AFFTC Technical Library

"DROP DEAD DEADLINE"

Tasking Instructions

1. Review Classified Holdings
2. Identify 25 years or older
3. Acquisition Security - AFFTC
   Controlled Items
   (Permanently Historical)
4. Non-AFFTC Controlled Items
5. Tracking Hours/Costs

Review Team

1. Holder
2. Historian
3. Chief Engineer *
4. Intelligence Office
5. Directorate Security
6. Others: Combined Test Forces
       Special Program Office Liaisons
       * Engineering Disciplines Liaisons
7. Acquisition Security

Executive Order Review Checklist

TITLE:		
Document Date:	Markings (RD, FRD,NF,WN,NC):	File Series:
Location:	Pages/Tape Length/ Diskettes:	TS Control #:
Type of Info (Disk Tape, etc.):	Permanent Historical or Non-Permanent Historical	Classification (TS, S, C,):
Classified Holder	Data Referred Out:	Referred To:
TS Security: Date Reviewed:	Recommendation (Down grade, Declassify, Extend):	If Exempt, What Category?
AFFTC/IN: Data Reviewed:	Recommendation (Down grade, Declassify, Extend):	If Exempt, What Category?
Chief Engineer Date Reviewed:	Recommendation (Down grade, Declassify, Extend):	If Exempt, What Category?
Other Organization Referred to as Required: Date Reviewed:	Recommendation (Down grade, Declassify, Extend):	If Exempt, What Category?

Executive Order Review Checklist

(cont.)		
Review (As Necessary):	Date of Review	Other Referrals as Necessary
Technical OPR (If Available):	Date of Review	Other Referrals as Necessary
MSS/IM (File Series) or Rule if Applicable):	Date of Review	Other Referrals as Necessary
HO (Determine Permanent or Non-Permanent Historical Value, As Applicable):	Date of Review	Other Referrals as Necessary
AS (Optional Configure Information And Prepare for the Commander's Signature	Date of Review	Recommended course of action
COMMENTS:		

Executive Order Review Checklist

(cont.)

OCA: Date & Classification: Decision (Downgrade, Declassify, Extension):

COMMENTS:

REFER TO: (NON-AIR FORCE ORGANIZATIONS):

STATE:	DOE:	FOREIGN GOVT
NATO	CIA	CINCPAC
DOD/JCS/DNA	NSA	STRAT COM
JSSA (c & c)	ARMY	OTHER
NAVY/MARINES	DIA	OTHER

Executive Order Review Checklist

(cont.)

EXEMPTIONS

__1. Reveal intelligence Sources or Method	__4. Impair Application of State-of-the-Art Technology w/in U.S.	__7. Impair Ability to Protect President, VP, etc.
__2. Assist Development or Use of Weapons Mass	__5. Reveal Actual U.S. Military War Plans	__8. Impair National Security Emergency Preparedness Plans
__3. Impair U.S. Cryptologic Systems or Activities	__6. Impair Relations Between U.S. Foreign Govt., or Diplomatic	__9. Violate a Statute, Treaty or International Agreement
Total Pages Reviewed	Pages Downgraded	
Pages Declassified	Pages Retained	

Executive Order Review Checklist

(cont.)

ALL AIR FORCE ORIGINATED PAGES WITHIN THIS DOCUMENT ARE DECLASSIFIED EXCEPT:

Costs Associated with Declass: (include all Time, Personnel, and Equipment used for Declassification, Determination during current reporting period)

FINAL ACTION TAKEN:

Remind team members to

Remind team members
NOT
to discuss reasons with you

you

Actions: AFFTC Controlled

1. Team Recommendations to Directorate Security
2. Directorate Security Recommendations to Acquisition Security
3. Acquisition Security Recommendations to AFFTC/CC
4. AFFTC/CC Recommendations to HQ AFMC/SP
5. Copy of AFFTC/CC Recommendations to DTIC-OCQ

Actions: Non - AFFTC Controlled

1. Holder letters to controlling offices (FY 96)
2. *To date - - no replies (FY 96)*
3. Follow-up letters Dec 1997 - Jan 1998
4. FY 97 letters for controlling offices

You Want ME to Do WHAT?

SOURCES

LOCKHEED

FZM, FZT Series

LMTAS
Data Depository
Lockheed Blvd
Ft Worth, TX 76108

FAX: (817) 777 - 0169

Voice: (817) 777 - 1493

F - 111

SM-ALC/LAFS
5020 Dudley Blvd
McClellan AFB, CA
95652 - 1391

Mr Bill Haar
(916) 643 - 2601
DSN: 633 - 2601

SOURCES
(cont.)

Department of State:
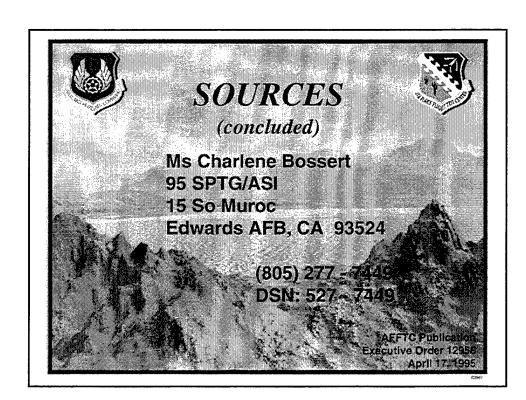
Mr Tony Dalsimer
Washington D.C.

(202) 647 - 9400
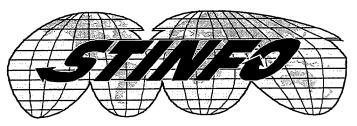
Executive Order Information:

Mr Bill Bush
Defense Technical
Information Center
DTIC-OCQ
8725 John J. Kingman Road
Suite 0944
Fort Belvoir, VA 22060- 6218

(703) 767 - 0011
DSN: 427 - 0011

SOURCES
(concluded)

Ms Charlene Bossert
95 SPTG/ASI
15 So Muroc
Edwards AFB, CA 93524

(805) 277 - 7449
DSN: 527 - 7449

AFFTC Publication
Executive Order 12958
April 17, 1995
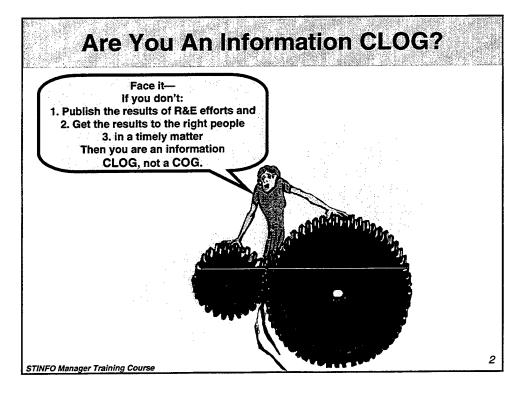
Scientific and Technical Information Lifecycle - Roles and Responsibilities
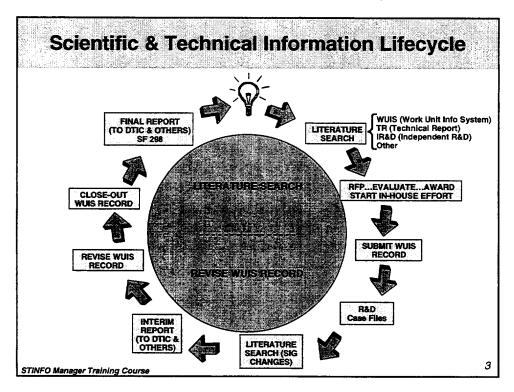
Presented on 17 Nov 97 at MLW by

Ms. Sharon Serzan

Defense Technical Information Center

Are You An Information CLOG?

Face it—
If you don't:
1. Publish the results of R&E efforts and
2. Get the results to the right people
3. in a timely matter
Then you are an information
CLOG, not a COG.

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2

02/20/97

10

1

DoD STINFO Manager Training Course

Scientific & Technical Information Lifecycle

FINAL REPORT
(TO DTIC & OTHERS)
SF 298

LITERATURE
SEARCH
- WUIS (Work Unit Info System)
- TR (Technical Report)
- IR&D (Independent R&D)
- Other

CLOSE-OUT
WUIS RECORD

LITERATURE SEARCH

RFP...EVALUATE...AWARD
START IN-HOUSE EFFORT

REVISE WUIS
RECORD

REVISE WUIS RECORD

SUBMIT WUIS
RECORD

INTERIM
REPORT
(TO DTIC &
OTHERS)

LITERATURE
SEARCH (SIG
CHANGES)

R&D
Case Files

STINFO Manager Training Course

3

STINFO Definition - Current

Communicable knowledge or information
resulting from or about the conduct and
management of scientific and engineering
efforts. STI is used by administrators,
managers, scientists, and engineers engaged
in scientific and technological efforts and is
the basic intellectual resource for and result
of such efforts. STI may be represented in
many forms and media. That includes paper,
electronic data, audio, photographs, video,
drawings, numeric data, textual documents;
etc.

—*DoDI 3200.12* (1997, pending signature)

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4

02/20/97

2

DoD STINFO Manager Training Course

STINFO Definition - Current
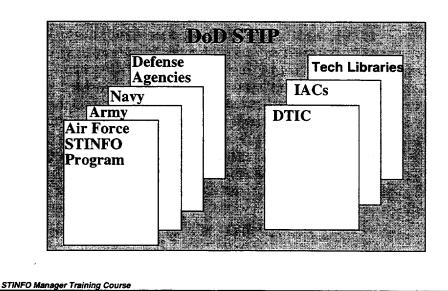
Information relating to research,
development, engineering, testing,
evaluation, production, operation, use,
and maintenance for military products,
services, and equipment for military
systems. This includes all production,
engineering, and logistics information.

—MIL STD 1806 (1990) - cancelled (1995)

DoD Scientific & Technical Information Program (STIP)

DoD STIP

Defense Agencies
Navy
Army
Air Force STINFO Program

Tech Libraries
IACs
DTIC

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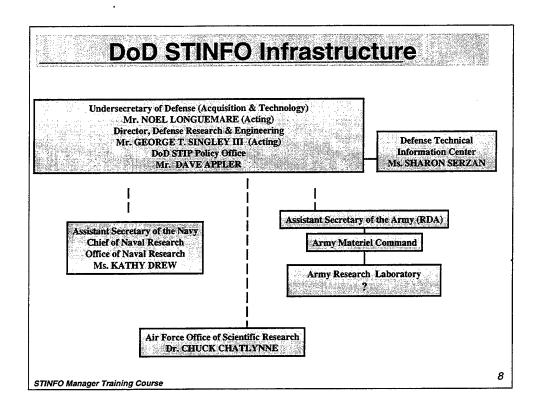
DoD STIP Regulations
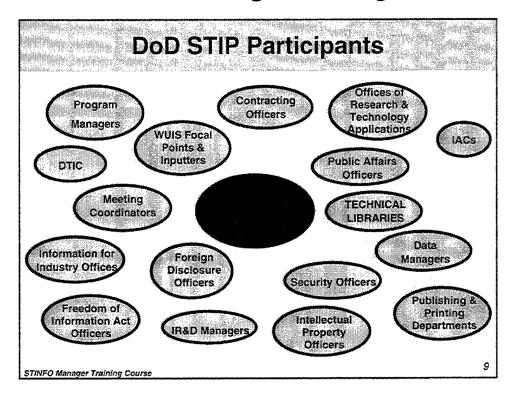
- **DoDD 3200.12, *DoD Scientific and Technical Information Program,* 15 Feb 83 *(*1997 revision, pending signature*)***
- **AFPD 61-2, *Management of Scientific and Technical Information,* 7 Apr 93**
- **AR 70-45, *Research, Development and Acquisition. Scientific and Technical Information,* 29 Jul 96 (working draft)**
- **SECNAVINST 3900.43A, *Navy Scientific and Technical Information Program,* 20 Jul 94**

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7

02/20/97

4

DoD STINFO Infrastructure

Undersecretary of Defense (Acquisition & Technology)
Mr. NOEL LONGUEMARE (Acting)
Director, Defense Research & Engineering
Mr. GEORGE T. SINGLEY III (Acting)
DoD STIP Policy Office
Mr. DAVE APPLER

Defense Technical
Information Center
Ms. SHARON SERZAN

Assistant Secretary of the Navy
Chief of Naval Research
Office of Naval Research
Ms. KATHY DREW

Assistant Secretary of the Army (RDA)

Army Materiel Command

Army Research Laboratory
?

Air Force Office of Scientific Research
Dr. CHUCK CHATLYNNE

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8

Mr. Dave Appler has two main responsibilities: (1)develop policy and regulatory guidance and and oversee compliance and (2) oversee DTIC operations. The three Service managers' duties are similar to each other except that Ron and Alan are also responsible for IR&D. They are both senior managers and have additional oversee additional, non-STINFO functions.

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DoD STIP Participants

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9

DoD STIP Objective & Goals

Objective: Increase the effectiveness of the scientific and technical effort within the DoD community

- Maximum contribution to science & technology

- Increase productivity & effectiveness of Defense R&E programs

- Avoid overlap/duplication of R&E programs

- Support & incorporate DoD policy to protect military critical technology

- Improve military readiness to meet international security needs

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10

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A Quote

"The more you share, the more you get back"

-Lieutenant General Paul Van Riper
Commanding General, Marine Corps Combat
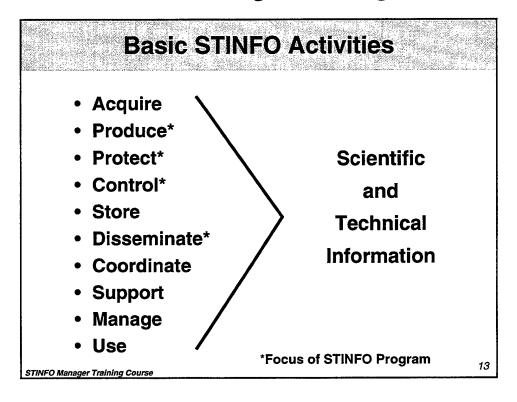Dev Command, Quantico, VA

11
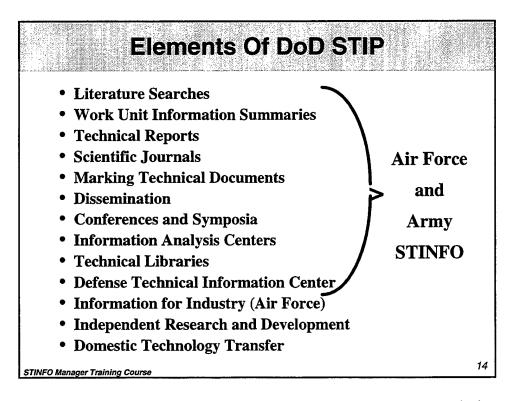
DoD STIP Responsibilities

Heads of DoD components shall:

- Designate senior-level STI manager at department level
- Review STI needs & make recommendations to OUSD(A)
- Establish, operate & administer STI functions & activities
- Provide programming, funding & other support
- Maintain a current review & inventory of STI functions & activities
- Encourage use & sponsorship of and participation in technical meetings
- Execute technology transfer programs
- Ensure all technical accomplishments are recorded as technical documents
- Operate & support input of data to central DoD databases
- Maximize distribution of information in unclassified form

12

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Basic STINFO Activities

- **Acquire**
- **Produce***
- **Protect***
- **Control***
- **Store**
- **Disseminate***
- **Coordinate**
- **Support**
- **Manage**
- **Use**

Scientific

and

Technical

Information

*Focus of STINFO Program

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13

Elements Of DoD STIP

- Literature Searches
- Work Unit Information Summaries
- Technical Reports
- Scientific Journals
- Marking Technical Documents
- Dissemination
- Conferences and Symposia
- Information Analysis Centers
- Technical Libraries
- Defense Technical Information Center
- Information for Industry (Air Force)
- Independent Research and Development
- Domestic Technology Transfer

Air Force

and

Army

STINFO

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14

What Is A STINFO Manager?

The primary point of
contact at a DoD activity
for STI policies and
procedures
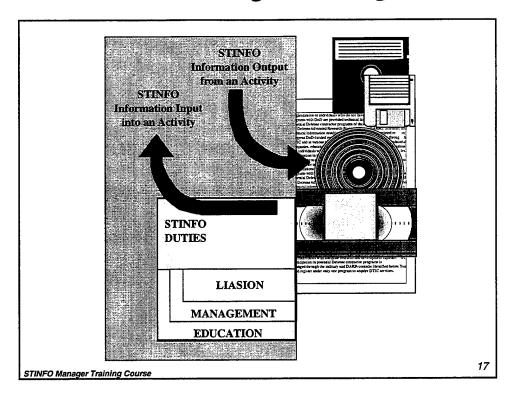
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Major Responsibilities of a STINFO Office

- Oversee STINFO program and ensure compliance
- Provide training and user support
- Literature searches are conducted (Technical Library)
- Records are submitted to the WUIS
- WUIS records are timely, accurate and complete
- Work efforts are promptly documented
- Technical publications meet publishing standards
- Technical publications are properly marked
- Primary distribution is proper and timely (Technical Library)
- DTIC handles secondary distribution

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02/20/97

18

4

DoD STINFO Manager Training Course

STINFO Information Output from an Activity

STINFO Information Input into an Activity

STINFO DUTIES

LIASION

MANAGEMENT

EDUCATION

17

Major Responsibilities of a Technical Library

- Collections - develop, maintain, disseminate
- In-depth materials in direct support of the parent organization's mission (AFI 34-270, 1 Sep 97)
- Reference and research services
- Bibliographic instruction
- Current awareness
- Literature searching
- Organizational focal point for information sources

18

02/20/97

Technical Library Definition

An activity that acquires, organizes, houses, retrieves, and disseminates information and information materials; and performs reference and research in direct support of a host activity's R&E mission. It also may provide all or any one of such services as analysis, current awareness, literature searching, translations, and referral. A technical library may also be called a "technical information center."

— DoDI 3200.12 (1997, pending signature)

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19

Some Air Force History

- **AFR 83-1, *USAF Scientific and Technical Information Program*, 1 Dec 88**
  - Provide technical library services consistent with user requirements

- **AFR 83-1, 1990 (Draft)**
  - Establish and maintain technical libraries, as required, in support of an organization's mission
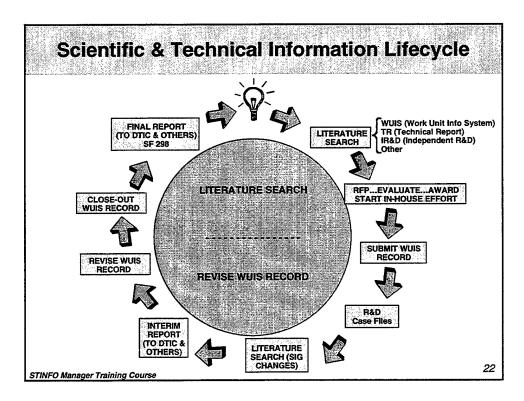
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20

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Current Wording

- **AFI 61-201,** *The Local Scientific and Technical Information Process,* **16 Jun 95**
    - Coordinates all elements of the STINFO program with appropriate offices, including....the technical library....
- **AFI 34-270,** *Air Force Library and Information System (AFLIS)*
    - Scientific or Technical Libraries and Information Centers provide information to personnel who work in RDT&E programs or support other technical functions. Information centers operate in close cooperation with the scientific and technical information officer (STINFO). Professional librarians or information specialists may be designated as the STINFO.

21

Scientific & Technical Information Lifecycle

22

02/20/97

21

7

DoD STINFO Manager Training Course

STINFO Actions - Nine

- **All applicable DTIC databases shall be reviewd prior to the initiation of any R&E effort (Technical Library)**
- **A description reporting the initiation or funding of any new DoD R&E effort shall be recorded and submitted in a timely manner to the WUIS**
- **All work effort summaries shall be updated:**
  - major change in work
  - upon completion of effort
  - upon termination of effort
- **All summaries shall be reviewed and revised at least annually following initial submission**

23

More Actions

- **A technical publication shall be prepared upon completion or termination of any DoD R&E effort**

- **All reports prepared by, or for, the DoD shall comply with:**
  - ANSI Z39.18- 1995, *Scientific and Technical Reports: Elements, Organization, and Design*, **and include**
  - Completed SF298, *Report Documentation Page*

24

02/20/97

22

8

Three Final Actions

- **Primary distribution shall be to the technical community having a direct and immediate interest in the outcome of the R&E or studies efforts**
- **DTIC, applicable IACs, and the local DoD technical library or repository that supports the activity responsible for the document shall be recipients of the primary distribution at the same time**
- **A collection of locally produced documents is set up and maintained (Technical Library)**
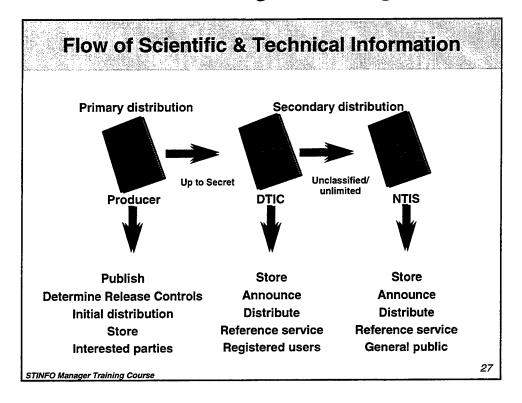
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Primary & Secondary Distribution

- **Primary distribution**
  - Initial
  - Internal and external
  - Controlling DoD office
- **Secondary distribution**
  - Subsequent
  - Response to a request
  - Repository such as DTIC/NTIS

STINFO Manager Training Course   26

02/20/97

DoD STINFO Manager Training Course

Flow of Scientific & Technical Information

Primary distribution

Secondary distribution

Up to Secret

Unclassified/
unlimited

Producer

DTIC

NTIS

Publish	Store	Store
Determine Release Controls	Announce	Announce
Initial distribution	Distribute	Distribute
Store	Reference service	Reference service
Interested parties	Registered users	General public

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27

Two Questions

* **Who should be the DTIC POC?**

* **Who should perform the required literature search?**

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28

02/20/97

1

DoD STINFO Manager Training Course

A Quote

"One of the principle functions of DoD technical libraries is to retain the current and future technical assets of the DoD."

— DoDI 3200.12 (1997, pending signature)

29

Common Goal

Both Technical Libraries and STINFO Offices are concerned with maximizing user access to information

30

02/20/97

1

Department of Defense
Scientific and Technical Information Program
DoD Distribution Statements

A Quick Reference for Marking Technical Documents

What is My Role in Marking Technical Documents?

What is the Process I Should Follow to Mark Documents?

What Kinds of Documents Should I Mark?

What Constraints Must I Consider in Marking Documents?

What Makes Up a Distribution Statement?

What are the Distribution Levels?

Where Do I Get More Information?

Introduction

Purpose

This guide is intended to offer DoD staff a basic understanding of the rationale and mechanics of properly assigning Distribution Statements to DoD scientific and technical information. While other markings such as classification and export control statements are also requirements, this guide covers only Distribution Statements.

Background and Policy

Research, development, technical, and engineering personnel are faced with many policies and requirements for managing the vast array of information they generate and manage. Identifying and balancing these diverse requirements can pose a significant challenge.

DoD policy is to maximize the availability of technical information and products resulting from Defense-funded technical activities consistent with restraints such as national security, export control, and intellectual property rights.

Distribution statements provide the framework for DoD personnel to comply with this policy and to meet the responsibilities for managing, disseminating, and when necessary, restricting the flow of information and data that results from their work.

User Surveys FAQ Glossary/Definitions References

Note: FAQ currently not activated.

A Quick Reference for Marking Technical Documents

References

The following references provide additional information about marking of technical information/documents and/or identify policy constraints on the dissemination of information created by or for DoD or under DoD's control. To access databases that contain DoD Directives and Instructions, click here and follow the directions for searching the databases. To access the databases containing Executive Orders and Export Control Administration regulations, click on the document as it is listed below.

Reference no.	Title
DoD Regulation 5200.1-R	Information Security Program Regulation
DoD Directive 5200.12	Conduct of Classified Meetings
DoD Directive C-5200.5	Communications Security (COMSEC) (U)
DoD Directive 5230.11	Disclosure of Classified Military Information to Foreign Governments and International Organizations
DoD Directive 5230.24	Distribution Statements on Technical Documents
DoD Directive 5230.25	Withholding Unclassified Technical Data from Public Disclosure
DoD Instruction 5230.27	Presentation of DoD-Related Scientific and Technical Papers at Meetings
DoD Directive 5230.9	Clearance of DoD Information for Public Release
DoD Directive 5400.11	Department of Defense Privacy Program
DoD Directive 5400.7	DoD Freedom of Information Act Program
DoD Directive 8910.1	Management and Control of Information Requirements
DFARS252.227	Rights in Data and Copyrights
Executive Order12981	Administration of Export Controls
Export Administration	Export Administration Regulations

For more information contact:

Office of Scientific & Technical Information Policy Defense Technical Information Center
8725 John J. Kingman Road
Suite 0944
Fort Belvoir, Virginia
Phone: (703)767-91630
Fax: (703) 767-9161

A Quick Reference for Marking Technical Documents

Glossary

Term/Reference	Definition
Contractor DoDD 5230.24	An individual or organization outside the U.S. Government who has accepted any type of agreement or order to provide research, supplies, or services to a U.S. Government agency, including both prime contractors and subcontractors.
Controlling DoD Office DoDD 5230.24	The DoD activity that sponsored the work that generated technical data, or received technical data on behalf of the DoD and therefore has the responsibility for determining the distribution of a document containing such technical data.
Defense Industry Information DoDI 3200.XX	Technical planning, requirements, and acquisition information provided to industry through various programs to enable industry to meet defense weapons and support systems needs.
Distribution Statement DoDD 5230.24	A statement used in marking a technical document to denote the extent of its availability for distribution, release, and disclosure without additional approvals or authorizations.
Primary Distribution DoDD 5230.24	The initial targeted distribution of or access to technical documents authorized by the controlling DoD office.
Scientific and Technical Documents DoDI 3200.XX	Documented result of DoD-sponsored or Defense-related research and engineering efforts. The work may have been performed either in-house or externally by contractors, subcontractors, grantees or by other similar business relationships. Scientific and technical documents include but are not limited to technical reports, technical notes, technical memoranda, technical papers, special reports, conference proceedings, journal articles, and other formats.
Scientific and Technical Information DoDD 5230.24	Communicable knowledge or information resulting from or pertaining to conducting and managing a scientific or engineering research effort.
Secondary Distribution DoDD 5230.24	Release of technical documents provided after primary distribution by other than the originator or controlling office. It includes loaning, allowing the reading of, or releasing a document outright, in whole or in part.
Technical Data DoDD 5230.24	Recorded information related to experimental, developmental, or engineering works that can be used to define an engineering or manufacturing process or to design, procure, produce, support, maintain, operate, repair, or overhaul material.
Technical Document DoDD 5230.24	Any recorded information that conveys scientific and technical information or technical data. This includes such informal documents as working papers, memoranda, and preliminary reports when such documents have utility beyond the immediate mission requirement, or will become part of the historical

	record of technical achievements.
Technical Information DoDD 5230.24	Information, including scientific information, that relates to research, development, engineering, test, evaluation, production, operation, use, and maintenance of munitions and other military supplies and equipment.
Technical Symposia and Meetings DoDI 3200.XX	Formally scheduled assemblies for the presentation and discussion of topics pertinent to R&E programs.

This information was developed by the Education and Training Division of Oak Ridge Institute for Science and Education, Nov 1997.

Department of Defense

Distribution Statements

A Quick Reference for Marking DoD Technical Documents

Purpose

This guide is intended to offer DoD staff and contractors a basic understanding of the rationale and mechanics of properly assigning DoD Distribution Statements to DoD technical documents. While other markings such as security classification may also apply, this guide covers only Distribution Statements.

Background and Policy

Research, development, technical, and engineering personnel are faced with many policies and requirements for controlling the vast array of information they generate and manage. Identifying and balancing these diverse requirements can pose a significant challenge.

DoD policy is to maximize the availability of technical information and products resulting from Defense-funded technical activities consistent with restraints such as national security, export control, and intellectual property rights.

Distribution Statements provide the framework for DoD personnel to comply with this policy and to meet their responsibilities for managing, disseminating, and when necessary, restricting the flow of information and data that results from their work.

Introduction

Roles in Marking Documents

DoD Controlling Office

Contracting Officer's Technical Representative (COTR)

Content Provider

Managers and Supervisors

Project Manager

Public Affairs Office

Security Office

Foreign Disclosure Office

STINFO Officer/ Technical Data Manager

DoD Controlling Office is the entity that sponsored the work which generated the technical document, or which received the technical document on behalf of the DoD. The DoD Controlling Office has overall responsibility for assigning DoD Distribution Statements including appropriate review and dissemination.

Contracting Officer's Technical Representative directs the contractor as to the appropriate DoD Distribution Statement for each technical document/data set.

Content Provider generates the document and has the best knowledge of its technical content. If content providers are DoD employees, then they should determine the appropriate DoD Distribution Statement and mark the document. If they are not DoD employees, they should assist the DoD Controlling Office in selecting the appropriate DoD Distribution Statement.

Managers and Supervisors are responsible for seeing that staff are aware of and adhere to DoD policy, that staff know what their roles are, and that they are carrying them out. There duties include helping to ensure that DoD personnel and contractors document and properly mark the results of their work.

Project Manager helps ensure that project results are documented, DoD Distribution Statements are assigned, and that documented efforts are disseminated.

Public Affairs Office reviews and approves all documents marked for release to the general public before they are released.

Security Office reviews documents to ensure that national security interests are protected.

Foreign Disclosure Office reviews documents for export-controlled information and ensures that all foreign disclosure requirements are met.

The **Scientific and Technical Information Officer/Technical Data Manager** assists the content provider in the proper use of DoD Distribution Statements and ensures that documents/data are distributed.

What Is My Role in Marking DoD Technical Documents?

What Is the Process I Should Follow to Mark Documents?

1. **Technical Content:** Is the content of the document, data, or information technical in nature? (For help, see "What Kinds of Documents Should I Mark"? below)

   YES? Then DoD Directive 5230.24 applies. Go to question 2.
   NO? Then no need to mark.

2. **DoD Technical Document:** Does the document meet all criteria for Defense technical documents? In particular, was it produced by or for DoD? (See note under Definitions in "What Kind of Documents Should I Mark?" below)

   YES? You must mark it. Go to question 3.
   NO? Then no need to mark.

3. **Primary Distribution:** To whom does the DoD Controlling Office need to send it? The list you generate in answer to this question constitutes the "primary distribution" for the document. In general, recipients on the primary distribution list should be consistent with the other audiences who can receive the content. On occasion, the DoD Controlling Office may choose to exercise its additional approval authority to distribute the document, data, or information beyond the constraints you must now consider. For example, although the document may be marked for distribution to DoD only because it contains proprietary information, the document may obviously be shared with the contractor who provided the proprietary information. Don't post, fax, or e-mail those copies yet. First, work through question 4 to consider "secondary distribution."

4. **Secondary Distribution:** Your fourth question is: Who do you think can or cannot receive this technical content *without further review or release decisions by the DoD Controlling Office?* Another way to think of this is: What are the constraints, if any, on the public release of the content?

   To answer this question, you must use:

   - Your knowledge of the project
   - Relevant information about the content (such as its origins, ownership, use, etc.)
   - Any supporting documents (such as contractor or joint work agreements)
   - Expertise of other DoD staff (such as security or foreign disclosure personnel)

   Got your resources lined up? Good, now you are ready to review the possible reasons—if any—that may make it necessary to limit the access of selected categories of individuals or organizations to the technical content of your materials. Use the matrix of "Reasons for Designating Audiences" below to address the following questions:

a. Is this a DoD technical document, DoD technical data, or DoD technical information?
b. Does it contain information provided by a foreign government?
c. Does it contain proprietary information?
d. Does it contain information on the results of testing and evaluation that would be sensitive in the relationship between DoD and its producing contractors?
e. Does it contain information obtained from management review of a contractor?
f. Does it contain critical technology information the release of which would have a negative impact on U.S. military activities or help potential adversaries overcome military deficiencies?
g. Does it contain potentially patentable information or information that is part of a patent application by a DoD activity for in-house work?
h. Does it contain documentation for software covered by a license?
i. Does it contain information that is descriptive of administrative or operational procedures with technical content such as technical manuals and maintenance procedures?
j. Does it contain information restricted by a specific law, regulations, or Executive Order?
k. Does it contain export-controlled information?

YES to any question? You must consider the need to restrict your document's secondary distribution to one of the audiences defined in the matrix. The outcome of your decision will be the choice of one of six distribution levels—B, C, D, E, F, or X (see "What Are the Distribution Levels/Codes" below).

NO to all questions? If the document does not contain information that is sensitive for other reasons (e.g., classified, copyrighted, falls under the Privacy Act, etc.) and if the Public Affairs Office concurs, the document should be approved for release to the general public and assigned distribution level A.

ONE MORE NOTE OF CAUTION: Not all DoD technical documents or data sets should have a single secondary distribution. For example, different distribution constraints may apply to the separate papers in a conference proceedings. If the document can or should be broken down into logical components, assign a distribution level to each component.

5. **DoD Distribution Statement:** Having made your initial decision, assign the Distribution Statement, providing all needed information and placing it correctly on the materials. (See the examples in "What Makes Up a Distribution Statement?" below)

6. **Review and Concurrence:** Finally, check your decision with others who have a role in marking documents for distribution (see "What Is My Role..." above). In addition to your own management line and DoD Controlling Office, reviewers may include the Public Affairs, Security, and Foreign Disclosure Offices, and your STINFO Officer or Technical Data Manager.

What Is the Process I Should Follow to Mark Documents?

Definitions

DoDD 5230.24 provides the following definitions for types of information that are considered DoD technical documents and should be marked with DoD Distribution Statements:

DoD Technical Data: Recorded information related to experimental, developmental, or engineering works that can be used to define an engineering or manufacturing process or to design, procure, support, maintain, operate, repair or overhaul material. The data may be graphic or pictorial delineations in media such as drawings or photographs, text in specifications or related performance or design type documents, or computer printouts. Examples of technical data include research and engineering data, enginering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog-item identifications, and related information and cumpter software documentation.

DoD Technical Document: Any recorded information that conveys scientific and technical information or technical data. It includes such informational documents as working papers; memoranda, and preliminary reports when such documents have utility beyond the immediate mission requirement, or will become part of the historical record of technical achievements.

DoD Technical Information: Information, including scientific information, that relates to research, development, engineering, test, evaluation, production, operation, use, and maintenance of munitions and other military supplies and equipment.

NOTE: DoD technical documents include only those technical documents generated by DoD-funded research, development, test and evaluation programs, which are the basis of the DoD Scientific and Technical Information Program. They also include all newly created engineering drawings, standards, specifications, technical manuals, blueprints, drawings, plans, instructions, computer software and documentation and other technical information that can be used or adapted for use to design, engineer, produce, manufacture, operate, repair, overhaul, or reproduce any military or space equipment or technology concerning such equipment. These documents **do not include** command, control, communication, and intelligence operational documents; communication security documents; cryptographic data; personnel records; broad types of documents such as administrative papers, internal procedures, catalogs and brochures, directories, promotional materials, and contract administration documents; or technical documents used by DoD that have not been produced by or for DoD such as a book of industry standards or a privately published scientific journal.

Documents that must be marked with DoD Distribution Statements include all information relating to research, development, engineering, testing, evaluation, production, operation, use, and maintenance for military products, services, and equipment for military systems.

Please note that the following list is **not all inclusive:**

Types of Documents	- Technical reports - Technical memoranda - Technical manuals - Conference proceedings - Special reports - Instructions - Engineering drawings - Preprints - Annual technology program reports	- Technical notes - Technical papers - Technical orders - Journal articles - Plans - Computer software - Working papers - Theses
Media Formats	- Paper - Film - Microfilm/Microfiche - Transparencies - Computer diskettes - E-mail	- Electronic - Oral presentations - Audio/Video tapes - Slides - CD ROM
Forms of Data	- Blueprints - Graphic displays - Dimensional data - Formulas - Maps	- Drawings - Text - Numeric data sets - Photographs - Computer printouts

What Kinds of Documents Should I Mark?

Reasons for Designating Audiences* for Secondary Distribution	DoD Distribution Statement Levels/Codes						
	A	C	D	B	E	X	F
APPROVED FOR PUBLIC RELEASE: *The information is approved for public release and does not contain controlled data.*	✔						
FOREIGN GOVERNMENT INFORMATION: *The foreign government information furnished to the Department of Defense is restricted in its distribution to:*							
DoD components only.					✔		
U.S. Government Agencies only.				✔			
DoD components and their contractors only.			✔				
U.S. Government Agencies and their contractors only.		✔					
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔
PROPRIETARY INFORMATION: *The information is (1) owned by a non-government entity and (2) is protected by a contractor's Limited Rights Statement (LRS) or other agreement. Therefore, dissemination is restricted to:*							
DoD components only.					✔		
U.S. Government Agencies only.				✔			
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔
TEST AND EVALUATION: *The information results from testing and evaluation of commercial products or military hardware produced by a nongovernmental entity.*							
Routine dissemination of such results outside DoD could result in unfair advantage or disadvantage to the manufacturer or producer.					✔		
Routine dissemination of such results outside the U.S. Government could result in unfair advantage or disadvantage to the manufacturer or producer.				✔			
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔

*Audience is the group of persons approved to receive a document.

Reasons for Designating Audiences* for Secondary Distribution	DoD Distribution Statement Levels/Codes						
	A	C	D	B	E	X	F
CONTRACTOR PERFORMANCE EVALUATION: *The information derives from the management review of a program, contractor, performance records, or other advisory documents evaluating a contractor program.* Routine dissemination of such results outside DoD could result in unfair advantage or disadvantage to the contractor.					✔		
Routine dissemination of such results outside the U.S. Government could result in unfair advantage or disadvantage to the contractor.				✔			
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔
CRITICAL TECHNOLOGY: *The technology or information is on the Munitions List or the Commerce Control List and release of the technology or information to other than the designated group (identified below) will have a negative impact on U.S. military activities or help potential adversaries overcome military deficiencies:* DoD components only.					✔		
U.S. Government Agencies only.				✔			
DoD components and their contractors only, but only if the contractors are registered with DoD to receive export-controlled data.			✔				
U.S. Government Agencies and their contractors only, but only if the contractors are registered with DoD to receive export-controlled data.		✔					
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔
Agencies, individuals, and enterprises authorized to receive export-controlled data.						✔	

What Constraints Must I Consider in Marking Documents?

Reasons for Designating Audiences* for Secondary Distribution	DoD Distribution Statement Levels/Codes						
	A	C	D	B	E	X	F
PREMATURE DISSEMINATION: *The information relates to patentable military systems or processes in the developmental stage, and:*							
Disclosure at this time, except at the discretion of the Controlling Office, would compromise DoD's interest in protecting a patentable technology.							✔
Disclosure at this time, except to U.S. Government Agencies, would compromise DoD's interest in protecting a patentable technology.				✔			
Disclosure at this time, except to DoD components, would compromise DoD's interest in protecting a patentable technology.					✔		
SOFTWARE DOCUMENTATION: *Software documentation shall be distributed according to the terms of the software license, which may restrict distribution to:* DoD components only.					✔		
U.S. Government Agencies only.				✔			
DoD components and their contractors only.			✔				
U.S. Government Agencies and their contractors only.		✔					
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔
ADMINISTRATIVE/OPERATIONAL USE: *This information describes administrative procedures or operations with technical content (such as equipment maintenance or weapons operations manuals). Such information may be unclassified but is considered sensitive information and its distribution should be limited to entities that need it for Government purposes or to conduct official business for DoD.* DoD components only.					✔		
U.S. Government Agencies only.				✔			
DoD components and their contractors only.			✔				
U.S. Government Agencies and their contractors only.		✔					
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔

Reasons for Designating Audiences* for Secondary Distribution	DoD Distribution Statement Levels/Codes						
	A	C	D	B	E	X	F
SPECIFIC AUTHORITY: *The specific authority (Executive Order, statutes such as the Atomic Energy or Stevenson-Wydler acts, Federal regulation, etc.) governing this information restricts its distribution to:* DoD components only.					✔		
U.S. Government Agencies only.				✔			
DoD component and their contractors only.			✔				
U.S. Government Agencies and their contractors only.		✔					
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔
DIRECT MILITARY SUPPORT: *The technical data is export-controlled and of such military significance to another country or to a joint U.S.-foreign program that its release for other than direct support of DoD activities potentially jeopardizes an important military advantage of the U.S. Release can be made:* To anyone permitted access to unclassified export-controlled data for foreign military sales.						✔	
To any DoD component in the joint program.					✔		
Recipients as directed by the DoD Controlling Office or higher DoD authority.							✔

What Constraints Must I Consider in Marking Documents?

Distribution Statement A

Approved for public release: distribution is unlimited.

Distibution Statement ___ (Fill in Level— B,C,D, oe E)

Distribution authorized to _____ (Fill in audience; see Note 1); _____
(Fill in reason; see Note 2); _____ (Fill in date of determination). Other requests
for this document shall be referred to _____ (Insert name of DoD
Controlling Office).

Note 1 - B = U.S. Government Agencies only
          C = U.S. Government Agencies and their contractors only
          D = DoD and U.S. DoD contractors only
          E = DoD components only

Note 2 - Reasons:

- Foreign Government Information
- Test and Evaluation
- Critical Technology
- Software Documentation
- Specific Authority

- Proprietary Information
- Contractor Performance Evaluation
- Premature Dissemination
- Administrative/Operational Use
- Direct Military Support

Distribution Statement X

Distribution authorized to U.S. Government Agencies and private individuals or
enterprises eligible to obtain export-controlled technical data in accordance with
_____ (Insert appropriate regulation); _____ (Insert date of
determination). DoD Controlling Office is _____ (Insert the name of DoD
Controlling Office).
(See Note 3)

Note 3 -   The audience(s) and reason(s) are inherent in the wording of the statement.

<div style="border: 1px solid black;">

Distribution Statement F

Further dissemination only as directed by _____ (Insert DoD Controlling Office or higher DoD authority); _____ (Insert date of determination). (See Note 4)

</div>

Note 4 - Distribution statement F is normally used only on classified technical documents, but may be used on unclassified technical documents when specific authority exists (e.g., designation as direct military support as in statement E). Distribution statement F is also used when the DoD originator determines that information is subject to special dissemination limitation specified by paragraph 4-505, DoD 5200.1-R (reference (h)).

A **Distribution Statement** consists of four critical pieces of information:

- Authorized audience approved for receipt of the data *(Distribution Level)*

- Reason that the data is restricted from public release *(Statement A has no reason since it is not restricted.)*

- Date *(of determination)*

- Identity of the DoD Controlling Office *(Statement A has no DoD Controlling Office since the material has been cleared for public release.)*
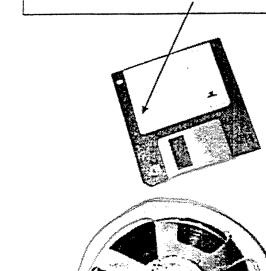
On the reverse and next pages are examples of DoD Distribution Statements on different document types, formats, and media.
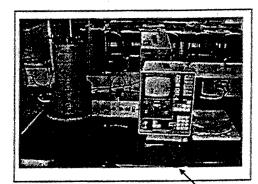
All DoD components generating or responsible for DoD technical documents and other forms of data shall determine the appropriate distribution and mark these materials with a DoD Distribution Statement before they can be disseminated. This statement denotes the extent of the document's availability for distribution, release, and disclosure without additional approvals or authorizations. It remains in effect until it is changed or removed by the DoD Controlling Office.

What Makes Up a DoD Distribution Statement?

Distribution Statement C

Distribution authorized to U.S. Government Agencies and their contractors only; software documentation; April 22, 1998. Other requests for this document shall be referred to the Director, U.S. Army Research Laboratory, Adelphi, MD 20783.
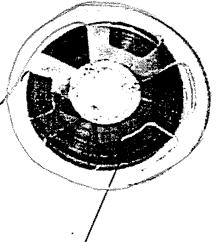
Distribution Statement D

Distribution authorized to DoD components and their contractors only; administrative/operational use; February 6, 1997. Other requests for this document shall be referred to the Commander, U.S. Army Test and Evaluation Command, Aberdeen Proving Ground, MD 21005.

(Back of Photo)

Distribution Statement F

Further dissemination only as directed by the
Chief of Naval Research,
Arlington, VA 22217;
May 14, 1997.

Distribution Statement E
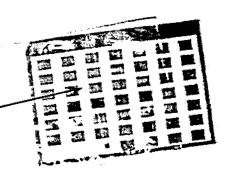
Distribution authorized to DoD components only; direct military support; July 1, 1996. Other requests for this document shall be referred to the Director, Sensor Technology Office, Defense Advanced Research Projects Agency, Arlington, VA 22203.

WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec. 2751, et. seq.) or the Export Administration of 1979, as amended, Title 50 U.S.C., App. 2401 et. seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

Presentation Title

Distribution Statement B

Distribution authorized to U.S. Government Agencies only; foreign government information; September 15, 1995. Other requests for this document shall be referred to the Naval Sea Logistics Center, Naval Sea Systems, Concord, CA 94510.

Distribution Statement X
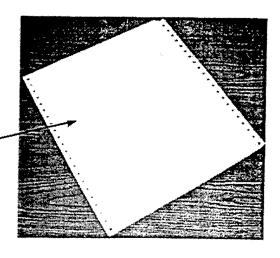
Distribution authorized to agencies, individuals, and enterprises authorized to receive export-controlled data; critical technology; June 9, 1990. Other requests for this document shall be referred to the Chief Scientist, Armstrong Laboratory, U.S. Air Force, Brooks AFB, Texas 78235.

WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec. 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50 U.S.C., App. 2401 et seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of DoD Directive 5230.25.

Distribution Statement E

Distribution authorized to DoD components only; contractor performance evaluation; August 21, 1996. Other requests for this document shall be referred to the Manager, Air Force, Program Data Systems Modernization Office, Dayton, OH 45431.

Examples of Distribution Statements

Distribution Statement Level/Code	Description
A	Approved for public release; distribution is unlimited.
C	Distribution authorized to U.S. Government Agencies and their contractors (fill in reason) (date of determination). Other requests for this document shall be referred to (insert DoD Controlling Office).
D	Distribution authorized to the Department of Defense and U.S. DoD contractors (fill in reason) (date of determination). Other requests for this document shall be referred to (insert DoD Controlling Office).
B	Distribution authorized to U.S. Government Agencies (fill in reason) (date of determination). Other requests for this document shall be referred to (insert DoD Controlling Office).
E	Distribution authorized to DoD components only (fill in reason) (date of determination). Other requests for this document shall be referred to (insert DoD Controlling Office).
X	Distribution authorized to U.S. Government Agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance with DoD Directive 5230.25, *Withholding Unclassified Technical Data from Public Disclosure* (date of determination). DoD Controlling Office is (insert).
F	Further dissemination only as directed by (insert DoD Controlling Office) (date of determination) or higher DoD authority.

What Are the Distribution Levels/Codes?

The following references provide additional information about marking of DoD technical documents and/or identify policy constraints on the dissemination of information created by or for DoD or under DoD's control:

Reference	Title
DoD Directive 3200.12	*DoD Scientific and Technical Information Program*
DoD Directive 3000.xx	*Principles and Operational Parameters of the DoD Scientific and Technical Program*
DoD Regulation 5200.1-R	*Information Security Program Regulation*
DoD Directive 5230.11	*Disclosure of Classified Military Information to Foreign Governments and International Organizations*
DoD Directive 5230.24	*Distribution Statements on Technical Documents*
DoD Directive 5230.25	*Withholding Unclassified Technical Data from Public Disclosure*
DoD Instruction 5230.27	*Presentation of DoD-Related Scientific and Technical Papers at Meetings*
DoD Directive 5230.9	*Clearance of DoD Information for Public Release*
DoD Instruction 5230.29	*Security and Policy Review of DoD Information for Public Release*
DoD Directive 5400.11	*Department of Defense Privacy Program*
DoD Directive 5400.7	*DoD Freedom of Information Act Program*
DoD Directive 8910.1	*Management and Control of Information Requirements*
DFARS 252.27.4/252.227	Proprietary Information

For more information contact:

Office of Scientific & Technical Information Policy
Defense Technical Information Center (DTIC)
8725 John J. Kingman Road
Suite 0944
Fort Belvoir, Virginia 22060-6218
Phone: (703)767-9160 Commercial or 427-9160 DSN
Fax: (703) 767-9161 Commerical or 427-9161 DSN

Military Librarians Workshop, 18-20 Nov 97, Dayton Marriott Hotel, Dayton, Ohio

Just for You Service: Challenges in Customizing Library and Information Services for the Future

Dean and Professor
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505 IS Building
135 N. Bellefield Avenue
Pittsburgh, PA 15260, USA
carbo@sis.pitt.edu
Military Librarians Workshop '97 program.

Introduction

It is a great pleasure to speak here at the Military Librarians Workshop (MLW). As a member of the Special Libraries Association (SLA) since the early 1970s, I have always learned from working with special librarians, and I did work in special libraries, primarily science and technology libraries, for many years.

Today I want to talk with you about trends I see emerging through a look at our changing roles, to relate these trends to the SLA competencies, and then to discuss briefly some challenges for us in shaping the future of our field. My discussion of trends and our changing roles is based on the Srygley Lecture I presented at the 50th Anniversary of the School of Information Studies at Florida State University. The paper I presented there is posted on the School's webpage.

Trends: Our Changing Roles

The roles of librarians and other information professionals are changing in many ways, in part due to increased economic pressures on libraries, to a growing understanding of the value of libraries in our networked, global society, and to very rapid changes in information technology. These changing roles can be described in many ways, and I have chosen to describe them under ten, somewhat arbitrary and, of course, overlapping categories. These categories are: 1) managers, 2) resource procurers, 3) creators/producers, 4) preservers of culture, 5) organizers of information, 6) researchers/retrievers, 7) educators, 8) students, 9) experts/advisors, and 10) advocates.

1. Managers

The context in which we manage has changed significantly over the past few decades as the demography of our country has evolved into a much more culturally and ethnically diverse society, with a greater number of seniors. We are living in a rapidly shrinking global village which enriches our lives and leads to a better understanding of other cultures. This evolution also places demands on our collections and services as we expand to include materials in other languages from other countries and provide services to meet more diverse needs.

Within this context, as managers we are managing our greatest resource: people, increasingly a more diverse workforce. Styles of management have changed as organizations and their work have evolved. Teamwork, matrix management, and fewer middle managers have resulted in greater emphasis on communication across divisions (and often across organizations and national boundaries) and on teamwork. Librarians are working more closely with archivists, records managers, marketing experts,

engineers and other technical staff, and many others as members of development and planning teams. Negotiations skills have become more important for teamwork and for the numerous services contracted out. As libraries join consortia and the role of the consortium for purchasing, licensing, and other cooperative ventures expands, these negotiation skills take on even more importance.

In part due to increased economic pressures, accountability has become of even greater significance. How well are we doing compared to other departments or similar organizations? How do we determine objectives and measure the outcomes of our work? How well are we meeting the needs of our users (often referred to as customers)? Are we central to the mission of our organization and how do we best demonstrate that we are? These and other questions of accountability demand responsible answers from us.

We must manage not only a growing and changing information technology, but also ensure that staff are trained to embrace the technology, all while balancing print and electronic collections and services. Decisions about what technologies to purchase or lease; whether to provide service centrally or decentrally, within the organization or contracted out; when to introduce technologies; and how to ensure that organizational priorities are clear before deciding how to use technology to meet those priorities are enormously complex and time-consuming. Careful planning, good teamwork, effective communication, patience, and a sense of humor are all needed to balance the demands and make the best possible decisions.

As managers, we are often called upon to be leaders, and the two do not always go together; not every manager is a good leader and vice versa. We must assume more responsibility as leaders, putting forward a clear vision, communicating that vision effectively, and working to implement what should become a shared vision. Of course effective communication is central to good management, even though it becomes more difficult as responsibilities and pressures are added on to an already overloaded day. Taking on the expanded role of a good manager is essential to our success, whether we are managing a small department and one staff member or a larger agency or organization.

2. Resource Procurers

Originally, I had thought to call this category, "Fundraisers," but I decided that was too narrow, because the resources needed go far beyond just dollars. Every agency, organization or corporation needs sufficient resources (budget, people, technology, and other support) to fulfill its mission and meet changing demands. As we work to grow our budgets--whether through increased appropriations, additional hard money funding, grants, or contributions, we must raise not only funds, but also "friends." This longer term cultivation of supporters takes a great deal of time and demands communication and negotiation skills of the highest order.

Recruiting and keeping the best and brightest for our organizations is a huge challenge because of the enormous demand for information professionals. If any organization is fortunate enough to get the staff needed, providing ongoing training and keeping the people from getting stolen away by higher paying jobs that offer sweeter benefits packages and signing bonuses is a great challenge.

Universities are fortunate in being able to attract donations of equipment and software. This is not always possible for corporations or government agencies, but there may be alternatives through partnerships. Procuring technology and software needed becomes increasingly important, and many libraries are joining or expanding consortia to increase their leverage and reduce costs.

All of this resource procurement work must be done within the context of rising expectations. As soon as equipment and software are acquired there is a demand for a newer, better version of software, faster hardware with more peripherals. One highly trained staff member raises expectations that all staff will be as expert. The addition of one new electronic databases increases demand for many. Rising expectations are good if they result in increased support, but this is not always the case.

3. Creators/Producers

We have traditionally referred to users and nonusers of libraries, but over the years (and, due in part to the growth of access to the Internet and the World Wide Web), the people who use libraries, especially those

with access to the Internet, can now do much more. They have always been able to create, manage, disseminate and preserve information, but information technology has made all of this much easier. From senior scholars to elementary school students, individuals can explore information space, discover, learn and interact with a wide range of resources in minutes. They can create new multimedia resources for use in teaching, in the workplace, or for pleasure.

This ability raises issues of how to evaluate information on the web and how to protect the integrity of information. Also, how do we balance the rights and responsibilities of intellectual property holders with those of users? Librarians, themselves, are creating more information, from electronic newsletters, to electronic pathfinders, to information resources of all types. This role both places demands on and creates opportunities for librarians.

4. Preservers of Culture

Another growing role for librarians is as preservers of culture, one that librarians have filled for thousands of years. While we must continue to protect print resources from the "slow fires" that are destroying them, we must also protect against the "fast fires" destroying electronic information. The Council on Library and Information Resources (CLIR) has released an informative film "Into the Future" in two versions (one-hour, and one-half hour) on this very serious problem. It is too easy to hit the "delete" key and eliminate early versions or texts or important records, and finding ways to preserve information in electronic form is critical to maintaining our cultural record. Our colleagues in the archives and records management field are working on guidelines to ensure that we protect the important records of the actions of our society considered to be of enduring value.

Preserving multimedia information on the web is a serious challenge. Just as one "never steps in the same river twice," the web is never the same twice. What was on a website last week (or even this morning) may not be there this afternoon. Cooperation among creators, archivists, records managers, historians, museum curators, government officials, and many others will be needed to preserve our culture for future generations.

5. Organizers of Information

The role of organizers is one that dates back to the beginning of librarianship and to related specializations of encyclopedists, indexers, and early documentalists. Building on all this expertise, librarians are developing enhanced knowledge and techniques to organize electronic information, working with metadata projects across types of organizations and national borders. This expanded role helps enhance the understanding of the value of librarians to society.

It also brings to mind changes in the responsibilities of professionals and paraprofessionals and the resulting flattening of organizations, including librarians. Much work formerly done by professional catalogers and classifiers is either being contracted out or being done by paraprofessionals. We need to continue to re-examine and redefine these responsibilities and roles.

6. Researchers/Retrievers

Helping people to explore information space, identify what is relevant, evaluate it, and provide this in a form needed are even more challenging than ever. Originally librarians worked to sift through available information, select what was appropriate for the community served, organize it within the collection and make it available within the library, "Just in Case" it was needed. As we learned, much of the collection was never used. Over time, in part through the use of technology and shared cataloguing, digital resources, etc., libraries have been able to provide "Just in Time" services. With the growth of the number of people who grew up with videogames, interactive media, and multimedia, expectations for information services customized for individual users will increase. We are making strides far beyond "one size fits all" interfaces, and much remains to be done to deliver true "Just for You" services.

7. Educators

Educators are not only those who work in places called schools or universities. All librarians are educators as they teach others about information services. With the high demand for more information

professionals, we all need to help attract the best and brightest into our field. Speaking at high schools and college career events about our profession, and talking with paraprofessionals about opportunities, as well as working with our alma maters to provide support for students can all help in bringing high quality future colleagues into our field.

8. Students

As well as educators, we are also all students. This field is moving so rapidly that we must all be lifelong learners. Participating in workshops like this and other continuing education programs is important to help keep up with our field as well as to help us see the bigger picture. Little more need be said.

9. Experts/advisors

As our roles continue to grow and expand, we are called upon for expertise and advice, both within and outside our agencies or organizations. Increasingly, a growing number of people are recognizing the value of librarians. I am optimistic that this will enhance the value, both real and perceived, of our profession, and result both in greater demand for librarians and in greater rewards.

10. Advocates

Librarians have long been advocates for their libraries, their organizations, the profession, and many policy issues, such as intellectual freedom. With greater accountability, demands more economic pressures, and increased demand for limited resources, librarians will need to be even stronger advocates. Learning how to communicate clearly and forcefully becomes even more critical.

Examining these ten roles is simply one way to look at our evolving profession. Each person may see these roles differently, but, however you describe librarians, it is important to examine how our responsibilities are evolving and will change in the future.

SLA Competencies

Another way to examine our roles is through competencies, and one excellent set has been developed by SLA. Descriptions of the competencies are available in full on SLA's website. They have divided these into professionals and personal competencies. Appendix 1 lists these competencies.

Comparing the Roles and Competencies

In comparing the ten roles to the competencies, nearly all the competencies relate to one or more of the roles. Appendix 2 shows the competencies linked to the roles. None of the competencies refers to the important role of Preservers of Culture, and I believe that this should be incorporated when SLA revises its Competencies. I also think that the Competencies should explicitly include the ability to work effectively in an increasingly multicultural society and, even more importantly, the competence to lead in helping to build a diverse workplace and a multicultural society.

Empowerment

Combining the perspective of the ten roles with the SLA competencies provides a good framework within which to examine our profession. It also helps us understand why we are in this field, which in my opinion, is to empower ourselves and others to: explore information space; discover; learn; interact with people and information; create; publish; develop applications and Just-for-you services; preserve, organize, evaluate, and use information; and educate and train. We must keep asking the question, "What difference does what we do as librarians make in the lives of individuals?" Are we truly empowering people or are we presenting barriers? We have great responsibilities and opportunities. This is, indeed, an exciting time to be in our profession.

Challenges: Shaping Our Future

These changing roles, the competencies needed, and the opportunities to empower people present several challenges for the future. Among these are: meeting increased expectations, handling economic pressures,

harnessing the right technologies, building partnerships, and ensuring that we act ethically.

Meeting Increased Expectations

As discussed above, expectations continue to grow for faster, customized information services from our libraries and for expertise in many areas from us as librarians. Meeting all the expectations is probably impossible, but meeting many of these is not unreasonable. As long as we continue to ask why we are doing what we are doing, how we can provide the best access and add value, and how well we are doing, we are on the right track to meet, and even raise, expectations.

Handling Economic Pressures

Economic pressures are not going to go away, and will probably get worse. As managers, we will manage existing resources as well as possible, providing greater accountability. As leaders and advocates, we will work to procure additional resources, to add value to information resources and services, and to provide the best access we can to information resources. Partnerships, consortia, and other cooperative ventures should help cut costs, strengthen services, and expand opportunities. These should also aid in the provision of Just For You Services in the future.

Technology

Keeping up with all changes in technology is impossible, but we must do our best to understand major developments and ensure that we have needed experts to provide specific expertise to make the right choices. As we build, preserve, disseminate, and manage multimedia resources, we will need to continue to update our knowledge and skills and also to build teams with expertise in the hardware and software, aesthetics, education (particularly how different people learn and use information), other areas of cognitive science, and information content.

Education and training are essential, ongoing, components of successful management and the use of information technology to achieve priority goals. Information technology must be incorporated as one of many tools to achieve goals -- a means to an end, but not an end in itself -- with the many other tools, such as efficient management, adequate financial support, and others, into a strong whole. Demands for technology will continue, and we will also have to keep one foot in the print world and one in the electronic world for many years to come. It is not an either/or situation, but one of some of each, with the balance shifting toward more electronic in the future.

Partnerships

Finally, one key solution to meeting the challenges will be to form new partnerships and strengthen existing ones. I believe that stronger partnerships between practitioners and educators are needed to ensure the best education of our future colleagues, to expand research and development (transferring research results into practice and practical experience into education), and to develop true lifelong learning for all librarians and other information professionals. We also must work to develop close ties with colleagues in other specializations (such as, archives, museums, subject specialists, and many others) and with policy makers in government, corporations, and not-for-profit organizations, as well as individual citizens. Building the Global Information Infrastructure will take all of us working together.

Ethics

As we work to fill these expanded roles a great challenge will be to work and live ethically. As information professionals, we have enormous power, and we must be careful to use this power to benefit individuals and society. At our School of Information Sciences (SIS) at the University of Pittsburgh, we introduced a Dean's Forum on Information Ethics over nine years ago and a course on Information Ethics eight years ago. More than 300 students have taken the course and have learned from it how to act more ethically. We have established an Information Ethics Fund, which supports the work of Professor Stephen Almagno and an Ethics Fellow. I encourage you to check our website at www.sis.pitt.edu/~ethics. We're very proud of this work and the fact that other schools are beginning to develop courses on this important topic. Understanding our own sense of ethics, learning how to work from a personal understanding of ethics to situations at work, and how to deal with questions related to privacy, intellectual freedom,

management and others are enormous challenges, but ones that are critical to our profession.

Summary

In this brief presentation I have attempted to discuss my views on our changing roles, comparing them to the SLA competencies, looking at how librarians can empower individuals. Also, I have highlighted a few of the many challenges facing us in the future. We are very fortunate to be in such an exciting profession. While I have seen many changes in the more than 35 years I have been in our field, I believe that the best is yet to come. Thank you.

APPENDIX I

SPECIAL LIBRARIES ASSOCIATION PROFESSIONAL COMPETENCIES

1.1   Has expert knowledge of the content of information resources,
       including the ability to critically evaluate and filter them.

1.2   Has specialized subject knowledge appropriate to the
       business of the organization or client.

1.3   Develops and manages convenient, accessible and cost-effective
       information services that are aligned with the strategic
       directions of the organization.

1.4   Provides excellent instruction and support for library and
       information service users.

1.5   Assesses information needs and designs and markets value-added
       information services and products to meet identified needs.

1.6   Uses appropriate information technology to acquire, organize
       and disseminate information.

1.7   Uses appropriate business and management approaches to communicate
       the importance of information services to senior management.

1.8   Develops specialized information products for use inside or
       outside the organization or by individual clients.

1.9   Evaluates the outcomes of information use and conducts research
       related to the solution of information management problems.

1.10   Continually improves information services in response to
       changing needs.

1.11   Is an effective member of the senior management team and a
       consultant to the organization on information issues.

PERSONAL COMPETENCIES

2.1   Is committed to service excellence.

2.2   Seeks out challenges and sees new opportunities
       both inside and outside the library.

2.3   Sees the big picture.

2.4   Looks for partnerships and alliances.

2.5   Creates an environment of mutual respect and trust.

2.6   Has effective communication skills.

2.7   Works well with others in a team.

2.8   Provides leadership.

2.9   Plans, prioritizes and focuses on what is critical.

2.10   Is committed to lifelong learning and personal career planning.

2.11   Has personal business skills and creates new opportunities.

2.12   Recognizes the value of professional networking and solidarity.

2.13   Is flexible and positive in a time of continuing change.

APPENDIX 2

Relationship of Ten Roles to SLA Competencies

1.   Mangers (1.3, 1.5, 1.7, 109, 1.10, 1.11, 2)

2.   Resource Procurers (1.7)

3.   Creators/Producers (1.3, 1.5, 1.6, 1.8)

4.   Preservers of culture

5.   Organizers of Information (1.1, 1.3, 1.6)

6   Researchers/retrievers (1.5, 1.6, 1.9)

7.   Educators (1.4)

8.   Students (2.10)

9.   Experts/advisors (1.1, 1.2, 1.9)

10.   Advocates (1.7)

The Future Isn't What It Used to Be:
Educators and Librarians in the New Millenium

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I recently attended a retirement reception for director of university libraries. This person had been a librarian for over thirty-five years. To highlight some of the changes that had occurred over this period, the library staff decided to organize a s eries of exhibits for the reception. The exhibits and displays were intended to demonstrate the various ways technology had found its way into the mainstream of library services, whether microform readers, personal computers and CD ROMs, or online catalo gs and patron-initiated checkout. When I finally got a chance to speak with the guest of honor, I said to him: "Well you certainly have seen a lot of changes during your career as these exhibits demonstrate." And he replied, " You know, Len, I certainl y have seen a lot of changes, and I was opposed to every damned one of them!"

I have been asked to speak with you today about how changes in technology and society may affect librarians and educators as we move into a new millenium. I do so with great interest and enthusiasm, but with some trepidation, since so much seems to be changing so fast in so many areas of our lives, that it might be good to come to a conference to hear about what's going to be about the same for awhile at least, thank you, rather than what may be profoundly different in the coming years.

In fact, many library professionals are quick to point out, some even quite proudly if somewhat defensibly, that most of the previous predictions about how technology would transform libraries have been well off the mark. But I would argue that techn ology has not had much impact as yet because libraries have largely used technology to automate tasks they have done manually for a long time rather than using technology to perform fundamentally new tasks. The same is true, even more so, for elementary and secondary school teachers, and for many college and university teaching faculty as well

.

For both librarians and educators, well all right, for nearly everybody, there is still a profound fear of the long-term implications of doing things in fundamentally new ways in the work setting, particularly when it involves technology, since one's c urrent job may be lost over the long term and most don't believe they can ever be truly proficient in a technologically intensive workplace. This is a variation on an often-told tale, but the fear still rings true--the library of the future will have com puters, a single staff person, and a dog. The purpose of the staff person is to feed the dog; the purpose of the dog is to keep the staff person away from the computers.

But it is not just fear that holds us back with using technology--it is the reliability and functionality of the technology itself which makes us pause--like today, like me, for example. Here I am, talking about how technology will transform libraries and schools, and I'm doing so without using the technology itself. Why? Have you ever tried to connect a computer to a projection system in a strange hotel on the road? Have you ever worked with hotel staff to get a phone line working with a modem? Hav e you ever tried to have computers sent to a conference and have them set up for you? But let's not pick on hotels only--what about in your work setting--are the networks reliable? Are the connections stable? Would you schedule a briefing for your boss using a Power Point file delivered from the network using a computer projection system? In many professions, this is mission-critical event, but not for schools, and not for libraries, so it doesn't really need to work, yet.

The last foot is always the kicker--the last foot from the computer to the projector, or from the modem to the phone line

or network adapter. The technology is still not reliable enough yet--still not ready for prime time. No wonder teachers don't wa nt to build their day around computers and connectivity to the Internet! No wonder we keep print directories and microforms even when the same materials are on databases! So we continue to try to define our work in such a way that we are not entirely dep endent on the technology for our success, and frankly, many hope that they will be able to retire before that day of full dependency really comes.

It often takes a long time for society to become truly dependent on major technological innovations in reasonably user-friendly ways. In the early 1900's Daimler-Benz commissioned a study to determine the world-wide demand for automobiles. The numbe r turned out to be about one million, and the controlling factor was the number of households that could afford chauffeurs, since in those days, one could not drive very far without needing the services of a mechanic as well as a driver to keep "the machi ne," as they called it in those days, running. How many of you today are absolutely dependent on the technical support staff, our computer chauffeurs, to keep our "machines" running, to deal with "crashes" on our disks and "collisions" on the network, an d to "tune" and provide maintenance for our servers? Hard drives, indeed!

There are other good reasons why we are reticent to push the technology along any faster, for we genuinely fear the loss of human contact, the loss of being able to provide and receive a useful service from a caring and dedicated professional, and ulti mately we fear the loss of community in the workplace--no matter how fragile and maddening it may be at times. We also genuinely resent the simplistic reductions and mis-characterizations of the work we do. Presentations about the future of computing oft en include "agents" who speak from some popup video window to show the potential of artificial intelligence to deal with user questions. While I agree that artificial intelligence may be better than none at all, I've never ·meant an agent I really liked, w hether "secret" or "insurance, " or Arliss on HBO for that matter.

But unfortunately, the future is changing more rapidly than many had hoped and most had planned. The old future was one in which technology would be introduced slowly--because of lack of training, or high cost, or system complexity and long lead time s, or the actions of latent luddites. We couldn't do very much about the OPAC performance problems, since the next vendor release was still 12 months away, and our problem isn't on the priority list yet anyway. We couldn't do very much about network doc ument delivery because the image servers were too expensive and the bandwidth wasn't available. And just think of all the materials not yet in the online catalog because of lack of funds for retrospective conversion. Besides, inflation is killing our a cquisitions budget, and we'll never have enough money left for user workstations in the library and still have a decent collection. We missed Windows95, might as well wait for Windows97 or 98....

The situation is comparable or even worse in the nation's schools. There is very little in the day-to-day work of a teacher that requires regular use of a computer, which is probably just as well, since the pace of wiring and acquiring networks and computers has been very slow in most states, as school administrators strive to retrofit buildings designed for 19th century teaching techniques with 21st century technology. Teachers desperately need training in the use of computers, and they need effec tive and engaging software for their students. So teachers struggle on, hoping someday the situation will get better, and that they will eventually have the time and training to use computers effectively. Until then, largely business as usual.

But that is the old future. The new future requires that teaching and learning be grounded in the community and not just the school, and libraries must become critical community centers, among many others, for active learning by school-age children. It is perhaps a radical statement, but I believe, deep-down, that schools as we knew them are broken and can't be fixed, and libraries as most of us remember them will never return. Both institutions are critical to our future, but they will become incre asingly irrelevant in their current forms if they both do not embrace emerging computing and communications technologies to genuinely transform what they do, and who they serve. They will need to be, to strain the phrase, very well connected. Perhaps mo st fundamentally, they must learn that what we now call the Web is not about finding things, it is about discovery and making connections, the essential elements of knowledge creation.

Now for a brief comic interlude, or at least one from the comics. The late Calvin and Hobbes comic strip (I will trade one for 10 Dilberts...) pictures, as usual, the tiger and the boy riding a sled downhill at breakneck speed. Calvin exclaims: "I t hrive on change!" Hobbes replies, "Wait a minute, didn't you complain this morning when your mother put a different flavor of jelly on your toast?" Calvin replies, "I thrive on other people changing!"

We are in the midst of profound technological transformations that are truly unprecedented in terms of their scope and rate of change. The watchwords are "faster, better, cheaper and more." The announcements of increasing processing power and storage capacity are dizzying and numbing after a time, since they seem largely irrelevant to everyday life. Who really needs a disk drive with 16 gigabyte capacity as announced last week by IBM? Or high resolution displays on

digital cameras comparable to our current computer screens? Or streaming video broadcasts, or TVs with built-in digital modem circuitry? What does it mean to be able to transmit the contents of 300 years of a daily newspaper in less than a second across terabit fiber optics networks? Th ere is the story of Henry Ford telling a group of residents in a rural community in northern Michigan that someday, with good roads and reliable automobiles, people will be able to travel 50 miles an hour. And a voice in the crowd says--"Doesn't make any difference to me--I don't know anybody that lives 50 miles away."

One of the key elements of this revolution is that information itself is changing in form, in rate of transmission, and in rates of use--as the recent turbulence in Asian financial markets demonstrates so well. These, in turn, raise questions about d ata authenticity and integrity--the equivalent of "electronic" rumors, as well as how such data can potentially undermine the political and social stability of a nation--witness the efforts of the South Korean government to consider restricting data flows regarding currency exchange prices.

The real power of the new technologies is not computation, but communication of large amounts of information in a variety of formats almost instantaneously. This is also the downside, of course, since the technology for display and retrieval has lagge d beyond the capacity to produce the information in the first place. This is a familiar and persistent problem for librarians. For centuries, librarians have been dealing with the organization and management of information and new knowledge. But in the last 100 years, both the volume of information and the formats in which it is recorded have increased dramatically. These changes in volume and format can be described as a sequence of five waves, the fifth being the most ominous if you are familiar with the Elliott wave theory in the investment world.

The first wave began with the use of movable type for printing by Gutenberg, and this era lasted well into the 19th century. Information was stored in a relatively accessible format--the book--with only minor variations in size and content that made i t relatively convenient to arrange the materials for retrieval. As the volume and subject coverage expanded, more complex cataloging conventions had to be developed, of course, but the medium of the book was a stable format that continues today as the mo st popular and easily used way to share information and entertainment in written form.

The second wave--periodicals--increased the complexity of cataloging, storage and retrieval of information. Not only were periodicals used as a way for sharing scholarship and research, they also became a popular and accessible, if even more short-live d format than the book for storing and conveying information. With periodicals, third-party organizations and companies developed to assist in describing the content of some forms of periodicals, particularly scholarly journals and newspapers. With the wide variety of formats, periodicals were, and continue to be, troubling documents for libraries to store and retrieve for patron use. In some public libraries, they are thought of as perishables with a measurable shelf life. In more specialized librari es, they are often the heart of the collection. But as every librarian and patron know, periodicals are awkward to use in bound form, and because they are often printed on paper which is subject to greater deterioration over time, many collections of pe riodicals require special handling and limited access. In any case, most library catalogs are only able to describe whether a library "holds" a particular periodical title, and table of contents for some periodicals are only now being added to online vers ions of catalogs, again supplied by third parties.

The third wave of information for librarians is an even more recent phenomenon with the storage of information in image, audio and video formats. While this wave began primarily as a subset of disciplinary collections in music, art and architecture, f or example, the increased use and decreased cost of storage of information in audio and video formats have been extended to all disciplines. With these media, there is even less ability than in the first two waves to describe the subject and content of information, and retrieval is even more awkward and cumbersome, whether sorting through slide files, or trying to locate a particular audio passage or video scene. Storage of these multimedia documents is awkward as well, and storage and playback format changes put additional strains on library budgets to support the wide range of access equipment required, from film projectors to VCRs that can still play Beta formats, for example.

The fourth wave is largely a phenomenon of the last twenty-five years, but is increasing in volume and frequency. This wave is the storage of information in digital format on physical media for computer access and retrieval in the form of tape, "flopp y" data disks and multimedia compact discs that require a computer for access. Huge collections of documents can now be recorded and retrieved in digital formats, as well as instructional and research software for a variety of learning tasks. Storage a nd retrieval in these formats requires use of a wide range of proprietary products, whether at the level of computer platforms such as PC, Macintosh, and Unix systems, or filing and retrieval formats that are often both proprietary and expensive, increasi ng the cost and complexity for providing patron access.

The fifth wave, which is now still in its early stages, is the use of distributed computers in an international network for the storage and retrieval of information. In this wave, publishing has been transformed from being a way to provide long-term

s table content in print form, to becoming the medium for frequently-revised, even dynamic formats for information storage and retrieval. On the net, as it is called familiarly, documents not only may change in format and content, but they may entirely dis appear--for the short term if the network is down, or longer if files are reorganized locally, and online filenames and directories are changed. Validating the accuracy and content of information, long the hallmark of librarianship, is all but impossible in the evolving world-wide-web, but it is increasingly the retrieval system of choice for many people, with search engines and browsing hierarchies provided by commercial companies such as Yahoo and Lycos.

The "web" has been described as a library with all the books scattered randomly on the floor. Finding what you are looking for tries to make use of earlier methods, such as "bookmarks" in web browsers, but these methods break down quite quickly with t he rapidly increasing volume of information on the estimated 160,000,000 web sites, and with the plethora of proprietary formats to retrieve image, audio and video data.

With each wave, the difficulty of storing and managing the information for patron access has increased. With each wave the ability to describe effectively the information in catalogs or directories has decreased. With each wave more difficult and comp lex technology has needed to be developed for retrieving and displaying information, as has the reliance on third-parties for describing the content of materials. And with the fifth wave, the integrity, stability and reliability of information itself has become more problematic and troublesome as librarians try to provide structured, organized systems for their patrons. At the same time, we are becoming even more dependent on automated approaches for storing and retrieving information in electronic for mats as Sven Birkerts warns us in "The Gutenberg Elegies:" "Once it dawns on us, as it must, that our software will hold all the information we need at ready access, we may very well let it. That is, we may choose to become the technicians of our auxilia ry brains, mastering not the information but the retrieval and referencing functions. At a certain point, then, we could become the evolutionary opposites of our forebears, who, lacking external technology, committed everything to memory. If this were t o happen, what would be the status of knowing, of being educated? The leader of the electronic tribe would not be the person who knew most, but the one who could execute the broadest range of technical functions" (p. 139).

With all the changes that have come about in the last ten years, from PCs to multimedia to the web, along with the difficulties of keeping up with the first four waves, why should librarians want, or be expected, to deal effectively with this fifth wav e? To frame this issue, I like to ask The Four Questions concerning the fifth wave:
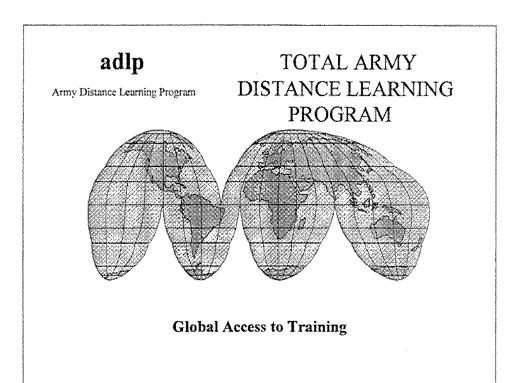
1. Is information easy to find? *No.*
2. Is information easy to use? *No.*
3. Does it save time? *No.*
4. Is it worth the effort to master? *Yes!*

First and foremost, librarians can bring their considerable knowledge, their craft, to organizing collections of materials that meet the learning or research objectives of their audiences. They can bring structure and coherence, along with increasingl y sophisticated search and retrieval systems and strategies, to build and sustain reliable, stable content resources for these virtual collections. They can continue to work with electronic publishers to argue for equitable access to important informatio n. To be effective with distributed audiences, they must increasingly become proficient in managing and delivering distributed information sources, whether to support "virtual" offices or distance-learning, or research collaboratives that may have member ship drawn from people on different continents. And because of the audiences they directly serve, it seems that military librarians can make a convincing case for using advanced technologies for mission-critical activities that depend on reliable and tim ely delivery of information.

So the opportunities for librarians at this time are extraordinary, but they depend on some very fundamental changes. These include:

1. Learn what your potential clients will need in the future; don't just dwell on current client needs--expanded audiences will be critical to long-term success.
2. Invest in technologies that will transform what is done, and not merely automate current practices.
3. Move from a liber-centric (books) to an info-centric (network) orientation
4. Link emerging technologies to the tradition and essential purposes of libraries to public access to information resources
5. Learn, master, and teach others the necessary skills to find information effectively across distributed networks, from local to international.

adlp

Army Distance Learning Program

TOTAL ARMY DISTANCE LEARNING PROGRAM

Global Access to Training

BRIEFING OUTLINE

- **ADLP Overview**
  - Definition/Background
  - Program Management
  - Courseware
  - Hardware/Facilities
  - Infrastructure
  - Funding
  - Program Support
  - Ongoing/Next Steps
- **Questions**

1

Army Distance Learning

"The delivery of standardized individual, collective, and self-development training to soldiers and units at the right place and right time through the application of multiple means and technologies."

Army Distance Learning Plan

April 1996

TRADOC

Background

In April 95, DepSecDef, ASD M&RA, and DCSOPS tasked TRADOC to develop the Army distance learning plan specifying their use of DL technologies to teach the Total Force. Plan approved by CSA in April 1996 -- TRADOC appointed executive agent.

Distance Learning

TODAY

Satellite Based

SEN

TNET

- Videoteletraining
- Limited Access
  70 Receive Sites
  119 Receive/Send Sites
- 71 Courses, 41K
  Students

FUTURE

Information "Super Highway"

ATM

Fiber Optics

Some Satellite

- Multimedia
  (full range of technology
  options)
- World Wide Access
  - 745 DL Classrooms
  - Soldiers' Homes
  - Colleges
  - Other Shared Use
- 400+ Military Courses in Cue
- 525 End-Sites

Army Distance Learning Plan

Lays out How Army Will Implement Distance Learning (DL)
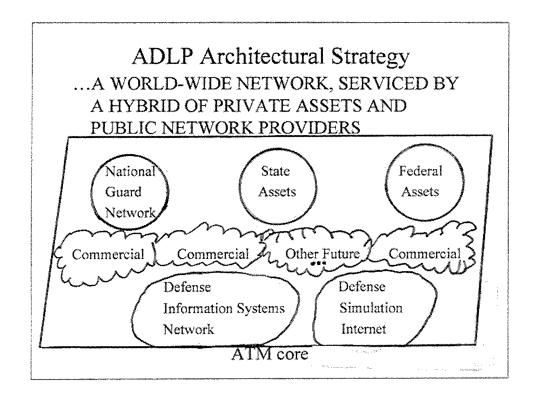
Describes The Following Requirements in Depth:
- Implementing Actions and Timelines (FY96-2010)
  - ✓Selection and Conversion of Courseware
  - ✓Facilities and Hardware
  - ✓Infrastructure
  - ✓Funding
- Includes all Army MACOMS

Focus: Total Force Readiness

INFRASTRUCTURE

ADLP Architectural Strategy

...A WORLD-WIDE NETWORK, SERVICED BY
A HYBRID OF PRIVATE ASSETS AND
PUBLIC NETWORK PROVIDERS

National Guard Network | State Assets | Federal Assets

Commercial | Commercial | Other Future | Commercial

Defense Information Systems Network | Defense Simulation Internet

ATM core

Information Super Highway

TADLP Architectural Strategy...WORLDWIDE
NETWORK, SERVICED BY A HYBRID OF
PRIVATE AND PUBLIC NETWORK PROVIDERS

[Map illegible]

INFRASTRUCTURE

- Today
  - Terrestrial-based 2-way audio/visual VTT
  - Bridging to other networks
  - Supplemented by satellite-based systems as required
  - All Schools connected to INTERNET
- Future
  - Connectivity from the proponent school to the desktop
  - Worldwide access to information via ATDL and DTAC
  - Supplemented by satellite-based systems as required

Army Training Digital Library

[chart illegible]

Global Accessibility
Interactive
Library w/o walls

Digital Training
Knowledge
Used by Units &
Individuals
Relational Database

Classroom XXI/DL Levels of Capabilities

LEVEL	CAPABILITY	NETWORKS	TRAINING
1	Multimedia Instructor Workstation	Self contained	Instructor Centered
	Video/Data Projection System	or LAN	
	3-D Presentation System		
	Video Teletraining (optional)		
	Student Response System (optional		
2	Level 1 Capability		
	Student Multimedia Workstation	LAN	
	Integrated Student Response Sys		
3	Level 1 and 2 Capability	Worldwide access	
	Internet Access	& WAN	
	Video Teletraining		
4	Interactive Simulation	Worldwide access	Student Centered
5	Virtual Reality	Worldwide access	

I

PROMOTING YOURSELF AND YOUR LIBRARY

PRESENTED BY
Corilee Christou
LEXIS-NEXIS

1

AGENDA

- ◆ Introduction
- ◆ Where are you now? - library analysis
- ◆ Marketing Principles Overview
- ◆ Break
- ◆ Communicating with Upper Management
- ◆ Adding Value: The Critical Element
- ◆ Action Plan

2

1

OBJECTIVES

- Build positive visibility and name recognition
- Communicate effectively with upper management
- Communicate the value proposition for organization (WIFM)
- Develop a library promotional plan
- Demonstrate the effectiveness of library services

3

WHERE ARE YOU NOW?

- LIBRARY ANALYSIS
  - Synergy between the Organization's mission and the Library's mission
- SWOT ANALYSIS
  - Strengths - what is done well
  - Weaknesses - what could be improved
  - Opportunities - areas for expansion
  - Threats - potential harm to current organization

4

68

2

MARKETING PRINCIPLES
4 P's of Marketing

◆ Four essential elements for meeting the marketing mix
  - Product
  - Place
  - Promotion
  - Price

5

MARKETING PRINCIPLES
Product

• The library's products are the services provided including:
  - Reference
  - Training
  - Current awareness
  - Administration (budgeting, personnel, order & check-in)
  - Collection development
  - Competitive analysis

6

69

3

MARKETING PRINCIPLES
Packaging

- ◆ An important element of the product is packaging:
  - – Work product organization
  - – Findings summary
  - – Library cover sheet

7

MARKETING PRINCIPLES
Place

- ◆ Physical Facility
- ◆ Vehicles used to disseminate information
- ◆ Organizational placement

8

4

MARKETING PRINCIPLES
Promotion

- ◆ To seek to make a product or business successful
- ◆ Library promotional methods can include:
  - Staff member service orientation - successful marketing is not only a plan, but a staff attitude
  - Newsletters, Annual reports
  - Library logo/family look
  - Presentation of library services to all in firm brochure

9

MARKETING PRINCIPLES
Price

- ◆ In libraries, price includes both the cost of providing services and the fees generated.
  - Determine total cost to firm of maintaining library including overhead
  - Understand what percentage of the firm's expenses the library's cost represents
  - Examine billing rates of library staff

10

71

5

COMMUNICATING WITH UPPER MANAGMENT

- ◆ COMMUNICATE, COMMUNICATE, COMMUNICATE
- ◆ WITH WHOM?
  - Executive Directors/Heads of staff
  - Strategic Planning/New Business Development
  - MIS Directors
  - Human resources for Continuing Education
  - Marketing Directors

11

COMMUNICATING WITH UPPER MANAGEMENT

- ◆ WHY?
  - To be a team player
  - To justify professional activities
  - To justify you
  - To justify library staff
  - To focus attention on the library
  - To demonstrate effectiveness of library services

  - To win support for library
  - To educate
  - To show value added
  - To overcome skepticism
  - To learn
  - To increase visibility and name recognition
  - To establish credibilty

12

COMMUNICATING WITH UPPER MANAGEMENT

◆ WHAT
- Value added
- Available resources
- Library policies
- Services provided
- Resources utilized
- Technology available
- Training schedules
- Cost savings

- Strategic plans
- Support of organizations' mission & strategy
- Importance to overall organization
- WIFM

13

COMMUNICATING WITH UPPER MANAGEMENT

◆ HOW?
- In person
- In hallways
- On an elevator
- In telephone conversations
- At meetings
- With newsletters
- Via e-mail
- In cover memos
- Open house

- With a logo or a family "look"
- In library policy manuals
- By organization charts
- With annual reports
- With a brochure
- With personal appearance
- By personal attitude

14

COMMUNICATING WITH
UPPER MANAGEMENT

◆ WHEN?

CONTINUOUSLY!!!!!!!!!

15

ADDING VALUE
The Critical Element

LIKE IT OR NOT

◆ Librarians at crossroads
 – Part of the future

◆ Shift from maintaining a collection to providing a service

◆ May not like where road is going
 – Doesn't matter

16

8

LIKE IT OR NOT

- ◆ Cost & technology are the driviers
- ◆ Exponential leap in volume of information
  - – 2X in less than 4 years
  - – Society becoming more impatient
- ◆ Exponential leap in technology changes
  - – Every 4 months
- ◆ Must add value to be recognized

17

YOUR ACTIVITIES

- ◆ What do you do?
- ◆ Who knows you do these things?
- ◆ Do they understand their value?
- ◆ Better yet - Do they add value?
- ◆ Perform needs assessments - Before
- ◆ Measure customer satisfaction - After

18

YOUR ACTIVITIES

- ◆ Are there strategic plans?
  - – Your organization?
  - – Your library?
  - – Do they include mission statements?
  - – Are they connected?
- ◆ Identify mission critical tasks
  - – Centralize efforts

19

YOUR ACTIVITIES

- ◆ Ensure tasks relate to the bottom line
  - – Serve when it PAYS
    - » not just when asked
  - – Perform work even when not asked
  - – Illustrate how can add revenue
  - – Illustrate how can save expenses
  - – Say no
    - » fire some customers
    - » make them independent

20

YOUR ACTIVITIES

- ◆ Take classes in areas of weakness
  - – Management
  - – Public speaking
  - – Finance
  - – Selling
- ◆ Pick your battles

21

YOUR STAFF

- ◆ What do staff members do?
  - – Are these critical activities
- ◆ Who knows they do these things?
- ◆ Must they be done the same way in the future?
  - – Mobile work force
  - – Telecommuters

22

YOUR STAFF

- ◆ Must they be done by who's doing them now
  - – Place work at proper level
  - – Headcount vs. work force skills

23

YOUR COLLECTION

- ◆ Look at books & technology AND internal information
  - – Forms-organization's collective "knowhow"
- ◆ Collection is everywhere

24

YOUR TECHNOLOGY

- ◆ Understand its capabilities
- ◆ Understand what support you have
- ◆ Explain uniqueness of library's needs
  - – currentness important
- ◆ Serve on Technology Committees
- ◆ Know the organization's technology plans
- ◆ Help patrons through maze of choices
  - – Know how they work best
  - – Know alternatives   25

YOUR BUDGET

- ◆ Know choices based on medium
- ◆ Understand what you are buying
- ◆ Partner with vendors
- ◆ Classify purchases

26

13

YOUR SPACE

- ◆ Balance between books & technology
- ◆ Library is everywhere
- ◆ Change the name
  - Information Center
  - Information Resource Center
  - Experience Center
  - Information & Technology Research Center

27

YOUR COMMUNICATIONS

- ◆ Get to the right people
  - Decision makers critical
- ◆ Move around the organization
  - Find those who prize information
- ◆ Tell folks what you've done-how you did it
- ◆ Don't let things look easy or "magical"
  - Explain effort you went through
  - Explain benefits NOT features

28

14

- ◆ Take credit for your professionalism
  - Act & dress like a professional
- ◆ Show library not only expense center
  - Rather service center and revenue enhancer
- ◆ Talk to everyone
  - Directors, Heads of staff, HR, Marketing areas, Engineers, IT ··

YOUR THINKING

- ◆ Add value by
  - Selecting
  - Evaluating
  - Acquiring information
  - Facilitating, consulting and training users
- ◆ Eliminate activities if add no value
  - Not just because always done it this way

30

YOUR THINKING

- Proactive not reactive
- Cannot just react to realities of today's information requirements
- Must be influential
- Flexible
- New rule - there are no rules
- Sense of humor essential
- Exciting challenges ahead [31]

ACTION PLAN
Situation analysis

- **WHERE** does the library fit within the organization?

- To whom does the Library Director **REPORT**?

- Who is responsible for approving the library **BUDGET**? [32]

ACTION PLAN

- ◆ What is the organization's **MISSION STATEMENT?**

- ◆ What is the library's **MISSION STATEMENT?**

33

ACTION PLAN

- ◆ What are the overall **OBJECTIVES** of the organization?

- ◆ What are the **PRIORITIES** of the organization?

34

ACTION PLAN

◆ Identify the **DECISION MAKERS** within the organization:

_____

_____

◆ Identify decision makers who are also **LIBRARY USERS**:

_____

_____

ACTION PLAN

◆ How is the library **PERCEIVED** by the organization?

_____

_____

◆ Are there any **POTENTIAL USER GROUPS** that are not using your services?

_____

_____

18

ACTI ON PLAN

Identify **USER GROUPS**	Identify user group **INFORMATION NEEDS**

37

ACTI ON PLAN

◆ What opportunities do you
have to **PROMOTE** the library
within the organization?

_____

_____

_____

_____

38

85

ACTION PLAN

◆ List one or more marketing
efforts you will put into
action this week.

_____

_____

_____

_____

_____

39

20

Using Competition

Doug Hansen
DIRECTOR, INSTALLATIONS REQUIREMENTS AND MANAGEMENT
OFFICE OF DEPUTY UNDER SECRETARY OF DEFENSE
(INDUSTRIAL AFFAIRS AND INSTALLATIONS)

We Are Living in a Time of Fundamental Institutional Change

- Integrated global economy

- High rates of innovation and technological change

- Changing national concerns

- Geopolitical change

Institutions were crafted for a different era

1

How Corporate America Is Responding

- Reengineering business processes

- Investing in state-of-the-art technology

- Concentrating on core competencies

- Networking/combining/downsizing

- Outsourcing
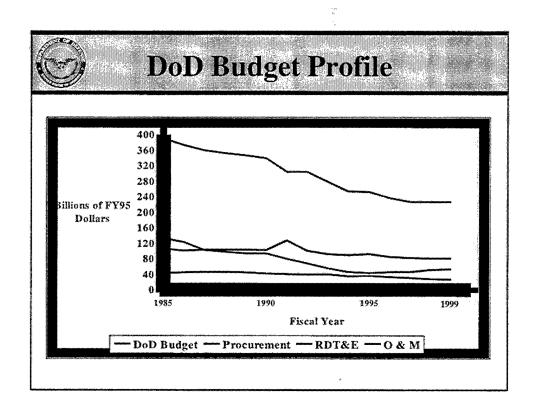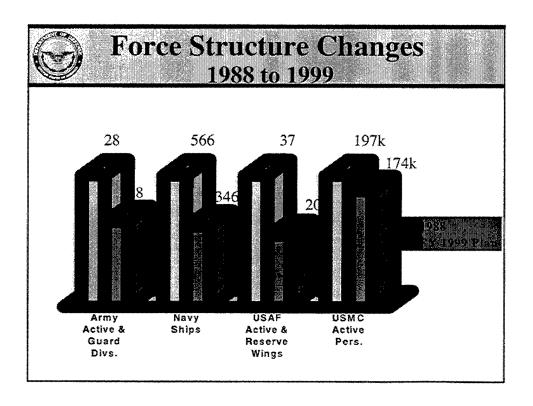
Private Sector Outsourcing Experience
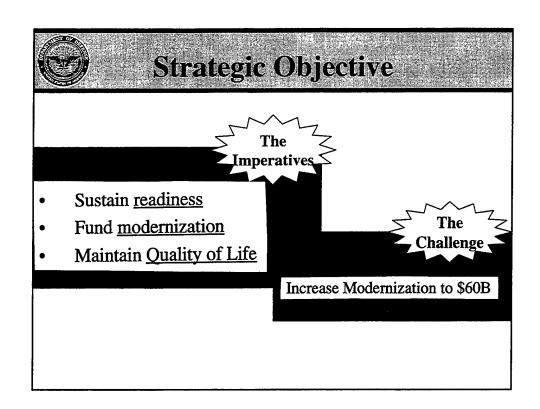
- **Benefits:**
  - Focus on core competency
  - Improve customer service quality and responsiveness
  - Reduce costs
  - Obtain access to changing technologies
  - Employ more efficient business practices

- **77% of Fortune 500 firms outsource some aspect of their business support services ***

> Capabilities have emerged to meet this demand
> ...$100 billion business and growing...

* 1994 Pitney Bowes Management Services study

88

2

DoD Budget Profile

Billions of FY95 Dollars

Fiscal Year

DoD Budget — Procurement — RDT&E — O & M

Force Structure Changes
1988 to 1999

28	566	37	197k
			174k
8	346	20	

Army Active & Guard Divs. | Navy Ships | USAF Active & Reserve Wings | USMC Active Pers.

Strategic Objective

The Imperatives

- Sustain <u>readiness</u>
- Fund <u>modernization</u>
- Maintain <u>Quality of Life</u>

The Challenge

Increase Modernization to $60B

Chairman of the Joint Chiefs of Staff

"Ultimately, we must commit ourselves to a major reengineering of our infrastructure."

Quadrennial Defense Review -- May 1997
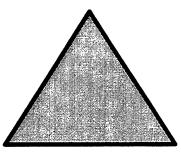
"To do this (exploit technological advances) with the forces that will remain committed to operational readiness, contingency operations and engagement activities requires a stabilized investment program and a fundamental re-engineering of support infrastructure."

National Military Strategy -- September 1997

90

4

Competition Goals

Sustain or Improve Readiness

Generate Savings
for Modernization
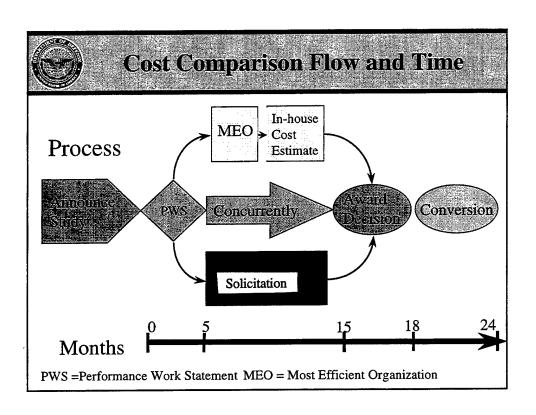
Improve Quality
and Efficiency
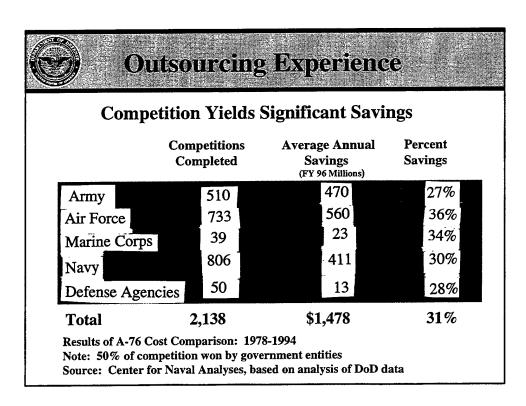
To achieve these goals, we have initiated a comprehensive
review of DoD support functions
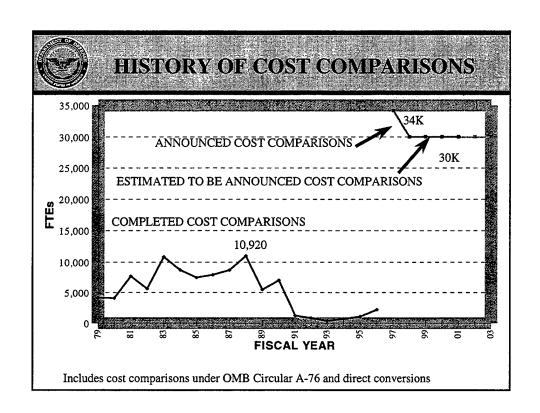
What OMB Circular A-76 Provides

- Method of conducting competitions
- The best effort of providing level playing field between
  - Government
  - Unions
  - Industry
- Inventory of commercial activities

5

Cost Comparison Flow and Time

Process

| MEO | In-house Cost Estimate |

Announce Study — PWS — Concurrently — Award Decision — Conversion

Solicitation

Months

0   5   15   18   24

PWS =Performance Work Statement MEO = Most Efficient Organization

---

Outsourcing Experience

Competition Yields Significant Savings

	Competitions Completed	Average Annual Savings (FY 96 Millions)	Percent Savings
Army	510	470	27%
Air Force	733	560	36%
Marine Corps	39	23	34%
Navy	806	411	30%
Defense Agencies	50	13	28%
Total	**2,138**	**$1,478**	**31%**

Results of A-76 Cost Comparison: 1978-1994
Note: 50% of competition won by government entities
Source: Center for Naval Analyses, based on analysis of DoD data

92

6

HISTORY OF COST COMPARISONS

ANNOUNCED COST COMPARISONS → 34K

30K

ESTIMATED TO BE ANNOUNCED COST COMPARISONS

COMPLETED COST COMPARISONS

10,920

FISCAL YEAR

FTEs

Includes cost comparisons under OMB Circular A-76 and direct conversions

Impediments

- Cultural

- Regulatory

- Legislative

Cultural

- Competition requires a new approach to provision of services
- Few incentives
- Incentives needed
  - New direction from Deputy Secretary
  - Services to keep their savings

Regulation

- Federal Acquisition Regulation
  - DoD lacks expertise in structuring and managing complex service contracts
  - Emphasis on "how to" specifications, rather than on performance specifications
  - DoD relations with contractors are often adversarial, when a cooperative partnership is needed
  - Procurement process timelines are too long

8

Savings Capped by Legislation

- **General Outsourcing**

  - 10 USC 2461 mandates extensive reporting to Congress

  - 10 USC 2465 prohibits outsourcing of firefighting or security guard functions

  - Sec 8014, FY98 Appropriations Act requires using A-76 before outsourcing functions with > 10 civilian employees

  - Sec 8027, FY98 Appropriations Act requires cost comparisons to be completed in 24 months for single function and 48 months for multi-function

Expanding Competition Candidates

- **FY 97 CA Inventory with full accounting**   • Jan 98
  - Studiable & Exempt Commercial Activities
  - Inherently governmental
  - Validated against personnel authorizations

- New DoD Directive on military and civilian   • Jan 98
  personnel requirements criteria published with
  comprehensive reason codes for inherently
  governmental and exempt & studiable
  commercial activities

- Services and OSD review FY 97 CA Inventory   • Jan 98
  to expand competition opportunities

- Services and OSD review FY 98 CA Inventory   • Jan 99
  to expand competition opportunities

DEFINITIONS

MILITARY ESSENTIAL

A function required to be accomplished by a
uniformed member of the Armed Forces

INHERENTLY GOVERNMENTAL

A function that is so intimately related to the public
interest as to mandate performance by Government
employees.

- The discretionary exercise of Government
  authority
- Monetary transactions and entitlements

DEFINITIONS

COMMERCIAL ACTIVITY

Any function that is capable of being performed by a
private sector entity.

- Business
- Non-profit organization
- University or college

Examples

Military Essential
- **Positions exposed to hostile fire**

Inherently Governmental
- Command of governmental organizations
- Judicial
- Revenue disbursement

Commercial Activities
- Maintenance of equipment
- Food service

Secretary of Defense

"We must act now if we are to have the resources to invest in modernization in the midterm and if our support capabilities are to keep pace with our military capabilities in the long term."

Quadrennial Defense Review May 1997

"We are examining the best opportunities to outsource and privatize non-core activities, ..."

Quadrennial Defense Review May 1997

1.

AFMC
A-76 COST COMPARISON PROGRAM
18 NOV 1997

Briefer: Harvey Brewster
AFMC/XPM
Tel: DSN 787-6276

1

BRIEFING OVERVIEW

- A-76 COST COMPARISON PROCESS
- AFMC STRATEGY
- FY96/97 STUDIES BY CENTER
- FY97 STUDY RESULTS TO DATE
- AF O&P $ TARGETS
- AFMC O&P $ TARGETS
- SUMMARY

2

DIRECTIVES

- Public Policy (1947 Defense Act)
  - Government should not compete with its citizens
  - Rely on private industry sector to the maximum extent for products and services

- OMB Circular No. A-76

- 10 US Code Chapter 146 Section 2461 - 69

- Supplement to OMBC A-76 (CA Handbook)

- AFI 38-203

- AFP 26-12 (AFMAN 38-203)

3

These are the primary directives that govern the Commercial Activities Program

Executive Order 12615 - A cost comparison will be completed when a function is identified as a commercial activity.

OMBC A-76 establishes CA federal policy

Policy of CA Program:

Rely on the private sector

Aim for economy - When an activity is not inherently governmental or military essential

The supplement outlines procedures to determine whether commercial activities should be performed under contract with commercial sources or in-house with civilian personnel

Two DOD documents implement the DOD program

Two AF directives provide guidelines for implementing the AF Pgm

SAF/AQK, Mr. Mosemann Executive Agent for AF CA Program

LEGISLATION

- Prohibits contracting out
    - Security Guards
    - Firefighters

- Prohibits using A-76 from converting Depot Maintenance (CORE Logistics) to contract performance

4

Current CA legislation:

Contracting of fire fighters and security guards is prohibited.

Sixty percent of depot maintenance must be performed by employees of the DOD.

Direct patient care may not be contracted out

Installation commander has sole authority to contract out CAs

LEGISLATION
(Continued)

- Cost Comparison Required
  - Eleven or more civilians
  - Cannot RIF civilians except via cost comparison process if workload is to be continued
- Cannot use to circumvent civilian personnel ceilings
- Requires monthly consultation with employees and union during study
- Requires retirement and benefits to be in both contractor and in-house bids

5

Cost comparison required when 11 or more civilians are impacted. No civilians will be RIFed unless via the cost comparison process

Cannot contract to avoid personnel ceilings

Reorganizations to circumvent A-76 rules are not permitted

Must keep employees apprised of situation through monthly meetings

Benefits must be considered in all computations

LEGISLATION
(Continued)

XP

- Congressional notification
    - For cost comparison with 46+ civilians
    - Before converting in-house to contract
- Congressional Reporting Requirement
    - Annual inventory of CAs
- 2/4 year time limits
    - 2 year single function (AFMC 18 Months)
    - 4 year multiple functions (AFMC 36 Months)
- Public Law 103-226, 30 Mar 94. Limitation on Procurement of Service Contracts

6

Strict Congressional Reporting:
- a. Before a cost comparison with 46 or more civilians can begin
- b. When a cost comparison results in contract decision
- c. Annual inventory of all CAs for FY and estimate for next FY

Must complete cost comparison within 2 (single) or 4 (Multi) years

OMB CIRCULAR A-76 ☰ *XP*

- Purpose
  - Establish Federal Policy Regarding Performance Of Commercial Activities (CAs)
- Policy
  - Achieve Economy and Enhance Productivity
  - Retain Governmental Functions In-House
  - Rely On Commercial Sector

7

OMB CIRCULAR A-76
(Continued)

- Some Functions Must Be Performed In-House By Organic (Government) Resources
  - National Defense - Wartime Duties, Military Training, Firefighting, Security Guards, Etc.
  - Inherently Governmental - Monetary Transactions And Entitlements, Resource Control And Allocation, Discretionary Exercise Of Government Authority

8

DEFINITIONS

- Commercial Activity - Process Resulting In A Product or Service That Is Or Could Be Obtained From A Private Sector Source

- Inherently Governmental Activity - An Activity So Intimately Related To The Public Interest As To Mandate Performance By Federal Employees

-

9

DEFINITIONS
(Continued)

- Cost Comparison Study - A Management Reinvention Process Designed To Use Competition To Encourage Change And Improve The Quality And Cost Of Commercial Support Services

10

DEFINITIONS
(Continued)

XP

- 3 Elements Of A Cost Comparison Study
  - Development Of Performance Work Statement (PWS)
  - Most Efficient Organization (MEO)
  - Cost Comparison

11

DEFINITIONS
(Continued)

- **Performance Work Statement (PWS)** - A Statement Of The Technical, Functional And Performance Characteristics Of The Work To Be Performed; Serves As The Scope Of Work And Is The Basis For All Costs Entered On The Cost Comparison Form

-

- **Most Efficient Organization (MEO)** - The Government's In-House Organization To Perform A Commercial Activity; It Is the Basis For Government Costs Entered On The Cost Comparison Form

12

DEFINITIONS
(Continued)

- **Cost Comparison** - Process Whereby The Estimated Cost Of Government Performance Of A Commercial Activity Is Formally Compared, IAW the Principles And Procedures Of OMBC A-76 And Supplements, To The Cost Of Performance By Commercial Or ISSA Sources

  -

13

Commercial Activity: Most BOS, air traffic control operations, cost benefit analysis, scientific data studies, defense, education, and energy studies.

Commercial Activities are not:
    R&D
    Personal Services

Inherently Governmental: Activities that require the exercise of discretion in applying Government authority or use of value judgment in making decisions for the Government.

DEFINITION
(CONTINUED)

XP

- **Severable in-house commercial activities**

OMB CIR A-76 states: "A-76 does not apply to research and development functions. However, severable in-house commercial activities in support of research and development, such as those listed below, are normally subject to this circular and its supplements."

- **Audiovisual products and services**
- **Automatic data processing**
- **Maintenance, overhaul, repair, and testing**
- **Manufacturing, fabrication, processing, testing, and packaging**
- **Office and administrative services**
- **Printing and reproduction**
- **Special studies and analyses**
- **Systems Acquisition engineering, installation, operation, maintenance, and testing**

14

PROCESS

XP
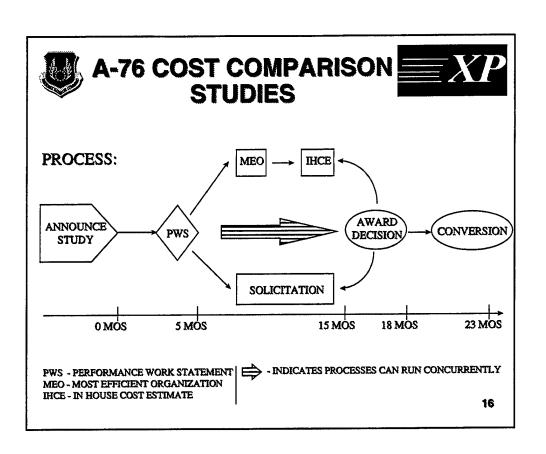
- Step 1 - Determine Activity Type
- Step 2 - Maintain AF CA Inventory
- Step 3 - CA Review: Installation Commanders
  - Determine method of operation
  - Determine if Military essential
  - Identify function for cost comparison
  - Notify MAJCOM & HQ

15

Step 1 - Inherently governmental or CA. OFPP policy letter 92-01 outlines inherent governmental. DODI 4100.35 outlines CA's.

Step 2 - AF CA Inventory identifies CAs operated in-house and by contractor, and is extracted from command manpower data systems. This inventory satisfies reporting requirements directed by Congress, OMB, OSD, and HQ USAF

Step 3 - CA reviews are accomplished by installation commanders with their manpower representatives to determine in-house or commercial operation. Military essentially determined at this point. Criteria to remain in-house are matters of national defense, critical skills, overseas rotation, deployment, no satisfactory commercial, or installation commander elects to retain the CA in-house.

Installation commanders have sole authority to convert CAs from in-house to contract performance.

If a CA has only military and or less than 11 AF civilians who can be placed, or is performed outside the US, it can be directly converted to contract. A cost comparison (A-76 study) is required when 11 or more AF civilian employees are impacted by the action, or when a function with less than 11 civilians can not be placed or retrained.

Page 15

AFMC STRATEGY

XP

- AFMC/XP Will Chair A-76 IPT and Serve as Command Integrator for A-76
- Business Area Chief Operating Officers (COOs) Have Authority and Responsibility for Developing Their A-76 Strategy and Overseeing Execution
- COOs Will Designate Their Own A-76 Manager to Oversee Execution
- XP Will Broker Issues Which Cut Across Business Areas
-

17

STRATEGY
(Continued)

- COOs Will Have Individual Performance Targets
- IPT Will Standardize Reporting Requirements, Project Breach Criteria, and Synchronize Installation RIF Schedules
- AFMC Developing Manpower & Cost Reduction Templates for O&P and Efficiencies

18

EXAMPLES OF WHAT IS BEING STUDIED

XP

- **Base Operating Support Functions:**
  - Grounds Maintenance
  - Civil Engineering Maintenance/Repair
  - Supply
  - Transportation
  - Mail Services
  - Education and Training
  - Telecommunications
  -

19

RECENTLY COMPLETED STUDIES

XP

INSTALLATION	FUNCTION	DECISION	AUTH	% SAVINGS
Eglin	Library	Contract	8	13%
PL Hanscom	Comm	In-House	2	60%
Hill	Grounds	Contract	11	10%
Hanscom	Tran	In-House	27*	42%
Kirtland	PMEL	In-House	32*	63%
WPAFB	Log	Contract	504*	49%
Robins	Comm Spt	In-House	5*	13%
Hanscom	VI	In-House	10*	56%
Edwards	Supply	Contract	331*	46%
LA	Ed&Tng	In-House	15*	48%

*in Review/Appeal period

20

Page 20

AIR FORCE O&P TARGETS ($M)

Base Spt/DMBA	FY98	FY99	FY00	FY01	FY02	FY03	TOTAL	%
ACC	-8.6	-21.9	-20.9	-20.8	-26.2	-32.1	-130.5	10.6%
AETC	-5.1	-12.6	-12.6	-12.5	-16.4	-20.1	-79.3	6.4%
AFSPC	-6.7	-11.8	-11.4	-11.3	-13.3	-15.5	-70.0	5.7%
AFSOC	-0.4	-0.9	-0.9	-0.8	-1.1	-1.4	-5.5	0.4%
PACAF	-2.6	-8.3	-9.4	-10.2	-8.7	-11.1	-50.3	4.1%
AMC	-5.5	-14.4	-12.9	-12.3	-16.4	-20.9	-82.4	6.7%
AFMC								
A-76 STUDIES	-20.7	-55.3	-67.7	-78.9	-93.1	-103.4	-419.1	
DMBA O&P	-28.1	-44.2	-72.1	-72.0	-72.1	-72.0	-360.5	
AFMC TOTAL	-48.8	-99.5	-139.8	-150.9	-165.2	-175.4	-779.6	63.4%
USAFE	-1.8	-6.1	-4.9	-4.8	-6.4	-8.1	-32.1	2.6%
TOTAL	-79.5	-175.5	-212.8	-223.6	-253.7	-284.6	-1229.7	100.0%

21

- This chart reflects AF directed O&P targets as programmed in the FY98 POM.

- AFMC's bill of $779M is comprised of two parts: $360M for DMBA Privatization and $419M for A-76 savings.

AFMC O&P PROGRAMMED SAVINGS ($M)

	FY98	FY99	FY00	FY01	FY02	FY03	TOTAL
FY98 POM REDUCTIONS	20.7	55.3	67.7	78.9	93.1	103.4	419.1
PROJECTED SAVINGS	4.1	19.1	46.6	70.3	82.0	94.2	316.3
DIFFERENCE POM TO PROJ SAVINGS	-16.6	-36.2	-21.1	-8.6	-11.1	-9.2	-102.8

22

- If the additional 3571 makes, this is how our projected savings track with the AF O&P bogeys

- As centers slip time lines to accommodate RIF milestones, and studies do not make, shortfalls in FY98 & FY99 will continue to grow.

- The first group of lines show the O&P dollar targets identified in the FY 98 POM. The defined/undefined line is comprised both of the savings associated with the studies we announced--the defined portion, and the undefined--the portion that we have identified to the Air Staff, but will not be programmed until announcements are made to Congress

-- The additional bogey is the amount identified by AF/LGM-1 during the last POM exercise

- The second group of lines show savings we project, based on SAF/FM pricing methodology. This pricing reflects the 2-year lead time associated in current programming methodology.

- The final group of lines shows the shortfall in meeting our POM O&P targets originally projected assuming quantities and timelines are met.

- FM is repricing based on changes to completion dates, and will complete this when detailed information on the changes is forwarded from the field.

Page 22

SUMMARY

- **AFMC Is Aggressively Pursuing A-76 Cost Comparison Studies To Improve**
  - Quality Of Our Commercial Services
  - Cost Of Our Commercial Services
- **Process Is Win-Win**
  - Provides Government Employees An
    Opportunity To Compete For Their Jobs
  - Provides Private Sector Opportunity To
    Become A Partner in National Defense
  - Ensures Most Cost Effective Source For
    The Taxpayer

23

Back up facts for emphasis on the last bullet:

- If CDC #24 savings and additional CE and SC A-76 study savings are slipped by one FY, the total impact over the FYDP is a loss of over $21M in savings.

- If no MSG/SSG A-76 savings are realized, the impact over the FYDP is a loss of over $35M in savings.

Legal Issues and
A-76 Cost Comparisons

- Background - Wright-Patterson
  - » Logistics (88 ABW, WL, Med Ctr) - 632 slots under study
  - » Civil Engineering, Blue Collar - 698 slots
  - » Education and Training - 115 slots
- Additional studies may be announced in FY 98

Capt Deborah Muldoon
18 Nov 97

-My Background - Legal advisor to the Logistics A-76 Study here at WPAFB

-Talk about a few of the legal issues we encountered. Every study will likely encounter these.

-Disclaimer: These are my personal observations and do not represent an official viewpoint.

-Snapshot of the studies ongoing at WPAFB at the moment, so there are bound to be many issues which arise.

Legal Issues and
A-76 Cost Comparisons

● **Logistics Study**
  » Largest study for WPAFB at the time
  » 2 Step Sealed Bid Acquisition
  » 30 Sep 97 bid opening - contractor performance
  » Summer '98 transition to contractor performance

Capt Deborah Muldoon
18 Nov 97

-Background about LG Study: - Largest study for WPAFB at the time. Current CE study eclipses it by a few slots. We used a 2 Step sealed bid acquisition strategy. Sealed bid opening 30 Sep - initial determination to go contract

-Personnel actions such as incentive programs and finally RIF notices, if needed. Contractor chance to hire these folks before performance begin.

-1 Jun - orientation, 1 Jul - transition, 1 Sep - 100% performance

Legal Issues and
A-76 Cost Comparisons

- Variety of Legal Issues
  - » Inherently Governmental Functions
  - » Ethical Considerations

Capt Deborah Muldoon
18 Nov 97

-Through the course of LG study, many legal issues have arisen.

-Touch on two of the largest which would have universal application.

-Encourage you to enlist the support of your legal staff throughout the process if you find yourself encountering an A-76 Study.

Legal Issues and
A-76 Cost Comparisons

● **Inherently Governmental Functions**

» Those official responsibilities which may not
be transferred to Government contractors

» Excluded from A-76 Studies

» OFPP Policy Letter 92-1 is the latest guidance

» Definition is amorphous - difficult to apply

Capt Deborah Muldoon
18 Nov 97

-Goal - exclude the minimal number of positions needed to perform that inherently governmental function.

-Not easy to apply the definition given in the policy letter

-Functions proposed for study are frequently tempted to declare as many positions as possible inherently governmental. Realistically, this will likely not fly in today's climate.

Legal Issues and
A-76 Cost Comparisons

- Definition: a function so intimately related to the public interest as to mandate performance by Government employees. Include those activities which required either the exercise of discretion in applying Government authority or the making of value judgments in making decisions for the Government. Normally fall into one of two categories:
  - » act of governing, i.e., the discretionary exercise of authority
  - » monetary transactions and entitlements.

Capt Deborah Muldoon
18 Nov 97

-Application of this definition admittedly difficult.

-Suggested way is to look at your entire function, identify those items which cannot be contracted out, and then determine the minimum number of people you need to perform those duties.

Legal Issues and
A-76 Cost Comparisons

- **Ethical Considerations**
  - » Divided Loyalties - Membership on Performance Work Statement (PWS)/Most Efficient Organization (MEO) teams, technical evaluation team - potential for conflicts of interest
  - » Post-Government Employment considerations

Capt Deborah Muldoon
18 Nov 97

-Asking people to participate in activities which may ultimately result in the contracting out of their jobs. Potential conflicts of interest may arise.

-The uncertainty and the stress of the process causes much concern. There are many questions about the myriad of rules and regulations regarding the search for post-government employment. Ensure you know who your Ethics Counselors are and talk to them before beginning any job search or when you are contacted by a potential employer.

Pros & Cons of Contracting Library Functions

© November 1997Doria B. Grimes

National Oceanic & Atmospheric
Adminstrative Library
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Silver Spring, MD 20910-3282
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Military Librarians Workshop '97 program.

Good afternoon. On my first overhead, I will be presenting some generalities that have been experienced when a library contracts out some of its support functions. Many of these elements are basic, but are worth a review. I will also attempt to be as balanced as possible.

1. TURNOVER
The average used in the federal government is to expect 10% turnover in staffing annually. This calculates to 50% at the most at the end of five years. This five year benchmark is also the length of a services contract. Support contracts and contract staff, on the other hand, are re-bid or re-negotiated every five years because the entire contracting process is on a five year cycle. Consequently, 100% turnaround in contract staff is possible - if the contract goes to another company. A new company can and in some cases is successful is re-hiring the federal or former contract personnel. So this 100% turnaround is not always the case. However, please note that the successor company has bid lower than the incumbent. Thus, the staff is most always offered a lower salary. The experience at the NOAA Central Library has been 100% turnaround on contract staff when another company takes over a new contract. Turnover also impacts corporate memory. A stable core of federal employees is essential to provide the continuity in the library's collections development, agency connections, and budget battles.

Impact on Training and Re-Training
Federal staff , once trained, will be around up to 10 years - when the 10% turnaround rules is applied. Training for contractors is necessary with each successive new company, as there are a number of in-house requirements unique to the agency. In addition, the incumbent contractor experiences greater staff turnover when administering the contract. This is understandable, because many young library professionals and library technicians begin their careers with a contract while looking for a more permanent position. We have a in-house joke that we are the NOAA School of Library and Information Science because of all of the contractors that we have taught to catalog and perform interlibrary loan functions. Granted that contractors are supposed to provide experienced and trained staff. However, there are a number of in-house procedures, and an inherent desire for many to seek a more permanent position.

Termination of Employees
There is a myth that federal employees cannot be fired. This is indeed a myth. I have been successful in terminating staff who have not been forming at acceptable levels. Yes, it takes a lot of documentation, but it can be done without violating the employee's rights. Suffice it to say that it is more difficult to terminate a federal employee that a contractor. Contractors, on the other hand, can be replaced more easily. For example, reputable companies want to please their federal agency, and want to know how their staff is performing. On several instances, I have asked the contract project manager to replace an employee who is not working out - after many attempts at re-training. This has been quickly implemented with a new contractor reporting the next day.

2. STAFFING
As we all know, we are "doing more with less" in the federal government. Our staffs are shrinking. This is a long term problem as a manager, and there does not seem to be any change in this policy in the immediate future. Hiring contract staff is an excellent solution for special projects. For example, when functions at the NOAA Central Library were contracted out in 1988, the Internet, Home pages, and electronic documents did not exist at the library. Since then, these major and important services have been incorporated using contract staff. I have also been successful is receiving funding through grants - the special projects being executed with the help of contract staff. Please remember, however, to keep the management of the special projects, be it digitization or creating Home pages, under federal control. At the NOAA Central Library, we provide guidance to the contractor who modifies the Home pages, etc.

3. SALARIES

Federal employees are usually paid a higher amount per hour, whereas contractors are paid less. This supports my earlier statements regarding that some library professionals are contractors until they find federal employment. This also supports the turnover problem. Higher federal salaries do make it difficult to win a contract in-house.

4. VERSATILITY

All of us have this wonderful clause in our Positions Descriptions - "Performs miscellaneous duties as assigned." This clause covers many instances when new technology or special projects are added to our regular duties. Contractors, on the other hand, are legally limited to the functions described in the Statement of Work. In DoD, I believe it is called the Performance Work Statement or PWS. For example, at the NOAA Central Library, we had a flood in which the books in the basement were under 3 inches of water. The federal staff immediately established a book brigade to carry out the wet volumes. The contractor at the time did not assist in the emergency, stating that it was NOT in their PWS. Needless to say, that contractor is no longer with us. This may not happen at your library, and most contractors will help in an emergency - if there is not additional overtime. But I am citing this example to illustrate the contractual limitations that are legal.

5. CORPORATE AFFILIATION

As federal employees we are part of and identify with the agency that we support. Our contractors are part of the team, but have distinct limits in their participation. For example, our contractors do NOT and CANNOT attend budget meetings, staff meeting, prepare confidential personnel documents, or any other "inherently governmental" functions. We at NOAA include the contractors in our office celebrations, holiday parties and early dismissals. However, as much as we try to be inclusive, they really are like a stepchild with some but not all of the benefits. Another example, when we experienced the government-wide shutdown in January 1996, the federal staff was eventually paid their salary. A Stop Work Order was executed to the contractors, who were not paid. This also caused some resignations of contract staff.

CONTRACTING IN A LARGE BUREAUCRACY

On this next overhead, I will present the pro's and con's of contracting in a large government organization - like DoD or the Dept of Commerce, NOAA or any other Executive agency. Rather that fight the system, use it to your advantage.

1. CORPORATE EXPERIENCE

Most of us have large Procurement Offices that can and do execute the required documentation to execute a good, solid contract. Unfortunately, some of these Procurement folks have no concept of what are library support services . They are used to order widgets, and need some education on our part. Yes, we have all experiences with the regulations, rules, and fences that are place in our way. However, that is what we - as COTR's (Contracting Officer's Technical Representatives) are paid to do. Keep the Procurement folks well informed in advance and know your facts. I have won every battle, but you need to be well prepared . Even though you may work at a library, become certified in contracting. Again, I am a certified COTR which means that I manage the contracts at the NOAA Central Library. But I am also in charge of Technical Services, Special Collections, and the Photo Collection, Interlibrary Loan, maintain the budger, pay bills and "other miscellaneous duties as assigned." This certification keeps this position as a federal FTE (Full Time Equivalent) as a "inherently" governmental position.

2. GREATER GUIDANCE

The experience of Procurement officials enables them to provide greater guidance in the selection of which type of contract to execute - be it labor/hour, fixed fee, etc. The disadvantage is that many Procurement Offices are loath to try innovative solutions, new solutions, or anything that has not been tried before.

3. LARGE CONTRACTS

Compared to other very large contracts, library support services are minuscule. Thus, it is an education process that we must do for Procurement officials so that the unique requirements are understood. Library services are not widgets.

4. RIDE ESTABLISHED CONTRACTS

Contracting library support services has been around for at least ten years. So don't re-invent the wheel and write your Performance Work Statement by yourself. Adopt copies of those already being used. Several agencies also have established contracts with large dollar amounts, i.e. ceilings, which enables other agencies to use the same contract. I encourage you to see into some established contracts with GSA and elsewhere in the federal sector. The National Institutes of Health Library is preparing a GWAC (Government-Wide Acquisitions Contract) that other agencies can use. FEDLINK also has some for technical processing.

5. USE GENERAL COUNSEL

When in doubt, ask your Office of General Counsel for any clarification necessary. They are your best ally and advocate. Remember, this service is at no charge to you. An example that I used the General Counsel was their assistance in establishing which areas are "inherently governmental" at the NOAA Central Library. With their help, the reference functions, database management which oversees OCLC cataloging, as well as Collection Development were accepted by the agency in this category.

Other important points in your library advocacy are:

> A.) The placement of your library in your agency's organization chart reflects the level of support that you will receive. Remain as high on the chart as possible. However, I caution you NOT to be in the Office of Administration. This area has been and continues to be the target of severe budget cuts.

> B) Market your library within the agency at agency new employee orientations. Establish a Library Advisory Council made up of library advocates from each line office or department. This creates levels of support. The NOAA Library Advisory Council meets quarterly and assists in reviewing journal selections. They have been very instrumental in supporting the library when the journal budget was slashed.

FEDERAL FUNCTIONS AT THE NOAA CENTRAL LIBRARY

The discussion regarding what is considered "inherently governmental" at the library has been determined at the highest levels at NOAA. In 1993, we were successful in obtaining a signed policy memorandum on this subject. Basically, Reference was supported as a federal function due to the number of confidential searches that are performed by the library for the NOAA Office of Procurement regarding contractors. It is inappropriate for a contractor to perform searches and obtain information on their competitors during contract negotiations. This simple function, which many of you may also being doing, supports Reference as a governmental function.

In addition, we have a Collections Development Librarian that was determined by the General Accounting Office as "inherently governmental." In GAO Report number GAO/RCED-87-184 "Contracting Out - - National Oceanic Atmospheric Administration's Central Library stated that "core governmental staff....to ensure that the collection development functions is performed." As a result of this ruling, I immediately hired a Collections Development Librarian GS 1410-11/12. This plus a core federal staff of library managers, reference librarians, and database managers make up the federal staff at NOAA. This includes a network manager and database managers. These database managers are also professional library catalogers and who perform quality control of cataloging by contractors.

QUALITY ASSURANCE EVALUATOR

Are you familiar with Quality Assurance Evaluators? This is a common position description. However, have you ever seen one in a library position, the 1410 professional series? Well, I have one. This is indeed an "inherently governmental" function. Please note that my quality assurance evaluator is also in charge of the Special Collections and Gifts and Exchange Program. Again this is an opportunity to use the regulations and still manage a library with professional federal librarians.

PERFORMANCE MEASUREMENTS

Earlier presentations stressed very vague performance measurements in the Statement of Work, i.e. Performance Work Statement. I am of the opinion and my colleague on the podium, who is a contractor, agree that performance measurements are needed. It enables the contractor to know in advance what is expected of them, and also allows the federal manager to measure what has been completed. A good contractor wants to know, and both parties do not want surprises. Without performance measurements, it becomes increasing difficult to terminate a contract for default as well as reward a contractor for outstanding performance. Section IV-- Inspection and Acceptance should be a standard part in all contracts. I am not implying too detailed measurements. Below is an example to follow:

> Contractor shall submit at the end of each month a listing of recommended titles for purchase to the Collections Development Librarian. Each list shall contain a minimum of 25 titles with supporting reviews.

Should there be extenuating circumstances in which this is not required, the federal manager (COTR) can execute a contract modification in writing substituting another function to be performed in its place.
I understand that the current trend is NOT to include performance measurements. My advice is to include them. They can

always be deleted, but you will have recognized what and how much needs to be done. If measurements are not included, follow-up meetings will occur in which a good contractor asks for clarification of the work to be performed. Having been in the federal sector for nearly 19 years, the trend against performance measurements will swing back. Then you will have been ahead of the game.

In conclusion, being a COTR (Contracting Officers Technical Representative) is a challenging and creative experience. As a certified Procurement Official, I have acquired another layer of experience necessary to manage my Branch and the technical operations of the NOAA Central Library. I did not learn this in library school. But as a federal manger, I consider COTR training and certification as a pre-requisite to working in any federal library. The federal managers keep the continuity and vision for the library. The contractors provide technical support functions. This combination has created a successful contracting partnership at the NOAA Central Library.

Military Librarians Workshop 97

A Vision for Air Force Libraries (2 + 2 = 5)
or
Seizing an Opportunity:
Three Case Studies

Presented by
Bonnie C. Carroll, President
Pat L. Powell, Vice President
Information International Associates, Inc.
Oak Ridge, Tennessee

Wright Patterson AFB
Dayton, Ohio

November 18, 1997

WHO ARE WE?

- Information resource management company -- content-based
- Librarians
- All-sector experience
- Can see the various points of view
- Theory (Bonnie) vs Practice (Pat) vs Reality (George)

132

1

The Context of A-76

◆ The Criterion is never quality of the job -- only the price
  - Achieve economy and enhance productivity
  - Retain governmental functions in-house
  - Rely on the commercial sector
◆ Inherently governmental functions
  - The library contains the knowledge capital of an institution
◆ The Pendulum swings
◆ Outsourcing and downsizing is becoming a way of life
◆ Support services, facilities management, commercial services

Preparing for the Worst

◆ The Ostrich and the Camel
◆ Best value contracting
◆ Professional library management or ???
◆ It takes three legs: budget, contracts, technical

Be an Educated Buyer

- Best value contracting
  - Low bidder
  - Evaluation factor, computation-based
- Librarians need to be involved in not only the SOW, but type of buy, evaluation factors, review process
- Stack your deck
- Know how to use the rules
- Transitions have big cracks (⟶ Pat)

Once the decision is made, make the most of it

- Assume that in a total quality environment, we share common goals
- Recognize both long-term and short-term strategies (profit vs success)
- Take advantage of all flexibility and agility
  - Values of a competitive way of life
  - If you have a foil, use it
- Hold to higher standards that are the same
  - Penalties are real and immediate
- The fortress mentality -- the fortress reality

Minimize pitfalls and pain

- Marginalizing workers
- Share lessons learned in the community
  - Reaction to this session
- Use successful templates
- Help them to help you

Leveraging with new relationships

- Change allows reengineering, not just transitioning
- Different opportunities and constraints
- Flexibility to try new things
- Go places you can't ordinarily go
  - Possible new funding opportunities
  - Politics
- Unusual places provide unusual opportunies
  - Local labor situations, findings
  - An outsider's view

135

Our Libraries

- ◆ Foreign Science Library

  Dayton, OH

- ◆ Cannon AF Base Library

  Clovis, NM

- ◆ Eglin AF Base Library

  Fort Walton Beach, Florida

Foreign Science Library

- ◆ Established in 1951 - IIa began operations in 1996
- ◆ Covers foreign scientific and technical information and other materials and topics
- ◆ Specialty translations and other services provided in Chinese, Japanese, Czech, Slovak, Russian, and other Slavic languages as well as German, French, and Spanish

FSL's collection includes . . .

- 60,000 mongraphs
- 1100 periodical title subscriptions
- Online access to over 1000 databases
- Irregular serials
- Conference proceedings
- Pre-prints
- Patents
- Newspapers
- Technical reports
- Grey literature

Cannon Air Force Base Library

- Contract start-up -- September 1, 1997
- General library services for military personnel, their dependents, and base civilians
- Mission support for base agencies
- Educational services and cooperation

2

Cannon Air Force Base Library collection includes --

- 39,000 monographs
- Periodicals and newspapers
- Audio and video collection
- Dialog access to over 1000 databases
- Internet access to information
- Variety of educational material (future tests, CLEP, DANTES)
- Microforms, other non-print media

Eglin Air Force Base Library

- Contract start-up -- October 1, 1997
- General library services for military personnel, their dependents, and base civilians
- Mission support for base agencies
- Educational services and cooperation

139

Eglin Air Force Base Library collection includes --

- 120,931 monographs
- Periodicals and newspapers
- Audio and video collection
- Dialog access to over 1000 databases
- Variety of educational material (future tests, CLEP, DANTES)
- Microforms, other non-print media

The Beginning . . .

- Deciding to bid

IIa is a Good Choice

- Staffing
- Technology
- Contract Management

Things they never told us and other challenges . . .

- Transition
- Budget acceptance
- Inventories
- Workload estimates
- Communication among base personnel
- Systems and technology
    - Internet services
    - New system implementation

141

If anything can go wrong, it will . . .

- ◆ Budget approval
- ◆ Hackers and system security
- ◆ Earthquake
- ◆ Equipment problems

Where we are TODAY and postive thoughts . . .

- ◆ Contract compliance
    - Government contract managers
    - Staff
    - Customers

Where we want to be and our goals for the FUTURE . . .

◆ The Air Force Base Libraries as centers of lifelong learning
◆ Collaboration with Base personnel
◆ Increased access to resources
◆ Networking opportunities

143

U.S. Military Internet Sites

Military Librarians Workshop

November 1997

Created by Holly Wilson

Until 7 November: **Librarian**

Network Services Branch

Defense Technical Information Center

After 7 November: **Librarian**

EEOC Library

Equal Employment Opportunity Commission

hjwilson@mindspring.com

Presented by Carol Ramkey

Librarian and Chief

Reference and Retrieval Services

Defense Technical Information Center

cramkey@dtic.mil

The URL for this presentation is: http://www.dtic.mil/dtic/dticb/dticbln/dticconf.html

Methods for Identifying US Military Internet Resources

- See if someone else has done the work for you!

    o When looking to see if a particular organization has an Internet presence, consult a **directory** containing comprehensive listings of military sites. Use the Service level home pages.

    o If browsing with no particular site in mind, consult a general **guide** to resources compiled by librarians at military educational institutions or think-tanks such as the Army's National Defense University Library Defense Nexus.

    o If looking for Internet resources in a particular subject area, examine **lists of links** compiled by organizations specializing in the subject or functional area. Many organizations compile lists of links considered to be of prime importance in support of their mission. For example, for links to resources in military history, go to the U.S. Army Center of Military History or for resources related to modeling and simulating, go to the Defense Modeling and Simulation Office.

    o Look for an FAQ on the subject being researched. Maybe someone else has thought of your question!

- Conduct a search using the advanced capabilities of a **search engine** such as Alta Vista or HotBot to limit search results to military domains or specific military servers.

144

The following is a *brief survey* of military Internet resources available today. This presentation is meant to provide a method for identifying resources and to show a *selection* of the valuable information which can increasingly be found on military Internet sites. With few exceptions, only sites produced by military organizations are listed here. There are many other valuable military sites. To identify them you may have to browse with guides and directories, visit military organizations whose mission mirrors your research need, use search engines, or simply follow links to other links in the resources you find.

Keep in mind that the URLs listed here may change or cease to exist in the near future due to the fluid nature of the Internet.

Directories and Guides for US Military Internet Resources

Directories by Service

To identify a specific organization, browse or search comprehensive listings of US military Internet sites using the directories of sites composed by each Service:

- Army Home Page
  http://www.army.mil
  Prominently displayed at the top of the Army Home Page is the capability to **browse** or **search** by keyword or organization name. There is also a "New Sites" link to keep abreast of newly added sites as well as a listing of organizations by subject area.

- Air Force Sites
  http://www.af.mil/sites/
  Browse through this alphabetical listing of publicly accessible US Air Force Web Sites. Other public listings are available by Major Command. The list of InternalAir Force sites is available only to ".mil" domains.

- NavyOnLine
  http://www.ncts.navy.mil/nol/
  Browse through Naval Web sites alphabetically by organization name or subject category or **search** by keyword(s) found in the title of the organization's Web site.

- Marine Corps Locations Around the World
  http://www.usmc.mil/wwwmain/marsites.htm
  Browse this list of links to Marine Corps sites around the world.

- GuardLINK
  http://www.defenselink.mil/guardlink/
  Browse by state for links or contact information for National Guard units in the United States.

- ReserveLINK
  http://raweb.osd.mil/ReserveLink.htm
  Links to the Army, Air Force, Naval, Army, Marine Corps, and Coast Guard Reserve organizations plus the National Guard and the Air National Guard.

  - Army Reserve Units
    http://www.army.mil/usar/homepage.htm
    Browse by organization name, date, keyword or state. **Search** by keyword or organization name.

  - Air Force Reserve Units
    http://www.afres.af.mil/units/
    Browse a list of links by organization name.

  - Naval Surface Reserve Force Organizations
    http://www.ncts.navy.mil/navresfor/navsurf/srfflorg.html

  - Naval Air Reserve Directory
    http://www.ncts.navy.mil/navresfor/navair/aircont.html

  - Marine Forces Reserve Web Sites by Location
    http://www.marforres.usmc.mil/
    Click on the link for MFR Web Sites to browse by state or **search** by keyword.

General Guides   145

Many military organizations are compiling links to mission related Internet resources. Guides created by librarians or research staffers at Army, Navy, Air Force, Marine, or DoD technical libraries and think-tanks are good places to start when browsing!

- The National Defense University (NDU) Library's Defense Nexus
  http://www.ndu.edu/ndu/library/military.html
  A guide to links for the Air Force, Army, DoD, Navy and Marine Corps plus international military links and civilian defense-related links. Arrangement is by Service and then alphabetical by name of the organization. Some links are described. There are also links to subject areas of interest to the NDU community such as regional studies, defense acquisition, political science, economics, and information technology.

- CARL's Gateway to the Internet
  Combined Arms Research Library (CARL), Ft. Leavenworth
  http://www-cgsc.army.mil/carl/gateway.htm
  A brief selection of sites arranged by Service and other topical areas such as Military Education & Research; Military Photos and Graphics; Military Magazines On-Line; and Sites for CAS3.

- Defense Technical Information Web Locator
  http://www.dtic.mil/dtiwl/
  The DTIW contains links to a wide variety of DoD (and non-DoD) resources. Arrangement is by subject category.

- Information Resource Center, Canadian Forces College
  http://www.cfcsc.dnd.ca/welcome.html

  o War, Peace, and Security Guide
    http://www.cfcsc.dnd.ca/links/index.html
    An excellent guide to military (and military related) resources worldwide. Created by the Information Resource Centre, Canadian Forces College, an educational institution for Canadian military officers.

  o Military Libraries
    http://www.cfcsc.dnd.ca/links/f/millib/index.html
    Links to military libraries on the Internet. Contains an extensive listing of US military libraries.

"Civilian" Directories and Guides

Directories

None of the online "civilian" directories contain comprehensive listings but can be helpful nonetheless, especially when trying to search for a DoD organization or for an organization whose service affiliation is unknown.

- Federal Web Locator
  http://www.law.vill.edu/Fed-Agency/fedwebloc.html
  Villanova's Center for Information Law and Policy created this one stop shopping point for military (and civilian Government) information on the World Wide Web. The DoD listings are modest, however. Use the search mechanism to look for a particular agency or simply browse the DoD listings

- Yahoo
  http://www.yahoo.com/
  For Military resources, search or browse through the sites listed under Government:Military

Other Guides

- The Military Network
  http://www.military-network.com/

- Armed Forces .COM
  http://www.armedforces.com/

- BUBL Military Science
  http://link.bubl.ac.uk/military/
  This guide, out of a university in the UK, covers military resources around the world.

- The US Military Online: A Directory For Internet Access To The Department Of Defense, William Arkin, Brassey's, c1997. This book, published only this summer, is an excellent guide to US military resources!

Subject Specific Sites   146

When looking for sites with a specific subject focus, go to an organization whose mission mirrors your research needs. Often, in addition to their own valuable resources, there will be a compilation of related links to other military as well as non-military resources. Here is a small sample of sites.

- LabLINK - The US Department of Defense Laboratory Community
  http://www.dtic.mil/lablink/
  Great starting point for links to DoD laboratories and other federally run labs.

- TechTransit
  http://www.dtic.mil/techtransit/
  Information and links related to technology transfer at this site by the DoD Deputy Director Defense Research and Engineering, Office of Laboratory Management and Technology Transition.

- Military History

  o U.S. Army Center of Military History
    http://www.army.mil/cmh-pg/default.htm
    Links to other military history resources on the Internet.

  o Naval Historical Center
    http://www.history.navy.mil/

- Defense Modeling and Simulation Office (DMSO) Links
  http://www.dmso.mil/orgs.html
  Links to military (and other) organizations involved in modeling and simulation. Arrangement under broad categories: Organizations and Groups; DMSO Projects; M&S in Government; M&S in Industry; M&S in Academia.

- Center for Army Lessons Learned
  http://call.army.mil/call.html

  o Operations Resource Links
    http://call.army.mil/call/homepage/opnsres5.htm

- Defense Language Institute Foreign Language Center's LingNet
  http://lingnet.army.mil/
  Ling-Net, the Linguist's Network, supports military linguists and is located at the Defense Language Institute Foreign Language Center (DLIFLC) in Monterey, California. Most of the links (under LingNet's Language Resources) cited are not military but this web site is an excellent example of a specialized military site containing valuable links. Browseable by language in alphabetical order as well as searchable. Resources cited include information on special fonts needed for non-Roman alphabets, background information on the country and culture where the language is spoken, and training materials for the language.

- Manpower and Training Research Information System (MATRIS)
  http://dticam.dtic.mil/hm/org.html
  Links to other organizations related to manpower, personnel, training and human factors(MPT/HF) research.

- Ballistic Missile Defense Organization's BMDO Link
  http://www.acq.osd.mil/bmdo/bmdolink/html/bmdolink.html
  This site is provides fact sheets and links to other organizations conducting research in ballistic missile defense.

- AMEDD MEDLI-NET (Army Medical Department Medical Library and Information Network)
  http://www.medcom.amedd.army.mil/medcom/medlinet/
  The US Army Medical Command Library Program office has created this site dedicated to medical resources on the Internet of interest to the US Army medical community. Internet resources are divided into sections: Information Resources which contains links to Biomedical/Research Sites, Electronic Journals & Publications, Virtual Reference Desk, and Library-Oriented Web Sites; the Health Reference Center SearchBank which is designed to be a one-stop resource for Patient Education information and *is limited to MEDCOM* personnel; and a link to the MEDLINE database, the premier resource for medical literature from the National Library of Medicine. Of the freely accessible materials, of special note are medical related resources compiled under the Virtual Reference Desk such as links to health-related statistical resources and links to medical organizations and associations on the Internet.

- DoD Environmental Cleanup Home Page
  http://www.dtic.mil/envirodod/index.html
  Resources relating to the environmental cleanup of active, formerly used, and closing bases. Along with information on business opportunities, there also is a lengthy list links to DoD environmental resources.

- DENIX - the Defense Environmental Network and Information Exchange
  http://denix.cecer.army.mil/denix/denix.html

147

DENIX is designed to provide DoD personnel in the environmental security arena with timely access to environmental legislative, compliance, restoration, cleanup, and DoD guidance information. Some information on DENIX is <u>publicly accessible</u>, the rest, however, is restricted to DoD personnel and DoD contractors with a current relevant contract.

- Defense Women's Health Information Center
  http://www.4woman.org/dwhic/index.htm
  A joint effort, composed of representatives from the Office of the Assistant Secretary of Defense (Health Affairs), the Bureau of Medicine and Surgery of the U.S. Navy, the Office of the Surgeon General of the U.S. Air Force and, acting as executive agent for the project, the U.S. Army Medical Research and Materiel Command. The site provides resources for researchers ranging from listings of past and present studies and grants and links to resources on health issues for military women.

- Defense Acquisition University
  http://www.acq.osd.mil/dau/
  The DAU was established in 1990 to consolidate and integrate education and training for DoD employees in the area of acquisition. Links to <u>documents</u> and other <u>acquisition related sites</u> can be found here.

Frequently Asked Questions (FAQs)

FAQs can be a good source of information. Look for FAQs on an organization's site or try searching on your subject and the word FAQ. For example in Alta Vista:

(army near history) and FAQ and domain:mil

A sampling of FAQs :

- Defense Link FAQs
  http://www. defenselink.mil/faq/pis/index.html

- U.S. Army FAQ
  http://www.army.mil/Faq.htm
  Want to know if Army regulations and FMs will be available on the Web? And if so, where? Look at the Army FAQ for the answer to this and many other questions we all want to know the answers to.

- Army History FAQs
  http://www.army.mil/cmh-pg/faq.htm

- Civil Engineer Objective Squadron FAQ
  http://www.afcesa.af.mil/AFCESA/A-GRAMS/1996/www9607.html

- Frequently Asked Questions about MILSPEC Reform
  http://www.acq.osd.mil/es/std/faq.html
  Six volumes of questions dealing with military specifications and standards reform.

- Naval Historical Center FAQ
  http://www.history.navy.mil/nhc3.htm

- Contracting Opportunity FAQ at Eglin AFB
  http://eglinpk.eglin.af.mil/OTHER/Faq/FAQ.HTM

- Grassland FAQ
  http://www.cecer.army.mil/grass/LAS/faq/faq.html

- Parallel Computing Meta FAQ
  http://ivory.nosc.mil/~trancv/ppdir/PP-mFAQ.new.html

- Astronomical FAQ
  http://aa.usno.navy.mil/AA/faq/

Search Engines

Search engines may be employed profitably to identify organizations housing a particular resource such as a report, to find information dealing with a particular subject area, or to identify organization Web sites (but a directory is better for identifying Web sites!). To do this, use a search engine with the ability to field search in order to restrict results by domain or a portion of a URL, such as Alta Vista or HotBot. When "fishing" be creative. Use the capability to see what sites are linked

148

to a particular site to find other (presumably!) similar sites. Keep in mind, however, some of the limitations of search engines.

- Some military sites do not allow search engines to collect information on the contents of their Web pages. Therefore, no amount of searching will identify where the information might be located.
- Restricting by domain won't always work as there are some military sites which do not have a .mil domain! Some military educational institutions such as <u>National Defense University</u> have .edu as their domain, still others have a .com such as the <u>Army's Recruiting Web Page</u>.
- New sites or information just mounted on an existing site may not yet have been visited by a search engine's robot
- Dynamically changing sites are not indexed, according to the documentation of some Web search engines such as Alta Vista.
- Search engines are of varying size and content. If a search fails in one, try another.
- There is no organization or standarized cataloging of sites. Keep your detective hat on as the information desired may be present within your search results but is not readily apparent by the description provided on the hit list.

When a search engine fails, go to the military site or sites most likely to house the information desired or that may provide clues or point to the needed resource. For those familiar with military Internet resources, going directly to the site likely to host the information is often the quickest line of attack. For example, the day the "Quadrennial Defense Review" was released, information about it was available on DefenseLink's Web site. The next day, the full text of the report was up on the site. However, neither HotBot nor Alta Vista had yet revisited DefenseLink and collected the new information and in fact, did not have the information up for more than a week.

- Alta Vista Advanced Search Option
  http://www.altavista.digital.com/cgi-bin/query?pg=aq&what=web
  Use the boolean capabilities of Alta Vista's advanced search interface in combination with a field search to limit your searches to military Internet sites found in Alta Vista's catalog of 31 million Web pages. Be sure to repeat your most important search term in the results ranking criteria box which determines how search results are displayed.

  Those unfamiliar with how to construct a search query using boolean logic, ask your organization librarian for a tutorial. For example:

  Is the report to Congress "Right-sizing the DoD Acquisition Workforce" available on the Web?

  "right sizing" and acquisition and domain:mil

  A fishing expedition: Find Army sites that mention the concept of the tactical internet

  "tactical internet" and host:army.mil

  What is the URL for the Army's Foreign Military Studies Office?

  (FMSO or "foreign military studies office") and host:army.mil

  Of course, this particular search would be more easily and quickly accomplished by going to the Army Home Page to search the organizational listing.

  A fishing expedition: Find business opportunity information on Navy sites

  ("business opportunit" or "contract solicitation*") and host:navy.mil*

  Find sites linked to the DSMC Home Page:

  link:www.dsmc.dsm.mil

  Alta Vista's reference literature also suggests conducting the search as follows in order to eliminate references from within the organization's many other Web pages:
  link:www.dsmc.dsm.mil and not host:dsmc.dsm.mil

  These searches can be done at the simple search interface (http://www.altavista.digital.com/), although due to its non-boolean search structure, searching here will return a higher number of hits with more of them being of marginal value. It is possible to simulate the advanced search by using the "+" symbol to require that both elements be present to satisfy search requirements. Otherwise, the search defaults to the "or" logic.

  For example, *+"information warfare" +domain:mil*

- HotBot
  http://www.hotbot.com/
  HotBot, with its catalog of more than 50 million Web pages, provides the same capability as Alta Vista for advanced searching using boolean logic and limiting by field. Users may type in a search query similar to the examples above

149

or fill in the appropriate choices on the search form. One peculiarity of HotBot is the existence of a Stop Word list which, unfortunately, is not present in the site's Help documentation. Certain words such as information, business, internet, appear to be on this invisible list. Therefore searches on "information warfare," "business opportunities" and "tactical internet" do not work very well. Except for this HotBot is an excellent search engine! An example that does work:

Is the full-text of the "Quadrennial Defense Review" available yet?

On the search form, select "the Boolean expression"
(QDR or "quadrennial defense review") and domain:mil

- GovBot of Government Web Sites
  http://cobar.cs.umass.edu/ciirdemo/Govbot/
  Automatically limited to a collection of more than 334,000 military and federal Government web pages, this would seem an ideal search interface for military organizations and subjects. However, its non-boolean interface produces disappointing results and its command driven interface will put off all but the most persistent of users.

Military Internet Resources

Public Affairs and News Resources

The Department of Defense and the Services

- DefenseLINK
  http://www.defenselink.mil/
  Designed to be the starting point for information about DoD, its organizations, and functions. Links to each of the services are found on the home page as well as official news releases, photos, publications such as the Quadrennial Defense Review or the 1997 Annual Defense Report which may be searched or browsed, and fact sheets. Look here for biographic information on senior defense officials as well as their speeches (available through Defense Issues), information on doing business with DoD, history, career opportunities, and education. There is also a searchable index of DefenseLINK material.

  o DefenseLINK News
    http://www.defenselink.mil/news/

  o BosniaLINK
    http://www.dtic.mil/bosnia/index.html
    BosniaLINK is the official home page about US military activities in Operation Joint Endeavor, the NATO peacekeeping mission in Bosnia. The site contains operation maps, fact sheets, news releases, biographies of key commanders and leaders, and transcripts of briefings, speeches, and testimony. There are also links to NATO and State Department sites.

- United States Army Home Page
  http://www.army.mil/
  Notable links: Army installations; Fiscal Year 1998 Army Posture Statement; a subject listing of Army sites; and information on Army Retirement Services.

  o ArmyLINK: Office of the U.S. Army Chief of Public Affairs
    http://www.dtic.mil/armylink/
    Contains links to the Army Broadcasting Service; the Fact File on Army equipment, weapon systems, vehicles, aircraft, and more; News including recent news releases plus a searchable archive for mid 1996 to present, speeches, and Army News stories; Army photos by category; an FAQ; and Soldiers Magazine.

    ■ ArmyLINK News
      http://www.dtic.mil/armylink/news/

- Air Force Link - the Official Site of the US Air Force
  http://www.af.mil/
  Notable links: The Office of the Secretary of the Air Force for Public Affairs has loaded this site with information about the Air Force such as: Global Engagement: A Vision for the 21st Century Air Force, the Air Force Library, and Air Force news services.

  o Air Force Library

http://www.af.mil/lib/
Contains biographies of high-level Air Force personnel; a "facts on demand" fax service; fact sheets on Air Force organizations and weapons systems; an FAQ; Air Force bands and music; publications; and speeches by high ranking Air Force civilian and military leaders.

- o Air Force News
  http://www.af.mil/news/
  Updated daily, there are current news articles on issues of concern to the USAF; links to news by major command; a calendar of public events hosted by the Air Force; and news from other federal government sources. An easy to use search interface makes it easy to find news resources on this web site.

- The United States Navy: Welcome Aboard
  http://www.navy.mil/
  Notable links: Updated daily, this site contains a wealth of information about the US Navy. There is an FAQ about the Navy, the biography, speeches, and testimony of the Secretary of the Navy, highlights of the FY98/99 Navy Budget, status of the US Navy, the 1997 Posture Statement, the Navy Fact File which contains complete descriptions of the roles and characteristics of Navy aircraft, ships (for example, aircraft carriers), and weaponry, as well as news and a listing of naval related links. Those fortunate to have audio capability will be greeted by the sound of bells traditionally rung aboard ships to announce the arrival of important guests.

  - o Navy News Service
    http://www.chinfo.navy.mil/navpalib/news/navnews/.www/navnews.html

  - o The Navy Office of Information
    http://www.chinfo.navy.mil/navpalib/chinfo/chinfo.html
    The Navy Office of Information is the representative for Navy-wide public affairs matters and is the creator of the United States Navy Home Page.

- MarineLINK: The United States Marine Corps
  http://www.usmc.mil/
  Notable links: General Officer biographies; Command Directory; and Marine Corps Orders and Directives.

  - o Marine Corps News Summary
    http://www.usmc.mil/mcnews.nsf/New+MCNEWS

  - o Division of Public Affairs
    http://www.hqmc.usmc.mil/pashops.nsf/PA+Shops

  - o Marine Corps Public Affairs Points of Contact Around the World
    http://www.usmc.mil/opages/paoshops.htm

- GuardLINK
  http://www.defenselink.mil/guardlink/
  Information on the National Guard, "hot spots" for the Guard around the United States, and the Annual Review reports for 1994 and 1995.

- ReserveLINK
  http://raweb.osd.mil/ReserveLink.htm
  Handy compilation of links to all the Service's Reserve programs: the Army, Air Force, Naval, Marine Corps Reserve and the Army National Guard, Air National Guard, and the Coast Guard Reserve.

- American Forces Press Service
  http://www.dtic.mil/afps/index.html
  AFPS provides news stories, feature articles, line art and photographs for editors of DoD publications, military service Public Affairs Officers, and news directors of DoD's broadcast media. Civilian news media are encouraged to download and publish information from this site. AFPS is available in electronic format only.

Other Public Affairs Efforts and Military Exercises

- U.S. Army Training and Doctrine Command, Office of the Chief, Public Affairs
  http://www-tradoc.army.mil/pao/index.html

- MobilityLINK, Air Mobility Command Public Affairs, Scott Air Force Base
  http://www.safb.af.mil/hqamc/pa/

- Headquarters, Air Force Personnel Center Public Affairs Office
  http://www.afpc.af.mil/publicaf/

151

- The Advanced Warfighting Experiment
  http://www.monroe.army.mil/pao/awe1.htm
  Information and links relating to the AWE held at Ft. Irwin, California, in April 1997.

- Tandem Thrust '97
  http://www.c7f.yokipc.navy.mil/dwnundr.html
  Tandem Thrust '97 was a U.S. Pacific Command-sponsored military exercise involving Australian and U.S. forces in Queensland, Australia in March 1997. 22,500 U.S. and 5,700 Australian military personnel participated in this exercise.

- Exercise Agile Lion
  No longer available at: http://www.eucom.mil/ecpa/exercises/agilelion/
  Agile Lion was an exercise conducted 11-25 July 1997 by the United States European Command "designed to demonstrate and to enhance the ability to provide humanitarian assistance and disaster relief operations following a simulated civilian nuclear power plant accident. The exercise was a command post exercise which will test the ability to provide humanitarian assistance without major troop deployments to Europe." Participants included the government of Lithuania, the US European Command, and various US Government and international agencies.

- RIMPAC '96 (Rim of the Pacific)
  Rim Of The Pacific '96 was a U.S. Pacific Fleet exercise involving 30,000 Navy and Marine Corps forces from six Pacific Rim nations: Australia, Canada, Chile, Japan, Republic of Korea and the U.S. It was conducted 22 May - 21 June. Web site no longer available.

- U.S. Navy Pacific Fleet
  http://www.cpf.navy.mil/

    o Pacific Fleet News and Information
      http://www.cpf.navy.mil/pages/cpfnews/cpfnews.htm

- U.S. Navy Seventh Fleet
  http://www.c7f.navy.mil/
  The Seventh Fleet Public Affairs Office has made a tremendous amount of information available about Seventh Fleet history, port call schedules, photos, composition (ships, aircraft, submarines), news, and much more available at this site.

Educational Institutions, Think Tanks and Research Labs

- Air Force Academy
  http://www.usafa.af.mil

- Naval Academy
  http://www.nadn.navy.mil/

- West Point
  http://www.usma.edu/

- Merchant Marine Academy
  http://www.usmma.edu/

- Coast Guard Academy
  http://www.dot.gov/dotinfo/uscg/hq/uscga/uscg.html
  The Coast Guard actually falls under the Department of Transportation but as many of its activities relate to the military, it is included here.

- The Naval Postgraduate School
  http://www.nps.navy.mil/

- Air University
  http://www.au.af.mil/

    o Air University Research Database
      http://www.au.af.mil/au/database/research.html
      This database contains information on all research being conducted at Air University and provides a link to the faculty member responsible for the research. Search or browse for information on research conducted 1995 to the present.

    o Air University Faculty Expertise Database Search Engine
      http://www.au.af.mil/au/database/expertise.html

152

This expertise database compiles a list of all faculty and staff assigned to Air University, providing information on each individual's area(s) of expertise and research interests. Address, phone number, and email contact information is provided.

- Air University Library
  http://www.airuniv.edu/au/aul/aulv2.htm

  - Air University Index to Military Periodicals
    http://132.60.136.133:8002/
    Search the AUL Index for military periodical literature for 1990-1996. Searches may be conducted by using keyword, title, author, or subject. There is a "simple" and an "advanced" interface. Click on the link for Geoweb and then click on AUL Index.

  - Aviation Images
    http://www.au.af.mil/au/aul/image/image.htm

  - Air University Library Bibliographies
    http://www.au.af.mil/au/aul/bibs/bib97.htm
    An extensive listing of bibliographies compiled to support the educational needs at Air University. Many, but not all, are linked to the actual bibliography. The bibliographies contain links to Internet resources and citations to books, documents, and journal articles.

- National Defense University
  http://www.ndu.edu/
  NDU is home to the Armed Forces Staff College, Industrial College of the Armed Forces, Institute for National Strategic Studies, Information Resources Management College, National War College, and the NDU Library. NDU publishes research and other information primarily in the area of national security through the NDU Press and the Joint Force Quarterly. Some of the publications are accessible on the NDU web site in full text and may be searched for.

- Army Logistics Management College
  http://www.almc.army.mil/
  This site contains the full text of articles from *Army Logistican* dating from January 1996, a catalog of courses, and information on the Defense Logistics Studies Information Exchange (DLSIE) database which is not available on the Internet plus links to a small number of sites.

- Army War College, Carlisle Barracks, PA
  http://carlisle-www.army.mil/
  Contains links to resident activities: the Center for Strategic Leadership, the Strategic Studies Institute, the Military History Institute, the Army Physical Fitness Research Institute, and the journal *Parameters*. A selection of the studies produced in the various research institutes is available here.

- Defense Systems Management College
  http://www.dsmc.dsm.mil
  The Defense Systems Management College (DSMC) was established in 1971 to provide systems acquisition education and training.

  - Acker Library
    http://www.dsmc.dsm.mil/library/library.htm
    Of special note is the online catalog for the Library's collection of acquisition and management related publications as well as the book lists which are bibliographies on subjects of interest to the DSMC and acquisition community.

- U.S. Military History Institute
  http://carlisle-www.army.mil/usamhi/
  Part of the U.S. Army War College, the Military History Institute is the U.S. Army's central repository for historical materials. It's mission is to collect, preserve, and make available to researchers source materials on Military History, especially American military history. Researchers may browse or search American Civil War Biographical Bibliographies, American Civil War Unit Bibliographies, Archives Database (electronic catalog of MHI's manuscript holdings), Normandy Photos Database, Photo Collection Database, Reference Bibliographies such as on the Airborne since WWII, and U.S. Army Unit Bibliographies.

- Foreign Military Studies Office, Ft. Leavenworth
  http://leav-www.army.mil/fmso/index1.htm
  Full text of many FMSO publications as well as a lengthy list of links on subjects of interest to the military such as information warfare and peacekeeping.

- Center for Army Lessons Learned, Ft. Leavenworth
  http://call.army.mil/call.html

153

Valuable information here includes the CALL Dictionary and Thesaurus, a browseable database containing definitions of military terminology, acronyms, geographic codes, names of statesmen, military leaders, UN peacekeeping operations, and other useful information and the CALL Database of information on Army tactics, techniques, procedures and other research materials. The CALL Database requires registration and is FOR OFFICIAL USE ONLY, limited to DoD employees and US military personnel. There are also links to CALL products such as the CALL Newsletter List and Internet resources of interest such as those in the area of operations such as military logistics.

- George C. Marshall European Center for Security Studies
  http://www.marshall.adsn.int/marshall.html
  The Center provides instruction in national security affairs to Europe's senior defense officials, conducts research on European security issues, holds conferences on those issues, and conducts specialized regional studies and language training courses. A small number of publications are available in full text on the web site.

- Naval Research Laboratory
  http://www.nrl.navy.mil/
  The Naval Research Laboratory (NRL) is the Navy's corporate research and development laboratory. The lab addresses basic research issues concerning the Navy's environment of sea, sky, and space. Investigations have ranged widely from monitoring the sun's behavior, analyzing marine atmospheric conditions, measuring parameters of the deep oceans, to exploring the outermost regions of space.
  - o Ruth H. Hooker Library
    http://infoweb.nrl.navy.mil/
    The Library has an extensive list of links in the Sciences and other areas.

- United States Marine Corps Research Center
  http://138.156.203.52/www/mcrc.htm

  - o Marine Corps University Libraries
    http://138.156.203.52/www/library/library.htm
    Of special note are bibliographies such as "International Threats, Terrorism, And Foreign Policy: List Of Internet Links" and The New Science Collection, a bibliography of Internet links in the subject areas: Artificial Intelligence, Artificial Life, Artificial Life Simulation and Research Groups, Autonomous Agents, Cellular Automata, Chaos, Fractals, Fuzzy Logic, Genetic Algorithms, Genetic Programming, Intelligent Software Agents, Neural Nets, Nonlinear Dynamics, Software, and Time-Series Analysis.

Business Opportunities

- DoD Costing References Homepage
  http://www.dtic.mil/dodim/costweb.html

- Central Contractor Registration
  http://ccr.edi.disa.mil/
  The purpose of the Central Contractor Registration (CCR) process is to facilitate registration by a commercial company as a Trading Partner with the Federal Government.

- DefenseLINK's Doing Business with the Department of Defense
  http://www.defenselink.mil/other_info/business.html

- Defense Logistics Agency (DLA)
  http://www.dla.mil/
  Note the small business opportunity links on DLA's home page.

  - o Doing Business with the Defense Logistics Agency
    http://www.dla.mil/doing.htm

- ACQWeb
  http://www.acq.osd.mil/
  A wealth of acquisition related information can be found at this site. In addition to the business opportunity information, the Acquisition Reform Home Page is of special note for its detailed lists of publications, events, and links to other acquisition reform sites.

  - o Small and Disadvantaged Business Utilization Office
    http://www.acq.osd.mil/sadbu/

  - o DoD SBIR and STTR Home Page
    http://www.acq.osd.mil/sadbu/sbir/homepg.htm

  - o Women-Owned Small Business Resources

154

http://www.acq.osd.mil/sadbu/wosb/resources.html

- DoD Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR)
  http://www.dtic.mil/dtic/sbir/
  The SBIR and STTR programs aim to foster participation by small firms in high-tech research and development.

- Air Force Acquisition Home Page
  http://www.safaq.hq.af.mil/

  o Air Force Contracting
    http://www.safaq.hq.af.mil/contracting/

  o Air Force Business Opportunities on the Web
    http://www.safaq.hq.af.mil/contracting/biz_opty.html
    Currently there are links to 10 AF Major Commands (MAJCOMS) that host "Business Opportunity" web sites as well as links to other Federal Government business opportunity sites including the Commerce Business Daily via the Government Printing Office.

- Air Force Office of Small and Disadvantaged Business Utilization
  http://www.safsb.hq.af.mil/

- Air Force Materiel Command Business Opportunities on the Web
  http://www.hq.af.mil/SAFAQ/contracting/business_oppty/afmc.html
  Links to information on business opportunities at Air Logistics Centers, Product Centers, Laboratories, and Test Centers.

- Army Research Laboratory
  http://info.arl.army.mil/

  o ARL Contracting Home Page
    http://w3.arl.mil/contracts/

  o ARL Technology Transfer Home Page
    http://www.arl.mil/tto/index.html

- Naval Sea Systems Command (NAVSEA) Headquarters Contracts Directorate
  http://www.contracts.hq.navsea.navy.mil/

- Naval Undersea Warfare Center (NUWC) Division Newport, Commercial Acquisition Department
  http://www.npt.nuwc.navy.mil/contracts/
  NUWC posts: Announcements (current synopses of upcoming solicitations, special notices, contract awards, Broad Agency Announcements and announcements as published in the Commerce Business Daily); Solicitations (listing of our current open solicitations, announcement as published in the CBD, statement of work, personnel qualification sheets, entire solicitation to review and download); Information Documents (draft solicitations and other advance planning information regarding upcoming solicitations); and Points of Contact (information on key personnel within the Division).

- Naval Air Warfare Center Training Systems Division
  http://www.ntsc.navy.mil/contract/procure.htm
  Requests for proposals are listed here.

- The Office of Naval Research: Business Opportunities
  http://www.onr.navy.mil/02/bus_op.htm
  Opportunities for small businesses. Contains information on and links to: Broad Agency Announcements at ONR and NRL; information on How to Submit a Proposal; the U.S. Navy SBIR Online Submission Interface; the Navy SBIR/STTR Bulletin Board; the DoD SBIR/STTR HomePage; the ONR SBIR Program; the Navy SBIR Technology Tranfer Program, the Navy Small Business Technology Transfer Pilot Program (STTR); and the Office of Small Business.

- Tri-Service Solicitation Network
  http://tsn.wes.army.mil/
  A selection of solicitations from the Army Corps of Engineers, Navy, and Air Force are listed here.

Practical Information -- Facts, Figures, Definitions, Jobs

- DoD Organizations and Functions Guidebook
  http://www.defenselink.mil/pubs/ofg.html

155

This Guide outlines the functions of the Office of the Secretary of Defense (OSD), Defense Agencies, and DoD Field Activities.

- DFAS Lane
  http://www.dfas.mil/
  This is the place to view current military and civilian pay charts. You can also find information about military pay, civilian pay, retired and annuitant pay, vendor pay, travel pay, transportation pay, garnishment and involuntary allotments, and government credit card programs. DFAS customers can also find help with a pay or debt problem.

- HQ Air Force Personnel Center
  http://www.afpc.af.mil/
  There is a great deal of useful information on Air Force personnel issues, for both civilian and military personnel. Of particular note are: demographics on military and civilian personnel; Officer and Enlisted assignments; the AF Civilian Career Management Program; military promotion information; information on awards including a graphic for each, and training materials for new supervisors.

- The Directorate of Time at the U.S. Naval Observatory
  http://tycho.usno.navy.mil/
  When you need to know the *official time* in the United States, visit this site.

- Sunrise/Sunset/Twilight and Moonrise/Moonset/Phase
  http://tycho.usno.navy.mil/srss.html
  Calculate the sunrise, sunset, twilight, moonrise, moonset and phase times for U.S. locations.

- CALL Dictionary
  http://call.army.mil/call/thesaur/index.htm
  This continually updated database by the Center for Army Lessons Learned contains definitions of military terminology, acronyms, geographic codes, names of statesmen, military leaders, UN peacekeeping operations, and other useful information. In addition to the definition, there are links to related terms and an ability to execute the search in Yahoo by selecting the link, "search this term on the WWW."

- DoD Dictionary of Military Terms
  http://www.dtic.mil/doctrine/jel/doddict/
  Browse or search for definition and usage of terms in the *DoD Dictionary of Military and Associated Terms*.

- ADTL Acronym Database
  http://www.atsc-army.org/atdl/search/acronym.htm
  Search for the meaning of military acronyms, for which the DoD is deservedly famous! This database is courtesy of the Army Digital Training Library.

- DoD Education Gateway
  http://www.acq.osd.mil/ddre/edugate/
  Look here for information on educational programs, scholarships and apprenticeships, parterships, and other programs sponsored by DoD.

- Worldwide Defense Switch Network (DSN) Telephone Directory
  http://dsnbbs.ncr.disa.mil/phone96/dsndir96.txt
  To view other formats for the 1996 Directory, go to: http://dsnbbs.ncr.disa.mil/

- Per Diem, Travel, and Transportation Allowance Committee
  http://www.dtic.mil/perdiem/

- Army Civilian Personnel Online
  http://cpol.army.mil
  Search for a job, view publications in the Army Civilian Personnel Management Library, find information on training and career development.

- Defense Logistics Agency Administrative Support Center's World Wide HR
  http://www.worldwidehr.hq.dla.mil/
  An example of human resources information for a particular organization. DLA employees and others can look at vacancy announcements and review personnel literature at this site.

- SITES - Standard Installation Topic Exchange Service
  http://www.dmdc.osd.mil/sites/
  Terrific resource about military installations in the United States and around the world. Brief overviews of each installation along with information on the local community, housng, support services, employment, and other topics are available at the click of a mouse.

- MAPsite - Military Assistance Program

156

http://dticaw.dtic.mil/mapsite/
Visit here for information on and links to resources to aid the military family in transition. Resources include information on installations, moving benefits, child care, finance, and tips for teens whose military parents are "on the move."

Collections of Publications, Regulations, Forms, Technical Reports, and ...

Air Force

- Air University Index to Military Periodicals
  http://132.60.136.133:8002/
  Follow the path to the Air University Index which currently can be searched or browsed for the years 1990 to 1996.

- The Air Force FAR Site
  http://farsite.hill.af.mil/
  Not just of interest to the Air Force! Visit this site for anything to do with Federal Acquisition Regulations (FAR), Defense Federal Acquisition Regulation Supplement (DFARS), Air Force Federal Acquisition Regulation Supplement (AFFARS), and other acquisition regulations. Use the search capability to find what you need. Be sure to read the Help information on the rules for searching. There are three search options: simple, power, summary.

- HQ, Air Force Personnel Management and Information System
  http://www.afpc.af.mil/dps/dpsi/permiss/permiss/permiss.htm
  PERMISS contains information on over 400 areas of civilian personnel management and is organized in two ways. By an alphabetical index or by seven subject matter areas such as General Management Information, Equal Employment Opportunity, etc. In addition, each topic selected contains regulatory references and links to related subject areas. To aid managers, there are sample letters for performance and disciplinary actions along with forms.

- U.S. Air Force Departmental Publishing Directorate SAF/AAD
  http://afpubs.hq.af.mil/
  This is the "official source" for Air Force administrative publications and forms.

- Air Force Material Command (AFMC) Publishing Distribution Library
  http://www.afmc.wpafb.af.mil/pdl/
  This is a marvellous resource for USAF and AFMC publications, selected technical orders, and forms. Follow the links for access to:

  - HQ, USAF Departmental Publications
    http://www.afmc.wpafb.af.mil/pdl/af/
    Come here for the full text (in MSWord or PDF) of Air Force Publications Bulletins (PBs), Air Force Indexes (AFINDs), Air Force Supplements to DOD Issuances (DODAFSUPs), Air Force Doctrine Documents (AFDDs), Air Force Mission Directives (AFMDs), Air Force FAR Supplement (AFFARS), and Air Force Publications by Functional Series (AFPDs, AFIs, AFMANs, etc.). Use the search interface when looking for a specific Air Force publication.

  - Major Air Command and Air Force Field Operating Agency (FOA) Publishing Libraries/Product
    http://www.afmc.wpafb.af.mil/pdl/majfoa.htm

- Technology Area Plans via the Air Force Materiel Command's Directorate of Science and Technology
  http://www.afmc.wpafb.af.mil/STBBS/info/taps/taps.htm
  Technology Area Plans in Portable Document Format are available here. TAP Annexes and Contractors Supplements are available for viewing on-line on a secure web site which requires registration.

Army

- Army Doctrine and Training Digital Library
  http://www.atsc-army.org/atdls.html
  The US Army Training and Doctrine Command has made available approved training and doctrine information. Some publications are not available for public access, authorized users (U.S. Government agencies and their contractors) must register to receive a password in order to view these materials. Some documents are in portable document format and require the free Adobe Acrobat viewer.

  - ATDL Document Type
    http://www.atsc-army.org/atdl/browse/doc_type.htm
    Selected Army Field Manuals (FMs) (422! as of 4 November 1997, of those 224 are publicly releaseable), Training Circulars (TCs), Soldier's Manuals, Mission Training Plans, and other training publications in full text.

157

- Joint and Other Publications
  http://www.atsc-army.org/atdl/browse/othrsvc.htm
  There are also links to publications of other Services such as the <u>Marine Corps</u> as well as <u>Joint publications.</u>

- Army Publishing Agency
  http://www-usappc.hoffman.army.mil/index.html
  Information on and full text of many Army regulations and a few other publications. Internet access to full-text is limited to DoD organizations. Once registered, DoD organizations may download a copy of the IBM Bookmaster Viewer which is required to view the full-text. Non DoD organizations must go to:

  - The National Technical Information Service's Army Manuals and Publications Search Site
    http://www.ntis.gov/databases/armypub.htm
    Those outside DoD who cannot use the Army Publishing Agency may order the same Army publications (such as Army Technical Manuals (TM's), Field Manuals (FM's), Army Regulations (AR's), and Technical Bulletins (TB)) from NTIS. A search mechanism is provided to identify materials for ordering.

- U.S. Army Corps of Engineers Publications
  http://www.usace.army.mil/inet/usace-docs/
  This collection of publications contains all official USACE engineering regulations, circulars, manuals, forms, specifications, and other documents originating from HQUSACE. At present, as only a portion of the publications are available in full text on the Internet, its value lies in its comprehensive listing of Corps of Engineers publications. Those publications that are available are in portable document format which requires the free Adobe Acrobat reader.

- Army Financial Management WWW
  http://134.11.192.15/

  - Resource Management Publications
    http://134.11.192.15/pubs/pubs.htm
    Look here for publications dealing with Army financial management such as the <u>1998 Army Budget.</u>

Marine Corps

- Marine Corps Doctrine Manuals
  http://138.156.107.3/docdiv/manuals.htm
  As the site says, "Life's tough, but it's tougher when you're stupid!"

DoD and Joint

- DoD Contracting Regulations
  http://www.dtic.mil/contracts/
  DoD contracting regulations and related information, including the Defense Federal Acquisition Regulation Supplement (DFARS), the Federal Acquisition Regulation (FAR), open FAR cases, open DFARS cases, and Defense Acquisition Circulars (DACs), are available electronically via this site.

- DoD Acquisitions Systems Management Publications
  http://www.acq.osd.mil/api/asm/product.html
  The full text of the following are available in Word or Portable Document Format: DoDD 5000.1 -- Acquisition Policy Directive; DoD 5000.2-R -- Acquisition Policy Regulation; and the six appendices to DoD 5000.2-R.

- Joint Doctrine
  http://www.dtic.mil/doctrine/
  Joint Doctrine refers to the fundamental principles that guide the employment of forces of two or more Services in coordinated action toward a common objective. Click on the link for the Joint Electronic Library for the full text of publications and research papers (some of which require the Adobe Acrobat reader) on joint doctrine.

- DoD's Directorate for Information Operations and Reports
  http://web1.whs.osd.mil/DIORHOME.HTM
  A veritable gold mine for statistical information on the Department of Defense, particularly in the areas of procurement and manpower. Some of the reports are available in full text online, others are present only in sample form. See the <u>catalog of publications</u> for a listing of all available reports. DTIC's user community may order these directly from DTIC. The general public must order from NTIS.

  - DIOR Manpower Management Information Division
    http://web1.whs.osd.mil/mmid/mmidhome.htm
    This web site contains information on military and civilian manpower statistics. For example: totals for active

158

duty personnel by rank and grade, numbers of females by rank and grade; casualty figures from October 1979; rosters of General Flag Officers; numbers of civilian personnel by organization and function; and a glossary of military terminology used by DIOR.

- DIOR Procurement and Economic Information Division
  http://web1.whs.osd.mil/peidhome/peidhome.htm
  PEID collects information and statistics on the procurement process. For example statistics on: the 100 companies receiving the largest dollar volume of prime contract awards for FY96 with the top ten cited for FY 95 and FY96; awards over $25,000; prime contract awards by state for FY96; as well as procurement guidance and the DoD Catalog of Federal Domestic Assistance.

- DIOR Information Control Division
  http://web1.whs.osd.mil/icdhome/icdhome.htm
  DoD Forms are available here in either Perform Pro/Form FLow electronic formats. Also available here is a handy chart of links to forms for other organizations, such as the Air Force, Army, Office of Management and Budget, the US Postal Service, standard and optional forms, Secretary of Defense, plus forms arranged by major subject groups (such as personnel, training, travel).

- Washington Headquarters Services Directives and Records Branch Home Page
  http://web7.whs.osd.mil/corres.htm
  Browse or search for directives and instructions.

- DoD Index of Specifications and Standards
  http://www.dtic.mil/stinet/htgi/dodiss/
  DoD Index of Specifications and Standards (DODISS) lists the unclassified Federal and Military specifications, standards, and related standardization documents, and those non-government standards adopted for DoD use. Users may construct a fairly sophisticated search (look at the tips) but only the citation for the standard is returned. Users must then order from:

  - DoD Single Stock Point for Specifications and Standards
    http://www.dodssp.daps.mil/
    According to the DODSSP, this site is the official point of access to the "most up-to-date collection of over 50,000 Military Specifications, Standards, and related documents available on the market today."

- STINET (Scientific and Technical Information Network)
  http://www.dtic.mil/stinet/
  Search here to identify publicly releaseable technical reports produced by Department of Defense agencies. STINET provides a WAIS search interface to the last 11 years of the publicly releaseable (unclassified unlimited) portion of DTIC's Technical Report bibliographic database (approximately 400,000 citations) along with an assortment of other resources. Links to other databases of technical reports such as NASA and DOE are found here and may be searched at the STINET site. Also available is a link to the Research and Development Descriptive Summaries, commonly called RDDS or PEDS. RDDS depository includes narrative information on Research, Development, Test and Evaluation (RDT&E) Programs and Program Elements (PE Numbers) within the Department of Defense. For .mil and .gov users, a database of gray literature is also available.

- Secure STINET
  https://www-sec.dtic.mil/S-STINET/
  Available only to DTIC's user community, this passworded site provides access to the last 11 years of unclassified portion of the Technical Reports bibliographic database (approximately 470,000 citations), including limited. Five years worth of Work Unit Information Summaries (WUIS) records will be available here as well. Users must have the domestic version of Netscape 1.2 or higher due to encryption requirements. For information on registration, please contact DTIC's Online Services Registration Branch, 703-767-8272 or DSN 427-8272.

- MATRIS
  http://dticam.dtic.mil/

  - Directory of Design Support Methods
    http://dticam.dtic.mil/hsi/

  - Directory of Researchers
    http://dticam.dtic.mil/resdir/

- GulfLINK
  http://www.gulflink.osd.mil/
  GulfLINK is the official home page for the Persian Gulf War Veterans Illnesses Task Force. This service provides background information and up-to-date research and analysis of the issues related to illnesses affecting Persian Gulf War veterans.

- Defense Information Systems Agency (DISA) Center for Standards

http://www.itsi.disa.mil/
Excellent site for information on DoD's information technology standards.

- o DISA's Information Technology Standards Document Library
  http://www.itsi.disa.mil/cfs/itsi_lib.html
  The Library's purpose is to provide a central on-line source for the policies, guidance, standards, and other references related to building affordable, maintainable, and interoperable standards-based information systems for the DOD.

- Defense Acquisition Deskbook
  http://www.deskbook.osd.mil/
  Acquisition information available for download from this site. DoD personnel may request a CD ROM version for free, contractors must pay $35 and order through the Government Printing Office. Defense Acquisition Deskbook's Reference Library contains numerous acquisition publications. The Reference Library divides the publications in two categories; Mandatory Documents and Discretionary Documents. The Mandatory Documents include directives and regulations (e.g. US Code, Federal Acquisition Regulation (FAR), DFARS, DoDD 5000.1 and DoD 5000.2-R). The Discretionary Documents include guides, pamphlets, and handbooks. Also notable at this site is a collection of acquisition related links.

- Defense Link Photos
  http://www.defenselink.mil/photos/
  Browse or search for publicly releaseable official U.S. military photos from around the world.

  - o Joint Combat Camera Center
    http://dodimagery.afis.osd.mil/home.html
    This site contains official U.S. Military images from around the world and is restricted to Department of Defense and Government personnel. The images at this Web site are available by searching or browsing. Some of the images present may not have yet been cleared for public release.

- Joint Data Base Elements for Modeling and Simulation
  http://208.145.129.4
  Links to data models, databases, tools and utilities, projects, and more for those interested in military M&S. Registration is required for access to some of the information.

DTIC Resources

For a complete listing of DTIC sponsored Web pages, go to:

- DTIC Internet Resources .
  http://www.dtic.mil/dtic/dtic-inet.html

- Joint Internet Resources
  http://www.dtic.mil/dtic/joint-inet.html

On the Horizon!

- The Air University Index to Military Periodicals
  Under development at DTIC, the Air University Index from 1990 to the present will be available for searching on DTIC's Web site. The citations will contain a link, if one exists, to the journal on the Internet. Keep an eye on the DTIC Home Page!

As of 4 November 1997, all URLs were valid. Due to the ever changing nature of the Internet, some of the addresses may change or even cease to exist in the near future!
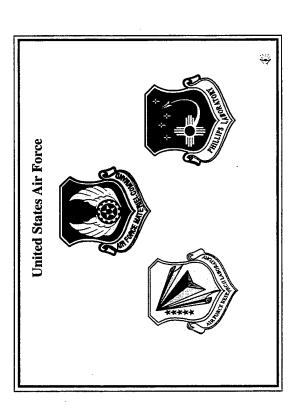
This presentation may be mounted on organization intranets or linked to if so desired. Those wishing to mount the presentation at their home site should contact me or DTIC's Network Services Branch for a "complete" html file as technical requirements on DTIC's web server require that all DTIC links be altered, and therefore become unusable when the file is saved in html and mounted elsewhere.

A special thanks to Carol Wong, US Patent Office Library; Pat Lane, US Marine Corps University Library; Sharon Lenius, US Army RCAS Library; Marie O'Mara, DTIC Network Services; Wendy Hill, DTIC Network Services; and Sherril Hisaw, Hughes Aircraft, for alerting me to some of the resources listed here.

Holly Wilson
formerly of:
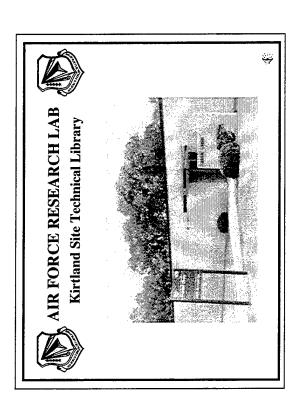
Defense Technical Information Center
Network Services Branch
8725 John J. Kingman Road, Suite 0944
Ft. Belvoir, VA 22060
after 7 November, please contact me using email: hjwilson@mindspring.com

161

ALIVE - Philips Lab - Virtual Library System, Marsha Dreier, Acting Chief, Air Force Research Laboratory Library, Kirtland AFB, NM
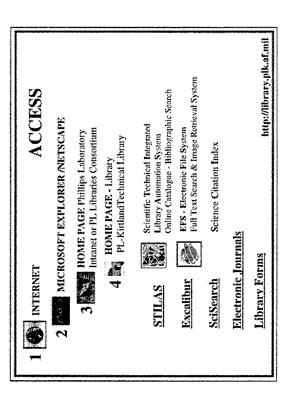
United States Air Force

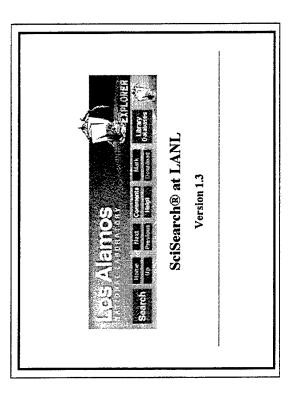According to Barron's dictionary of computer terms "a virtual machine is a computer that does not physically exist, but rather is simulated by another computer."

Now, Imagine a library in which you never speak to a librarian, but you get the information you need almost instantaneously! Visualize a library in which you can look for information in several locations around the country simultaneously! Imagine a library where you can view the full contents of a book, and print it out at your desktop or cut and paste portions into your research notes. Without leaving your work environment you can; peruse a magazine, request materials and do literature searches.

AIR FORCE RESEARCH LAB
Kirtland Site Technical Library

A "virtual library" information system for the AFRL Laboratory Phillips Site located at Kirtland Air Force Base in Albuquerque, NM, HAS been created.

Hi, I'm Marsha Dreier, Chief of the Technical Library at that location. Our system ties together many information utilities and resources and makes them available at the user's desktop.

ACCESS

MICROSOFT EXPLORER /NETSCAPE

1 INTERNET

2 MICROSOFT EXPLORER /NETSCAPE

3 HOME PAGE - Phillips Laboratory
Intranet or PL Libraries Consortium

4 HOME PAGE - Library
PL-Kirtland Technical Library

STILAS
Scientific Technical Integrated
Library Automation System
Online Catalogue - Bibliographic Search

Excalibur
EFS - Electronic File System
Full Text Search & Image Retrieval System

SciSearch
Science Citation Index

Electronic Journals

Library Forms
http://library.plk.af.mil

Current in-place applications of this new technology are available through the Library home page These applications include STILAS (Scientific Technical Information Library Automation System) library bibliographic search capability and Excalibur Technologies' EFS (Electronic Filing System) full text document image and retrieval application. Also available from the home page are SciSearc, access to electronic journals and library service request forms. Access can also be achieved through the Lab intranet and also through "public" terminals located at the library. By utilizing STILAS and EFS the user has flexible search options which can take them directly to the keywords in the documents they need.

SciSearch® at LANL

Version 1.3

We participate in SciSearch access through Los Alamos National Lab's Library and the NM Library Alliance. LANL has taken the Science Citation Index database and done numerous front end enhancements. This frequently used research tools has also netted us savings on Online charges from outside access providers.

!!Coming Soon!!

DTIC Full Text Documents
Defense Technical Information Center
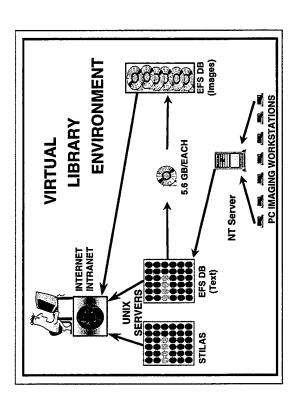
Phillips Site Technical Library Selected as AF beta site!

READ SLIDE
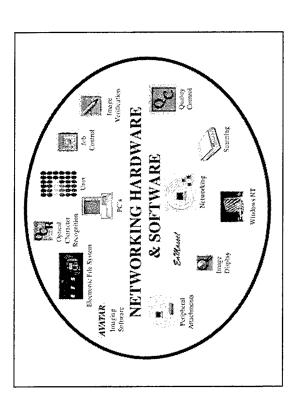
New On-line System offers user;

❑ PC access in **your office.**

❑ **24 hour** document **access.**

❑ **Keyword searchable** database with searches on labels or entire file contents.

❑ **Cut & paste** of text files to your own research notes in your word processing program *(editing required).*

❑ Print capabilities to your local **printer.**

READ SLIDE

167

VIRTUAL LIBRARY ENVIRONMENT
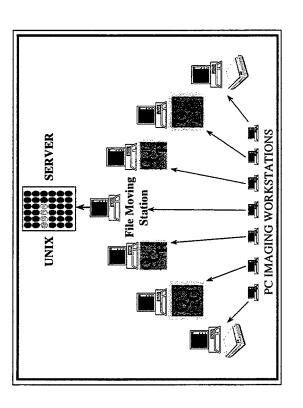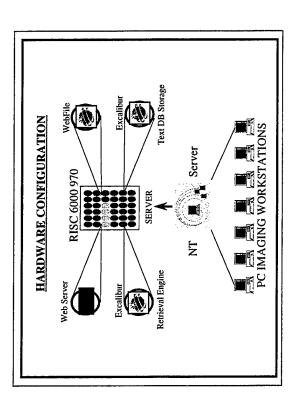
One of the key components to our Virtual Library System is our Optical Imaging System. The Scanning system is being hosted by an NT server, Unix servers support our STILAS bibliographic database and our Full Document Retreival Text database. The digital images are being stored on 5.6 Gig optical Platters.

NETWORKING HARDWARE
& SOFTWARE

Optical
Character
Recognition

Electronic File System

AWATAR
Imaging
Software

User

PC's

Job
Control

Image
Verification

Quality
Control

Scanning

Networking

Windows NT

Image
Display

Peripheral
Attachments

EzMamel

Networking hardware and software
integration has been accomplished by Grayhawk Systems Inc.
Numerous hardware and software components such as (name
some of them from above) shown here have had to be
choreographed to provide a smooth flowing series of events to
gives users access.
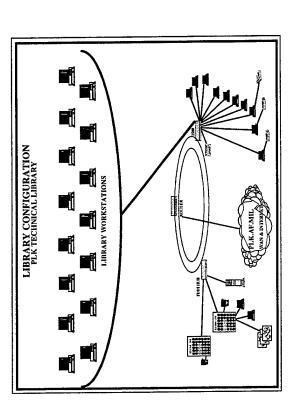
At the PC imaging workstation level, PC's
are connected to high speed document scanners, PC's are being
utilized for document image Quality Control, other stations are
being utilized for OCR (Optical Character Recognition–which
converts the scanned image to digital text for searching) and
one PC is currently being utilized for moving the processed
files onto the Unix server, and into the Excalibur Database.

HARDWARE CONFIGURATION
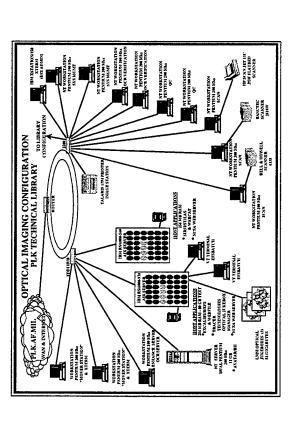
One the existing UNIX - IBM RISC 6000/970 is being utilized as the image server and is connected, via Ethernet, to a NT server which currently hosts numerous imaging workstations. The Unix server provides magnetic storage for the Excalibur Text Files and Index. It also hosts our Web Server Software, WebFile Internet access software and the existing EFS search engine.

HARDWARE CONFIGURATION

UNIX SERVER

5.6 GB OPTICAL DISC

JUKE BOX

PC IMAGING WORKSTATIONS

RAPID CHANGER

HOLDS 10 OPTICAL DISCS

56 GB = 1,000,000 IMAGE PAGES

After the text and image files are transferred to the UNIX server the images are then transferred to 12 inch optical discs, or platters. Each disc is capable of holding 5.6 GB of data. The discs are currently housed in a LMSI, rapid changer, "juke box". A 10 platterer Juke box is capable of holding 56 GB of data which is roughly equivalent to 1,000,000, image pages.

This slide represents our overall system configuration and includes the library workstations, the scanning setup and the unix server/platter configuration. The setups are networked together and connected the user/PLK intranet users via router.

This slide shows the detail of the scanning equipment we utilize and details of the server setup.

ADVANTAGES & SAVINGS

1) Access on demand on personal PC's to bibliographic records and links to <u>searchable</u> full text documents and images.

2) Savings on library construction costs.

3) Savings on personnel costs for document handling.

4) Services available to other agencies for Optical Image Processing.

5) Savings on wear and tear on original documents.

6) Savings on postage and travel costs for personnel to obtain documents.

READ SLIDE

14

175
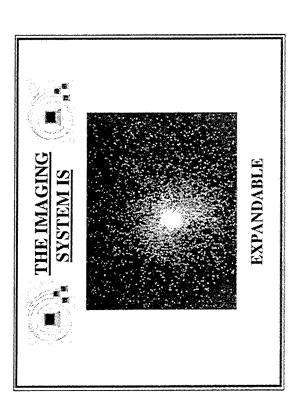
SYSTEM ADVANTAGES

SEARCH CAPABILITIES
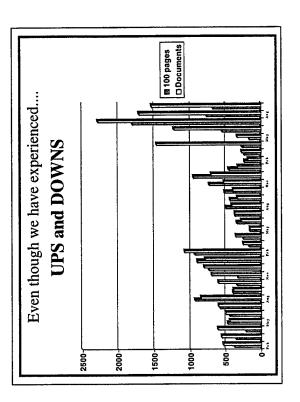
ADAPTIVE PATTERN
RECOGNITION

"FUZZY" SEARCHES

READ SLIDE

THE IMAGING SYSTEM IS

EXPANDABLE
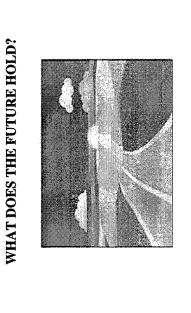
The completed system has been designed for expansion and the existing setup is configured to permit the addition of many scanning subsystems and digital storage units as well as allowing for upgrades.

Even though we have experienced....
UPS and DOWNS

Many people who are developing imaging systems attemp to estimate potential productivity by the scanners ability to process pages. Numerous other factors such as QC & OCR time affect the rate achievable. This slide shows our monthly production rate in # of documents processed vs. 100 pages. Note the variation which is due to the difference in processing time for small page number documents and large documents.

As of October 1, 1997 we have;

☺ <u>Completed hardware connections.</u>

☺ <u>Completed software interfacing.</u>

☺ <u>Scanned 1.7 million pages.</u>

☺ <u>Transferred 22,000 documents into EFS.</u>

☺ <u>Upgraded STILAS.</u>

☺ <u>Implemented SciSearch.</u>

☺ <u>Implemented Forms.</u>

READ SLIDE

WHAT DOES THE FUTURE HOLD?

What does the future hold??

20 MILLION PAGES

TERABYTE OF OPTICAL STORAGE

By the time our library's Technical Reports are digitized it will
include............READ SLIDE

Projects in Development

📖 **Expanding Scanning and Storage Capability.**

📖 **Implementing DTIC Full Text Reports.**

📖 **Providing CD ROM Project Files.**

📖 **Adding Electronic Journals.**

📖 **Implementing STILAS/EFS launch link.**

📖 **Implementing RetrievalWare.**

READ SLIDE

AFMC Benchmark Candidate

PROCESS: Document Imaging Project

QAF CATEGORY: 7.0 Customer Focus And Satisfaction
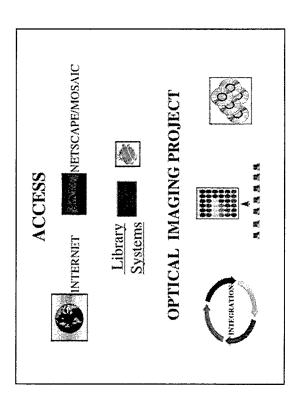
FUNCTIONAL: DO

DESCRIPTION: Anticipating future customer needs, the Air Force Research Lab, Phillips Lab Site, Kirtland AFB, NM, developed a process to convert paper documents-- containing graphics, text, scientific notations, equations, graphs, and schematics-- into text files that can be used to populate a virtual library. Accessing this library via any internet browser, researchers can search both text and image databases. The user can cut and paste the information into their own note files saving hours of retyping or editing. This project has preserved valuable documentation that was in jeopardy of being lost due to deterioration caused by time. Several reputable technical research organizations have already contacted Phillips Lab for information on how to set up their own document imaging programs.

POC: Martha L. Dreier, (dreierm@pc5.af.mil), AFRL, Phillips Research Site, Kirtland AFB, NM, DSN 246-4767

SUBMITTED: 22 Jul 97 via WWW

LAST REVIEWED: 25 Jul 97 by AFMC/IG by AFMC/IG

We are very proud of the fact that we have been named a benchmark candidate for the Entire AFMC. This means the Inspector General recognizes our imaging project as a potential best practice with Command wide applicability.
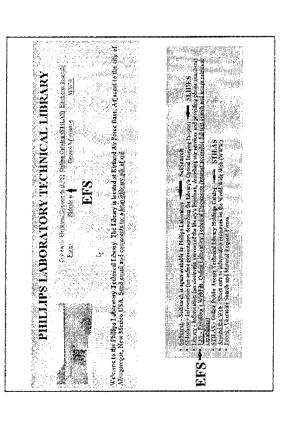
What I've discussed so far today is our Virtual library system, and electronic filing system. We have also briefly covered the computer system for the optical imaging project. Now lets take a look at the actual Full Text application we are currently providing our users.

http://www.plk.af.mil

Library Access Through
INTRANET or FEATURED LINKS
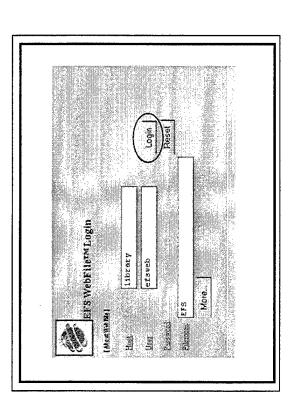
Our users access our full text documents by going to the Lab home page and clicking on either the Intranet button or the Featured Links button.
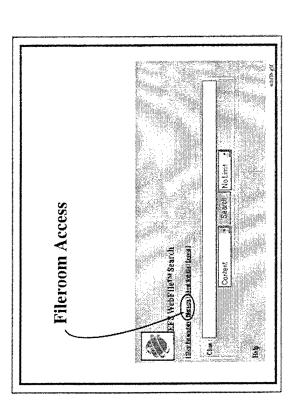
The next step is to click on the Phillips Lab Kirtland Technical Library entry which is circled. This will take you to the library home page.

PHILLIPS LABORATORY TECHNICAL LIBRARY
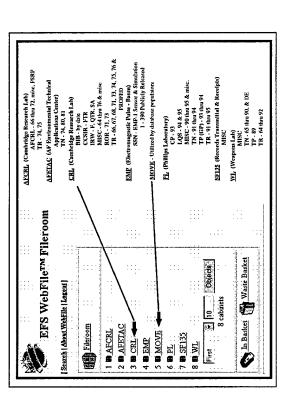
Once in our home page a number of link buttons are shown at the top of the page which correspond to our services offered. A description and hotlink to each of these services is also located at the bottom portion of the page. Clicking on the EFS button will put you into Excalibur's WebFile product.

Since only PL researchers are allowed access at the current time, we have hardwired the login page so no password is required.

Fileroom Access
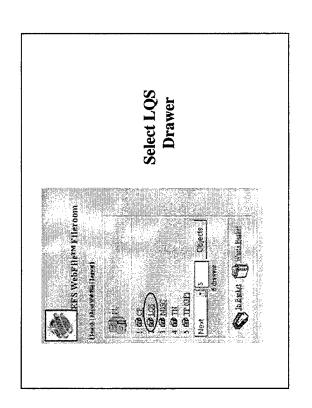
The program wakes up in the search mode and we will look at this more in a few minutes, but I would like for you to note the Fileroom link. Let's go there first.

EFS WebFile™ Fileroom

[Search | About WebFile | Logout]

Fileroom

1 ☐ AFCRL
2 ☐ AFETAC
3 ☐ CRL
4 ☐ EMP
5 ☐ MOVE
6 ☐ PL
7 ☐ SF135
8 ☐ WL

First ☐ 10 ☐ Objects

8 cabinets

In Basket   Waste Basket

AFCRL (Cambridge Research Lab)
AFCRL - 66 thru 72, misc, PSRP
TR - 74, 75

AFETAC (AF Environmental Technical
Applications Center)
TN - 74, 80, 81

CRL (Cambridge Research Lab)
BIB - by date
CUSIR - FTR
IRW - F, QTR, SA
MISC - 64 thru 76 & misc
ROR - 71, 73
TR - 66, 67, 68, 71, 73, 74, 75, 76 &
PROFED

EMP (Electromagnetic Pulse - Baum)
SSN - EMP-1 Sensor & Simulation
1 - 390 Publicly Released

MOVE - Utilized by database populators

PL (Phillips Laboratory)
CP - 93
LQS - 94 & 95
MISC - 90 thru 95 & misc.
TN - 91 thru 94
TP ((IP) - 93 thru 94
TR - 91 thru 95

SF135 (Records Transmittal & Receipts)
MISC

WL (Weapons Lab)
MISC
TN - 65 thru 90, & DE
TP - 89
TR - 64 thru 92

The fileroom is easiest to use if you have already identified the document you need. Clicking on the fileroom button will bring up this screen. Our documents are organized like our call #'s for our documents in STILAS which makes locating documents easier for our users. Our Unlimited fileroom contains documents from -- READ SLIDE.

EFS WebFile™ Fileroom

[Search | About WebFile | Logout]

Fileroom

1 AFCRL
2 AFETAC
3 CRL
4 EMP
5 MOVE
6 PL
7 SF135
8 VL

First ▾ 10 Objects

8 cabinets

In Basket   Waste Basket

FIND: Phillips Lab
Lab Quality Survey - LQS
PL-LI-94-11

PL (Phillips Laboratory)
CP - 93
LQS - 94 & 95
MISC - 90 thru 95 & misc.
TN - 91 thru 94
TP (GP) - 93 thru 94
TR - 91 thru 95

Let's suppose you have identified a need from STILAS or some other source for a Lab Quality Survey document whose call # is PL-LI-94-11. We would first click on the PL folder.

Select LQS
Drawer
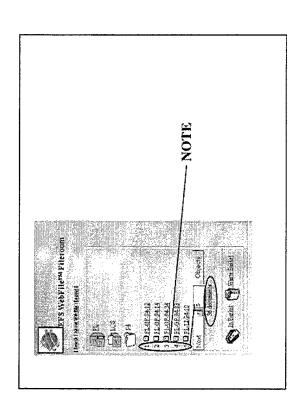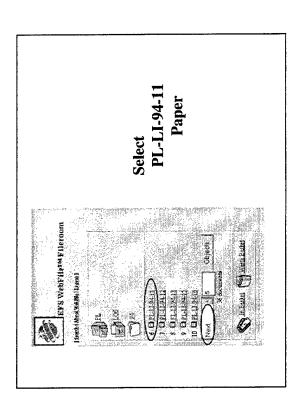
Within the PL folder we find an entry for LQS.

Select 1994 Drawer
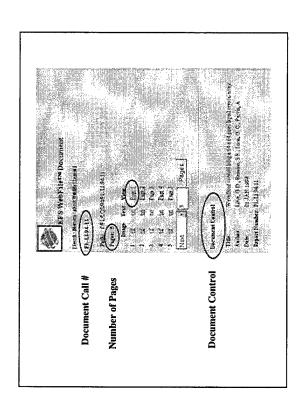
Our document is from 1994 se we will open documents from that year. Notice that all your drawer openings are shown above your selection choices.
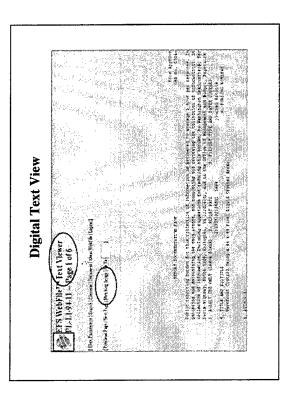
A list of all 1994 Lab Quality Surveys are retreived. Note the the screen identifies 36 documents are present yet only 5 can be seen. As with many web products you must click on "next" to view documents 6-10. The amount of listed documents can be increased by setting the number in the box to a higher figure.

Select
PL-LI-94-11
Paper
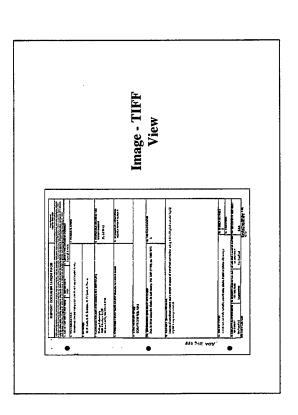
Click on the PL-LI-94-11 document.
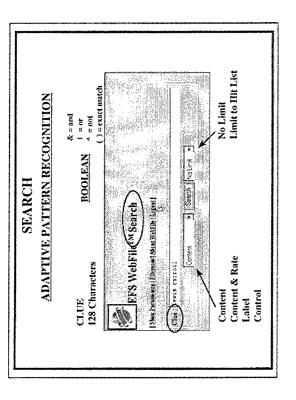
This next screen to appear provides key information about the document. It's call # is identified, the number of pages contained in the document, the document control field which, include the author, title, report date and report #, which in our case is the barcode. You will also see a page by page listing with hotlinks to the tiff image and OCR'd text file. Clicking on these will take you to a specific page. A click on page 1 brings up the will bring up the text page which is the default.

Digital Text View
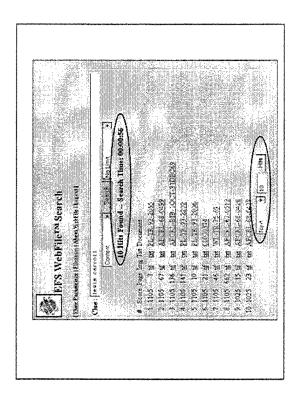
This screen shows the text file which was created by the OCR process. This file is called a dirty OCR because when the program converted an image of a character to a digital character it is not always perfect. Note that there are no lines or graphics visible on the text page. One of the strengths in this system is that editing of these files is not necessary for Excalibur's powerful "Fuzzy Logic" search engine to find the hits in the document. Even if you make a typing mistake it will find hits that are "close to" what you have asked for.

Image - TIFF
View
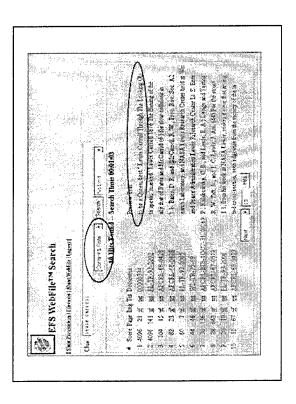
This tiff image however contains all information on the page and is a one-to-one representation of the page. This is important in the scientific and technical arenas. Printed pages reproduce formulas and graphs faithfully.
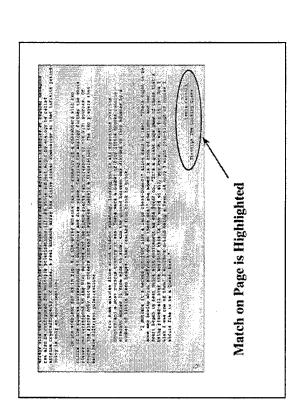
Let's imagine you were at a conference and someone told you to check out a scientists work. You cannot however, remember his name of any paper titles but they did mention he likes to quote Alice in Wonderland. Traditionally keyword indexed databases would not include an entry such as Lewis Carroll for a paper on Electromagnetic Pulse. Utilizing Adaptive Pattern Recognition searching the information can be found. You can condust your searches - READ SLIDE
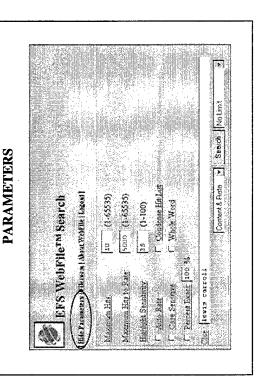
A content search alone will yield the following data - READ SLIDE - Note that retrieval only took 56 seconds even though every word on every page of the database was searched.

Many reserachers prefer doing a content and rate search since the exact location of the hit is highlighted in context. This allows for an easy perusal of the information and eleimination of nondesireable hits. Clicking on the TXT link will take you to the highlighted page.

Match on Page is Highlighted

This is an example of the results and identifies the location of
the hit exactly.

In its simplest form as in fig. 6.1 the array antenna has the symmetry of a chessboard with two colors of the squares corresponding to conductors and free space. Carrying the analogy further the white pieces can correspond to the $y^{(x)}$ sources and the black pieces can correspond to the $y^{(x)}$ sources. Of course, the pieces now occupy corners instead of squares (merely a translation). The two players then each have different polarizations.

"For some minutes Alice stood without speaking, looking out in all directions over the country—and a most curious country it was. There were a number of tiny little brooks running straight across it from side to side, and the ground between was divided up into squares by a number of little green hedges, that reached from brook to brook.

'I declare it's marked out just like a large chess-board!' Alice said at last. 'There ought to be some men moving about somewhere—and so there are!' she added in a tone of delight, and her heart began to beat quick with excitement as she went on. 'It's a great huge game of chess that's being played—all over the world—if this is the world at all, you know. Oh, what fun it is! How I wish I was one of them! I wouldn't mind being a Pawn, if only I might join—though of course I should like to be a Queen, best.'"

Lewis Carroll
Through The Looking Glass

Matching Image Page

This is an example of the matching image page if you had clicked on txt.

PARAMETERS

This slide is an example of the parameters page. These are are numerous options available to the user so they can customize their results. You can set the number of maximun hits you want and how many of the hits you want rated. The highlight sensitivity sets how many characters will be highlighted in the hits. The auto rate can be set so the default result has the hit highlighted in context and you can make your search case sensitive or set it to what % exact your want your matches. Additionally you can condense the hit list so you do not get every hit in every page but only a best match in the document or set it to search for whole words only.

44

UNLIMITED DOCUMENTS FILEROOM

AFCRL (Cambridge Research Lab)
AFCRL - 66 thru 72, misc, PSRP
TR - 74, 75

AFETAC (AF Environmental Technical Applications Center)
TN - 74, 80, 81

CRL (Cambridge Research Lab)
BIB - by date
CCSIR - FTR
IRW - F, QTR, SA
MISC - 64 thru 76 & misc
ROR - 71, 73
TR - 66, 67, 68, 71, 73, 74, 75, 76 & PROFED

EMP (Electromagnetic Pulse - Baum)
SSN - EMP-1 Sensor & Simulation
1 - 390 Publicly Released

PL (Phillips Laboratory)
CP - 93
LQS - 94 & 95
MISC - 90 thru 95 & misc.
TN - 91 thru 94
TP (GP) - 93 thru 94
TR - 91 thru 95

SF135 (Records Transmittal & Receipts)
MISC

WL (Weapons Lab)
MISC
TN - 65 thru 90, & DE
TP - 89
TR - 64 thru 92

22,000 DOCUMENTS IN TWO FILEROOMS
1) Unlimited
2) Limited not on Net

Please note that we have two filerooms. One is unlimited and this can be accessed through the web while our limited fileroom is restricted to useage within the library by cleared personnel.

FOR MORE INFORMATION

ON
OPTICAL IMAGING SERVICES

OR
DATABASE ACCESSING

CONTACT:

PHILLIPS LABORATORY TECHNICAL LIBRARY

1-505-846-4767 DSN 246-4767 FOR IMAGING SERVICES

1-505-846-4770 DSN 246-4770 FOR DATABASE ACCESSING

READ SLIDE

Trademarked names and graphics appear throughout this presentation. These names and graphics are being utilized for educational purposes only. Their usage is to the benefit of the trademark owner and with no infringement intention on the part of the presentation developers.

PRODUCTION

Kandy L. Thorn, Air Force Research Lab
(previously Phillips Laboratory, Kirtland)

This slide is necessary for CYA purposes and this concludes my presentation. Can I answer any questions?

What does the future hold?
Scorpion and automatic subject assignment

Keith Shafer

Office of Research

OCLC Online Computer Library Center, Inc.

The Challenge:
Indexing may be Sufficient

● Original free Internet search service premise:

    good computer indexing plus bad cataloging (or no
    cataloging) is as good as good cataloging

● When is a **1,000** fold cost increase worthwhile?

    $ .01 to index an item
    $10.00 to catalog an item

Increased Interest in Cataloging and Metadata

- Consistent categories would be nice
  - » Excite and Infoseek Channels
  - » Lycos Wed Guides
  - » What happened to AltaVista's Live Topics?
  - » Yahoo! categories -- end users and catalogers

- Softbank invested over $65 million in Yahoo!
  hoped that Yahoo! would grow its directory and
  catalog service into a de facto standard   (1996)
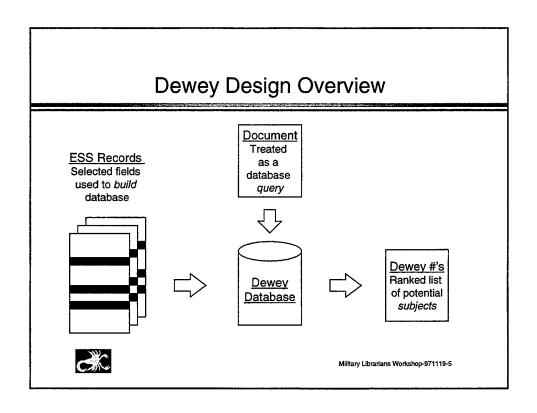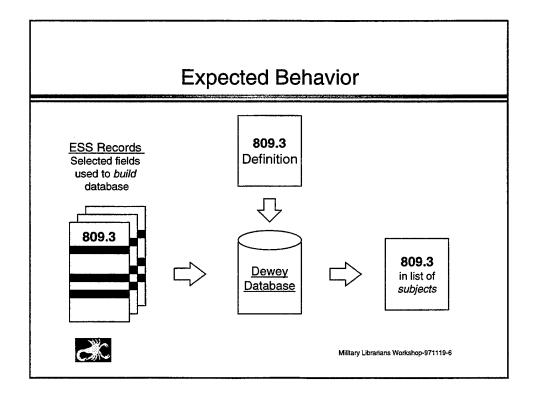
Scorpion Introduction
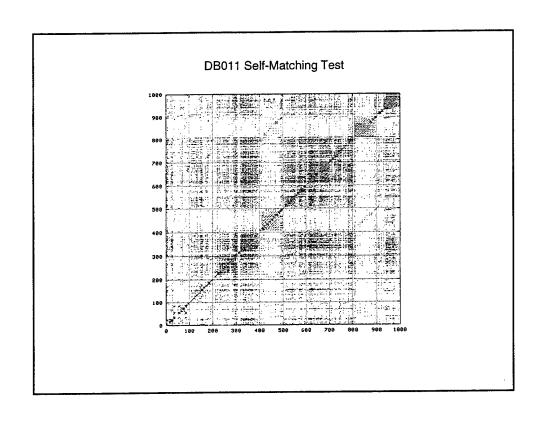
Assumption: subjects are key to advanced searching, browsing, and clustering
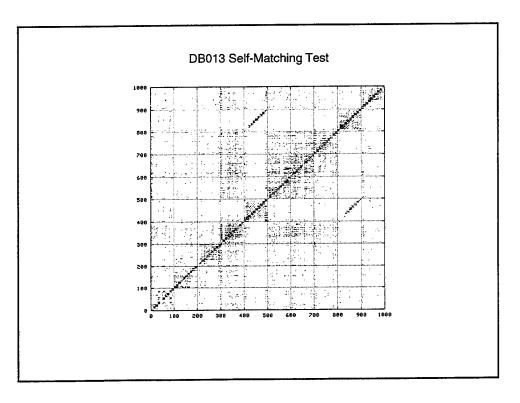
Goal: Mine Dewey as a knowledge base for automatic subject assignment of electronic resources

Dewey Design Overview

ESS Records
Selected fields
used to *build*
database

Document
Treated
as a
database
query

Dewey
Database

Dewey #'s
Ranked list
of potential
subjects

Military Librarians Workshop-971119-5

Expected Behavior

ESS Records
Selected fields
used to *build*
database

809.3
Definition

809.3

Dewey
Database

809.3
in list of
subjects

Military Librarians Workshop-971119-6

210

3

DB011 Self-Matching Test

DB013 Self-Matching Test

211

OCLC Text Homepage
(October 31, 1997)

025.431	Dewey Decimal Classification
025.62	Interlibrary loans
025.5	Services to users, Public services -- libraries
025.524	Information search and retrieval
025.432	Universal Decimal Classification
025.5874	Public libraries use studies
020.7155	On the job training
025.3132	Online catalogs

Why 020.7155?

Caption (Heading)

On the **job** training

Upward Hierarchy

0xx Generalities

02x **Library** and **information** sciences

020 **Library** and **information** sciences

020 7 Education **research** related **topics**

Scorpion Dependent on Input

- Suggested subjects only as good as input
  - » Another example: copyright notice on every Web page

- Important to preprocess collection-based input

  | InterCat | NetFirst | ECO |
  | FirstSearch | Funk & Wagnalls | Wilson Select |
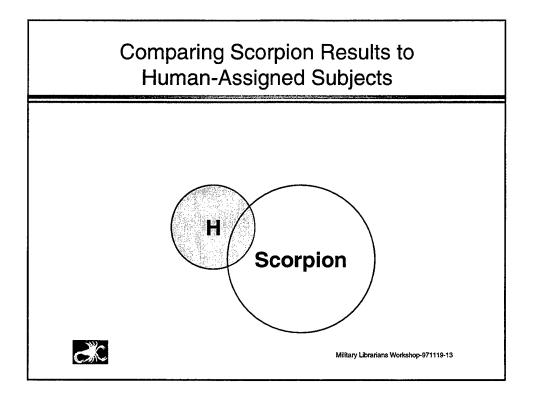
- AT&T preprocessing example
  - » Raw text, general results with: Insurance
  - » NLP surrogate, specific: Activities and Services, Telephony
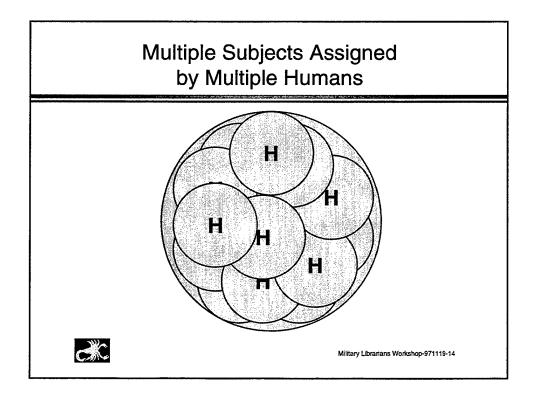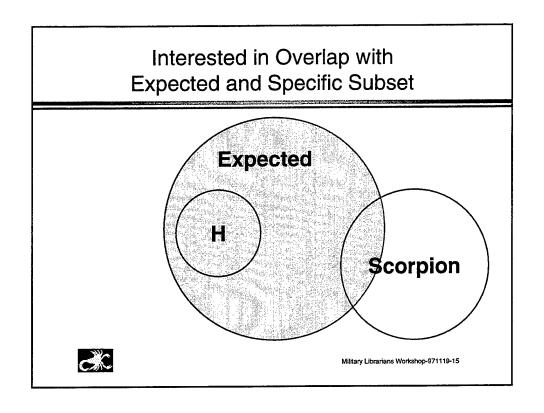
AT&T Preprocessing Example

Comparing Scorpion Results to Human-Assigned Subjects

Multiple Subjects Assigned by Multiple Humans

214

7

Interested in Overlap with
Expected and Specific Subset

Expected

H

Scorpion

Military Librarians Workshop-971119-15

As Research Progresses,
Overlap Increases

Expected

H

Scorpion

Military Librarians Workshop-971119-16

215

8

And Increases...

Expected

H

Scorpion

Now, Interested in Overlap with Expected and NetFirst

Expected

H

Scorpion
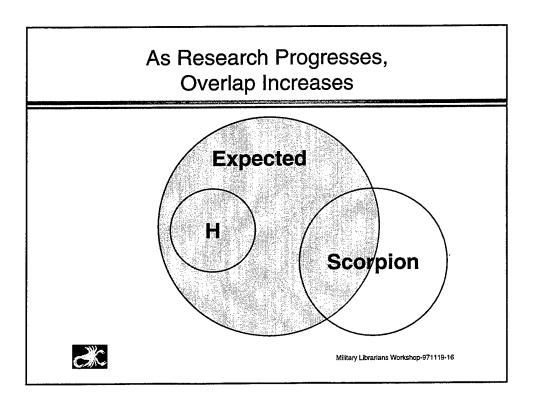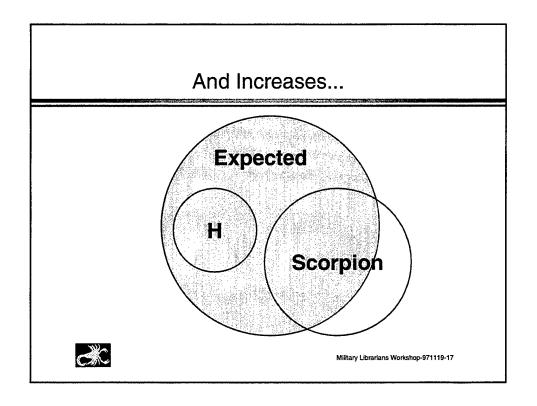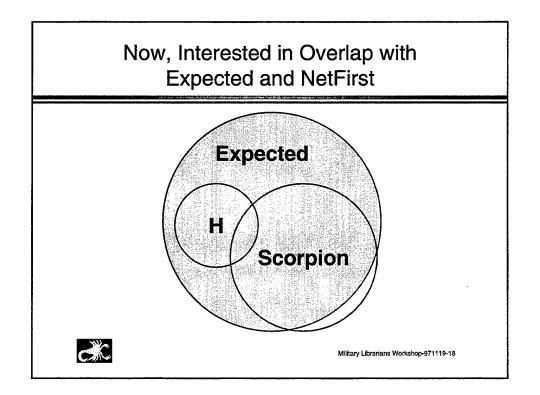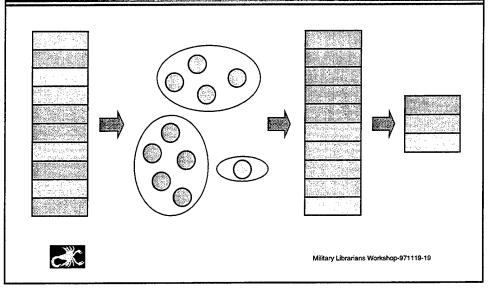
Reducing the Unexpected:
Ranked Result Sets

Implications
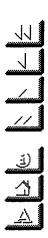
- Soon, every electronic resource will be run through Scorpion or other automatic classification tools.
  - » Yahoo! categories automatically assigned
  - » Almost every publication is in electronic form first

- Automatic metadata creation for enhanced searching, browsing, and result clustering
  - » FirstSearch
  - » Free Internet search services

Slide 1 of 25

Slide 2 of 25

219

http://www.sla.org/division/dmil/sanville/sld001.htm

December 1989 OLIS Overview and Vision
7 VISIONARY EXAMPLES

- Remote hospital clinic uses Medline(1994) and online full text medical journal(1998+) in diagnosis
- Chemical researcher has system regularly download newly published material(1998+) in her special topics
- Librarian fully coordinates purchases with colleagues at other schools(1998+)
- Geologist uses online maps and GIS data (1998/1999+)
- Student uses online tables of contents to select needed books for paper(1995)
- Professor has full array of relevant databases to research a labor law issue(LEXIS,CIS,PAIS)(1997/1998)
- Legislative aid requests fax delivery of selected articles in research on nursing homes(1995-1998+)

Slide 3 of 25

OhioLINK History

- 1990- RFP for Integrated central and local catalogs with patron online borrowing and real time circulation status
  - Based on single vendor, distributed local systems and union catalog central catalog

- 1991- Awarded RFP to Innovative Interfaces Inc.

- 1992- Central Catalog and Statewide reference databases
- 1994- Patron Online Borrowing
- 1995- Statewide PowerPages
- 1996- Academic Press EJO statewide access
- 1997- ISI Web of Science
- 1997- In-state EJO site with Elsevier in test

Slide 4 of 25

220

http://www.sla.org/division/dmil/sanville/sld003.htm

Slide 5 of 25

Slide 6 of 25

221
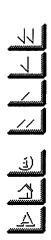
Slide 7 of 25

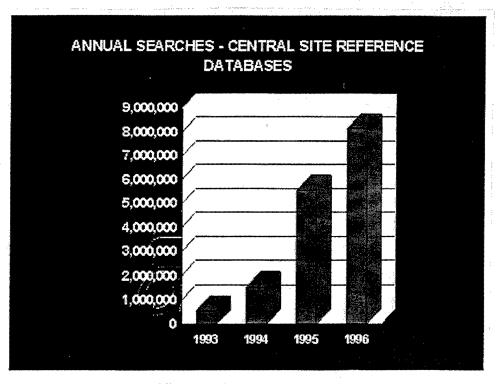Slide 8 of 25

222

Slide 9 of 25

Slide 10 of 25

223

Task 3- Create Statewide Access to Electronic Information

- December 1992 with 2 databases
  October 1997 with 65 databases

- Calendar 1996 9,114,797 searches
- **1997 YTD +9.4% over 1996**

- Calendar 1993 no full text journal articles
- Calendar 1996 700,000 full text journal articles

Slide 11 of 25

ANNUAL SEARCHES - CENTRAL SITE REFERENCE DATABASES

Slide 12 of 25

http://www.sla.org/division/dmil/sanville/sld011.htm

Task 4- Provide the information cost effectively

- Central (full) and library unit cost of POB only $ 8.00 versus new book cost of $45/ traditional Inter-library Loan $15-$30
- Central unit (full)cost of Reference Databases searching under $ 0.30/ search
- Central unit cost of full-text articles $ 0.60
- Reference Database licensing costs at 30% to 80% discounts under individual library prices
- Electronic Journal licenses at +5% to +10% cost increase delivers 5X to 10X expanded access versus traditional print subscription levels

Slide 13 of 25

Task 4- Provide the information cost effectively

ECONOMIC IMPACT ON LIBRARIES

- Increased cost to support POB but dramatically improved ability to coordinate acquisitions: Increase coverage/avoid unnecessary duplication
- Elimination of duplicative local, less cost-effective database license costs
- Expansion of new, needed database resources at the most attractive rate possible
- Focus of technology improvements on end user delivery not duplicative database storage/servers and administration

Slide 14 of 25

225

http://www.sla.org/division/dmil/sanville/sld013.htm

How critical is the need to invest in higher education library information programs?

- The cost of new electronic data - journal full text and multi media- is more technology intensive- storage, manipulation, integration
- Group action will result in larger economies of scale while enabling wide spread access and use
- Extra transition costs of maintaining old and new media are still building and continuing
- Rate of information publishing is increasing

Slide 15 of 25

STRATEGIC PRIORITIES

- Deliver all services to the desktop via integrated WWW based platforms
- Complete core statewide reference databases
- Build critical mass of electronic journals online
- Expand into non-text based resources...maps, numeric, images of all sorts...and beyond
- Integrate with Instruction

Slide 16 of 25

226

ELECTRONIC JOURNALS
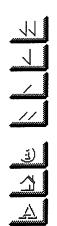
- **Control price increases on 65% of $$$$**
  - 1993-1996 -1% in subscriptions
  - 1993-1996 +16% in $$$
  - 1994-1997 -12% in Elsevier subscriptions
  - 1994-1997 +42% in Elsevier costs
- **Leverage expenditures**
  - Academic Press: 1,100 into 6,300 subscriptions
  - Elsevier 3,600 into 40,000 subscriptions
- **Improve Access/Expand Use**
- **Better Value**
- **Bridge to Future**

Slide 17 of 25

EJO- Underlying Assumptions

- **past use levels are poor predictors of future use via electronic access**
- **improved access leads to greatly expanded use**
- **must increase journal use not just ration more cost effectively**
  ... making journals a better value and worth the investment
- **can't wait for the revolution**
- **the publisher's view isn't rosy either**

Slide 18 of 25

227

http://www.sla.org/division/dmil/sanville/sld017.htm

EJO Objectives

- Stabilize the economic equation for both publishers and libraries
- Create a business model allowing more journal access not less
- Create an electronic environment that maximizes use and improves the value of the investment
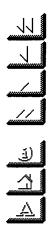
Slide 19 of 25

EJO- a new approach

- Subscribe as a group to intellectual content - not medium of delivery
- Get all you can get for each member of the whole group
- Commit to the publisher a multi year stable revenue stream at a modest, affordable increase

TYPICAL NET RESULT:

+5 to +10% annual cost increase

2x to 5x titles at universities

++++x titles at small colleges

Slide 20 of 25

228

http://www.sla.org/division/dmil/sanville/sld019.htm

Slide 21 of 25

Slide 22 of 25

229

Slide 23 of 25

Slide 24 of 25

http://www.sla.org/division/dmil/sanville/sld023.htm

Slide 25 of 25

INTELINK

Introduction to the Intelligence Community's Internet

Mark Kelly

MLW

19 NOV 1997

Intelink

Intelligence Community Internets running on separate networks

2

Intelink-SCI

-- TS/SCI

-- Runs on JWICS

-- Main system for Intelligence
  Producers

3

Intelink-S

Secret Collateral

Runs on SIPRNET

Main system for the warfighter

4

Intelink-P

Top Secret ORCON

Runs on dedicated network

Main system for Congress

5

Intelink-C

Top Secret SI / CA UK AS US
"Four Eyes"

Encrypted on JWICS - Connected
to Allies' Networks

6

Intelink- U(OSIS)

Unclassified

On Internet Behind Firewalls

7

Intelink Services

Search Engines

Directories

7x24 Technical Support

Information Management

Security Support

8

Producers

Maintain Web Sites

Determine what is posted

Provide access to databases

9

Intelink Management Office

Provides overall technical, standards
and security guidance and assistance

10

IMO's Goal

To foster a coherent information space without stifling creativity

11

ISMC

Intelink Service Management Center

Provides Technical Support and Technology Insertion

12

SPPD

Security Policy and Plans Directorate

Establishes Security Policy for Intelink

13
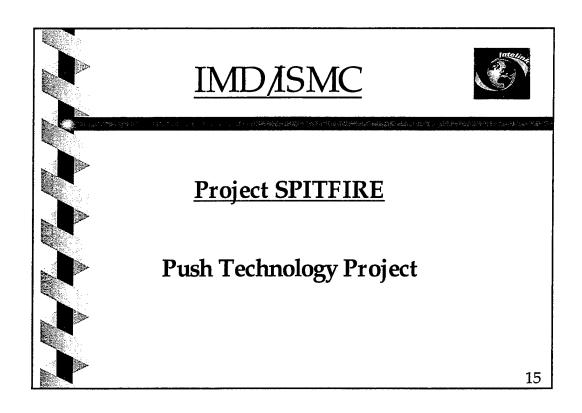
IMD
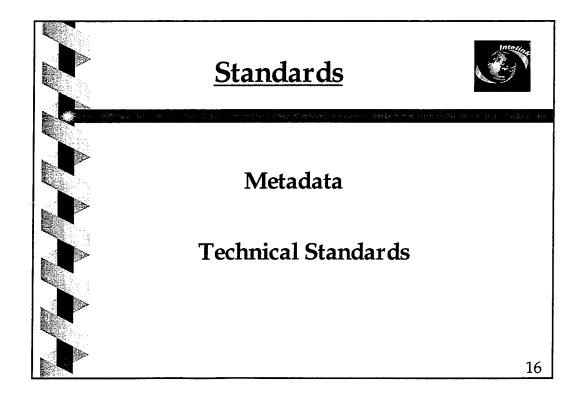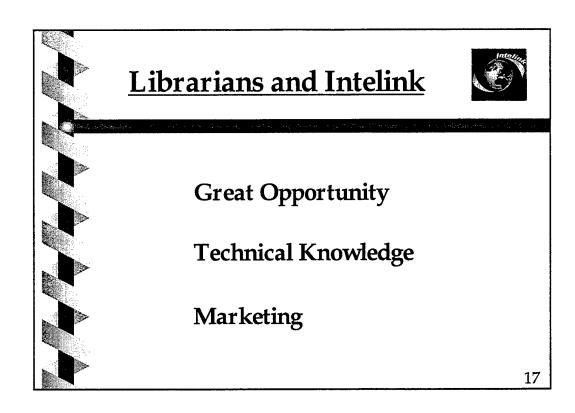
Information Management Directorate
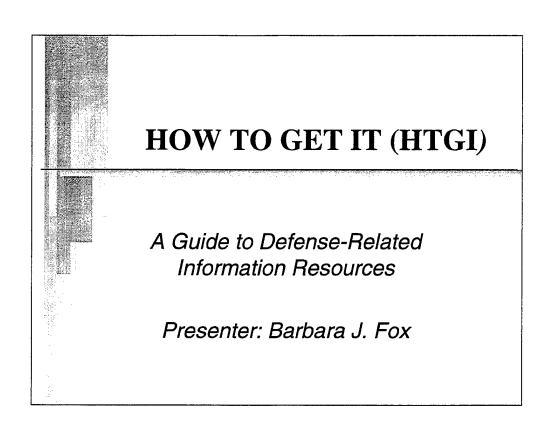
-- Production Support

-- Customer Support

-- Information Organization & Process

14

IMD/ISMC

Project SPITFIRE

Push Technology Project

15

Standards

Metadata

Technical Standards

16

Librarians and Intelink

Great Opportunity

Technical Knowledge

Marketing

17

HOW TO GET IT (HTGI)

A Guide to Defense-Related Information Resources

Presenter: Barbara J. Fox

First Edition, October 1973
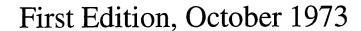
- Concept grew out of Committee on Information Hang-ups
- First met June 1969 at the Institute for Defense Analyses (IDA)
- Unofficial group of 90 librarians and information officers from 55 offices
- Regina Nellor, compiler and editor

•The concept for the HTGI grew out of the meetings of the Committee on Information Hang-ups and its Subcommittee on Document Procurement.

•This committee first met in June of 1969 at the invitation of Ms. Ruth S. Smith, Head Librarian of the Institute for Defense Analyses, IDA.

•It was an unofficial group of about ninety librarians and information officers representing over 55 government and industrial offices in the Washington area who met to discuss the problems of finding, acquiring, using, and controlling government publications.

•In April of 1973 the IDA agreed to sponsor the compilation and distribution of the information collected as an IDA Library Project Guide. And the publication became a reality in October 1973 with Regina Nellor as its compiler and editor.

First Edition, Continued

- HTGI arranged in single alphabetical list with many "see" and "see also" references
- Each entry: title, originator, ordering information, restrictions, cost, telephone, indexing, notes
- Accessioned by DDC, January 1974
- NTIS Best Seller list

•Its original intent was to limit the contents to technical documents and related material that those who have to identify or acquire government-published or government-sponsored documents of interest to the defense community.

•The HTGI was arranged in a single alphabetical list with many "see" and "see also" references. It consisted of 325 pages and 440 main entries.

•Each entry included : Title, Originator, Ordering information, Restrictions, Cost, Telephone numbers, Indexing information, ex. GPO Monthly Catalog and Notes

•Accessioned by DDC (Defense Documentation Center) and quickly went to the Best Seller List at NTIS.

Second Edition, October 1980

- 484 pages with 440 main entries
- Contents limited to technical documents and information resources prepared for, needed by, or of particular interest to the DoD and its contractors
- Under contract to DTIC

•The next edition was published in 1980 with 484 pages and 440 main entries and a slightly different subtitle: A Guide to Defense Related Information Resources.

•Contents limited to technical documents and information resources prepared for, needed by, or of particular interest to the DoD and its contractors.

•This time it was done under contract to DTIC.

Third Edition
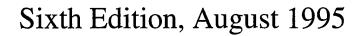
- 1982 edition expanded to 531 pages with 529 entries
- Availability of online databases, such as DOE and Dialog, included
- Sold 2,375 copies

• The 1982 edition was 531 pages with 529 main entries.

• Ms. Ruth S. Smith was again project leader and again it was updated under contract with DTIC.

• This time the availability of online databases like BRS and Dialog was included.: "Database access available from…"

Fourth and Fifth Editions

- 1988 edition expanded to 536 main entries and a 32-page bibliography
- 1992 edition had 559 main entries but no bibliography
- Approximately 3,000 total entries

•The next edition came out in 1988 , contained 626 pages with 536 main entries.

•The 1992 edition had 533 pages with 559 main entries and 948 copies from DTIC directly.

•There were approximately 3,000 total entries including the "see" and "see also" references.

•This is the edition upon which the 1998 Librarians' Edition will be based. Why?

Sixth Edition, August 1995

- Dropped the "see" and "see also" references
- Arranged entries under four headings
- Used the Government Information System (GILS) elements
- Reduced main entries to 168
- Searchable, updated electronic version available at http://www.dtic.mil/stinet

•The 1995 edition had 362 pages, 168 main entries, dropped the "see" and "see also" references and arranged entries under 4 headings: Products and Publications; Organizations; Programs and Services; and Databases and Automated Information Services.

•Used the Government Information Locator System (GILS) elements which were dictated by OMB Bulletin #95-01 as the required elements in records to identify public information resources.

•Its strongest feature was the availability of a searchable electronic edition within STINET on the Internet.

PLANNING THE 1998 EDITION

- Librarians' Edition
- HOW TO GET IT Advisory Group:
  Larry Clemens, U.S. Naval Academy
  Lorna Dodt, NDU
  Harriet Foster and Catheryn Lee, DTIC
  Larry Goldberg, STINFO
  Dolores Knight, Marine Corps
  University
  Lily Waters, Pentagon

Planning for the 1998 edition.

HOW TO GET IT Advisory Group formed to
    recommend format and content:

•Lily Waters, Pentagon Library

•Lorna Dodt, National Defense University Library

•Larry Clemens, U.S. Naval Academy, Nimitz Library

•Dolores Knight, Marine Corps University Libraries

•Thomas Rohmiller (Consultant) Wright-Patterson Air Force Base
Technical Library

•Harriet Foster, User Services, DTIC

•Catheryn Lee, User Services, DTIC

•Susan Lundgren, Information Specialist for Geo-Centers, Newton, MA

•Dr. Robert Myers (Consultant), Air University Library

•Patricia Ames, Naval Research Laboratory

The 1998 Librarians' Edition

- Format and updated contents of 1992 edition
- Paper product first, then a searchable Web version
- Include URL's for Internet sites
- Use listservs to ask for corrections and suggestions for new resources
- An accurate, useful, well-documented technical information resource

Decisions made:

1) Librarians' Edition using the format and basic content of the 1992 edition updated.

2) Paper edition first, followed by a searchable Web version.

3) Include URL's for Internet sites.

4) Do not list commercial organizations unless they offer something unique that is hard for the public to know where to obtain.

5) Use listservs to ask the public for corrections and suggestions for new resources.

6) Produce an authentic, accurate, useful, well-documented technical information resource.

Gray Literature:

Finding the Needle in the Haystack

Bonnie Klein

Defense Technical Information Center
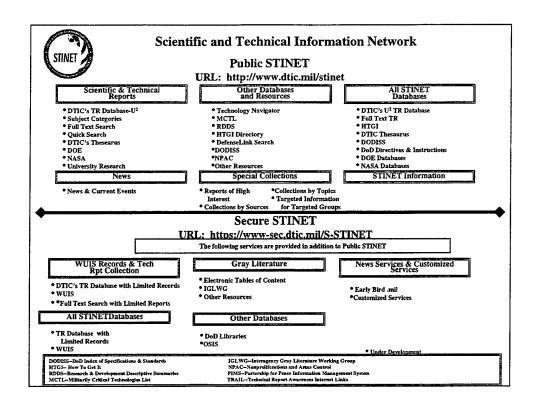
8725 John J. Kingman Road, Suite 0944

Ft. Belvoir, VA 22060-6218

Telephone: (703) 767-8037, DSN 427-8037

bklein@dtic. mil

Good Afternoon,

I am Bonnie Klein, Program Manager for Gray Literature and Copyrighted Information, at the Defense Technical Information Center.

Scientific and Technical Information Network

Public STINET

URL: http://www.dtic.mil/stinet

Scientific & Technical Reports	Other Databases and Resources	All STINET Databases
• DTIC's TR Database-U²	• Technology Navigator	• DTIC's U² TR Database
• Subject Categories	• MCTL	• Full Text TR
• Full Text Search	• RDDS	• HTGI
• Quick Search	• HTGI Directory	• DTIC Thesaurus
• DTIC's Thesaurus	• DefenseLink Search	• DODISS
• DOE	•DODISS	• DoD Directives & Instructions
• NASA	•NPAC	• DOE Databases
• University Research	•Other Resources	• NASA Databases

News	Special Collections	STINET Information
• News & Current Events	• Reports of High Interest •Collections by Topics • Targeted Information • Collections by Sources for Targeted Groups	

Secure STINET

URL: https://www-sec.dtic.mil/S-STINET

The following services are provided in addition to Public STINET

WUIS Records & Tech Rpt Collection	Gray Literature	News Services & Customized Services
• DTIC's TR Database with Limited Records	• Electronic Tables of Content	
• WUIS	• IGLWG	• Early Bird .mil
• *Full Text Search with Limited Reports	• Other Resources	•Customized Services

All STINETDatabases	Other Databases	
• TR Database with Limited Records	• DoD Libraries	
• WUIS	•OSIS	• Under Development

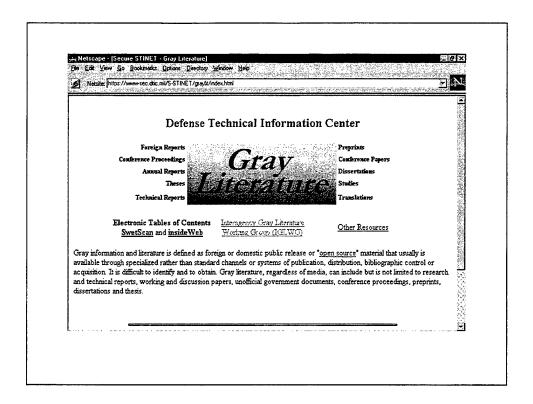|	
DODISS--DoD Index of Specifications & Standards	IGLWG--Interagency Gray Literature Working Group
HTGI-- How To Get It	NPAC--Nonproliferations and Arms Control
RDDS--Research & Development Descriptive Summaries	PIMS--Partnership for Peace Information Management System
MCTL--Militarily Critical Technologies List	TRAIL--Technical Report Awareness Internet Links

Today I want to tell you about DTIC's gray literature efforts. The resulting products and services are documented and available on DTIC's Scientific and Technical Information Network, STINET.

The upper half of the chart details the content of DTIC's Public STINET. Public STINET contains only Unclassified, Unlimited Distribution data and is freely available to the public. Information available on Public STINET includes Scientific & Technical Reports, Special Collections, and numerous other databases and resources.
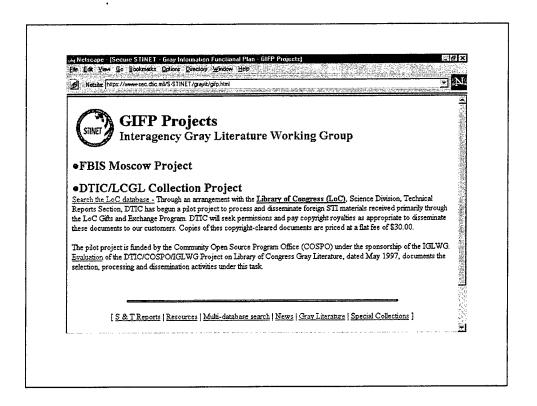
The lower half of the chart shows additional content available to subscribers to DTIC's Secure STINET which differs in that it also allows access to Unclassified, Limited Distribution data. Because of distribution limitations, users must register for Secure STINET which employs security mechanisms for strict access control and data encryption..

The organization and content of Public and Secure STINET change frequently as we update and enhance both . For example, in Secure STINET, we plan to move Electronic Table of Contents, currently under Gray Literature, to a position equivalent with Gray Literature.

The Gray Literature home page is found on Secure STINET. The definition of "gray literature" was developed by the Interagency Working Group for Gray Literature (IGLWG) and is found in the Gray Information Functional Plan (https://www-sec.dtic.mil/S-STINET/graylit/iglwgbm.html).

DTIC has been a member of the IGLWG from its beginning in 1994. IGLWG, chaired by the Foreign Broadcast Information Service (FBIS), is comprised of representatives from agencies throughout the U.S. Government that have an interest in or mission responsibility for gray literature.

Through the IGLWG, DTIC participated in a demonstration project as a Proof of Concept for the Gray Information Functional Plan.

In this IGLWG initiative which was funded by the Community Open Source Program Office (COSPO), DTIC processed foreign technical reports received by the Library of Congress, Science & Technology Division.

4

4

Interagency Gray Literature Working Group Project

- ■ DTIC/LC Partnering
  - – Foreign Source STI
  - – 70% English-language
    - » Government-Sponsored Reports
    - » Annual Reports
    - » Preprints
    - » Working Papers
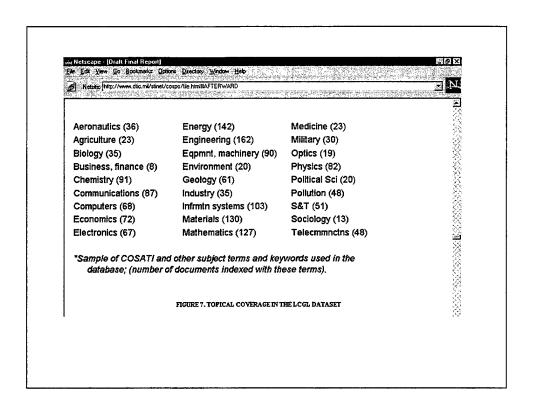
The Library of Congress Science & Technology Division, Technical Reports Branch has a collection of 120,000 uncataloged foreign technical reports. The materials are acquired through the Overseas Division Operations Field Offices in Brazil, Egypt, India, Indonesia, Kenya, Pakistan and Russian and through the Library Gifts and Exchange Program.

These documents are not under bibliographic control. LC did not select them for cataloging because they are mainly irregular series. They are shelved alphabetically by country and organization and are available for use in the library or through ILL if you know who to ask for what.

LC Regional Coverage

Argentina	Czechoslovakia	Japan	Senegal
Armenia	Denmark	South Korea	Slovenia
Australia	Ethiopia	Mexico	Spain
Austria	Finland	Netherlands	South Africa
Belgium	France	New Zealand	Sweden
Brazil	Germany	Norway	Switzerland
Bulgaria	Greece	Philippines	Thailand
Canada	Hong Kong	Poland	Ukraine
Chile	Hungary	Portugal	United Kingdom
China	India	Romania	Venezuela
Costa Rica	Israel	Russia	
Cyprus	Italy	Saudi Arabia	

Forty-one countries are represented in the collection. They are mainly European. Seven countries account for 85% of what DTIC processed. These are Finland, Germany, Japan, Russia, the Netherlands, Sweden, and Denmark.

.

Aeronautics (36)	Energy (142)	Medicine (23)
Agriculture (23)	Engineering (162)	Military (30)
Biology (35)	Eqpmnt, machinery (90)	Optics (19)
Business, finance (8)	Environment (20)	Physics (82)
Chemistry (91)	Geology (61)	Political Sci (20)
Communications (87)	Industry (35)	Pollution (48)
Computers (68)	Infrmtn systems (103)	S&T (51)
Economics (72)	Materials (130)	Sociology (13)
Electronics (67)	Mathematics (127)	Telecmmnctns (48)

*Sample of COSATI and other subject terms and keywords used in the
database; (number of documents indexed with these terms).

FIGURE 7. TOPICAL COVERAGE IN THE LCGL DATASET

The reports cover a variety of subjects with concentration on engineering,
information systems & computers, mathematics, materials science, and
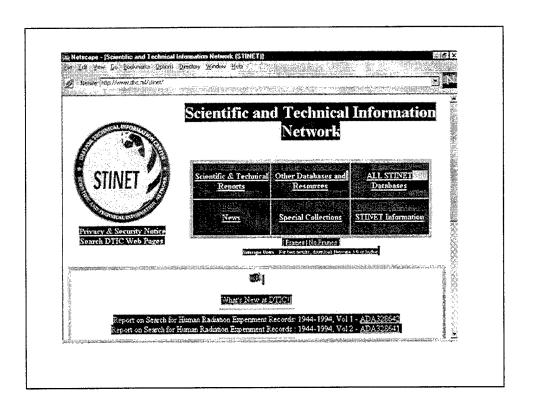chemistry

256

7

7

LCGL Collection

- Apr-Sep 96: 2,443 Documents Processed
- Oct 96: 1st online records appear in DROLS and STINET
- Oct 96-Oct 97: 212 Document Orders
- Apr 97: Final report available on IGLWG Homepage on STINET-S
- Apr 97: Special Collection on STINET

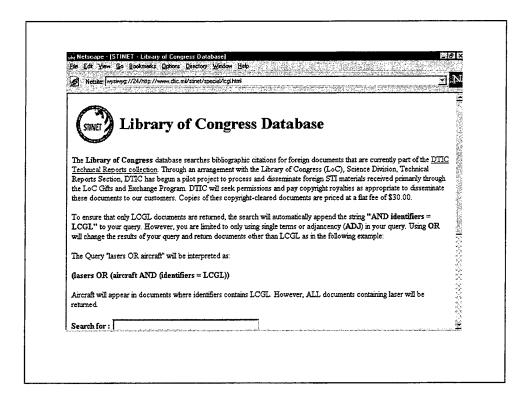For the project, DTIC processed 2400 documents in the last half of FY 97.

Processed documents were selected by an IGLWG Subcommittee which included information professionals from the Defense Intelligence Agency (DIA), the Armed Forces Medical Intelligence Center (AFMIC), the Central Intelligence Agency (CIA), the National Air Intelligence Center (NAIC), the Foreign Broadase Information Service (FBIS) and the Defense Technical Information Center (DTIC).

Citations to these documents are in DTIC's Technical Reports Database and are available through DROLS, Public STINET, Secure STINET, and the TR CD-ROM.

The project final report was completed in May 1998 and is available in full-text on the STINET-S Gray Literature homepage at http://www.dtic.mil/stinet/cospo/file.html

8

8

The documents are also made available as a Special Collection on both Public
STINET, seen here at www.dtic.mil/stinet/ and on Secure STINET.

9
9

Library of Congress Database

The **Library of Congress** database searches bibliographic citations for foreign documents that are currently part of the DTIC Technical Reports collection. Through an arrangement with the Library of Congress (LoC), Science Division, Technical Reports Section, DTIC has begun a pilot project to process and disseminate foreign STI materials received primarily through the LoC Gifts and Exchange Program. DTIC will seek permissions and pay copyright royalties as appropriate to disseminate these documents to our customers. Copies of thes copyright-cleared documents are priced at a flat fee of $30.00.

To ensure that only LCGL documents are returned, the search will automatically append the string **"AND identifiers = LCGL"** to your query. However, you are limited to only using single terms or adjacency (ADJ) in your query. Using OR will change the results of your query and return documents other than LCGL as in the following example:

The Query "lasers OR aircraft" will be interpreted as:

(lasers OR (aircraft AND (identifiers = LCGL))

Aircraft will appear in documents where identifiers contains LCGL. However, ALL documents containing laser will be returned.

Search for :

Here is the STINET Special Collections search screen for the Library of Congress Gray Literature or LCGL Collection . " LCGL Collection" is an identifier in the bibliographic record and a qualifying search term.

259

10

10

Copyrighted Materials
DTIC Approach

- Title 17 U.S. Code, Copyright Act of 1976
- Berne Convention (1989)

The main issue in processing the LCGL Collection was copyright management.

Under Title 17 USC, the Copyright Act of 1976, and the Berne Convention, the LCGL materials are copryright protected. DTIC must seek permissions for secondary distribution and pay royalty fees if required.

U.S. Copyright Law has its roots in the Constitution of the United States which states: The Congress shall have power...to promote the progress of science and useful arts..by securing for limited times to authors and inventors the exclusive rights to their respective writings and descoveries.

The Berne Convention, which the United States joined in 1989, is a international agreement with 24 country signators. The premise of the Berne Convention is that works from outside a country should be treated no differently than works created inside the country.

Copyright Owner
Bundle of Five Rights

- Reproduction
- Distribution
- Adaption
- Performance
- Display

Under the U.S. Copyright Law, copyright holders are entitled to a "bundle of five rights." Copyright protects original creative fixed works of authorship. It is automatic; a notice is not necessary.

Facts are not copyrightable nor are official works of the U.S. Government.

Fair Use
Four Factors

- **Purpose and character of the work**
  - Commercial
  - Nonprofit
- **Nature of the work**
- **Amount and substantiality**
- **Effect upon the potential market**

The Copyright Law provides for some limitations on the copyright owner's exclusive rights. The rights of the copyright owner are balanced against the public's right to use the works for certain purposes and under certain circumstances.

Such purposes include criticism, comment, news reporting, teaching, scholarship, research or personal use.

The conditions are outlined in Title 17 USC, Section 107, commonly known as the "Fair Use" doctrine.

Other conditions and exemptions specifically related to libraries and archives are outlined under Title 17 USC, Section 108.

13

13

First Sale, not Fair Use

■ DTIC is not a library

■ DTIC systematically reproduces facsimilies for external customers on a cost recovery basis

    » Photocopies

    » Microfiche

    » Electronic copies

    » Non-print

DTIC defines itself as a repository and secondary distributor. By our own definition, we are not a library" or eductional institution as defined under Section 108 of the Copyright Act. We serve profit making entities and have no knowledge of the user's purpose of the documents we supply.

We determined the First Sale rather than Fair Use doctrine applies to our distribution of copyrighted works. The First Sale doctrine allows the owner of a particular lawfully-made physical copy of a work to dispose of it in any manner with certain exceptions without infringing on the copyright owner's exclusive bundle of rights. Note here that the copyright owner parts company with a tangible copy only. If you own a first sale copy, you can permanently add it to a collection or loan it, but you do not have the right to make copies and retain the original without authoriztion or permission.

Although, DTIC does not distribute for direct or indirect commercial advantage and is a not-for-profit government appropriated-funded operation, we do systematically reproduce and distribute facsimilies or exact copies of the materials in our collection.

14

14

Copyrighted Materials Acquistions

- **Process into EDMS**
- **Announce in TR Database**
- **Supply document**
- **Obtain permissions and pay royalties**
  - Copyright Clearance Center (CCC)
  - License agreements

DTIC's appproach to copyright management was reviewed and approved by our legal counsel and the U.S. Copyright Office. DTIC will process copyrighted documents into Electronic Document Managment System and will research and pay royalites when documents are requested. Royalties will be paid through the Copyright Clearance Center, a nonprofit collective and the U.S. international rights organization. When payment cannot be made through the CCC, DTIC will seek permission and license agreements directly with publishers and authors.

Copyright Notice

■ **Field 13**: Exception Pricing
  – Codes = CD or CF
■ **Field 22**: Availability
  – Code 20 = Publisher Information
  – DTIC Users Only, Not Available from NTIS
■ **Field 25**: Identifiers
  – Term = Copyrighted Materials
■ Document Cover sheet
  – Copyright Notice & Warning

In accordance with USC Title 17, Section 108(d), the DROLS citation indicates the document is copyrighted. Also the document cover sheet carries a copyright notice and warning statement.

In DROLS, copyrighted documents are identified through through the fields and codes listed here.

16
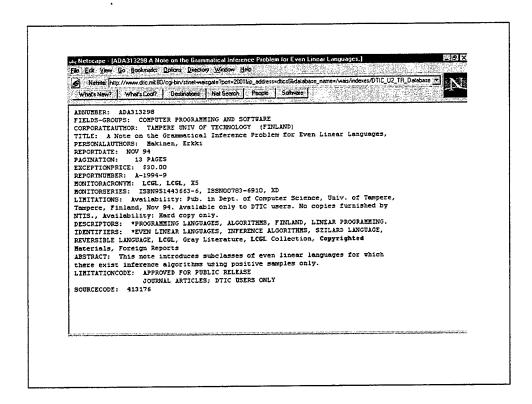
Copyrighted Information Exception Pricing

■Domestic (CD) Flat fee = $20.00

■Foreign   (CF)   Flat fee = $30.00

Documents Available to DTIC Users Only

Currently DTIC charges a flat fee for copyrighted documents. The fee is an estimate of the average cost to cover document reproduction and the royalty. DTIC will periodically reveiw these fees.

Commercial document delivery services such as UnCover, EbscoDoc, and KR Source One, charge a base fee for copying, a variable copyright fee which is set by the publisher, and additional fees for special handling or delivery. The average document cost is $20.00.

17

```
Netscape - [ADA313298 A Note on the Grammatical Inference Problem for Even Linear Languages.]
File  Edit  View  Go  Bookmarks  Options  Directory  Window  Help
Netsite: http://www.dtic.mil:80/cgi-bin/stinet-weisgate?port=2001&ip_address=dtic$5&database_name=/wais/indexes/DTIC_U2_TR_Database

What's New?    What's Cool?    Destinations    Net Search    People    Software

ADNUMBER:  ADA313298
FIELDS-GROUPS:  COMPUTER PROGRAMMING AND SOFTWARE
CORPORATEAUTHOR:  TAMPERE UNIV OF TECHNOLOGY  (FINLAND)
TITLE:  A Note on the Grammatical Inference Problem for Even Linear Languages,
PERSONALAUTHORS:  Makinen, Erkki
REPORTDATE:  NOV 94
PAGINATION:    13 PAGES
EXCEPTIONPRICE:  $30.00
REPORTNUMBER:  A-1994-9
MONITORACRONYM:  LCGL, LCGL, X5
MONITORSERIES:  ISBN951443663-6, ISSN00783-6910, XD
LIMITATIONS:  Availability: Pub. in Dept. of Computer Science, Univ. of Tampere,
Tampere, Finland, Nov 94. Available only to DTIC users. No copies furnished by
NTIS., Availability: Hard copy only.
DESCRIPTORS:  *PROGRAMMING LANGUAGES, ALGORITHMS, FINLAND, LINEAR PROGRAMMING.
IDENTIFIERS:  *EVEN LINEAR LANGUAGES, INFERENCE ALGORITHMS, SZILARD LANGUAGE,
REVERSIBLE LANGUAGE, LCGL, Gray Literature, LCGL Collection, Copyrighted
Materials, Foreign Reports
ABSTRACT:  This note introduces subclasses of even linear languages for which
there exist inference algorithms using positive samples only.
LIMITATIONCODE:  APPROVED FOR PUBLIC RELEASE
                 JOURNAL ARTICLES; DTIC USERS ONLY
SOURCECODE:  413176
```

This screen is an example of a STINET bibliographic record for a copyrighted
LCGL document.

<div style="border: 1px solid black; padding: 20px;">

Copyright Web Sites

- United States Copyright Office
  The Library of Congress
  - http://lcweb.loc.gov/copyright/copy1.htm
- Stanford University - Copyright and Fair Use
  - http://fairuse.stanford.edu/internet/
- Schoolhouse: The Library
  Copyright Reference Sources
  - http://www.teacherpathfinder.org/School/Library/copy.html
- University of California, Berkeley
  Copyright, Intellectual Property Rights, and Licensing Issues
  - http://sunsite.berkeley.edu/Copyright/index.html

</div>

Here are a few among many web sites I recommend for further information about copyright and fair use.

Scientific and Technical Information Network -Secure *Your Internet Gateway Access to Electronic Tables of Contents*

Canada Institute for Scientific and Technical Information

-SwetScan

14,000 jounals detailed to article titles including conference proceedings

The British Library
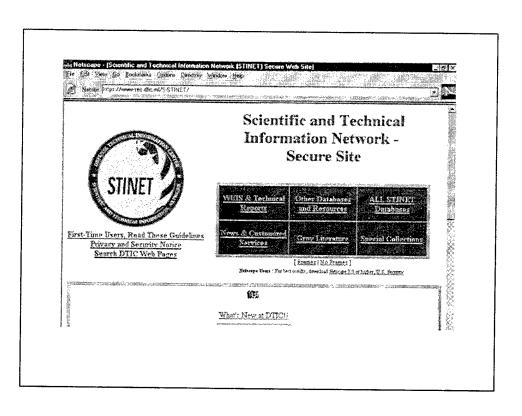
-Inside Web

21,000 journal titles detailed to the article level 16,000 conference proceedings.
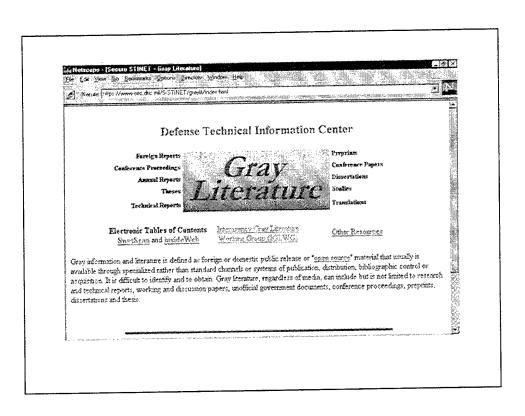
Use your DTIC account to order full-text documents

In an effort to expand our customers access to copyrighted information, DTIC has negotiated international data and service exchange agreements with the Canada Institute for Scientific and Technical Information (CISTI) and the British Library (BL).
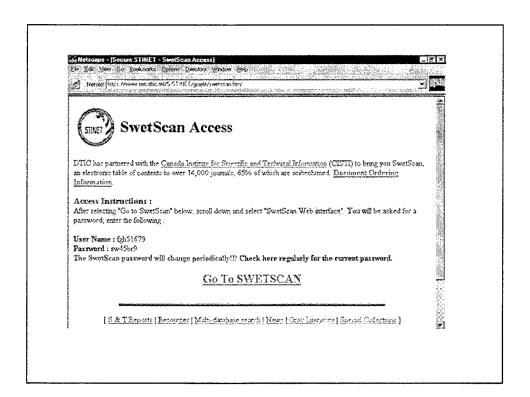
In a quid-pro-quo arrangement, DTIC will supply both national libraries with our public release electronic bibliographic records and the corresponding documents in microfiche and electronic images. In exchange, CISTI and BL will allow access their Electronic Tables of Contents (ETOC) databases to subscribers to DTIC's Secure STINET. Additionally, DTIC customers may use their DTIC accounts to order full-text documents.
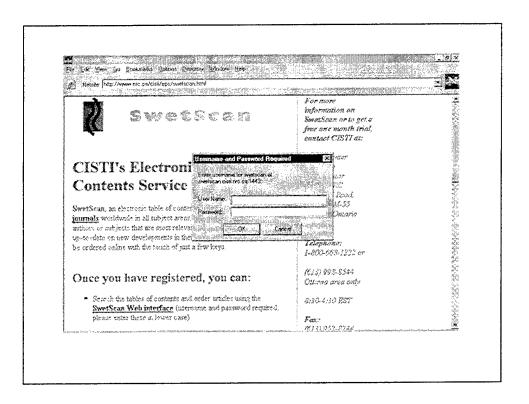
Currently, to get to these ETOCs, Secure STINET users would click on Gray Literature.

21

21

From the Gray Literatute homepage, the user would then select either CISTI's SwetScan database or BL's Inside Web database.
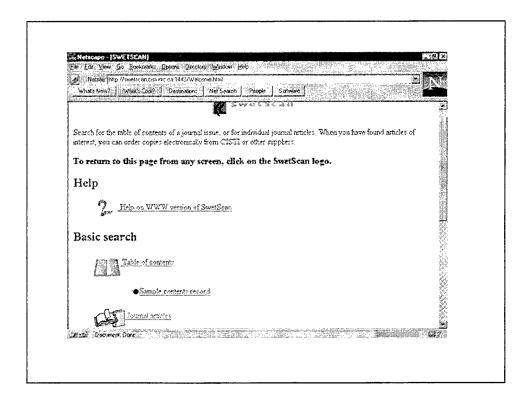
Choosing SwetScan takes the user to this screen. Note the generic log-on and password that DTIC users must type to access SwetScan.

23

This screen is the SwetScan screen that appears after the user clicks on "Go to SwetScan."

NOTE: As of January 1998, the user is automatically logged onto to SwetScan from Secure STINET and no longer has to type the log-on and password.

This is the upper-level SwetScan screen. The user has a choice of searching Table of Contents or Journal Articles.

The Table of Contents is searched by serial/journal titleand will bring up thetable of contents of a specific issue of a journal.

Journal articles will bring up a specific article or,if searched by keyword or subject, a list of articles from all journals indexed.

SwetScan coveragebegins in 1993. Every item listed in a journal's table of contents, including Letters to the Editor and Classifieds, is indexed.

Sample journal titles are:

> Atomic Data and Nuclear Data Tables
>
> Bell Labs Technical Journal
>
> Chinese Journal of Low Temperature Physics
>
> COMSAT Technical Review - Communications Satellite Corporation
>
> Critical Reviews in Solid State and Materials Science
>
> Defense Intelligence Journal
>
> Jane's International Defense Review
>
> International Journal of Satellite Communiations
>
> Korean Journal of Chemical Engineering
>
> Modeling & Simulation in Materials Science and Engineering
>
> Systems & Computers in Japan
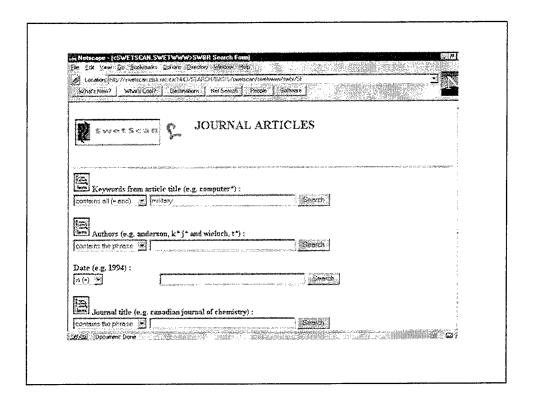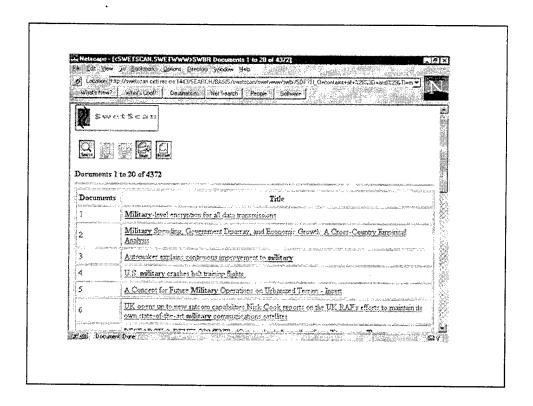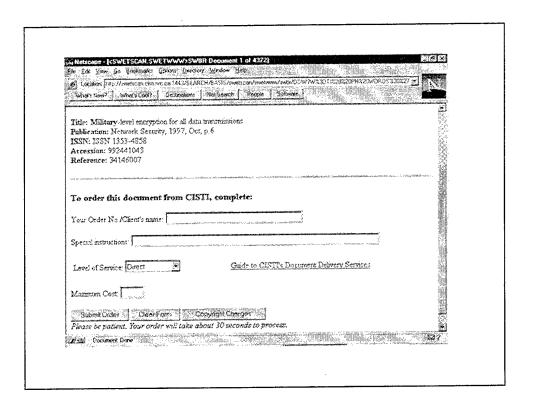
This is the SwetScan Journal Articles search screen.
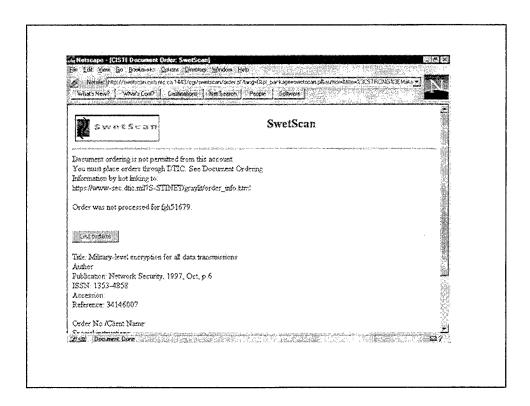
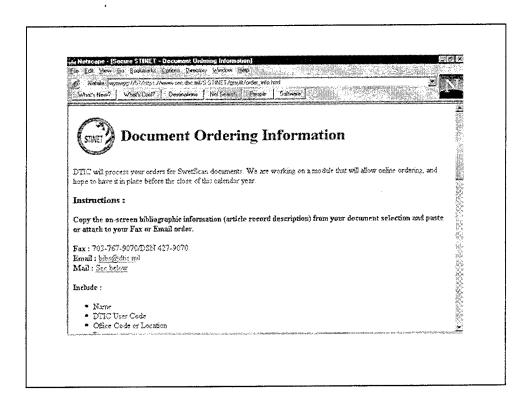Here are returned results from Journal Articles searching on the keyword "military."

Choosing an article takes the user to a screen with short bibliographic information and a document order template.

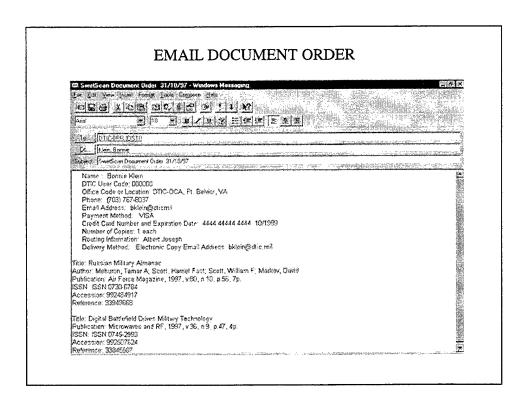Notice there is an option to view copyright fee charges.

28

28

If the user clicks on "Submit Order," this screen appears. Currently it instructs the user to place the order through DTIC and refers them to Document Ordering Information at https://www-sec.dtic.mil/S-STINET/journals/order_info.html.

Document Ordering Information

DTIC will process your orders for SwetScan documents. We are working on a module that will allow online ordering, and hope to have it in place before the close of this calendar year.

Instructions :

Copy the on-screen bibliographic information (article record description) from your document selection and paste or attach to your Fax or Email order.

Fax : 703-767-9070/DSN 427-9070
Email : bbs@dtic.mil
Mail : See below

Include :

- Name
- DTIC User Code
- Office Code or Location

Here are the current instructions for ordering documents identified through SwetScan. We ask you that you email or fax the bibliographic citation along with your account number, payment and delivery preferences to DTIC's Document Order Branch.
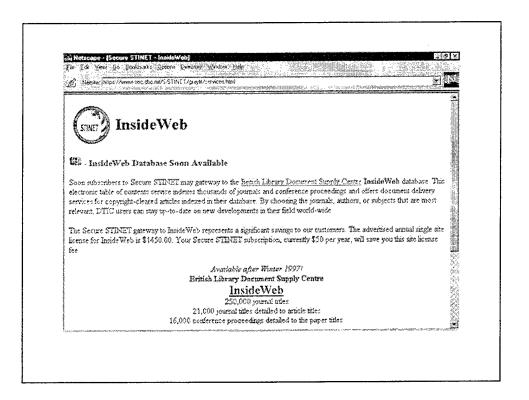
DTIC is working with CISTI to create an order template for online ordering. In the near future, ordering will be simplified.

30

30

EMAIL DOCUMENT ORDER

This is an example of a SwetScan order request.

CISTI charges the following:

      –For electronic delivery via Ariel or email:
      $8 per 50 pages + variable copyright fee

      –For papercopy U.S. Mail delivery:
      $11 per 50 pages + variable copyright fee

31

31

In early 1998, DTIC will also offer access to the British Library's InsideWeb database. BL has limited the service to <u>U.S. Government</u> subscribers to Secure STINET.

U.S. Government subscribers to Secure STINET must request access to Inside Web and must (1) sign a Copyright Declaration as required by BL and (2) set their account preferences.
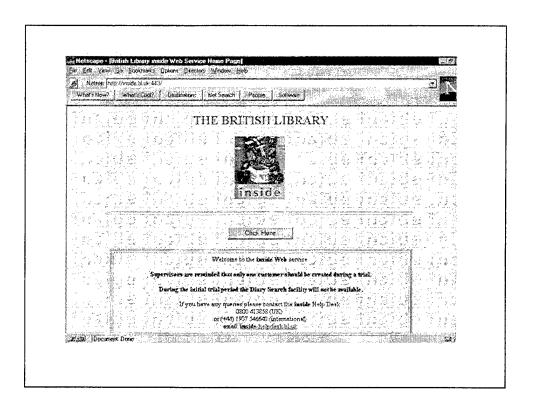
Preferences are for:

One or two accounts
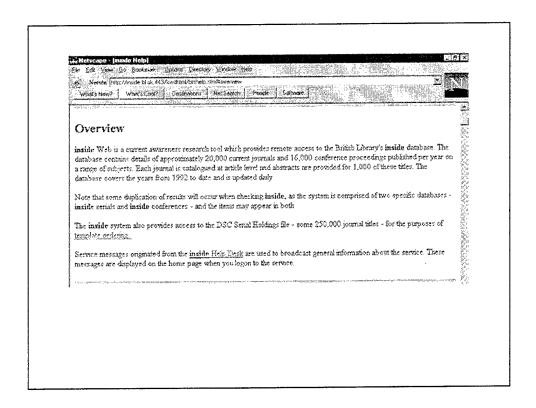
–Search only (Discovery/Reference Tool)

- •Simultaneous multiple users served by an Agency, Library or Information Center
- •End-user with no fund commitment authority

–Search and order

- •Users with fund commitment authority

Document delivery address

- •Direct to customer
- •Anonymous through DTIC

281

32

32
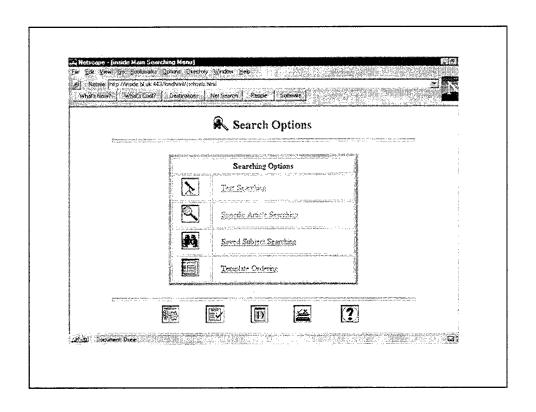
This is the current welcome screen for InsideWeb.

Overview

inside Web is a current awareness research tool which provides remote access to the British Library's inside database. The database contains details of approximately 20,000 current journals and 16,000 conference proceedings published per year on a range of subjects. Each journal is catalogued at article level and abstracts are provided for 1,000 of these titles. The database covers the years from 1992 to date and is updated daily

Note that some duplication of results will occur when checking inside, as the system is comprised of two specific databases - inside serials and inside conferences - and the items may appear in both

The inside system also provides access to the DSC Serial Holdings file - some 250,000 journal titles - for the purposes of template ordering.

Service messages originated from the inside Help Desk are used to broadcast general information about the service. These messages are displayed on the home page when you logon to the service.

Here is a description of InsideWeb content and coverage.
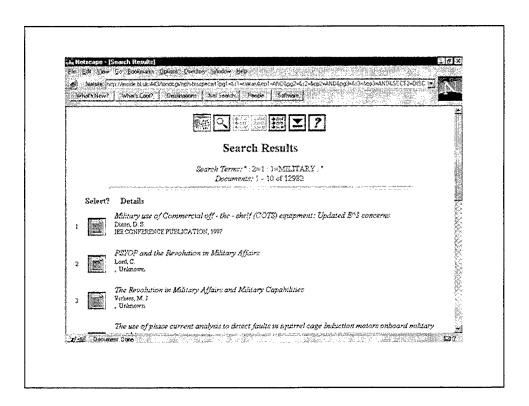
Sample titles are:
- –Asia Pacific Defence Reporter
- –Australian Defence Force Journal
- –British Army Review
- –CERN European Organization for Nuclear Research Reports
- –Chinese Science Bulletin
- –European Journal of Physics
- –IEEE Transactions on Neural Networks
- –NATO ASI Series F Computer and Systems Sciences
- –Russian Aeronautics, Izbestiia Vysschie Uchebnye Zedeniia Aviatsionnais Tekhnika

34
34

284

35

35
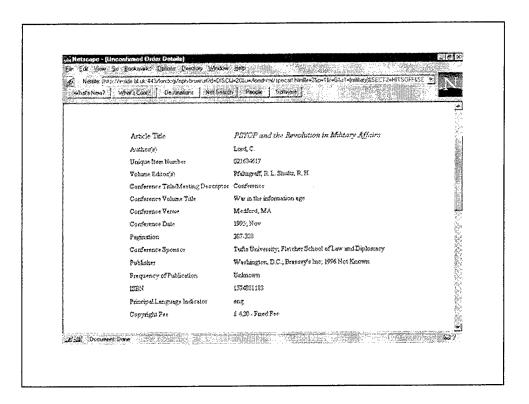
Unlike CISTI, InsideWeb only allows specific article searching. It does not allow the user to see thetable of contents list for a specific serial or journal issue.

36

36

A search using the keyword "military" gives these results.

Netscape - [Unconfirmed Order Details]

File Edit View Go Bookmarks Options Directory Window Help

Article Title	PSYOP and the Revolution in Military Affairs
Author(s)	Lord, C.
Unique Item Number	02163617
Volume Editor(s)	Pfaltzgraff, R. L; Shultz, R. H.
Conference Title/Meeting Descriptor	Conference
Conference Volume Title	War in the information age
Conference Venue	Medford, MA
Conference Date	1995, Nov
Pagination	307-320
Conference Sponsor	Tufts University; Fletcher School of Law and Diplomacy
Publisher	Washington, D.C.; Brassey's Inc; 1996 Not Known
Frequency of Publication	Unknown
ISBN	1574881183
Principal Language Indicator	eng
Copyright Fee	£ 4.20 - Fixed Fee

Document: Done

Here is an example of an InsideWeb bibliographic record.

Customers may place Inside Web document orders online. At the time of order, the user specifies the delivery method which sets the base fee for the document..

  –Papercopy AirMail

    •$10.50 for unlimited pages +copyright fee

  –12-Hour Fax Service

    •$10.50 for unlimited pages +copyright fee

  –2-Hour Fax Service

    •$13.50 for unlimited pages + copyright fee

  –Papercopy Courier Service

    •$16.50 for unlimited pages + copyright fee

Note the copyright fee is a variable set by the publisher and ranges from a low of 0 to more than $15.00. The average fee ranges between $4.00-$7.00. Charges are displayed at the time of order.

287

38

38

For your annual $50 STINET-S subscription

- **Save $2000 in database subscription fees**
  - CISTI's SwetScan = $550 per year
  - BLDSC's Inside Web = $1450 per year
- Do not have to register directly for CISTI or BLDSC service
- Use your DTIC account to order SwetScan and Inside Web documents
- May remain anonymous in document order transactions

Do I have a deal for you! DTIC, through our quid-pro-quo exchange agreements, is underwriting the cost of bringing our users SwetScan and Inside Web for the bargain price of the $50.00 annual Secure STINET subscription.

CISTI charges $550.00 per year for an annual single site license and BL charges $1450.00.

The math is simple...$2000.00 in database services is yours for $50.00! And you don't have to order a single document to use these for reference, research or document identification.

To register for Secure STINET, contact DTIC's Online Services Registration Staff.

ATTN: DTIC-BCS

Defense Technical Information Center

8725 John J. Kingman Road, Suite 0944

Ft. Belvoir, VA 22060-6218

Tel: (703) 767-8272; DSN 427-8272

Fax: (703) 767-8228; DSN 427-8228

email: reghelp@dtic.mil

Using Netscape to Organize and Access Electronic Resources
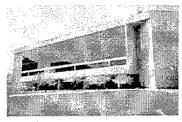
November 19, 1997

Your Speakers...

* Sheila Shellabarger - Head,
  Reference and Research Services,
  Fordham Health Sciences Library
  sshellabarger@library.wright.edu

* Jeff Trzeciak - Head, Automation Services
  jtrzeciak@library.wright.edu

November 19, 1997

The Libraries
Paul Laurence Dunbar Library
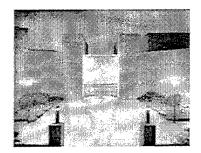
November 19, 1997

The Libraries
Fordham Health Sciences Library

November 19, 1997

The Library Information and Research Network

LIBNET
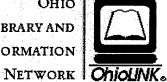
OhioLINK   CDROM   INTERNET   SERVICES   Full Text

November 19, 1997

OHIO
LIBRARY AND
INFORMATION
NETWORK   *OhioLINK*

° **Local/Central Catalog**
  ▫ **Including patron-initiated circulation**
° **External Databases**
  ▫ **Ovid**   ▫ **Wilson**
  ▫ **RLG**   ▫ **ISI**
  ▫ **UMI (including Powerpages)**
  ▫ **OCLC**   ▫ **Lexis-Nexis**

  ▫ **Others**

° **Full Text Resources**

November 19, 1997

CDROM

○ Silverplatter (GPO)
○ Dialog
○ ABC-CLIO
○ Some Full Text and Multimedia Resources
○ Standalone vs Networked issue

November 19, 1997

INTERNET

○ SilverPlatter WebSpirs
  ▪ Agricola
  ▪ Books in Print
  ▪ Econlit
  ▪ GeoRef
  ▪ Humanities Index
  ▪ Social Sciences Index
○ Multitude of free resources

November 19, 1997

4

SERVICES

° Interlibrary Loan Requests
° Book Renewals
° Reference Assistance
° Document Delivery
° Suggestions
° New Book Requests
° Electronic Full Text Course Reserves

November 19, 1997
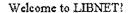
Full Text

° Ethnic Newswatch
° Lexis/Nexis
° Journals through Academic Press and Elsevier
° Reference Sources
    ⁼ Britannica Online
    ⁼ Columbia Encyclopedia

November 19, 1997

How do these appear to the user?

November 19, 1997

Welcome to LIBNET!

Wright Brothers 1910
Wright State University Libraries

WSU & Affiliates Library Catalog

OhioLINK & Other Library Systems

Article Indexes & Abstracts

Subject Guides to Information

Electronic Journals & Texts

Reference Online

Government Resources

Course Reserves

About the Libraries   Internet Search Tools   Wright State Homepage
Library Services/Help   Find a Resource   Special Collections

294

WSU & Affiliates Library Catalog
Wright State University Libraries

- TITLE
- AUTHOR
- AUTHOR and TITLE combined
- WORDS in Title, Series, Subjects, etc.

- SUBJECT Headings
- MEDICAL SUBJECT Headings

- Call Number: (LIBRARY OF CONGRESS)(NLM)(GOV DOCS)(LOCAL/DEWEY)
- Other Number: (ISBN/ISSN)(OCLC)(OTHER)

- SEARCH OHIOLINK CENTRAL CATALOG
- Reserve lists by COURSE NAME or INSTRUCTOR NAME
- VIEW your own circulation record

For comments and suggestions, please contact:

WSU and Affiliates Library Catalog

(Next Record)(Return To Browse)
(Another Search)(Start Over)(E-mail)(OhioLINK Central)
You searched for the TITLE: **advances in mathematics**
Record 1 of 2

Title   **Advances in mathematics**

Publish info   New York, N.Y. : Academic Press, 1965-

CLICK ON THE FOLLOWING TO

Connect to Advances in mathematics (Online)

Dunbar Periodicals QA3 .B95
Latest Issue RECEIVED: 131:1 (Oct 15, 1997)

295

Subject Guides to Information
Wright State University Libraries

Anthropology/Archaeology	Ethnic Studies	Music
Art & Architecture	Gender Studies	Nursing
Biological Sciences	Geography	Philosophy
Business	Geology	Physics
Chemistry	History	Political Science
Classics	International/Regional Studies	Psychology
Communication	Languages	Religion
Computer Science	Law	Social Work
Counseling	Library Science	Sociology
Economics	Literature	Theater Arts
Education	Mathematics	Urban Affairs
Engineering	Medicine	

Literature
Wright State University Libraries

Electronic Indexes, Abstracts, and Bibliographies

- Arts & Humanities Citation Index
- Columbia Granger's World of Poetry (index and some full-text)
  (Available in Dunbar, Fordham and Music Libraries only)
- English Short Title Catalogue
- Essay and General Literature Index
- Humanities Index
- MLA International Bibliography (Modern Language Association)

Full-Text Databases

- Contemporary Authors
  Biographical information on modern authors, primarily those active from 1960 to present.
- Masterplots Fiction (Available in Dunbar, Fordham, and Music Libraries only)
- Masterplots Nonfiction, Poetry, and Drama (Available in Dunbar, Fordham, and Music Libraries only)

Research Guides

- Guide to Poetry Criticism
- Guide to Short Story Criticism

Electronic Texts

- **OhioLINK and University Libraries Projects**
  - American Poetry Database
  - ARTFL (American and French Research on the Treasury of the French Language)
  - Database of African-American Poetry
  - Editions and Adaptations of Shakespeare
  - Eighteenth Century Fiction
  - English Poetry Database
  - English Prose Drama
  - English Verse Drama
  - Paul Laurence Dunbar Digital Text Archives

How do we organize and manage LIBNET?

http://www.libraries.wright.edu/staff/central/auto/what/libnet.html

November 19, 1997

LIBNET Editorial Board
Composition

○ Rotating Chair, currently Head of Reference & Research Services, Dunbar Library
○ Head of Automation Services
○ Head of Technical Services
○ Reference and Outreach Librarians
○ Coordinator of Publications and Public Relations

November 19, 1997

298

1

LIBNET Editorial Board
Goals
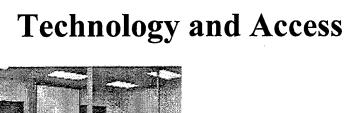
- Determine logic of organization
- Determine layout and design
- Monitor marketplace developments
- Compose and maintain a UL homepage, distinct from LIBNET homepage
- Review changes and additions
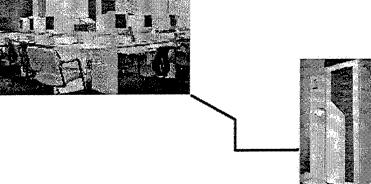
November 19, 1997

Organization and Design
Key points

- Must incorporate all formats
- In-library/dial access must be same
- Logical and user-friendly, ease of use for novice and expert
- Limit use of 'library terms'
- Teach about technology as well as library services and resources
- Team effort
- Work with adaptive technologies

November 19, 1997

1

Technology and Access

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Access

- ° Internally
  - ⁻ 200Mhz Pentiums
    - ⁻ 32MB or 64MB RAM
    - ⁻ sound
    - ⁻ 17in monitors
    - ⁻ Netscape/Internet Explorer
  - ⁻ Novell Network
- ° Externally
  - ⁻ Netscape, Lynx or other browser
- ° Both use Sun Netra webserver

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300

1

OHIO LIBRARY AND INFORMATION NETWORK — OhioLINK®

- How are they accessed?
  - Telnet
  - Moving towards web versions

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CDROM

- Logicraft LANCD and 386ware
  - Phasing out dial access
- 1 CDROM tower with 14 cdrom drives and a 1GB harddrive
- Remove local subscripts as OhioLINK purchases them for the state

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INTERNET

○ All Internet resources are incorporated into the subject pages

○ Users do not know if the resource they are using is local or remote

○ Moving to Internet access for research databases

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Full Text

○ Most are pdf documents
  ▫ Loaded Adobe Acrobat on all internal pc's
  ▫ Worked with Computing Services to ensure faculty have Acrobat as well

○ Charge-back system for printing

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302

1

Adaptive Technologies

○ Visually Impaired
   ▫ Archenstone reader
   ▫ Zoomtext
   ▫ Jaws for Windows and DOS
   ▫ pwWebSpeak
○ Mobility Impaired
   ▫ King and mini keyboards
   ▫ Joystick
   ▫ Head pointer

November 19, 1997

Wright State University

Jeffrey G. Trzeciak
Head, Automation Services
email: jtrzeciak@library.wright.edu

Sheila G. Shellabarger
Head, Fordham Health Sciences Library,
Reference and Research Services
email: sshellabarger@library.wright.edu

USING WEB TECHNOLOGY TO ORGANIZE LIBRARY RESOURCES

Military Librarians Workshop '97

Kathleen Tiller
Kathleen Webb

304

1

Background
1994-1995

- DOS based menu driven interface
- Increasing Internet resources
- OhioLINK Web-only databases
- Demand from users for Internet access
- Impetus from professional literature and meetings
- Availability of CD-ROM launchers

We were using Direct Access menu that required us to log out and start windows to use web browser

updates and menu maintenance required all users to log out

limited number of menu choices

Groundwork

1995-1996

- Attended workshops
- Visited other schools
- Upgraded computers in ref room
- Hired a computer science student
- Learned HTML

Systems office consisted of one person so the student was given this project

Basic HTML

Combined Skills and Resources Available

- Knowledge of basic HTML
- Very basic knowledge of computer graphics
- A training room for meetings and viewing work in progress
- Basic understanding of CGI scripts
  - access to server for testing
- Time (ha ha)

Training room useful to see changes immediately

307

Design by Committee
(the only logical solution)

- All reference librarians participated (5)
- Decided to develop a Web page (not a Web site) to act as the library's interface
- Focused on in-house users
- Agreed upon a general page design
- Developed a template
- Debated page layout and philosophy

This approach will not work for every library

One librarian offered to coordinate

Since majority ruled, no one person had final say.
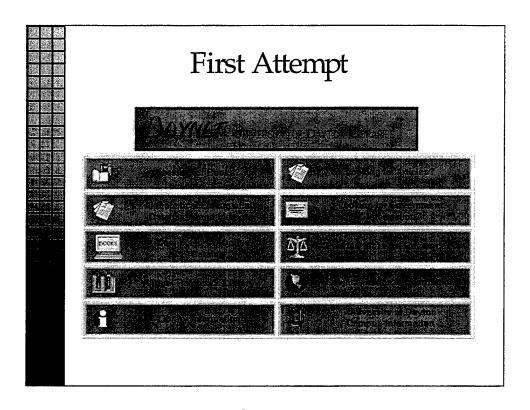
        Disagreements sometimes resulted in hard feelings

Systems librarian had minimal input
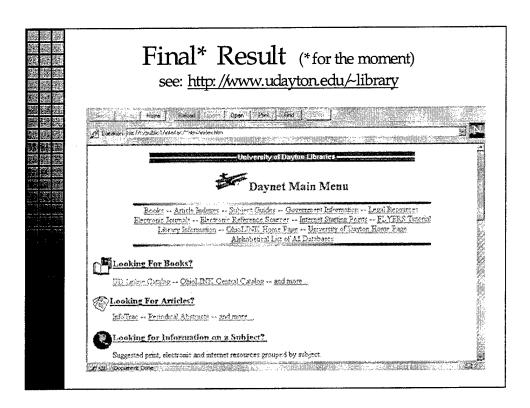
1st Layer Philosophy
(after much discussion!)

- Addresses the users' most common way of requesting library materials
- Presents an organization of resources by subject or format
- Guides users to most requested resources
- Incorporates library handbook, ILL forms, research skills tutorial, etc.

Unlike the Direct Access menu, we were incorporating a variety of databases, indexes, fulltext, catalogs so we needed to come up with a different type of organization.

309

6

First Attempt

Final* Result (*for the moment)
see: http://www.udayton.edu/~library
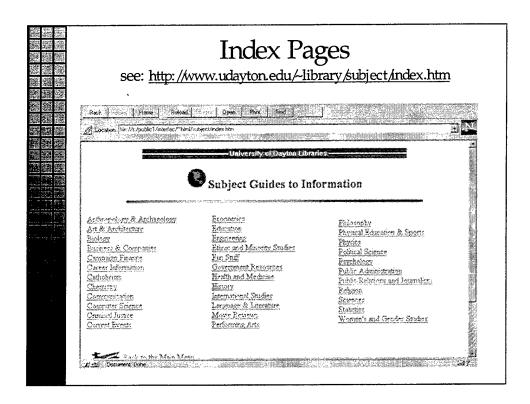
-Our dissatisfaction with how much material patrons see without scrolling

-Organization still unclear to some patrons

-Page is becoming unwieldy

2nd Layer Philosophy

- Present broad subject areas
- Present subject areas specific to our curriculum

Index Pages

see: http://www.udayton.edu/~library/subject/index.htm

University of Dayton Libraries

Subject Guides to Information

Anthropology & Archaeology	Economics	Philosophy
Art & Architecture	Education	Physical Education & Sports
Biology	Engineering	Physics
Business & Computing	Ethnic and Minority Studies	Political Science
Campus Events	Fine Arts	Psychology
Career Information	Government Resources	Public Administration
Catholicism	Health and Medicine	Public Relations and Journalism
Chemistry	History	Religion
Communication	International Studies	Science
Computer Science	Language & Literature	Statistics
Criminal Justice	Movie Reviews	Women's and Gender Studies
Current Events	Performing Arts	

Back to the Main Menu

Show Subject Index First

- had more choices but no time to complete pages so we deleted them

- different stages of development

- add subject pages to accompany instruction sessions

- never be specific enough ex:handgun control
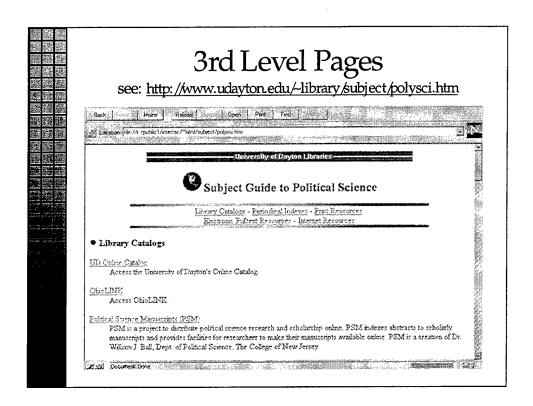
Show Article Index Page

-2nd try, first try had much broader categories that confused students ex:arts and humanities and social sciences

- database availability dictated a category

-prominence of alpha list as bone of contention

10

3rd Layer Philosophy

- 3 kinds of pages: subject, article, electronic reference sources
- Page organization based on resources available
- Value added (annotations)
- Flexibility: add to pages as needed
- Used for class-specific instruction
- Librarian selected
- Print resources included

There was quite a bit of discussion but in the end we wanted these pages to "stand in" for a reference encounter and so included print resources

3rd Level Pages

see: http://www.udayton.edu/~library/subject/polysci.htm

Telnet vs web links

Category titles ex: fulltext resources, electronic fulltext resources, electronic reference resources

time needed to monitor urls for current internet sites

time needed to identify new sites

number of pages per librarian

nonreference librarians still not involved

quality of annotations

Ongoing Issues

- Maintenance, maintenance, maintenance
- Past practice -- designed for Netscape
- Future practice -- who knows ?
- Integrating new resource types into existing organization
  - electronic journals, Current Issues SourceFile
- Control of page
  - librarian vs microcomputer support specialist
- Progressing from interface to Library Homepage
- Maintaining two sets of pages

Right now UD supports only Netscape but with the rising presence of Internet Explorer that could change

Where will the electronic journals go, include on subject pages?

Mark vs the librarians -- philosophical differences and lack of understanding as to the purpose of the pages

Access to CDs from outside of the library is problematic and user receives no feedback since we have no time/expertise to write the scripts that would explain usage policies

This was designed as an interface, not a homepage but in fact it is the first page people see when linked from UD Web site

2 sets of pages resulted from not having our own web server and needing to use UD's main site. (-)

2 sets of pages save us when the main ud server is down (+) but updating both is very time consuming and prone to errors.

13

Questions?

Kathleen Tiller, Public Services
Kathleen Webb, Government Documents
Roesch Library, University of Dayton
300 College Park, Dayton, OH 45469-1360

14

Service Update: Air Force

© November 1997 Barbara Wrinkle

Director, Air Force Library
and Information System
HQAFSVA/SVPAL
10100 Reunion Pl., Ste., 402
Universal City, TX 78216-4138
wrinkleb@agency.afsv.af.mil
Military Librarians Workshop '97 program.

In 1858, Oliver Wendell Holmes wrote in The Autocrat of the Breakfast-Table:

I find the great thing in this world is not so much where we stand, as in what direction we are moving: To reach the port of heaven, we must sail sometimes with the wind and sometimes against it - but we must sail, and not drift, nor lie at anchor.

Air Force libraries are consistently being bombarded with pressures from outside the organization, and even from within - pressures, challenges, and opportunities are unending. Yet, despite these overwhelming pressures, our Air Force librarians continue to "stand in the gap" and provide access to information resources. In these days, I'm reminded of yet another quote by an anonymous pundit: "A diamond is a chunk of coal that makes good under pressure." We are looking forward to finding the diamonds.

Of course the most pressing issue in Air Force libraries is that of outsourcing. As I mentioned last year, the Air Force Library Steering Committee developed an outstanding Performance Work Statement template that was eventually released to the field in January 97. Officials outside of library circles have marveled at the thoroughness and completeness of the document. Since my last presentation, 10 general libraries have been turned over to commercial firms. I'm pleased to report that these librarians have hit the ground running, and are providing good customer service. I'm also pleased that three libraries (Maxwell, Dover, and Andrews) remained in house. We hear rumblings about outsourcing technical libraries, but the issue seems to be on hold for right now.

New variations of the outsourcing concept are under way. One major command is studying a "Multi-Wing" concept in which a group of libraries at different bases undergo a cost comparison study. Yet another command is using the "Commercial Services" method, in which a base can buy library services "off-the-shelf" from an experienced library contractor.

The Air Force has initiated a program called Jump Start, in which libraries are identified as cost comparison candidates. My office is working closely with the Air Force Center for Quality Management Innovation to develop a standard Most Efficient Organization (MEO) template to streamline the outsourcing process even further and also to look at the Quality Assurance Evaluator issue.

Outsourcing is here to stay. While I am concerned about outsourcing, I am more concerned about the threat of library closures by those whose idea of a library is a library of children's books run by little old ladies with hair buns.

We've seen several incidents crop up where a commander on a base with a library outside the gate has simply "decided" to close a library for a number of reasons. Reducing APF positions seems to be the largest factor in the closing rationale. Fortunately, when confronted with the facts that Air Force libraries:

1. Are determined to be among the most necessary facilities on the base;
2. Are among the heaviest used facilities on the base; and
3. Provide the highest level of customer service of any Services activity

Some commanders will change their tune, especially with a little "prodding" by outraged library customers. A quote by Casey Stengel illustrates these situations: "The secret of managing is to keep the guys who hate you away from the guys

who are undecided."

Even with all these issues, we have continued to make major accomplishments this year.

Our new Air Force Instruction, AFI 34-270 was finally published on September 1. Some changes our Steering Committee made from the previous instruction were:

1. Clarification of the role of Air Force libraries in the global information network;
2. The use of electronic research;
3. The applicability of the American Library Association Bill of Rights, the Privacy Act, and the Intellectual Freedom Manual;
4. Outsourcing; and
5. Inactivation schedules for BRAC libraries.

The Air Force has decided to centralize its personnel system at the Air Force Personnel Center located in San Antonio. The Air Force believes all personnel actions can either be done via voice mail, e-mail, computer response system, or via the world wide web. We've worked with the Air Force Personnel Center in developing core personnel documents to assist bases in developing position descriptions for library personnel. So far, we've completed core documents for technician positions graded at the GS-4 through GS-7 level; and librarian positions at the GS-9 and GS-11 levels. There will be no core documents for GS-8 and higher 1411s nor GS-12 and higher 1410s because these grades are based on very specific requirements. We're also working on publishing 10 new and updated training aids for library directors and their staffs to use in the day-to-day operation of their libraries.

On the service front, formal library service is breaking out into new frontiers. Thanks to open-ended operations in place in Southwest Asia, we have new library services operating at Prince Sultan Air Base in Saudi Arabia. We are currently examining possibilities for enhancing library services to facilities in Southwest Asia under a new initiative for "Productive Use of Deployment Time," especially education and distance learning support.

The Air Force Library Central Procurement Program continues to produce amazing results. In fiscal year 97, the program saved $2.2 million, with an average savings level of 35.7% above and beyond individual library discounts. We were able work on the following standardization projects:

1. Purchase 94 of 99 titles on our core reference list (a $1 million project);
2. Revise and implement the new 50-title core periodical list;
3. Purchase sufficient copies of the Air Force Chief of Staff Professional Reading Program for officers, enlisted, and civilian members for all Air Force libraries; and
4. Currently, we are developing a core professional development collection for Air Force librarians with projected delivery in FY98.

In automation, we had a busy year. My "Director of Information Delivery Technologies" has been glued to his seat with the following projects:

1. Installing and upgrading CD-ROM LANs in over 40 libraries in 1997. By February 1998, we will have standardized CD-ROM LANs in over 80 libraries.
2. Establishing 7 separate listservs for Air Force library staff members to exchange ideas and solutions to library problems. We've established listservs for all AFLIS libraries, all general libraries, all academic libraries, all technical libraries, all contract libraries, STINFO specialists, and even a listserv for job announcements in Air Force, other services, Federal, and non-Federal libraries. Six of the seven are available for any subscriber.
3. Developing a home page for AFLIS libraries. As we speak, our home page is currently under review. As soon as it is published, we'll announce its address over the AFLIS listserv. Our libraries will be able to get up the minute procurement status reports from the home page as well as our central procurement guide, software manuals, and other documents.
4. Monitoring the controversial issue of public Internet access in Air Force libraries. Some of you may not be aware that our friends in the SC-community do not want Air Force libraries to utilize the base's communications infrastructure to provide public access to the Internet for "security reasons." We've been able to get the AF/SC folks to clarify their position, and now, library staff members can use the Internet to perform their jobs - which wasn't clear in the original regulation. We've also been able to get them to permit libraries to contract with local, commercial Internet Service Providers for their public access - at least, until a permanent solution is reached.
5. Beginning the development of our Library Electronic Ordering System (LEOS) which will completely automate

the entire central purchasing program for libraries and organizations.
6. Acquiring new CD-ROM databases, expanding access to online reference materials, and providing new sources of information retrieval for all Air Force libraries.

Air Force libraries have met challenges before and, on the other side, emerged triumphant and stronger than ever. I have no doubt we will weather this current torrent of challenging winds. As Eleanor Roosevelt wrote in You Learn by Living:

> *You gain strength, courage, and confidence by every experience in which you really stop to look fear in the face. You are able to say to yourself, "I lived through this horror. I can take the next thing that comes along." ... You must do the thing you think you cannot do.*

Military Librarians Workshop, 18-20 Nov 97, Dayton Marriott Hotel, Dayton, Ohio

Service Update: Army

© November 1997 Janet Scheitle

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Military Librarians Workshop '97 program.

1. TRADOC 4 Star decision to unfund general libraries in the US Army Training and Doctrine Command. Resulted in 46 Congressionals and 7 Presidential inquiries. In October, the four star reversed the decsion and decided to fund general libraries.

2. HQDA, Assistant Secretary of the Army for Manpower and Reserve Affairs created group to look into libraries. Decision was made to stand up an Army Library Office and recruit for an Army librarian.

Service Update: Fedlink

© November 1997 Susan M. Tarr

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Military Librarians Workshop '97 program.

Since the update I did at MLW a year ago, the FEDLINK program has undertaken a great deal of analysis and planning. With the help of our contract consultants, Abacus Technology Corporation, we have:

- studied FEDLINK's cost allocation methodology to validate the Direct and Transfer Pay cost centers and adjust our cost allocation formulas accordingly;
- studied the costs vs. benefits to members of the major FEDLINK service categories-- serials, books, and database services;
- and developed the broad outlines of a multi-year FEDLINK Business Plan.

All these studies were conducted between November '96 and June '97 at the same time we were undergoing the annual financial audit--this time a full audit of FY96. This has been pretty exhausting for managers and staff, but we've learned a great deal and believe we know enough to make significant improvements in the FEDLINK Program for the future.

The immediate change that was introduced for FY98 was an increase in the Direct Pay fees. Abacus' studies revealed that more staff time was spent assisting Direct Pay members than had previously been calculated. For FY99, we and the FLICC Budget and Finance Working Group will be considering how we can complete the necessary adjustment between Direct and Transfer Pay revenue, possibly by decreasing certain categories of Transfer Pay fees, based on information gained from Abacus cost studies.

At the same time, staff have begun grassroots discussions on streamlining, as recommended in our Business Plan, and we are hoping to realize additional economies from those efforts that we want to translate into stable or decreased fees.

There are two other areas of focus from our Business Plan for which small group activity has begun:

- the establishment of consistent criteria for determining what new products and services FEDLINK takes on and what products and services FEDLINK continues to support.
- the development of measures to study procurement patterns of current FEDLINK customers in order to provide better service for the future.

We have small staff focus groups working on other areas as well. In February, FLICC staff and managers began an 18-month Consultative Management Pilot Project; two of the goals staff set for the pilot are:

- Improving customer service
- Raising LC's awareness and support of the FLICC/FEDLINK program.

Each of these issues is being explored initially by a small group of staff and management volunteers.

Just as there has been a lot of constructive energy flowing within the FEDLINK staff this past year, we have also enjoyed a great deal of support and assistance from the membership governing bodies.

As Fred Rettenmaier, this year's Chair of the FEDLINK Advisory Council, can attest, the FAC has worked very hard on your behalf in 1997--in the first few months to help us focus and develop goals for the Business Plan, and during the past couple months, to put the final touches on a FEDLINK MISSION STATEMENT. The approved mission of FEDLINK is

"to serve federal libraries and information centers as their purchasing, training and resource-sharing consortium." It seems rather simple and obvious (I hope), but any of you who have ever developed a one-sentence mission statement know how hard it is to clearly state the obvious!

One thing that this year has taught me is that there exists a great deal of confusion--even among our long-term members--about FLICC and FEDLINK, their relationship and their respective roles.

So, I want to take a bit of my time today to try to pass on to you my understanding of these two vital and complementary operations that I have had the privilege to direct for a full 3 years now.

FLICC--originally FLC, the Federal Library Committee, and now the Federal Library and Information Center Committee--came first, in 1965. It's purpose then, as now, was to improve federal libraries and information centers through: 1) promotion of service, 2) development of staff, and 3) coordination and sharing of available resources.

FLICC is comprised of representatives from each of the four national libraries--yes, there are now four since the National Library of Education was legislated in 1994--from each of the central libraries in the cabinet-level agencies, from the courts libraries, and from selected independent agency libraries and information centers. To this are added 24 elected rotating members. As a FEDLINK member, you directly elect 9 of these rotating members, who also serve as your FEDLINK Advisory Council. With the recent bylaws change, FEDLINK members also join the FLICC membership in voting for the remaining 15 rotating members. The total membership of FLICC is 55, but a lot more library and information center staff contribute to FLICC's purpose through their work on the various FLICC Working Groups. [See chart.]

FLICC initiated and staffed FEDLINK in the 1970s to serve as the federal libraries network for OCLC automated bibliographic and ILL services to promote resource sharing and efficiencies in federal libraries. Because FLICC staffing was limited to only two Library of Congress appropriated positions, all additional staff needed to run the network had to be paid for with FEDLINK fees. Once the centralized staff and member governing structure were in place, it was only natural to expand to other procurements, other training classes, other member support activities. Now the FEDLINK program has basic ordering agreements with nearly 100 vendors, including OCLC and the other bibliographic utilities, but also including database services, serials, books, document delivery, microforms, technical processing services and copyright licensing.

In FY97, FEDLINK members purchased over $127 million worth of products and services through FEDLINK BOAs. Abacus' analyses indicate that using FEDLINK saved members over $9 million in cost avoidance and millions more in vendor discounts.

CHART: The FEDLINK fees support a staff of about 50 librarians, accounting technicians, accountants, editors, computer specialists and managers at our office; plus 9 in a separate FEDLINK procurement unit; 4 in central financial services, and one attorney. (CHART indicates only the staff in our offices.) This staff, headed by me, is answerable to FLICC, to the FLICC Executive Board and to the FAC for operation of the FEDLINK program. Although FEDLINK is big enough to survive on its own, its identity as a major program of FLICC helps keep the program focused on the welfare of federal libraries and the goal of serving them effectively. It also allows for a critical mass of library specialists, who, when they aren't writing FEDLINK RFPs or training OCLC users, can provide expert consultation for member libraries, can support the FLICC working groups, and can plan high quality educational programs. Recently we have also been able to negotiate with LC for the time of some of their expert cataloging trainers to provide instruction for federal cataloging librarians.

During FY97, FLICC staff supported 50 working group meetings, 31 seminars for 1400 participants, and 113 OCLC and Internet training classes for 820 students, many of the latter on-site at Air Force libraries. For those of you who cannot come personally to our 31 educational events, our videotape ILL program through the National Library of Education is now in full gear. I'd be really interested in feedback from any of you who have borrowed these tapes and used them with staff. We will also be working with the Air Force to pilot the use of distance learning technologies to broadcast FEDLINK courses.

In FY98 we are anticipating notable improvements in the FEDLINK program as a result of our initiatives on

- streamlining
- customer service
- customer analysis, and

- systematic product/service selection.

We have some excellent new representatives coming on to the FLICC and FEDLINK governing boards, and we expect to exploit their talents and ideas on your behalf.

A good way to keep up with our new vendors, and services, your representatives' names, program policy, etc., is to visit our new improved website at: http://lcweb.loc.gov/flicc.

Service Update: Navy

© November 1997 Joan Buntzen

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Military Librarians Workshop '97 program.

Our **big** news item is formation of the Consortium of Navy Libraries (CNL). Some of you may recall my mentioning that at last year's Navy meeting at MLW there was a long and very spirited discussion of a Naval Postgraduate School thesis calling for a grand Naval Service Digital Library concept and strategy. In that thesis, the authors stated that of all the services, Navy had made the least progress in developing the digital library.

We felt at that meeting last year a very great sense of frustration that our efforts weren't better known or recognized, yet we had to agree that although Navy libraries each had their vision statements and planning documents, we **did** lack a unified concept and set of strategies. And, we also agreed that developing such a unified concept and set of strategies could serve us in defining the changing and critical role of libraries in the Department, and also might facilitate new ways of doing business in our increasingly networked environments.

So, we had a meeting... in March...for 3 grueling days of discussion **and** eventual consensus building. We decided to form a consortium, and we drafted a charter and a strategic plan for the Consortium of Navy Libraries which was then approved by the end of June. We now have 37 member libraries, libraries of all types, technical, medical, academic, and general. Our grand vision is: " to provide world class information access and services to the Navy, ashore and afloat, and be the Department of Defense leader in virtual library development!"

The principal purposes of the Consortium are to:

- support and promote Navy library programs and services;

- exploit possibilities for leveraged buying and distributed costs;

- advise on pertinent information issues, including core sources and services;

- and explore areas of cooperative technical support and resource sharing.

The Consortium Strategic Plan states our priorities and recommendations, goals and objectives, all of which are aimed at realizing the benefits of timely access to accurate and complete information, improved business processes, coordinated enterprise-wide efforts, and enhanced sharing of information resources.

We had a one-day mini-meeting in September in which we focused on issues relating to cooperative acquisitions and licensing. We've compiled data about Navy subscriptions to electronic products to help us in identifying potential products for cooperative acquisition. At the all-day Navy meeting on Monday here in Dayton, we constituted a Consortium Working Group on Product Research to coordinate that process of identifying Consortium products.

We're now very excited about a work in progress, a Web site for the Consortium. We, of course, had a committee that worked on the basic design and content in October, and we're delighted that DTIC is going to host and Webmaster our site. The purpose of our Web site is three fold: to establish presence and gain recognition by the Department of the Navy for the CNL; to provide a communication channel between the Consortium membership and our vendors; and to provide a source of current information on Navy, DOD, and federal acquisition policies, procedures, and developments pertinent to information and information technology acquisition.

Some of our future Consortium plans include: a project to aggregate Navy Fedlink Dialog accounts into one to qualify for a better discount; training in strategic budgeting for Consortium activity; and a 3 day meeting in conjunction with ALA in Washington next year with a very focused vendor fair.

I'd like to preface other news from Navy with the observation that in spite of downsizing and no significant growth in resources, our libraries have pretty much held their own in the last year. I attribute that success in these hard times to the skills and ingenuity of great Navy and Marine Corps librarians! I also think that increased understanding and perhaps even sympathy or empathy by Navy managers for library and information issues may be occurring, and I think this might be attributed to another year gone by in which more and more personnel experience the possibilities and the challenges of the Internet and the Web.

Here are just a few highlights of 1997:

- The **Navy Virtual Library (NVL)** project continues in a third phase with streamlining of the prototype and documentation of the system. It will be made available in early 1998 for any organization interested in providing and managing desktop end user access to an array of scientific and technical information sources and services.

- The new library building at the **Armed Forces Staff College** is now underway, with the occupancy date set for 4th quarter FY98. It will increase the floor space from 16K to 41K square feet.

- The Resource Information Center Library at the **Atlantic Intelligence Command** has purchased Endeavor's Voyager ILS.

- The library of the Navy's **Office of General Counsel** moved from Crystal City to smaller, but nicely renovated space at the Washington Navy Yard therefore accelerating the pace to more electronic services.

- Good support for the libraries at the **Naval Medical Center, San Diego** continued, including acquisition of new computers, subscription to OVID's Web Gateway, and a face lift for the 10 year old building. This in spite of the fact that during the Spring of 1997, Navy medical libraries were informed by BUMED that they may be subject to outsourcing or contracting studies along with computer department services. No new news on that front.

- The **Medical Library at Portsmouth** completed its implementation of the Georgetown Library Information System, and the OPAC is available via the Web from the Library's homepage.

- The **Medical Library at Camp Pendleton** installed the EOSi automation system, is in the process of setting up a CD-ROM network, and the Library's homepage contains journal holdings , as well as a library guide and links to important medical websites.

- The **Naval Surface Warfare Center Library in Dahlgren, VA** developed a home page, completed a major facility renovation, added over 50 new electronic products, and upgraded its ILS to a Windows/client server with Web access.

- The **NRL Library** expects to complete conversion of its entire unclassified reports collection to optical storage by the end of the calendar year. Hyperlinks have been added to the Library's Web-based STILAS catalog making the full content of 5,000 NRL formal and memorandum reports available on the Web. The Library received a special $100,000 allocation from the Director of Research to continue its digital initiatives in FY98, and it also received special funding of $135,000 to upgrade its library system during the current fiscal year.

- The **Naval Observatory Library and the Navy Department Library** (in a partnership venture) received approval on a DOD Legacy Pre-Proposal and are very optimistic about approval of their final proposal for $400,000 for conservation and cataloging projects for rare and 19th century books.

- The **Naval Postgraduate School Library** (one of the Navy's 2 RLIN sites) added OCLC as a cataloging utility this year, as well as switched to Windows 95 and implemented the STILAS Serials Control Module. The Library staff have begun teaching organized classes for Lexis/Nexis, and also are being asked to do more course-oriented classes, as well.

- The **Naval Academy Library** continues to develop its homepage and increase access and services via the Web. It recently added ProQuest Direct, Eureka on the Web from the Research Libraries Group, and expanded its

Project Muse subscriptions to include all of the journals published electronically by the Johns Hopkins Press.

- **NAWC China Lake** has launched a virtual library initiative to transition over a 10 year period to an intensively electronic library. The Library is supporting a Center-wide marketing strategy of 5 strategic thrust initiatives and hot technologies and working with the Center's Director for Business Development. It has also made improved customer service a primary goal: listening to library advisory board and patrons, trying to make a difference one-to-one, and taking a long-term approach to process improvement.

- and, a final highlight, the **Naval Facilities Engineering Service Center, Port Hueneme, CA** has in partnership with China Lake formed a consortium for a shared, common OPAC and circulation system. They've installed STILAS for this new arrangement, and are also planning to extend access to users without physical libraries or librarians at Camp Pendleton and Point Mugu.

This joint project at Port Hueneme and China Lake is a very important, leading edge development in today's trend towards more collaborative and consortial activities among libraries. I think that as more downsizing in DOD looms, library managers must look beyond consortial licensing of content and examine the cost benefit potential of shared systems, as well. Library systems are not only growing more and more powerful, they're also becoming more and more complex to manage and maintain. The demands of systems management, in addition to integration with other digital and virtual library resources and services, are going to grow beyond the staffing levels of many military libraries.

Consequently, we're watching with very keen interest the Marine Corps STILAS project. This is a centrally funded initiative for a networked ILS for the 18 Marine Corps commands with general libraries. The system server will be located at MWR, MC HQ in Quantico, and each library will have an NT server, CD tower and patron Internet access. PTFS is the contractor for the project, and the data conversion phase is nearing completion. The database will have about 700K records (or 225K bib records). PTFS plans to load STILAS and build a training database in December, and then Marine Corps Air Station Cherry Point will be the first library (sort of a beta site) scheduled for installation and should be operational in February. There is a committee of 6 Marine Corps librarians to develop policy and procedures for this new network.

In other news from the Navy general library front, BRAC, regionalization, and fiscal realities continue to reshape naval organizational structure and library services. Naval Air Station Miramar has been transferred to the Marine Corps; Naval Hospital Millington library has closed; Naval Training Center Orlando, Naval Support Activity Memphis, and Marine Corps Air Station Tustin libraries are scheduled to close next year; and library service for Naval Amphibious Base Coronado and Naval Air Station North Island is to be consolidated. Naval Stations at San Diego and Norfolk have significantly decreased the size and scope of their library's collections, co-located the remains in multipurpose spaces with contracted computer labs and other MWR services, and are relying on public libraries to bridge the information gaps.

On a more positive note, general libraries have opened at Fleet Anti-Submarine Warfare Center San Diego and Naval Air Station New Orleans; and in '98 Naval Support Activity Naples will open a new facility, and ten commissioning ship Library Multimedia Resource Centers will come on line.

I would like to conclude the Navy report with a few special thank yous. As I said earlier, our big news is formation of the Consortium of Navy Libraries, and we couldn't have done it without Mary-Deirdre Coraggio, John Cummings, and Bryan Thompson. Mary-Deirdre, who left China Lake last spring to become associate director at NIST, and John Cummings, from the Naval Academy Library, served as facilitators at our planning meeting last March. It was their amazing skill as group leaders and facilitators, as well as their long experience in and knowledge of Navy libraries that led to the success of our sessions. Bryan Thompson, Naval Facilities Engineering Service Center, took on the task of Coordinator of the Consortium and its Working Groups, **in addition** to his work as the current chair of the Council of Navy Special, Scientific and Technical Libraries (CONSSATL). Bryan has kept the Consortium agenda well on track and moving towards its future objectives. And, special thanks to all the members of the Working Groups, too many names to mention now, but you know who you are, and you'll all soon be able to see their names at our CNL Web site.

Benchmarking Basics for Librarians

Annette Gohlke
Library Benchmarking International

Good morning. I'm Annette Gohlke and I'm very happy to see so many librarians who are interested in finding out about benchmarking and how it can be used in each of your libraries. I'd like to share some of my background with you so you can see why I'm such a believer in benchmarking.

I grew up in San Antonio Texas and went to a school system well known for its academic excellence. Both elementary and high school libraries were outstanding. I assumed that all young people had access to the same type of libraries. I was surprised in library school to learn that few elementary schools had even rudimentary libraries and not all high schools had accredited libraries. While librarians were usually helpful, caring people, the profession as a whole was very elitist - and not very customer oriented. This was fertile ground for a rebel looking for a cause.

With a competitive spirit and an inquisitive mind, I jumped zealously into library management wanting to open the world of knowledge and to share the excitement of what libraries can do with my clientele - first school students, later military communites, and then as director of the Air Force Library and Information System. Always inquisitive, I wanted to know what made one library or librarian more successful than another. So I collected facts, conducted studies, always searching for "the best way" to get things done. Part of the driving factor was never having enough staff, and a constant turnover of staff which complicated reaching an excellent quality of service.

Why You're Here

▶ To Obtain Cutting Edge Knowledge & Practices

▶ To Learn a New Management Process

▶ Need Help Justifying Library Costs/Services

▶ To Improve Customer Service & Operations

▶ Because You've Been Told to Benchmark

2

There are usually a variety of reasons that librarians and information professionals are becoming interested enough in benchmarking to take a class. Hopefully you are one of those proactive librarians who want to stay on the cutting edge of the information profession. You've read or heard that benchmarking is something that the corporate world is using to improve their competitiveness in the market place by improving customer service and work processes.

You may be curious to learn what the current new management process is all about. You've weathered MBO, ZERO BASED BUDGETING, QUALITY CIRCLES, so why not TQM and benchmarking?

Maybe your organization is looking for ways to cut overhead costs and the library is up for review. You want to show upper management that they are getting a good return on their investment in the library and that you compare favorably with other libraries in your industry - corporate, academic, public, etc.
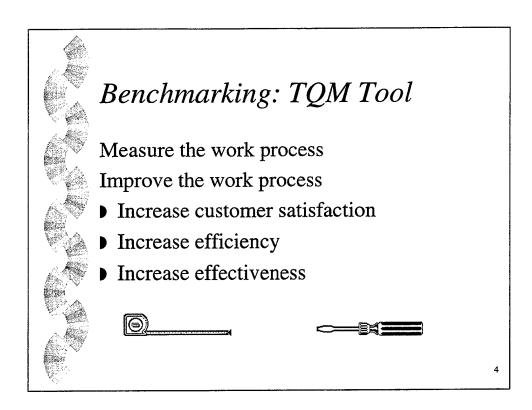
You may want to streamline some processes and improve the various services you provide to your clientele or you've been told to conduct a benchmarking study because your organization is doing it.

Workshop Objectives

- Describe What Benchmarking Is
- Explain Why Benchmarking Is Important to Libraries
- Decide What to Benchmark in Libraries
- Identify Pitfalls & How to Avoid Them
- Start Benchmarking Using the 5-step Process

3

Benchmarking: TQM Tool

Measure the work process

Improve the work process

- Increase customer satisfaction
- Increase efficiency
- Increase effectiveness

4

Benchmarking is a total quality management tool. History of Deming - 1950s Japanese Management

So what is total quality? Brieflytomer satisfaction. **Who are the library's customers?** 3 groups to think about (take questions from the librarians)

> **Library users/ clients**- people who come into the library and use our resources and services. When we apply TQ, we have to think about what the customer wants. It requires the librarian to step into the customers shoes. Sometimes this can be really hard for us because as librarians we understand information and how to find it. Most of our customers don't.

> **Library staff** - how the staff feels affects their performance and the type of service they deliver

> **Upper management** or whoever has ultimate control over your budget. These people need to receive certain things from the library in order to give it continued support.

Second, total quality focuses on work processes instead of the end product. Demings philosophy is based on the concept that if you improve the process your end product will improve as a consequence. Goal is to do do things better (improve the efficiency of the process) and do the right things (improve effectiveness of the process).

So how does all of this apply to Benchmarking? With benchmarking we will actually measure a work process or procedure in your library. The ultimate goal of measuring it is to improve the process to make it better meet the needs of customers (library users, library staff and upper management). To improve its efficiency and its effectiveness.

How Does Benchmarking Work?

▶ Measure your organization

▶ Compare your process measures to those of your benchmarking partners

▶ Decide who is the best

▶ Adopt your partner's best practice

5

So what is benchmarking and how does it work. In a nutshell, . . .• Measure your organization and your partners will also measure theirs

> • You and your partners will compare your measures and then decide whose organization is the highest performer. We sometimes refer to the higher performer as being a "best practiced" organization. This means that this organization has the most efficient and effective practices in place
> • Then you interview your best practiced partner figure out how their practice works, modify it to make it work in your organization and adopt it.

This is basically what benchmarking is all about. It's kind of like "friendly" competitive intelligence.

So now that we have a general idea of what we are talking about, lets talk a little bit about how benchmarking originally got started.

History Lesson 101

1979   Xerox coins the term "Competitive Benchmarking"

1982   Xerox benchmarks with L.L. Bean

1985   Metro Toronto Reference Library benchmarks its public service dept.

1987   Malcolm Baldridge Quality Award Improvement Act

6

Benchmarking started out in the corporate sector. It was originally started when Xerox corporation realized it was losing a lot of money and market share to its Japanese competitors. Its competitors were able to sell photocopiers for the same price that it cost Xerox to make them. Benchmarking was started by Xerox's Manufacturing unit when it analyzed its photocopier manufacturing compared to Fuji-Xerox, an affiliate Xerox's Logistics and distribution unit benchmarked with L.L. Bean in the way it handled its materials handling and warehouse operations. This is a very famous study that became part of the first book on Benchmarking by Robert C. Camp. (Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance). This book was not published until 1989, but in the meantime benchmarking was becoming indoctrinated in the Xerox system. Bear in mind that most people did not know about benchmarking at this time.

So how do we have a library conducting a benchmarking study in 1985. The librarian who did this study originally worked in competitive intelligence in industry. When she was hired as the planning officer of this public library,she realized that one way they could solve their problems was to find out what other libraries did. They conducted this study on the public services department and it involved 4 other libraries. She said at the time, they did not even realize they were benchmarking. Now we all need to remember that if this librarian was doing this study in 1985, library benchmarking should not be a difficult concept.

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Page 6

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Then in 1987, President Ronald Reagan signed the Malcolm Baldridge Quality Award.

In 1993, Holly Muir, a young reference librarian, lost her job when her employing corporation downsized. She decided to start her own business, identified a need, and put her ideas to work by founding Library Benchmarking International. With business plan in hand, she wrote 5 books to guide librarians through the benchmarking process, started a newsletter for corporate librarians and other interested in improving their operations, and began conducting workshops.

In 1996, SLA published "COMPETENCIES FOR SPECIAL LIBRARIANS IN THE 21st CENTURY.   Three of the 11 professional competencies deal with knowledge and skills that include benchmarking:

1.7 Uses appropriate business and management approaches to communicate the importance of information services (conducts benchmarking studies)

1.9 Evaluates the outcome of information use and conducts research related to the solution of information management problems. (seeks opportunities for improvement and strives to be "best in class" on key services)

1.11 Is an effective member of the senior management team and a consultant to the organization on information issues (participates in benchmarking and re-engineering teams).

Personal competencies include item 2.1 Is committed to service excellence (seeks out performance feedback and uses it for continuous improvement)..

Page 8

Benchmarking: A Definition

Benchmarking is a Total Quality tool used to measure and compare your library's work processes with those in other libraries. The goal of benchmarking is to increase your library's performance by adopting the best practices of your library benchmarking partners. Since best library practices are always evolving, benchmarking should be applied at least annually.
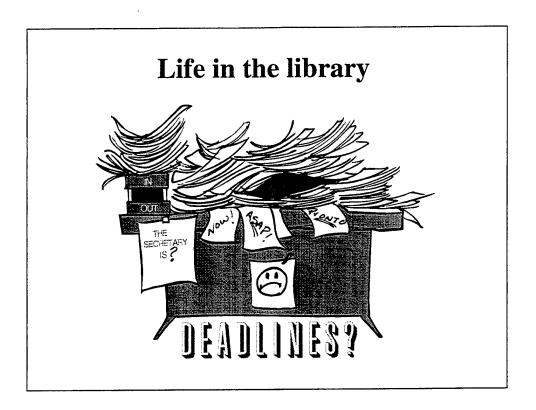
Holly J. Muir, *Library Benchmarking Explained*

So before we begin, lets define benchmarking
What are the main points here? First benchmarking comes out of total quality. One of the purposes of total quality is to make your service or product better meet the needs of your customers. Keep in mind that this not only includes library customers
So you want to improve your library's performance to meet the needs of these 3 groups. And how are you going to do that? By comparing the library to other libraries and finding out who is doing better than your library. Then identify the library procedures they use to outperform you. ie: their best practices, and adopt those procedures to your library.
And benchmarking should be applied at least annually to monitor your progress towards improvement. Benchmarking is a method which should be used on a continual basis as best practices are always evolving.

Page 9

Life in the library

As a librarian, we all have daily pressures to deal with. Each of us can probably identify with this picture. If ao, while you may think that benchmarking sounds like a good idea, you may wonder how you can make it happen in a time crunch. You may be asking yourself questions like "Why exactly should I take the time out to do this?" " What will I not get done if I start a benchmarking project? Will it pay any dividends?

Well, here are some reasons to apply the benchmarking method to your library.

Benchmarking Benefits

▶ Improves your library's performance

▶ Gains/Improves upper management support

▶ Builds professional relationships

▶ Meets strategic goals

▶ Proves your library's value

11

Let's address this question to find out what benchmarking can do for the library and library staff?

First, it can help you improve your library to better meet the needs of your customers and to make it operate more efficiently and effectively. By identifying best practices you can maximize your current resources. It also can be used to explore a new service or product that a library may want to adopt.

Second, it can be used to help you gain or improve the support of upper management. The thinking behind this is that benchmarking makes you look more proactive, demonstrates that you can operate like a business, shows that the library is solving its own problems with the good of the organization in mind. It makes the library look more like a team player which may protect its budget in the long term or even gain increased resources..

Third, it helps build relationships within the organization and profession. And these types of relationships can be very helpful after the benchmarking study is completed.

Fourth, benchmarking can support corporate, organization or library goals. If the company wants to cut costs, the library can look for ways to help the company or even cut library costs. A benchmarking study can help showcase the library process that is selected for benchmarking or can show why other processes are not selected.

Last, benchmarking can help show how valuable library resources and staff are to the company..

Page 11

Strategy for Success

- ▶ Develop a Plan
- ▶ Select a Team
- ▶ Select & Follow a Model
- ▶ Gain Management Support
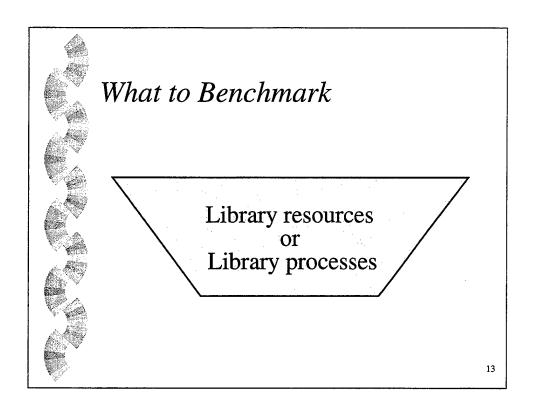- ▶ Implement Improvements

12

First you need to sit down and prepare a plan that will guide you through the steps you need to take. The plan will include the purpose or why you want to benchmark; how you will go about doing the benchmarking study including training, selecting the team & model, gaining mgt support and approal, etc.

Secondly, you need to select a team to carry out the study. You'll want to get volunteers from the staff that are interested and committed to the purpose and process. Someone that works with the selected process should be on the team because they will be instrumental in making needed changes.

Third, you need to study benchmarking models and select one that is useful to you. If your organization is involved in benchmarking, they may want you to use a specific model they've chosen.

Fourth, you must get the support of upper management. You need to know the level of support mgt is willing to provide and how they feel about staffing levels and workflow during the benchmarking project. Are there funds available for travel, hiring temporary help, etc.

Last, you need to have a plan for actually implementing improvements after you have conducted the study and analyzed the data.

What to Benchmark
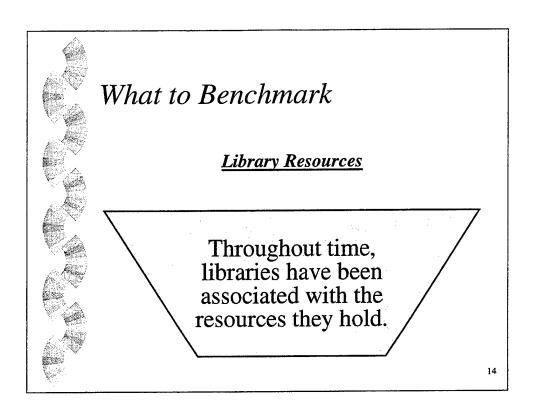
Library resources
or
Library processes

13

When you do a benchmarking study, you have to decide what you you are going to measure, or count, in the library. Then you measure those things and then use them for comparisons against other libraries.
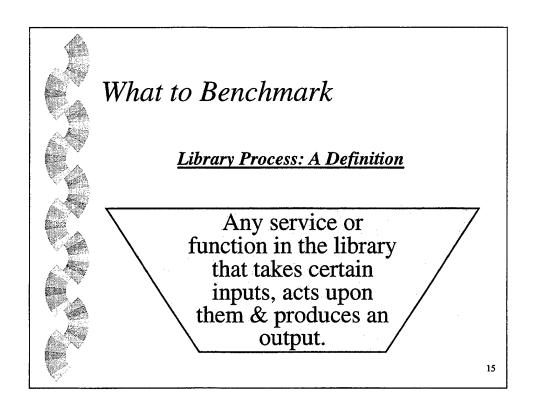
When many libraries begin a study they try to do something that is quick and dirty. It is very common for libraries resort to benchmarking the number of resources in their library (such as number of books and number of journals) and the number of times those resources are used. These numbers are then compared with those of other libraries.

However, the other way to benchmark is by comparing the work processes in your library. We are going to discuss in a minute what exactly a library process is.

First, we're going to look at why many librarians have a tendency to benchmark library resources.

What to Benchmark

Library Resources

Throughout time, libraries have been associated with the resources they hold.

14

Ever since some of the first private libraries of Mesopotamia in 4000 B.C., libraries have been associated with the resources that they hold. Whether they held clay tablets as in Mesopotamia, or rolls of papyrus like in Ancient Egypt or Rome, or books as in the Medieval monasteries. All through history, collections of knowledge were possessed by the wealthy and the church. Only in very recent times has the general populace had access to libraries and information. Even then, libraries have been judged on what they owned. This is changing to a great degree because of the technology revolution. Now even small libraries can have access to information in the larger libraries.

What to Benchmark

Library Process: A Definition

Any service or function in the library that takes certain inputs, acts upon them & produces an output.

15

However, in benchmarking we aren't concerned with resources or what is owned. Instead, we're interested in library work processes.

What do we mean by a work process? A work process is any function or procedure in your library. It takes inputs such as money, a librarian's skills or a request and turns it into an output such as a book, online search results or answered questions. A work process transforms library inputs to library outputs. Most of your library services and procedures are work processes.

What should you benchmark?

Library Outputs	vs.	Work processes
▶ Number of books		▶ Interlibrary loan
▶ Number of journals		▶ Document delivery
▶ Number of books circulated		▶ Online searching services
▶ Quantity of materials bought		▶ Acquisitions
▶ Number of items checked out		▶ Circulation

16

In determining what to benchmark, we have to look at some of the outputs that have been measured in the past. Libraries published what they owned, what they purchased, what they circulated, how many items where checked out, how many people used the library, etc.

But a work process is different. It is a series of inter-related activities. Let's break a library operation into 3 distinct parts - public services, technical services, and management or administration. Within each part are many functions, and within the functional areas are separate processes.

Library Processes

Examples

- Reference Service
- Online Searching Service
- Interlibrary Loan
- Journal Routing Service
- Circulation Procedures
- Shelving/ Reshelving Procedures
- Collection Development

17

As you can see there are many work processes in the library. Here are just a few processes. Lets put them in one of the three basic library operational areas and see how many more functional areas and processes we can identify..
There are lots of processes that we could benchmark, but not all benchmarking efforts would be practical nor result in improvements worth the effort of conducting the study. At this point we need to have some criteria to help us decide on what to benchmark.

Important to customers, upper management & staff
-Select a process that can be easily improved with benchmarking.
- process with a long turn-around time
- a process important to your most influential customers
• **Emphasizes librarian skills** - reinforce the need for skilled librarian
- process where customers recognize the expertise of your librarian (ref, online searching, etc.)
- "value-added" functions (competitive analysis or current awareness)
- yield "products" that hit your customers regularly
• **Faces competition -**
- information brokers or other types of libraries
- identify the services your customers access externally
• **Not in transition -**
- replacing the card catalog with an online one, don't do cataloging work processes;
- produces a complicated benchmarking analysis
- strive for simplicity

If you cannot identify problems with your work processes, benchmark those areas important to your customers

Benchmarking Process Pros

- Benchmark libraries in different environments
- Tells you how to improve
- Explains why you need librarians
- Uses business approach

19

Now why would you want to benchmark a library work process instead of the number or type of library resources?

Well, first of all benchmarking work processes allows you to benchmark with libraries in different environments. While the resources may be different in libraries, the processes used purchase and process them may be the same. For years libraries have claimed to be unique because their collections were different. Libraries share more similarities via processes than differences.

Second, benchmarking a library process identifies the *how* to improve. Let['s look at journals. Benchmarking the journal collections in two libraries can show how many each have, how often their used, what titles each library has, etc. But that won't tell you how to improve collection development or routing services. Your library partner could have more journals, but that doesn't mean they have a better journal routing procedure.

Third, benchmarking explains the need for the library staff. The library is not just a collection of materials, it is a service run by living human beings. Benchmarking library work processes explains to upper management and to customers what those human beings in the library do, how well they are doing it, and how they can do it better with beneficial results..

And last, benchmarking is a valid tool used by leading corporations with measurable results. Libraries can be operated more like a business, and the willingness of librarians and staff to employ benchmarking to measure and improve their products and services will usually be met with support.

Pitfalls to Avoid in a Study

1. Not setting aside enough time
2. Meaningless data
3. Biting off more than you can chew
4. Believing you don't need to improve

As with any project, a process benchmarking study is prone to certain problems. First and foremost, benchmarking takes quite a bit of time. You have to be prepared to take enough time out of your daily routine to ensure the project 's success.

If you're not careful, you can end up with meaningless data which means your whole study was for naught.

If you are not an experienced benchmarker, you can easily bite off more than you can chew. Benchmarking looks easy but making improvements can be very difficult if you try to tackle too much at once.

The last one is pretty self evident. If you go into benchmarking with the idea that you are so superior and so good that you are never going to have to make improvements, you may end up being severely disappointed.

So lets deal with each of these pitfalls in turn.

The Benchmarking Process

Step 1 - Conduct a preliminary analysis

Step 2 - Develop process measures

Step 3 - Identify partners

Step 4 - Collect and analyze data

Step 5 - Present results to management

21

What is the purpose of a benchmarking model?
A benchmarking model explains the basic steps to follow in performing a benchmarking study. A lot of different organizations use different models to lead their employees through the benchmarking process. The most noticeable difference between models is the number of steps that it has. For example,

      Xerox = 10 steps;IBM Rochester = 5 phase model with 15 steps
      Weyerhauser = 33 step model

Let's look at what a librarian needs to know. First, every model you see, whether its the one we discuss here, or any other one, will take you through a similar process. All benchmarking models will help you successfully go through a process and achieve results. Think about how you might describe your morning routine/ CLASS DISCUSSION.
Second, a benchmarking model does nothing more than to tell you what you need to do in the benchmarking process. Third, the model that I am going to introduce right now will explain specifically what a library staff has to do in a benchmarking study.
We are going to use a 5-step model to library benchmarking. Each step follows one of LBI's notebooks. Each notebook covers one of the5 steps and then provides a case study explaining how a library applies that step. These steps include the following: (**Walk through the model**) Let's look at each step in turn. Are there any questions so far.

1. Conduct a Preliminary Analysis

‣ Determine the needs of 3 groups
- Upper management
- Library clients
- Library staff

22

Notebooks #1 - What do we do in this first step? Our goal is to determine the needs of 3 groups - upper management, library users and library staff. What do these three groups associate with good library services and resources. What may be important to one group may not be important to the others. Your challenge is find something that is important to all 3 groups.

Your first notebook covers this area. Some of the factors that upper management feel are important to the library are found on page 5 of this notebook. (money, time, value added information, legal, accuracy, timeliness, helpfulness, consistency, etc. **(read some of these off)**

To identify what customers want, you often have to conduct library surveys or focus groups . Surveys are more precise and quicker. Customer concerns might include much of the same issues important to upper management - friendliness, consistency, accuracy, quality and quantity of information, timeliness.

To meet the needs of library staff, it is obviously not necessary to go through and develop a questionnaire or focus group. Here it is advisable to conduct a brainstorming session to identify the areas that are important to the staff working in the library. Staff is probably interested in working conditions, having the time to give good service, good distribution of workload, positive feedback, etc.

2. Develop Process Measures

The Basics
- Determine What to Benchmark
- Understand Library Processes
- Develop Process Measures

Notebook #2 -This is a complicated step. We're talked about what to benchmark - a process which needs improvement. What are some of the re-occurring problem areas found in libraries. Public Services? Technical Services?

Next we need to understand the process as it is currently practiced. That is not as easy as it seems. Most processes have evolved and new staff is trained by old staff and the reasons why various steps are done gets lost in the fog of time. **Tell about the AF study. Explain how to do a Work Process Chart.** You must understand what and why something is done in your library before you can discuss it with partner libraries. Creating a flowchart or process map can help you understand the library process.

And last you need to develop measures, another 5-step process, for the process you want to benchmark. So what is a metric? A metric describes the quantitative data that you are going to collect on your work process Benchmarking requires a combination of quantitative and qualitative data. Metrics help you collect quantitative data. Quantitative information allows you to identify a partner who performs a process better than you. The qualitative data comes from interviewing your best practiced partner. You develop a number of metrics to measure different parts of your work process. . Having these measures, or metrics, will ensure that all members of your library staff collect data the same way and that all of your partner libraries in the benchmarking study collect data the same way.

These metrics should monitor aspects of your library process that are important to one of three groups: library staff, library clients and upper management. Page 23

Use Process Steps for Flowchart

▶ A Flowchart is a graphic representation (a picture) of a work process. It breaks the process down into steps. It shows how the process converts inputs to outputs.

24

- can be a very tedious activity
- also can be an eye-opening experience
- forces you and your staff to analyze what you do on a daily basis
- A flowchart takes you through every step in a process.

Why Flowcharting Is Important

▶ Think through the process

▶ Build consensus

▶ Identify problem areas

▶ Compare with partner's process
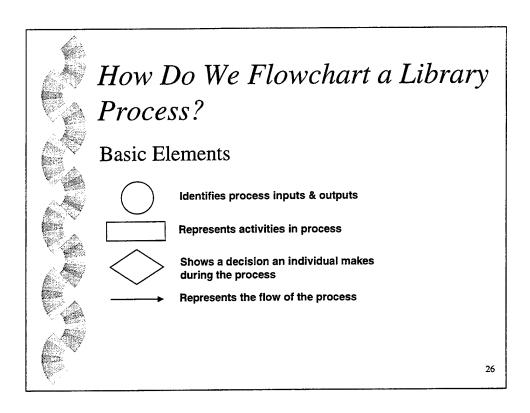
▶ Use to develop benchmarking measures

25

Helps the library staff (as a group) understand and focus on the process the same way.

- Helps build consensus. Work through the process as a group so that everyone, esp. the person responsible for the process, is involved - emphasizes teamwork.

- identify areas of inefficiency and redundancy. also areas to be improved

- tells benchmarking partners how we do what we do.

"A picture is worth a thousand words"

If you identifies a partner library with a better practice, it will be easier for you to understand what they do if you can look at a flowchart. Likewise, if you expect all of your partners to have a flowchart, you had better have one to. So when you are identified as having a best practice, you can help them as you expect they would be able to help you.

- And as we will see later today. This flowchart will be used to help us develop some measures for benchmarking and making comparisons with our partners.

How Do We Flowchart a Library Process?

Basic Elements

○   **Identifies process inputs & outputs**

▭   **Represents activities in process**

◇   **Shows a decision an individual makes during the process**

⟶   **Represents the flow of the process**

26

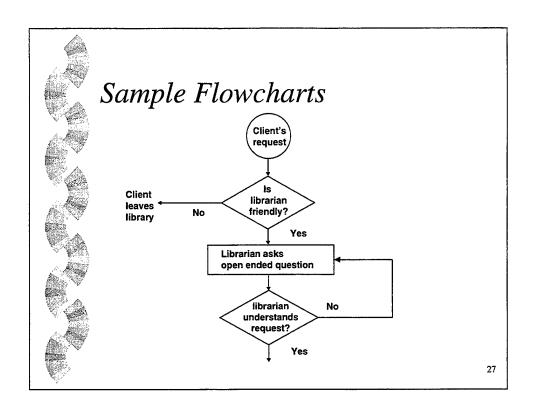You need to use 4 different symbols to make a flowchart.

Circles: Identify inputs or outputs to the process.

Rectangles: Represent different activities in the process.

Diamonds: Represent different decisions that individuals make during
             the process.

Arrows: Show the flow of the work process.

Sample Flowcharts

(Start to talk them through the reference process.)

(Then get 2 volunteers from audience and start "reference play." Flowchart as I go.)

A Benchmarking Metric

▶ Elements of a definition

- Measures part of your library process
- Describes the data to collect
- Measures what's important to one of 3 groups:
  - Library staff
  - Library clients
  - Upper

28

So what is a metric?

Benchmarking requires a combination of quantitative and qualitative data. Metrics help you collect quantitative data. Quantitative information allows you to identify a partner who performs a process better than you. The qualitative data comes from interviewing your best practiced partner. But we will not be covering this area today

Today we are jus going to explain the development of metrics. You develop a number of metrics to measure different parts of your work process.

A metric describes the quantitative data that you are going to collect on your work process.

Having these measures, or metrics, will ensure that all members of your library staff collect data the same way and that all of your partner libraries in the benchmarking study collect data the same way.

These metrics should monitor aspects of your library process that are important to one of three groups: library staff, library clients and upper management.

So now that we know what a benchmarking metric is, let's explain how we develop them.

5 Steps to Metric Development

Step 1 - Identify overall process measure

Step 2 - Evaluate existing performance
measures

Step 3 - Create diagnostic measures

Step 4 - Determine comparative library
measures

Step 5 - Select 5-7 measures for data
collection

29

Metrics = process measures we are going to use to measure our library process. Collect data on our library process using these measures, then we are going to have our partners collect data on their process using these measuresxchange data with our partners to determine who has the better practice (library process).

Lets give an overview of what we are going to cover here. There are 5 steps to metric development.

(read through the 5 steps)

Just from looking at these 5 steps, where do traditional library output measures fit in? (under what step do they fall)

Sample Metrics

- Number of customer reports on friendly service
  - Total number of reference requests
- Number of open ended questions asked
  - Reference request
- Number of times question is verified
  - Reference request

30

Sample Metrics

◗ Number of unanswered questions

  • Total number of reference requests

◗ Number of sources consulted

  • Reference request

◗ Number of questions requiring outside resources

  • Total number of reference requests

31

3. Identify Partners

▶ Identify libraries that excel in the process
- Internal sources
- Libraries in excellent organizations
- Libraries employing library "experts"
- Dissimilar partners (generic benchmarking)

32

Notebook #3 - In step 3 we are going to identify other libraries that we want as benchmarking partners. And of course, we are only going to want to benchmark with libraries that we think will have good practices. So we have to put our information skills to work to identify which partners we want to ask to participate in our study. Keep in mind that you are benchmarking a process and you want to identify libraries that excel in that process. There are several ways to identify such libraries.
- Internal sources: head of TQM dept., individuals that come to your library
- Libraries in excellent organizations
  - Libraries in best in class organizations: stat ratios used by your organization's industrys (Malcolm Baldridge National Quality Award, Deming prize, President's Award for Quality & Productivity type of partners - everyone wants to BM them, their library may not be best-in-class (award to whole organization- weak depts and strong ones)
  - Libraries and librarians who have won awards (by library type or for a particular area like reference services)
- Libraries employing experts: people who give seminars (conference programs, write papers (conference proceedings and library literature)
- Other depts in your organization : Billing /purchasing dept. for acquisitions processing
- Alternative partners: Suppliers & Vendors, Other types of libraries, Fee based services, generic benchmarking)ie: customer service organizations

Page 32

4. Collect & Analyze Data

▶ Exchange quantitative data with partners

▶ Identify who has the best data

▶ Interview your "best" partner

▶ Calculate performance gap

▶ Develop action plan

33

After you have identified your partners, you are now ready to start collecting their data and analyzing it. Share your measures with your partners. Have them collect their quantitative data.

5. Present Results to Management

▶ Executive summary

▶ Background information

▶ Measures

▶ Results

▶ Recommendations & Conclusions

34

Now that you have conducted a benchmarking study of your process and come up with a better practice, its time to get buy in for your new practice and recognition for your hard work. This is where presentation counts. How to prepare a good presentation is covered in **Notebook #5**.

Executive summary: 1-3 pages, concise, based summary around key elements esp. those that require management's buy-in for your results and study. Other areas that should receive coverage:

Background info: preliminary analysis results, partner selection and identification

Metrics: why you chose the metrics you did and how you developed them

Results: charts of quantitative data from all libraries, highlights from interview with best partner and performance gap results

Recommendations & Conclusions: summarize improved work process and highlight key points of your action plan to improve your process; list benefits of improving the process

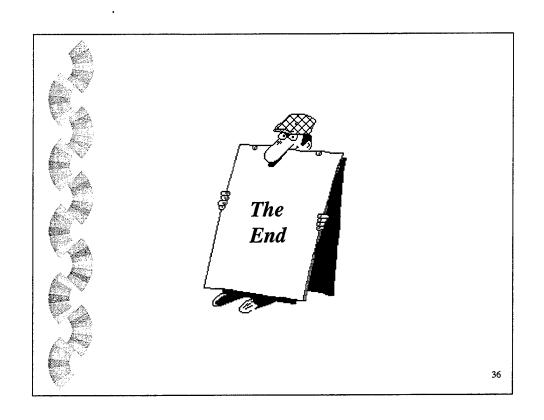**Notebook #5** has a series of slides for an example library benchmarking presentation. This can be used as a guide when you do your own presentation to management.

What You Have Learned

- What library benchmarking is
- Benefits of benchmarking in libraries
- What to benchmark and why (processes)
- Pitfalls to avoid in conducting a benchmarking study
- How to Use the 5-step benchmarking model

35

The End

Military Librarians Workshop, 18-20 Nov 97, Dayton Marriott Hotel, Dayton, Ohio

Retirement in the 21st Century

© November 1997 Dave Darkow

Quail Hollow Services
PO Box 751481,
Centerville, OH 45475
quailhollow@worldnet.att.net
Military Librarians Workshop '97 program.

Question and Answer: DD is Dave Darkow with MLW notes

* What is the truth about Social Security's Future?

DD: Many critics and supporters of the Social Security Program say something needs to be done to prevent the failure of the Social Security system due to the explosion of Baby Boomer retirements in the 21st Century. Others question the basis or fundamentals of funding the retirement system. A series of options are being considered to solve "the problem." How serious is the problem? A closer look at the problems should help answer many of the questions and concerns. We will explore these issues from a realistic approach to help ease your concerns.

MLW notes: This is a very short-term concern with a small window of being "in the red" for the Social Security system. As baby boomers move through and die the system will be very soon again solidly in the black.

* Will Retirement Systems as we know them today be changing?

DD: The past approach to retirement was heavily employer-oriented with different types of "Defined Benefit" plans. More employers are now leaning towards "Defined Contribution" systems. We will discuss the impact and concerns over this new trend in retirement options on the individual employee.

MLW notes: Employees have more options and more decisions, and thus more responsibility, for their retirement planning.

* How will various Federal Benefits Change in the future?

DD: Many congresspersons and critics of the federal retirement systems are demanding changes. Let us explore these proposed changes; the fundamental reasons for the concerns; and the merits of these proposed changes. How will these changes impact on the individual employee as well as the general public?

* How can You use Your Benefits today?

DD: Many employees seem to overlook the way they can utilize their employer-provided benefits today instead of just thinking about "retirement." Let's explore the current disability, survivor, investment options, and educational benefits now available.

MLW notes: Discussion of federally-paid education for current employees, value of accrued sick leave in the future for various classes of employees: general idea is to get it while the getting is good, use it while the using is good.

* How can You prepare for the Future and Future Changes?

DD: Employees who take an active interest in their benefits and their financial futures will be in the best situation if some of the critics are correct and in an even better position if the critics are wrong. We will review the basic protection, prevention, and aggressisve steps to consider for you to be better prepared.

MLW notes: Save now all possible funds, both pre-tax and after-tax.

Military Librarians Workshop '97
41ª Annual Military Librarians Workshop
18-20 November 1997
Marriott Hotel
Dayton, Ohio

Evaluation Form

To assist in the planning of future workshops, please complete the following questionnaire and turn it in at the MLW Information/Registration Desk. **Thank you.**

1. Which of the following best describes your organizational affiliation?

   CHECK ONE:

   ____ Army   ____ Air Force
   ____ Navy   ____ Canadian
   ____ DoD   ____ Other (Please Specify) _____

2. Which categories best describe your profession or current position?

   Type of Library   **Position**
   ____ Base/Public   ____ Public Services   ____ Computer/Info. Systems
   ____ Laboratory/Technical ____ Tech Services   ____ Librarian [Performing
   ____ Academic   ____ Management   multiple functions]
   ____ Medical   ____ Information Specialist
   Other (Please Specify) _____

3. Please rate the quality of the following items.

	Excellent	Good	Fair	Poor	NA
Speakers	O	O	O	O	O
Meeting Room	O	O	O	O	O
Hotel Accommodations	O	O	O	O	O
Length of Breaks	O	O	O	O	O
Breakfasts/Lunches/Breaks	O	O	O	O	O
Lexis-Nexis Tour	O	O	O	O	O
Library Tours	O	O	O	O	O
Museum Event	O	O	O	O	O
Other: (Please Specify)					
_____	O	O	O	O	O
_____	O	O	O	O	O

Comments: _____
_____
_____

6. What is your overall rating of the Workshop?

_____ Excellent _____ Good _____ Fair _____ Poor

4. What aspect(s) of the Workshop would you most recommend, and why?

_____

_____

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7. We would appreciate any other comments/suggestions you have concerning this year's Workshop. What aspect(s) of the Workshop could be improved, and how?

_____

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8. Please help us, help you. Indicate topics you would like to see discussed at future workshops:

_____

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9. I learned about this conference via (please circle) : **e-mail**
SLA Website   DTIC Digest   Military Librarian's Newsletter
Other_____

I am on the following Listservs (please circle): **MLD   Army   Navy   Air Force**
DTIC   NASA   Other_____

367
**Thank you for attending the 41st Military Librarians Workshop
and for taking the time to complete this survey.**