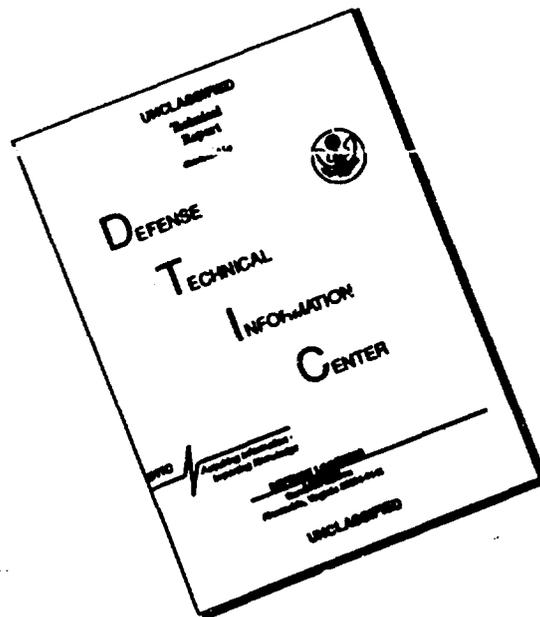


UNCLASSIFIED

AD NUMBER
AD824675
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; OCT 1958. Other requests shall be referred to Army Artillery and Missile Center, Fort Sill, OK.
AUTHORITY
USAAMS ltr, 8 May 1968

THIS PAGE IS UNCLASSIFIED

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

REPRODUCTION QUALITY NOTICE

This document is the best quality available. The copy furnished to DTIC contained pages that may have the following quality problems:

- Pages smaller or larger than normal.
- Pages with background color or light colored printing.
- Pages with small type or poor printing; and or
- Pages with continuous tone material or color photographs.

Due to various output media available these conditions may or may not cause poor legibility in the microfiche or hardcopy output you receive.

If this block is checked, the copy furnished to DTIC contained pages with color printing, that when reproduced in Black and White, may change detail of the original copy.

AD824675

STATEMENT #2 UNCLASSIFIED

This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of U.S. Army Institute for Security Center, Fort Sill, Oklahoma

D D C
JAN 11 1968

PROCEEDINGS
of the
SECOND MILITARY LIBRARIANS' WORKSHOP 21

2 - 4 October 1958.

~~STATEMENT IS UNCLASSIFIED~~

This document is subject to special export controls and each
transmittal to foreign governments or foreign nationals may be
made only with prior approval of _____

U. S. ARMY ARTILLERY AND MISSILE CENTER
Fort Sill, Oklahoma

TABLE OF CONTENTS:

Foreword	
Welcoming Address by Maj. Gen. Thomas E. de Shazo, Commandant, U. S. Army Artillery and Missile Center, Fort Sill, Oklahoma.	1
> List of Conferees	2
List of Organizations Represented	8
Program	11
Program Outlines	15
Program Summaries	38
Summary of the First Military Librarians' Workshop	39
Introduction to the Problems	42
Union List of Military Periodicals	44
Cooperative Indexing of Military Periodicals	45
Cataloging Problems	48
Corporate Authors	50
Serial Publications	56
Training of Professional Personnel	58
Utilization of Sub-Professional Personnel	62
School Libraries	65
Size and Services of a School Library	66
Book Selection in a School Library	93
Exchange of Military Cataloging Information	95
Book Selection in a Technical Library	98

Inventory of Federal Scientific Information Activities	103
Translation Problems	114
Subject Headings	115
Microfilm and Microcards	116
Summary of Proceedings, 4 October 1958	117
Directory of Military Libraries - A Progress Report	129
Circulation Procedures	130
Summary and Recommendations	133

FOREWORD

The Second Military Librarians' Workshop met at Fort Sill, Oklahoma, October 2-4, 1958.

Compiled herein are various papers representing the activities of the Workshop. Two major groups of papers include, first, the working outlines, and second, the summaries of the presentations and discussions. It should be remembered that discussion does not always lead to accepted conclusion. Limitation of time in some instances prevented an adequate consideration of the problem involved. In some cases, discussions will be continued at a later meeting.

It is hoped that publication of these proceedings will lead to even further consideration of the problems which we Military Librarians must solve. The interchange of ideas will inevitably lead to better understanding, more intelligent attacks on the problems, and eventually to successful solutions.

Note: The presentation by Mr. Hodgson on "Size and Service of a Research Library as Related to the Parent Organization" will be published by the Quartermaster Food and Container Institute.

O. WILLARD HOLLOWAY
Director
U. S. Army Artillery and Missile School
Fort Sill, Oklahoma

WELCOMING ADDRESS

Major General T. E. de Shazo

U. S. Army Artillery and Missile School
- Fort Sill, Oklahoma

It is a great pleasure for me to welcome you to Fort Sill. It is a particular pleasure for me to know that the top Military Librarians in this country and in Canada are coordinating their efforts in this Workshop. We sincerely hope that your stay will be both pleasurable and profitable. I am sure that Mr. Holloway has made every effort to assure you of the proper facilities for your meeting.

We are particularly proud of our library and hope that you will have the time to peruse its collections. We have a rather unique situation here in that the library is over 43 years old and we have had only two directors of the library in that entire period; Mr. Morris Scott came here in 1915 and proceeded to build up one of the finest military libraries in the country. He stayed until the fall of 1954, when we selected Mr. Holloway to succeed him.

We are truly cognizant of the important part which a library plays in the progress of an educational institution. I am also quite aware of the vast problems which face librarians in trying to handle the great mass of material which is now being produced. I am sure that in your discussions you will arrive at some recommendations and ideas which will help in solving our many technical problems.

While you are in this part of the country I hope you will have time to see some of the interesting historic sights which exist. Fort Sill is one of the older military posts and played a very important part in the settlement of the west. Our Museum has an outstanding collection of historical relics dating back to the early 19th century. I understand that you are going to have an opportunity tomorrow afternoon to see some of these things.

I regret that I will be unable to take active part in your sessions, but I am sure that Mr. Holloway will report fully on all of your activities.

In closing let me say again that it is our privilege to be your host on this occasion. I cordially invite all of you to return to Fort Sill again at any time you can.

CONFEREES
SECOND MILITARY LIBRARIANS' WORKSHOP
2-4 October 1958
Fort Sill, Oklahoma

Mr. Alan J. Blanchard
Librarian
Army War College
Carlisle Barracks, Pa.

Miss Marion E. Bonniwell
Librarian
Bureau of Ships
U.S. Dept of the Navy
Washington 25, D.C.

Miss E. Lou Bowman
Air Res and Dev Cmd
Andrews Air Force Base
Washington, D.C.

Mrs. Mildred H. Brode
Chief Librarian
David Taylor Model Basin
Navy Department
Washington 7, D.C.

Miss Florence K. Brunner
Asst Tech Lib
White Sands Missile Range, N.M.

Mr. Paul J. Burnette
Director, Army Library
Department of the Army
Washington, D.C.

Mrs. Cleo S. Cason
Chief, Tech Lib
Army Rocket & GM Agency
Redstone Arsenal, Ala.

Mr. James G. Chandler
Deputy CIA Librarian
Central Intelligence Agency
Washington, D. C.

Mrs. Charlotte F. Chesnut
Chief, Tech Doc Lib
Army Ballistic Missile Agency
Redstone Arsenal, Alabama

Lt. Col. Lawson Clary, Jr.
Deputy Director, Air Univ Lib
Maxwell Air Force Base, Ala.

Mr. Michael A. Costello
Librarian
Picatinny Arsenal
Dover, New Jersey

Mr. Louis C. Covell
Deputy Chief, Doc Div
Central Intelligence Agency
Washington, D.C.

Miss Marion Craig
Naval Proving Ground
Dalgren, Va.

Mrs. Bessie Daughtry
Librarian
Sheppard Air Force Base, Tex

Capt. Edwin A. Dayton
Library Officer
US Army Cmd and Gen Staff Ccl
Fort Leavenworth, Kansas

Mr. Ernest DeWald
Chief Librarian
Army Map Service
Washington, D.C.

Mrs. Frances R. Dickey
Reference Librarian
Army Rocket & GM Agency
Redstone Arsenal, Alabama

Mrs. Catherine W. Dundas
Library Officer
Patrick AF Base, Florida

Lt. Col. Claudius M. Easley
Library Officer
Army War College Library
Carlisle Barracks, Pa.

Mr. David K. Easton
Library
QM Food & Container Institute
1819 W. Pershing Road
Chicago 9, Ill.

Lt. Col. George V. Fagan
Director
USAF Academy Library
Denver, Colorado

Miss Helen E. Fry
Staff Librarian
Fourth US Army
Fort Sam Houston, Texas

Mrs. Lillian M. Gerecke
USA Security Agency Tra Cen & Sch
Fort Devens, Mass

Mr. Ishmail Haznedari
US Naval Air Rocket Test Station
Dover, New Jersey

Mr. John Hetrick
AF Office of Scientific Research
Air Res and Dev Cmd
U. S. Air Force
Washington 25, D.C.

Mr. James Hodgson
Chief, Library Branch
QM Food & Container Inst.
1819 W. Pershing Road
Chicago 9, Ill.

Miss Helen J. Hopewell
Reference Assistant
Air University Library
Maxwell Air Force Base, Ala.

Miss Fern L. Hunter
Librarian
The Ordnance Board
Aberdeen Proving Ground, Md.

Mrs. Esther M. Johnson
Librarian
Photo Interpretation Center
US Army Intelligence Center
Fort Holabird,
Baltimore 19, Maryland

Miss Mary Anne Kernan
Librarian
Air University Library
Maxwell Air Force Base, Ala.

Mr. Charles R. Knapp
Asst. Chief, Library Branch
Office of The Chief of Engineers
Washington 25, D.C.

Mr. Donald Koslow
Head Technical Processes
Naval War College Library
Newport, Rhode Island

Miss Virginia Z. LaGrave
Librarian
Tinker Air Force Base
Oklahoma City, Oklahoma

Miss Eva Liberman
Chief, Library Division
US Naval Ordnance Laboratory
White Oak, Silver Spring, Md.

Miss Ruth A. Longhenry
Chief, Services Branch
Army War College Library
Carlisle Barracks, Pa.

Mr. George R. Lockett
Director of Library
US Naval Postgraduate School
Monterey, California

Mr. John B. McClurkin
Tech Asst to the Director
Air University Library
Maxwell Air Force Base, Ala.

Mr. Lachlan F. MacRae
Director of Scientific Info Serv
Defense Research Board
Ottawa, Ontario, Canada

Mr. Robert L. Martin
Chief, Technical Library
QM Research & Development Command
Natick, Mass.

Miss Mary Mathis
Librarian
US Army Artillery and Missile Center
Fort Sill, Oklahoma

Mrs. Elizabeth Mennie
Librarian
Army Transportation School
Fort Eustis, Virginia

Miss Nevada M. Montgomery
Librarian
USN Supply Res & Dev Facility
Naval Supply Depot
Bayonne, New Jersey

Mr. Frank T. Nicoletti
Chief, Documents Library
Army Map Service
Washington, D.C.

Miss Kathleen P. Nolan
Chief, Classified Doc Sec
AF Special Weapons Center
Kirtland Air Force Base, N.M.

Miss Florine A. Oltma
Chief, Bibliographic Asst Br
Air University Library
Maxwell Air Force Base, Ala

Miss V. Estelle Phillips
Editor, Air Univ Periodical Index
Air University Library
Maxwell Air Force Base, Ala.

Miss Anna E. Pierce
Cataloger
US Military Academy
West Point, New York

Mr. Wm. H. Plant
Bureau of Aeronautics Library
U.S. Dept of the Navy
Washington, D.C.

Mrs. Catherine R. Quinn, Librarian
AF Office of Scientific Research
Air Res & Dev Command
U. S. Air Force
Washington 25, D.C.

Mr. Frank E. Randle, Jr.
Librarian
Army Aviation School
Fort Rucker, Alabama

Miss Helen Ratermann
Librarian
Army Air Defense School
Fort Bliss, Texas

Mr. Herbert Rehbock
Chief, Cataloging Branch
Hqs, ASTIA
Arlington Hall Station
Arlington 12, Va.

Mrs. Lucille Ridings
Chief, Ref Unit, Tech Doc Lib
Army Ballistic Missile Agency
Redstone Arsenal, Alabama

Miss Lois Robertson
Asst Chief, Tech Doc Lib
Army Ballistic Missile Agency
Redstone Arsenal, Ala.

Mr. Staffan Rosenberg
Customer Relations
Hqs, ASTIA
Arlington Hall Station
Arlington 12, Va.

Mr. Elmer M. Schloeder
Army Library
Department of the Army
Washington, D.C.

Dr. Philip G. Seitner
Off of Scientific Info
National Science Foundation
Washington, D.C.

Mr. Robert Severance
Director
Air University Library
Maxwell Air Force Base, Ala.

Mrs. Beth A. Simpson
Stinson Library
Army Medical Service School
Brooke Army Medical Center
Fort Sam Houston, Texas

Mr. James J. Slattery
Librarian
Quartermaster School
Fort Lee, Virginia

Miss Margaret Smart
USAF Inst of Technology Library
Wright-Patterson Air Force Base, Ohio

1st Lt William K. Snead
Administrative Officer
US Army Air Defense School -
Fort Bliss, Texas

Miss Caroline Stanley
Library Advisor
Army Library Service
Department of the Army
Washington, D.C.

Mr. Charles H. Stewart
Librarian
Department of National Defence
Ottawa, Ontario, Canada

Miss Josephine E. Sullivan
Chief, Periodicals Unit
Army Library
Washington, D.C.

Capt. Norman E. Trask
Asst. Secretary for Administration
US Army Air Defense School
Fort Bliss, Texas

Mr. Howard B. Turner
Chief Bibliographer
National War College
Washington 25, D.C.

Miss Pearl Tuttle
Chief, Document Cataloging Branch
Air University Library
Maxwell Air Force Base, Ala.

Mr. J. Bernard Vinet
Chief Librarian
College Militaire Royale
de Saint-Jean, P. Quebec, Canada

Mrs. Katherine K. Weed
Head, Tech Lib Branch
Bureau of Ord Tech Lib
U.S. Dept of the Navy
Washington, D.C.

Mr. Egon A. Weiss
Librarian
U. S. Military Academy
West Point, New York

Mr. R. G. Weitz
Air Res & Dev Command
Inglewood, California

Miss Ruth Wesley
Librarian
U. S. Army Infantry School
Fort Benning, Georgia

Miss Clara J. Widger
Librarian
Ind College of the Armed Forces
Washington, D.C.

Miss Catherine L. Zealberg
Chief, Processing Branch
Army War College Library
Carlisle Barracks, Pa.

Miss Margaret B. Zenich
Chief, Technical Library
White Sands Missile Range, N.M.

U. S. ARMY ARTILLERY AND MISSILE SCHOOL

LIBRARY STAFF

Mr. C. Willard Holloway
Librarian

Mrs. Ann T. Simmonds
Secretary

Mrs. Margaret D. Kerns
Chief, Cataloger

Mrs. Sophia A. Hall
Asst' Chief, Cataloger

Mrs. Bernice L. Moore
Catalog Assistant

Mrs. Carolyn B. French
Clerk Typist

Miss Helon Hackett
Chief, Reference

Mrs. Eva B. Seydell
Asst Chief, Reference

Mrs. Mary Lee Wright
Library Assistant

Mrs. Marjorie M. Nelson
Library Assistant

M/Sgt. Floyd K. Schwartz
Chief, Supply

Mrs. Barbara M. Rennolds
Property and Supply Clerk

ORGANIZATIONS REPRESENTED

ARMY

Army War College, Carlisle Barracks, Pennsylvania

White Sands Missile Range, New Mexico

Army Library, U.S. Department of the Army, Washington, D.C.

Army Rocket and Guided Missile Agency, Redstone Arsenal, Alabama

Army Ballistic Missile Agency, Redstone Arsenal, Alabama

Picatinny Arsenal, Dover, New Jersey

Army Command and General Staff College, Ft. Leavenworth, Kansas

Army Map Service, Washington, D.C.

Staff Librarian, 4th U.S. Army, Ft. Sam Houston, Texas

USA Security Agency Training Center and School, Ft. Devens, Mass.

Ordnance Board, Aberdeen Proving Ground, Maryland

Photo Interpretation Center, USA Intelligence Center, Ft. Holabird, Md.

Library Branch, Office of the Chief of Engineers, U.S. Dept of the Army,
Washington, D.C.

Q.M. Research and Development Command, Natick, Mass.

Army Transportation School, Ft. Eustis, Virginia

U. S. Military Academy, West Point, New York

Army Aviation School, Fort Rucker, Alabama

Army Air Defense School, Fort Bliss, Texas

Army Medical Service School, Brooke Army Medical Center, Ft Sam Houston, Tex

Quartermaster School, Ft. Lee, Virginia

Army Library Service, US Department of the Army, Washington, D.C.

ARMY (Cont'd)

National War College, Washington, D. C.

Army Infantry School, Fort Benning, Georgia

US Army Artillery and Missile School, Fort Sill, Oklahoma

NAVY

Bureau of Ships, US Department of the Navy, Washington, D.C.

David Taylor Model Basin, Department of the Navy, Washington, D. C.

Naval Proving Ground, Dalgren, Virginia

US Naval Air Rocket Test Station, Dover, New Jersey

Naval War College, Newport, Rhode Island

Naval Ordnance Laboratory, White Oaks, Silver Spring, Maryland

US Naval Postgraduate School, Monterey, California

Naval Supply Depot, Bayonne, New Jersey

Bureau of Aeronautics, US Department of the Navy, Washington, D.C.

Bureau of Ordnance Technical Library, US Department of the Navy, Washington, D.C.

AIR FORCE

Air Research and Development Command, Andrews Air Force Base, Washington, D.C.

Air University, Maxwell Air Force Base, Alabama

Sheppard Air Force Base, Texas

Patrick Air Force Base, Florida

US Air Force Academy, Denver, Colorado

Tinker Air Force Base, Oklahoma

AIR FORCE (Cont'd)

Air Force Special Weapons Center, Kirtland Air Force Base, New Mexico

US Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio

MISCELLANEOUS

Central Intelligence Agency, Washington, D. C.

GM Food and Container Institute, 1819 Pershing Road, Chicago 9, Ill.

ASTIA, Arlington Hall Station, Arlington 12, Virginia

Office of Scientific Information, National Science Foundation, Washington, D.C.

Industrial College of the Armed Forces, Washington, D. C.

FOREIGN

Director of Scientific Information Service, Defence Research Board,
Ottawa, Ontario, Canada

Library, Department of National Defence, Ottawa, Ontario, Canada

College Militaire Royale, de Saint-Jean, P. Quebec, Canada

PROGRAM

SECOND MILITARY LIBRARIANS' WORKSHOP

U. S. Army Artillery and Missile School Library
Fort Sill, Oklahoma
2 - 4 October 1958

THURSDAY

- MORNING SESSION, Room 112, Snow Hall Moderator: O. Willard Holloway,
US Army Artillery and Missile
School Library
- 0900 Welcoming Address Major General T. E. de Szabo,
Commanding General, US Army
Artillery and Missile Center
- 0910 General Conference Information Moderator
- 0915 Summary of First Military
Librarians' Workshop Robert Severance, Air University
Library
- 1015 Coffee Break
- 1045 Introduction to the Problems George R. Luckett, Naval Post-
graduate School
- 1115 Problems of the First Workshop:
1. Union List of Military
Periodicals Charles H. Stewart, Department
of National Defence Library,
Canada
 2. Cooperative Indexing of
Military Periodicals. V. Estelle Phillips, Air Uni-
versity
- 1230 Lunch, Coffee Shop, Snow Hall
- Tour of U. S. Army Artillery and Missile School Library

AFTERNOON SESSION Moderator: Elmer Schlocker,
Dept of the Army Library

1400 Panel on Cataloging Problems:

1. Corporate Authors Anna Pierce, US Military Academy
2. Serial Publications William Plant, Bureau of Aeronautics, U.S. Navy
Pearl Tuttle, Air University

1530 Coffee Break

1600 Training of Personnel Eva Liberman, Naval Ordnance Laboratory

Utilization of Subprofessional Personnel Ernest DeWald, Army Map Service

EVENING

1930 Cocktail - Buffet - Reception,
guests of Major General and Mrs. de Shazo

FRIDAY

MORNING SESSION - School Libraries, Room 24,
Snow Hall Moderator: Lt. Col. George Fagan, Air Academy

0900 Size and Services of a School Library as Related to the Student Body Served Ruth Wealey, Infantry School

Book Selection in a School Library Clara J. Widger, Industrial College of the Armed Forces

1030 Coffee Break

1100 Exchange of Military Cataloging
Information or Material Catherine Zealberg, US Army
War College

Exchange of Information on
Student Research Products of
Academic Military Schools Mary Anne Kernan, Air Uni-
versity

MORNING SESSION - Technical and Research
Librarians, Room 213,
Snow Hall Moderator: Lachlan F. MacRae,
Defence Research Board, Canada

0900 Size and Services of a Research
Library as Related to the
Parent Organization James Hodgson, Quartermaster
Food and Container Institute
for the Armed Forces

Book Selection in a Technical
Library Catherine Quinn, Air Force
Office of Scientific Research

1030 Coffee Break

1100 Presentation on National Science
Foundations Inventory of Federal
Scientific Information Activities Dr. Philip G. Seitner, Office
of Scientific Information

1230 Lunch - Smorgasboard at the
Civilian Club

AFTERNOON SESSION -

1400 Demonstration of Missiles of US Army, Tour of Fort Sill Indian School,
and The Artillery Museum

EVENING

1930 Round Tables (running concurrently) - Room 213, 24, Library, Snow Hall

1. Translation Problems Moderator: John Hetrick, Air
Force Office of Scientific
Research

- 2. Subject Headings Moderator: Frank E. Randle, :
Army Aviation School
- 3. Microfilm and Microcards Moderator: Ray Weitz, Air For:
Ballistic Missile Division,
Air Research and Development:
Command
- 4. Committee Meetings

SATURDAY

- MORNING SESSION - Room 213, Snow Hall Moderator: Marion E. Bonniwell
Bureau of Ships, U.S. Navy
- 0900 Union List of Military Periodicals Committee Report
 - Standards for Subprofessional Personnel .. Committee Report
 - Expansion of Military Periodical Index . . . Committee Report
 - 0930 Directory of Military Libraries John B. McClurkin
Air University Library
 - 0945 Summary and Recommendations O. Willard Holloway,
US Army Artillery and
Missile School
 - 1015 Coffee Break
 - 1030 Circulation Methods Charles R. Knapp, Office of
Chief of Engineers, US Army
 - 1100 Inventory Methods Mildred Brode, David Taylor
Model Basin, US Navy
 - 1230 Lunch, guests of Artillery
Officer Candidate School

PROGRAM OUTLINES

"UNION LIST OF MILITARY PERIODICALS"

Outline of Discussion, Thursday, 2 Oct 58, 1115 Hours

Charles H. Stewart, Dept of Nat'l Defence. Library.

I. Statement of the Problems

The expansion of the preliminary Union List of Foreign Military Periodicals to include Military Journals of the United States as well as authoritative journals no longer being published. This should be called the Union List of Military Periodicals.

II. Present Status

It was agreed at the last Workshop that this project would remain at the Air University. It is felt however that the onus should be distributed among the three services.

III. Suggested Procedure

A committee should be formed containing a representative from each of the services.

Each service member will have compiled a list of the U.S. periodicals covering their service and a suggested list of discontinued foreign military periodicals in their field to be added to the expanded Union List.

It is suggested that the responsibility of such a committee and its service members might be:

1. Service Responsibility:

- (a) Compilation of a list of U. S. Periodicals in its field.
- (b) Compilation of a suggested list of additional titles of discontinued U.S. and foreign military periodicals.
- (c) The compilation of history cards for A and B.

2. Committee Responsibility:

- (a) To decide whether each service will collect data on holdings in its own libraries or alternative method.

- (b) To decide at what point data should be concentrated in one place and who would be responsible for the editing and publication of the preliminary edition.
- (c) Suggest deadline dates.
- (d) To follow this project through to completion.

It is suggested that the first business at the Workshop session should be to request approval from the delegates for the formation of an Interservice Committee. If such approval is given to call for nominations and elect the members who will guide discussion for the remainder of the session.

IV. Conclusion:

I feel this is our most challenging project. The publication of the Union List will open the door to many beneficial projects and services -- to mention a few interlibrary loans, exchanges, cooperative acquisition planning and international exchanges and cooperation. Let us all cooperate to the fullest extent in bringing the Union List of Military Periodical to an accomplished fact as soon as possible.

UNION-LIST OF MILITARY PERIODICALS
Plan and Procedure for Completion

I. Definition of Military Periodical

A military periodical is a publication of indefinite duration issued at regular or stated intervals under a common and usually distinctive title by government bodies, military units and installations, societies, or commercial publishers, disseminating primarily information intended for military personnel and relating to various or selected aspects of military activities.

II. Coverage

1. Military activities related to the mission and functions of the Departments of Defense, Army, Navy, and Air Force, the reserve components of the armed forces and corresponding foreign organizations.

The activities may include military policy, strategy and tactics, logistics and equipment, organization and personnel, medicine and psychology, history, training, civil defense, and technical and scientific developments having direct applications to military operations.

2. Type of Title Listing

A. Include:

1. Currently published military periodicals and authoritative discontinued ones of proven reference value.
2. Cooperating libraries should indicate (a) Holdings that are currently held and which are to be retained, (b) Holdings of titles that are listed but are regarded as available to other libraries on a gift or exchange basis by the reporting library.

B. Exclude:

1. Classified periodicals (Confidential and above)
List to be unclassified and available for distribution to any requester.
2. Discontinued periodicals of no reference value.
3. Training bulletins of limited local interest.
4. ROTC bulletins.

5. Camp newsletters and bulletins.
6. Annual reports, transactions, orders, regulations and troop lists issued serially.
7. Periodicals of less than semiannual frequency.
8. Periodicals published by regimental societies containing chiefly news of purely local interest.
9. Bulletins published by medical agencies of defense departments containing almost exclusively articles on clinical subjects. These publications are listed in the annual list of publications included in Current List of Medical Literature.

III. Title Information Desired

Bibliographical details pertaining to each title should be recorded on work-cards including the following information:

Country
 Language
 Official title
 English translation or transliteration of title
 Former title (if any)
 Name of Publisher
 Official mail address
 Date of Volume 1, No. 1
 Subscription rates (where applicable)
 Frequency of publication

NOTE: Though all bibliographical details given above will not be included in the final Union List they are desired for checking purposes and for inclusion in potential publication of a finding list or index of foreign military periodicals. Cooperating libraries, in listing any titles not found in the preliminary checklist, should give as much bibliographical detail as possible using outline above.

IV. Bibliographical Description: Preliminary Rules

1. Entries will be set up according to Library of Congress practice and the ALA Cataloging Rules for Author and Title Entries.
2. The title of each publication will be capitalized and presented, wherever possible, exactly as it appears in the latest available issue.
3. Subtitle will be used only to explain otherwise ambiguous titles and to indicate the scope of the publication.

4. Where needed, titles should be transliterated to Roman alphabet.
5. Translate foreign titles as necessary.

V. Method of Indicating Holdings

1. In general, methods of the Union List of Serials in the United States and Canada, edited by Winifred Gregory will be followed, e.g.:

A dash (-) between volume numbers or dates signifies "from and including the former, to and including the latter".

A dash (-) at the end of the volume number or date indicates that the serial is currently received and that the set is complete from the last date or volume number given.

Parentheses indicate that volume or years so enclosed are not complete.

2. Symbols for cooperating libraries will be assigned prior to compilation of final Union List.

"COOPERATIVE INDEXING OF MILITARY PERIODICALS"

Outline of Discussion, Thursday, 2 Oct 58, 1115 Hours

V. Estelle Phillips, Air University Library

1. Summary of indexing contributed by other libraries.
2. Problems of cooperative indexing.
3. Recommendations from the Army and Navy of specific titles of periodicals which will make the AUPI adequate for their needs.
4. Proposals—pro and con—for continuation of cooperative indexing by additional libraries.

57-82

"CATALOGING PROBLEMS: CORPORATE AUTHORS, SERIAL PUBLICATIONS"

Outline of Discussion, Thursday, 2 Oct 58, 1400 Hours

Elmer Schloeder, Dept of the Army Library

I. STATEMENT OF THE PROBLEM:

To obtain an exchange of information from military librarians on satisfaction or dissatisfaction with current cataloging rules for serial publications and for corporate entries; and to discuss revision of these rules, and the impact that a revision will have on the catalogs of military libraries.

II. SOME INFORMATION NEEDED TO UNDERSTAND THE PROBLEM:

- a. Types of serial publications and corporate authors.
- b. Cataloging guides.
- c. Treatment in military libraries.

III. SOME DIFFICULTIES ENCOUNTERED IN FINDING SOLUTIONS:

- a. Requirements in different libraries.
- b. Changes in title, format, frequency of publication and issuing agencies of serial publications.
- c. Fluctuations in the status, names and location of corporate bodies.
- d. Difficulty in obtaining sufficient information from publications of corporate bodies.
- e. Costs.

IV. GOAL SOUGHT:

- a. A revision to the present rules which will reflect the needs of the military library.

V. PROPOSALS FOR A SOLUTION:

- a. Seek agreement from military libraries that there is a need for a revision of the rules.
- b. Survey the cataloging policies of military libraries so that a determination can be made of their particular requirements with emphasis on defense agencies and serials.
- c. Evaluate the information obtained from the survey and use it as a basis for the compilation of a code.
- d. Submit the code to the organization responsible for the revision of the present rules.
- e. Seek representation on the committee(s) responsible for the revision of the present rules and request that serious consideration be given to the problems of the military library.
- f. Publish, with frequent supplementation, any revisions in the rules, especially those for entry of publications of corporate bodies.

VI. MINIMUM GOAL:

Promulgate through the medium of some form of news notes the cataloging information that will assist the military cataloger to establish proper entries.

"CORPORATE AUTHORS"

Outline of Discussion, Thursday, 2 Oct 58, 1400 Hours

Anna Pierce, U. S. Military Academy

I. Statement of the problem:

Should corporate author headings, as suggested by Library of Congress catalog cards, be accepted, or should they be simplified or revised, if such will aid patrons? Should an added entry be made for persons responsible for such works, as chairmen of conferences?

II. Information needed to understand the problem:

- A. Corporate authors are governments and other agencies, societies, institutions, firms, conferences, etc.
- B. ALA rule 91 states: A society is entered under the first word other than an article, of its latest corporate name, with references from other names by which it is known, and from the place where its headquarters are established.
- C. ALA rule 92 states: An institution is entered under the name of the place where it is located, except those in the U. S. and Gt. Brit., which have names beginning with a proper noun or adjective. These are entered under name with reference from place.
- D. German rules (Prussian instructions) do not recognize the principle of corporate authorship. Publications are entered under title.

III. Difficulties encountered:

- A. U. S. government agencies frequently change their name with administration.
- B. Should foreign entries be in the vernacular, or English translation?
- C. Following ALA rules frequently causes confusion.
- D. Editor or person mainly responsible sometimes seems more important than institution or society.
- E. Sponsoring agency may seem as important as institution or society.

IV. Goals sought:

- A. A method of entry which will give credit where due, seem logical and useful to patrons, and will fit in a well-organized catalog.

V. Proposed solutions:

- A. Simplification of ALA rules.
- B. Considering all to be anonymous works, and entering them under title.
- C. A compromise of A & B.

"SERIAL PUBLICATION"

Outline of Discussion, Thursday, 2 Oct 58, 1400 Hours

William H. Plant, Bureau of Aeronautics, USN
Pearl N. Tuttle, Air University Library

1. Definition
2. Kinds
 - a. Periodicals and society publications
 - b. Technical reports
 - (1) by issuing agency notation
 - (2) by contract
 - (3) by surcharged series (ASTLA, local etc)
 - c. Serials in numbered order
 - (1) Recurring
 - (2) Monographic
 - d. Serials in order of date only
 - (1) Recurring
 - (2) Monographic
 - e. Multiple series serials
 - (1) Original multiple serials
 - (2) Surcharged or artificial serials
 - f. Decataloging problems
 - (1) Issuing agencies
 - (2) Frequency or format
 - (3) Title
 - g. Circulation problems
 - (1) Library retention
 - (2) Office deposit
 - (3) Duplicate sets
 - (4) Routing
 - (a) Individual
 - (b) Code or section

"TRAINING OF PROFESSIONAL PERSONNEL"

Outline of Discussion, Thursday, 2 Oct 58. 1600 Hours

Eva Liberman, Naval Ordnance Laboratory

Training Program for Librarian

Statement of Problem

- A. Laboratory Program
 - 1. Orientation talk available to new NOL personnel
 - 2. Laboratory tour
 - 3. Orientation lectures open to incoming engineers
 - 4. Laboratory lectures on special subjects
 - 5. Laboratory films on special subjects

- B. Library Program
 - 1. Training films which are shown to professional library staff
 - 2. Talks by Laboratory personnel who are specialists in a particular field.
 - 3. Tours arranged for special areas with talks by subject specialists
 - 4. Reference tools.
 - a. Dictionaries
 - b. Current periodicals
 - c. NavPers training manuals
 - d. Photostats of nomenclature and terminology lists
 - e. Reprints of technical articles

- C. Library Procedures
 - 1. Procedure manuals
 - a. Reference
 - b. Cataloging
 - 2. Flow charts
 - 3. Assistance offered by Supervisor

"UTILIZATION OF SUP-PROFESSIONAL PERSONNEL"

Outline of Discussion, Thursday, 2 Oct 58, 1600 Hours

Ernest DeWald, Army Map Service

- I. INTRODUCTION
- II. UTILIZATION
 - a. Grade structures
 - b. Type work assignments
- III. RECRUITMENT
 - a. Civil service register
 - b. Open market
 - c. Transfers from other agencies
 - d. Qualification requirements
 - e. Experience requirements
 - f. Security clearance
- IV. TRAINING
 - a. Special courses
 - b. On-the-job
 - c. Education and experience limitations
 - d. Employee limitations
- V. ADVANCEMENT
 - a. Employee abilities
 - b. Education and experience
 - c. Promotional ladder
 - d. Qualifications
 - e. Vacancies
 - f. Resignations
- VI. POSSIBLE IMPROVEMENTS
 - a. Revision of civil service classification standards
 - b. Agency registers
 - c. Additional on-the-job training
 - d. Agency recruiting drives
 - e. Lowering of qualification requirements
 - f. Relief from routine boredom

"SIZE AND SERVICES OF A SCHOOL LIBRARY AS RELATED TO THE STUDENT BODY SERVED"

Outline of Discussion, Friday, 3 Oct 58, 0900 Hours

Ruth Wesley, Infantry School

1. PROBLEM. To consider the functions and resources of the service school libraries in relation to the missions, organization, and programs of the schools supported.
2. ASSUMPTIONS.
 - a. Service schools, in spite of variations as to mission, organization, and programs, have certain factors in common which determine the library service needed.
 - b. These factors can be isolated.
3. FACTS BEARING ON THE PROBLEM.
 - a. The missions of the libraries are derived from the missions of the schools they support.
 - b. The functions of the libraries (that is all the work to be done) should be determined by their missions of supporting the schools' programs of instruction, research, publicity etc.
 - c. The resources of the libraries (that is their staffs, collections, budgets etc.) should be determined by the nature of their functions in support of the schools' programs and by the amount of service demanded by certain organizational factors in the schools, such as size of faculty, number and kind of students.
4. DISCUSSION.
 - a. Certain comparisons may help us to arrive at criteria for our own functions and resources.
 - (1) Comparison of service school libraries with university and college libraries.
 - (2) Comparison with purely research libraries.
 - (3) Comparison of the service school libraries with each other.
 - b. General criteria for service school library functions and resources.
 - c. Possibility of developing yardsticks for certain resources, such as size of staff and budget (less personnel).
5. CONCLUSIONS.
6. RECOMMENDATIONS.

"BOOK SELECTION IN A SCHOOL LIBRARY"

Outline of Discussion, Friday, 3 Oct 58, 0900 Hours

Clara Widgor, Industrial College of the Armed Forces

1. Selection of books and documents should tie in very closely with College curriculum.
2. Be familiar with the subjects covered and select accordingly, Show "Catalog" and "Curriculum Books." Brief discussion of contents.
3. Sources from which selections are made - "Publishers Weekly", periodical book lists from service schools, etc. No standard lists available.
4. Purchase information sent to Chairman, Library Committee (also Director of Instruction with recommendations.
5. Requests originating with Branch Chiefs and Students.
6. All requests coordinated.
7. Put Library on government mailing lists in our subject field. Phone requests, GPO stamps, "ride the jacket", contact persons.
8. Purchase annuals as announced.
9. ICAF graduates as excellent source for new or unusual material.
10. Determine number of copies needed. Permanent room sets, unit room sets, individual issue, reference shelves, reprints.
11. Borrow material needed for short time in unit studies and that needed for theses.
12. Know subject interest of the faculty - make use of it. Consult them re value of material and sources of supply.
13. Handling of gift material.
14. Be aware of changes in subject coverage of curriculum.
15. Have as much advance notice as possible of needed material - when needed, quantity, how long. Extra copies for outside faculty advisors. Be sure that the Library is in on the planning.
16. Train faculty to give full and accurate information on material to be purchased or borrowed. "Put them thru like a book"
17. Cooperation between the Library and the rest of the College.

"EXCHANGE OF MILITARY CATALOGING INFORMATION"

Outline of Discussion, Friday, 3 Oct 58, 1100 Hours

Catherine L. Zealberg, Army War College

- I. Statement of the Problem:

To investigate the need for an exchange of military cataloging information among military libraries, and to determine whether such exchange could be made feasible.
- II. Principal points and information needed to understand the problem:
 - A. Type of cataloging information to be exchanged
 - B. Amount of exchange now being accomplished on an informal basis
 - C. Method of distribution
 - D. Periodicity of exchange
- III. Principal difficulties to be encountered in finding a solution:
 - A. Varying needs of libraries represented
 - B. Lack of cataloging uniformity among military libraries
 - C. Lack of central agency to supervise exchange
 - D. Cost of preparing material and mailing
 - E. Restrictive regulations preventing exchange
- IV. Goals sought:
 - A. Determination of type of information which is needed and can be exchanged
 - B. Discovery of a practical, economical way to exchange this information.
- V. Proposals for a solution:
 - A. Exchange of main entry cards (3x5 "p" slips) for selected documents
 - B. Exchange of selected items of information, e.g. corporate entries
 - C. Acceptance of responsibility by one school in each of three services to serve as a clearing house for other schools in their service, i.e. Army War College coordinate and distribute information from Army Schools; Air University, for Air Force; Naval War College for Navy.
 - D. Distribute information through the present machinery now in use for biographical data.
- VI. Minimum goals acceptable:
 - A. Agreement that exchange of cataloging information is needed
 - B. Decision on the amount of information exchange that should be initiated
 - C. Assignment of responsibilities

"EXCHANGE OF INFORMATION ON STUDENT RESEARCH
PRODUCTS OF ACADEMIC MILITARY SCHOOLS."

Outline of Discussion, Friday, 3 Oct 58, 1100 Hours

Mary Anne Kernan, Air University Library

- I. Purpose of discussion
 1. To determine extent of need for such an exchange
 2. To propose methods of accomplishing an exchange
- II. Definition of terms
 1. Student research product
 2. Academic military schools
 3. Published as applied to written matter shall be used only in sense of material offered for sale or put into general circulation
- III. Information necessary for meaningful discussion
 1. List of schools producing student research products, with description of kinds of papers produced
 2. Sources of information on these papers
 - a. Indexes, abstracts, summaries
 - b. Distribution of existing information
 - c. Problems of distribution
 3. Policy on use of student papers
- IV. Need for information on student papers and methods of getting this information
 1. Who wants the information?
 2. What limitations are imposed on distribution of information about papers and on use of papers?
 3. How should information be made available?

**"SIZE AND SERVICES OF A RESEARCH LIBRARY AS
RELATED TO THE PARENT ORGANIZATION"**
Outline of Discussion, Friday, 3 Oct 58, 0900 Hours
James G. Hodgson, CI Food & Container Institute

1. Background
 - a. Types of military libraries.
 - b. Importance of libraries to research establishments.
 - c. Particular difficulties of the military research library.
2. Objectives of the military research library.
 - a. Primary objective is to make the library collection available.
 - b. Second objective is to make the library collection most effective.
 - c. It must stimulate the productive ideas of the research workers.
 - d. The cost of the library must be justifiable economically.
3. Types of users served.
 - a. Pure research worker.
 - b. "Applied" or practical" research workers.
 - c. Administrative officials.
4. Service functions of the library.
 - a. Collecting the needed materials and properly organizing them.
 - b. Using the collections to the greatest advantage through —
5. Composition and size of the collections.
 - a. General comment. Size depends upon the subjects covered, the types of work done, and the availability of other collections close by.
 - b. First question is when to own and when to borrow.
 - c. How large should the collections be?
 - d. Collections need to include —
 - e. Cooperation between the various military research libraries.
6. Composition and size of the staff.
 - a. General comment.
 - b. Number and types of duties which require professional staff.
 - c. Proportions between professional and clerical staff (1-1, 1-2, 1-3.)
 - d. Importance of an economic distribution of labor and functions.
 - e. Problems in connection with the Civil Service and Management Surveys.
7. Space and equipment needed for the library.
8. Standards for military research libraries.
 - a. The necessity for standards as a means of showing needs clearly.
 - b. Should standards be general or specific?
 - c. Standards used by other types of libraries.
 - d. Standards for a military research library should include —
9. Should the military librarians make a study of standards with a view to recommending sound basic criteria?

"BOOK SELECTION IN A TECHNICAL LIBRARY

Outline of Discussion, Friday, 3 Oct 58, 0900 Hours

Catherine Quinn, Air Force Office of Scientific Research

Sound scientific book selection demands a particularly unique combination of talents. The scientific librarian must truly be a rockman. Selecting vital and essential material from the mushrooming mass of scientific titles published has been compared to the ability to select diamonds sown in a field of rhinestones.

This paper will attempt to describe how the librarian in selecting books for a small technical library may best choose the diamonds and avoid the superficially attractive, false, or misleading stones. Factors influencing the librarian in her choice of the gem of virtue over the glittering bauble such as the limited budget, the overly advisory patron, and the lure of the inexpensive interlibrary loan will be discussed.

"NATIONAL SCIENCE FOUNDATION'S INVENTORY OF
FEDERAL SCIENTIFIC INFORMATION ACTIVITIES"

Outline of Discussion, Friday, 3 Oct 58, 1100 Hours

Dr. Philip C. Soitner, Office of Scientific Information

- I. History and objectives:

A brief review of the origin of the Inventory in the Office of Scientific Information and the current concept of its purposes.
- II. A description of the specific data being collected concerning information activities:
 - A. Categories of research and of technical reports of the agency.
 1. Kinds of reports issued, in terms of subject content, reflecting the agency's research activities.
 2. Kinds of reports issued, in terms of designations and descriptions of the agency's own series or types.
 3. Quantity of reports issued by the agency.
 - B. Policies and procedures relative to handling and disseminating the reports.
 1. Bibliographic aids which accompany the agency's reports.
 2. Agency's practice with respect to announcement.
 3. Agency's policy with respect to making copies of its reports generally available.
 4. Policy regarding OTS and GPO.
 5. Policy regarding maintenance of availability of reports.
 6. Libraries and information centers.
 7. Policy of the agency regarding journal publication of the unclassified results of the scientific research it supports.
 8. Policies of the federal agency and its contractors relative to centralization and standardization of printing and distribution of reports from research contracted by the agency.
 9. Policy of the agency regarding translation of foreign scientific documents.
 10. Documentation research.
 11. Policy of the agency regarding declassification.
- III. Major problems of agencies in scientific report handling reflected in difficulties in clearly defining certain aspects of the inventory reports.
- IV. Procedures of the inventory and its current status.

"TRANSLATION PROBLEMS"

Outline of Discussion, Friday, 3 Oct 58, 1930 Hours

John Netrick, Air Force Office of Scientific Research

Affording ready access in English to the accomplishments of leading Soviet bloc scientists, engineers and military writers is certainly an important function of a military library, and one too frequently neglected.

Fortunately, the persevering military librarian, at no or little cost, may acquire through a variety of sources a wealth of translated materials - books, journal articles, digests, abstracts - not normally available to the non-military librarian.

The chief military, government, institutional and commercial sources will be reviewed briefly, together with their products, representative samples of which will be displayed.

An effort will also be made to furnish guidance to the librarian attempting to find his way through the maze of channels and sources in search of a specific current foreign literature translation, or who would like to increase his holdings in a subject area.

"SUBJECT HEADINGS"

Outline of Discussion, Friday, 3 Oct 58, 1930 Hours

Frank E. Randle, Army Aviation School

Military libraries build their subject heading lists by using LC, Sears, Dewey, Army, Navy, Air Force systems and terminology, adding to these lists many field expedients and local solutions. Problems of satisfactorily meeting the needs of the library user, the cataloging department, and the reference staff will always be with us. Continual adjustment of subject headings is required to maintain adequate standards of research. In this discussion, let us know what you are doing that will be of interest to others; tell us what you tried and discarded, if you wish, as well as what you did that worked very well.

Specific problems suggested for discussion:

1. How to bring out "FUTURE" concepts, predictions, plans.
2. New current strategy terminology, such as cold war, deterrence, disengagement, passive defense.
3. Additional breakdowns, or improvements, revisions, within the LC system. Would other libraries have use for these, if you make them available?
4. What problems do you have in your subject headings that are different from other libraries you've known? Perhaps another one of the group has experience or knowledge which may suggest an answer.
5. Is there a good method of exchanging notes on our subject heading problems and solutions, other than these meetings, journal articles, direct correspondence, or personal visits? If so, what is it?

"MICROFILM AND MICROCARDS"

Outline of Discussion, Friday, 3 Oct 58, 1930 Hours

Raymond G. Weitz, Ballistic Missile Division, ARDC

1. Organization and Planning
 - a. Training
 - b. Procedures
 - c. Control
 - d. Records
2. Objectives
 - a. Uses
 - b. Economics
 1. Space
 2. Duplication
 - c. Security
3. Disadvantages
 - a. Limitations
 - b. Inconvenience
 - c. Interfiling Difficulties
 - d. File Rearrangement
 - e. Cost
 - f. Photographic Difficulties
4. Advantages
 - a. Economies of Space
 - b. Physical Convenience
 - c. Cost to Government
5. Development
 - a. Mechanization
 - b. Present state of the Art of Microfilming
 - c. Future Systems and Procedure

"CIRCULATION METHODS"

Outline of Discussion, Saturday, 4 Oct 58, 0900 Hours

Charles R. Knapp, Office Chief of Engineers, USA

A. Outline of Phases of Circulation:

1. Forms: Time - Book - Reader
2. Systems: Newark - Identification Card - Detroit - Marginal Punched Card - IBI - Gaylord - Dickman - Photographic - Audio - Other.
3. Borrower Control and Registrations:
Registration - Identification
Clearance
Temporary
Out-of-agency
4. Loan Periods and Book Control:
Reserves
Renewals
Overdues
Permanent Loans
Inter-Library Loans
Retrieval
Loan Controls
Rental
Non-book materials
5. Statistics: Type - Significance - Use
6. Security Controls
7. Stacks Maintenance
8. Special Problems

B. Suggested Topics for Discussion:

1. Service to out-of-agency clients.
2. Newly developed circulation systems.
3. A re-examination of the type, value and use of statistics.
4. Extent to which circulation and reference functions may be combined.
5. Security controls and conventional library circulation systems.

SUMMARIES

SUMMARY OF THE FIRST MILITARY LIBRARIANS' WORKSHOP

Mr. Robert Severance
Director
Air University Library
Maxwell Air Force Base, Alabama

The first military librarians' workshop was held at Maxwell Air Force Base, Alabama from the 21st through the 23d of October 1957. The purpose of this workshop was published in the proceedings and does not need to be reread here today. The responsibility for all the planning for the first workshop was assumed by the staff of the Air University Library, chiefly because the shortness of time did not permit accomplishing planning by correspondence with other libraries.

We felt that the first workshop would set the precedent and its success or failure would determine whether or not additional workshops would be held. In order to make round table discussion possible, it was decided early to limit attendance to the representatives of forty libraries, other than the Air University Library. There was a pressure for invitations and actually there were forty-five participants.

A statistical analysis of the attendance shows that there were seven librarians from Canada, fifteen from the Army, ten from the Navy, seven from the Air Force, and six from other government and civilian agencies, a total of forty-five. The Air University Library had fifteen participants, chosen either because of position they held on the staff or because they prepared a working paper.

By schools, the Army had nine libraries represented, the Navy two, the Department of Defense two, and Canada four. Since all the Air Force schools except the Academy are part of the Air University, all Air Force schools were represented.

Technical and research libraries were represented as follows: Canada one, the Army five, the Navy eight, and the Air Force five.

The Air University Library staff members were called upon also as reporters to prepare a record of the discussions after each paper. Thus, our proceedings were ready for editing the day the conference ended and actually went to press the next week.

In discussing the results of the first workshop, I think we need to take two views. The first is that expressed by Dr. Jerrold Orne at the end of the conference and published in the proceedings; the second

"Finally, we have gained in understanding that all these earlier cited gains represent only first steps and that they may be small, weak or partial. They may seem unimpressive, but it will be remembered that some gains have been made and that broader and larger goals remain in our sights. We thus gain in understanding our problems and in having the understanding to begin our work within the limits of potential success."

The results quoted above are general in character. Now for some of the specific results which I shall list but not discuss, since in each case these will be topics on the agenda before us here. (1) A bibliography of military biographies conducted by Army War College Library. (2) A Union List of Military Periodicals. (3) A Directory of Military Libraries. (4) Cooperative Indexing of Military Periodicals.

In addition, agreement was reached on a liberalization of inter-library loan privileges among military libraries. The possibility of exchange of staff members was discussed and, as far as I know, no further action has been taken. This is a very intriguing proposal and I think some of us should look closely into such a possibility. Finally, it was enthusiastically recommended that further workshops be held and that is why we are here now.

is that represented by the planning that went into the agenda before us today and tomorrow. The latter does not need discussion at this time. Now, reading from the proceedings of the first military librarians workshop:

***** One gain most immediately evident is the establishment of the basis of a pattern which may now be tested and improved upon for the continuing benefit of those present. As time demonstrates the true gains made in this meeting, others will doubtless follow to pick up and carry further many ideas only partially developed in this first attempt.

"Another gain less obvious but equally important is the establishment of high level recognition of the place of the library as a key element in military life and work. The possibility of conducting a workshop for librarians follows a pattern commonly found in the military, under which we see groups of military attaches, reconnaissance conferences, bombing conferences, orientation sessions for professors of military science, refresher sessions for tactical groups and many others. *****

"Another area in which gains have been made is the free exchange of information concerning facilities and services. The very fact that a group as large and representative as this can visit one or more major military library establishments and while there meet the principals of many other military library activities results in a large and otherwise unattainable understanding of what we have to work with. Improved acquaintance of key personnel of the field is also a part of this. *****

"There is one other gain which, though not universal, is important. In the case of the library sponsoring the workshop, the vision and understanding of the local library staff is materially increased by participation and attendance at the various workshop sessions. In this case the Air University Library staff has been heavily represented among the audience as well as in participation. In their case they have had the benefit of a type of professional development which could not be obtained in any other way. Outside the library staff itself there is a material increase in the understanding of the quality and character of military librarians and their profession. *****

"We have taken only the first steps in establishing the profession of military librarianship. By taking on this responsibility and recognizing our duties, we undertake to foster and even produce some of the literature of the military. In doing this we make our contributions to furthering the recognition of the profession of arms, a matter of continued concern to our commanders. Librarians and libraries must lead in establishing the literature of this profession as one of their more important contributions toward establishing a better understanding of the people whose life is devoted to the profession of arms.

INTRODUCTION TO THE PROBLEMS

Professor George R. Lockett
Director of Libraries
U. S. Naval Post Graduate School
Monterey, California

Good Morning, Ladies and Gentlemen. It is with somewhat mixed emotions that I speak to you on the subject of "An Introduction to the Problems." I am happy to be here but I rather feel that introducing you to the library problems we will discuss and, perchance, solve is like introducing a man to his wife on their silver wedding anniversary.

Since the problems have been distributed to committees whose members will discuss them, analyze them and, with your help, attempt to find a solution, I will restrict my introduction to generalities and philosophize for a moment on methods of solution.

I was searching for the means of attempting to introduce my subject when I happened to read an article on Dutch proverbs of the kitchen. Two of them, while culinary in thought, express our problems and our feeling toward them. The first says that solving one's problems is "like eating one's way through a mountain of rice." This often seems true; the problems loom before us like a veritable mountain of rice and our progress toward solution is like eating rice: a slow process dependent on how much we can dispose of and assimilate without risking indigestion, gastric or mental.

However, in the word "RICE" we find, philosophically at least, the method of solution of our problems.

Represented by "R" is the action of "recognition." We must recognize our problems and resolve them. To attempt solution without knowing and without understanding is fatal or, at least, is time ill-spent.

Represented by "I" is "investigation" and "isolation." If we investigate our problem and isolate it from others, we will place it squarely before us in a position for attack. There is no if about this. Many times, I am sure, all of us have endeavored to solve a problem only to find that we have permitted our efforts to be spread too thinly to have effect. While it is true that "no problem is an island" it is also true that one of the best known maxims is expressed simply as "divide and conquer."

In "C" we have the reason for this workshop. We exist because we can collaborate." To reexpress an old adage: "What is one man's poison is another man's meat." What to one of us may be a seemingly insoluble problem may be to others of us a nightmare of past dreams. Together, this group can do what each of us, individually, cannot do.

"E" represents "evaluation" and is the action taken by the group as a whole as we study proposed solutions to our problems and as individuals as we apply them in our own libraries. Here, then, is the trial and the testing. Here in evaluation the decision is made that we have or have not found the answer.

I am a firm believer in group action provided we act as a group and not as an assembly of isolationists. If I may make a pun at this time, I would like to say that none of our problems is insoluble if we take the "rice" attitude.

In closing, and somewhat in anti-climax, I would like to quote my other Dutch proverb. No matter how difficult our problems seem nor how much we may recoil at their intensity they are not as great as they appear to be. As the Dutch say, "Soup is never eaten as hot as it is served." Thank you.

UNION LIST OF MILITARY PERIODICALS

Mr. Charles H. Stewart
Librarian
Dept. of National Defence
Ottawa, Ontario, Canada

The delegates at the 2nd workshop approved Mr. Stewart's proposal that this project should become an interservice project operating under a committee of service representatives.

The following representatives were chosen to represent each service during the workshop.

Army — Miss Ruth Longhenry, Army War College

Navy — Mr. George Lockett, Naval Postgraduate School

Air Force — Mr. John Hetrick, AF Office of Scientific Research

Ex Officio Chairman — Charles Stewart, National Defence Library, Ottawa

Copies of basic list of U. S. periodicals both current and discontinued were distributed to members.

A meeting of service representatives was held in the Fort Sill Library on Friday evening. The plan and procedure instructions for the compilation of the Union List was reviewed and several changes were made. A permanent committee in the Washington area was appointed to facilitate meetings and coordination between service representatives. Mrs. Catherine Quinn of AF Office of Scientific Research was chosen chairman, Miss Josephine Sullivan of the Army Library, the possible Navy representatives were to be contacted by Mrs. Quinn, Mr. John Hetrick will continue as Air Force representative if required. Informal discussions on ways and means of gathering data from libraries, the recording of holdings and the reproduction of the preliminary edition followed to assist the permanent committee on planning.

Preliminary discussions on ways and means will be held in Washington and a meeting is planned for November to include Mr. Stewart and Mr. Robert L. Martin, chairman of the Military Librarian's Division of S.L.A.

It is planned to establish deadline dates for each phase of the operation with hopes for a preliminary edition before the next workshop. The cooperation of all participating military libraries is asked.

It is recommended that at future workshops, that members of committees who are reporting to the workshop, be invited to arrive a day earlier to have an opportunity to coordinate reports and plans for the future.

COOPERATIVE INDEXING OF MILITARY PERIODICALS

Miss V. Estelle Phillips
Editor
Air University Library
Maxwell Air Force Base, Alabama

Students, instructors, researchers and librarians are well aware that the most recent and useful information for research in many fields is found in current periodicals. This information is naturally limited by the availability of bibliographic guides to the contents of periodicals. For more than fifty years there have been available commercially produced aids - - the Reader's Guide, Education Index and others in the same pattern. These have served well the general function for which they were intended but they do not account for all fields or all journals. Among the fields poorly represented in commercial indexes, Military Science has been outstanding. In recent years, the Air University Library has undertaken to bridge this gap by producing and publishing its own periodical index to military journals.

The Air University Periodical Index is a subject index to all significant articles, book reviews, news items, and editorials appearing in 74 English language military and aeronautical periodicals not indexed in readily available commercial indexing services.

The Index was begun with 20 titles as a quarterly publication in 1949 by what is now the Air University Library at Maxwell Air Force Base to serve the needs of the reference staff of the library and the faculty and students of the Air University in locating current, unclassified material on general military and aeronautical subjects. It was continued as a quarterly until March of 1953 when a cumulative issue containing all indexing from the origin of the index in October 1949 through December 1952 was published. Since then it has been issued on a quarterly basis superseded by annual and three-year cumulations.

The Index is available to other libraries on exchange basis. At present 875 copies are distributed to military activities as well as civilian institutions.

The Index is a cooperative project of the staff members in the Reader Services Division of Air University Library with the indexing being done by professional members of the General Reference, Periodical Reference, and Bibliographic Assistance sections.

Last fall at the Military Librarians Workshop the participants were unanimous in their praise of the Index. However, a number in the group felt that even though the most important military periodicals are now being indexed, that the usefulness of the AUPI would be enhanced by increasing its coverage. Since the staff at Air University Library had about reached the limits of time which could be devoted to indexing, the solution seemed to be cooperation and assistance from Army, Navy and other Air Force libraries.

As editor of the Index, I proposed that participants present could contribute indexing copy for the periodicals relative to their service or specialized field. Of some forty people about half expressed a willingness to furnish indexing copy for inclusion in the AUPI. Prior to initiating the actual work, it was necessary to revise the master list of subject headings and the manual of instructions to guide indexers, and to formulate a policy statement for the cooperating libraries so that uniformity could be achieved.

To date, this project has been started on an exploratory basis with seven libraries: Air Force Academy, National Defence College and Army Staff College, Quartermaster Training School, Royal Military College of Canada, U. S. Army Artillery and Missile School, U. S. Army Infantry School and U. S. Naval Ordnance Laboratory providing indexing copy of ten journals. After working with these seven libraries on a trial basis, I would like to commend them for their splendid cooperation. Beginning with January 1959, I think it would be beneficial to the Index if the librarians present would agree to submit indexing copy of the indexed journals pertinent to their subject areas. If any of you have a list of additional titles you would like to be included in the Index please give them to me.

SUMMARY OF REPORT ON COOPERATIVE INDEXING AND EXPANSION OF AIR UNIVERSITY PERIODICAL INDEX

It was readily accepted by all participants in the first Military Librarians Workshop that it would be eminently desirable that the Air University Periodical Index be expanded to include more journals and a wider range of information. In the intervening year between workshops, expansion of coverage has included 16 additional titles, making a total of 74 titles now indexed. This has been accomplished by taking advantage of assistance in preparation of index copy volunteered by libraries representing Air Force, Army, Navy and Canada.

At the second Workshop, through conversation with conferees from each of the services and through the committee representing Air Force, Army and Navy, several titles which are not presently indexed have been suggested

for inclusion in the Index. These include six titles recommended to be especially useful to Army libraries and two to the Navy libraries. These suggested titles will be considered by the AUPI Subject Heading Committee for inclusion and necessary action taken for their indexing. Other titles suggested by any military librarians will be welcomed.

Index copy is now prepared by staff members of seven libraries other than Air University Library. After working with these seven on an experimental basis, procedures for cooperative indexing have been worked out successfully. Beginning with January 1959, Air University Library will accept the offer of other libraries to prepare and submit index copy for titles particularly pertinent to their subject areas.

CATALOGING PROBLEMS (CORPORATE AUTHORS AND SERIAL PUBLICATIONS)
Report of Proceedings

Mr. Elmer H. Schloeder
Chief, Catalog Division
Army Library
Department of the Army
Washington, D.C.

Discussion on problems arising from cataloging entry for corporate authors and serial publications was introduced by a resume of the historical aspects of the rules of entry for this type of publication. Mention was made of the succession of rules commencing with those published for the British Museum by Panizzi in 1841, Cutter's Rules of 1876, the Catalog Rules of 1908, and the A.I.A. Cataloging Rules (2d ed., 1949), and of the reactions, mostly unfavorable, which followed the appearance of each set of new rules. Rules and exceptions to the rules have multiplied both in quantity and complexity. Dissatisfaction by catalogers over the unwieldy structure of rules and the difficulties encountered in their application brought about the publication (1953) of the results of a study made by Seymour Lubetzky entitled Cataloging Rules and Principles. This study, a criticism of present rules and a proposal for their revision, have developed into a program to revise the A.I.A. Cataloging Rules of 1949.

It was the proposal of the panel on cataloging problems that through the medium of discussion, the participants in the workshop would have the opportunity to relate their experiences in the application of the present Cataloging Rules to materials received in their military libraries, and to express opinions on the question that the cataloging entries either satisfy or fail to satisfy the particular requirements of a military library. Failure of the rules to meet the requirements for adequate and useful entries for publications of corporate authorship and serials raises the question concerning the extent of simplification or revision needed in order to satisfy the requirements of the military library.

Time limitations permitted little more than remarks from panel members defining the areas of the problem and expressing dissatisfaction with existing rules of entry for corporate authors and serial publications. Hope was expressed that any catalog code revision would result in simplification of the rules of entry, and that the new rules should permit cataloging of all types of material including the highly specialized publication reflecting the work of research programs.

Other than these general expressions of dissatisfaction with the present cataloging rules, no definite recommendations were made, and no conclusive action was taken to seek the remedies to a situation which is the particular concern of catalogers. It was requested that consideration be given to the feasibility of further exploration of the problem in the next workshop.

CORPORATE AUTHORS

Miss Anna E. Fierce
Cataloger
United States Military Academy
West Point, New York

Constance Winchell, in her paper entitled "The Catalog, Full, Medium, or Limited," which she read at the fall meeting in 1954, of the New York Regional Catalog Group, said, "Names of married women, pseudonyms, anonymous works, titles of nobility, etc., are not the only things that cause difficulty. There are corporate authors. I shall certainly not attempt to rush in where apparently a large number of cataloging angels fear to tread, by trying to suggest to you what might not be done about the corporate entry." I can truthfully say that I am one of the so-called "cataloging angels" who fear to tread into the problem of how to deal with corporate entries. I shall, however, in spite of my fears, attempt to give you a picture of how they are treated at USMA.

The cadets, who are in the majority of library patrons, do not seem to be bothered with the corporate author, unless it is a well-known one, such as the Hoover Commission, which incidentally, LC enters as U. S. Commission on Organization of the Executive Branch of the Government. Cadets usually ask for subject material, or books by title or personal author.

AIA Cataloging Rules, which are supposed to form a basis for decision, state:

"General Rule and Specification: Governments and their agencies, societies, institutions, firms, conferences, etc., are to be regarded as the authors of publications for which they, as corporate bodies, are responsible. Such material as official publications of governments, proceedings and reports of institutions and societies, official catalogs of libraries and museums, firms, conferences, and other bodies, is entered under the heading for the corporate body, even though the name of the individual preparing it is given.

"Monographic works by individuals, officials, officers, members and employees of corporate bodies when these works are not clearly administrative in character, are preferably to be entered under personal author, even though issued by the corporate body.

"Rule 91: A society is entered under the first word other than an article, of its latest corporate name, with reference from any other names by which it is known, and from the place where its headquarters are established."

An institution, according to Rule 92, is entered under the name of the place where it is located, with the exception that institutions in the United States or Great Britain which have names beginning with a proper noun or adjective, are entered under the name, with a reference from the place.

Some objections to the use of a name as distinct from a place are:

1. The name of a society may vary from time to time.
2. Its correct form may not always be known or remembered.

Disadvantages of putting it under place are:

1. Place of headquarters may not be generally known.
2. Place does not form part of a society's name.
3. Place of headquarters may change.

Apparently the AIA rules are under revision at present. In an article in Journal of Cataloging and Classification, April, 1956, on Catalog Code Revision, a statement of "Objectives and Principles for Catalog Code Revision" issued by the Committee on Catalog Code Revision at its Chicago meeting says:

"Names of corporate bodies are entered under the first word, not an article, if the names are individual or distinctive. If the name consists only of a generic term or phrase, entry is under the place required for identification. Names are given in the form in use at the time of publication of the work being published, and in the vernacular except that English is preferred for international places. The names of national and local government agencies are entered as subheadings, in the vernacular under country, state or city, or other jurisdiction. Geographic names are given in the vernacular, unless an English form is in current use. In case of change of name, the latest form is preferred."

A comment on the rules was made by Masse Bloomfield, Cataloger at the Naval Ordnance Test Station, Inyokern, California, in the Journal of Cataloging and Classification, October, 1955. He states:

"Corporate authors are a problem because the ALA rules, even with the Lubetzsky refinements, are easily misinterpreted."

He is referring to Seymour Lubetzsky's ". . . a Critique of ALA Rules for Entry and a Proposed Design for Their Revision." You may very likely be familiar with his proposals.

Mr. Bloomfield also suggests that LC publish a list of corporate authors to be used similarly to their subject headings. LC did publish a list of U.S. government agencies in 1936, but it was limited in scope, and is now entirely out of date. Lists of corporate authors have been published by the Naval Research Section at LC for the ASTIA, and by the Technical Information Division of the Atomic Energy Commission. These agencies handle security material. They include see and see also references.

We at USMA lean quite heavily on the LC printed cards. We generally use their author headings, but give more thought to subjects. The catalog in the corporate author field, is more or less a mirror of LC. Some of our entries of U. S. government agencies seem problematical. One that has always bothered me is the "Statistical Abstract of the United States," which is entered under U. S. Bureau of Foreign and Domestic Commerce, its original so-called author. This is now published by the U. S. Bureau of the Census. Another problem is the "United States Government Organization Manual," which is entered under its original author: U. S. National Emergency Council. This was abolished in 1939. The "Manual . . ." is now the responsibility of the U. S. National Archives and Records Service. It would seem reasonable to enter these publications, which sometimes change authors with each administration, under title, with an added entry for the agency responsible for them. LC now does this for Foreign Commerce Yearbook.

International agencies better known by abbreviation, such as UNESCO, NATO, etc. pose another problem. We follow LC and spell them out, using a see reference for the abbreviation. Examination of the catalog revealed that, however, LC uses the abbreviation in the entry: UNESCO/Library of Congress bibliographical survey. We followed suit.

Corporate authors that begin with adjectives always irritate me. Is it necessary to have: Joint Brazil-United States Economic Development Commission? The rest of the card states: "The development of Brazil, a report." It was published in Washington by the Institute of Inter-American Affairs, Foreign Operations Administration (1954)

Wouldn't using the Institute of Inter-American Affairs as author be more reasonable? Another publication entitled: "Continuity and change in Russian and Soviet thought," ed. with an introduction by Ernest J. Simmons is under: Joint Committee on Slavic Studies. Why doesn't LC put this under editor, as they did with "Soviet economic growth," ed. by Abram Bergson. A note states that the Joint Committee on Slavic Studies sponsored the conference which issued the "Proceedings," of which this is a revised form.

The LC printed card uses the Swedish form for Swedish Institute of International Affairs, which put out the report: "Sweden and the United Nations" for the Carnegie Endowment for International Peace. In our library, primarily for Cadets, we thought the English form was more sensible.

We cataloged Rockefeller Brothers Fund "Report on International Security" before the LC cards were received. We were happy to learn that LC put these reports under Rockefeller Brothers Fund as we had. Each of these reports will be cataloged separately, but are listed in one place on a series card for "Special studies reports," under Rockefeller Brothers Fund.

American institutions of learning are under name in our catalog, with the exception of the Citadel. This is under South Carolina, The Citadel, the military college of South Carolina. Research disclosed that it was known as the South Carolina Military Academy from 1882-1910. It was then changed to the Citadel, the Military College of South Carolina. The Citadel was the official, as well as the familiar name from its founding in 1842 until it was closed in 1865. It was reopened in 1882. Perhaps this is why it is entered under place. I discovered that LC is inconsistent in not putting Providence, R.I. after Brown University. Duke University is followed by Durham, N. C. and Norwich University is followed by Northfield, Vermont. Columbia University, like Brown, is not followed by New York (City).

Foreign military schools are under place, with see reference from name. Two examples are: Paris. Ecole polytechnique, and La Paz, Bolivia. Colegio militar. Placing the country after La Paz, but not after Paris, is, of course inconsistent. Exceptions to this procedure are: Cuba. Academia militar, Habana, and Belgium. Ecole militaire, which is not under Brussels.

Yearbooks and handbooks of the military schools are entered under title, both foreign and local, unless the title is not distinctive. Examples are: "Le Flambeau," which has an added entry:

Port-au-Prince, Haiti. Ecole militaire d'Haiti; and Modena, Italy. Accademia militare, whose yearbook is merely called "Annuario." The "Howitzer" and "Lucy Bag," yearbooks of the U. S. Military and Naval academies, respectively, are under title, with added entries for each institution. The handbook of the U. S. Military Academy is an exception to this. Until 1924 it was published under the auspices of the Cadet YMCA, so we enter it under: U. S. Military Academy. Young Men's Christian Association. Should we take time to recatalog it under title?

Different academic departments at USMA annually issue various textbooks. We simplify and revise LC in their heading forms. Where LC uses: U. S. Military Academy, West Point. Dept. of Social Sciences, we use: U.S.M.A. Social sciences dept.

We try to simplify for the Cadets, foreign military subheadings. In the French headings we are quite consistent in using the French language, both for material in English and French. Ex.:

France. Armees. Ecoles du genie.
Manuel de l'artificier.

France. Ministere de la guerre.
German mine for wrecking tanks.

Subject entries are in English.

In the German language we are more inconsistent. I found that we use English and German for author headings, regardless of the text:

Ex.:

Germany. Army
Soldaten-Bolderbuch fur die Deutsche Jugend.

Germany. Army.
Translations: War diaries of German units opposed to the Second Division.

Germany. Wehrmacht. Oberkommando.
Hitler directs his war.

There are see references from Germany. Heer, to Germany. Army; Germany. Kriegsmarine, to Germany. Navy; Germany. Luftwaffe, to Germany. Air Force.

We have translated from Russian to English the author heading: All-Russian Communist Party (Bolsheviks). We have a see reference

from the Russian form used by LC. The publication is a history of the Communist Party in the Soviet Union. One copy is in Russian. All material in the Russian language is cataloged in English, with a note: "Title-page and text in Russian." There are two such items under: Russia. Army.

We have nothing at present in the Czechoslovakian language. Author headings which LC enters in the vernacular are translated. Ex.:

Czechoslovak republic. Army.
Eighteen months of the 11th Czechoslovak infantry battalion.

It seems that it is almost impossible to conform to rule in the use of corporate authors. The statement by Wyllis E. Wright, Librarian at Williams College, expresses the situation well: "Corporate entries are a time-consuming growth, the cost of which has led to some suggestions that they be abandoned completely. Rather than giving them up, we should, I think, seek better ways to curb them. For most libraries, certainly, we do not need to use anywhere near as many subdivisions . . . I do not know whether we shall be able to agree on a uniform treatment of all bodies under their names in the revision of the catalog code, but some lessening of the present complexity is coming."

SERIAL PUBLICATIONS

Mr. William H. Plant
Bureau of Aeronautics Library
U. S. Department of the Navy
Washington, D. C.

The definition of serials as given in the A.L.A. catalog code seems unduly restrictive for purpose of handling technical report literature. The definition in the Webster unabridged dictionary, is much broader, and will cover the field for practical purposes much better than a more restrictive one.

The serial handling of technical reports may depart from the conventional because of either convenience or necessity. It is often more practicable to handle the entire output of a given source or corporate author as a serial, even though there is no really good cataloging rule which justifies such a procedure. The common way of creating a serial catalog is by the date of the documents arranged under the corporate source either with the earliest date at the head of the file, or with the latest date at the head of the file. With publications which are a result of military contract research, another serial relationship can be established under the number of the contract, and a sub series for the report numbering under the contract (e.g. Quarterly report no.##). Frequently, a corporate source will consistently carry a double serial numbering on its reports, one for the over-all publication series, plus one for either a division or laboratory, or for the particular contract under which the report is rendered. In addition to this, there may be meaningful series notations printed or surcharged on the face of the report, such as Armed Services Technical Information Agency "AD" (ASTIA Document) numbers, serial numbers imposed by forwarding authorities, such as attaches, and notations, and accessions numbers placed on the documents by controlling agencies. It is even possible that the accretion of serial notations on a given document may amount to a total of over a dozen. The only practical solution to this problem is to disregard some of the notations, and take only those which have proved useful to the cataloging library. On occasion it may be practical to make skeleton records of serial holdings under all or most of these imposed or surcharged series, but generally such a practice will prove quite expensive in time, space, and personnel. Technical reports having only two or three serial notations imposed on them, either originally, or subsequent to their issuance can usually be handled in the conventional fashion with the usual added entries.

The effect of circulation problems on cataloging and handling of serial publications cannot be neglected. Wherever the library is the central point for purchase and routing control over serials, decisions must be made as to

the type of records which need to be kept. Certainly, there should be unit card or other entries in the regular library catalog for the actual bound permanent, and even the semi-bound semipermanent holdings of the library. On the whole, particularly where the serial holdings are of any size, it seems impractical to use the card catalog to record current receipts. It remains necessary that the library have record of at least some of the serial receipts which are on permanent loan or deposit elsewhere in the installation. Lack of records as to the routing and disposition of duplicate sets can frequently create a great deal of confusion and lost motion. While current entry of serials into the card catalog may be impractical, certainly a visible file type record of all serial receipts and routing or deposit which is kept at the circulation desk will provide ready access to serial collections for both the patrons of the library, and for the library personnel, and will simplify location of items both for loan, and to fill gaps in the permanent collections. The time to enter serial receipts in the card catalog would seem to be at the point of decision to keep or bind, rather than at the time of receipt. The type of serial record kept at the point of circulation will also vary with the mode of circulation. If each serial issue is routed out and in to each client separately, the record card may have to be kept by client routed to in multiple copy under each serial. If serials are routed to the entire clientele interested and only returned to the library at the conclusion of the routing, a single card for each serial will usually suffice. This latter practice is fraught with a certain amount of uncertainty, since recall of the routed serials may turn into extensive physical searching procedures on occasion. On the other hand, the number of handlings of each piece by the library is materially reduced, and the number of personnel occupied in routing serials and maintaining circulation records can be very materially reduced.

The whole problem of handling serials is one which must be solved on the basis of local requirement. In general, the solution of the problem which works in the situation at hand is the best, even though the solution may violate many rules which are taught in school, and one which may even seem illogical on its face. The application of "common sense" to serial problems, rather than hewing to the line of doing according to the rules will probably produce the best end results, even though principles of uniformity may become lost thereby.

TRAINING OF PROFESSIONAL PERSONNEL

Miss Eva Liberman
Chief, Library Division
U. S. Naval Ordnance Laboratory
White Oak, Silver Spring, Maryland

I believe you are all familiar with the problem of recruiting library trained personnel who also have a technical background. We haven't been able to hire librarians who have training in physics, chemistry or engineering. Sometimes we think we are fortunate if we can hire people with a library degree.

Because of this situation, management at NOL has agreed to a training program for librarians.

Every attempt is made to take advantage of the laboratory training programs in effect for technical personnel.

An orientation talk is given to all incoming personnel by the Training Division of the Laboratory. This sets forth the Laboratory mission, its facilities and administrative policy. For new employees other than research personnel this introduction is all that is available.

Tours of the Laboratory and its facilities are available to technical personnel. Often a phone call to the Training Division is all that is required to have librarians included in these tours. It is probably best to wait until a person has been on the staff for a short time before scheduling him for a Laboratory tour. By then the librarian has gained some knowledge of the Laboratory's research program and terms like wind tunnels, shock tubes and ballistic ranges are more than mere words.

Each Fall the incoming technical people are given a lecture course entitled Evolution of Ordnance consisting of 20 one hour sessions. The speakers are key personnel associated with various phases of the Laboratory research program. An arrangement has been made with the Training Division for the Library to send as many as four persons to attend these lectures. Lectures are given twice a week and include visits to various areas of the Laboratory as well as talks on subjects of research. One talk may be on underwater sound, another on explosives, a third on aeroballistics.

From time to time the Training Division arranges for lectures on special subjects. Some are given by industry personnel, some by government or university personnel. A specialist in a particular field discusses his research project. Often the lectures have a security classification. In most instances attendance is restricted. However, permission can be obtained.

Library personnel to attend the lecture. Dr. Spiess of Scripps Institute of Oceanography gave an excellent talk on work being done by the Institute in measuring underwater sound. At another time, Dr. Paul Fye, former Assistant Director of NGL discussed the Navy's research program as proposed by the Nobzka Group at Woods Hole.

Often films are available to keep research personnel informed of the work of the Navy or the Laboratory. As the Hotpoint program developed from research to testing a film on the development was available to Laboratory personnel. Chief of Naval Operations releases films on the research programs of the Navy and these also are usually available to Laboratory personnel.

The Library Division can arrange for the borrowing and showing of films through the Photographic Division. Films are requested by the Library, the Photographic Division borrows the film (unless it is a Laboratory film) and sends a photographer and photographic equipment at a place and time designated by the Library. These films may be classified or unclassified. Training films issued by the Bureau of Naval Personnel for training purposes in handling and firing ordnance are particularly suited to the needs of the Librarian who must identify ordnance equipment and its components. Unclassified films which are broad in scope such as Seapower are suitable for the Librarian who is just getting acquainted with naval ordnance and its function.

Occasionally it is possible to arrange for a research person to talk to the Library staff about his work. Arrangements were made for the Laboratory representative on the Joint Special Weapons Board to talk to the group on nuclear physics as related to the Laboratory program and the work being done on ordnance. At present we are anticipating a talk on degaussing to be given by a specialist in that field. These talks by subject specialists are utilized whenever it is possible to get the services of research personnel who are sufficiently interested in the Library and will devote time and effort to assist in our training program.

Tours may be arranged for special areas and the man who is very much interested in his subject is often willing to spend two to three hours in conducting half a dozen people through his facility. Our plastics laboratory has been extremely cooperative. Recently, a mine exhibit sponsored by the laboratory provided a lecturer and tour for several members of the Library staff. Here again I would suggest waiting until your people have been on the Library staff for a short time instead of plunging them into detailed technical explanations without a background in the subject.

Reference tools are provided to the Library staff covering various subject areas. Each branch of the Library has its own reference copy of International Dictionary of Physics and Electronics; Cooke and Marcus - Electronics Dictionary; Mack's Chemical Dictionary; Handbook of Chemistry and Physics; Mathematics Dictionary by James to mention a few.

NavPers training manuals are provided to the professional staff as library tools. A copy of Crinence and Gurnery is available to each librarian. Basic Electronics is also available. The Library procures training manuals for the Training Division. Training manuals covering a wide range of technical subjects are also available to the Library staff.

Current periodicals are scanned by the Librarian and articles of particular interest are circulated to the staff. Electronics may have an article on the Navy's role in sonar; Machine Design may have a few short paragraphs on the firing of the Polaris missile; Aviation Week has articles on the maser amplifier. Photostats of reference material are made whenever material is judged to be of sufficient value; glossaries, nomenclature and terminology lists are furnished the librarian for his own reference file. Electronics may have an extensive article on plastics and resins - reprints are purchased for the use of the librarians. A recent issue of Missiles and Rockets had a section on guided missiles which proved of great value to the Reference librarians. A recent issue of Time Magazine which discussed anti-submarine warfare was circulated to the Library staff.

Procedure manuals are maintained by all Branches of the Library Division. Changes and corrections are made at frequent intervals. For some persons, a step-by-step procedure is most effective; others can glean their information from broad statements of procedures.

Flow charts are also maintained by the Branches depicting the work sequence from start to finish in each Branch. These are subject to review and revisions are made as required. Suggestions from the staff are encouraged and we are always trying to eliminate non-essential work.

The assistance offered by the Supervisor cannot be underestimated. If the answer to a question is not known, it must be obtained. What is meant by a dummy mine? Is a signal gun a gun? What is meant by whiskers on a metal? What is the difference between a shock tube and a shock tunnel? Magneto-hydrodynamics and magnetogasdynamics?

Some of the answers are available to the supervisor from years of experience at NOL. Sometimes current periodical literature holds the answer to a question. Research personnel may be called upon for assistance in a particular area - but care must be taken not to abuse this source of information. There is no harm in requesting help from an aerodynamicist in defining the difference between shock tunnels and shock tubes but if a dictionary can answer the question, so much the better. The research man has a job to do, with deadlines to meet, and cannot spend time helping the librarian. Some questions can be answered by the research man without consuming too much time. A simple yes or no answer will suffice. A report discusses nose caps but nowhere does it state that nose caps are to be used

with fuses. The fuse specialist can answer this question readily - the nose caps are part of the fuse. The supervisor must know the sources of information - whether it be a book or a research person.

I believe we do a satisfactory job in training our professional librarians. There is much that is learned from day to day on the job - how much depends upon ability and interest in the work. Engineering comprises a number of subjects and presents an entirely new field to the layman.

I have enumerated a few of the things which we do at EOL to assist the librarian in getting acquainted with the technical field. I am sure many of you have developed your own training programs and can offer suggestions and ideas for additional training.

UTILIZATION OF SUBPROFESSIONAL PERSONNEL

Mr. Ernest De Wald
Chief Librarian
Army Map Service
Washington, D. C.

I INTRODUCTION

I wish to mention that my comments concern only subprofessional personnel. They may well be unique to Army Map Service Library and possibly other libraries in the Washington area.

II UTILIZATION

Grade structures and work assignments

- a. Circulation and shelving supervisors - GS-5
- b. Circulation supervisors - GS-4
- c. Periodical routing - GS-4
- d. Shelving attendants and routine reference - GS-4
- e. Card catalog supervisor - GS-4
- f. Shelving attendants - GS-3
- g. Circulation desk - GS-3
- h. Labeling and preservation - GS-3
- i. Card catalog attendants - GS-3

III METHODS OF RECRUITMENT (There are four sources)

a. Civil Service Register

From our experience, this method has proved the least fruitful.

- (1) The Register frequently has personnel in an age group nearing retirement that have not been employed for many years.
- (2) The Register contains some malcontents from other agencies.
- (3) The Register is stagnant with personnel desired by no agency.

b. Open Market

The recruitment of high school graduates has been the most satisfactory method to date. This of course usually means special training in order to qualify.

c. Transfer from other Agencies

This involves personnel with status applying directly to AMS. Usually we get good employees because usually there is a special desire, such as place of occupation, type of work. This type of recruitment is a very small percentage of the overall total.

d. Qualification Requirements

These requirements for subprofessional recruitment other than from transfers and Civil Service Registers are difficult to meet. Open market recruitment usually means the applicant does not have the necessary education or experience in the field to meet requirements without special training.

e. Experience Requirements

Any specialized experience beyond that necessary to qualify is very desirable, but difficult to find. The lack of specialized experience by applicants has not been too great a problem.

f. Security Clearances

The waiting period after recruitment for security clearance has been a problem in some of our security areas. This period is usually eight weeks or more. The manpower loss creates a backlog in some phase of the operation.

IV TRAINING

a. Special Courses

High School graduates have been recruited in a GS-2 category and then given a 4-6 week course of study in cartographic procedures, techniques and terminology. This is followed by an extensive period of special training and orientation for two weeks in all phases of Library activities. Upon satisfactory completion of this study and training, these applicants are assigned as GS-3 Library Assistants. The special training plan has, of course, been approved by the Civil Service Commission.

b. On-The-Job

We have been doing considerable on-the-job training both on the position to which the applicant is assigned, as well as position exchange assignments. The latter, of course, is for employees with a high degree of ability and for evaluation of their future potential for more responsible positions. Time is not available during this discussion to bring out the full details, but I will be happy to discuss it further at another time.

c. Education and Experience Limitations

Due to a lack of applicants with adequate education and experience, considerable specialized training is necessary. Frequently, an employee is convinced to take special study courses during his non-work hours. This, of course, affects your productivity for a considerable time.

d. Employee Limitations

Even with all the special courses and training I have spoken about, you may find some of your employees limited. This immediately presents a utilization problem, which may be followed by morale difficulties.

V ADVANCEMENT

a. Employee abilities

This factor is very difficult to handle because many employees will not honestly accept their limitations and thus - a problem area.

b. Education and Experience

It seems we never have sufficient personnel that are fully proficient for the job to be done, even though they are qualified by Civil Service standards.

c. Promotional Ladder

At AFS we have, over the years, developed a fairly good ladder of different subprofessional grade levels. There are of course, many more GS-3's than GS-4's and more GS-4's than GS-5's. This curtails or slows promotions for some of the employees. We find that sincere position classifiers are of great assistance in establishing adequate promotional ladders.

d. Qualifications

As you remember from my previous comments, high school graduates are frequently recruited. This requires a considerable amount of training and experience to qualify for advancement. We find quite often the employee most suited for the advanced position does not have adequate experience to qualify under Civil Service Standards.

e. Vacancies

The majority of vacancies occur in the GS-3 and GS-4 category. This presents an old problem of recruitment and training. Fewer positions and lower turnover in higher grade positions limit promotional opportunities, and seem to increase lower grade turnover.

f. Resignations

Our experience indicates most resignations result from boredom on lower level positions, insufficient promotional ladder and impatience with time and experience qualifications.

VI POSSIBLE IMPROVEMENTS

Revision of Civil Service Classification Standards

These standards were due for revision at the same time the professional series was issued. In fact, drafts were reviewed by various agencies just prior to final publication. On issuance of the new professional standards, the old subprofessional standards were retained. New standards could possibly allow for higher grades on some of the present day type of duties such as personnel handling security classified material. It may also be possible to have a subprofessional GS-7 category, and to eliminate the GS-2 group entirely; as no longer practical for present day recruitment.

SCHOOL LIBRARIES

Lt. Col. George V. Fagan

U. S. Air Force Academy Library
Denver, Colorado

The Schools section had a most stimulating and provocative session. The matter of evolving a yardstick to determine adequate library resources and services was discussed at great length. Because of the diversity of the institutions and installations represented, no decision could be reached at this time. The matter requires further study and exploration before any satisfactory conclusions may be reached or any criteria formulated.

It was established, however, that there was a definite requirement among certain types of libraries for an exchange of cataloging data for documents and for theses and other writings originating within military schools. A media was sought to fulfill this need and at present, it appears feasible that the data be distributed in the same manner that the biographical data on lecturers is being disseminated.

Because of the significance of the problems under discussion, it is highly recommended that the theme of a future Military Librarians' Workshop could be developed around the subject.

SIZE AND SERVICES OF A SCHOOL LIBRARY AS
RELATED TO THE STUDENT BODY SERVED

By

Miss Ruth Wealey
Librarian
U. S. Army Infantry School
Fort Benning, Georgia

- 11
1. **PROBLEM.** To consider the functions and resources of the service school libraries in relation to the missions, organization, and programs of the schools supported.
 2. **ASSUMPTIONS.**
 - a. Service schools, in spite of variations as to mission, organization and programs, have certain factors in common which determine the library service needed.
 - b. These factors can be isolated.
 3. **FACTS BEARING ON THE PROBLEM.**
 - a. The missions of the libraries are derived from the missions of the schools they support.
 - b. The functions of the libraries (that is all the work to be done) should be determined by their missions of supporting the schools' programs of instruction, research, publicity, etc.
 - c. The resources of the libraries (that is their staffs, collections, budgets etc.) should be determined by the nature of their functions in support of the schools' programs and by the amount of service demanded by certain organizational factors in the schools, such as size of faculty, number and kind of students.
 4. **DISCUSSION.**
 - a. Certain comparisons may help us to arrive at criteria for our own functions and resources.
 - (1) First, let us compare the two types of schools themselves. The University Library, by Wilson and Tauber, contains a great deal of useful information.
 - (a) Universities compared with service schools as to functions, organization, and resources.
 1. Functions
 - a. Universities conserve knowledge and ideas. The service schools have this function within their specialized fields. Certainly the military libraries conserve all the knowledge and ideas in their particular subjects.

4. a. (1) (Cont'd)

b. Teaching.

c. Research. In the sense of studious inquiry, this is a function of the military as well as the civilian schools. For the libraries of both types of school, it is perhaps the most significant function of the schools, in that it requires the most professional support.

d. Publication. Most, or all, of the service schools have a publication function.

e. Extension service. Some of the service schools at least have extension programs.

f. Interpretation. Both types of schools constantly interpret the results of their investigation through their teaching, publication, and extension activities.

2. Organization. Here we find a great difference. Faculties of universities are relatively settled, and include professors who have devoted years to the subjects they are teaching. Service school faculties, on the other hand, are characterized by rapid turnover. The average instructor in a service school is on a short tour of duty, and teaching is not his life work. The subject he is required to teach may or may not be the one in which he is most interested.

3. Resources. Here is a painful difference. University resources are comparatively fixed. They do not have the fluctuations in budget, space, and authorized personnel which face the service schools.

(b) University Libraries compared with service school libraries.

1. Mission. Both types of libraries support the administrative and educational policies of the schools of which they are a part.

2. Functions

a. Both acquire the bibliographic apparatus, books, journals, etc. to support the various phases of the work of the institutions. In the university libraries, the largest part of the book selection originates with the

h. a. (1) (Cont'd)

faculty. This is not necessarily true with the service school library.

- b. Both organize and prepare their resources for use by setting up branch collections, operating periodical rooms, reserve collections etc., and by cataloging and binding. The service schools operations are similar in general, but the cataloging is in most cases more detailed and specialized.
- c. Both render direct reader service involving research and bibliographic assistance, and instruction of clientele. The reference librarians in a service school, however, must have a very good grasp of their special subject fields - something beyond common knowledge is required.

3. Resources. As in the case of the schools themselves, the university libraries have fairly stable personnel, funds, and space, whereas great fluctuations mark the administrative support available to the military libraries.

a. Budget. The statistics on college and university libraries given in the January 1958 issue of College & Research Libraries are suggestive. We find that in the 112 large institutions concerned the ratio of library expenditures to total educational and general institutional expenditures was: Median 3.6%, with a high of 7.5% and a low of 1.3%. How this compares with service school figures, I can't say. I did try the Infantry School figures, and found we were just about the low figure for universities. Both the school figure and the library figure were less military personnel.

b. Personnel. When I began to think about this paper, I sent a short questionnaire to 24 large university libraries, one of which failed to reply, and found the ratio of library staff to total faculty and students was: Median 1 to 93.5, with a high of 23.1 and a low of 186.5. The ratio of professional librarians to faculty was: Median 1 to 20.8, with a high of 11.6 and a low of 66.3.

4. a. (1) (Cont'd)

- h. Criteria for functions and resources. From The University Library, by Wilson and Tauber, and from an article in Library Journal, "What to Consider in Evaluating the Library," I find that criteria for these civilian schools are in general:
- a. Complete integration of the library with the administrative and educational policies of the university, growing out of a systematic study of the curricula of the university and its methods of research, general administrative and educational procedures. This criterion seems to be a good one for the service schools also.
 - b. A library committee or board to assist the librarian in formulating a broad, general policy of library development. The functions of this group are advisory rather than administrative or executive.
 - c. A competent library staff, trained in professional and subject fields, and sufficient in number.
 - d. Adequate space and a good location.
 - e. Adequate financial support.
 - f. Preserves the accumulating source materials necessary for scholarly pursuits. Service school libraries do this also.
 - g. Integration of the library with certain other national and international resources. This corresponds to the military librarians program of specialization and cooperation.
 - h. Circulation department's primary function is to get the material to the reader expeditiously.
 - i. Library staff must understand the institution's policies and maintain intimate contact with its activities. This point is emphasized by Wilson and Tauber, "...the librarian is a university officer who serves the entire institution; he should be so placed in

a. (1) (Cont'd)

h. i. (cont'd)

relation to other administrative and policy-forming officers and bodies as to be informed concerning the interests of the university which the library should foster. Cloak and dagger maneuvers may serve to effect some of these contacts, but a positive program should prove fruitful on a more uniform basis. Thus the librarian should be in a position to know all modifications in the curriculum, since they are likely to affect the library." This business of getting the word in time and maintaining contact with other departments is just as important to the service school library, and if anything, more difficult.

(2) Comparison with purely research libraries - that is scientific, technical, industrial libraries not connected with schools. Lucille Jackson's book Technical Libraries is a very good source of information, and there are many good articles in Special Libraries.

(a) The institutions in which these libraries are found. The majority are in industrial organizations, trade associations, and research institutes. Sometimes the library is a department in the research laboratory of an industrial enterprise, serving primarily research scientists and their laboratory assistants.

(b) Mission - To pass on to the users important information necessary to their work. They are first and last information services for their clientele.

(c) Functions. In general, they "secure, assemble, and present all the information in a specific subject field, published and unpublished, thus bringing together related facts from files within the organization and those found in print." (8) The following are some typical functions:

1. Acquire and maintain a collection of books, journals, research reports, etc.
2. Conduct literature searches, resulting in bibliographies and reports. This is also a function of service school libraries.
3. Compilation of library bulletins comprising abstracts from current literature or other items of interest. Some of us do a good bit of documentation.

4. a. (2) (Cont'd)

4. Routing of periodicals. Some of us, at least, do this.
5. Interpret the library service by various means of liaison. All of us try to do this.
6. In summary, giving very comprehensive personalized service in a narrow subject range to a small clientele.

(d) Resources.

1. Budget. It seems to be generally realized that library research is ultimately less expensive than laboratory research, and therefore the libraries should have a budget adequate for maximum service.
2. Personnel. In-service training of the library staff is essential, as it is in the service school libraries, to assure adequate subject matter knowledge. It is pointed out that the libraries providing this training do not gain much for the first year or so since the training takes a great deal of time on the part of the regular library staff. How very true, we all know.
3. Physical layout and equipment. My sources mention the need for duplicating equipment and micro-filming facilities, as well as enough work space, storage space, and reading space.
4. The collection. Research libraries, like service school libraries, are very dependent on documents and periodicals for timely information - more so than the civilian school libraries. The importance of reports and studies made within the organization is also recognized. "The reports constitute unique records of the progress of original investigation, and it is a great importance that their contents be indexed accurately and in detail in order that information may be located easily; the data represents investment in research, the results of which will never be published in full." (8)

L. a. (2) (cont'd)

(d) Resources (cont'd)

5. In connection with resources, it is interesting to note a survey made by the Carrier Corporation and reported in Library Journal. The Carrier Library was faced with reorganization, and as a planning aid, sent out questionnaires to 27 similar corporation libraries. 21 replied in time to be included in the recap. (see Annex B)

(e) Criteria for functions and resources.

1. Identification with the parent organization based on understanding of the objectives and the means used to attain them, and by recognition of the library's role and functions by the rest of the organization.
2. Library Committee, consisting of representative from the various departments concerned. This advisory committee aids in determining policies and acts as a liaison between the library and its clientele.
3. Liaison or intercommunication with administrative superiors and with clientele. A program of continuous interpretation of the library service to its clientele. "Lacking channels of official knowledge, many a librarian is literally forced to depend on corridor gossip or peeping at the keyhole to keep ahead or in touch with current research projects." (9)
4. A library staff well versed in the special subject as well as the practices of library science. The librarians must not only know the literature, but be able to identify its relevance to their clientele.
5. A collection built around the special interest of the organization, including reports of research and investigation conducted by the organization itself.
6. Classification, cataloging, and indexing of resources are from the point of view of the specialized clientele.
7. The library saves the time of research scientists by taking the initiative in sending information to the right person as quickly as possible.

h. a. (2) (e) (Cont'd)

8. Space is convenient, quiet, and in proportion to the size of the research staff served. Note that they are using the number on the research staff as a yardstick factor for space requirements.
- (3) Comparison of the service school libraries with each other. This part leans heavily on the book "Soldiers and Scholars", by Masland and Radway.
- (a) The service schools themselves - their missions, functions, organization, and resources.
1. Missions include all or some of the followings:
 - a. To educate the leaders, technical experts, planners and policy makers needed by the defense establishment.
 - b. To develop doctrine.
 - c. To publish - prepare training literature, publish periodicals etc.
 2. Some typical functions are:
 - a. Prepare and conduct resident instruction, prepare and administer nonresident instruction.
 - b. Initiate action leading toward the formulation of new and the revision of old doctrine.
 - c. Prepare training literature or other publications.
 - d. Accomplish cross-service and allied understanding.
 3. Organization.
 - a. Faculty and staff are characterized by rapid turnover, short tours of duty. Teaching is not their life work.
 - b. Student bodies vary in size and pursue various courses. In some schools a few students are given very intensive courses of study; in others, some short technical courses are given which do not require much study on the part of the student.

.. (3) (a) (cont'd)

1. Resources. Military schools are not as autonomous as civilian institutions. They are part and parcel of the armed forces. The support the schools receive fluctuates as to money and personnel available. The schools must compete with more dramatic and costly requirements of the armed forces for a fair share of available resources, personnel and funds.

(b) The service school libraries. We are affected by the following peculiarities of our institutions:

1. Type of clientele. We are required to give bibliographic assistance to faculty, staff, and students who don't stay long. This makes liaison and interpretation of library service more of a problem. We have to do the same thing over again for each newcomer. The fact that the faculty are on short tours of duty imposes an extra responsibility on the professional staff of the library in getting the material in their subjects and making it known to them. They don't have the literature of their subjects at their finger tips like the professor who has devoted his life to some aspect of science or literature.

2. Resources. The fluctuation in funds and personnel spaces available to us makes it harder to plan ahead. If the service schools have to compete with more glamorous parts of the armed services for support, it is even more true that the libraries have to compete with more clamorous departments of the schools for support.

4. DISCUSSION. (Cont'd)

b. General criteria for service school library functions and resources.

- (1) Complete identification of the library with the parent school and support of its objectives, based on:
 - (a) The school's recognition of the library's role and functions
 - (b) The library's understanding of the school's needs acquired by systematic study of the school's mission, program, and organization chart.
- (2) Library representation at the planning and policy making level of the school to insure that the library is kept informed of developments and trends in time to anticipate instructional and research needs.
- (3) Continuous liaison with other departments of the school to keep the library abreast of requirements and the departments aware of the support the library can give them.
- (4) An acquisition policy is designed primarily to provide faculty and students with the information they need in connection with their work at the school, and secondly to stimulate independent thinking and professional growth.
- (5) Accepts the primary responsibility for preserving the studies, reports, and other papers of more than temporary interest which are prepared by the parent school, and all reports of conferences and committees convened at the post or installation.
- (6) Participates in the military library program of specialization and cooperation by conserving all the knowledge and ideas in the school's areas of specialization and sharing its resources with libraries of other schools and defense agencies.
- (7) Library's resources are organized for maximum accessibility to all its clientele by appropriate catalogs and other bibliographies apparatus, an adequate number of service desks, and by as many branch collections as are needed by students and faculty.
- (8) The library identifies the distinct subject matter requirements of each element of its clientele, and takes the initiative in providing faculty and students with books and other sources of information pertinent to their current work.

b. (Cont'd)

- (9) The library is open, with professional staff present to give reference and bibliographic assistance, during the hours when students and faculty can conveniently use it.
 - (10) The library's records and statistics contain all the information needed for identifying trends, anticipating needs, and for continuous evaluation of the service with a view to its improvement.
 - (11) Library's location is the best available from the standpoints of convenience to clientele and quietness.
 - (12) Furniture, facilities for reproducing materials, and other equipment are sufficient for the service required of the library.
 - (13) Total floor space allotted the library is sufficient to conveniently store its present collections with extra room for expansion, to provide the library staff with work space needed for maximum efficiency, and to provide reading and study space in proportion to the library's principle research clientele.
 - (14) The library's budget (less personnel) is in proportion to the school's other educational expenditures.
 - (15) The library's professional staff is in proportion to that part of its clientele needing exhaustive reference and bibliographic assistance.
 - (16) The non-professional staff whose primary duties concern technical processes acquisitioning, binding, preparing material for shelves and files, are in proportion to the library's total annual acquisitions.
 - (17) The non-professional staff whose primary duties concern reader service are in proportion to the library's total circulation figure for one year.
- c. Possibility of developing yardsticks for certain resources, such as size of staff and budget (less personnel). Can we establish correlations between certain typical functions and the resources needed to perform them? In the last four criteria above, I have suggested that there is a logical relation between:
- (1) Budget and other school expenditures
 - (2) Professional staff and principle research clientele
 - (3) Non-professional staff and total annual acquisitions and circulation.

5. CONCLUSIONS. It is concluded that:

- a. A list of criteria for functions and resources can be made which would help us evaluate our own libraries, and interpret our services to our clientele.
- b. Yardsticks can be developed, correlating functions with resources, which will help us to arrive at our requirements for fund, personnel, and space, and which will help us to gain the administrative support which we need in order to fulfill our missions.

6. RECOMMENDATIONS: That each of us consider the problems involved and contribute any suggestions we can draw from experience, reading or insight.

Ruth Wesley
RUTH WESLEY

ANNEX A - Bibliography
ANNEX B - Extract from Carrier Survey
ANNEX C - Extracts from other pertinent literature

ANNEX A - BIBLIOGRAPHY

1. Bentz, D. M., "College and University Library Statistics, 1956-57", College and Research Libraries, Jan 1958 (note: available as a reprint for 50¢).
2. Canter, Louis, "Impact of Documentation on the Research Library", Special Libraries, Dec 1954, p. 407-413.
3. Baker, M. O., "How to Start a Small Technical Library", Special Libraries, Mar 1955, p. 103-108.
4. Fry, B. M., "Special Librarianship and/or Documentation", Special Libraries, Sep 1956, p. 326-327.
5. Gibson, E. B., "What Can Be Learned From a Library Survey?", Special Libraries, April 1957, p. 133-138.
6. Graham, C. C., "Administrative Policies for the Special Librarian", Special Libraries, November 1954, p. 367-370.
7. Jackson, E. B., "Inside Documentation", Special Libraries, April 1954, p. 151-157.
8. Jackson, Lucille, Technical Libraries. N.Y., Special Libraries Association, 1951.
9. Lewton, L. O., "On the Outside Looking In", Special Libraries, February 1956, p. 74-79.
10. Masland, J. W. and Midway, L. I., Soldiers and Scholars. Princeton University Press, 1957.
11. Report of the Department of the Army Officer Education and Training Review Board, 1 July 1958 (note: the Board met at Fort Monroe, Virginia, on 7 January 1958 and continued in session for a period of 6 months).
12. "Significance of Special Librarianship", Columbia University Press Release, Special Libraries, March 1958, p. 136.
13. U. S. Department of the Army, Manpower Survey Handbook. Wash., Govt. Print. Off., 1957.
14. Wennerberg, A. P., "Literature Research at Armour Research Foundation", Special Libraries, April 1958, p. 149-153.
15. "What to Consider in Evaluating the Library" (Document No. 4.81, Oct 1957, of the Middle States Association of College and Secondary Schools' Commission on Institutions of Higher Education). Reprinted in Library Journal, June 1, 1958, p. 1656-1658.

ANNEX A - BIBLIOGRAPHY (Cont'd)

16. Woodruff, Elaine, "Work Measurement Applied to Libraries", Special Libraries, April 1957, p. 139-144.

17. Wilson, L. R. and Tauber, M. F. - The University Library, Columbia University Press, 1956.

ANNEX B - EXTRACTS FROM CARRIER SURVEY

Extracted from
 "What Can Be Learned From a Library Survey?" by E. B. Gibson
 IN Special Libraries, April 1957, p. 136

SUMMARY OF REPLIES TO CARRIER QUESTIONNAIRE

Column Information	High	Low	Median	Average
1 Corporation net sales.....	\$299,791	\$93,273	\$177,281	\$185,139
2 Number employees.....	37,060	6,328	12,870	14,908
3 Number ESRD (a).....	967	30	150	236
4 Number employed on library staff.....	13	1	4	5 (b)
5 Corporation net sales per libn (c).....	\$16,860	\$177,281	\$41,745	\$66,408
6 Number corporation empl per libn (c).....	1,083	9,779	3,149	4,561
7 Number ESRD per libn.....	11	150	48	52 (d)
8 Total library sq ft area.....	8,205	400	1,900	2,601 (e)
9 Total library sq ft area per ESRD.....	45	1.3	13.2	17.4(e)
10 Year library was established.....	1893	1953	1943	1942
11 Number books.....	15,000	800	5,000	5,434
12 Number periodicals.....	677	30	275	272
13 Total annual library budget (f).....	\$20,000	\$1,000	\$5,900	\$7,059
14 Library budget dollars per ESRD.....	\$152	\$3	\$40.50	\$53

2

- a ESRD - Engineers and/or scientists engaged in research or development work.
 - b Figure is the average for libraries reporting for the whole corporation
 - c The average including those reporting for one division only is 4.3
 - d Figures given only for libraries reporting for the whole corporation
 - e Average excluding one "out of line"
 - f Average excluding two "out of line"
 - g Excluding salaries
- Other common abbreviations used

Extracts from

Manpower Survey Handbook (DA Pamphlet #616-1, June 1957)

1. a. Requirements for manpower, as for other resources, are generated by missions. As a result, the assignment of a mission carries with it the concurrent responsibility for the assignment of sufficient means for its accomplishment. Manpower, to the military commander, is as much a resource as is materiel or money and he must determine and correlate his requirements for manpower just as accurately as for any other resource required for the accomplishment of an assigned mission. Unlike materiel, however, manpower cannot be stockpiled, and we have little control over the production of manpower. It is at the one time the most valuable, the most perishable, and the most difficult to control of our resources. It is logical then, to utilize time-tested and proven procedures to determine our basic manpower requirements. To date, one of the best systems devised for determination of basic manpower requirements in nontactical elements of the Department of the Army is the conventional manpower survey discussed herein.

b. The purpose of a manpower survey is to make an on-the-site appraisal of the military and civilian personnel requirements and of the personnel utilization of a given activity at a particular time, based upon considerations of policy, assigned missions, organizational structure, physical layout, facilities, operating methods and procedures, workload, efficiency of the work force and other factors, and to recommend such changes as may be appropriate.

2. Functional. The functional approach is the relating of what has been done (performance) to what must be done (functions). For example, is reproduction at a class I installation centralized as outlined in the yardstick (staffing guide) definition of work performed or has it been decentralized to the various staff elements on the Post? Obviously, to weigh requirements for decentralized reproduction, it would be necessary to look at the number of impressions handled by all operating elements and numbers of personnel utilized as compared to the numbers of personnel required if the operation were centralized. This procedure insures that functions are kept in the right perspective. Since functions are defined as that responsibility assigned to organizational elements which are considered necessary in the accomplishment of the mission, it follows that the organization must be considered also.

Extracts from
Manpower Survey Handbook (Cont'd)

3. Staffing guides, to include yardsticks, are primarily designed for CONUS operations and cover normal operating conditions. As a result, staffing guides cannot be arbitrarily applied. Particular attention must be paid to nonstandard or unusual conditions such as special jobs or missions, special functions required by the missions, unusual physical layout, abnormal operating conditions or hours, etc. When nonstandard conditions are found to exist the survey should carefully document these conditions and include in the team's recommendations an appropriate tolerance, upward or downward, from the basic staffing guide.

4. As pointed out above, staffing guides are a point of departure and should never be construed as prescribing, limiting, or authorizing numbers of personnel or positions. Operating personnel frequently fail to understand this fact and therefore survey team personnel must be prepared to enlighten them on this point.

5. Data for development and revision of staffing guide allowances are collected from manpower surveys of like functions. For this reason the importance of verifying performance data, commenting on the validity of existing staffing guides and explaining deviations from normal cannot be overlooked by survey teams to assure timely changes of staffing guides.

A valid correlation must be developed for the two variables — individuals required and workload. Use of the "scatter diagram" has been found to be the best means for presenting the relationship between the number of people required for different levels of work. The "scatter diagram" is a statistical procedure whereby the two variables are graphically plotted and a line of relationship then drawn.

Analysis of the data can then be made. Proper weight must be given to reported occurrences, deviation, and similar factors. Through interpretation a new or revised staffing standard can be established.

ANNEX C - EXTRACTS FROM OTHER PERTINENT LITERATURE

TECHNICAL LIBRARIES, by Lucille Jackson. SIA, 1951

SPACE ALLOCATIONS

Reading Area

There should be three and one-half feet between a wall and table, five feet between tables, with a minimum of four and one-half feet. Tables 72 x 34 inches will serve four readers, but smaller ones may be preferable. For intensive or extended study, carrels or cubicles for individual readers where books and papers may be kept together, should be provided if it is possible. The Firestone Research Library in Akron, Ohio and the Bell Telephone Library in Murray Hill, New Jersey have excellent facilities of this type. Unusual space-saving carrels have been designed for the library at the Ciba Pharmaceutical Products, Inc. at Summit, New Jersey. The Lilly Research Laboratories Library in Indianapolis has three private study rooms where typewriters may be used and reports prepared.

Storage Area. Book stacks should be at least thirty inches apart, preferably thirty-six inches for easy access. No more than six three-foot sections should be placed end-to-end in economic space planning. It will usually be preferable to place stacks perpendicularly to the walls at measured distances rather than line the walls and fill in the middle spaces with free-standing stacks.

As an aid in deciding how many stacks will be needed to hold the number of books the library expects to acquire, calculations can be based on the fact that an average of seven ordinary technical books or five bound periodical volumes occupy one foot of shelf space. Another method of calculating is based on a standard "cubook" which is a standardized unit representing an average sized volume; allowance should be made for one hundred "cubooks" to a standard single-faced section measuring 36" x 7'6" x 9".

Vertical files may stand back to back or face to face. If the latter plan is used, at least three and one-half feet should be left between them. It may be advisable to arrange the files in such a way that they are more readily accessible to the library staff than to the users of the library since it is wise to supervise their use. They serve a dual purpose when they are used for partitioning certain areas that require separation.

Administration and Operations Areas. The librarian should have an office, or an area affording some degree of privacy, since administrative duties require conferences, interviews, and telephone conversations. There must be a general service desk from which the library is supervised. Each staff member must have a desk situated in his own working area. At least forty square feet of space should be allotted for every desk, exclusive of passage ways.

Administration and Operations Areas (Cont'd)

Provision should be made for a place to prepare books for the shelves, for getting periodicals ready for binding, and for handling packages. A separate workroom with running water is a great convenience. If such a room can be arranged, supply cabinets and coat racks can also be placed there. Herbert (6) in "Personnel Administration in Public Libraries" outlined minimum requirements which were considered as essential to good working conditions. One of the points made is that the workroom should be planned in detail with an eye to improving efficiency and securing economy of effort.

TECHNICAL LIBRARIES

by Lucille Jackson

SLA, 1951

In an attempt to determine the number of staff members that should be employed to serve a research laboratory staff, Nicholson (2) investigated figures published in 1940 for indications of what is followed in actual practice. The findings showed that

Library staffs varied from 1 to 4 for laboratory staffs of 20 to 100, from 1 to 9 for staffs of 100 to 200, from 2 to 13 for staffs of 200 to 400, and from 2 to 11 for laboratory staffs of over 400.

Libraries staffed with one, two or three persons, in 1940 served an average of about thirty professional research workers per library staff member, while the correlation for library staffs of nine or more was less than twenty to one.

Individualized Service

The librarian has an unusual opportunity of learning the special interests of his clientele through personal conversation, subjects of papers presented at meetings, reports of contact trips, and attention to the reference questions directed to the Library. The ideal situation is brought about when the librarian is informed of research projects to be undertaken, either through actual attendance at research staff meetings when the projects are in the planning stage, or by memoranda from the director of research and development. Still another opportunity is opened to the librarian when he first is asked to make a preliminary search of any subject which holds promise for investigation.

Once informed of research in progress or likely to be undertaken, the librarian is in a strategic position to catch items of interest as they appear in current publications. Although limitations of time may make the use of printed or mimeographed forms advisable, telephone calls expedite personal service. A thorough discussion of an individualized type of service is described by Fleming, Brodman, and Robb (14). Also de Haen (4) has recently pointed out that "the scientific library will perform its function most efficiently if it takes the initiative in sending information to the right person at the right time."

Extract from

"On the Outside Looking In", by L. G. Lewton
IN Special Libraries, Feb 1956, p. 74-77

1. These librarians' headaches are caused by poor circulation -- not of blood, but of information -- that is, by lack of communication and understanding between management at the top level and the librarian.

2. The technical librarian should be as informed on research programs and their results as a research group leader. He should sit in on research conferences. Only in this way can he be kept "au courant" of what fields are being considered for research so that the appropriate material will be ready, classified, and available when the project is actually undertaken. The librarian also can often contribute to such conferences by steering interest away from those projects which he knows from the available literature have already been explored. Being "in the know" makes the librarian's work and searches more intelligent, more selective, apt, pertinent, and more interesting. Just as any job done blindly becomes mechanical, so also library work can easily slip into dull routines and lose the personal creative slant that makes it really a contribution to research. Lacking channels of official knowledge, many a librarian is literally forced to depend on corridor gossip or peeping at the keyhole to keep ahead or in touch with current research projects.

3. Original library space should be determined by management after conferring with the librarian (and space should be in proportion to services requested and the size of the research staff served). The final layout planning is something that management could leave entirely to the librarian, not only because he must live in and with that space more than anyone else, but also because in this too, he is a specialist whose opinions should be deferred to, like that of any other specialist.

4. An investigator is most appreciative, however, when the librarian on his own initiative sends attention notes carrying an abstract of new articles of particular interest to him. The new book sent first to the person whose specialty is covered is also appreciated. Such personalized service requires close familiarity with investigators' interests and it is this service which sells investigators on the library.

Extracts from

"Administrative Policies for the Special Library," by E. C. Graham
IN Special Libraries, Nov 1954, p. 367-370

1. In a general library, the librarian's job primarily is to make the collection accessible to the patron, and the key is the card catalog. In a special library, the collection is used primarily by the librarian to obtain information that has been requested or to select and assemble sources of information.

2. It is generally recognized that the special library "functions as a service unit, its activities being the centralization and presentation of facts, ideas, opinions as they are available in printed or other sources, and the supplying of these facts and ideas at the appropriate time to the appropriate person . . . The vital function is good service at the right time; all else is secondary and should be subordinated to it."

The administrative approach is pragmatic: That policy which contributes to good service is good, that which does not is bad. Since the results of a library cannot be measured in dollars and cents, the effectiveness of its services is under constant scrutiny by management. The librarian does well, therefore, to maintain a continuous audit of the library functions so as to streamline and improve services in any way possible. Alertness and flexibility are characteristic qualities of the successful special library administrator.

3. The librarian must know and must arrange to see that he is kept informed of the scope of activities and interest of the parent organizations, its organizational structure, and its personnel.

The place of the library in the organization. Although there is much discussion as to the exact place for the library on the organizational chart, there is general agreement that the library should be close to top management or to the executive head of the department which the library serves. Its proper place will guarantee it recognition, an adequate budget, and less red tape and more freedom in shaping its own destiny.

4. The personnel using the library. The number of employees and their location in relation to the library will affect library policies. In spite of the telephone and interoffice mail, the use of the library by any one person is too frequently in reverse proportion to the linear distance the person is from the library: that is, the farther he is from the library, the less he will tend to use the library.

Extract from

Significance of Special Librarianship (Columbia University Press
Release) IN Special Libraries, March 1958, p. 136

The result, notes Dean Leigh, has been the growing profession of the special librarian. "More than the traditional 'cataloguer' and compiler of bibliographies, he must not only know the material which has been written in his field, but must identify its relevance to the work of a specialized clientele as well. He must know the scientists and the facts engulfing their work, must be able to provide them with information on previous work in the same area so that research is not needlessly duplicated, and must be able to abstract and bring to their desks such information for their use."

Extracts from

"How to Start a Small Technical Library", by M. O. Baker
IN Special Libraries, March 1955, p. 103-108

1. In selecting a location, the allowable floor load is a vital consideration. The weight of a stack of books seven shelves high is 140 pounds per foot, plus the weight of the stacks and a margin for safety.

Whether or not a separate room is used for the library, the place selected should be quiet.

2. In choosing space for the library a vital consideration is sufficient area for expansion. A library grows like the proverbial green bay tree. It cannot remain static. Much of the value of the library resources lies in the retention and listing of current data.

It has been estimated that a technical library doubles itself every twelve to fifteen years. This figure might be questioned as far as shelf space is concerned. Unless control is rigid, shelf space may double itself within eight years. Averages are merely guides at best. Periodicals grow at the average rate of seven inches of shelf space per year for each title. "Chemical Engineering" increases at the rate of ten inches per year. Weekly publications mount rapidly.

3. The size and type of staff will depend upon the number of professional personnel to be served and the type of research and services required. For example, some laboratories require the services of a full-time translator; some require a full-time abstractor. Certain companies require constant and competent patent searches. These requirements naturally increase the staff and therefore the immediate cost. Generally speaking, and omitting these specialized positions, one competent librarian and one clerk can serve twenty to thirty professional research workers.

extracts from

Soldiers and Scholars, by J. W. Masland & L. I. Radway
Princeton Univ Pr, 1957, p. 443 and 445

1. Unlike civilian colleges and universities, military schools are not relatively autonomous institutions. They are part and parcel of the armed services, which have many responsibilities of which military education is only one, and not a primary one at that. The achievements of military education cannot be judged apart from this broader context. Its strengths and weaknesses are the products not only of what is done within the schools but of forces external to the schools within the services. The principal measures required to bring further improvement cannot be accomplished by the schools alone.

This dependence upon external factors takes several forms. It rests upon what the services call "support." The services provide buildings, equipment, and operating expenses.

2. The administrative pattern employed by each of the services in support of its education programs has a direct bearing upon the quality of that support. The military schools must compete with more dramatic and costly requirements of the armed forces for a fair share of available resources, personnel, and funds. Unless they have access to responsible leaders they face serious difficulty in holding their own in a highly competitive environment. Insofar as they maintain the interest and respect of these leaders, they may expect to prosper.

Extracts from

"What to Consider in Evaluating the Library" (Document No. 4.61, Oct 1957, of the Middle States Association of College & Secondary Schools' Commission on Institutions of Higher Education) Reprinted IN Library Journal, June 1, 1958, p. 1656-1658

1. The primary characteristic of a good academic library is its complete identification with its own institution. The measure of its excellence is the extent to which its resources and services support the institution's objectives.

Every library must therefore be evaluated in its own setting rather than by comparison with general patterns or norms, because each library must support a particular educational program. The prerequisite for library evaluation, accordingly, is an exact description of the institution's mission and of the means by which the institution proposes to fulfill it. Given that, scholars can identify the resources they must have to accomplish the task. The evaluation of the library can then begin.

2. Clearly, therefore, the emphasis in evaluating a library should be on the appropriateness of the collection for the instructional and research programs of the students and faculty, its adequacy in breadth, depth, and variety to stimulate both students and faculty, its accessibility, including proper cataloging, the competence and interest of the staff, and above all what happens in the reading and reference rooms. Statistical comparisons need to be handled with caution. Percentages of the educational budget spent on library service and growth, per capita expenditures, number of volumes, circulation figures, and ratio of staff to students and of students to seats often provide suggestive leads, but they should be studied in context and perspective.

SELECTION OF BOOKS AND DOCUMENTS

Miss Clara J. Widger
Librarian
Industrial College of the Armed Forces
Washington, D. C.

Selection of books and documents in any military school library should tie in very closely with the College curriculum. First become familiar with the subjects covered by the various phases of the curriculum and then plan your selection accordingly. You can't read a book review, see a reference to a new report, hear a newscaster's comment without wondering if and where the information hits the interests of the College.

As an example the Industrial College of the Armed Forces includes in its College Catalog (show) a list, in some detail, of the subject areas to be covered by each Unit. Imagine that this is more or less standard practice. Unit curriculum books are then published giving "required" and "reference" reading lists. These are the joint work of the Faculty and the Library. Because it is necessary and important that only the latest possible information be included, these lists are carefully checked - obsolete material deleted and new added. To keep up to date all possible sources are checked - "Publishers Weekly", "Book Review Digest", "N.Y. Times Book Review", "Annals", "American Economic Review", "Foreign Affairs", as well as material in technical periodicals. Book lists from service schools and libraries are a great help. In our College this information goes to the Chairman, Library Committee with recommendations for purchase and the number of copies needed. Requests for purchase originating with the branch chiefs are routed to the library thru the Chairman, Library Committee. All requests are coordinated, duplicate ones studied to ascertain the number of copies needed.

Try to have the Library placed on the mailing list to receive government reports in your subject field as issued. Procuring government documents is less of a problem in D. C. than elsewhere. Usually a phone call will suffice to get a copy quickly for examination - if more copies are needed GPO stamps are available. Order annual volumes of UN publications, "Statesman's Yearbook", "U.S. Government Manual", "World Almanac" etc. as soon as they are announced. In fact we read the jacket at GPO for the Government Manual and have copies as soon as they come off the press.

I have found that graduates of the College as one of the best sources for new and unusual material. Many times they send us reports before we are aware that they exist. And when I ask for help they are most cooperative. Perhaps they remember their student days when they wanted a certain document or book "today, please". So keep on good terms with your graduates.

Number of publications procured should be judged on how they will be used. Our 37 student rooms have permanent room sets; additional material is added for each Unit - this is returned to the Library at the end of the Unit. Reference material is shelved in special places in the Library. This procedure is necessary when the supply is so limited that we don't have sufficient copies for each room. This material may circulate over night. Our purchase policy for room sets is 37 plus 4; for individual issue 1 for each student plus 8 and for general references at least 5 copies. In many cases permission is granted the College to reprint specific articles or chapters. This type of distribution is less complicated than trying to procure multiple copies of the basic document and is of great value to the students.

If material is to be used for a short time and it means that it will have little or no future value borrow it. This policy prevails when the students are on their theses - we couldn't hope to cover all their varied interests in any other manner.

Know the subject interest of each member of the Faculty and bring new material immediately to his attention. Also consult him as to possible value of material that has come to your attention and see if he thinks it is worth procuring. Close cooperation between the Faculty and the Library is necessary, important and enjoyable.

Decide whether gift material is of value and if it isn't send it on to some-one else. If it continues to come in try to find the source and ask that the distribution be stopped.

Because the subjects covered by the curriculum vary from year to year it is important that this fact be kept constantly in mind. It is important when selection of new material is being made.

Try to find out as much in advance as possible what material will be needed, when, for how long and in what quantity. It takes time for requisitions to be processed - keep reminding people of that fact. Even cataloging can't be done in short order. Outside faculty advisors have been brought in for short periods and the Library would be swamped with requests for material in short supply. A quick explanation in the right place should indicate that the Library should have been in on the planning. Personal appeals sometimes go further than memos. Lack of channels of information can cause real trouble.

Train the Faculty and students to give full and accurate information when requesting material to be borrowed. A vague title and date may cause delay in procuring needed publications. I know of no quicker way to train a person than to put him thru the procedure as you would a book. He understands your problems better after that. Go more than half way and you will find that others will cooperate with you.

"EXCHANGE OF MILITARY CATALOGING INFORMATION"

Miss Catherine L. Zealberg
Chief, Processing Branch
Army War College Library
Carlisle Barracks, Pa.

This is an era of exchange. From the schoolboys who exchange comic books to the nations who discuss the exchange of atomic secrets, all are agreed that exchange is a good thing. How much to exchange, and how to accomplish such exchange is everyone's problem. This paper concerns the possibility of exchanging military cataloging information or materials. Without our labelling it as such, we are already exchanging cataloging information through the Air University Periodical Index, through our accession lists, and through discussions like this at conferences and conventions.

Instead of presenting an academic paper on the benefits of exchange, I want to get your reaction as a group to a more definite program, to the possibilities of a regular exchange of specific information which might save all of us numerous hours of repetitious research.

I should like to suggest the exchanging of main entry cards complete with tracings for those military documents for which there are no abstract cards, no printed cards, and for which original cataloging must be done. The exchange of the main entry card would provide the recipient with information regarding classification, authorship, subject headings, and source.

How can this be accomplished, and what difficulties might be encountered in such exchange?

Certain military libraries are now exchanging with each other biographical data, and the same mailing might include main entry cards. However, this would require the preparation of many additional "main cards", and for those libraries who prepare each card individually, this could be a hardship. Mr. James Slattery, librarian of the Quartermaster School, who is interested in exchange of this kind, suggests that "main entries" could be transferred to regular mimeographed stencils, with perhaps six to eight cards on each page, and that these mimeographed pages be exchanged. But since the preparation of such stencils might still be a laborious chore for many small libraries, and since much duplication might result, I would like to recommend an adaptation of this idea. Suppose that one of the larger

libraries in each of the services (e.g., Army War College for Army; Air University for Air Force; Naval War College for Navy) served as a clearing house for exchange. Each participating library would send to this clearing house one copy of each main entry chosen for exchange; entries would be screened for duplication, and a stencil prepared at this clearing house. Mimeographed sheets of "main entries" would then be mailed to participating libraries.

Parenthetically speaking, I can visualize ways in which the participating libraries might use these mimeographed sheets similar to the way libraries now use L.C. proof sheets. Entries could be cut apart, and after being used by the cataloging section, might be screened by acquisition section for selection purposes, or used by service division personnel as an index to available materials needed only occasionally which could be borrowed.

To be effective, a regular schedule would have to be maintained; weekly lists would be ideal, certainly a month would be the maximum length of time that could be permitted between lists if they were to be valuable to recipients.

Even with the mechanics of distribution ironed out, other details have to be considered to make such exchange feasible and valuable:

1. Varying needs of participating libraries
2. Lack of cataloging uniformity among military libraries
3. Lack of a central agency to supervise exchange
4. Restrictive regulations
5. Cost of preparing material and mailing

The first two of these, I do not consider obstacles to exchange. The purpose of such exchange is not to bring about cataloging uniformity, but rather to provide for an exchange of ideas and information. I do believe it would be necessary for the "clearing house" libraries to set up a style manual to govern entries in the mimeographed bulletin, similar to the manual prepared by Air University for participants in their cooperative periodical indexing, but this should not force contributing libraries to change their cataloging policies. While it is to be expected that some libraries might benefit more than others from such exchange, it would seem that no library could "lose," since even the small libraries might contribute valuable information particularly about their own publications.

A central agency to supervise exchange would be a great advantage, but its absence might be taken care of through the establishment of "clearing house" libraries, as suggested earlier.

One of the principal difficulties to be surmounted is the matter of security. The inclusion of classified titles on mimeographed lists would require that such lists be classified; even if only unclassified citations were included, the listing of an accumulated group of classified documents might constitute classified information. Classified accession lists are

being prepared and distributed currently, however, so that even this difficulty does not appear to be unsurmountable.

The cost of such exchange need not be prohibitive. Unclassified mimeographed sheets of main entries might be included in the present mailing of biographical data; even the cost of registered mail required for classified lists, and the personnel needed to screen entries and prepare stencils would be compensated for by the value of the lists.

Throughout this paper, I have not mentioned the possibility of "cataloging at source" as a solution to the need for cataloging information. If this could become a requirement for all military documents, as abstract cards are now a requirement for technical reports, the need for an exchange such as I have just been "plugging" may be eliminated.

BOOK SELECTION IN A TECHNICAL LIBRARY

Mrs. Catherine E. Quinn
Librarian
Air Force Office of Scientific Research
Air Research and Development Command
U. S. Air Force
Washington, D. C.

Book selection is one of the most important of the many roles that must be assumed by the librarian. And sound science book selection demands a particularly unique combination of talents in order that the collection be vital and essential to the mission of the activity for which it is maintained.

Scientific literature differs from that of the humanities even as the scientist differs from the artist, the musician or the historian. For your true scientist is a man with a lack of bias and a tendency not to rely on the evidence of the senses. So too, scientific literature - true scientific literature, that is - tends to be composed of tentative statements, approximations and suggestions of experimental methods. For this reason, popularizations with rare exceptions are dangerous acquisitions in a science library. There is no fiction in science, although there may indeed be "science-fiction!"

Since sound book selection is the unique and decisive act of the librarian, it would be well if this function could remain the prerogative of that individual and not be weakened through the well-meaning but often selfish requests or demands of staff and/or library advisory committees. Although for the very plain reason that the tangible rewards of following a scientific career are greater than those of practicing librarianship, very few scientists become librarians, still, how many of you have ever noticed any reluctance on the part of your scientific or technical patrons to feel themselves incapable of running your library or of telling you how simple book selection really is? Do not misunderstand me however - a library advisory committee or staff members with a broad objective view of what will be useful not only for their own particular work, but who concern themselves with the intellectual activity of additional scientific disciplines can be invaluable. These men by virtue of their membership in various societies, attendance at congresses, symposia, etc., are often made aware in advance of forthcoming publications, both books and documents which will make worthy additions to the library's resources. In addition they can keep the librarian informed about "hot" projects or recent breakthroughs into the frontiers of science that will give the keen book selector inklings often long in advance of what may be forthcoming in the literature. Those individuals on the other hand - a mathematician for

example, who requests nothing but specialized math texts and books seen his nose at your collection in chemistry, or some military type I have run into, who care not a fig for the real excellence of any of the collection so long as the shelves are well filled and precisely arranged - these can be the real menace to the true growth and worth of your library. Happily for all concerned, with the increasing cross-bracing trend, the sciences and the increasing better education among the military, both types are probably going to be less and less prevalent among library patrons. Cultivate the former as you would a trusted colleague in the profession; as for the last mentioned - it may help to do some real spade-work of re-educating, using the appeal of professional or military pride in superiority to overcome some sluggishness in awaking to how real an asset a truly fine collection may be.

The interlibrary loan picture is affected by certain characteristics of the library's selection and acquisitions policy. A library's collection is often built in response to staff requests for books and periodicals and the librarian's interpretation of them in relation to the established policy or mission of her center or institution. We all acquire for local needs, well or badly defined. When a new journal is announced the desirability of entering a subscription is weighed by the librarian and/or advisory staff in each agency and a decision is reached either to buy it or to pass it up. The pros and cons are pretty much the same in each agency. With a modest book budget this usually results in little more than a core collection. Libraries in the same area, of similar size and affluence are doing much the same thing. The same kind of libraries buy much the same kind of books. They subscribe to most of the same journals. Thousands of items are rejected as being too special, too general or too expensive in relation to potential use, and by and large all small libraries reject the same items. A Union List not of what other libraries have, but of what they were most likely going to have, would be a vastly useful and wonderful tool for those of us in small libraries! Anyone doing interlibrary loan work knows or soon learns that what is not in her own collection is not likely to be found in other small collections, and consequently she turns to the larger governmental libraries in the area or to extremely wide collections found in such centers as Washington, New York, Chicago, Boston and the West Coast. Even among the larger libraries the situation is similar. If, say, the Army Library decides to buy or reject a periodical, it is for many of the same reasons that the Naval Research Lab Library or the National Bureau of Standards Library will buy or reject it. This situation again leads to these larger institutions turning to their still larger source - the Library of Congress - most frequently. The system works pretty well. For most of us there is always a larger institution from which to borrow,

but it has the effect of requiring the larger libraries to carry a disproportionate burden in supplying books to their smaller sister libraries. Something resembling the Farmington Plan might be a help to all military technical libraries. The enrichment of resources could be carried forward according to well developed plans (which I will not go into here for obvious reasons!) - either within the separate services or even (oh happy thought!) on a tri-service basis by area and by subject. As a form of cooperation it would be different in both nature and purpose from what has in the past been regarded as cooperation - the development of means of locating books and journals in other institutions - books and journals acquired solely for local reasons and for local staff without reference to regional or national needs. Just recently, apropos, we received a request for a commercially published two-year old book, from a military establishment in west Texas. It would be less than worthy of me not to suppose that the librarian there had not queried other libraries in that area before she wrote all the way to Washington, D.C. (and to one of the smallest, if not THE smallest library at that!) in order to borrow this particular item. Under such a plan just mentioned such an expensive and time consuming maneuver need not occur.

The vast ferment in the physical sciences in the Twentieth Century has resulted in the proliferation of science and technology literature to an extent where those of us in the book selection end of library work are looking upon a scene as filled with possibilities for success or error in our choices as today's voyager into outer space has of reaching his destination of one chosen planet among the far-flung galaxies of which he is perhaps only dimly aware.

The librarian cannot and should not be a subject specialist in any one field except the realm of BOOKS. Leave the subject specialization to those whose careers lead them into other fields. There are few truly special libraries in the narrow sense - off-hand I can think of perhaps three: The Folger Shakespeare Library, the bee culture laboratory library at Agriculture's Experimental Farm at Beltsville, Md., and the Philatelic Library of the Post Office Department in Washington, D.C. - and you will note that only one of the three can by any stretch of the imagination be classed as a scientific or technological library! We need rather to be "specialists in the general," but above all to be specialists in the printed literature.

In addition to the use of all the tools of book selection (which would also be used in non-scientific libraries as well) i.e., book reviews garnered from all manner of sources, publishers' lists and announcements, lists published and/or established as being basic to any reputable collection, and the usual inter-change of opinions among one's professional colleagues, there is one last important factor that must be considered.

It stems back to an earlier thought I expressed, that of the intrinsic difference between the literature of the humanities and that of the sciences. We must somehow note these odd differences, must take cognizance of the variance of the scientific from all other literatures. I am quoting when I state that the language the sciences share with the humanities, when they do not use their own language of mathematics, is only an accidental sharing. These distinctions between the literatures have great implications on book selection policy. The cost to the library of buying a book ephemeral in nature, or popularizations both in dollar value and in true academic worth is incalculable. There is here a chain of consequences, which can either depreciate or appreciate, infinitely and irreversibly. Our mistakes in the selection of our science collections, both of commission and of omission are far more costly than mistakes in any other type of collection.

Only a fraction of what is in print is of lasting research value and \$50.00 spent wisely will represent \$260.00 worth at the end of the second year. Significant books can be and should be selected with meager funds because the production of significant books is meager and their utility permanent. The stumbling block here is the lack of any definition of the phrase "research value" or of "scholarly utility" to guide the acquisitions librarian. It is doubted that any two librarians could reach complete agreement on a general working definition of either phrase if they sat down to work one out. This by the way was tested back in 1952, when four well-known librarians set out to check in a foreign national bibliography for 1949 the items they thought would meet such a definition. They reviewed 1,022 items, excluding fiction, drama and poetry. They agreed unanimously on only 110 items, they voted three to one (either for or against) on 396 and on 516 items, just over half of the titles, two voted yes and two voted no. The situation has not changed. What one library uncompromisingly proclaims junk another library pronounces of fundamental research value!

It appears to be a truism that libraries are doing their best with the staffs and means available to them, but they meet with widely varying degrees of success. One strong indication of this is the concern expressed by various organizations of scholars which are currently working independently on their own possible solutions to acquisitions problems. These include the Social Science Research Council and a committee of the American Council of Learned Societies. Also an International Conference on Scientific Information is to be held in Washington in November.

For it is in our science collections, and in the contributions which we make to them that we may measure our maturity - our own as librarians, and our nation's as reflected in our national libraries to which we as custodians have the rare privilege of leaving our mark.

Quotation:

"The world of books is the most remarkable creation of man. Nothing else that he builds ever lasts."

Citations:

Frederick D. Weinstein, "Book Selection in the Sciences," ALA Journal, 52,7(1958)509.

Robert L. Talmadge, "The Farmington Plan Survey: An Interim Report," College and Research Libraries, 19,5(1958)375.

PRESSENTATION ON NATIONAL SCIENCE FOUNDATION'S INVENTORY OF
FEDERAL SCIENTIFIC INFORMATION ACTIVITIES

Dr. Philip G. Seitner
Office of Scientific Information
National Science Foundation
Washington, D. C.

INTRODUCTION

It has seemed superfluous, in view of the special interests of the group being addressed to describe in great detail the problems engendered by the world's mounting quantity of research and correspondingly increasing volume of technical reports. The handwriting was on the wall before 1940; the research stimulus provided by the wars since that date has only accelerated the acute stages of the malady. A recent surge of attention given to aspects of availability and use of technical information was seeded by a spectacular scientific achievement, by a nation now conceived as a rival — an achievement that stung the popular American ego. This unexpected and sudden aggravation of the problem, whose solution was still in its initial stages, may be variously interpreted as fortunate or unfortunate — fortunate because of the stimulus provided in strategic quarters where the problem had had little previous recognition — or unfortunate because a certain amount of confusion, misunderstanding, and waste is almost inevitable when sudden and explosive growth is imposed on a field still in its early evolutionary stages such as is this field of information handling — a field not yet ready with adequate tools and methods developed to accomplish its ultimate ends. In any case, the urgency is now with us.

The problem is hydra-headed, each of its parts warranting separate attention: dissemination, translation, assimilation, selected retrieval, and correlation. While each of these has its fascinating — and formidable — aspects, any successful solution in the last mentioned areas are dependent, like a train of upright dominoes, on the success by which the solutions in the first areas have been accomplished and all are dependent finally on the successful stand of the first — i.e., on adequate dissemination and availability of technical information from the source of its discovery.

I am to deal here with only one aspect of all this vast problem of dissemination which, in its broadest scope, concerns world-wide scientific communication. Essentially, I am limiting attention to technical information engendered by research and development supported by federal funds of this country. This comprises, incidentally,

approximately 50% or slightly more of research and development of the nation. To date, there has been no central source of information about the output of technical reports and, particularly, information policies of each of the federal agencies, other than the agencies themselves. The Inventory has the broad objective of being that source of information about scientific information policies of each federal agency. It is conceived as being assistant to persons working outside the federal government, in areas of information and documentation (including the technical librarian). In addition, the scientists and engineers performing the 50% of research and development that is not federally supported should also find invaluable an understanding of the policies of federal agencies and the ways of learning about and obtaining technical information (reports) from federally supported research. On the other hand, it is most probable that the Inventory will prove valuable to the same categories of technical personnel within the federal government as those outside, including the military and other technical librarians.

While this "information-about-information" service is an objective, the Inventory professes to a broader objective, that of stimulating improvement in handling information, based on an assumption that we have not yet arrived at Utopia. It should be clear that the Inventory — and NSF — is not primarily concerned with problems within any one given agency, but rather with problems that concern all agencies. Because of the differences in character of agencies, total standardization in information policies is not only an undesirable objective — it would be an impossible objective.

It is one of NSF's responsibilities to be advisory and — when advice is requested — to have information that will give basis for that advice. It might not be inept here to compare NSF to an electronic machine, a machine which represents a practical effort to coordinate the activities of (1) the federal government with (2) the field of scientific research and development, both already of gargantuan proportions and still growing. One does not expect a machine to provide answers to problems if information about the problems have not been completely and carefully fed into it. In the same way, NSF cannot be expected to fulfill its analytical and advisory mission if appropriate information has not been fed into it. I think the realization of this can at least in part account for the prevailing atmosphere of cooperation of federal agencies with NSF in general and the Inventory in particular.

However, beyond the use NSF might conceivably make of the information as an aggregate, I tend to regard the Inventory as being valuable to other federal agencies; particularly when establishing a

policy or in re-assessing an established procedure, it seems reasonable that the deliberations of any agency would stand to profit by having information about the practices other agencies have used for the same activity.

HISTORY

The history of the Inventory dates back to a committee of the Research and Development Board (the Special Committee on Technical Information), one of whose first projects was the collection of information about the output of technical documents and policies and methods of handling information by Department of Defense agencies and special information agencies. This information was assembled and published first in January 1949, classified as restricted, and given a distribution in accordance with that classification. Subsequently, this report underwent two revisions, the final edition appearing in September 1951. The title given the document was "Inventory of Technical Information Activities of the Department of Defense." About the time of this last edition, the Special Committee on Technical Information was discontinued.

In 1950, the National Science Foundation had its inception (the act creating it being dated 1950). In its organization (during 1951), an Office of Scientific Information (OSI) was established, which was given responsibility for a broad scientific information program including the granting of support to scientific publications and to information services of all kinds as well as to studies and research projects in the field of scientific information.

Over a period of several years (1952-1956), intentions persisted in the Office of Scientific Information for continuing the inventory project started by the discontinued Special Committee of Technical Information, but although work was begun, circumstances did not allow time for completion of any significant portion of the project. In 1956, the Office of Scientific Information made the decision to establish a program to be known as Government Research Information (GRI), one of whose projects was specifically to be the resumption of the old Inventory, but with horizons expanded to encompass more than Department of Defense. It was envisioned as an inventory that would provide information about policies and procedures used by all federal agencies concerned with technical reports from research and development, rather than just the Department of Defense.

To lend further definition to the Inventory, attention is called to an earlier NSF project in another major NSF department, the Office of Special Studies. This project was a study of Federal organization, made in 1954 and 1955, and from it came reports, one of which is entitled

"Organization of the Federal Government for Scientific Activities." This deals exclusively with the organization of agencies for performing research and development; it does not concern itself with the technical information resulting from this research, except incidentally. To an extent, the GRI Inventory might be considered an adjunct of this earlier publication.

For the most part, the present Inventory may be assumed to be concerned with availability of unclassified technical documents and the federal agencies' policies and practices regarding those unclassified documents. However, even casual reflection will make apparent the fact that it would be impossible to construct a report on technical documents which would avoid completely any reference to classified documents -- beginning with the very fact that the distinction must be made in order to define the Inventory. Too frequently, a single type of report (i.e., a single series) includes some reports whose subjects demand their distribution be restricted (for reasons of national security or for proprietary reasons), while other reports of the same series are intended for wide distribution. The point made here is that the agency and the Inventory report does not automatically suppress description of a series because some, or most, or even all of the reports of the series are classified; it must be assumed that classified documents can be eventually declassified and that a classified document has a wide distribution potential. Furthermore, the declassification policies and actual declassification accomplishments are definitely appropriate to a description of an agency's information activities. Thus, the Inventory cannot pretend to ignore or avoid entirely the aspect of classification of technical information.

SPECIFIC ITEMS OF THE INVENTORY

Each agency has been requested to define its technical documents. A publication's character, as well as the character of any series of publications, is determined on the one hand (1) by the subject or type of subject with which it deals and on the other hand (2) by its technical level and comprehensiveness.

A description of the general subject areas of an agency's technical reports (the first of the two determinants of a publication's character just mentioned) has been selected as an introduction to the report for each agency. This usually includes a brief account of the agency's research activities and any description of the current organization for research that seems important in order to make more comprehensible subsequent parts of the report on information handling policies; it is particularly pertinent if significant changes in organization have been made since the 1954-1955 survey by the NSF Office of Special Studies. It has

seemed invariably appropriate also to include in this introductory section at least a listing of the installations of the agency (Washington, D.C. offices and laboratories and field stations located elsewhere) where its research and development is carried out, as well as identification of major contracting laboratories.

Following this introductory section on the agency and the general subject areas of technical reports, the Inventory pays special attention to the identification and characterization of report series. Defining a technical publication type is not as simple as it might seem; indeed, defining a "publication" is the root of considerable part of the difficulty in constructing the list of the agencies' series of reports. Each agency has a publication spectrum, ranging from bound reports given wide distribution, through typewritten or mimeographed technical notes passed between individuals or laboratories or between laboratories and administration. This spectrum usually contains a transition zone of variable width below which the agency conceives its technical documents to be intended mainly for internal use and therefore to be questionably appropriate for the Inventory. Actually, to be on the safe side, most reports prepared by Inventory span this "transition" zone to include descriptions of certain report series which have more or less restricted distribution (even though not classified) merely by their nature. In addition, brief descriptions are included of technical report series which have been discontinued or replaced by a new series within the recent past, because of the considerable probability of reference to certain reports of such a discontinued series.

Accompanying the descriptions of the series, the agency is asked for an estimate of the number of reports (annual) which each series represents — preferably, the number of unclassified reports of the series. Ideally, Inventory would like to know the total number of reports (reflecting the volume of research) and for each series the percentage of reports which are unclassified.

Announcement of technical reports is of great interest to the Inventory which has chosen to regard "announcement" in a broad sense — i.e., any means of public notification of the report's existence and availability. This is intimately related to the Office of Technical Services (OTS) and the Government Printing Office (GPO), both of which are given special consideration by requesting specific information about the procedures and policies for cooperation with those agencies in announcing reports.

In general, the Inventory report indicates whether the agency prepares any periodical announcement publication for its own technical

reports; if so, the frequency with which this is issued, its description, and its availability are included in the Inventory report. In addition, it is of interest to know in what other general announcement media the agency's reports appear, such as the widely-distributed and well-known Monthly Catalog of U. S. Government Publications (GPO), the more recent publication, U. S. Government Research Reports (GTR), and (if the agency is of the Department of Defense) the Title Announcement Bulletin (ASTIA). In addition, there are indexing and abstracting publications such as the Bibliography of Agriculture, Chemical Abstracts, Biological Abstracts, Engineering Index, and many others, which regularly serve as announcement channels for government research reports appearing in professional journals. The degree of coverage by these special abstracting and indexing services in announcing reports of the publications series of federal agencies, or attitudes toward extending their services thereto, is not yet entirely clear. Any miscellaneous announcement media which happen to be significant in the case of a given agency, will also be included in the Inventory report; examples are book and report review sections of professional journals, radio and TV, newspapers, comprehensive lists of the agency's publications available at a given time, etc.

The agency has an opportunity through this NSF Inventory of expressing its general attitude toward supplying copies of its unclassified reports and describing provisions for supplying copies. Some agencies understand one of their major missions to be the dissemination of information relative to their specific area of interest, the most conspicuous example of this being perhaps the USDA. In such a case, the agency makes every effort to supply, either at absolutely minimal cost or, if possible, at no cost, a copy of any report to anyone who gives reasonable indication of his need for it (which indication frequently consists of nothing more than his request for the report). At the other extreme, there are agencies who conceive their research and development to be more of internal concern. The Department of Defense agencies fall in this latter category; their primary concern is the national defense and their research and development have this objective, rather than the objective of instructing the general public in advances of defense materials and equipment. The fortunate — or unfortunate — fact emerges, however, that Department of Defense research has become so vast and varied that it touches virtually all scientific fields; i.e., this Department of Defense research has scientific significance beyond that for national defense. The only possible compromise to this somewhat paradoxical situation has been the development by such agencies of an attitude which essentially favors the dissemination of all technical information not serving specifically as an advantage in event of active defense of the nation. Although this attitude exists, the actual implementation for dissemination of unclassified information has at times tended to be given low priority — frequently for the justifiable reason that the agency had neither the specific authority nor means to distribute

its reports widely. For the Department of Defense, the Armed Services Technical Information Agency (ASTIA) was formed, but this was conceived essentially as a device for internal use; it serves agencies outside the Department of Defense and its contractors only incidentally. Now the Office of Technical Services (OTS) exists and, to the extent possible, serves as a channel for making available Department of Defense technical documents to non-DOD or non-government scientists. Thus, some agencies — especially DOD agencies — who have developed no special provision for supplying reports on direct request from non-federal agencies, have been more than willing to place this function entirely in the hands of OTS.

Specifically, then, it is this information which this particular part of the Inventory report wants to convey — whether, beyond the agency's general attitude of willingness to disclose certain research results, it depends entirely or in part upon OTS or CPO for this service, or whether it accepts requests for reports and furnishes them itself. The Inventory report would ideally indicate for each agency the address to be used for requesting a copy of a report of that agency. (It should be noted that, if the report is included in the Monthly Catalog of U. S. Publications or in the U. S. Government Research Reports, and if these announcement publications are available, the source and price of any report so announced can be found therein.)

OTS has the function of serving as a source of technical documents from federally supported research — or information about those documents — and especially for those documents from agencies which have no special provision of their own for announcing and giving wide circulation to their reports. Inventory is interested in learning, for each agency, the exact procedure the agency uses in cooperating with OTS, the degree of dependency on OTS for announcement and dissemination of its reports, and the efficiency with which this procedure works. If reports are sent to OTS on a regular basis, the Inventory report should indicate which of the agency's series are sent.

GPO has long requested from each federal agency a copy of each unclassified report and since this includes unclassified technical reports, Inventory is anxious to include information about the exact procedure whereby each agency submits its unclassified reports to GPO for announcement in the Monthly Catalog of U. S. Government Publications. It would be useful to know which of the agency's report series are printed by GPO (which would assure automatic deposit in the GPO Documents Division Library and announcement in the Monthly Catalog) and which are printed by other shops or are processed by the agency's own devices (micrograph, multilith, offset, ozalid, typing, etc.).

Inventory has asked each agency if it has any special policy about maintaining availability of its unclassified reports — i.e., reprinting, if necessary. The answer generally is that the maintaining of such reports depends on several factors (which are subsequently enumerated for the Inventory report), such as the special character and demand for the series or for a specific report.

The description of libraries and information centers is ordinarily fairly uncomplicated.

Most agencies are anxious to have their scientists represented as authors in professional journals, though occasionally a publication policy of a federal agency will work to inhibit journal publication; in particular, an agency which insists on complete centralization of its publication activities and which has established a policy of not accepting reprints in lieu of technical reports almost automatically prevents publication of its technical reports in journals. Editors are most frequently loth to accept for publication material already "in print" in a government publication, under the current situation in which publication costs are high and competition for publication space in most professional journals is keen. If many of the agency's reports appear in professional journals, those journals are listed, if possible, for the Inventory report.

Translation is becoming an increasingly important aspect of the technical information picture and each agency is requested to review its solution to any translation problems. In particular, Inventory is anxious to have a record and description of each facility for translation existing within the framework of the Government, as well as the translation methods or translating services used by agencies not having themselves a special translation facility. Also, it is desired to know, if the agency has facilities for translation, to what extent it is used by other agencies and to what extent specific translations are made available beyond the translating agency.

To refer again to the chain of technical information problems outlined at the beginning, there are those of assimilation, retrieval, and correlation. Research on these has taken considerable strides and projects are increasing in number. Few are actually within government agencies, yet a number of government agencies have supported or helped support such research. Each agency is asked if it has supported, or is supporting, or anticipates supporting any research in this area, which has been generally referred to as "documentation."

Classification continues and will continue to be a problem as a deterrent to an optimum freedom in announcing and disseminating contemporary unclassified reports, but an aspect no less vexing is that of

removal of a classification when the situation that prompted the classification has altered so that it is no longer essential. In essence, each government agency follows — or supposedly follows — a regulation which stipulates periodical review of a classified document, either downgrading it or renewing its classified status. In the cases of those agencies actually placing classification on one of its documents, they are asked to explain their actual procedure and an estimate of the number of documents downgraded as a result of this procedure over a representative period of a year.

Finally, it is hoped that each agency can suggest some specific office or offices within its organization where there is maintained the most current information about subjects of research in progress.

PROCEDURE

The Inventory has resorted to requesting each agency to assemble, for a preliminary draft, the information suggested on an outline given the agency. This has proven the only practical method, since in every case the information has had to be pulled from various sources within the agency and has demanded time which, even if all agencies concerned were located in Washington, would make almost impossible the assembly of information by an NRP representative.

Subsequently, this preliminary report is studied for any points not entirely clear and frequently a visit to the agency or a letter will serve to collect missing details or information. Prior to actual duplication, the report in its final form is submitted to the agency for checking to ascertain that the changes from the first draft did not result in inaccuracy of statement.

The first issue of the bulletin of the Inventory (describing publications and policies of the U. S. Department of Agriculture agencies) will be ready in October and will be followed closely by reports from other agencies, now in various stages of preparation. This serial publication is entitled Scientific Information Activities of Federal Agencies.

SCOPE

The work of the Office of Special Studies which culminated in the publication, Organization of the Federal Government for Scientific Activities, has been used by Inventory as a general guide to agencies administering and performing research and development. Using this NRP publication as a basis and background, each Department, when initially approached, has been asked for advice about its over-all

organization for information handling. This organization usually follows, though it may not precisely follow, the pattern which the administrative organization charts suggest; some Departments have evolved an information handling program that is centralized or partly centralized while others find it more expedient to leave the several research branches free to develop the publication and procedures best adapted to their own activities. Upon this depends the number of reports that will cover each Department. Thus, USDA has had composed for it five separate reports, one for the Department in general and one for each of the USDA agencies which so differed from each other that any single report attempting to describe them all could only have been a confusion of comparisons and exceptions. In the end, the five reports are all being printed together, as a Bulletin, although they are given separate treatment.

As another example, reports were recommended for four major installations of the Office of Naval Research (Naval Research Laboratory, Underwater Sound Reference Laboratory, Naval Training Device Center, and Naval Biological Laboratory), as well as one for ONR itself. In addition to ONR, each Naval Bureau has been approached individually, consulting initially with key personnel to determine whether under the present organization a single report can adequately cover the entire bureau.

The Inventory plans to include accurate reports on the many special information handling agencies, whether or not they are federally supported, to distinguish and report in detail their functions. There are already many of these, each established to fill specific needs and each undergoing its own evolutionary stages. It is hardly an exaggeration to say that no one agency understands adequately all its contemporary agencies or even, in some cases, those other agencies whose activities most resemble its own. Therefore, both the agencies and their potential users can benefit by such a centralized series of reports.

In conclusion, attention is called again to the over-all problem with which scientific information confronts us. It would not be particularly daring to suggest that in our progress toward the ultimate solutions, the developmental stages may result in mechanisms and policies that will prove transitory expediences.

A parallel might be seen in the juvenile stages of many animals in which are developed specialized organs which permit their locomotion, feeding, etc., during that stage and which are discarded on passing into the adult stage — e.g., the abdominal appendages of caterpillars, the tail structures of tadpoles, embryonic sacs of mammalian embryos, etc. These structures occur in greatest profusion and elaboration when there is forced on the juvenile stage a period of growth and contention with its environment before it has time to develop its adult structures.

Like those juvenile forms of organisms, juvenile stages in the development of information handling will doubtless require developing mechanisms for transitory expedience. Certainly development of mechanisms for handling scientific information should be guided to avoid any semblance to the blind evolution typified by biological evolution, but rather guided to develop transitory mechanisms intelligently. For this, a necessary preliminary will be an understanding of the existing situation, information which the Inventory is intended to provide.

TRANSLATION PROBLEMS

John M. Hetrick

Air Force Office of Scientific Research
Air Research and Development Command
U. S. Air Force
Washington, D. C.

Military Librarians have access to translations and to translation services and collections not normally available to other government and non-government librarians, i.e., intelligence resources including CIA and ASTIA.

ASTIA does have a large and growing collection of translations. British and Canadian translations are received at an annual rate of over 1500. ASTIA also receives all Air Force Technical Intelligence Translations including classified and many Army and miscellaneous translations.

The Technical Translations Division of OTS is in operation. OTS will receive and list all unclassified service and other government translations. In addition OTS and the SLA Translation Pool at John Creer will exchange translations and publish a new journal Technical Translations which will replace Translations Monthly.

ROUND TABLE DISCUSSION — SUBJECT HEADINGS

Moderator: Frank E. Randle, Librarian, U. S. Army
Aviation School, Fort Rucker, Alabama

A group of 28 conferees discussed the problems of new subject headings with particular regard to those new headings which appear so often in military use. To give the best service to the library user, these new headings must be put into the card catalog or reference service as speedily as possible. The participants shared in telling how this problem is attacked in their respective libraries. The Army War College Library (Miss Zealberg) wishes to attempt an exchange of copies of cataloging or acquisition slips with interested libraries, in order that information as to subject headings in use be exchanged.

A survey at the Army Aviation School Library in 1958 shows that 868 out of 1,000 library users consult the Subject-Title catalog instead of the Author catalog. The card catalog there is divided into these two parts. This emphasis on the need for proper subject headings exists at a military school, where the users are faculty and students. It was pointed out that other user surveys in research libraries and educational institutions have shown almost the reverse in that the author catalog is more often consulted.

ASTIA is republishing its Subject Heading Lists under date of September 1958. There are still a few copies available for distribution. Members are urged to make use of the special lists of Subject Headings in various fields prepared by the S.L.A. Western Reserve University (Ohio) also has special lists available.

When a military library makes additions or revisions to the LC cataloging system, or when any cataloging system is expanded by the use of additional subject headings, the group feels that this contribution can be made known to other libraries by the insertion of notices in chapter journals and the national news letters and other publications of S.L.A. Exchange of subject heading information at these workshops is profitable; journals of a professional nature are helpful; but the best method of discovering how other libraries handle this problem is to arrange for exchange visits between library personnel and let others see our cataloging methods and subject headings where they are used.

MICROFILM AND MICROCARDS

Ray G. Weitz

Air Research and Development Command
Inglewood, California

Objectives of microrecords were discussed in considerable detail by the group attending the session.

Systems and procedures of microrecords were evaluated in great length in relation to their objectives.

It was the general consensus of opinion of the group that microrecords were of little value as a user's item. The main advantage is that of space savings. The cost of equipment, transferring and preparing records to miniaturizations, preparing new systems and training personnel, were problems requiring close observation when microrecords are being considered.

Since space was the obvious advantage of microrecords systems it was felt that other advantages were only secondary or incidental and the costs in most cases prohibitive.

SUMMARY OF PROCEEDINGS

Saturday, 4 October 1958

By

Miss Marion E. Bonniwell
Librarian
Bureau of Ships
U. S. Department of the Navy
Washington, D. C.

Saturday, 18 October 1958

The business session of the final meeting of the Workshop was devoted to reports from the following committees:

(1) UNION LIST OF PERIODICALS; Charles Stewart announced that Catherine Quinn had been appointed as permanent chairman of the committee. Mrs. Quinn reports that the committee will meet in the Washington area to revise reporting instructions.

(2) AIR UNIVERSITY PERIODICAL INDEX and COOPERATIVE INDEXING was submitted by

John B. McClurkin.

It was readily accepted by all participants in the first Military Librarians Workshop that it would be eminently desirable that the Air University Periodical Index be expanded to include more journals and a wider range of information. In the intervening year between workshops, expansion of coverage has taken place to the extent of sixteen new titles added, making a total of seventy titles now indexed. This has been accomplished by taking advantage of assistance in preparation of index copy volunteered by libraries representing all three services and Canada and by readjustment of indexing assignments to Air University Library staff members.

At the second Workshop, through conversation with conferees from each of the services and through the committee representing Army, Navy, and Air Force, several additional titles which are not now indexed have been suggested for inclusion in the Index. These include six titles expected to be especially useful to Army libraries and two to the Navy. These suggested titles will be considered by the AUPI Committee for inclusion and necessary steps taken for their indexing. Other titles suggested by any military librarians will be welcomed.

Index copy is now prepared by staff members of six libraries other than Air University Library. After working with these six on a trial basis, procedures for this cooperative indexing have been worked out. Beginning with January 1959 the Air University Library will accept the offer of other libraries and ask them to prepare index copy for titles particularly pertinent to their subject areas."

(3) DIRECTORY OF MILITARY LIBRARIES was submitted by John B. McClurkin.

Announcement was made at the first Workshop of Military Librarians of a forthcoming publication, a directory of military libraries. This is being produced as a project of the SLA Military Librarians Division.

and the project is centered at the USAF Institute of Technology under direction of Mr. Paul Spence. This directory by listing for each library areas of specialization, publications issued regularly, and staff members would serve as a medium for exchange of information and increase the interlibrary loan usefulness of all collections.

A letter and information form were prepared by Mr. Spence and mailed to 55 libraries. This list of military libraries was compiled principally from those represented at the first Workshop and in the Union List of Foreign Military Periodicals. From the 55 libraries replies were received from 35.

The form for reporting information about the libraries provided spaces for listing name and address, subjects emphasized and size of collection, list of publications regularly issued, and librarians for each library.

It was agreed with Mr. Martin, then editor of the Bulletin of the Military Librarians Division, that the completed returns would be published in installments in the Bulletin. This has been done during the last year with three more returns still to be published.

For the libraries which returned the completed information sheet, a subject specialties index has been prepared by Mr. O. Willard Holloway, Librarian, U. S. Army Artillery and Missile School. This subject index will give quality and depth as anticipated. A name index has been prepared by Mr. Spence. Additions to each will be made as information about other military libraries is received.

From the list of conferees at the second Military Librarians Workshop, more than a dozen military libraries not included in the directory have been noted. Information forms will be mailed to these libraries for completion. Mr. Martin, Chairman, Military Librarians Division, will appoint an editor for the directory. It will be his task to publish the directory, including the indexes."

(4) A COMMITTEE ON STANDARDS composed of Paul Burnette, Marian Craig, Carolyn Stanley, Robert L. Martin and Colonel Fagan presented the following recommendation:

"An Annual Conference of Military Librarians representing some fifty Army, Navy, Air Force installations and institutions as well as related agencies in the Department of Defense met at Fort Sill, Oklahoma, 2-4 October 1958. During these sessions participants expressed grave concern over inadequacies of the existing Position Classification Standards of the GS-1411 Library Assistant Series dated September 1957.

Inconsistencies and ambiguities in classification of non-professional positions exist in many installations. It is believed that these factors adversely influence morale and hinder the accomplishment of the mission. Progression of responsibility is essential to the successful accomplishment

of the library mission.

It is urgently recommended that the Civil Service Commission take steps to restudy and to implement the existing Position Classification Standards for the GS-1411 Library Assistant Series.

This group stands ready to offer technical and professional assistance if so desired."

Willard Holloway announced that the U. S. Naval Postgraduate School has issued an invitation for the third Workshop to meet in Monterey in October 1959.

Following Mr. Holloway's summary and recommendations, Paul Burnette expressed for the participants their appreciation for a very successful series of meetings. Particular thanks were expressed to General T. E. de Shazo and his staff for their gracious hospitality and warm interest. Mr. Holloway's capable leadership in organizing and directing the conference received special commendation. Special thanks were also extended to his staff and to the program committee.

The final program presented two important library routines - circulation procedures and inventory methods.

CIRCULATION PROCEDURES

Charles R. Knapp
Office, Chief of Engineers

Rather than enter into a detailed discussion of the merits of various circulation schemes, or some of the particular problems arising in military libraries pertaining to circulation, it is suggested that Librarians make a critical examination of the reasoning behind the existence of our present systems and make an effort to determine their validity.

A number of reasons suggest that such a critical re-examination may be warranted. First, it is apparent from a cursory examination of the literature of special library organization, and of military libraries in particular, that there is a dearth of information available on the subject. Perhaps the very lack of material is an indication of the lack of importance placed on this subject by administrators in the field. Second, it is obvious that because of administrative dependence on tradition and authority, most of our present schemes are but adaptations of systems that have been in existence many years. There have been changes in detail, in machine application, and in regulations, but essentially the differences are slight. Third, though perhaps fewer in number, are those instances where the dependence on tradition (or inertia) has been so great that there have been no changes whatever, but a resigned or apathetic assumption of the status quo. Rarely, if ever, it seems, have we attempted a return to fundamentals and attempted to justify the reasons for the procedures we administer. As a profession we have, at least until recent years, betrayed a deep reluctance to question the reasons why we do a thing.

— A quick attempt at this initial examination of circulation systems would seem to indicate that there are three basic reasons why we do, or should have a well defined set of procedures. One would be the evident need of the library to be able to identify the location of any item in its collection as an important phase of the information retrieval operation. Second, and this factor applies with varying emphasis to libraries operated under different governing regulations, is the demand of a higher echelon for a record of responsibility. This seemingly obvious need for

a record system would apply even more forcefully to institutions involved in the administration of security classified materials. Third, is the apparent need for a circulation system that will supply a basis for statistics on library usage.

When considering the last factor, most administrators are likely to confess to honest doubts as to the value of the data which they collect. For many years, at every professional meeting, some speaker has voiced dissatisfaction with the ineffectiveness of gross circulation figures as a valid index of the actual accomplishment of the library, or as an accurate indication of its value, the degree to which it is accomplishing its mission. The figures have been used reluctantly because by themselves they cannot measure the value of the library's worth. Data reflecting the circulation of individual items cannot discriminate between the casual use of an item taken through the library doors by a patron, and that use of information furnished by the library that by any measure of worth may by itself justify the establishment of an entire library.

It is not the intention of the writer to indulge only in destructive criticism: there should be at least an attempt to sketch the possible methods whereby improvement could be attempted. The first method may be best explained by the use of the term "creative engineering" - the attempt to solve a problem by first defining it, then to seek solutions that are fresh and unique and not merely adaptations of previous practice. We need for this survey of library operations examiners who can be impatient without being exasperated, and challenged without being frustrated.

Perhaps such methods as operations research and linear programming could supply a workable answer. Their applications are being used with increasing

frequency in business and industry, and it is not likely that library operations are so esoteric that the precise language of mathematics cannot encompass their problems.

And there is always the possibility that out of all of this research, if accomplished, there may not be anything new but only a reaffirmation that what has been done was logical, right and should be considered satisfactory. An answer too would be valuable, if only to relieve the administrator from a banking doubt that all circulation systems were bad, per se, and free him to consider more pressing and important problems.

We do not recommend that the library profession abruptly regard as unusable everything that has ever been accomplished, circulation wise, for we are, at least by popular tradition, too conservative for such a move. No advancement in a science ever be predicated on a disregard for all that has been done and learned in the past. But it is difficult to believe that a soupçon of "engineering", which has been so frequently lacking in our approach to fundamental questions, could not provide even a little improvement in circulation procedures. Certainly our recent concern with such topics as the machine retrieval of information indicates that we possess the capacity to adopt the scientific method and look at things in a fresh light.

And we suggest that this same creative engineering approach be applied to other library operations such as acquisitions, equipment design, and so forth. The one premise, however, that should be the basis of all investigation should be the simple and basic one: what kind of a circulation system can best help us to accomplish our mission of furnishing all the defense information needed when it is required.

INVENTORY METHODS AND PROCEDURES

Mildred H. Brode
David W. Taylor Model Basin

We all realize that the chief purpose of an inventory of library material is to discover which items are missing from the collection and unaccounted for, so that those not found may be replaced if needed, or withdrawn from catalog records. The detection of discrepancies in library records and discovery of weak spots in the collection are incidental but useful by-product of the process. An inventory of a book collection can sometimes be accomplished without a large expenditure of labor in connection with a moving, expanding or re-classification operation.

However, with the almost universal short-staffing in military libraries and the pressure of work which will produce more needed services to our clientele, most administrators of military libraries have avoided taking inventories whenever possible as not being worth in end results the time and labor required to perform the work. Right here our bête noir of Accountability rears its ugly head, and I am very sure any one of you would be much more grateful to me if I could tell you how you could avoid this Accountability in at least certain areas of your collections, than if I tell you of procedures for complying with Accountability. Some administrators of large military libraries have succeeded unbelievably well in this area and I refer you to them for their methods for achieving this happy state. I also am aware that those of us in the Navy are more fortunate than those in the Army and Air Force in this regard.

Even when we are able to have books (in hard covers) declared outside "accountable matter," nearly all military librarians expect, and do have to

make inventories of classified documents. Most of this paper will deal with methods and procedures used for inventorying classified material in differing types of Navy libraries in the Washington area.

The Program Committee for this Workshop was certainly wise in tying together the two working papers for this session on Circulation Methods and Inventory Methods and Procedures. Mr. Knapp has given as his second basic reason for a well defined set of circulation procedures the provision for a record of responsibility and surely any library administrator facing the task of setting up efficient circulation procedures, and having the responsibility of periodic inventory, will have partially won the second battle by keeping this periodic or running task constantly in mind when planning for circulation. This is especially true in selecting methods of providing for the security of classified material.

A second point that will be of the greatest assistance in planning for an inventory will be to have appropriate "Instructions" or "Regulations" issuing from the top levels of administration regarding the Inventory and the penalties for non-compliance. This puts teeth into the process and greatly speeds up the accomplishment of the task. Often the Librarian is called upon to draft or assist in drafting such an "Instruction" and it will behoove her to be familiar with the Security Manual of her particular service, and ready to propose on-station regulations for carrying out its dictates.

In the Navy, the Security Manual for Classified Information in Chapter 6, Custody, Section 2, Accounting, authorizes each Naval Activity to set up suitable procedures for safeguarding the security of Secret and Confidential Reports. This is reiterated in Op Nav Instruction 5510.1 B issued 10 Mar 1958. The David Taylor Model Basin Regulations in Chapter 14, Art. 1401 b. (Change No. 8)

p. 13-14 designates the Classified Librarian as the Official Custodian for Secret, Confidential, and Restricted Data reports and charges her with maintaining an adequate system for recording and accounting for all such reports which enter, are retained by, or leave TME.

The Classified Library lists each report received by its accession number in a log. There is one log for the Confidential and one log for the Secret reports for which duplicate copies are made and circulated weekly. Current acquisitions are thereby publicized and requests for the reports may be made. The logs, therefore, serve the double duty of accessions records and Library bulletins. Two other logs, the Restricted Data Confidential and Secret do not circulate. All four logs together form a required permanent record of all material received by the Classified Library. The Classified Library composed forms and helped the Records Vault through which Classified Documents are circulated, in establishing a system for conducting an around the calendar continuous inventory of classified reports charged out. They have just completed the first comprehensive inventory since 1949 of Secret documents on the Station. The logs, shelf list, and burn records have been brought into agreement by annotating the shelf list with all accession information gathered from various sources and at various times. In April 1958 all but three secret documents out of 6394 have been accounted for. The Inventory of Confidential documents is now in progress. The preliminary checking and annotating of records prior to taking these inventories is laborious and time consuming, but if kept up currently will never need to be done again. The Library sends each borrower an inventory listing of his charges made up from his individual charge slips.

Our Aerodynamics Laboratory Library takes an inventory of Secret documents every six months and finished their last complete inventory of Confidential

in June 1956 (10,250 items).

Naval Ordnance Laboratory has a well worked out and smoothly running set of "Procedures for Inventory of Accountable Material." These are given in five steps below.

1. The inventory of accountable material is held twice a year in accordance with NOL INSTRUCTION 5510.15A.

2. The borrowers' records are sent to the Photo-Lab. for photostating. When the photostatic copies are received in the Library, each one is checked for completeness. The photostats are then mailed out to the Departments with a copy of the form letter which explains the photostat.

3. A record is maintained of all photostats returned. If the borrower is unable to account for his charges, he must comply with NOL INSTRUCTION 5570.1B, unless the document lost is unclassified, in which case the Memo comes directly to the Library.

4. At the end of one month a list of all borrowers' who have not complied with the inventory is sent to the Departments concerned. This list is sent out weekly thereafter until all borrowers' have complied.

5. No transfer of charges is made by telephone. All documents have to be returned to the Library before they are charged out again.

NOL originated documents are charged out for one month; all others are charged out for two weeks. Documents are not recalled unless there is a waiting list. The charges are entered daily on the borrower's record. The Charge cards are filed by Library number and the borrower's records in alphabetical order by the name of the borrower. This daily entry on a borrower's card makes possible the use of a photostatic charge record at any moment for inventory purposes.

NOL also conducts book and periodical inventories using these same procedures. NRL conducts an annual sight inventory of all classified documents in the fall of each year. The procedures are set forth in NRL Instruction 5510.3 C, Inventory of Confidential and Secret Documents.

Some military libraries or document centers take a cyclical inventory covering a five year period, while others take a complete inventory at the time of each change of command.

From these examples, it is apparent that such factors as the size of the collection, the number of borrowers, frequency of turnover of borrowers, and frequency of required inventory will determine the most advantageous circulation as well as inventory methods and procedures to be adopted by any specific military library.

DIRECTORY OF MILITARY LIBRARIES -- A PROGRESS REPORT

John E. McClurkin

Air University Library
Maxwell Air Force Base, Alabama

Announcement was made at the first Workshop of Military Librarians of a forthcoming publication, a directory of military libraries. This is being produced as a project of the SLA Military Librarians Division and the project is centered at the USAF Institute of Technology under direction of Mr. Paul Spence. This directory by listing for each library areas of specialization, publications issued regularly, and staff members would serve as a medium for exchange of information and increase the interlibrary loan usefulness of all collections.

A letter and information form were prepared by Mr. Spence and mailed to 55 libraries. This list of military libraries was compiled principally from those represented at the first Workshop and in the Union List of Foreign Military Periodicals. From the 55 libraries replies were received from 36.

The form for reporting information about the libraries provided spaces for listing name and address, subjects emphasized and size of collection, list of publications regularly issued, and librarians for each library.

It was agreed with Mr. Martin, then editor of the Bulletin of the Military Librarians Division, that the completed returns would be published in installments in the Bulletin. This has been done during the last year with three more returns still to be published.

For the libraries which returned the completed information sheet, a subject specialties index has been prepared by Mr. O. Willard Holloway, Librarian, U. S. Army Artillery and Missile School. This subject index will give quality and depth as anticipated. A name index has been prepared by Mr. Spence. Additions to each will be made as information about other military libraries is received.

From the list of conferees at the second Military Librarians' Workshop, more than a dozen military libraries not included in the directory have been noted. Information forms will be mailed to these libraries for completion. Mr. Martin, Chairman, Military Librarians Division, will appoint an editor for the directory. It will be his task to publish the directory, including the indexes.

CIRCULATION PROCEDURES

Mr. Charles R. Knapp
Office, Chief of Engineers
Washington, D. C.

Rather than enter into a detailed discussion of the merits of various circulation schemes, or some of the particular problems arising in military libraries pertaining to circulation, it is suggested that librarians make a critical examination of the reasoning behind the existence of our present systems and make an effort to determine their validity.

A number of reasons suggest that such a critical re-examination may be warranted. First, it is apparent from a cursory examination of the literature of special library organization, and of military libraries in particular, that there is a dearth of information available on the subject. Perhaps the very lack of material is an indication of the lack of importance placed on this subject by administrators in the field. Second, it is obvious that because of administrative dependence on tradition and authority, most of our present schemes are but adaptations of systems that have been in existence many years. There have been changes in detail, in machine application, and in regulations, but essentially the differences are slight. Third, though perhaps fewer in number, are those instances where the dependence on tradition (or inertia) has been so great that there have been no changes whatever, but a resigned or apathetic assumption of the status quo. Rarely, if ever, it seems, have we attempted a return to fundamentals and attempted to justify the reasons for the procedures we administer. As a profession we have, at least until recent years, betrayed a deep reluctance to question the reasons why we do a thing.

A quick attempt at this initial examination of circulation systems would seem to indicate that there are three basic reasons why we do, or should have a well defined set of procedures. One would be the evident need of the library to be able to identify the location of any item in its collection as an important phase of the information retrieval operation. Second, and this factor applies with varying emphasis to libraries operated under different governing regulations, is the command of a higher echelon for a record of responsibility. This seemingly obvious need for a record system would apply even more forcefully to institutions involved in the administration of security classified materials. Third, is the apparent need for a circulation system that will supply a basis for statistics on library usage.

When considering the last factor, most administrators are likely to confess to honest doubts as to the value of the data which they collect. For many years, at every professional meeting, some speaker has voiced

dissatisfaction with the ineffectiveness of gross circulation figures as a valid index of the actual accomplishment of the library, or as an accurate indication of its value, the degree to which it is accomplishing its mission. The figures have been used reluctantly because by themselves they cannot measure the value of the library's worth. Data reflecting the circulation of individual items cannot discriminate between the casual use of an item taken through the library doors by a patron, and that use of information furnished by the library that by any measure of worth may by itself justify the establishment of an entire library.

It is not the intention of the writer to indulge only in destructive criticism: there should be at least an attempt to sketch the possible methods whereby improvement could be attempted. The first method may be best explained by the use of the term "creative engineering" - the attempt to solve a problem by first defining it, then to seek solutions that are fresh and unique and not merely adaptations of previous practice. We need for this survey of library operations examiners who can be impatient without being exasperated, and challenged without being frustrated.

Perhaps such methods as operations research and linear programming could supply a workable answer. Their applications are being used with increasing frequency in business and industry, and it is not likely that library operations are so esoteric that the precise language of mathematics cannot encompass their problems.

And there is always the possibility that out of all of this research, if accomplished, there may not be anything new but only a reaffirmation that what has been done was logical, right and should be considered satisfactory. That answer too would be valuable, if only to relieve the administrator from the hankering doubt that all circulation systems were bad, per se, and free him to consider more pressing and important problems.

We do not recommend that the library profession abruptly regard as unusable everything that has ever been accomplished, circulation wise, for we are, at least by popular tradition, too conservative for such a move. Nor can advancement in a science ever be predicated on a disregard for all that has been done and learned in the past. But it is difficult to believe that a suspicion of "imagineering," which has been so frequently lacking in our approach to fundamental questions, could not provide even a little improvement in circulation procedures. Certainly our recent concern with such topics as the machine retrieval of information indicates that we possess the capacity to adopt the scientific method and look at things in a fresh light.

And we suggest that this same creative engineering approach be applied to other library operations such as acquisitions, equipment design, and so forth. The one premise, however, that should be the basis of all investigation should be the simple and basic one: what kind of a circulation system can best help us to accomplish our mission of furnishing all the defense information needed when it is required.

SUMMARY AND RECOMMENDATIONS

O. Willard Holloway

U. S. Army Artillery and Missile School
Fort Sill, Oklahoma

My mission at this time is to present a summary of what has happened during this Second Military Librarians' Workshop, followed by any recommendations for future action.

In considering what I would say today, it appeared that it would be very simple for me to summarize the efforts of this Workshop. I shall not attempt to list every accomplishment, but will call particular attention to four specific things:

- First: An action committee was formed to study the Union List of Military Periodicals. This committee met during the course of the Workshop and formulated definite plans for the project.
- Second: Another action committee was formed to pursue further possible expansion of the Military Periodical Index. This committee will function throughout the year, and its accomplishments will be reported.
- Third: A committee was appointed to draft a resolution regarding the Civil Service Standards for Subprofessional Personnel. The resolution drafted by this committee was accepted and it was decided to send copies to the American Library Association and the Special Library Association.
- Fourth: The completion of the Directory of Military Libraries was reported. This project was started at the first Workshop in 1957, and the detailed work was performed by Mr. Spence of the Air Force Institute of Technology and Mr. Holloway of the U. S. Army Artillery and Missile School Library. Plans are now underway for the publication of this directory.

My first recommendation concerns the proposal for another Workshop next year. You will recall that at Chicago last summer, Dr. Orne recommended that we hold three annual Workshops and then decide what our future should be. He felt that there were enough problems to fully occupy our time for three annual meetings. At the conclusion of the third meeting he suggested that we re-evaluate our objectives and accomplishments and

determine what was needed for the future. I believe that this advice is still sound. At last year's Workshop we accomplished a great deal. I believe this Workshop this year has been just as valuable. However, I do not feel that we have obtained the best approach to our problems in the present form of Workshop. I do not know at the present time what the answer is. However, I think it would be feasible to hold for example, a Workshop strictly for Military School Librarians and another Workshop for technical and research librarians. I think it would be desirable to establish a central theme for each Workshop and to center all meetings around that theme. For example, we could well devote an entire Workshop to "Cataloging Problems."

We have already received an invitation to hold a Third Military Librarians' Workshop next year at the Naval Postgraduate School, Monterey, California. The invitation reads as follows:

"The Naval Postgraduate School would like to extend an invitation to the Military Librarians' Workshop to hold its third annual meeting in Monterey in 1959. It is expected that a date early in October will be chosen for the meeting but it is preferable to delay setting the exact date until after the formulation of our academic calendar for next year.

It is indeed a pleasure for us, as a Naval establishment, to serve as host to the military librarians serving the Army, the Air Force, and the other activities of our own Naval service."

I would like at this time to get an expression from this body as to whether a Third Workshop should be held and if so, whether this invitation should be accepted. (By an overwhelming majority the Workshop voted to hold a Third Annual Meeting and to accept the above invitation.)

I would like to recommend that serious study be given to the question of who should be invited to participate in these Workshops. We have present this year 76 individuals representing 41 military organizations. There are at least 35 other organizations which either were unable to accept this year's invitation for various reasons or were not invited due to the limitation of our facilities here at Fort Sill. It will be necessary for us to draw up a formula for the issuance of invitations for future Workshops. Although I recognize the desirability of keeping the group small for working purposes, I think we must also recognize the fact that we cannot operate as a closed organization. I recommend that a study be made of this whole invitation question.

My last recommendation concerns the annual meetings of the SIA and the ALA. In the past we have always had a meeting or two of the Military Library Section of these national organizations at which time some

individual would give a lecture on some subject at least remotely connected with our problems. It seems to me that this time could be better utilized by a Workshop session on some particular problem.

That concludes my report on summary and recommendations.

Following the above report the meeting was thrown open for discussion, recommendations and suggestions. The following remarks were pertinent:

One individual suggested no evening meetings at future Workshops. This appeared to be a minority viewpoint.

The majority of the individuals were in favor of more round table sessions whose activities would be reported upon at a later general meeting with recommendations.

It was suggested that working papers and outlines be sent out in advance, if possible.

It was further suggested that the moderators for the next Workshop meet at least one day prior to the arrival of other participants.