PROCEEDINGS OF THE MILITARY LIBRARIANS' WORKSHOP
(18TH) HELD AT FORT HAUCHUCA, ARIZONA ON 10-12
SEPTEMBER 1974

Army Communications Command
Fort Huachuca, Arizona

12 September 1974
KEEP UP TO DATE

Between the time you ordered this report—
which is only one of the hundreds of thou-
sands in the NTIS information collection avail-
able to you—and the time you are reading
this message, several new reports relevant to
your interests probably have entered the col-
lection.

Subscribe to the Weekly Government
Abstracts series that will bring you sum-
maries of new reports as soon as they are
received by NTIS from the originators of the
research. The WGA's are an NTIS weekly
newsletter service covering the most recent
research findings in 25 areas of industrial,
technological, and sociological interest—
valuable information for executives and
professionals who must keep up to date.

The executive and professional informa-
tion service provided by NTIS in the Weekly
Government Abstracts newsletters will give
you thorough and comprehensive coverage
of government-conducted or sponsored re-

search activities. And you'll get this impor-
tant information within two weeks of the time
it's released by originating agencies.

WGA newsletters are computer produced
and electronically photocomposed to slash
the time gap between the release of a report
and its availability. You can learn about
technical innovations immediately—and use
them in the most meaningful and productive
ways possible for your organization. Please
request NTIS-PR-205/PCW for more infor-
mation.

The weekly newsletter series will keep you
current. But learn what you have missed in
the past by ordering a computer NTISearch
of all the research reports in your area of
interest, dating as far back as 1964, if you
wish. Please request NTIS-PR-186/PCN for
more information.

WRITE: Managing Editor
5285 Port Royal Road
Springfield, VA 22161

Keep Up To Date With SRIM

SRIM (Selected Research in Microfiche)
provides you with regular, automatic distri-
bution of the complete texts of NTIS research
reports only in the subject areas you select.
SRIM covers almost all Government re-
search reports by subject area and/or the
originating Federal or local government
agency. You may subscribe by any category
or subcategory of our Weekly Government
Abstracts or Government Reports
Announcements and Index categories, or to
the reports issued by a particular agency
such as the Department of Defense, Federal
Energy Administration, or Environmental
Protection Agency. Other options that will
give you greater selectivity are available on
request.

The cost of SRIM service is only 45¢
domestic (60¢ foreign) for each complete
microfiched report. Your SRIM service begins
as soon as your order is received and proc-
cessed and you will receive biweekly ship-
ments thereafter. If you wish, your service
will be backdated to furnish you microfiche
of reports issued earlier.

Because of contractual arrangements with
several Special Technology Groups, not all
NTIS reports are distributed in the SRIM
program. You will receive a notice in your
microfiche shipments identifying the exception-
onally priced reports not available through
SRIM.

A deposit account with NTIS is required
before this service can be initiated. If you
have specific questions concerning this ser-
vie, please call (703) 451-1558, or write NTIS,
attention SRIM Product Manager.

This information product distributed by

NTIS
U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161
PROCEEDINGS

of the

18th MILITARY LIBRARIANS' WORKSHOP

held on

10 - 12 September 1974

EDITOR
Helen Weber

HOST
Headquarters
Fort Huachuca, Arizona

WORKSHOP CHAIRMAN
Edith J. Fraser

HOSTESSES
Helen Weber
Gloria Gordon
Arlene Shaw
Betty Hinkle
Hilde Currie
Joyce Ullrich
Carolyn Kelley
Dorothy Tompkins

DISTRIBUTION STATEMENT
Approved for public release
Distribution Unlimited
FOREWORD

Headquarters, Fort Huachuca, Arizona hosted the 18th Military Librarians' Workshop, held 10-12 September 1974. The workshop began with a welcome from Colonel Corley, Post Commander, followed by a special command briefing on US Army Communications Commands located around the world.

152 military librarians participated in the workshop sessions devoted to "Interpersonal Communication," and in the group meetings following the workshop sessions. Highlights, recommendations and conclusions of the workshop sessions and group meetings are presented in the proceedings.
CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>ii</td>
</tr>
<tr>
<td>Program</td>
<td>iv</td>
</tr>
<tr>
<td>Welcome</td>
<td>1</td>
</tr>
<tr>
<td>Special Command Briefing</td>
<td>3</td>
</tr>
<tr>
<td>Workshop Sessions</td>
<td>11</td>
</tr>
<tr>
<td>&quot;Some Unwritten History of Fort Huachuca&quot;</td>
<td>15</td>
</tr>
<tr>
<td>Working Groups</td>
<td></td>
</tr>
<tr>
<td>ACADEMIC . . . . . Mr. Earl Schwass</td>
<td>19</td>
</tr>
<tr>
<td>GENERAL . . . . . Ms. Louise Nyce</td>
<td>20</td>
</tr>
<tr>
<td>MEDICAL . . . . . Ms. Donna Griffitts</td>
<td>22</td>
</tr>
<tr>
<td>TECHNICAL . . . . . Ms. Eleanor Driscoll</td>
<td>23</td>
</tr>
<tr>
<td>General Assembly</td>
<td></td>
</tr>
<tr>
<td>DEVELOPMENTS &amp; CURRENT STATUS OF FLC . . . Ms. Mary Shaffer</td>
<td>32</td>
</tr>
<tr>
<td>INFORMATION HANGUPS &amp; DDC . . . Ms. Cathryn Lyon</td>
<td>34</td>
</tr>
<tr>
<td>NEW DEVELOPMENTS AT DDC . . . Mr. Paul Klinefelter</td>
<td>35</td>
</tr>
<tr>
<td>Reminiscing . . . . Mr. Ernest DeWald</td>
<td>37</td>
</tr>
<tr>
<td>Participants</td>
<td>49</td>
</tr>
<tr>
<td>Sponsors of Military Librarians' Workshops</td>
<td>57</td>
</tr>
<tr>
<td>Military Librarians' Workshop Proceedings</td>
<td>59</td>
</tr>
</tbody>
</table>

iii
PROGRAM

Monday - 9 September

1600-2000 Registration Ramada Inn
1800-2000 Council of Navy Scientific & Technical Librarians, East Ramada Inn

Tuesday - 10 September

0630-0800 Registration Ramada Inn
0815 Buses leave Ramada Inn
0900-1100 Opening Session Greely Hall
Welcome
    COL Arthur V. Corley
    Commander, Fort Huachuca
Command Briefing
Coffee Break
Visits
    Technical Library
    Microfilm Facility
1115 Buses Leave Greely Hall
1130-1300 Lunch Officers' Club
    Introduction of New Participants
    Long-Range Planning Committee Announcement, Margret Zenich, Chairperson
1315 Buses leave Officers' Club
1330-1630 Workshop Session - Ken Ernst Ramada Inn
    Man's Basic Needs
    Need for Strokes
    Time Structuring
1630-.730 AMC Librarians' Meeting Ramada Inn
Wednesday - 11 September

0830-1145 Workshop Session - Ken Ernst Ramada Inn
Parent, Adult, Child Personalities; Problems in the Libraries

1145-1300 Lunch

1300-1630 Workshop Session - Ken Ernst Ramada Inn
Games Played in Libraries
How to Turn Off Games
Evaluation

1830 Western Cookout Ramada Inn
Fancy Gun Play

Thursday - 12 September

07:00 0900 Breakfast Ramada Inn
Slide/Talk by Dr. Bruno Rolak, USACC Historian
"Some Unwritten History of Fort Huachuca"

0900-1100 Working Groups Ramada Inn
Academic
Earl Schwass
General
Louise Nyce
Medical
Donna Griffitts
Technical
Eleanor Driscoll

1100- General Assembly Ramada Inn
Briefings
Developments & Current Status of FLC
Mary Shaffer
Information Hangups & DDC
Cathryn Lyon
New Developments at DDC
Paul Klinefalter

Announcements
Reminiscing by Ernest DeWald
Lunch

1400 Tour of Fort Huachuca and Visit to the Post Museum
Welcome to Fort Huachuca and the 18th Annual Military Librarians' Workshop. Of course, we are a little biased, but we think the fort is a nice place to have this workshop.

For those of you working with substantial historical collections, you are now surrounded by reminders of the history of the western movement of the United States.

Within the distance of a rifle shot of this building lies the evidence of American Indian habitation in our canyons going back at least a thousand years.

The first recorded European penetration of this area was in 1538 by the Spaniards searching for the Seven Cities of Gold. They found no cities of gold, but they did find plenty of Indians that needed christianizing. The missionaries that followed the Spanish explorers exerted a significant influence in this area, and the remains of many of their missions are still visible today.

As this area came under the dominance of the United States and the westward migration built up steam, the native Indian looked unkindly at the invaders. To control the hostile natives, the US Army was posted westward and before the Indian question was settled, the Army had established 70 military camps and posts in Arizona. Fort Huachuca is the only remaining active post of that era.

Fort Huachuca was established in 1877 in the mouth of the Huachuca Canyon by two troops of the 6th Cavalry. Its purpose was to provide patrols to block escape routes of the Apaches into Mexico. The post was never attacked by the Indians; very few military posts were attacked because the Indians had a healthy respect for fixed, fortified positions. Nonetheless, troops from Fort Huachuca participated in numerous patrols and skirmishes, and Fort Huachuca based 4th Cavalry and 8th Infantry led the relentless pursuit of Geronimo and his band that ended in surrender.

Captain Lawton, who led the Geronimo pursuit, became a Brigadier General and was killed in the Philippines. Dr. Leonard Wood, a young
contract surgeon who accompanied the Lawton party, later became Chief
of Staff of the US Army. Hundreds of other good soldiers passed through
Huachuca, some to go on to greater glory, others into obscurity. For
most of them, the Huachuca mountains cast a spell that lasted the rest
of their lives.

After training two divisions for WWII, Fort Huachuca was declared
surplus in 1947 and became a state game preserve. Reactivated in 1951,
the post has now grown into a center of modern communications, elec-
tronics, intelligence operations and testing.

A world-wide electronic communications network is controlled by the
Army's Communications Command here at Fort Huachuca and a communication
link can be established almost instantly anywhere in the world. The
Intelligence School teaches people how to analyze bits and pieces of
information to detect the capabilities and intentions of an enemy. Yet,
we find that the most elaborate electronic systems do not insure com-
munication. Communications break down more often because of people than
because of electronic or mechanical malfunctions.

And that is why the theme of your workshop is so important. We must
find better ways of interpersonal communication--better understanding of
the communication circuitry between you and me--what turns it off and
on--and how to recognize when communication circuits are properly tuned.

I wish you well in your workshops and hope you find them rich and
rewarding experiences. You may find that the more you learn of this
complex subject the less you know, but that too is a part of the learning
process.

And once again, welcome to the Southwest and Fort Huachuca.
Welcome to Headquarters, US Army Communications Command, ACOMM as we call our organization for short, is a major Army command responsible for world-wide communications. The objective of this briefing is to give you a sense of feel for what we do and where we do it.

First, I will review the missions of the command. Then I will describe the types of communications facilities and systems for which we are responsible. And third, I will address the operations and other activities of ACOMM elements around the world.

The Communications Command manages the Army's portion of the worldwide Defense Communications System, or the DCS. We operate and maintain major facilities and transmission media in the Department of Defense long-distance communications systems. We are responsible for DCS facilities of all types throughout Europe, the Pacific Area, Panama Canal Zone, and in the Continental USA.

The statement 'plan, engineer, install, operate and maintain Army Communication' applies to Army communications, not a part of the DCS that support Army forces. Examples are the command and control communications systems and area networks going down to corps areas in a communications zone, or COMMZ, in an overseas theater of operations. A further dimension of Army communication is the management of electromagnetic frequencies for Army forces.

In regard to post, camp and station communications, fixed installations of the Army around the world receive their support from the Army Communications Command, or ACOMM.

Characteristic of this effort are telecommunications centers and telephone exchanges. We provide for local area communications services and entry into the world-wide message and voice networks.

For the Defense Civil Preparedness Agency, we provide communications and warning systems in direct support of the national, state and local warning facilities. ACOMM operates radio, teletype, voice and special systems for civil emergency purposes.

Operation and maintenance of communications for joint service activities is one of our responsibilities. The term "joint service" means participation of two or more services. This effort is typified
by our provision of headquarters and field communications support to the top level US commanders in Europe, the Panama Canal Zone, Thailand, Korea, and Taiwan.

ACOMM is responsible for central management of leased communications for Army use. We arrange for leasing of all world-wide long-distance communications services, and local communications services. We determine the best way to fulfill valid requirements from technical and economic standpoints, and arrange for ordering equipment and services from commercial carriers.

We provide communications security logistics support to overseas Army component commanders and others as directed. To accomplish this, CONSEC logistics support installations are operated at eight overseas locations for distribution and area repair support.

One of the combat development projects in which we are engaged is refining doctrine for support within the communications zone in an overseas theater of operations. The new concept of organization eliminates field Army headquarters.

When Department of Defense assigns a military assistance program communications project to the Army, and the project requires communications systems engineering, ACOMM is generally tasked to be the single manager. The communications command, for the Army, is managing the planning and establishment of the Spanish Army Territorial Command Wet Project. This will connect the Spanish Army and Navy Headquarters in Madrid with 15 major terminal points throughout the country. We are also managing the acquisition of map C-E projects in the Philippines and Taiwan, and we are participating in projects in Indonesia and Saudi Arabia.

Air traffic control is the final mission that I will discuss. The communications command is responsible for management of Army air traffic control and navigational aids for all non-tactical Army activities and specified tactical Army activities. As the single manager, we are taking a systems approach to acquisition strategy and maintenance of all Army air traffic control and navigation aids systems and facilities and provision of flight information.

Throughout mission accomplishment, ACOMM is a communications planner, engineer, installer, operator, maintainer and traffic manager. Approximately 25% of our resources (manpower and financial) is devoted to defense communications systems. The other 75% is devoted to Army communications-electronics functions.

Next, I will describe the types of facilities and systems for which the command is responsible. To lead off this segment, I display this chart which lists the types of facilities and systems and shows the total number for which we are responsible.
The size and configuration of telecommunications centers vary according to requirement. More sophisticated installations are needed to serve larger areas. An example is in the telecommunications center at Fort Ritchie, serving the alternate National Military Command Center. We operate telecommunications centers in 210 locations, at Army headquarters and installations. ACOMM has major responsibilities in regard to consolidation and automation of telecommunications centers to ensure that requirements of the future will be met.

Consolidation and automation is accomplished under the Army's Telecommunications Automation Program (ATCAF). Management of ATCAF is the responsibility of the Army Communications Command. This program is designed to result in standard automated telecommunications centers world-wide during the next five years.

We operate and maintain 605 telephone exchanges of various types to fulfill requirements, such as for small Army posts, large headquarters and command control purposes.

The world-wide Automatic Digital Network (AUTODIN), a DCS system, is comparable to Western Union. The network is a fully secure, automatic, high speed, computerized switching system, providing punched paper tape, magnetic tape, punched card, printed page, and computer interface capabilities. By processing traffic on a first in, first out by precedence basis, messages can be transmitted almost anywhere in the world in a matter of seconds.

The overseas Automatic Voice Network (AUTOVON) is comparable in many ways to Bell Telephone Service. This overseas AUTOVON DCS network interconnects with the Automatic Voice Network System in the US, which is a fully leased commercial network, thus enabling direct long-distance
dialing almost anywhere in the world. Access into the network is through telephones connected directly to the AUTOVON switches or through designated local telephone exchanges.

A world-wide Automatic Secure Voice Network, or AUTOSEVOCOM, parallels the AUTOVON system and utilizes the same circuits. This DCS system permits discussion of classified matters on certain telephones, between selected points throughout the world.

Current emphasis is on expansion of satellite communications systems. The new satellites communications capacity is the equivalent of 1200 voice channels. Their mode of operation allows simultaneous two-way operation between the satellite and several ground stations. The communications subsystems are being provided with a capability of 72 voice channels. Capacities may be expanded by addition of equipment.

Other modes of communications transmission include: 167 microwave radio sites, 51 troposcatter radio sites (these systems bounce radio signals off the troposphere), and 62 high frequency sites of varying sizes.

ACOMM is responsible at 94 airfields and heliports for systems to support air traffic control and safety for the Army's 10,000 aircraft. Centralized management and technical direction are responsibilities of the US Army Air Traffic Control Activity, headquartered at Fort Huachuca. Participation in these efforts are elements in the Continental USA, the Pacific Area and the Panama Canal Zone.

ACOMM operate specialized area maintenance and supply facilities (AMSF's) in Korea, Thailand, Taiwan, Okinawa, and Germany. The AMSF's are essential for support of the sophisticated fixed communications systems and the near perfect communications reliability that must be maintained.

The final segment of the briefing will cover our major operations and activities in different areas of the world, and global deployment for accomplishment of our responsibilities.

Our three operations and maintenance commands are named in the following slide:
5th Signal Command Headquarters is at Worms, Germany; 6th Signal Command Headquarters is at Fort Shafter, Hawaii; and ACOMM CONUS Headquarters is at Fort Ritchie, Maryland. The operations and maintenance commands operate on a world-wide basis. They provide the communications for which the Army is responsible with the exception of tactical communications organic to combat units.

The 5th Signal Command in Europe has ACOMM personnel located in nine countries, with the majority in Germany. Support is provided Commander-In-Chief, Europe, and all major Army, Navy and Air Force headquarters in Europe, as well as SHAPE and NATO. The 5th Signal Command operates a total of 453 communications facilities. The Commander of the 5th Signal Command functions in a dual status. He serves concurrently as the C-E staff officer for Commander-In-Chief, US Army, Europe. This same type of arrangement is also true in regard to the ACOMM commanders in the Pacific, and the commanders under ACOMM-CONUS.

The area served by the 6th Signal Command in the Pacific extends control throughout the area west of Hawaii. Support is provided Commander-In-Chief, Pacific, Commander-In-Chief US Army Pacific, and their subordinate commanders throughout Korea, Okinawa, Taiwan, Thailand and Japan. Signal Command personnel in the Pacific Area are located in seven countries. The majority are in Korea. The command operates a total of 214 communications facilities. The backbone system linking Pacific operational areas is the Integrated Joint Communications System (IJCS-PAC). The system is a mainline from the Philippines in the south, to Taiwan, to Okinawa, to Japan. ACOMM operates all of the IJCS except the Japan and Philippine portions, which the Air Force operates. The IJCS is extended from the Philippines to Thailand, and from Japan to Korea.

The backbone system in Korea for which ACOMM is responsible is the Korea Wideband System (KWN). A total of 89 communications facilities are operated in Korea. Support is provided 8th US Army, US Forces, Korea, the United Nations Command, the 38th Air Defense Artillery Brigade.

In Okinawa, we support the US Army Base Command and other elements, and operate major facilities in the DCS. A total of 35 communications facilities are operated in Okinawa.

Okinawa and Taiwan are connected by submarine cable. The Taiwan terminal is at Camp McCauley, located at the northern end of the Taiwan backbone system. Support is provided Commander, US Taiwan Defense Command; Military Assistance Advisory Group, Republic of China; and US Army Forces, Taiwan. We operate a total of 28 communications facilities in Taiwan.

Next is Thailand. ACOMM is responsible for operation and maintenance of the DCS transmission systems in Thailand. These systems are operated for this command on contract by ITT Federal Electric. Support is provided by ACOMM to Commander, US Military Assistance Command, Thailand,
and the support group. We are responsible for 45 communications facilities in Thailand.

In Japan, ACOMM operates 16 communication facilities. ACOMM supports Commander, US Army, Japan and an element of the IX Corps. In Japan, we do not operate the backbone communications system; the Air Force does.

Moving on now to the Western Hemisphere, the Continental United States is the primary area served by ACOMM-CONUS. ACOMM-CONUS also has responsibilities in Alaska, Hawaii and the Panama Canal Zone. There are a total of 487 facilities at this time. Support is provided to special communications systems such as the National Military Command System, Joint Chiefs of Staff Networks and Civil Preparedness Networks. Among the more important facilities operated are the Pentagon Telecommunications Center; the East Coast Telecommunications Center, at Fort Detrick, MD; and the Northeast Telecommunications Center, at Hancock Field, NY. Communications are provided for Army posts, organizations and commanders everywhere. ACOMM-CONUS is our largest command. They operate a total of 561 communications facilities altogether.

ACOMM-CONUS participates in the operation of the Washington-Moscow hotline, which is being upgraded as a satellite Direct Communications Link (DCL). DCL will utilize both the Russian-made Molniya and American-made Intelsat satellites. This will provide a communications system between the heads of state of the USA and the USSR that is vastly more effective and reliable than the existing Washington-Moscow hotline. Operations are scheduled to be in later this year. ACOMM-CONUS will have this responsibility.

In Alaska, the communications facilities operated by ACOMM-CONUS total 25. The primary functions in Alaska are to provide theater Army level and post communications to Commander, US Army, Alaska, with operations centered around Forts Richardson, Wainwright and Greely. We operate some long distance communications in that area, but this is primarily an Air Force responsibility. The ACOMM responsibility in Alaska includes command of the 33rd Signal Battalion. This organization provides tactical support and DCS entry for US Army forces in Alaska.

In Hawaii, the communications facilities operated by ACOMM-CONUS total 22. Base communications-type support is provided Army organizations located in Hawaii.

The communications operated by ACOMM-CONUS in the Panama Canal Zone total 27 facilities. Support is provided the unified commander, and the Army, Navy and Air Force component commanders. This is the backbone communications system for which we are responsible in the Panama Canal Zone. Primary elements of the backbone system are the Trans-Isthmian Microwave System and the Trans-Isthmian Cable System.

Leaving the operations and maintenance scene, I will discuss important functions in the acquisition, engineering and installation of communications-
electronics system. In the earlier portion of the briefing, we described the fixed communications systems that our people operate and maintain in the field. These systems are not static. There are continuing changes in the communications requirements of organizations served by Defense communications systems and Army communications systems for which we are responsible. This means a continuing need to upgrade, expand and reconfigure systems and facilities, and in some cases to find new systems. The three functions—acquisition, engineering and installation—are centrally managed for purposes of economy, efficiency and standardization.

The Communications Systems Agency (CSA), located at Fort Monmouth, NJ, is a joint USAMC-ACOMM project management agency. The Communications-Electronics Engineering Installation Agency is headquartered at Fort Huachuca, Arizona. Its title is self-explanatory. These two agencies, commanded by one individual, work as a team to solve the complex problems associated with acquisition of systems and the engineering, installation, test and acceptance activities around the world.

CSA and CEEIA are constantly upgrading and reconfiguring systems, and establishing new systems to fulfill new and changing requirements. As to scope, CSA handles in excess of 100 million dollars a year. Modernized systems are turned over to the operations and maintenance commanders for employment after installation, test and acceptance activities have been completed.

It is a way of life that many communications-electronics projects are under way around the world at all times.

Another ACOMM function that is part from the normal day-to-day operation and maintenance of systems is provision of contingency systems and teams. These are quick reaction communications elements of the 11th Signal Group that fly anywhere in the world to support contingency forces such as the Eighteenth Airborne Corps. This ACOMM unit is specially equipped and trained to restore or extend links in the Defense Communications System as required when contingencies occur.

Along another line of endeavor, ACOMM has developed the communications system for the Safeguard Anti-Ballistic Missile System. The Safeguard Communications Agency (SAFCA) at Fort Huachuca has had this responsibility. This agency is undergoing a scheduled phase down at this time. ACOMM-CGHUS will take over responsibility for operations and maintenance of the Safeguard Communications System.

There are three other subordinate commands that should be mentioned: HQ Fort Huachuca, USACC-CIDC, and Interagency Communications Agency (ICA). HQ Fort Huachuca, a communications command installation, provides base operations support to our headquarters and tenant activities located here. ACOMM-CIDC is the dual status communications agency supporting the US Army Criminal Investigation Command. ICA has a specialized mission serving various key government agencies other than Department of Defense.
A final specialized function that I will mention is the Military Affiliate Radio System (MARS). The tri-service MARS system has the mission of providing DOD-sponsored emergency communications as an adjunct to normal communications. ACOMM exercises supervision over the Army's portion of the MARS system. There are more than 4,700 active MARS members participating full time in the program. Provision of a capability for telephone patch communications service to Armed Forces throughout the world, is an important phase of the MARS program.

This concludes the highlights of the Army Communications Command. I have summarized for you the missions, systems and facilities and deployment throughout the world. ACOMM manages all the men, money and material engaged in providing system design, acquisition, and operation of the vital communications links in that broad area between the Office of The President and the combat unit level in the field. This is of critical importance to the Army and the nation. ACOMM is a growing command from the standpoints of missions, which we have described today; manpower, which has increased 20% in the past year. Most of the increases were brought about by ACOMM becoming responsible for Army installations communications in the Continental USA and for Army Air Traffic Control Management. The dedicated efforts of almost 31,000 military and civilian engineers, technicians and specialists, exemplifying the "one Army team" concept, are brought to bear to provide the voice of command around the world, 24 hours a day, 7 days a week.
INTERPERSONAL COMMUNICATIONS

Ken Ernst
Special Consultant

Ken Ernst is a training member of the International Transactional Analysis Association, and also belongs to the Eric Bern Seminar of San Francisco. Mr. Ernst graduated from the University of California at Berkeley with a degree in psychology, and also has a masters degree in clinical psychology.

I have given transactional analysis workshops numerous times throughout the western part of the United States. During this workshop, we are going to have time to go over only a few concepts of transactional analysis; there are many more concepts than the few we shall cover today and tomorrow. I am going to go into these concepts in depth and show you how they apply to what you are doing. For example, how does it affect you and how does it affect the people you deal with, and how can you use transactional analysis in your every day activities? Because no matter how nice the theory sounds, unless you can use it you might as well forget it.

We have made great strides in the field of psychology over the last ten years. For example, during the last ten years, we have learned more about what goes on inside our heads than we have learned from the beginning of time up until ten years ago.

Everyone in here is very predictable, and how predictable we have just begun to learn. I am going to give you several brief examples to show you how predictable people are and how it happens. This is called script analysis. Very few people have gone through script analysis. When we are born, our parents program us; this is called raising children. When we are born, we start off with people around us who have great expectations for us: he is going to be a football player when he grows up; she is going to be a beauty queen; or, she is going to get married and have ten children because she is not really a woman unless she has had the joy of holding children in her arms. All these stereotypes become ingrained in us when we are very small and hear them over and over again. This is our script that we follow throughout our lives and what makes us very predictable. Very few people ever break out from their script; some do, but it is very rarely done.

Transactional analysis is the process where we analyze the transactions
that go on between people. All of us are powerless to control our lives in the sense that we do not know what is going on in our subconscious minds; as a result, things just seem to happen without our understanding why and we wonder "why does that always happen to me?" However, you can analyze yourself. I have actually seen and worked with some people who have analyzed themselves and figured out their scripts without having to go through a very expensive psychoanalysis.

People have several basic needs. Let us start with the life, liberty and the pursuit of happiness needs. The life needs are simple: food, air, water and shelter; food, air, water and shelter we need to live. These needs are so basic and obvious that we really don't need to discuss them. The next needs are liberty and the pursuit of happiness. The liberty needs are not quite so obvious. Physical liberty means the freedom to physically grow healthy and strong while we are growing up—as strong as our genes and as strong as our food, etc. will let us grow. Emotional liberty is even less obvious. Emotional liberty means going through the first five or six years of life without any severe hang-ups. We will take a couple of stages. For example, there are the oral, the anal, and the phallic stages—the so called Freud stages. As children go through these emotional stages, they have the right to be free to go through them without any big hang-ups. Children also have a right to go through their early years with the liberty to have their intellects developed without any restraints or other inhibiting factors. Children must be stimulated with intellectual ideas in order to grow and develop naturally; they must have people to talk to, things to look at, things to handle, and the ability to wander around and get into things. That is not to say you can let them wander everywhere, but they should have the freedom to look around and to think. Now we get down to the last of our needs, pursuit of happiness needs; these are called strokes. A stroke is any time you touch the skin. For years we have been told that everybody needs to be loved. However, usually when we think of love we think of sex. Love and sex are not the same things at all. Unfortunately, the idea exists that it is almost impossible to touch somebody else without the thought of sex entering into the picture. That is because of our background and our upbringing. We are programmed to think of touching as meaning sex. As a result, we have a hangup about touching. But why do I say touching is important? Well, it has been found that unless people are touched they will die. We need to be touched. The surface of our skin is 17% of our body. That is a fairly large sense organ. We need to have it stimulated regularly.

Time structuring is how we get what we need out of life. There are only six ways of structuring time, and everything we do fits into one of these ways: withdrawal, ritual, pasttime, activity, game and intimacy.

The whole purpose of transactional analysis is NOT to change other people, but to help us understand others and change ourselves in the areas that we need to change. The only time people change is when they are ready, willing, able, and want to change.

A script is based on a decision made in early childhood as the compulsion to live in a certain way. A script ends in a particular manner,
and it will stay that way unless you want to change it. A script can be changed through the adult if you are aware of the script you are following.

The biggest reason for most of our activity is that most of us are starving for attention, i.e., strokes. We know that we have a parent, an adult, and a child in our heads. We also know we are working mostly for strokes. Between 20% and 80% of our waking time is spent playing games; the payoff of most games is strokes. The adult information is that people need strokes; they need attention and they figure out the best way of getting it. This results in the games people play throughout their lives.

There are positive strokes and there are negative strokes. The very obvious positive strokes are praise and affection. Some obvious negative strokes are criticism or a frown. As we grow up, we learn not to be honest and open. When little four year olds like you, they are not afraid to tell you so. But as we grow up, we learn to hide our honest and open feelings. Everything gets switched around and we find we have to disguise our true feelings. As a result, if we want to give a good comment or a compliment, we find we cannot give it directly; we learn to disguise the good strokes to make them look like bad ones. As adults, we are not allowed to be open and honest with our feelings. As a result, the open and honest strokes tend to get hidden. Most of the time, we tend to be very suspicious of any good strokes we might receive. It is a sad fact of life that most of us are very suspicious of accepting good strokes and eventually don't want to accept them at all.

Psychological games work the same as athletic events. Athletic events are nothing but an excuse to get together and give physical strokes. A game is actually where things are going on at an ulterior level. All of us have been brought up to be a little bit devious and that is the origin of games; we do things on two levels: the obvious level and the real level of where the real strokes are located. Unfortunately, we feel we have to be dishonest about our desire for strokes; hence, the necessity for games.

There are exercises to improve the adult. The adult is like a machine and can be improved with practice. One exercise for the adult is to tape yourself on a tape recorder and listen to the tone of your voice. I would suggest doing this and other exercises when you are alive. Another exercise is to talk to yourself in front of a mirror and watch the expression on your face and watch your posture and other reactions. For example, if your head is tilted, it is probably either your parent or child talking. Most of us don't know how we come across to other people.

As opposed to the parent and the child, the adult has no emotion. Therefore, if you have a problem, I would suggest turning on the adult: turning on the adult tone of voice, leveling the head, sitting up straight. When I am in my adult, my posture will be different than when I am in my child. These can all be done with practice.

We have had a very quick run through of several theories of transactional analysis. However, there is a big difference between learning
theory and applying it. It takes practice to apply it. That is the message I would like to leave with you—that it takes practice and more practice to successfully convert theory into use. If there is somebody else at the same installation that has also gone to a transactional analysis workshop, keep in contact with them as a reinforcement. Keep reinforcing the principles learned here because it does take practice. At several installations, people who have had transactional analysis training have formed clubs that meet once a week or twice a month. This has proven to be very effective in helping to reinforce transactional analysis concepts.

I would like to personally extend my thanks to you for having me here; I have enjoyed my stay very much. If invited back, I would certainly like to return to Sierra Vista and Fort Huachuca.
Mrs. Fraser, Ladies and Gentlemen, welcome to Apache land. If you had come here 100 years ago, it would have required the permission of the great Apache chief, Cochise, because 100 years ago no white man could come into this area without his permission.

Fort Huachuca as founded in 1877 by Captain Whiteside. Now, 1877, the year the fort was founded, was an interesting year in military history. First, let us go back to 1876 to the disputed election between Hays and Tilden. The important thing as far as Congress was concerned was who was going to be the next president. Congress was also extremely irritated because in 1876 Custer got himself killed along with about 240 men and there was considerable criticism of Congress; Congress in turn blamed the Army for allowing Custer to be killed and bringing so much bad publicity. As a result, Congress refused to pass an Army budget for 1877. This meant that nobody was going to get paid and nobody was going to get money for rations. The Army posts were on their own. There are many interesting stories, but I'll tell you about one I read across in reading letters sent by soldiers from Fort Huachuca in 1877. The story goes that a company commander, cavalry units were called companies in 1877, got his men together and told them he had one piece of good news and one piece of bad news and asked which would they like to hear first. After a little silence, a man asked for the bad news first. The captain told them the bad news was that Congress had failed to pass a budget; Congress had gone home and they had no money for their subsistence for the year 1877. This meant they had no money to buy food and they were not going to get paid. He then announced that for the next year they were going to have to live on buffalo chips. Well, the men cursed and grumbled and finally, after another silence, a man asked for the good news. The captain's face brightened up and he told them the good news was that the Quartermaster had informed him that they had enough buffalo chips so they could even have snacks between meals.

There are two famous Indians connected with this area. One was Cochise, who by any standards was a great man. He was a great Indian; he was a great American; he was a great man. He died in 1874. The other one is Geronimo. Now Geronimo was never a chief; he was a leader. The Chief of the Chiricahua Apaches was the surviving son of Cochise. The Geronimo campaign is really the highlight of the early history of
Fort Huachuca. In 1886 General Crook, after an extremely strenuous campaign, succeeded in convincing Geronimo to come in and discuss surrender terms. I say come in because Geronimo had fled to Mexico. Geronimo finally agreed to come in and discuss surrender terms with General Crook near Douglas, Arizona. Geronimo agreed at that time to surrender his weapons and go back to the reservation. Unfortunately, that night an American bootlegger sold whiskey to Geronimo and his braves and during the night they fled. They were full of fight again—full of liquor and full of fight. General Crook was so embarrassed by this that he submitted his resignation and requested a transfer out of Arizona. The request was approved and he was replaced by General Miles. Again there was a campaign, but finally the Apaches, completely worn out, were given surrender terms. Now you will sometimes read that Geronimo was captured by General Miles. Geronimo was not captured by anybody. He was given terms to come in and surrender, which is not the same as being captured. The terms were that he and his braves would be sent to Florida; they would not be harmed; they would not be imprisoned. Those were the conditions that he accepted.

Fort Huachuca was the advance headquarters for the Geronimo campaign. The B troop from the Fourth Cavalry was selected to lead the pursuit. They left here on May 10, 1886. This campaign had worldwide interest. They took their own supplies with them because the American troops could not live off the land as the Apaches could. Logistical support came from Fort Huachuca. After a very strenuous chase, the Indians finally surrendered. There was one, to me, very tragic incident connected with the Indians' movement to Florida. The Indians loved dogs, both as pets and also to eat when food was scarce. They had about 2,000 dogs that they brought with them to the train. The Bureau of Indian Affairs made the decision that they could not take the dogs with them. So as the train pulled out, about 2,000 dogs chased the train frantically trying to rejoin their owners, but of course they never did. The dogs were just abandoned and left on their own. A little unwritten tragedy, but it really happened. Then there was peace for awhile at Fort Huachuca.

The next really important event in the history of Fort Huachuca was the Pancho Villa campaign. In 1916 Pancho Villa raided Columbus, New Mexico, not to attack the Army as some journalists say, but to steal weapons from the US Army. Of course, in order to steal the weapons, he was going to get involved in a fight. Second, he had purchased a number of weapons—it is believed about $30,000 worth—from a couple of brothers who ran a general store in Columbus, and they delivered a number of broken, obsolete weapons that were of no value. So Pancho Villa had two motives: revenge against the two brothers and weapons. There is a belief, and you will find it in many journals, that Pershing failed in his mission because he did not catch Pancho Villa. The truth is that catching Pancho Villa was not his mission. His mission was to destroy Pancho Villa's band, and I call your attention to the last line of his orders: "In any event, the work of these troops will be regarded as finished as soon as Villa's band or bands are known to be broken up."
He was not ordered to capture Pancho Villa any more than the American armies were ordered to catch Hitler in World War II. So General Pershing accomplished his mission. The bands were destroyed and Pancho Villa was never again an important leader. The other myth I would like to dispel is the belief that Pancho Villa was a Robin Hood. He was not a Robin Hood. He was extremely cruel. One of his trademarks was to bury a person alive with one arm protruding; in this way he would spread terror to his enemies and they would flee rather than fight him. Pancho Villa's philosophy was really to steal from the rich and rob from the poor. But today he is a hero.

Some of the more interesting stories connected with Fort Huachuca involve Indian Scouts. The Apaches lived in huts called wickiups. In 1933 Fort Huachuca was given money for a WPA project. The post commander decided that one of the things he would do would be to construct what he considered adequate quarters for the Apaches. When the Indian quarters were constructed, the post commander called in SGT Riley, the Indian leader of the Scout detachment, and told him huts had been constructed for all the Indians and for them to move into them. Several days later the post commander went down to see how the Indians were enjoying their new luxurious quarters and discovered that the Indians had constructed their wickiups inside the new huts. The post commander told them the post had frequent visitors and these visitors would think the Army was mistreating the Indians by letting them live in substandard quarters, so the Indians could not have their wickiups inside the huts. The Indians removed their wickiups, but then something very unusual happened. SGT Riley asked to see the post commander. He told him that traditionally Indian men liked to sit in a circle inside a wickiup where they would smoke and talk; this was a place that was off limits to women and children. He asked permission to construct one somewhere on the post. The post commander permitted this.

My last story is my favorite story. In November, 1922, General Pershing was making a tour of the western posts. He went to Fort Bliss, then he came to Fort Huachuca. Immediately there was much excitement. The Chief of Staff of the Army was going to visit Fort Huachuca; this did not often happen. So the Post Commander, Colonel Rhea, decided to put on quite a show. He borrowed several artillery howitzers and nineteen rounds of ammunition for a nineteen gun salute; and they rehearsed the welcome they were going to extend to General Pershing. One of the officers on post had a touring car with the top down. General Pershing's train would stop at a railroad terminal seven miles from Fort Huachuca; there he would get in the car with his aide, Major George C. Marshall, Colonel Rhea and the officer who was driving the car. They would then come to Fort Huachuca and as they entered the gate there would be a nineteen gun salute; the soldiers would come to attention and they would also fire a salute with their rifles. Finally came the great day. About a quarter of a mile from the post an officer signalled that they were coming. Then a touring car appeared with the top down. Some of the observers thought it was travelling at a surprisingly high rate.
of speed, but anyway here it came. Just about the time it entered
the post, the first howitzer fired and then nineteen howitzers fired;
next the soldiers brought their weapons to their right shoulders and
they fired a salute. Just about that time a second car, completely
unexpected and also going at a high rate of speed, approached. This
cased a lot of confusion and people began milling around wondering
what was going on. Suddenly a third car approached. The third car
was a touring car with the top down and there were four people in it.
One was General Pershing. There was no ammunition; the salute had
already been fired. The first car that had entered the post was already
on its way out of the post, followed by the second car, both again at
a very high rate of speed. Now there was complete confusion and about
this time the officer who was driving the General's car appeared before
the adjutant and told him that Colonel Rhea wanted to see him immediately.
1922 was during prohibition, and what had happened was that a local
bootlegger was making his deliveries and somehow got on the one road
from the depot to the post and there was no turnoff; right behind him was
the county sheriff. As the bootlegger entered the post, the adjutant
gave the signal to fire the welcome salute. Before you sympathize too
much with the officer in charge, don't forget the poor bootlegger: a
man trying to make a dishonest living getting on the wrong road with the
sheriff right behind him and unable to turn off. As he entered the post,
the artillery started firing at him; then the soldiers raised their
rifles to their shoulders and they fired at him. Well, of course he
escaped. When General Pershing heard the story, he took it in good
spirits. He remembered it as one of his favorite stories and enjoyed
telling of his memorable visit to Fort Huachuca. Eventually he did get
to inspect the troops and everybody lived happily ever afterward.

Well, you will not find what I have told you in the history books,
but these are the things that the old timers remembered, and when they
got together these were the stories they told.

Ladies and Gentlemen, this completes my talk.
The academic librarians met for a one-hour discussion on Thursday morning. The meeting was chaired by Professor Earl R. Schwass, Naval War College, who introduced the subject of network arrangements in academic libraries. Professor Schwass stated that the Naval War College had been a member of the New England Library Information Network (NELINET) for five years and had participated in that network's off-line catalog products program. Now that NELINET has joined the Ohio College Library Center (OCLC) network, which is on-line, the Naval War College will be participating on-line by the middle of October.

Professor Egon Weiss of West Point described his library's experience as an on-line member of SUNY Network which is also connected with OCLC. He stated that experience to date indicated that there would be a cost savings involved.

Ms. Helen Hunsecker of the Army War College described her library's participation in the Federal Library Experimental Program which involves ten Federal libraries in the Washington area connected to OCLC using both TIMNET and CRT terminals. Ms. Hunsecker indicated that the experience to date has been encouraging but no cost figures are available.

Ms. Mary Schaeffer of the Army Library, Pentagon, was enthusiastic in her discussion of the Army Library's participation in the Federal Library Experimental Program which she believes will result in savings both in manpower and other costs.

A discussion ensued concerning the advantages/disadvantages of participation in an on-line network. Those libraries presently participating generally endorse networking while others reserve judgement pending more information on costs.
The general librarians meeting was held for one hour at the 18th Military Librarians’ Workshop. The meeting was conducted by Louise Nyce, HQ, US Army Forces Command, who introduced the subject of library publicity.

All communities believe that libraries are good things and that reading is salutary and basic to education and necessary to modern society. While libraries have no natural enemies, neither do they have natural supporters. They must attract widespread citizen interest as there is fierce competition for the dollar with a decreased budget and increased costs. A varied public relations program enthusiastically presented on a continuing basis can go a long way to get total support and attract widespread community interest.

Public relations is the sum total of the performance and attitude of the entire staff from the newest part-timer to the command librarian. The staff must promote their professionalism, impress the public with the extent and variety of library services, and present a positive library image.

A continuous program is more valuable and effective than a splurge of publicity at infrequent intervals, so plan!

HOW TO PLAN

1. Psych yourself for this one and play whatever game is necessary to get started, i.e., "I won't have a cup of coffee until I've finished this."

2. Sit down with a calendar and mark all the obvious holidays and tie-ins, then go through and mark days that are not so obvious (Jewish Book Month, Negro History Week, etc.). Think about seasons (back to school, summer vacations, winter sports). Think about your community (the young, the old, the family, the single man, the new parent, the prospective retiree, the club, the individual). You have various publics, not just a monolith, identical in outlook, interests and responsiveness. Jot down ideas. Plagiarize, "but remember always to call it research." (Tom Lehrer)
3. Look over all these ideas and see how you can get the maximum mileage from the minimum amount of time expended. A bibliography title can lead into a radio spot, DB note, a newspaper article, a book display, bookmarks, a panel discussion and a film. Make a little go a long way.

4. Analyze the strengths and weaknesses of yourself and your staff. Capitalize on their interests and talents. Talent may be hidden or may be a consideration when the next staff member is recruited. Make tentative assignments.

5. Commanship. Convince someone else to do it for you (staff, wife, lover, boss, friend, acquaintance). This saves you time and gets others interested and involved in the library. Encourage this. The little old lady who makes paper flowers may be the commander's mother-in-law. Write thank you letters afterwards.

6. Final points to remember:

   a. The best public relations is a friendly, courteous, knowledgeable, efficient staff. They know how to use the new reference books and thread the tape recorder.

   b. KISS (Keep It Simple, Sam) for more effective results.

   c. Do what you do best, but try a few new things each year.

   d. Keep idea files and get supplies which make life easier and add to the professional appearance of the project.

   e. Try to inform as well as attract attention. Publicity should elicit a response.

   f. Plan realistically and make an honest effort to stick to the plan.

   g. Create news. Don't sit back and wait for things to happen. Make things happen. Probe every facet of your library and community for something to emphasize and publicize.

   h. Cover your bet on your booklists. Include records, magazine articles, pamphlets, everything you can find on the subject. Distribute then inside and outside the library in unusual places: consumer education - P.X., cookbooks - commissary, hunting and fishing - Rod and Gun Club, etc.
The first recognition of the needs of medical librarians was met at the 18th Military Librarians' Workshop with a formal presentation of MEDLINE by Mr. William Caldwell of the National Library of Medicine. The meeting held at this workshop was the first organizational meeting of medical librarians with representatives of all three services attending.

A short summary was presented on the creation of a Military Library Section at the 1974 annual conference of the Medical Library Association. Ms. Marie O'Mara at that meeting was directed to compile a directory of military medical librarians. Ms. O'Mara gave an up-date on the current status of her survey. Ms. Lora-Frances Davis gave her reflections on her participation in the US Army's Library Career Screening and Planning Board held in August 1974 and its impact on medical librarians.

The group discussed the validity of the 1410, 1412 and 1411 CSC standards as applied to individuals working in medical, scientific and technical libraries. The consensus was that an investigation should be made and that changes be instituted, so that the CSC standards properly reflect the level of expertise required of medical librarians, as opposed to standards for recreational librarians.

The group recommended that at each Military Librarians' Workshop a two-prong session should be held for medical librarians: an informal session to discuss mutual activities and an invited guest speaker or formal paper presented to reflect trends in medical librarianship.
The workshop session for technical librarians discussed various aspects of networks available and the benefits to be accrued from their use.

Eleanor A. Driscoll, Command Librarian, began the workshop session by defining a library network as an automated or non-automated organized group of interrelated libraries and/or information centers which, by sharing resources and services, allows each member the capability of furnishing its users materials and services normally beyond its own capability. Ms. Driscoll explored the types of networks available today: on-line or off-line, geographic subject or service-oriented, and encouraged workshop participants to become active in regional and other networks.

Following the introduction, Ms. Concetta Anaclerio, US Army Concepts Analysis Agency, presented a paper on "Library Networks for Technical Processing." Next, Ms. Carol Johnson, USAF Cambridge Research Laboratory, read a paper on "A New Era In On-Line Information Retrieval Through Networks." Mr. Philip Rochlin concluded the panel's presentation with a paper on "Off-Line Networks." A question and answer period concluded the workshop session.

LIBRARY NETWORKS FOR TECHNICAL PROCESSING, presented by Ms. Concetta Anaclerio.

I will describe some library networks which aid in technical processing. It is not possible to give an adequate overall view of such networks, so I will confine myself to examples of existing networks which illustrate the options which are available to a library administrator, namely: to actively participate in a library network, to adapt a presently working system, to "piggy-back" on a library participating in a network, and to subscribe to a commercial network. For this discussion the distinction between on-line and off-line is a simple one. On-line is a direct immediate access to a data bank with the information requested appearing on a terminal screen. Off-line generally implies batching requests and accessing the data bank according to a pre-arranged schedule. From this we see that a main library participating in a network may be on-line while its branch libraries may be off-line.

PHILSOM is an example of a serials control network. PHILSOM stands for Periodicals Holdings In Library School of Medicine. This is an automated record control system started in 1969. It is used by the
The data base consists of 8,300 titles. Each serial record consists of the full title, bibliographic description and history, cross references, and location data. The PHILSOM file is updated once a month and differs from SERLINE in that a SERLINE member receives immediate bibliographic and location information. A PHILSOM network member receives, instead, a list of its journal titles and holdings, a list of missed issues and overdue warnings, receipt cards for journals to be published, a list of titles ready for binding, a fiscal report of moneys spent, and renewal lists. It may also get, if needed, lists of titles by subject, language, and shelving locations. The PHILSOM data base is primarily the Union Catalog of Medical Periodicals published by the Medical Library Center of New York.

PHILSOM is an example of a working "piggy-back." The VA Hospital opposite the Medical Center of the University of Missouri-Columbia includes its periodical titles in PHILSOM. In this manner, the holdings of the major health science libraries in Columbia are available to the VA librarian. The Washington University Library pays for the PHILSOM network, but the VA Hospital is charged on the basis of the number of titles recorded for it.

BIBLIOS is an example of a network system which could be adapted by another library system. BIBLIOS stands for Book Inventory Building Library Information Oriented System. This is the system designed and used by the Orange County Public Library System in California to fulfill the following requirements: acquisitions, book processing, catalog maintenance, circulation control, book fund accounting, management reporting. BIBLIOS is a modular system with many by-products. The Acquisitions System produces purchase orders for new materials and re-orders, lists of books on-order, budget reports, and pre-vend review lists. The Bibliographic Control System produces master indexes, book catalogs and supplements, inventory updates for losses and gifts, locator guides, pocket and card sets, and collection profiles. The Circulation System produces input transactions, patron registers, holdings lists, overdue notices, management reports, and user profiles. While many of these products are not strictly speaking "technical processing," they are included as examples of the wide variety of products that a well designed system can produce.

OCLC (Ohio College Library Center) was established in 1967. It is a regional library network. The heart of the system is a computerized on-line file of bibliographic information located in Columbus, Ohio. Participating libraries access over dedicated telephone lines using CRT terminals. The overall design provides for six subsystems: on-line union catalog and shared cataloging, serials control, technical processing system, interlibrary loan communications, remote catalog access and circulation control, retrieval by subject. The on-line union catalog and shared cataloging system has been operational since late 1971. In the first six months of 1972 the system operated at an annual rate of 500,000 works cataloged and over 3,400,000 catalog cards produced. The cards
are custom tailored to the specifications of the individual library and are produced in pack order. The data base consists of MARC II tapes and original cataloging input from member libraries. To give you an idea of the scope of shared cataloging, by January 1973 the OCLC data base consisted of 300,000 MARC II records and 245,000 user produced records. It is presently growing at a rate of a thousand records a day.

Serials Control will consist of four functions: cataloging, check-in, claiming, and production of bindery records. Early this year it was announced that OCLC had activated an on-line program for inputting serial records at Ohio University. The system will be available to other libraries when it is operating smoothly. The AD Hoc Discussion Group on Serials (also known as the "Toronto Group") has announced that OCLC will be used to build 100,000 serial records the first year and another 100,000 the second year.

The Technical Processing System will be basically an acquisition system. It will be designed to produce purchase orders, maintain a record of outstanding orders, issue claim notices for books not received on time and keep account of funds committed and spent by member libraries.

The Interlibrary Loan System is presently being developed. At the moment, OCLC does indicate which library now has a specific title in its collection. This on-line union catalog has reduced search time considerably. The mechanics of arranging the loan, however, are still the traditional ones.

And finally, an example of a commercial network available is BIBNET, a service of the Information Dynamics Corporation in Reading, MA. BIBNET is an on-line library network with a data base of over four million records which provide access to twenty years of LC cataloging, all the MARC records, and shared cataloging of participating members. It is expected to expand into providing the following additional services: circulation control, book fund accounting, union catalogs and interlibrary loan, serials records management. BIBNET's mini-computer acts not only as a communications terminal but also has capabilities, with display and print accessories, to provide in-house preparation of catalog cards and management reports. The New Mexico State Library is the first state library to use the BIBNET on-line network to record holdings information of libraries throughout a state. It also uses BIBNET to support its own technical processing systems, as eight New Mexico libraries now forward holdings data to the State Library each month to be included in the index.

A NEW ERA IN ON-LINE INFORMATION RETRIEVAL THROUGH NETWORKS, presented by Ms. Carol Johnson.

As librarians from scientific and technical libraries, we have an unprecedented and exciting opportunity to bring new and improved information services to our users through computer terminals, which provide a gateway to infinite resources through networks.
We are all confronted with increasing costs, while budget constraints continue to be top priority concern. On the other hand, computer terminals and networks have opened the way for more advanced information services at a cost which even small to medium sized libraries can afford. Computer networks have brought together users with similar needs, making information products economically justifiable and at the same time broadening the scale of user access.

There are two messages which I hope to bring to you through this discussion. One is the trend in technologies leading to on-line bibliographic systems which have become economically feasible through timesharing systems. The other is to encourage everyone here to become more involved with existing services, networks and library consortiums. Find out what is available and become an influential participant in the development of these services.

Underlying this presentation is the strong bias that users are highly adaptive and greatly influenced by the availability of specific capabilities. Just as many DOD-sponsored projects require a Work Unit Information Summary (WUIS) from DDC prior to funding or launching a new piece of research, numerous other data bases should be queried to obtain a more comprehensive and accurate picture of the topic being studied.

It has been reported that Federal librarians have accepted the concept of services offered from machine readable data bases and it is felt by many that on-line access is a feasible augmentation of local library capabilities. However, it has also been recognized that to exploit this potential fully, government libraries must somehow tie into data base services offered by nonlibrary groups. Librarians have an obligation to investigate, recommend and utilize new technologies to better serve their users.

Why on-line? What are the virtues and advantages? On-line, by definition, is a system in which there is direct interaction of a terminal with the computer. Current activity is introduced into the data processing system as soon as it occurs, and is thus in-line with the main flow of transaction processing.

In the retrieval of information from a large store of bibliographic data, this means that we have all the advantages of speed, and immediate turn around or response to each new iteration of a query. With the introduction of time-sharing computer systems, it also brings the asset of economy.

More specifically, the fast response time has the advantage of doing a search on-line with a total response time (including the formulation of a set of queries and receiving the printed responses) of an average of 15 to 20 minutes. This compares very favorably to an average response time for off-line batch searching, which ranges from one day to 2 or 3 weeks, depending on the service.

Other virtues of on-line searching include expanded access to the
data queried because of multiple points of access, greater selectivity through use of boolean logic by which the user can interactively limit the parameters of his search, thereby more closely defining his query and obtaining desired information, while screening out unwanted data. The on-line search also gives multi-cite accessibility to millions of pieces of information and increases the speed for delivery of materials cited.

To summarize, the advantages of on-line systems thus mentioned include: 1. Quick access to the most recent literature. 2. Direct interplay while processing a query, which permits much faster and more precise response to a query than waiting for returns and restructuring query on off-line searching. 3. An indication of what is in a file, from which the user can decide whether to search back further either manually or by computer.

Another important implication in the use of on-line terminals for retrieval of information is that the capabilities of a professional librarian can be extended. This is true both because of less time required in conducting a bibliographic search (either with or without the assistance of a scientist, researcher or other patron), and because of the quality of information service the librarian can provide to the individual searcher with their in-depth knowledge of the system, the file contents, and the file organization.

The last and one of the most important considerations for many when looking at the advantages or virtues of on-line retrieval involves economics. What will it cost? Can I afford it?

Each of the on-line data bases has a different cost associated with its access. The major suppliers of data bases will provide costs and parameters of availability upon request or through their published literature. Therefore, I shall not attempt to elaborate on costs of access to any given system. Instead, I would like to spend a few minutes describing some of the general cost factors and user economics which are involved in this fast growing and rapidly changing technology.

As background to this overview of the economic trends, let me remind you that in most libraries today, half of their cost increases are for staff, and the rest is in acquisition costs. The ever increasing costs and already high expense of scientific monographs has led many to predict their demise by the end of this decade. The cost of printed indexes also has continued to rise at an average rate of 12% a year for many scientific and technical titles. On the other hand, the cost of using the computer has continued to drop by about 35 - 45% a year since 1950. These facts give strong indications that by 1979 a library will be better advised to buy a terminal and do a computer search than to buy a printed index. Because of the trend of increasing costs of standard library services, and the decreasing costs of computer searching, one can also predict that on-line searching will be much cheaper than any kind of manual searching and may, in fact, replace printed indexes.

As previously mentioned, the major breakthrough in cost reduction
of computer terminals is due to networking developments. Communications and hardware costs are still going down. Telenet, which is expected to become operational late this year, has posted prices which are 1/4 that of Tymshare, indicating another large drop on communication costs. A breakdown of other costs associated with on-line retrieval shows that they also have been rapidly decreasing with technological improvements. For example, direct access storage costs have decreased from $1.00/character/year in 1956 to about $.065/character/year in 1973. This decline in storage costs has promise for substantial further reductions with some new technologies now in laboratory use. The CRT terminals have also decreased in costs to about $200/month in 1973, while the CRT screen capacities have more than doubled and printer speeds more than tripled (to 480 cps).

For commercially available on-line information retrieval services, the costs range from about $25 to $50 per connect-hour, with the majority of systems costing less than $35 per connect-hour. Many information centers are running 3 to 6 comprehensive searches an hour. This means that the direct cost of a typical retrospective on-line search would run about $8.00 for retrieval from many of the major data bases.

There are more than 100 data bases in the fields of science and technology now available in machine readable form. Many of these are available for on-line information retrieval. Let me list some of the major data bases currently in wide use through this medium to give you an idea of the size and scope of the files: NASA STAR and International Aerospace Abstracts (IAA); AEC Nuclear Science Abstracts (NSA); DDC Technical Abstract Bulletin (TAB); NAL Cataloging and Indexing System (CAIN); NLM Medline and Toxicon; Engineering Index COMPENDEX; CAS Condensates; American Society of Metals; Metal Abstracts Index (METADEX); Macmillan Pandex and TRANSDEX; NTIS Government Reports Announcements (GRA); and American Geological Institute GEO-Ref.

While this list is no doubt incomplete, and is limited to those on-line systems in the science and technology fields, it is significant in that most of these data bases are available for searching on demand through use of a single, inexpensive terminal.

There are many types of terminals available for use, including telephonic dial up, teletype, typewriter, keypunch and cathode ray tube (CRT), to name only a few. The CRT has gained the most rapid popularity in recent years because of its capability for performing more complex, rapid interactions, as well as requiring significantly less computer processor time.

In 1970 there were an estimated 100,000 terminals in use. This number had more than doubled by 1973. Of course, not all of these terminals are being used for on-line information retrieval systems. The point here is that the emergence of computer networks, which allow the use of individual terminals to dial up one of several time-sharing computer systems, has opened the market to all levels of users.

The impact of technological developments in the area of data
communications is particularly noteworthy in this regard. Whereas
direct distance dialing costs can be as much as $30 an hour, a call
placed locally through the Tymshare network costs only about $10 an
hour. This Tymsharing service is available in about 40 major cities.
Thus the cost of communications has decreased sharply, and the geo-
graphic availability has increased significantly. The growing cost of
mini-computers as communication concentrators has introduced the option
of reaching many different computers throughout the network, which also
allows greater capabilities by multiple terminal users.

Up to this point in my discussion I have highlighted the technological
significance of on-line network computer systems and that we, as librar-
ians, are in the midst of an important era for providing improved information
retrieval services to our users. Now I would like to spend the last few
minutes on some of the critical issues and problem areas associated with
this technology.

There are two categories of problems about which librarians and
information specialists should be concerned. First, there are those
relating to the on-line interactive situation itself; and secondly, there
are those centered in the time-sharing operations.

Under the first category we have all the issues relating to the way
in which a user communicates with the computer. In most instances, a
scientist does not use an on-line terminal regularly and thus is not
familiar with the search techniques. Even for a librarian or information
specialist who has worked with various systems, the idiosyncrasies of each
system, as well as the lack of standardization in terminology, the use
of data elements and various search strategies, all result in confusion
and less than efficient utilization of different services. There is also
the lack of effective control provisions and signal techniques in many
systems so that the actual interplay between user and computer results
in frustration to the user and inefficient use of the computer time.
Since on-line systems are still nothing more than technological curiosity
to many, the problem of user acceptance is another issue to be considered
by librarians and data base services alike.

Several suggestions can be made at this point to improve on these
shortcomings. The supplier of the service should prepare better user
manuals for the consumer. These should be written as step-by-step instruc-
tional guides for users who do not need to know why—but simply how! All
the aids possible should be made available from the service supplier,
including file updating schedules and guides to structuring queries, in
order to provide maximum assistance to the user.

The second area of problems stemming from time-sharing operations
raises questions based on the expense of keeping very large files on the
air all the time. Because of the economics of access to these large com-
puter files, most services now provide user access to only a portion of
their files on any given day, and some 85% of available files kept on line
are less than 3 years old. A coordinated, national effort must be made to
I assure that the maximum resources are available and to avoid unnecessary costs and duplication.

In this discussion I have merely highlighted some of the aspects of on-line information retrieval. As a closing thought, I would like to reiterate that enormous information resources are now available on demand for on-line searching. As librarians or information specialists, we should give careful consideration to the benefits to be derived from having immediate and powerful access to the technical information of the world.

OFF-LINE NETWORKS, presented by Mr. Phillip Rochlin.

This paper describes briefly several off-line networks from various places around the country. In general, these types of networks are sponsored by libraries in a specific geographic area and are intended to promote cooperation among them.

One way to discover which networks operate in your vicinity is to examine the listings for nearby libraries in the most recent edition of the American Library Directory (New York, Bowker). The listings often mention the networks to which the individual libraries belong. Details about the networks can then be obtained from listings in the new 2d International edition (c1974) of the Encyclopedia of Information Systems and Services, edited by Anthony T. Kruzas. (Some of the information in this paper is taken from this publication.)

The following descriptions give some idea of what the networks do for their members, and by extension, perhaps, what they might do for you if, as a nonmember, you can work through someone who is a member.

METRO -- New York Metropolitan Reference and Research Library Agency, 11 West 40 Street, New York, NY 10018. METRO was founded in 1964 to provide the 3Rs - Reference and Research Library Resources - for all New Yorkers. Membership is open to all libraries - academic, public, special - in the New York metropolitan area (including nearby New Jersey), and nearly 70 libraries belong.

Among METRO's activities are: provides a clearinghouse for distribution of surplus materials; cooperates on acquisitions or expensive items and also to avoid duplication of seldom used materials; provides help with reference inquiries; exchanges information about materials, services, and staffing of other libraries; maintains a collection of materials on library management: provides for interlibrary loans and photocopying; holds workshops and seminars which provide in-service training for library staffs; makes grants to libraries for payment of consultant fees.

NEW JERSEY LIBRARY NETWORK, State Library, 185 West Trenton Street, P.O. Box 1898, Trenton, NJ 08625. NETWORK is for use by New Jersey libraries only; it includes public, school, academic, and special libraries; 24 area libraries; and 4 research library centers. It covers all
areas of research interest and was established to facilitate inter-library reference, loan, and photocopying services and cooperative activities. The State Library serves as a switching center for requests and also operates a telephone reference and referral service which makes use of the resources of the Princeton and Rutgers University libraries, the Newark Public Library, the College of Medicine and Dentistry of New Jersey at Newark, and the Pennsylvania Union Catalogue in Philadelphia.

NETWORK also maintains reports and statistical data as a library data bank operated under contract by the Rutgers Graduate School of Library Science. Many other services are also provided.

TALON, South Central Regional Medical Library Program, University of Texas, 5323 Harry Hines Boulevard, Dallas, Texas 75235. TALON serves those in the medical and medically-related fields in the five South Central States: Texas, Arkansas, Louisiana, Oklahoma, and New Mexico. TALON is a decentralized program with the Dallas office serving a coordinating and fiscal role, and 12 medical libraries acting as Resource Libraries.

Services are offered to health practitioners who do not normally have direct access to library resources and information facilities.

TALON provides computer and manual literature searching, reference and referral services, advisory and consulting services in library management and organization, copying and interlibrary loan services, etc. Any reference library not having a MEDLINE capability may forward a user's request to TALON in Dallas or to the closest Resource Library with a MEDLINE terminal.

SLICE, Southwestern Library Interstate Cooperative Endeavor, University of Texas Southwestern Medical School, 5323 Harry Hines Boulevard, Dallas, Texas 75235. SLICE serves libraries in the six state Southwestern Library Association (SWLA) area: Arizona, Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. SLICE's main services are planning and evaluating cooperative programs and networks. It also provides SDI services from MARC-O or full MARC data bases, cataloging copying via MARC-O, and workshops to train libraries in the use of MARC-O services.

PNBC, Pacific Northwest Bibliographic Center, 253 Suzzallo Library, University of Washington, Seattle, Washington 98195. PNBC is a co-operative non-profit organization consisting of a union catalog, bibliographies, printed catalogs and reference works, and a trained staff. It serves as a clearinghouse for regional cooperation among libraries of the Pacific Northwest region, encouraging subject specialization and avoidance of unnecessary duplication of resources among libraries. PNBC locates books and other printed materials, arranges interlibrary loans, directs users to specific subject collections best able to serve them, and assists librarians with bibliographical research.
DEVELOPMENTS AND CURRENT STATUS OF FLC

Mary L. Shaffer
The Army Library, Pentagon, Washington, DC

The Federal Library Committee has reorganized in recognition of the need for continued cooperation and concerted action. Permanent members of the committee are the Librarian of Congress, the Director of the National Agriculture Library, the Director of the National Library of Medicine, representatives from each of the other executive departments and delegates from the Atomic Energy Commission, the National Aeronautics and Space Administration, the National Science Foundation, the Smithsonian Institution, the Supreme Court of the United States, the US Information Agency, the Veteran's Administration and the Office of Presidential Libraries. Six members are appointed by the Committee on a rotating basis by the permanent members. The Civil Service Commission, the US Environmental Protection Agency, Export-Import Bank of the US, the Federal Trade Commission, the Securities and Exchange Commission and the Small Business Administration are serving this year. A representative of the Office of Management and Budget, designated by the budget director, and others appointed by the chairman meet with the committee as observers. Ten regional members, one from each of the ten federal regions, are voting members. This group has just recently been selected and appointed. In addition to the permanent representative from DOD, one nonvoting member is selected from each of the three services: the Army, the Navy and the Air Force. These members, who serve for two years, are selected by the permanent DOD member from a slate provided by the Federal Library Committee. On November 14, 1973, I was designated the permanent DOD representative to the Federal Library Committee. In May 1974, the nonvoting members of the Army, Navy and Air Force were selected; they are Nel Strickland (Army), Bart Greenwood (Navy), and John Cook (Air Force). Selections were made as directed by the Federal Register, vol. 38, No. 106, June 4, 1973. The departmental members are rotated equally among the Recreation Services, Technical, Academic and School libraries.

The Federal Library Committee was established to consider policies and problems related to federal libraries, to evaluate existing libraries and resources, to determine priorities among library issues requiring attention, to examine the organization and policies for acquiring, preserving and making information available, to study the need for and potential of technological information in library practices, and to study library budgeting and staffing problems. Within these areas, the Federal Library Committee recommends policies and other measures to promote
optimum exchange of resources among federal libraries and to otherwise further federal library operational efficiency.

The Federal Library Committee actively participates in and/or endorses such projects as the joint project for measuring and enhancing federal productivity. The executive committee recently reviewed the numerous task forces and reduced them considerably. There is now a task force on Interlibrary Loan arrangements, a statistical committee, and an education committee.

During the past few years, the Federal Library Committee has been primarily engaged in setting up and conducting regional and federal workshops. I'm sure that most of you are familiar with the Federal Library Committee's participation in the Ohio College Library Center experiment in cooperative cataloging. They go by the name Federal Library Experiment in Cooperative Cataloging (FLECC).
The Information Hangups Group has been meeting for five years in Washington, DC. The members are some of the heaviest users of DDC. This spring marks the five-year anniversary of the association of DDC and NTIS with the Information Hangups Group.

Herman Miles, representing DDC, talked to us about their ten-year-long-range plan and indicated that it would be very helpful if our group would do some kind of research that would support that long-range plan. Mr. Miles met with a committee early in June and after a day of discussion we came up with four subcommittees that will do a study in support of the long-range plan at DDC. One of the committees will ask how complete is the information available from DDC, and are the services really giving us all the coverage we need. Users of DDC will be interviewed. The next committee will work on a cost study and on what has happened to us over the years since costing has come into existence. The group that I am particularly concerned with is called "Generation and Management Information in DOD and Contractor." Contractor is places such as Westinghouse or IBM. The last group will take all of this information and project it from our point of view as the long-range plan would affect us.

In talking with Mr. Miles, it seemed to us that we should have a much wider range of coverage than we would get just in Washington, DC. Therefore I have brought ten copies of the questionnaire I am using and I hope that before I leave this morning I will see some hands of people who will take them and answer them.

Thank you.
NEW DEVELOPMENTS AT DDC

Paul Klinefelter
Defense Documentation Center, Cameron Station, Alexandria, VA

Any consideration of DDC and where it is going should fall into two sections. One is about what is changing, what has been planned to change, and what is going on that will affect all of us. The other is about what is new or will change as far as we can predict it now. The speed of actual new developments and how fast they go into being are going to be affected by the cuts expected in manpower as well as resources, for us as well as for you.

DDC has evolved from a strictly document collection to one that includes the machinable inputs. We are working toward some eventual unified system of all DDC's data banks. This system will include machinable descriptive data created at the source and coming to a single center, and cross searchable because a standard has been used in preparing all of the descriptive and cataloging elements. The system has followed a planned evolution and this, if done carefully, will allow us to do all the things with maybe the same or even less manpower.

Another major change is the machine-generated-indexing concept. Although machine-generated indexing does not cost us any less than manual indexing, it will allow us to free manpower for other services that we should be offering you. Since this started a year or so ago, we have created a new retrieval language. We are using machine-generated indexing for all of the management data banks. Hopefully, in a year we will go to full use of machine-generated indexing. Analysts still look at a set of terms proposed to them by these computer programs based on abstract and title and they still delete and add; there is intervention from people who know the subject. The term set therefore is not totally machine generated, but machine generated and list refined.

Experimental access to open literature citations has always been a dream, and I am surprised that we ever tried it. However, we now have the Pandex file, but we do not know yet whether people find it useful. If it is useful, it will be largely due to the user population at each of your libraries; however, it is certainly a good idea and if it proves out well it should be expanded.

For the present, there are several things that DDC would like to do: expand the Pandex file, announce all of its DOD-generated documents
instead of having to look both in the NTIS announcement bulletin and in our own bulletin, and get a training method study out on contract to provide us with some way of giving you the kind of training you require in the various ways you can use DDC services without our having to send someone out to each of your libraries every time it is necessary.
After agreeing about a month ago to present highlights of the past seventeen workshops, there was some problem selecting subjects from the many workshop proceedings.

I decided to present highlights personally remembered as well as some selected from the proceedings of each workshop.

My coverage will mention events about the official programs, the social programs, and other related matters. Any items missed or possibly not quite correct are not intentional, I assure you.

I trust both the recent newcomers to the workshop and those who have attended over the years will find these highlights interesting.

The first slide depicts the first six workshops. Note they cover five different items, identified across the top of the slide.

The Air University at Maxwell was the first one to hold a Military Librarians' Workshop. The number of attendees was reasonably small in comparison to most other workshops and the sessions were very successful.

The asterisk shown by the host names signifies those individuals who have retired from their federal positions.

The Military Librarians' Workshop maintained a nice rotation by the sponsoring Military Departments with two DOD agencies throughout the 18 years.

The themes indicate that many varied subjects were discussed. Attendees numbered 50 to 200.

At Maxwell, we had a theme that came up several times at other workshops and I don't think we have ever satisfied ourselves that reasonable success on that subject has been realized.

The Air University Workshop permitted all attendees to be seated in a large circle facing each other. An excellent way to conduct open discussion.

I would say that the library furnishings at the Air University Library
<table>
<thead>
<tr>
<th>MILITARY LIBRARIANS’ WORKSHOPS SPONSORS</th>
<th>SPONSORING MILITARY DEPARTMENT</th>
<th>INDIVIDUAL HOST</th>
<th>WORKSHOP THEME</th>
<th>NUMBER ATTENDEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST-1957: AIR UNIVERSITY</td>
<td>AIR</td>
<td>&quot;BOB SEVERANCE&quot;</td>
<td>LIBRARY INFORMATION EXCHANGE &amp; COOPERATION</td>
<td>50</td>
</tr>
<tr>
<td>MAXWELL AIR FORCE BASE, ALABAMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2ND-1958: ARMY ARTILLERY AND MISSILE CENTER</td>
<td>ARMY</td>
<td>&quot;BILL HOLLOWAY&quot;</td>
<td>LIBRARY OPERATIONS AND ACTIVITIES</td>
<td>75</td>
</tr>
<tr>
<td>FORT SILL, OKLAHOMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3RD-1959: NAVAL POSTGRADUATE SCHOOL</td>
<td>NAVY</td>
<td>GEORGE LUCKETT</td>
<td>LIBRARY OPERATIONS AND ACTIVITIES</td>
<td>110</td>
</tr>
<tr>
<td>MONTEREY, CALIFORNIA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4TH-1960: ARMED SERVICES TECH INFOR AGENCY</td>
<td>DOD</td>
<td>&quot;Lt Col HAMMOND&quot;</td>
<td>AUTOMATION AND PERSONNEL STANDARDS</td>
<td>200</td>
</tr>
<tr>
<td>WASHINGTON, D.C. (NOW-DDC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5TH-1961: AIR FORCE ACADEMY</td>
<td>AIR</td>
<td>&quot;Col FAGAN&quot;</td>
<td>OBJECTIVES/ACHIEVEMENTS MILITARY LIBRARIES</td>
<td>75</td>
</tr>
<tr>
<td>COLORADO SPRINGS, COLORADO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6TH-1962: WHITE SANDS MISSILE RANGE</td>
<td>ARMY</td>
<td>MARGRETT ZENICH</td>
<td>PERSONNEL FACTS OF LIFE</td>
<td>75</td>
</tr>
<tr>
<td>NEW MEXICO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
were outstanding or maybe unbelievable for 1957, i.e., recliner chairs in the reading rooms and remote moving panels on the conference room stage.

Some of us experienced a flu-like illness at that conference, including yours truly. Mary O'Connor from Canada had to be removed from the plane prior to our departure from Maxwell.

At Fort Sill, Bill Holloway sure made us work. We not only had evening sessions, but an entire Saturday morning as well. That was the first and last time for t'at nonsense; the Workshop Program Committee disallowed such actions at later workshops.

Oklahoma was a dry state at that time, but with the Military Club and guess what—a Civil Service Club—there was no problem having social events. This Civil Service Club was also a first and last; it was later outlawed. Surely not because of the workshop attendees!

The Fort Sill workshop was our first attempt at some panel discussion groups.

Finally on Saturday afternoon, many of the attendees enjoyed a full dress show by the Fort Sill Military and the local Indian tribes celebrating an occasion, the reason for which I cannot recall, but fun at any rate.

At number three Workshop, we found ourselves at beautiful Monterey, California. Here we had five panel groups to discuss the theme and report on the final day.

Professor Luckett was a great host and permitted time for some sightseeing along the Pacific Ocean and the Monterey Drive. He topped it off with a party at his home situated high above the city with a beautiful view of Monterey.

The larger number of participants at this and the Fourth Workshop indicates an increased interest on the part of DOD libraries.

Moving to the Fourth Workshop, we find our first session on automation. I believe many of us were not anxious to discuss this matter in 1960. I suppose, "who needs it," was the attitude.

Next we went to the Air Academy in Colorado; what a beautiful spot. We dropped from 200 to 75 participants. I believe there was some TDY funding problems.

Panel sessions at the Academy were arranged to discuss the workshop theme by groups of DOD, Army, Navy, Air Force and our Canadian friends which later reported to the total attendees.

Charlie Stewart of Canada gave some of us a scare; the high altitude
didn't agree with him.

We had a chance to drive to the top of Pikes Peak and found it strenuous walking at this high altitude.

The Air Academy was the first military academy with a new library consisting of very modern furniture and new innovations.

In 1961, we had our first report on the Federal Library Survey from Luther Evans of the Brookings Institute, Washington, DC.

From a personal standpoint, Workshop Six, White Sands, leaves me many memories. We had six panels discussing an important subject to all of us: "Personnel Civil Service Standards." Officers representing their respective personnel offices from Army, Navy, Air Force and the Civil Service Commission participated in these sessions. This workshop provided the final jolt which eventually brought us the revised 1410 and 1411 as well as the 1412 series.

We had to be housed at El Paso, Texas which meant a daily 57 mile trip each way to White Sands. One of the buses broke down in the middle of the desert. Attendees were mingling among the cactus, sand, burros and no doubt rattlesnakes. Many of us continued workshop sessions during the bus ride trying to convince the participating personnel people of our higher grade structure needs for subprofessional positions.

This was the first time we had U.S. librarians participating from the European and Pacific Commands.

We had a nice banquet and several trips to Juarez, Mexico while at White Sands. We also got to observe the launching of the missile "Hawk," which hit its target after three attempts. Finally we had a picnic on tables, but amongst nothing but sand. It got surprisingly cold after the sun went down.

The second slide shows the next six workshops.

Now we find ourselves all the way from Washington, DC to Ohio, Pennsylvania, California, New York and back to New Mexico. Notice the sequence of sponsoring military departments has not been disturbed. The workshop themes covered some interesting subjects. Notice more individual hosts have retired; one not noted who has also retired is Bill Jorgenson, San Diego, Tenth Workshop.

At the Seventh Workshop in Washington, we had our second taste of automation. This time we seemed to be less tense and more understanding about the subject.

Attendees doubled over last year and Washington seemed to bring larger participation. The Washington workshop included many tours of libraries as well as sightseeing.

At the Eighth Workshop, we find participation back to 65 attendees.
<table>
<thead>
<tr>
<th>MILITARY LIBRARIANS' WORKSHOPS</th>
<th>SPONSORING MILITARY DEPARTMENT</th>
<th>INDIVIDUAL HOST</th>
<th>WORKSHOP THEME</th>
<th>NUMBER ATTENDEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>7TH-1963: NAVAL ORDNANCE LABORATORY&lt;br&gt;SILVER SPRING, MARYLAND</td>
<td>NAVY</td>
<td>*EVA LIBRMAN</td>
<td>PROCUREMENT/RETRIEVAL MEETING THE CHALLENGE</td>
<td>150</td>
</tr>
<tr>
<td>8TH-1964: AIR FORCE WEAPONS LABORATORY&lt;br&gt;ALBUQUERQUE, NEW MEXICO</td>
<td>AIR</td>
<td>*MADELINE CANOVA</td>
<td>MILITARY LIBRARIES IN THE INFORMATION PROCESS</td>
<td>65</td>
</tr>
<tr>
<td>9TH-1965: MILITARY ACADEMY WEST POINT, NEW YORK</td>
<td>ARMY</td>
<td>EGON WEISS</td>
<td>LIBRARY OBLIGATIONS AND MISSIONS</td>
<td>140</td>
</tr>
<tr>
<td>10TH-1966: NAVY ELECTRONICS LABORATORY&lt;br&gt;SAN DIEGO, CALIFORNIA</td>
<td>NAVY</td>
<td>BILL JORGENSEN</td>
<td>LIBRARY EMPLOYEE DEVELOPMENT</td>
<td>130</td>
</tr>
<tr>
<td>11TH-1967: AIR FORCE INSTITUTE OF TECHNOLOGY&lt;br&gt;WRIGHT-PATTERSON AIR FORCE BASE, OHIO</td>
<td>AIR</td>
<td>VIRGINIA ECKEL</td>
<td>THE USER AND THE LIBRARY</td>
<td>150</td>
</tr>
<tr>
<td>12TH-1968: US ARMY WAR COLLEGE&lt;br&gt;CARLISLE BARRACKS, PENNSYLVANIA</td>
<td>ARMY</td>
<td>*ALAN BLANCHARD</td>
<td>MANAGING MILITARY LIBRARIES</td>
<td>180</td>
</tr>
</tbody>
</table>
At Kirtland Air Force Base, New Mexico, we had our first panel discussions towards the goal of preparing a formal staff study as a report to management on our workshop theme. The final staff study was completed by a group of librarians in Washington and copies were widely circulated. This staff study indicated that librarians are "good guys" and "bad guys," but so is management.

At West Point, six panels discussed many subjects related to the theme and presented reports. This was the first time that the DOD member to the the Federal Library Committee (Dr. Winnacker), now retired, spoke to the workshop.

West Point was the second military academy to get a new library. They learned much from the Air Academy Library and used it very appropriately. There was much fascination observing the cadets' daily routines at West Point as well as the Air Academy.

I believe it was about the first time there seemed to be a great deal of socializing around a piano with the workshops top singers. Piano playing was provided by Bill Holloway and Alan Blanchard, our second and twelfth workshop hosts.

At Number Ten Workshop, we find lovely San Diego. Here we had panel groups by academic libraries, technical libraries and general libraries, all discussing the workshop theme.

I believe this was the first session where the Military Library Workshop emblems were used. It was also the first workshop where the Executive Secretary to the Federal Library Committee (Mr. Paul Howard) spoke to the group.
The official photographing of workshop activities by the sponsor seemed more evident than at previous workshops.

We had some scare landing at the old San Diego airport. The runway was quite short for a 707 and the roof tops of city buildings seemed terribly high for our landing pattern.

There were several nice visits to Tijuana, Mexico by the workshop participants. We had the opportunity to tour the city and view the Pacific Ocean as we did at Monterey a few years ago.

This brings us to the Eleventh Workshop at Wright-Patterson where we had good panel discussions on a very important subject, "The User and the Library." The Workshop received a nice message from Vice President Humphrey wishing us much success.

I recall having a good banquet speaker (COL Demidovich) from Wright-Patterson who spoke on "Libraries in the 21st Century."

Again we had lots of piano playing and singing during the social hours.

Twelfth Workshop at Carlisle brought many to the session by private auto, especially from Washington and surrounding area libraries. Here we had speakers presenting papers on large technical libraries, medium-size technical libraries, small technical libraries and academic libraries. These were excellent papers followed by many discussions.

DOD librarians got our first spanking about poor library service from COL Pappas, US Army. Most of us were quite irritated at this speaker.

Mr. Bill Woods, who experienced many years in library operations with federal, educational and commercial organizations as well as the Special Library Association, spoke about cooperative activities among libraries. This was a subject also discussed at our first workshop.

Slide three shows Workshops Thirteen through Eighteen. On this slide, notice we still are in good sequence with the sponsoring military departments except for the Eighteenth Workshop being Army instead of Air Force. This was the first miss in sequence. During this period we also had the second DOD sponsor.

The workshop themes kept changing and we had our third automation discussion during the Sixteenth Workshop at Huntsville. It seemed we now began to accept automation and in fact it became an everyday life for many of us.
<table>
<thead>
<tr>
<th>MILITARY LIBRARIANS' WORKSHOPS SPONSORS</th>
<th>SPONSORING MILITARY DEPARTMENT</th>
<th>INDIVIDUAL HOST</th>
<th>WORKSHOP THEME</th>
<th>NUMBER ATTENDEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>13TH-1969: THE NAVAL WAR COLLEGE</td>
<td>NAVY</td>
<td>EARL SCHWASS</td>
<td>LIBRARY ADMIN/COOPERATION</td>
<td>130</td>
</tr>
<tr>
<td>NEWPORT, RHODE ISLAND</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14TH-1970: INDUSTRIAL COLLEGE OF THE</td>
<td>DOD</td>
<td>NANCY WALSH</td>
<td>DOD LIBRARIES IN TRANSITION</td>
<td>150</td>
</tr>
<tr>
<td>ARMED FORCES WASHINGTON, D.C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15TH-1971: HEADQUARTES, UNITED STATES</td>
<td>AIR</td>
<td>JOHN COOK</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>200</td>
</tr>
<tr>
<td>AIR FORCE, SAN ANTONIO, TEXAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16TH-1972: US ARMY MISSILE COMMAND</td>
<td>ARMY</td>
<td>'CLEO CASON</td>
<td>TECHNOLOGY TRANSER</td>
<td>210</td>
</tr>
<tr>
<td>REDSTONE ARSENAL, ALABAMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17TH-1973: NAVAL RESEARCH LABORATORY</td>
<td>NAVY</td>
<td>DORIS BASTER</td>
<td>CHALLENGE OF 70's FOR MILITARY LIBRARIES</td>
<td>200</td>
</tr>
<tr>
<td>WASHINGTON, D.C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18TH-1974: FORT HUACHUCA</td>
<td>ARMY</td>
<td>EDITH FRASER</td>
<td>INTERPERSONAL COMMUNICATION</td>
<td>#160</td>
</tr>
<tr>
<td>ARIZONA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* RETIRED  #ESTIMATED
Only one host retired during this period, namely Cleo Cason.

At the Naval War College, the workshop received a letter of encouragement from the Secretary of Defense, the Honorable Melvin Laird. We also had similar encouragement from the Chairman of the Joint Chiefs of Staff, General Wheeler.

Professor Schwass organized the panels by command libraries, academic libraries and technical libraries.

Newport was quite a beautiful spot and we had some memorable tours, several by boat around the immediate area. I believe Newport receives "First Prize" in providing one of the finest menus among all the workshops. The Military Club chef with assistance by the ladies who were Club members received a standing ovation from the workshop participants.

Back to Washington for Workshop Number Fourteen and Nancy Walsh did a fine job as host at the Industrial College of the Armed Forces. She had ten panel groups on ten separate subjects related to the workshop theme.

The Second Executive Secretary to the Federal Library Committee (Mr. Curt Cylke) spoke to the workshop for the first time. Dr. Hammer of UNIVAC gave us another push regarding automation for libraries.

At Workshop Fifteen, Mr. Cook, Randolph Air Force Base, Texas gave us a new approach for our workshops. A three man team presented several interesting talks on "Creativity in DOD Libraries" and "Decision Making in DOD Libraries." The leader of this team was, guess who, "Mr. Demidovich," formerly COL Demidovich, who spoke to the Eleventh Workshop. This was not only different, but was well related to actual DOD library management situations.

While at San Antonio, we had the opportunity to visit and tour the library of President Johnson at Austin, Texas. John Cook also had us well entertained with beautiful sidewalk cafes, shops and theaters along the San Antonio River which passed just outside our motel door. There were boat rides up and down this river, and walks in and out of the shops and cafes.

Cleo Cason, at our Sixteenth Workshop, had the doors wide open with that great southern hospitality. She started another "first" by listing all ladies attending the workshop as Ms., not Miss or Mrs.

Eight panels worked on the workshop theme.

This year there was a change in the Long Range Planning Committee by adding a DOD member to the existing Army, Navy and Air Force membership. The honor of being the first DOD member on this fine committee was given to yours truly. As you know, this committees' function is to assist the workshop sponsors, the Program Committees and arrange for workshop sponsors three years in advance.
The social hours at Huntsville again included singing and this time some dancing at the military and motel clubs.

The Washington contingent traveled to Huntsville by an Air Force T29 "two-engine" aircraft. We had a great ride back to Washington, however, in Air Force General Brown's four engine aircraft, a first for us.

Once again we go to Washington, DC for the Seventeenth Workshop with a fine job by our host Doris Baster. This is the fourth time in Washington with eight workshop groups covering eight separate subjects. There have been no other repeat workshop locations other than Washington.

At this workshop we found someone who lives in a suburb of Washington and was on official TDY of all things to the Seventeenth Military Librarians' Workshop held in Alexandria, Virginia, also a suburb of Washington. I wonder how that was accomplished?

Mr. Kilgour of the Ohio College Library Center presented a good paper on the State of Ohio automated program.

This workshop included many Washington library tours as well as a tour of that part of Alexandria, Virginia of the George Washington era. We had excellent entertainment at the banquet by a marvelous singing group known as "The Sweet Adelines."

Wasn't it great that so many new people could attend this Eighteenth Workshop at Fort Huachuca for the first time. One new participant is a second generation participant; Nancy Nicoletti, NOL Library, is the daughter of Frank Nicoletti, who also attended many of these workshops.

The program was different and there may be mixed feelings about its value, but that has been the case for most previous workshop programs. I would suggest it has great value in your everyday life, at home and in the office.

In behalf of the Long Range Planning Committee and the entire workshop participants, let us officially thank Edith Fraser and her staff for being such a fine host and doing an excellent job.

Let us also express our thanks to Mrs. Driscoll, Andrews AFB, Washington, and Mr. Lane, Air University, Maxwell AFB, for doing a fine job in providing aircraft for many of the participants. Without this help, some of us could not have attended this workshop.

Anyone interested and willing to Host a workshop in 1977, please write to Frances Carey, Naval War College, Newport, RI 02840, or call her on Autovon 948-3163.

We are particularly looking for a DOD Agency or an Army installation to serve as the 1977 host.
All of our workshops have received excellent support from the many people who served as chairman of the Military Library Division of the Special Library Association through these years.

Our thanks to those I could identify: Dwight Lyman, Logan Cowgill, John Cook, Mike Costello, Egon Weiss, Ruth Longhenry, Doris Baster, Virginia Eckel, Charlie Knapp, Bob Severance and Louis Rains (our current chairman).

Wasn't it nice that all our workshops included participation by our Canadian friends? This year we have a participant from the United Kingdom, Mr. Brian Tew, who is from the Directorate of Military Survey of London. Welcome, Brian.

It appears many of us had fears of computers in the early years, later changed to general acceptance but still not fully understood, and finally we find these monsters can be of great assistance to the library field.

It seems that cooperative arrangements between libraries have been discussed at several Military Librarians' Workshops, but is the one area we have not yet resolved. This may be a good thought for future workshops, especially with current automation capabilities.

Finally, if I don't see you at the Air Academy next year, I hope to see you at the Naval Academy the following year.

Thank you very much.
PARTICIPANTS
Eighteenth Military Librarians' Workshop

Lucille Achauer, Naval SEA Systems Command Technical Library, National Center Number 3, Washington, DC 20362

Rose Akers, Post Library, Bldg. 464, White Sands Missile Range, NM 88002

Concetta R. Anaclerio, Technical Library, Concepts Analysis Agency, Bethesda, MD 20014

Linda L. Anderson, Post Library, Bldg. P-9023, Fort Lee, VA 23801

Elizabeth M. Andreen, Center Library, Marine Corps Supply Center, Barstow, CA 92311

Mary Ash, Canadian Forces College, Toronto, Canada M5M 3H9

Jacqueline W. Baldwin, Marquat Memorial Library, US Army Institute for Military Assistance, Fort Bragg, NC 28307

Richard Barrows, Navy JAG Library, Washington, DC 20370

Louise C. Barry, Main Post Library, US Army Armor Center, Fort Knox, KY 40121

Doris P. Baster, Naval Research Laboratory, Washington, DC 20375

Ernestine D. Bell, Frankford Arsenal, Technical Library, TSP-L. Bldg. 51-2, Philadelphia, PA 19137

Janet Brooks, Defense Communications Agency, Washington, DC 20305

Phyllis E. Brown, National Military Command System Support Center, The Pentagon, Washington, DC 20301

Sybil H. Bullock, US Army Aviation School Library, Fort Rucker, AL 36362


James H. Byrn, Morris Swett Technical Library, Army Field Artillery School, Fort Sill, OK 73503
Irving G. Carlson, Naval Electronics Laboratory Center, San Diego, CA 92152

Frances L. Carey, Associate Library Director, Naval War College, Newport, RI 02840

Eva M. Cathey, Missile and Munitions Center and School, Huntsville, AL 35809

A. Virginia Chaney, Post Library, Bldg. 636, Fort Richardson, AK 99505

Palmer Price Clark, Van Noy Library, Fort Belvoir, VA 22060

Barbara N. Coleman, Base Library, FL 2500, Peterson Field, CO 80914

Betty J. Collins, Army Infantry School Library, Fort Benning, GA 31905

Brenda G. Corbin, Naval Observatory, Washington, DC 20390

Dorothy A. Cross, Recreation Services Div, Stuttgart Support Command, APO New York 09154

John P. Cummings, Nimitz Library, US Naval Academy, Annapolis, MD 21402

Hildegard I. Currie, Technical Reference Division, Fort Huachuca, AZ 85613

Lora- Frances Davis, Brooke Army Medical Center, Fort Sam Houston, TX 78234

Ernest DeWald, Defense Mapping Agency, Naval Observatory, Washington, DC 20305

Nancy C. Dickinson, Naval Education and Training Support Detachment, Norfolk, VA 23511

Alice Doidge, Technical Library, Naval Missile Center, Point Mugu, CA 93042

Eleanor A. Driscoll, Command Libraries, Andrews AFB, MD 20034

Virginia Eckel, Air Force Institute of Technology, Wright-Patterson AFB, OH 45433

Aileen V. Ellis, Base Library, Eglin AFB, FL 32542

Elmon K. Ellsworth, Technical Library, Dugway Proving Ground, UT 84022

Dorothy W. Evans, Walter Reed Army Institute of Research, Walter Reed Army Medical Center, Washington, DC 20012

Richard A. Evans, Nimitz Library, US Naval Academy, Annapolis, MD 21402

50
Elizabeth Hinkle, Raymond W. Bliss Army Hospital, Fort Huachuca, AZ 85613

Lawrence H. Hoelter, Shipbuilding, Conversion and Repair USN Twelfth Naval District, Code 1190.1, San Francisco, CA 94135

Elizabeth Hollaway, Air Force Flight Dynamics Lab, Wright-Patterson AFB, OH 45433

Therese C. Huaman, National Security Agency, C512, Fort George G. Meade, MD 20755

Lealer M. Hughes, Army Air Mobility R&D Lab, Fort Eustis, VA 23604

Helen L. Hunsecker, Army War College Library, Carlisle Barracks, PA 17013

Doris A. Hunter, Army Military History Research Collection, Carlisle Barracks, PA 17013

Joann M. Hutchinson, Corps of Engineers District Library, St. Louis, MO 63101

Barbara Ivey, US Air Force Academy, CO 80840

Claude J. Johns, Jr., US Air Force Academy, CO 80840

Carol A. Johnson, Air Force Cambridge Research Lab, Hanscom AFB, Bedford, MA 01730

Stanley Kalkus, Naval Underwater Systems Center, Newport, RI 01840

Annette B. Keil, Center Library, Bldg. 9209, Fort Rucker, AL 36362

Renee H. Keller, Edgewood Arsenal, Aberdeen Proving Ground, MD 21010

K. Carolyn Kelley, Post Library, Fort Huachuca, AZ 85613

Mary C. Kennedy, Kirtland AFB, NM 87117

Theodore C. Kennedy, Base Library, Webb AFB, TX 79720

Mary E. King, Air Force Weapons Lab, Kirtland AFB, NM 87117

Paul Klinefelter, Defense Documentation Center, Cameron Station, Alexandria, VA 22314

Snowden E. LaFon, Naval Weapons Center, China Lake, CA 93555

Robert Lane, Air University, Maxwell AFB, AL 36112

Ruth M. LaPointe, Groninger Library, Bldg. 1313, Fort Eustis, VA 23604
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Address/Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benedict Laupacis</td>
<td>National Defense Headquarters</td>
<td>Cartier Square, Ottawa, Canada, KIA OK2</td>
</tr>
<tr>
<td>Lois V. Leach</td>
<td>Armed Forces Staff College</td>
<td>Norfolk, VA 23511</td>
</tr>
<tr>
<td>Willie Levett</td>
<td>Army Aviation System Command</td>
<td>St. Louis, MO 63166</td>
</tr>
<tr>
<td>George R. Luckett</td>
<td>Naval Postgraduate School</td>
<td>Monterey, CA 93940</td>
</tr>
<tr>
<td>Cathryn C. Lyon</td>
<td>Naval Weapons Laboratory</td>
<td>Dahlgren, VA 22448</td>
</tr>
<tr>
<td>Eunice M. Lyon</td>
<td>Malcolm Grow USAF Medical Center</td>
<td>Andrews AFB, Washington, DC 20331</td>
</tr>
<tr>
<td>Harry W. McAnallen</td>
<td>Base Library</td>
<td>Davis-Monthan AFB, AZ 85707</td>
</tr>
<tr>
<td>Helen McClaughry</td>
<td>Base Library</td>
<td>Lowry AFB, CO 80230</td>
</tr>
<tr>
<td>John B. McClurkin</td>
<td>Breckinridge Library</td>
<td>Marine Corps Education Center, Quantico, VA 22134</td>
</tr>
<tr>
<td>Nel Mathys</td>
<td>Rome Air Development Center</td>
<td>Griffis AFB, NY 13441</td>
</tr>
<tr>
<td>Regina Mayton</td>
<td>Air University Library</td>
<td>Maxwell AFB, AL 36112</td>
</tr>
<tr>
<td>Ruth Meredith</td>
<td>Rock Island Arsenal</td>
<td>Rock Island, IL 61201</td>
</tr>
<tr>
<td>Herman W. Miles</td>
<td>Defense Documentation Center</td>
<td>Alexandria, VA 22314</td>
</tr>
<tr>
<td>Anzella J. Mitchell</td>
<td>General Counsel Law Library</td>
<td>Department of the Navy, Washington, DC 20360</td>
</tr>
<tr>
<td>Aileen T. Moon</td>
<td>Ballistic Missile Defense Systems Command</td>
<td>Huntsville, AL 35807</td>
</tr>
<tr>
<td>Charles R. Moore</td>
<td>US Army Foreign Science and Technology Center</td>
<td>Charlottesville, VA 22901</td>
</tr>
<tr>
<td>Mildred M. Morris</td>
<td>Recreation Services Libraries</td>
<td>Fort Gordon, GA 30905</td>
</tr>
<tr>
<td>Margaret M. Murphy</td>
<td>Army Materials and Mechanics Research Center</td>
<td>Watertown, MA 02171</td>
</tr>
<tr>
<td>Edward Murray</td>
<td>Technical Information Div.</td>
<td>Naval Air Development Center, Warminster, PA 18974</td>
</tr>
<tr>
<td>Josephine Neil</td>
<td>Navy Education and Training Support Detachment</td>
<td>Charleston, SC 29408</td>
</tr>
<tr>
<td>Nancy Nicoletti</td>
<td>Naval Ordnance Laboratory</td>
<td>Silver Springs, MD 20910</td>
</tr>
</tbody>
</table>
Doris R. Nobles, Space and Missile Systems, Los Angeles, CA 90009
Louise Nyce, HQ US Army Forces Command, Fort McPherson, GA 30330
Ruth A. Ohler, Post Library, Bldg. 386, Presidio of San Francisco, CA 94129
Marie O'Mara, Naval Submarine Medical Research Laboratory, Box 900, Groton, CT 06340
Ingjerd O. Omdahl, HQS US Army Materiel Command, Alexandria, VA 22333
Antoinette Osmun, Nimitz Library, US Naval Academy, Annapolis, MD 21402
Leonard Parker, Fort Frontenac Library, Kingston, Ontario, Canada
Joyce B. Plaster, Army Missile Command, Redstone Arsenal, AL 35809
Beth Price, Redstone Scientific Information Center, Redstone Arsenal, AL 35801
Diana C. Proeschel, USARGO Recreation Services, APO San Francisco 96331
Linda Proudfoot, The Army Library, Pentagon, Washington, DC 20310
Frances Quinn, Naval Education and Training Support Command, Pensacola, FL 32509
Louis Rains, Office of Naval Research, Boston Branch Office, Boston, MA 02210
Dorothy A. Redmond, Recreation Services, Fort Leonard Wood, MO 65473
Myrtle J. Rhodes, Naval Coastal Systems Laboratory, Technical Library, Panama City, FL 32401
Pearl O. Robinson, Naval Ship Engineering Center, Philadelphia Division, Philadelphia, PA 19112
Phillip Rochlin, Naval Ordnance Station, Indian Head, MD 20640
John Rosenberg, Harry Diamond Labs, Washington, DC 20438
Newton W. Rucker, Walter Reed Army Medical Center, Washington, DC 20012
Frances J. Rugen, Civil Engineering Lab, Naval Construction Battalion Center, Port Hueneme, CA 93403
Eunice V. Salisbury, Army Cold Regions Research and Engineering Lab, Hanover, NH 03755
Earl R. Schwass, Naval War College, Newport, RI 02840
Mary L. Shaffer, The Army Library, Pentagon, Washington, DC 20310
Arlene Shaw, Post Library, Fort Huachuca, AZ 85613
Katherine deDory Smith, Van Noy Library, Fort Belvoir, VA 22060
Margaret H. Smith, DeWitt Army Hospital, Fort Belvoir, VA 22060
Maxine C. Smith, Army Engineer Division, Southwestern, Dallas, TX 75202
Dorothy T. Smither, Naval Command Systems Support Activity, Washington Navy Yard, Washington, DC 20374
Lola W. Stephens, The Army Library, Pentagon, Washington, DC 20310
Barbara E. Stevens, Army Engineer School, Fort Belvoir, VA 22060
Elizabeth L. Stevens, Recreation Services, APO San Francisco 96343
Brian J. Tew, UK Liaison, Defense Mapping Agency, Washington, DC 20305
Margaret B. Thornton, Retired, Edgewood Arsenal, MD 21010
Dorothy Tompkins, Intelligence Center and School, Fort Huachuca, AZ 85613
Raymon Trisdale, Logistics Library, Bunker Hall, Fort Lee, VA 23801
Joyce Ullrich, Technical Reference Division, Fort Huachuca, AZ 85613
George K. Vrooman, Watervliet Arsenal, Watervliet, NY 12189
Nancy B. Walsh, Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, DC 20319
Jack C. Ward, White Sands Missile Range, NM 88002
Helen Weber, Post Library, Fort Huachuca, AZ 85613
Egon A. Weiss, Military Academy, West Point, NY 10996
Mildred R. West, Corps of Engineers, Galveston, TX 77550
George Westerbeke, Recreation Services, Fort Hood, TX 76544
Janice C. Weston, US Army Ordnance Center and School, Aberdeen Proving Ground, MD 21005
Ernest A. Williams, Defense Scientific Information Service, Defense Research Board, Ottawa, Ontario, Canada
Kenda Wise, Air University Library, Maxwell Air Force Base, AL 36112
Patricia Wittgruber, Aerospace Research Labs, Wright-Patterson AFB, OH 45433
Camille Woodruff, US Army Sergeants Major Academy, Fort Bliss, TX 79918
Helen L. Woody, Aerospace Medical Research Laboratory, Wright-Patterson AFB, OH 45433
Margrett B. Zenich, Office of Chief of Engineers, Washington, DC 20314
Kathryn Zuzick, National Military Command System Support Center, Pentagon, Washington, DC 20301
<table>
<thead>
<tr>
<th>MILITARY LIBRARIANS' WORKSHOPS</th>
<th>SPONSORING MILITARY DEPARTMENT</th>
<th>INDIVIDUAL HOST</th>
<th>WORKSHOP THEME</th>
<th>NUMBER ATTENDEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st-1957: Air University</td>
<td>Air</td>
<td>Bob Severance</td>
<td>Library Information &amp; Exchange &amp; Cooperation</td>
<td>50</td>
</tr>
<tr>
<td>Maxwell Air Force Base, Alabama</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd-1958: Army Artillery and Missile Center Fort Sill, Oklahoma</td>
<td>Army</td>
<td>Bill Holloway</td>
<td>Library Operations and Activities</td>
<td>75</td>
</tr>
<tr>
<td>3rd-1959: Naval Postgraduate School Monterey, California</td>
<td>Navy</td>
<td>George Luckett</td>
<td>Library Operations and Activities</td>
<td>110</td>
</tr>
<tr>
<td>6th-1962: White Sands Missile Range New Mexico</td>
<td>Army</td>
<td>Mergrett Zenich</td>
<td>Personnel Facts of Life</td>
<td>75</td>
</tr>
<tr>
<td>7th-1963: Naval Ordnance Laboratory Silver Spring, Maryland</td>
<td>Navy</td>
<td>Eva Liberman</td>
<td>Procurement/Retrieval Meeting the Challenge</td>
<td>150</td>
</tr>
<tr>
<td>8th-1964: Air Force Weapons Laboratory Albuquerque, New Mexico</td>
<td>Air</td>
<td>Madeline Canova</td>
<td>Military Libraries in the Information Process</td>
<td>65</td>
</tr>
<tr>
<td>9th-1965: Military Academy West Point, New York</td>
<td>Army</td>
<td>Egon Weiss</td>
<td>Library Obligations and Missions</td>
<td>140</td>
</tr>
<tr>
<td>10th-1966: Navy Electronics Laboratory San Diego, California</td>
<td>Navy</td>
<td>Bill Jorgenson</td>
<td>Library Employee Development</td>
<td>130</td>
</tr>
<tr>
<td>11th-1967: Air Force Institute of Technology Wright-Patterson Air Force Base, Ohio</td>
<td>Air</td>
<td>Virginia Eckel</td>
<td>The User and the Library</td>
<td>150</td>
</tr>
<tr>
<td>MILITARY LIBRARIANS' WORKSHOPS</td>
<td>SPONSORING MILITARY DEPARTMENT</td>
<td>INDIVIDUAL HOST</td>
<td>WORKSHOP THEME</td>
<td>NUMBER ATTENDEES</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>13th-1969: The Naval War College Newport, Rhode Island</td>
<td>Navy</td>
<td>Earl Schwass</td>
<td>Library Admin/Cooperation</td>
<td>130</td>
</tr>
<tr>
<td>16th-1972: US Army Missile Command Redstone Arsenal, Alabama</td>
<td>Army</td>
<td>*Cleo Cason</td>
<td>Technology Transfer</td>
<td>210</td>
</tr>
<tr>
<td>18th-1974: Fort Huachuca Arizona</td>
<td>Army</td>
<td>Edith Fraser</td>
<td>Interpersonal Communication</td>
<td>152</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Retired</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Retired
<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Library Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>1st</td>
<td>AD-660 919</td>
</tr>
<tr>
<td>1958</td>
<td>2nd</td>
<td>AD-824 675</td>
</tr>
<tr>
<td>1959</td>
<td>3rd</td>
<td>AD-479 447</td>
</tr>
<tr>
<td>1960</td>
<td>4th</td>
<td>AD-243 000*</td>
</tr>
<tr>
<td></td>
<td>Supplement Workshop Papers: AD-243 001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paper by Calvin Mooers (pp. 85-106) was also issued separately as AD-239 984.</td>
<td></td>
</tr>
<tr>
<td>1961</td>
<td>5th</td>
<td>AD-665 760</td>
</tr>
<tr>
<td>1962</td>
<td>6th</td>
<td>AD-493 785</td>
</tr>
<tr>
<td>1963</td>
<td>7th</td>
<td>AD-493 137</td>
</tr>
<tr>
<td>1964</td>
<td>8th</td>
<td>AD-632 300</td>
</tr>
<tr>
<td>1965</td>
<td>9th</td>
<td>AD-638-928</td>
</tr>
<tr>
<td>1966</td>
<td>10th</td>
<td>AD-645 982</td>
</tr>
<tr>
<td>1967</td>
<td>11th</td>
<td>AD-669 362</td>
</tr>
<tr>
<td>1968</td>
<td>12th</td>
<td>AD-685 843</td>
</tr>
<tr>
<td>1969</td>
<td>13th</td>
<td>AD-710 395</td>
</tr>
<tr>
<td>1970</td>
<td>14th</td>
<td>AD-732 461, ED-056 699</td>
</tr>
<tr>
<td>1971</td>
<td>15th</td>
<td>AD-761 819</td>
</tr>
<tr>
<td>1972</td>
<td>16th</td>
<td>AD-759 494</td>
</tr>
<tr>
<td>1973</td>
<td>17th</td>
<td>AD-782 803-1G1</td>
</tr>
</tbody>
</table>