



*Dwight - AK file*

**DEPARTMENT OF THE ARMY**  
**THE CHIEF OF MILITARY HISTORY AND THE CENTER OF**  
**MILITARY HISTORY**  
**WASHINGTON, D.C. 20314**

RCC1.950616.007

DAMH-HD

8 November 1979

MEMORANDUM FOR CHIEF, EDITORIAL BRANCH

SUBJECT: Transmittal of Manuscript, Annual Report, The Surgeon  
General, United States Army, Fiscal Year 1975 (CMH MED 62-S)

1. Forwarded for editing is completed manuscript as titled above. The draft manuscript has been cleared by ACSI, TAG Statistics, and The Surgeon General. Recommended changes have been incorporated in the inclosed manuscript.
2. This project should be incorporated in your editorial program and status reported at least monthly.
3. The author is Mr. Dwight Oland, MHB, and subsequent coordination may be made directly with him.

1 Incl  
as

*n*  
JAMES W. DUNN  
COL, MI  
Chief, Histories Division

*CF*  
MHB

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*File: Annual Report SG, 75*

inQ might -

There are some blue reviews which look okay except as noted. On 'parachute medicine' call LTC Carroll at 71469 and ask him what it means. If he doesn't know, delete. I hope this will be the last we hear of this one - I know you do too.

SCV

Personal Research File - 8-558-2813

5108

COL Knapp

and: biologic research assoc. with enviro. hazards:  
stress assoc. with mil. para. (1975) spec. developing: eval.  
Os system Halo para. involved in clandestine (SF) operations,  
clothing for very old children - noted in H&LO; studies of  
list and how coeff. of human body in free fall, working  
with unexplained deaths assoc. with free fall para.  
esp. where there may have been unconsciousness during  
free fall period - death with heart blood pressure  
response to life-death sit. assoc. with free fall.  
Deaths - little diff. based on experience (notice a  
experience). Used free fall para. as model of  
ultimate psych. stress (self body high - flyth  
systems going of ultimate). Interesting effects -  
not unlike inf. in combat facing enemy who  
is shooting him. Assoc. of jump injuries (badly  
by exp) assoc. with ex. mil. para. when para.  
jumped at high ten. areas (juts) a. making  
jumps after making rapid turns half-way  
around the world.

P. 1

1. The two buildings mentioned have the same role as Medical Det. Hospital and Medical Training Program. Therefore, all six are in similar or all main heading or left or so.
2. Army Stock Record all under Logistics; facilities.  
TRIMIS sft under automated systems. (102).
3. Family Practice Program as far as can be determined is a part of Pmb.  
Care/Fam. Care. Program.
4. Main part, one of varying amt. of impact OK to reduce excessive length.
5. See 4.
6. Co. Corps apparently used diff. criteria in determining important items. Basic guidelines established for this program ~~do not~~ do not permit us to go behind SGO submissions.
7. See 4 and 6.

P. 2

- 7 ~~844~~ <sup>3</sup> If you feel there is confusion, spell it out.
- 43 This <sup>may</sup> ~~part~~ reflects a carry-over from prev. yr. ~~(3)~~
- 43 Figures seem out of whack, but agree with input. read.
- 63 Annual duty poss. 2nd uply exercise; inactive might be short term periods in which off. is not called for critical duty - weekend exercise?
- Higher than in previous years.
- 91 A checked and has to be made but this ~~refers to increasing~~ refers to increasing ppm of ~~physical~~ in climbing water over ppm in a previous yr.
- 102 SAILS ABX - Standard Army Intermediate Level Supply System (A = Level A; B = Level B & C) OS; DOS - haven't the foggiest. Appear to be tech. terms for computer operation.



5 s/b 5701 per Chart Book p. 57.  
34 35

5.3 Apparently, dit is total allocations AA + ALLS; Para. is RA only.

30 14 9.5699 = 9.670  
100% s/b 9.670 as far as I can figure  
93 s/b 9.670 " " " " " "

14	Total - 1.7%	ply change	74	39.2%	75
AD Army	-2.7%		AD Army	<del>39.2%</del> of total	38.8
Dep.	-3.5%		Dep.	44.8%	44.0
Other	-4.5%		Other	16.2%	17.2

110 s/b 1.9 instead of 1.7%

15 I got 14.96% which agrees with 15.70  
LB 110 I got 14.9670 rather than 14.370

### Tables

2 types in table 1971, other s/b 8,581 not 8,851 Total - 56,324  
No for 56,324 in text see for. 7, table 1, p. 17

6. Chart had type in U.S. Army, Pacific - changed but <sup>right</sup> total was not put in.

## FEEDER MATERIAL STILL OUTSTANDING

To enhance the completeness of the Annual Report for FY 75 and its continuity with the FY 74 report, the following input would be desirable:

1. Except for a list of construction projects completed or underway no input was received from the Logistics and Facilities Division, Directorate of Health Care Operations. Additional information concerning plans and doctrine, development of new logistics systems, and supply operations is needed. For example, the further development and/or extension of the SAILS A/B (X) program, the AMEDD Property Accounting System (AMEDDPAS), the Standard Army Maintenance System (SAMS), and the Tri-Service Medical Information System (TRIMIS). Also needed are statistics to update the Army Stock Fund and MEDCASE programs.
2. Information from the Psychiatry and Pharmacy Consultants.
3. Progress report on the implementation of the Family Practice Program.
4. Additional information from the Veterinary Corps; specifically, statistics pertaining to the food inspection program (no. of lbs. inspected, no. of inspections, etc.).
5. Information on legislation introduced, pending, or passed by Congress which is of importance to AMEDD operations. No input was received in this area.

Filing

Set info is to create.

Dec 1974

Info not known around.  
The entire system - automate those functions inside hospital to speed processing, communicate through central data base. Take all information - is in present, then add test results. Give info on hospital's money needed for services. This can then tell you cost of eg. say, lab. for professional services, supplies etc. Can abstract cost of treatment of patients coming in. This is a very important financial need. Could predict supplies, etc. needed. Privacy not caused problem with patient records & supplies together. Patient base not consistent over yrs. Could be tied to individuals. No good way to tie costs to patient due to patient (problem) and doctor (time of spec., etc.). Not really practical. Ended up using 2 price systems - (1) those not used in day-by-day outside (KIM's) (2) commonly used items, stocked in supply cart - restocked daily or after each shift (TRIMIS) still in used at URMHC.

Basic obj. - Automate functions inside hospital, patient moving orders from warehouse to wards etc. interface with base operating logistics systems (radio, ARX, Standard Intercom, Med. Stock Cont. System) Equipment have central equipment pool - EKGs, ventilators, can food carts, supply equipment - basically for moving notice equip. Commonly used in hosp. Needed methods of controlling equip., getting it out, and back - automate system to alert items and monitor movement of items within health care facilities. when maintenance due, etc. Facilitate visibility of assets and perform safety, maintenance, calibration checks.

Health care facility monitoring system - where patients & supplies here. Also patient appointments. <sup>Plan for</sup> Might want to talk to patient administrator, core service & pharmacy. Speed up test results returns to doctor. Take things that slow down hosp. treatment, esp. admin.

## SH/LS

12-2 Army... have some standard equipment...  
 100... ac... started in being...  
 and... last... in...  
 Caven... training... etc.

## AME DEPTS

Automated... designed to...  
 accountability for Army... Dept...  
 book...  
 installed in... 5-8 yrs ahead of  
 Army as whole.

## TRIMIS

Will get back.

## Army Stock Fund

A... to... in...  
 use - for... it to get items  
 into warehouse then bought by clinic with annual  
 appropriation. ~~Cost~~

## MCSEP

Money to buy investment equipment (\$1000 or  
 more) Bought out of procurement appropriation  
 for amortization - for every equipment...  
work-life

Operation... maintenance, salaries, expenditures,  
 main of building...  
 Provision...



ANNUAL REPORT OF THE

SURGEON GENERAL

FISCAL YEAR 1975

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## REPORT IN BRIEF

Army health indicators and medical workload statistics for fiscal year 1975 reflect the stabilization of manpower levels and a lowering of the recruit population achieved during the past 2 years. Slight increases were noted in the noneffective rate (10.4 per 1,000 average strength) and the clinic visit ratio (3.19 per 100 average strength), while the hospitalization ratio (0.49 per 100 average strength) and rate of initial admissions to hospitals and quarters (253 per 1,000 average strength) experienced declines. The most significant decline, 20.4 percent, was in the rate of initial admissions. Medical care composite units accomplished in Army medical treatment facilities worldwide declined by less than 2 percent, averaging 37,672 per day, of which the proportion administered to active-duty personnel as opposed to dependents, retirees, and others registered a change of 1 percent or less. In keeping with the continuing emphasis on ambulatory care, the use of inpatient facilities showed a decline, whereas the outpatient workload increased by 3.5 percent.

The authorized AMEDD commissioned officer strength as of 30 June 1975 was 15,722, compared to 16,122 as of 30 June 1974. All corps except the Medical Corps underwent small reductions in authorized strength. Actual commissioned strength at fiscal yearend was 15,909, with overstrengths occurring in the Dental, Medical Service,

and Army Medical Specialist Corps. The Medical and Veterinary Corps were understrength, while the actual strength of the Army Nurse Corps was in accord with the authorized level.

Of major importance to future operations was the decision at Department of Defense (DOD) level to phase out a number of long-standing AMEDD officer procurement programs which utilize active-duty spaces. This action, which will become effective with the beginning of fiscal year 1976, was taken primarily because of rising costs and the need to reallocate active-duty manpower spaces to meet more pressing requirements. Those programs to be discontinued include the Senior Student Programs; Army Student Dietitian and Occupational Therapist Programs; Registered Nurse Student Program; Graduate Student Programs for the Medical Service and Army Medical Specialist Corps; Environmental Health Sciences and Engineering Program; and the Program for Medical, Osteopathic, Dental and Veterinary Education for Army Officers. Students currently enrolled in these programs will be permitted to complete their training.

Additionally, the Department of Defense instituted studies of the Physicians' Assistant Program and the entire subsidized nursing education program. As a result, further input into these programs has been suspended pending completion of the DOD studies; however, selections were made to complete the final two classes of the original eight planned for the Physicians' Assistant Program. Until further guidance is received, nursing personnel are to be procured at the

baccalaureate level, and any shortfalls are to be filled through the recruitment of non-baccalaureate nurses.

For the immediate future, the Medical Department will be forced to rely on direct volunteers, the Health Professions Scholarship Program, ROTC, Berry Plan residuals, and the remaining graduating classes of the discontinued student subsidy programs to meet its need for officers. Presently, procurement officers are experiencing difficulty in recruiting optometrists, nuclear science officers, veterinarians, general medical officers, and some medical specialists.

The Department of the Army Alcohol and Drug Abuse Prevention and Control Program was adversely affected during the year by suspension of the DOD Drug Abuse Testing Program. The Department of Defense ordered the suspension after the Court of Military Appeals in the case of the United States vs. Ruiz ruled that the urinalysis procedures used in the program violated the self-incrimination provisions of the Uniform Code of Military Justice. In February 1975, however, because of the continuing severity of the drug abuse problem among members of the Armed Forces, the program was reinstated with a proviso prohibiting the test results from being used as the sole basis for a less-than-honorable discharge.

Matters of environmental improvement, including occupational health and safety, continued to be emphasized within the Directorate of Health Care Operations. Armywide, the Medical Department actively

supported the implementation of OSHA (Occupational Safety and Health Act) standards wherever applicable, and in addition, medical entomologists conducted 34 environmental surveys in accordance with the DA Pesticide Monitoring Program. In the field of radiological hygiene, the National Evaluation of X-Ray Trends (NEXT) program, which is designed to measure radiation exposure to both patients and technicians, became functional at 17 Army installations.

The communicable disease rate among Army personnel worldwide remained nearly stable during the past year. Although abnormal levels persisted, the sharp outbreak of viral hepatitis in Europe was brought under control. Routine use of types 4 and 7 adenovirus vaccine continued to hold down the incidence of acute respiratory disease at basic combat training centers, and rubella vaccine prophylaxis, in use among recruits since fiscal year 1973, was extended to include post partum and prepubertal females.

Medical Department operations continued to be reviewed as part of a study of DOD medical resources. This study, initiated during the previous fiscal year, is a combined effort by the Office of Management and Budget, the Department of Health, Education and Welfare, and the Department of Defense to assess the adequacy, cost-effectiveness, and future capabilities of existing medical services and facilities. It is expected to be completed during fiscal year 1976.

The U.S. Army Medical Research and Development Command

continued to move forward with its worldwide program of basic and applied medical research. During fiscal year 1975, this resulted in an expenditure of \$57.9 million.

There were several noteworthy developments in the infectious disease program. Having established the efficacy of monkey immune serum against Bolivian hemorrhagic fever, researchers, using the established monkey model, began the testing of human immune serum. Results thus far have been encouraging. Progress continued to be made on the development of new and more effective antimalarial drugs. Over 240,000 compounds have been tested to date, and more than 7,400 target compounds have been synthesized. Other large-scale research efforts were aimed at providing improved preventive and treatment methods for enteric and dermatologic infections, as well as developing additional vaccines effective against meningococcal meningitis, especially type B.

Accomplishments in the field of surgical research included the experimental use of an antiserum for the treatment of bacteremia and septic shock, and the development of a storage technique which effectively doubles the shelf-life of whole blood by prolonging the preservation period of the intra-erythrocytic metabolic intermediates.

Numerous in-house and extramural research projects dealing with the physiological and behavioral aspects of alcohol and drug dependency were completed or underway during the reporting period.



Researchers are investigating such aspects of the problem as the relationship between drug usage and behavior modification, the endocrinological anomalies associated with heroin withdrawal, and the psychopharmacological effects of alcohol ingestion.

In other accomplishments of note, the Aeromedical Research Laboratory, Fort Rucker, Alabama, was cited as the Army's most improved research and development facility and presented with a Department of the Army Special Award for Accomplishment. Throughout the years, the Aeromedical Research Laboratory has made numerous outstanding contributions to the field of aviation medicine. In recognition of its outstanding record of aviation safety, the laboratory was also presented with the Army Aviation Accident Prevention Award of Honor.

The U.S. Army Medical Intelligence and Information Agency continued to expand its intelligence-gathering capabilities and services. Concurrent with the beginning of the fiscal year, the agency, in cooperation with the Federal Research Division of the Library of Congress, expanded the scope of its general medical intelligence activities to include the preparation of medical capability studies for individual countries. To date, eight have been completed. The agency also took action to improve its information system, including among other things the installation of a direct cable link to the Defense Documentation Center. Several additional personnel spaces were identified and approved. Among these was the

position of Naval Liaison Officer, a move which is expected to facilitate triservice medical intelligence activities.

Near the close of the reporting period, the Deputy Chief of Staff for Plans and Operations ended several months of uncertainty by directing that the AMEDD Historical Unit be discontinued and its mission, personnel, and equipment transferred to the U.S. Army Center of Military History. Along with the transfer, the unit is to be relocated from Fort Detrick, Maryland, to Washington, D.C., within the next fiscal year.

Medical Department operating expenses for fiscal year 1975 totaled \$1,144.6 million, an increase of \$36.2 million compared to fiscal year 1974 budgetary requirements. OMA (operation and maintenance, Army) direct expenditures, however, declined by \$101.5 million because of the transfer of CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) funding to the Department of Defense.

## MEDICAL STATISTICS AND HEALTH TRENDS

Health indicators.--Based on the criteria of hospitalization and clinic visit ratios and admission and noneffective rates, the health of the Army remained good during fiscal year 1975. Slight increases were noted in the number of clinic visits and in the noneffective rate; however, the rate of admissions to hospitals and quarters declined significantly.

The hospitalization ratio (average number of beds occupied by active-duty Army patients in Army and non-Army facilities per 100 average troop strength per day) was 0.49, a decrease of 0.06 from the fiscal year 1974 level of 0.55. By comparison, the hospitalization ratio for fiscal year 1971 was 0.79.

The rate at which active-duty personnel were initially admitted to hospitals and quarters (exclusive of battle casualties) continued the significant decline noted during the previous fiscal year. For fiscal year 1975, the admission rate was 253 per 1,000 troop strength per day, down 20.4 percent from the level of 318 recorded during fiscal year 1974. Since fiscal year 1970, the rate of admission to hospitals and quarters had increased steadily, peaking at 381 per 1,000 troop strength per day during fiscal year 1973. The decline of the past two years is partly attributable to the increased emphasis being placed on outpatient care and partly to the stabilization of Army manpower levels, with a subsequent lowering of the recruit

population.

After registering a decline of 7.3 percent during the previous fiscal year, the noneffective rate (average number of active-duty personnel excused from duty because of illness or injury, exclusive of battle casualties, per 1,000 average troop strength per day) increased by 2.0 percent to a level of 10.4. The noneffective rate for fiscal year 1974 was 10.2, and that for fiscal year 1971 was 13.7.

The number of active-duty Army personnel visiting Army or non-Army clinics as outpatients, inpatients, quarters patients, or to undergo all or part of a complete physical examination is expressed as a clinic visit ratio. Although declining slightly in fiscal year 1974 (by 0.11), this ratio has tended to increase in recent years, due primarily to the increased reliance on outpatient care as mentioned above. For fiscal year 1975, it stood at 3.19 per 100 average troop strength per day, which was 0.13 greater than the 3.06 recorded during fiscal year 1974 and 0.22 above the fiscal year 1971 level of 2.97.

Trends in medical workloads.--Expressed in terms of medical care composite units (MCCU's), workloads in Army health care facilities have generally decreased during the past six years. This reflects both an increased use of ambulatory care instead of hospitalization and a reduction of approximately 45 percent in Army strength. During the past two years, however, Army manpower levels have become stabilized and the rate of decline in the medical workload has consequently slowed. If manpower levels remain relatively constant, future workload trends

will depend primarily upon resource allocations, continued emphasis on outpatient care, and the impact of Public Law 94-212, which amended the rules governing the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) to ensure full utilization of military health care facilities. (Further details of PL 94-212 are contained in the CHAMPUS portion of this report.)

Worldwide, Army medical facilities accomplished a daily average of 37,672 MCCU's during fiscal year 1975. This compares to a daily average of 38,419 accomplished during the previous fiscal year and 56,324 accomplished during fiscal year 1971. Table 1 illustrates the breakdown of the medical workload by major commands for fiscal years 1971-1975.

Of the average daily MCCU's accomplished worldwide, active-duty Army patients accounted for 14,618 (38.8 percent); dependents of active-duty, retired, or deceased personnel received 16,570 (44.0 percent); and 6,484 (17.2 percent) were administered to patients in other categories, including retirees. These figures are approximately the same as those for the previous fiscal year (a change of 1 percent or less in each category) and are indicative of a stabilized military population (Table 2).

In conformity with the trend of recent years, utilization of Army inpatient hospital facilities continued to decline during fiscal year 1975. A daily average of 8,032 beds were occupied worldwide, which represents a decrease of 9.6 percent from the daily average of

8,882 recorded during fiscal year 1974 (Table 3). Admissions to Army hospitals dropped by 3.1 percent during the same period, averaging 1,035 per day worldwide (Table 4).

The number of live births recorded in Army hospitals worldwide declined by approximately 15 percent, averaging 108 per day. After registering annual increases during the period from fiscal year 1967 through 1971, the number of births has decreased annually for four consecutive years, with the level for fiscal year 1975 representing the largest single-year decline for this period (Table 5).

In contrast to the other elements used to calculate the medical care composite unit, Army hospitals and dispensaries experienced a 3.5 percent increase in clinic visits. Worldwide, clinic visits averaged 60,699 per day, compared to 58,637 per day during fiscal year 1974. During fiscal year 1971, however, 72,356 such visits were recorded, or approximately 16.1 percent more than during fiscal year 1975. Table 6 illustrates the trend in clinic visits for the past five years.

An average of 31,842 dental procedures were accomplished per day in Army facilities worldwide. Of these, 24,463 were accomplished in Health Services Command facilities (CONUS), representing an increase of 3,906 over the previous year. Oversea facilities accounted for 7,379, a decrease of 3,039 as compared to fiscal year 1974. Overall, the dental workload showed a net increase of approximately 2.8 percent. The

percentage of dependents in the dental workload decreased by 2.8 percent in CONUS and increased by 2.1 percent in the overseas commands (Table 7).

The number of beds occupied by Navy, Marine Corps, and Air Force patients continued to decline, averaging 1,273 per day in Army fixed medical facilities worldwide. Compared to fiscal year 1974, this represents a reduction of approximately 5.4 percent. As in previous years, a drop in the number of active-duty military personnel and their dependents accounted for the largest share of the overall decline, while the number of retired personnel and dependents of retired or deceased personnel increased or remained nearly stable (Table 8).

**Table 1.--Average daily medical care composite units <sup>1</sup>**  
**in Army hospitals and health clinics worldwide, by command**  
**fiscal years 1971-75**

Command (Area)	1971	1972	1973	1974	1975
Worldwide.....	56,324	47,933	42,973	38,419	37,672
Health Services Command <sup>2</sup> .....	39,249	34,684	32,501	28,956	30,674
U.S. Army, Europe.....	5,900	6,003	5,840	5,530	5,501
U.S. Army, Japan <sup>3</sup> .....	--	--	--	--	630
Korea <sup>3</sup> .....	--	--	--	--	867
U.S. Army, Pacific <sup>4</sup> .....	10,675	6,807	4,223	3,541	--
U.S. Army, Alaska <sup>5</sup> .....	320	329	315	294	--
U.S. Army Forces Southern Command <sup>5</sup>	100	110	94	98	--
Other <sup>6</sup> .....	80	--	--	--	--

<sup>1</sup> This unit measures the overall hospital workload by combining four elements into a composite unit representing both inpatient and outpatient care. This is accomplished by weighting each element in terms of its relative manpower value and adding the weighted values to obtain the composite unit. These four elements and their respective weights are as follows: average daily beds occupied, 1.0; admissions, 10.0; births, 10.0; and dispensary and clinic visits, 0.3.

<sup>2</sup> Reported as continental United States before fiscal year 1974; includes Alaska, Hawaii, and Panama after 1 July 1974.

<sup>3</sup> Reported under U.S. Army, Pacific before 1 July 1974.

<sup>4</sup> Deactivated as of 1 July 1974.

<sup>5</sup> Included under Health Services Command after 1 July 1974.

<sup>6</sup> Includes nonfixed overseas hospitals until 1 July 1974.

Source: Army Medical Department Annual Chart Book, fiscal year 1975.



**Table 2.--Average daily medical care composite units  
in Army hospitals and health clinics worldwide, by type of patient**

fiscal years 1971-75

Type of Patient	1971		1972		1973		1974		1975	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total worldwide.....	56,323	100.0	47,933	100.0	42,973	100.0	38,419	100.0	37,672	100.0
Active-duty Army <sup>1</sup>	28,997	51.5	22,094	46.1	18,054	42.0	15,031	39.1	14,618	38.8
Dependents <sup>2</sup> .....	18,745	33.3	18,534	38.7	18,287	42.6	17,187	44.7	16,570	44.0
Other.....	8,851	15.2	7,305	15.2	6,632	15.4	6,201	16.2	6,484	17.2

<sup>1</sup> Excludes cadets of the United States Military Academy and Reserve Enlisted Program trainees, both of whom are included in the category "Other."

<sup>2</sup> Includes dependents of active-duty and retired or deceased members of the uniformed services, and dependents of civilian employees and foreign nationals, as authorized.

Source: Outpatient Report, MED-80 (R-1) and Beds and Patients Report MED-79 (R-1).

**Table 3.--Average daily beds occupied**  
**in Army hospitals worldwide, by command**  
**fiscal year 1971-75**

Command (Area)	1971	1972	1973	1974	1975
Worldwide.....	16,408	12,772	10,478	8,882	8,032
Health Services Command <sup>1</sup> .....	11,779	9,550	8,093	6,781	6,609
U.S. Army, Europe.....	1,336	1,258	1,234	1,197	1,106
U.S. Army, Japan <sup>2</sup> .....	--	--	--	--	145
Korea <sup>2</sup> .....	--	--	--	--	172
U.S. Army, Pacific <sup>3</sup> .....	3,214	1,901	1,095	859	--
U.S. Army, Alaska <sup>4</sup> .....	62	63	56	45	--
U.S. Army Forces Southern Command <sup>4</sup>	--	--	--	--	--
Other <sup>5</sup> .....	17	--	--	--	--

<sup>1</sup> Reported as continental United States before fiscal year 1974; includes Alaska, Hawaii, and Panama after 1 July 1974.

<sup>2</sup> Reported under U.S. Army, Pacific before 1 July 1974.

<sup>3</sup> Deactivated as of 1 July 1974.

<sup>4</sup> Included under Health Services Command after 1 July 1974.

<sup>5</sup> Includes nonfixed overseas hospitals until 1 July 1974.

Source: Beds and Patients Report (MED-79 (R-1)).

**Table 4.--Average daily admissions to Army hospitals  
worldwide, by command, fiscal years 1971-75**

Command (Area)	1971	1972	1973	1974	1975
Worldwide.....	1,650	1,407	1,272	1,068	1,035
Health Services Command <sup>1</sup> .....	1,078	970	941	776	825
U.S. Army, Europe.....	183	180	182	172	168
U.S. Army, Japan <sup>2</sup> .....	--	--	--	--	21
Korea <sup>2</sup> .....	--	--	--	--	21
U.S. Army, Pacific <sup>3</sup> .....	376	245	138	112	--
U.S. Army, Alaska <sup>4</sup> .....	9	12	11	8	--
U.S. Army Forces Southern Command <sup>4</sup> .....	--	--	--	--	--
Other <sup>5</sup> .....	4	--	--	--	--

<sup>1</sup> Reported as continental United States before fiscal year 1974; includes Alaska, Hawaii, and Panama after 1 July 1974.

<sup>2</sup> Reported under U.S. Army, Pacific before 1 July 1974.

<sup>3</sup> Deactivated as of 1 July 1974.

<sup>4</sup> Included under Health Services Command after 1 July 1974.

<sup>5</sup> Includes nonfixed overseas hospitals until 1 July 1974.

Source: Beds and Patients Report MED-79 (R-1).

Table 5.--Average daily live births in Army hospitals  
worldwide, by command, fiscal years 1971-75

Command (Area)	1971	1972	1973	1974	1975
Worldwide.....	171	152	140	127	108
Health Services Command <sup>1</sup> .....	114	99	91	83	78
U.S. Army, Europe.....	35	33	30	26	24
U.S. Army, Japan <sup>2</sup> .....	--	--	--	--	4
Korea <sup>2</sup> .....	--	--	--	--	2
U.S. Army, Pacific <sup>3</sup> .....	20	18	17	17	--
U.S. Army, Alaska <sup>4</sup> .....	2	2	2	1	--
U.S. Army Forces Southern Command <sup>4</sup>	--	--	--	--	--
Other <sup>5</sup> .....	--	--	--	--	--

<sup>1</sup> Reported as continental United States before fiscal year 1974; includes Alaska, Hawaii, and Panama after 1 July 1974.

<sup>2</sup> Reported under U.S. Army, Pacific before 1 July 1974.

<sup>3</sup> Deactivated as of 1 July 1974.

<sup>4</sup> Included under Health Services Command after 1 July 1974.

<sup>5</sup> Includes nonfixed overseas hospitals until 1 July 1974.

Source: Beds and Patients Report MED-79 (R-1).

**Table 6.--Average daily clinic visits in Army hospitals and dispensaries <sup>1</sup>  
worldwide, by command, fiscal years 1971-75**

Command (Area)	1971	1972	1973	1974	1975
Worldwide.....	72,356	65,247	61,283	58,637	60,699
Health Services Command <sup>2</sup> .....	51,846	48,134	46,978	45,292	50,091
U.S. Army, Europe .....	7,958	8,711	8,305	7,850	8,247
U.S. Army, Japan <sup>3</sup> .....	--	--	--	--	788
Korea <sup>3</sup> .....	--	--	--	--	1,573
U.S. Army, Pacific <sup>4</sup> .....	11,760	7,595	5,248	4,642	--
U.S. Army, Alaska <sup>5</sup> .....	468	441	436	527	--
U.S. Army Forces Southern Command <sup>5</sup>	333	366	316	326	--
Other <sup>6</sup> .....	81	--	--	--	--

<sup>1</sup> Includes outpatients, quarters patients, inpatients, and individuals undergoing 11 or part of a complete physical examination.

<sup>2</sup> Reported as continental United States before fiscal year 1974; includes Alaska, Hawaii, and Panama after 1 July 1974.

<sup>3</sup> Reported under U.S. Army, Pacific before 1 July 1974.

<sup>4</sup> Deactivated as of 1 July 1974.

<sup>5</sup> Included under Health Services Command after 1 July 1974.

<sup>6</sup> Includes nonfixed overseas hospitals until 1 July 1974.

Source: Outpatient Report MED-80 (R-1).

Table 7.--Average daily dental procedures <sup>1</sup>

in Army medical facilities worldwide, the continental United States and Overseas

fiscal years 1971-75

Area	1971	1972	1973	1974	1975
Worldwide.....	40,089	34,161	31,629	30,975	31,842
Health Services Command (CONUS) <sup>2</sup> ....	25,941	23,285	21,662	20,557	24,463
Percentage of dependents <sup>3</sup> .....	22.4	29.2	32.7	31.6	28.8
Overseas.....	14,148	10,876	9,967	10,418	7,379
Percentage of dependents <sup>3</sup> .....	26.4	34.1	39.0	35.0	37.1

<sup>1</sup> Reported as "dental treatments" until 1 July 1974; figures for fiscal years 1971-74 have been converted to "procedures."

<sup>2</sup> Reported as continental United States until 1 July 1974; includes Alaska, Hawaii, and Panama.

<sup>3</sup> Includes dependents of active-duty and retired or deceased personnel of the uniformed services, and dependents of civilian employees and foreign nationals, as authorized.

Source: Dental Service Report MED-85 (R-3).

## ADMINISTRATIVE OFFICE

Relocation of the Office of The Surgeon General.--During the weekend of 4 April 1975, the Office of The Surgeon General, along with the Armed Forces Epidemiological Board, the Armed Services Medical Regulating Office, the Military Blood Program Office, the Joint Army-Air Force Medical Library Branch, and the Clinical Medical Division, U.S. Army Health Services Command, were relocated from the Forrestal Building, Washington, D.C., to the Pentagon. The space assigned for the 340 personnel was 52,479 square feet. Remaining in the Forrestal Building were the U.S. Army Medical Research and Development Command, the U.S. Army Medical Intelligence and Information Agency, the Joint Army-Air Force Medical Library, and the newly established U.S. Army Medical Department Personnel Support Agency. A total of 64,100 square feet was allotted in the Forrestal Building for the 374 personnel remaining. The relocation of The Surgeon General and the other offices and functions noted above was in keeping with the policy of the Chief of Staff to consolidate all staff agencies within the Pentagon.

This consolidation of the CONUS regulating effort has resulted in significantly better utilization of scarce medical resources and a corresponding reduction in the number of personnel involved in medical regulating activities. Overall, it has proven to be a meaningful improvement in peacetime medical regulating.

#### MILITARY BLOOD PROGRAM OFFICE

The Military Blood Program is a triservice cooperative effort designed to promote the most economical and effective use of DOD blood resources. It is administered on a regional, decentralized basis under the overall management of The Surgeon General.

In recent years, the more normalized international situation has resulted in a lowering of the requirement for blood outside of the continental United States. Moreover, the blood manager of each military service has gradually assumed a more dominant role in the operation of the program. During the current reporting period, this combination of factors led to a reduction in the staffing authorization for the Military Blood Program Office. Under the revised authorization, the office is staffed by one officer, one enlisted person, and one secretary. The officer, whose normal tenure will be 4 years, is to be furnished by each service on a rotating basis, beginning with the Air Force.



Table 8.--Average daily beds occupied by Navy, Marine Corps, and Air Force Patients<sup>1</sup>  
in Army fixed medical facilities, worldwide, by type of patient  
fiscal years 1971-75

Type of Patient	1971	1972	1973	1974	1975
Total worldwide.....	1,618	1,496	1,462	1,346	1,273
Active-duty military.....	595	497	486	405	374
Dependents of active-duty military.....	512	467	438	387	355
Retired personnel.....	235	245	256	255	259
Dependents of retired and deceased personnel.....	276	287	282	299	285

<sup>1</sup> Includes active-duty and retired personnel, their dependents, and dependents of deceased personnel for whom the Navy and Air Force are responsible.

Source: Department of Defense report, "Medical Care Provided at Fixed Medical Facilities"; paragraph 2, Army Regulation 345-245.

CIVILIAN HEALTH AND MEDICAL PROGRAM  
OF THE UNIFORMED SERVICES

Administrative realignment.--Concerned by the continually rising cost of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), the House Appropriations Committee, in its report on the fiscal year 1975 Defense budget, recommended that program funding be removed from the cognizance of the military departments and placed under the direct supervision of the Office of the Secretary of Defense (OSD). This was duly approved and became effective as of 1 July 1974. As a result, the CHAMPUS portion of the Medical Department operating budget for fiscal year 1975 declined by 99.0 percent to \$4.9 million, as compared to \$507.7 million for fiscal year 1974. These reduced expenditures were reimbursable obligations incurred primarily in support of OCHAMPUS (Office of the Civilian Health and Medical Program of the Uniformed Services), Denver, and OCHAMPUS, Europe.

As an additional step in strengthening the organizational and managerial structure of CHAMPUS, the committee report recommended elevating the program to Defense-agency status or establishing it as an OSD field activity. The latter alternative was generally favored since it would accomplish the objective without the necessity of having to create a headquarters support organization. Accordingly,

on 4 December 1974, the Department of Defense issued a directive establishing CHAMPUS as an OSD field activity under the guidance of the Assistant Secretary of Defense (Health and Environment) (ASD(H&E)). Under this arrangement, the ASD(H&E) will continue to be responsible for recommending administrative policies to the Director, OCHAMPUS, and to assist the ASD(H&E) in his responsibilities, a Uniformed Services Health Benefits Committee, comprised of representatives from all the uniformed services, was formally established. The military departments are to provide OCHAMPUS with administrative support in the form of field accounting and disbursement, personnel administration, facilities, and office supplies, while the Department of the Army will continue to furnish such support for OCHAMPUS, Denver, and OCHAMPUS, Europe. Information concerning programs and services is to be made available through the Office of Information for the Armed Forces, Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs).

Changes in program benefits.--Throughout the course of the year, the OSD announced several modifications of CHAMPUS benefits. Each change was designed to produce a cost savings, as well as to align the program more closely with legislation governing coverage limits and cost-sharing formulas. The following is a summary of the actions taken:

1. An announcement dated 13 June 1974, which became effective with the beginning of fiscal year 1975, terminated the

cost-sharing of orthodontic services provided to dependents of active-duty personnel under the Program for the Handicapped. This change prohibits payment for the correction of a physical condition which in most cases does not constitute a severe handicap. Serious congenital defects will, however, continue to be covered.

2. On 2 July 1974, a stipulation announced during the previous fiscal year, limiting coverage of psychotherapeutic treatment to 120 inpatient and 40 outpatient visits per fiscal year, was rescinded as of 1 September 1974. The OSD removed this restriction after receiving assurance from responsible civilian professionals that appropriate standards for psychotherapeutic care could be developed for application on a case-by-case basis.

3. A group of 12 specific changes in the Basic Program and the Program for the Handicapped was issued on 21 February 1975, with an effective date of 28 February 1975. Ten of these changes affected the Basic Program and were intended to exclude payment for all services and supplies considered medically unnecessary for the diagnosis or treatment of a mental or physical illness, injury, or bodily malfunction. Examples of excluded services include "stop smoking" clinics and the treatment of obesity when obesity is the sole or primary condition being treated.

4. On 7 March 1975, 16 additional changes affecting the Basic Program and the Program for the Handicapped were announced. These became effective on 9 March 1975. Special emphasis was placed

on defining the limitations under which CHAMPUS would pay for dental and therapy services. For example, except when necessitated by trauma, dental procedures covered by the program will be limited to those required to eliminate an oral disease or infection that is complicating a medical or surgical condition other than one involving the teeth and their supporting structures. A therapist's services are to be authorized by a certificate from the attending physician, who is to renew it at least once every 30 days.

In voicing their criticism of the program management, several members of Congress cited instances in which medical care obtained from civilian sources under CHAMPUS could have been more economically and conveniently administered at an existing DOD facility. This in turn gave rise to the passage of Public Law 94-212 (PL 94-212). PL 94-212 requires that all beneficiaries residing within a 40-mile radius of a military treatment facility (MTF) must first try to obtain non-emergency inpatient care at the MTF before seeking such treatment at civilian facilities under CHAMPUS.

## ARMED FORCES MEDICAL REGULATING OFFICE

At the beginning of fiscal year 1975, the Armed Forces Medical Regulating Office (ASMRO), a joint agency of the Department of Defense, regulated all patient transfers from overseas to CONUS hospitals and, in addition, requested bed designations in Veteran's Administration facilities for uniformed services personnel who required further hospitalization after separation or retirement. Within the continental United States, ASMRO regulated the transfer of armed services personnel requiring hospitalization at military facilities outside their Army region, Naval district, and Air Force area, whereas a system of Army regional, Naval district, and Air Force area regulating offices was responsible for medical regulation within each of these regions, districts, or areas. Non-service members were accepted on a direct hospital-to-hospital basis.

On 27 January 1975, after an intensive review and as part of the Armed Forces Regional Health Services System, ASMRO assumed complete responsibility for inpatient transfers between military hospitals within the continental United States, while at the same time retaining its other regulating function. All other CONUS regulating offices were eliminated, and, with some exceptions, patients are transferred between military hospitals regardless of service affiliation.

## DIRECTORATE OF PERSONNEL

### Officer Authorizations and Strengths

Army Medical Department officer gains for fiscal year 1975 totaled 2,478. Gains by corps were as follows:

<u>Corps</u>	<u>Gains</u> <sup>1</sup>
Medical Corps.....	891
Dental Corps.....	341
Veterinary Corps.....	42
Medical Service Corps.....	557
Army Nurse Corps.....	636
Army Medical Specialist Corps.....	<u>11</u>
Total.....	2,478

<sup>1</sup> Does not include branch transfers.  
Source: OPO Stat 7 Report.

As of 30 June 1975, authorized AMEDD commissioned strength stood at 15,722; however, the actual commissioned strength was 15,909, or 1.19 percent more than authorized. The following is a comparison of authorized and actual strength by corps:

<u>Corps</u>	<u>Authorized</u> <sup>1</sup>	<u>Actual</u> <sup>1</sup>
Medical Corps.....	4,512	4,496
Dental Corps.....	1,800	1,856
Veterinary Corps.....	450	431

<u>Corps</u>	<u>Authorized</u> <sup>1</sup>	<u>Actual</u> <sup>1</sup>
Medical Service Corps.....	4,814	4,957
Army Nurse Corps.....	3,706	3,706
Army Medical Specialist Corps.....	<u>440</u>	<u>463</u>
Total.....	15,722	15,909

<sup>1</sup> Includes general officers and excludes nine Air Force officers serving with the Army.

### Officer Procurement

Changes in AMEDD officer procurement programs and recruiting operations.--During fiscal year 1975, an extensive study of AMEDD officer procurement operations resulted in a decision to phase out or suspend input into a number of active-duty subsidized programs. The rising cost of these programs, as well as the fact that each one utilizes active-duty manpower spaces needed to meet other requirements, was instrumental in bringing about a shift in emphasis to other procurement sources. As a direct result of the above decision, the following actions were taken:

1. The Department of Defense (DOD) directed that required nursing personnel be procured at the baccalaureate level and that any shortfalls be made up through the recruitment of non-baccalaureate nurses. In addition, a DOD study of nursing education programs was undertaken. Pending completion of this study, no new commitments for subsidization of undergraduate nursing education, including the Walter Reed Army Institute of Nursing and the Army Student Nurse Program, have been made since September 1974.



2. After selections were made for two classes to complete the original planned input of eight, the formation of additional physicians' assistant classes was suspended through fiscal year 1976, pending the results of a DOD study of the Physicians' Assistant Program. The purpose of this study is threefold: (a) to evaluate the various training programs, (b) to define the role of the physicians' assistant (PA) in the military, and (c) to consider the feasibility of direct procurement of civilian-trained PA's.

3. A number of procurement programs utilizing active-duty spaces will be discontinued as of 1 July 1975; however, current participants will be permitted to continue until normal completion of their training. The programs to be terminated are as follows: Senior Student Programs, to include medicine, osteopathy, veterinary medicine, and optometry; Army Student Dietitian and Occupational Therapist Programs; Registered Nurse Student Program; Graduate Student Programs for the Medical Service Corps and the Army Medical Specialist Corps; Environmental Health Sciences and Engineering Program; and the Program for Medical, Osteopathic, Dental and Veterinary Education for Army Officers. Because of prior commitments, the latter program will, however, remain open for a limited input of United States Military Academy (USMA) graduates desiring medical or osteopathic training. This exception will apply only to the graduating classes of 1975, 1976, and 1977, and the number of selectees will not exceed one percent of each class.

Beginning with fiscal year 1976, AMEDD officer procurement efforts will be primarily concentrated on direct volunteers (including the voluntary entry of Reserve officers on active duty and voluntary recalls), the U.S. Army Health Professions Scholarship Program, ROTC, Berry Plan residuals, and the remaining graduating classes from former student-subsidy programs. At present, procurement officers are experiencing difficulty in recruiting optometrists, nuclear science officers, veterinarians, general medical officers, and some medical specialists, which has in turn led to a shortfall in these categories.

Recruiting Command (USAREC) will continue to provide support to 4 of these offices on a non-reimbursable basis, and a new agreement was negotiated with the HSC to provide administrative support to the remaining 11 offices. No unusual problems resulted from the transfer.

Direct procurement of all health professionals was stressed during the year, with particular emphasis on physicians and nurses. Emphasis was also placed on the expeditious processing of Medical Corps volunteers. Physicians applying for direct appointment continued to be invited to Washington, D.C., for an interview and were reimbursed for their travel expenses. During the period from 1 February to 30 June 1975, 39 physicians visited the Officer Procurement Division, necessitating the assignment of an additional counselor to the Recruiting Operations Branch.

In association with the emphasis on direct procurement, a 2-day seminar was conducted in Washington, D.C., on 14-15 April 1975. Its purpose was to discuss methods and techniques for direct procurement of physician volunteers, and all career counselors were in attendance.

First Year Graduate Medical Education (Medical Intern)

Program.--During the reporting period, 494 applications were received for the 280 spaces authorized (82 flexible, 93 categorical, 16 categorical diversified, plus 89 first-year residencies) for the fiscal year 1976 First Year Graduate Medical Education Program (FYGME). Of those selected, 171 were participants in the U.S. Army Health Professions Scholarship Program, 6 were in the Senior Medical and Osteopathic Student Program, and 76 were participants in the Program for Medical, Osteopathic, Dental and Veterinary Education for Army Officers (AR 601-112). Fifteen selectees were civilian applicants, and 3 were members of the Early Commissioning Program. For the second consecutive year, selections were made at the Office of The Surgeon General rather than through the National Intern and Resident Matching Program (NIRMP). This procedure has proven to be extremely beneficial in so far as the spaces not taken by graduating medical/osteopathic students are filled by other individuals applying for residency training. Further, selection of FYGME participants without the NIRMP allows for flexibility in converting a space from intern to resident after applications have been received. Such conversions were made this year, for example, in the fields of pediatrics and pathology.

Senior Medical and Osteopathic Student Program.--Since the enactment of the Armed Forces Health Professions Scholarship Program, the number of applications for the Senior Medical and Osteopathic Student Program has decreased. During the past year, only seven

individuals graduated from it. As mentioned above, this program was cancelled along with other programs utilizing active-duty spaces.

Armed Forces Physicians' Appointment and Residency Consideration Program (Berry Plan) and Osteopathic Residency Deferment (ORD Program)/Army Residency Delay Option (AR 601-26).---The Berry Plan and ORD Program were discontinued as tri-service, Defense-monitored programs after the 1972 medical and osteopathic school graduates were processed for participation. Concurrently, each of the services was instructed to conduct a program of its own to insure that an adequate number of general medical officers and specialists would be available to fill future requirements. At the close of the fiscal year, approximately 1,450 physicians and osteopaths who graduated in or before 1972 remained in a deferred status for specialty training under the Berry Plan and ORD Program, and about 100 more were in a deferred status under the Army Residency Delay Option.

Clinical Clerkship Training Program (CCTP).---A total of 209 (38 military and 171 civilian) medical and osteopathic students participated in this program. Due to funding limitations, input into the CCTP was terminated in February 1975 for the remainder of the fiscal year. The civilian portion of the program was cancelled in its entirety because of the limited number of training spaces available. As in previous years, the CCTP continued to provide an incentive for participation in the U.S. Army Health Professions Scholarship Program and the First Year Graduate Medical Education Program.

Early Commissioning Program and ROTC Delay for Medical, Osteopathic, and Dental Students.--As of 30 June 1975, 229 medical and osteopathic students were enrolled in this program, which is about one-half the number of participants in previous years. This decline is attributable to the fact that most eligible personnel are applying for the U.S. Army Health Professions Scholarship Program (HPSP) and, secondly, that those already participating in the Early Commissioning Program (ECP) are being selected for the HPSP. In addition, the end of the draft on 1 July 1973 has had an appreciable effect on the interest shown in this program, especially among those desiring a commission during medical school.

Currently, 145 dental students are participating in the ECP, and of these, 74 are ROTC-obligated and 81 are identified as ECP exclusively. As in the case of medical and osteopathic students, many dental students who are in the ECP or are ROTC-obligated will be contending for spaces in the HPSP.

Program for Medical, Osteopathic, Dental and Veterinary Education for Army Officers (AR 601-112).--Effective 1 January 1975, the AR 601-112 program was closed to all new applicants other than the above-mentioned one percent of the United States Military Academy graduating classes of 1975, 1976, and 1977 who desire training in medicine or osteopathy. Ten Academy graduates were selected for participation beginning on 1 July 1975. Active-duty accessions during the reporting period numbered 77 medical, 8 dental, and 2 veterinary medicine officers, and as of 30 June 1975, 132 individuals

remained in the program as follows: Medicine, 112; osteopathy, 2; dentistry, 15; and veterinary medicine, 3.

U.S. Army Health Professions Scholarship Program.--The Uniformed Services Health Professions Scholarship Program, established pursuant to Chapter 105, Title 10, United States Code (Public Law 92-426), continued to provide scholarship support to selected students in the health professions. Under the law, the Army Health Professions Scholarship Program was allocated 1,850 spaces, and during the past year, 1,746 students participated.

The program enrollment at the close of the reporting period was 1,443, of whom 862 were medical students; 142 were students of osteopathy; 335 were in dentistry; 58 were students of veterinary medicine; 39 were in optometry; and 4 were podiatry students. During the year, 542 individuals graduated from the program as follows: Medicine, 320; osteopathy, 34; dentistry, 141; veterinary medicine, 33; and optometry, 14.

Out of a total of 1,814 applicants, the spring 1975 selection board chose 339 medical, 23 osteopathic, 153 dental, 41 veterinary, and 18 optometry students, for a total of 574 new participants for fiscal year 1976.

Dental General Practice Residency (1 year).--A total of 113 applications were received for the 65 spaces authorized for this program. From these, 65 individuals were selected for participation.

Regular Army (Medical and Dental Corps).--Applications for Regular Army (RA) appointment in the Medical Corps numbered 85, and

56 applications were received for RA appointment in the Dental Corps. There were 73 acceptances of Medical Corps RA appointments, and 63 officers accepted RA appointments in the Dental Corps.

Medical Corps.--Total Medical Corps accessions from all procurement programs were 1,025, with the largest portion, 658, accruing from Berry Plan graduates. Seventy-five physicians and osteopaths volunteered for active duty, and with the continued depletion of the Berry Plan residual, the need for volunteer medical officers will become increasingly acute. By way of illustration, current personnel projections will require approximately 168 MC volunteers in fiscal year 1976, 162 in fiscal year 7T, and 500 in fiscal year 1977. The breakdown of Medical Corps accessions by source is as follows:

<u>Program</u>	<u>Accessions</u>
Health Professions Scholarship Program.....	102
Senior Medical and Osteopathic Student Program.....	41
Berry Plan.....	658
Early Commissioning Program/ROTC Delay.....	72
AR 601-112.....	77
Volunteers/recalls.....	<u>75</u>
Total.....	1,025

Dental Corps.--Dental Corps accessions for fiscal year 1975 totaled 347. Of these, the largest group, 138, were graduates of the Army Health Professions Scholarship Program. The following is a summary of Dental Corps accessions by program:



<u>Program</u>	<u>Accessions</u>
Early Commissioning Program/ROTC.....	65
Health Professions Scholarship Program.....	138
AR 601-112.....	7
Postgraduate delay.....	33
Volunteers/recalls.....	<u>104</u>
Total.....	347

Veterinary Corps.--The Health Professions Scholarship

Program provided the largest number of Veterinary Corps accessions, accounting for 33 out of a total of 58. In addition, the final 11 participants in the discontinued Senior Veterinary Student Program were brought on active duty. Five accessions were direct volunteers, who were selected out of nine applications received during the year.

The total procurement was as follows:

<u>Program</u>	<u>Accessions</u>
Health Professions Scholarship Program.....	33
Early Commissioning Program/ROTC.....	7
Senior Veterinary Student Program.....	11
AR 601-112.....	2
Volunteers/recalls.....	<u>5</u>
Total.....	58

Seven applications for Regular Army appointment in the Veterinary Corps were received, and of these, four were approved and three are pending.

Medical Service Corps.--With the exception of the nuclear science and optometry specialties, the procurement of commissioned officers was generally sufficient to meet the active-duty requirements of the Medical Service Corps. Yearend shortages did occur in specialties other than nuclear medical science and optometry; however, these were the result of manpower restraints rather than a shortage of qualified applicants. Accessions were as follows:

<u>Program</u>	<u>Accessions</u>
Direct appointments.....	74
Branch transfers.....	28
Recalls.....	8
ROTC.....	310
Officer Candidate School.....	10
U.S. Military Academy.....	1
Early Commissioning Program.....	16
Environmental Science and Engineering Program	17
Health Professions Scholarship Program.....	16 <sup>1/</sup>
Senior Optometry Student Program.....	9
Graduate Student Program.....	8
Carrier programs.....	<u>34</u>
Total.....	531

<sup>1/</sup> Includes 2 HPSP (medicine) dropouts.

As in fiscal year 1974, MSC Regular Army appointments were again limited by a RA overstrength in the Corps. Out of a total of

102 appointments, the majority, 72, were received by distinguished military/scholarship ROTC cadets--again as was the case during the previous year. A combined total of 109 applications were received from USAR (United States Army Reserve) and branch transfer (reappointment) candidates, and from these, 21 USAR and 8 branch transfer appointments were approved. One RA appointment went to a USMA applicant.

Applications were received and considered from 145 individuals desiring MSC Reserve commissions without concurrent call to active duty. All but six of these were approved. Also, 33 applications were received from Army National Guard personnel requesting Federal recognition, and of these, 31 were approved.

Ten ~~MSC~~ enlisted personnel were appointed as warrant officers in MOS 202A, Medical Maintenance Officer.

Army Medical Specialist Corps.--During fiscal year 1975, 42 officers were brought on active duty under the provisions of current Army Medical Specialist Corps (AMSC) procurement programs. For the purpose of clarity, due to the number of programs offered by the AMSC, this report will be presented as an overview by profession and by the Army regulation appropriate to the action. A brief summary of total accessions by category is as follows:

<u>Program</u>	<u>Accessions</u>
Dietetic Internship.....	16
Occupational Therapy Clinical Affiliation.....	2

<u>Program</u>	<u>Accessions</u>
U.S. Army-Baylor University Program in	
Physical Therapy.....	16
Graduate Student Program.....	1
Direct volunteers (professionally qualified	
personnel).....	<u>7</u>
Total.....	42

Professionally Qualified Personnel (AR 601-139). Of the seven professionally qualified individuals brought on active duty, two were physical therapists (one female and one male), and five were dietitians (all female). Ten applications from professionally qualified dietitians (nine females, one male) are pending selection board action. A total of 33 applications were received for appointment without concurrent call to active duty, and of these, 22 were approved (4 physical therapists: 1 female, 3 males; 3 occupational therapists: 1 female, 2 males; and 15 dietitians: 14 females, 1 male) and 2 are pending. Three physical therapists (all male) and one occupational therapist (female) applied for 6 month's active duty for training purposes; their applications were approved.

2. Active Duty Educational Training Program, Dietetic Internship (AR 601-136). Sixteen dietetic interns entered on active duty out of a total of 58 applications received. Of this total, eight were from the Army Student Dietitian Program. A total of eight applications were received for the fiscal year 1976 summer-fall Dietetic Internship program. Due to budgetary and personnel

constraints, enrollment was limited to these eight individuals who were participants in the Army Student Dietitian Program.

3. U.S. Army-Baylor University Program in Physical Therapy (AR 601-136). Out of a total of 313 applications received during the previous fiscal year, 16 principals and 12 alternates were selected for the fiscal year 1975 Physical Therapy Program. During the current reporting period, 257 applications were received and processed for input into the fiscal year 1976 summer class.

4. Occupational Therapy Clinical Affiliation (AR 601-136). Two occupational therapy clinical affiliates were brought on active duty out of a total of 4 applications received. Four applications were received for the fiscal year 1976 summer clinical affiliation, and all were from participants in the Army Student Occupational Therapy Program.

5. Army Student Dietitian and Occupational Therapy Student Programs (AR 601-19). Thirty-seven applications were received during the year for participation in the Army Student Dietitian Program, and from these, 8 (all female) were selected. Four individuals (two males and two females) were chosen for the Occupational Therapy Student Program out of a total of 30 applications received. As mentioned above, both of these programs will be discontinued with the beginning of fiscal year 1976.

6. Civil Service AMSC Summer Practicums (OTSG Reg. 621-105). A total of 185 applications were received for the 36 spaces authorized for the fiscal year 1975 Dietetic Summer Practicum. From these, 36

principals and 12 alternates were selected, of whom, 33 participated. Thirty-two spaces were available for the fiscal year 1975 Physical Therapy Summer Practicum, and 166 applications were received from interested persons. From these applications, 32 principals and 6 alternates were selected, with 31 students actually participating. Eighty-two applications were received for the 24 spaces authorized for the Occupational Therapy Summer Practicum, and from these, 24 principals and 6 alternates were chosen. Actual participants numbered 23. Due to budgetary and personnel constraints, these summer practicums were discontinued as of September 1974.

Graduate Student Program (AR 601-137). One application, from a female dietitian, was received and approved for enrollment in the fiscal year 1975 Graduate Student Program. This participant is scheduled to complete training in July 1975, at which time the program will be terminated.

Regular Army. During fiscal year 1975, 10 officers (7 dietitians, 2 physical therapists, and 1 occupational therapist) applied for Regular Army appointment in the Army Medical Specialist Corps. PA appointments during the same period totaled 13 (6 dietitians, 5 physical therapists, and 2 occupational therapists). As of 30 June 1975, 11 additional applications had been approved, and 5 appointments (4 dietitians and 1 physical therapist) were pending oath of office; two applications, one from a dietitian and one from a physical therapist, were awaiting selection board action.

Master's Degree Program. Two dietetic interns were enrolled in the Master's Degree Program during the past year and are currently being trained at Walter Reed Army Medical Center in conjunction with the University of Maryland. There will be no further input into this program.

Army Nurse Corps.--During fiscal year 1975, 638 nurses were scheduled to report for active duty as commissioned officers in the Army Nurse Corps (ANC). This represents a decrease of 149 officers when compared to the number brought on active duty during fiscal year 1974. Total accessions by program were as follows:

<u>Program</u>	<u>Accessions</u>
Appointment with active duty.....	74
ROTC.....	2
Voluntary recall.....	9
Army Student Nurse Program (degree only).....	397
Registered Nurse Student Program.....	16
Walter Reed Army Institute of Nursing (June 1974 graduates).....	<u>140</u>
Total.....	638

Over 1,200 requests for applications were received for the Walter Reed Army Institute of Nursing program; however, these individuals were advised that the program had been suspended. The 125 applicants selected during the previous fiscal year for the class of 1978 began training during August and September 1974 at

accredited civilian institution of their choice.

In addition to active-duty ANC programs, 556 individuals applied for Army Nurse Corps Reserve commissions, and 93 applications were received for Federal recognition in the Army National Guard.

A total of 94 applications for Regular Army appointment in the Army Nurse Corps were received and processed during the reporting period. Of these, 76 were approved; 13 were disapproved; and 5 are pending.

Army Medical Department Officer Procurement Course.--

The fiscal year 1975 AMEDD Officer Procurement Course was held in San Antonio, Texas, during the period 15-19 July 1974. All personnel counselors and procurement representatives from the Office of The Surgeon General and the U.S. Army Reserve Components Personnel and Administrative Center (RCPAC) attended. This course is conducted annually to keep AMEDD officer procurement personnel fully abreast of policy and program developments, as well as to discuss and display the latest recruiting materials. Additional information and instruction is provided concerning interview and evaluation techniques, school relations, and personnel and fund requirements in support of officer procurement activities.

**Personnel Services**

Organizational changes.--In January 1975, an AMEDD Boards

Branch was established within the Personnel Services Division to



provide centralized control of AMEDD personnel selection boards, except those dealing with promotions and awards. The functions of the AMEDD Boards Branch are to (1) monitor all selection board policies, directives, and procedures; (2) solicit and recommend board membership; (3) prepare letters of instruction (LOI) and provide administrative support for boards; and (4) generally, serve as a focal point for personnel selection board policies and procedures. MAJ James A. Scott, MSC, was assigned as the first officer to the Secretariat for AMEDD Selection Boards.

Officer evaluation report appeals.--A substantial increase in the number of AMEDD officer evaluation report (OER) appeals was noted during the reporting period. Requests for the period 1 January-31 December 1974 totaled 149, compared to 111 recorded from 1 January to 31 December 1973. The trend during the second half of fiscal year 1975 indicates that an even greater increase can be expected for calendar year 1975. Since 1972, most OER appeals have been initiated by Medical Service Corps officers, while Veterinary Corps officers have consistently filed the least number of appeals.

The rise in OER appeals has paralleled a similar increase among officers managed by the Officer Personnel Directorate, U.S. Army Military Personnel Center, and is attributable to generally lower promotion selection rates and inflated OER scores.

AMEDD warrant officers.--The overall system for identification and selection of AMEDD warrant officers (other than Regular Army) to be retained on active duty for periods beyond 20 years has been consolidated under the Department of the Army Managed Tenure Program (MTP). The first AMEDD Panel of the MTP is scheduled to meet in August 1975 to select those MSC and MC warrant officers for retention whose performance indicates a high potential for continued service.

#### Professional and Service School Education

Specialized training.--During fiscal year 1975, the Academy of Health Sciences, United States Army (AHS), prepared and conducted more than 100 initial skill, skill progression, and functional courses for officer and enlisted personnel of the active Armed Forces and their Reserve Components. A total of 19, 143 students were enrolled in the various education and training programs of the AHS and its satellite organizations, including 15,779 active-duty Army personnel; 2,909 members of the Army Reserve Components; and 455 in other categories. Table 9 provides a summary of AHS specialized training by course, input, graduates, and average training load.

Professional Development Education.--Ninety-seven persons entered into fully funded degree programs during the year, and of these, 81 were at the graduate and 16 at the undergraduate level. During the same period, there were 27 new entrants at the graduate

and 29 at the undergraduate level under the partially funded degree programs. Fully funded programs provide payment of tuition, as well as payment for books and other reimbursables not exceeding \$100 per annum. Partially funded programs provide pay and allowances (Army military personnel only), but all educational costs must be borne by the student.

The AMEDD Centralized Education Program provided funding support for 6,560 Medical Department personnel, 980 of whom attended civilian institutions, while the remaining 5,580 participated in continuing education courses conducted by the AMEDD, its Navy and Air Force counterparts, and other Federal medical agencies. The above total does not include those AMEDD personnel who attended meetings of civilian professional societies nor those who participated in courses conducted by the Training and Doctrine Command (TRADOC) which are unique to the Army.

Interservice training.--In order to prevent unnecessary duplication of effort and make the most efficient use of DOD resources, interservice medical training programs are encouraged wherever applicable. During fiscal year 1975, AMEDD training requirements in certain specialty fields were provided by Navy and Air Force facilities and personnel as follows:

1. By the Navy: Cardiopulmonary Technician (HM 8408); Clinical Nuclear Medicine Technician (HM 8416); Dermatology Technician (HM 8495); and Electrocardiographic Technician (HM 8453).

2. By the Air Force: Aerospace Physiology Technician (Chamber Technicians, Aviation Center, Fort Rucker, Alabama); and Nuclear Hazards Training.

AMEDD facilities and personnel provided training in the following skills to meet the requirements of the other services as indicated:

1. For the Air Force: Occupational Therapy Specialist (303-91L20); Cytotechnology (311-F3).

2. For the Navy: Medical Equipment Maintenance (Supplementary and Refresher) (198-F1); Biomedical Equipment Maintenance (198-35G20); Biomedical Electronic Equipment Maintenance (198-35S20); and Biomedical X-Ray Equipment Maintenance (198-35T20).

3. For the Coast Guard: Same as the above-listed training provided for the Navy, plus Army Aviation Medical Officer (Basic) (6A-3160).

At the close of the fiscal year, 12 additional courses were either under review by the Medical-Dental Committee of the Interservice Training Review Organization (ITRO), in various stages of study for consolidation/collocation, or under active planning for implementation. The Medical-Dental Committee, ITRO, periodically reviews all officer and enlisted occupational subgroups to determine those in which interservice training appears to be advantageous. Since 1972, three such reviews have been conducted.

## Enlisted Personnel Management

Strength.--The authorized AMEDD enlisted strength as of 30 June 1975 was 36,426, an increase of 981 over the authorized end strength for fiscal year 1974. Actual strength as of the same date was 35,894, or 98 percent of the authorized level. The status of the various enlisted military occupational specialties (MOS's) was considered to be excellent, except for those discussed below.

In April 1975, a balanced status (availability of trained personnel equals the number of authorized spaces) was achieved in MOS 91C, Clinical Specialist. This marked the first time since the creation of the MOS that this status had been achieved; however, by the close of the fiscal year the assigned strength had once again become insufficient, due principally to a worldwide increase in authorized spaces. Currently, an inadequate number of school spaces are available for training purposes, which will in turn mean that the understrength in this specialty will probably grow more acute during fiscal year 1976.

MOS 91B, Medical Specialist, shifted from a vastly over-strength status in fiscal year 1974 to one of understrength in fiscal year 1975. The cause of the decline appears to have been twofold: Recruiting for the MOS was suspended during fiscal year 1974 and not resumed until late in fiscal year 1975, while at the same time, authorizations for this skill category were being expanded to meet the requirements of a 16-division force. A balanced status is

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expected to be achieved late in fiscal year 1976 or early in fiscal year 1977.

Continued improvement was noted in the status of MOS 94F, Hospital Food Service Specialist, and the specialty should become balanced by the last quarter of fiscal year 1976.

The strength posture of MOS 91V, Respiratory Specialist, also improved during the year but was still considered to be critical. Current personnel projections call for the attainment of a balanced status during the course of fiscal year 1977.

Approximately 20 percent (more than 7,000) of the total AMEDD enlisted strength for fiscal year 1975 was comprised of female personnel. Female soldiers are currently serving in each occupational category, including MOS 91T, Veterinary Specialist, and MOS codes 35G, 35S, and 35T, Biomedical Equipment Repairman Specialist. A female overstrength developed in MOS 91B, as a result of which recruiting of female personnel for this specialty was suspended. As a precaution against future overstrengths, a maximum female content has been established for each occupational code.

Enlisted Personnel Management System (EPMS) study.--An EPMS study of the Medical Career Management Field (CMF) 91 was continued during the year, leading to the formulation of a draft proposal affecting several occupational specialties. Overall, the proposal was quite favorable and, if adopted, should offer a challenging and rewarding career for the AMEDD soldier. The major

changes proposed include the creation of a separate E-9 Copper MOS for the following skills: Dental Specialist, MOS 91E; Optical Laboratory Specialist, MOS 42E; Clinical Specialist, MOS 91C; Medical Laboratory Specialist, MOS 92B; and veterinary MOS's 91R (Food Inspection), 91S (Preventive Medicine), and 91T (Veterinary Specialist). A new MOS will be created for Clinical Nuclear Medicine, and the present MOS 91U, EENT (Eye, Ear, Nose and Throat) Specialist, will be split into an ENT (Ear, Nose and Throat) Specialist, MOS 91U, and an Eye Specialist, MOS 91Y. MOS 94F, Hospital Food Service Specialist, will be continued as a separate specialty with advancement potential to grade E-9.

Medical Branch, Enlisted Personnel Directorate (EPD).---The Medical Branch, Enlisted Personnel Directorate, U.S. Army Military Personnel Center, is responsible for managing the careers of all AMEDD enlisted personnel in each of the 31 occupational specialties contained in CMF 91. During fiscal year 1975, the Branch entered into its second year of full operational capability, and the need for three additional personnel was recognized and approved. Two civilian spaces were authorized as a result of a manpower survey conducted during the year, and one military position was approved for a Medical Service Corps officer, grade O-4, to serve as Assistant Branch Chief. The latter space was authorized in January 1975; it will be filled during the first quarter of fiscal year 1976.

Effective 1 July 1975, the Medical Branch will be reorganized into a Professional Development (PD) Section and an Assignment Section. Concurrently, it will be redesignated as the Health Services Branch. Eight noncommissioned officer spaces have been authorized for the PD Section, with the aim of intensifying the management of all personnel in grades E-5 and above. Relocation of the Branch is contemplated at a later date as part of a general EPD reorganization plan.

### Civilian Personnel

Recruitment and staffing.--During the past year, sustained emphasis was placed on maximizing the recruitment and retention of civilian personnel, as well as on efforts to achieve the utmost utilization of all existing resources. A number of projects were undertaken to further these goals, including the following:

1. A special form was developed for requesting special pay rates to offset private industry pay advantages, and guidance for use of these forms was issued.
2. A pamphlet outlining methods of reducing turnovers was distributed command-wide.
3. The Public Health Dental Hygienist Program was instituted to free dental officers for chairside work.
4. ADP (automatic data processing) program feedback is being utilized to monitor special employment programs, the use



of civilian consultants, and the hiring of the handicapped, including disabled veterans.

5. Civilian consultants were employed by the Medical Department to provide otherwise unavailable medical expertise.

6. Special guidance was provided for the chiefs of dental services concerning promotion procedures for the Dental Therapy Assistant program. This information was developed to enhance the Army's leadership in this program.

7. The reorganization of the Army's medical laboratories was accomplished with a minimum of personnel turmoil. Close coordination among major command elements and precise planning resulted in a smooth transition.

Civilian Health Occupations Recruitment Office.--The overall shortage of health professionals, especially medical officers, prompted the establishment of a medically oriented civilian recruiting capability. This was accomplished in February 1975 by the creation of the Civilian Health Occupations Recruitment Office (CHORO) to undertake nationwide recruitment of all medical skills. Thus far, approximately 150 physicians have been recruited and efforts are underway to hire 27 industrial hygienists and industrial hygiene technicians.

Position and pay management.--A standard job description for emergency medical technicians was developed to meet the requirements for refined emergency ambulance treatment as set forth in the

Occupational Safety and Health Act. This legislation, as defined by the Department of Transportation, adds substantial new dimensions to the traditional ambulance driver concept. The basic change is one of increased emphasis on stabilizing the patient at the scene of an emergency rather than rushing him to the emergency room of a medical facility for stabilization. As a consequence, rigid new requirements were developed for (1) medical training of operators, (2) ambulance design, (3) essential medical equipment packages, and (4) communication nets with professional medical personnel in the emergency room. The new job description, to be applied Army-wide, defines the medical training and applications required of the emergency vehicle operator.

Training and development.--Approximately one-third of the civilian workforce participated in training and educational programs during the year, and to support the travel, per diem, tuition, and contractual fees for this program, approximately \$350,000 was provided from the Central Training Fund.

In other activity, efforts were made to gain additional spaces for the career intern program, and by the close of the reporting period, 25 such spaces, along with the funds required to support salaries and training, were expected to be allocated for fiscal year 1976.

#### Reserve Components

Army National Guard medical brigades.--In September 1974, the National Guard Bureau recommended to The Surgeon General that three medical brigades (TOE 8-112G) be validated on the Reserve Component troop basis for assignment to the Army National Guard (ARNG). This recommendation was approved by the Deputy Chief of Staff for Operations and Plans (DCSOPS) in December 1974, along with provisions for the upgrading of an existing medical group headquarters in each CONUSA (numbered army in the continental United States) area to a medical brigade headquarters. The ARNG medical brigades will thus be distributed on the basis of one per each of the three CONUSA areas (1st, 5th, and 6th) and will be organized to serve as regional headquarters with a mission of providing medical guidance and coordinating non-divisional medical unit activities within their respective areas. All medical units will remain under the command and control of their respective adjutant general and/or the headquarters to which they are presently assigned.

The guidance provided by the medical brigade headquarters will consist of specialized technical assistance in the medical aspects of administration, training, and logistics, while by helping to coordinate the activities of non-divisional medical units, these headquarters organizations will assist the adjutants general in achieving a more efficient and effective utilization of ARNG medical resources. To achieve the latter goal, the brigades will participate in the development of a standardized training program and will

provide the adjutants general with appropriate medical staff guidance. This uniform training program will include, but will not be limited to, Army Training Tests, field training exercises, and command post exercises carried out during both annual and inactive duty training periods. The medical brigade will also provide a center of information and/or coordination for FORSCOM (Forces Command), TRADOC (Training and Doctrine Command), CONUSA, HSC, AHS, and the National Guard Bureau on matters relating to ARNG medical service, and every effort will be made to effect uniform compliance with medical directives issued by these commands.

By the close of the fiscal year, ARNG medical brigades were organized and functioning in Mississippi (5th) and Ohio (1st), while the 6th Army area brigade was still in the initial stages of organization.

ARNG liaison officers.--During the reporting period, three members of the Army National Guard were assigned as liaison officers to the Office of The Surgeon General, the Health Services Command, and the Academy of Health Sciences. Those officers assigned were COL Carl L. Rasak, DC, Michigan National Guard (OTSG); LTC Shelton E. Weathersby, MSC, Mississippi National Guard (HSC); and MAJ John C. Philbrick, MSC, Maine National Guard (AHS). This marks the first time that ARNG liaison officers have been assigned to these major commands.

Table 9.---Specialized training, Academy of Health Sciences, U.S. Army

fiscal year 1975

Course	Input	Graduates	Average training load
Enlisted training			
Initial skill			
Biomedical Equipment Maintenance (198-35G20/4BF2)...	224	179	82
Dental Laboratory Procedures (Basic) (331-42D10)....	140	131	43
Optical Laboratory Specialist (331-42E20).....	34	34	14
Medical Records and Reports (513-71G20).....	526	464	81
Medical Material Procedures (551-76J20).....	254	222	19
Medical Specialist (Basic) (300-91B10).....	6,998	6,748	942
Dental Specialist (Basic) (330-91E20).....	548	519	63
Social Work/Psychology Procedures (302-91G20).....	428	299	82
Radiographic Procedures (313-91P20).....	334	292	122
Pharmacy Specialist (312-91Q10).....	462	304	151

Table 9. ---Specialized training, Academy of Health Sciences, U.S. Army

fiscal year 1975--continued

Course	Input	Graduates	Average training load
Enlisted training--continued			
Initial skill--continued			
Food Inspection Procedures (Basic) (321-91R10).....	476	341	73
Preventive Medicine Procedures (322-91S10/20).....	271	157	47
Veterinary Specialist (321-91T20).....	131	95	20
Medical Laboratory Procedures (Basic) (311-92B20)...	444	465	128
Hospital Food Service Cook (800-94F20).....	106	95	24
Total.....	11,376	10,345	1,891
Skill progression			
AMEDD NCO (Basic) (6-8-C40).....	249	246	38
AMEDD NCO (Advanced) (6-8-C42).....	232	275	67
Special Forces Aidman (300-F1).....	175	121	64
Medical Technology (311-F1).....	20	22	20

Table 9.---Specialized Training, Academy of Health Sciences, U.S. Army

fiscal year 1975--continued

Course	Input	Graduates	Average training load
Enlisted training--continued			
Skill progression--continued			
Cytotechnology (311-F3).....	18	15	18
Biomedical Electronic Equipment Maintenance (198-35S20)	49	57	38
Biomedical X-Ray Equipment Maintenance (198-35T20).....	44	45	35
Brace Specialist (304-42C20).....	37	23	37
Dental Removable Prosthetic Specialist (331-42D20).....	50	44	10
Dental Fixed Prosthetic Specialist (331-42F20).....	44	42	8
Clinical Specialist (300-91C20).....	1,212	841	932
Operating Room Procedures (301-91D20).....	760	603	175
Dental Hygienist (330-91E30).....	150	132	23
Psychiatric Procedures (302-91F20).....	151	128	23
Electroencephalograph Specialist (311-91F30).....	10	3	2
Orthopedic Specialist (304-91H20).....	59	57	14

Table 9.--Specialized training, Academy of Health Sciences, U.S. Army

fiscal year 1975--continued

Course	Input	Graduates	Average training load
Enlisted training--continued			
Skill progression--continued			
Physical Therapy Aid (303-91J20).....	91	80	7
Occupational Therapy Specialist (303-91L20).....	45	35	19
Food Inspection Procedures (Advanced) (321-91R20)....	78	78	15
Ear, Nose and Throat Specialist (300-91U20).....	133	135	33
Respiratory Specialist (91V20).....	47	--	--
Medical Laboratory Procedures (Advanced) (311-92B30)	115	79	115
Hospital Food Service Steward (800-94F40).....	15	15	2
Preventive Medicine Specialist (Advanced) (322-91S20)	39	43	6
Total.....	3,823	3,119	1,700
Functional courses			
Medical Equipment Maintenance (Suppl. & Refresher)			
(198-F1).....	50	39	6



Table 9.---Specialized training, Academy of Health Sciences, U.S. Army  
fiscal year 1975---continued

Course	Input	Graduates	Average training load
Enlisted training--continued			
Functional courses--continued			
Dialysis Technician (300-F2).....	8	9	4
Dental Administration (330-F1).....	68	68	5
Hospital Food Service Supervisor Refresher (800-F3)	30	30	2
Army Community Service Orientation (511-F1).....	20	20	1
U.S. Army Alcohol and Drug Abuse Team Training (5H-F2)	67	67	3
U.S. Army Drug and Alcohol Rehabilitation Training			
(5H-F3).....	264	264	10
Total.....	507	497	31
Total enlisted.....	15,706	13,961	3,622
Officer training			
Initial skill			
ANEDD Officer Basic (MC, DC, VC) (6-8-C20).....	454	454	17

**Table 9.--Specialized training, Academy of Health Sciences, U.S. Army**  
**fiscal year 1975--continued**

Course	Input	Graduates	Average training load
Officer training--continued			
Initial skill--continued			
AMEDD Officer Basic (MSC) (6-8-C20).....	640	630	98
AMEDD Officer Basic (ANC, ANSC) (6-8-C20).....	727	727	56
Total.....	1,821	1,811	171
Skill progression			
AMEDD Officer Field Grade Refresher (VC) (6-8-C8)	30	30	1
AMEDD Officer Orientation (MSC) (6-8-C21).....	20	20	1
AMEDD Officer Orientation (VC) (6-8-C21).....	9	9	1
AMEDD Officer Advanced (6-8-C22).....	287	286	121
AMEDD Officer Advanced (Reserve Components) (6-8-C22R)	12	12	--
Biomedical Equipment Maintenance (4B-F2).....	2	2	1
Patient Administration (7M-F3).....	47	47	7

Table 9. --Specialized training, Academy of Health Sciences, U.S. Army  
fiscal year 1975--continued

Course	Input	Graduates	Average training load
Officer training--continued			
Skill progression--continued			
Biomedical Electronic Equipment Maintenance (4B-202A)	8	7	6
Nurse Clinician - Pediatrics (6F-3442).....	21	20	9
Nurse Clinician - Psychiatric/Mental Health (6F-3437)	13	13	8
Operating Room Nursing (6F-3443).....	24	27	7
Anesthesiology for ANC Officers (6F-3445).....	22	22	22
Maternity and Gynecology Nursing (6F-3446).....	13	13	3
Physicians' Assistant (6H-911A).....	121	99	121
Medical Technology (6H-3314).....	6	--	6
U.S. Army-Baylor University Program in Physical Therapy (6H-3418).....	16	21	16
Army Aviation Medical Officer Orientation (6A-F1).....	12	12	--
Army Aviation Medicine (Basic) (6A-3160).....	43	43	5

Table 9.--Specialized training, Academy of Health Sciences, U.S. Army  
fiscal year 1975--continued

Course	Input	Graduates	Average training load
Officer training--continued			
Skill progression--continued			
U.S. Army-Baylor University Program in Health Care			
Administration.....	50	48	37
Total.....	756	731	372
Functional courses			
Essential Medical Training for AMEDD Aviators (2C-F7)	67	67	4
Essential Medical Training for AMEDD Aviators (2C-F7R)	14	14	1
Medical Equipment Maintenance (Suppl. & Refresher)			
(4B-F3).....	3	3	--
Army Community Service Orientation (5H-F1).....	28	28	1
U.S. Army Alcohol and Drug Abuse Team Training (5H-F2)	316	316	12
U.S. Army Drug and Alcohol Rehabilitation Training			
(5H-F3).....	101	101	4

**Table 9.--Specialized training, Academy of Health Sciences, U.S. Army**  
**fiscal year 1975--continued**

Course	Input	Graduates	Average training load
<b>Officer training--continued</b>			
<b>Functional courses--continued</b>			
Armed Forces Entrance Medical Examination (6A-F4)	11	11	--
Community Health and Environmental Science (6A-F5)	75	75	13
Community and Environmental Health Program Management (6A-F6).....	18	17	1
Chief Nurses Orientation (6F-F2).....	26	25	1
AMEDD Officer Clinical Head Nurse (6F-F3).....	60	60	2
Intensive Care Nursing (6F-F5).....	48	48	20
AMEDD Reserve Components General Staff (7M-F1).....	138	137	5
AMEDD Executive Management Program (7M-F5).....	24	24	1
Dental Command and Staff (7M-F6).....	27	27	1

Table 9.--Specialized training, Academy of Health Sciences, U.S. Army

fiscal year 1975--continued

Course	Input	Graduates	Average training load
Officer training--continued			
Functional courses--continued			
Medical Logistics Management (8B-F20).....	55	41	11
Total.....	1,011	994	77
Total officers.....	3,588	3,536	620
Total officers and enlisted.....	19,294	17,497	4,242

## UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

Development of the Uniformed Services University of the Health Sciences (USUHS) continued to move forward during fiscal year 1975. To be situated on the grounds of the National Naval Medical Center, Bethesda, Maryland, the new university will be a valuable educational asset to the Department of Defense and one which will have at its disposal the worldwide medical resources of the three military departments. In addition to its primary purpose of training career military health care professionals, the USUHS will have the teaching and research capabilities to become a leader in the development of improved health care delivery systems.

The first phase of the university development program involves the staffing and construction of a school of medicine. Initially, a basic science facility will be constructed in time to receive a class of approximately 48 students by the autumn of 1976. When fully operational, this facility will be capable of accomodating 150 medical students at each year level and have the flexibility to handle students in other health care disciplines as well. Until permanent facilities are ready, two of the four exhibit halls of the Armed Forces Medical Museum, Armed Forces Institute of Pathology, will be converted into temporary classroom, laboratory, and office space. These renovations are currently underway and are expected to

be completed in time to permit a small class of 24 to 36 students to begin work in the fall of 1975.

Efforts to staff the medical school with highly qualified faculty and administrators have likewise shown good progress. During the past fiscal year, the board of regents approved the selection of Dr. Jay Philip Sanford, Professor of Internal Medicine and Chief of the Infectious Disease Section, Department of Internal Medicine, Southwestern Medical School, as dean of the school of medicine. Dr. Sanford has had a varied and extensive background in the epidemiology and treatment of infectious diseases, and throughout his career has been closely associated with the practice of military medicine. He is a co-author of the official AMEDD history of internal medicine in Vietnam and Southeast Asia, now being prepared for publication.

University entrance requirements and selection procedures are currently being developed by the board of regents under guidelines prescribed by the Secretary of Defense. These are expected to be completed and published during fiscal year 1976.



Fiscal year 1975 saw the Army stabilize at reduced force levels following the drastic reduction in troops committed to Southeast Asia. Concomitantly, Army Medical Department officer strength continued to decline from previous year levels. Of considerable significance to Army medicine was the decision by the Department of Defense to phase out certain officer procurement programs, plus the Physicians' Assistant Program and the subsidized nursing education program. Problems in recruitment have already appeared, and may grow worse. Like the Army at large, the Medical Department was passing through a period of retrenchment.

Under the circumstances, the continued high levels of professional care, and noteworthy developments on the research front gain added luster. Despite the suspension during the year of the DOD Drug Abuse Testing Program in response to a court ruling, effective research into drug dependency continued. But this was only one aspect of a continuing ~~research~~ effort which achieved marked success in the study of infectious diseases, surgery, and aviation medicine. Such contributions to medical knowledge have continued some of the finest traditions of Army medicine.

In meeting the challenge to provide improved service ~~with~~ during a time of often difficult adjustment; the men and women of the Army Medical Department not only <sup>lived up to</sup> fulfilled the ~~best~~ <sup>standards</sup> traditions of the past, but gave a sure indication that still higher achievements lie ahead.

RICHARD R. TAYLOR, M.D.  
Lieutenant General,  
The Surgeon General.

## DIRECTORATE OF HEALTH CARE OPERATIONS

### Alcohol and Drug Policy Office

Suspension of Drug Abuse Testing Program.---Among the most significant developments affecting the Department of the Army (DA) Alcohol and Drug Abuse Prevention and Control Program was the suspension by the Department of Defense in July 1974 of its Drug Abuse Testing Program. This action was taken as the result of a legal opinion handed down by the Court of Military Appeals in the case of the United States vs. Ruiz, a suit which challenged the legality of the urine testing procedures used in the program. The court ruled that ordering an individual to submit to a urine test which could result in administrative discharge procedures being taken against him, violated the self incrimination provisions of Article 31 of the Uniform Code of Military Justice.

A moratorium on the testing program remained in effect for 6 months, during which time evidence of the continuing severity of the drug abuse problem with its adverse effects on the Health and efficacy of the Armed Forces, especially in Europe, mounted steadily. Consequently, in February 1975, the Defense Department ordered the urine testing program resumed in its entirety. A proviso was added, however, which prohibits the test results from being used as the sole basis for discharging an individual under less than honorable circumstances.

Discontinuance of Alcohol and Drug Abuse Assistance Team.--

Fiscal year 1975 brought about the disestablishment of the DA Alcohol and Drug Abuse Assistance Team. The functions, resources, and mission formerly provided by this team were transferred to the major Army commands. Under the new arrangement, personnel from Headquarters, DA, to include OTSG representation, will continue to make staff visits to selected commands and installations on an as-needed or as-required basis.

Alcohol abuse.--During the reporting period, an increased emphasis was placed on the early identification and treatment of the problem drinker in the Army; however, rather than signaling a greater proclivity toward alcohol abuse, this action was brought on by a growing awareness of the true nature and extent of the existing problem. A more realistic assessment of alcohol abuse in the Army came about as a result of the educational efforts undertaken as part of the Alcohol and Drug Abuse Prevention and Control Program, and through the widespread acceptance of rehabilitation as a viable alternative to the expensive loss of experienced manpower through administrative or judicial procedures.

Surgical Consultant

NATO surgical handbook.--The first United States revision of the NATO handbook, "Emergency War Surgery," was published in May 1975. This edition, a reworking of the original NATO handbook published by SHAPE (Supreme Headquarters Allied Powers Europe) in

1957, incorporates many improvements in the treatment of war wounds, including chapters on reoperative abdominal surgery and the use of aeromedical evacuation. Revision of the handbook was undertaken as a triservice project under the auspices of The Surgeon General, utilizing extensive contributions from members of the SHAPE Revision Committee, as well as from numerous military and civilian consultants. In addition, the SHAPE Committee approved the United States revision as a model for its revised edition, to be published in several languages.

Contract surgeons.--At the close of fiscal year 1975, the Medical Department was employing 41 contract surgeons worldwide. Of these, 33 were being utilized in CONUS and 8 were functioning in oversea commands. The Army's use of private physicians as contract surgeons has a long history, and as early as 1884 was given legal sanction by the 48th Congress. Until 3 June 1916, when they were given military status under the National Defense Act, contract surgeons were considered to be civilians; however, with the passage of the Army Organization Act of 1950, they once again reverted to civilian status. Currently, the use of contract surgeons is governed by Section 4022, Title 10, United States Code.

#### Medical Consultant

Medicolegal examinations in alleged sex crimes.--An event of importance within the Office of the Chief Medical Consultant was the publication on 30 May 1975 of Technical Bulletin, Medical 293 (TB MED 293), "Procedures for Medicolegal Examination in Alleged Sex Crimes." Contained in this bulletin are guidelines for the medical examination and care of the victim; procedures for collecting, handling, and transferring of relevant physical evidence; and the methodology of supportive laboratory testing.

### Laboratory Science Consultant

Drug testing laboratories.--Four new drug testing laboratories were opened during the year in support of the DA Alcohol and Drug Abuse Prevention and Control Program. These facilities are located at Tripler Army Medical Center, Hawaii; Fort Meade, Maryland; Wiesbaden, Germany; and at the U.S. Army Medical Laboratory, Pacific, Honshu, Japan. By the end of the year, these laboratories, with few exceptions, were meeting the program objectives of timeliness and accuracy, and a combined daily total of approximately 4,700 urine samples was being analyzed for evidence of drug usage. The analytical methodology used consists of radioimmunoassay techniques confirmed by gas liquid chromatography, while assays include tests for opiates, barbiturates, methaqualone, and amphetamines.

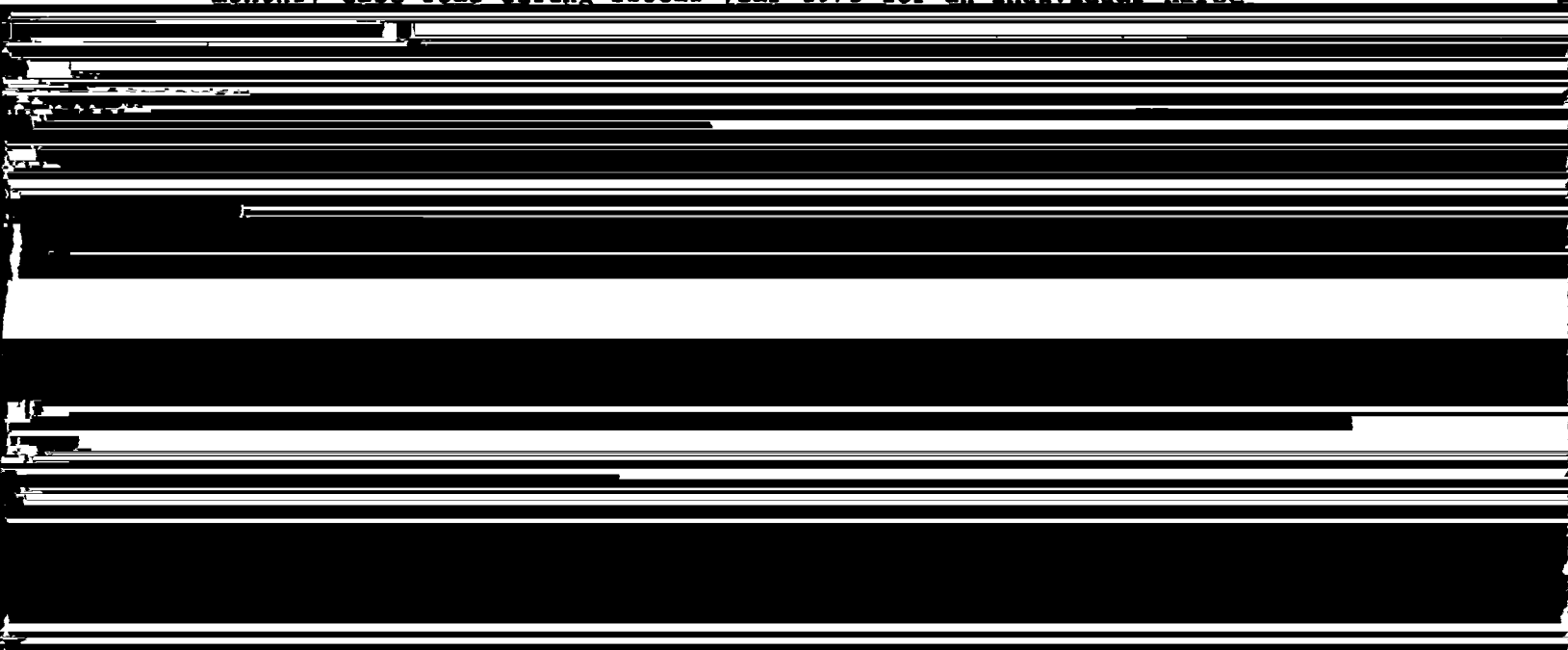
Revision of AR 40-24.--Army regulation 40-24, "Laboratory Reporting," was revised to completely eliminate an outdated reporting system and replace it with the recording method used by the College of American Pathologists (CAP). Under the CAP system, tests and procedures are converted into a weighted value which will be more

useful in a military setting for computing space, monetary, and manpower requirements. Implementation of the revised AR will commence on 1 July 1975.

Licensure of military blood banks.--During the previous fiscal year, a memorandum of agreement was concluded between the Department of Defense and the Bureau of Biologies, Food and Drug Administration, providing for the licensure of military blood banks. Under the terms of the agreement, The Surgeon General holds the DA blood license, and various Army medical facilities have been inspected and licensed for the production and transfusion of blood and certain blood products. As of 30 June 1975, all Army Medical Centers, with the exception of Letterman (LAMC), were so licensed, and measures had been taken to have LAMC reinspected for licensure. Additionally, nine MEDDAC's are presently preparing for pre-licensure inspections.

#### Nursing Consultant

Nurse Clinician Program.--The use of specially trained Army Nurse Corps officers as physician extenders underwent a dramatic expansion during the reporting period. A comparison of the average monthly case load during fiscal year 1975 for an individual nurse



## Psychiatry Consultant

Procurement of Psychiatrists. -- Due to the end of the draft and Berry Plan accessions as well as reduction in graduate medical education training positions, Army psychiatry began to experience shortages of personnel and an increasing reliance on CHAMPUS referral of dependents and utilization of civilian "contract surgeon" psychiatrists. The graduate student program for psychology was also discontinued.

### Programs. --

- a. ADAPCP. The Alcohol and Drug Abuse Control Program continued to have professional input and guidance from the Psychiatry and Neurology Consultant.
- b. Vietnamese Resettlement. Dislocated South Vietnamese resettlement programs had input from the Psychiatry and Neurology, Psychology and Social Work Consultants.
- c. LSD Follow-Up Program. WRAMC was selected as the site for a preliminary pilot follow-up program (Project 33) for LSD ingestion volunteers with psychiatric evaluations.
- d. POW Repatriation. The first of the five year RVN prisoner of war studies was initiated. This program had input from the three behavioral sciences consultants.
- e. ACAP. The Army Child Advocacy and Protection Program continued to have professional input from the behavioral sciences consultants.

Problems. -- Psychiatric personnel shortages began to be felt limiting the delivery of psychiatric services at various MEDDAC's.

Also indicative of the expanding Nurse Clinician Program was the extension of nurse midwifery service to Fort Campbell, Kentucky, and Fort Hood, Texas. This brings to three the number of such services established to date, and in the locations where they are functioning, nurse midwives are estimated to handle 40-45 percent of the delivery workload. By way of comparison, this figure was placed at 20-25 percent during fiscal year 1974, when a single midwifery service was operating at Fort Knox, Kentucky.

The career development of nurse clinicians was enhanced through the concluding of an affiliation agreement between the University of Texas System School of Nursing and the Nursing Science Division, Academy of Health Sciences. Under the terms of the agreement, graduates of selected nurse clinician courses offered by the Academy will have the opportunity to obtain 16 semester hours of graduate credit from the University. The courses to be credited include Pediatrics (6F-3442), Psychiatric/Mental Health (6F-3437), Obstetrics - Gynecology (6F-F4), Intensive Care (6F-F5), and Ambulatory Care (6F-3448).

Further guidance concerning the credentialling, utilization, and evaluation of nurse clinicians was provided to local commanders through the publication on 9 June 1975 of AR 40-48, "Health Care Extenders," and the publication on 2 June 1975 of a completely revised AR 40-2, "Army Medical Treatment Facilities General Administration." AR 40-48, which becomes effective on 15 July 1975,



contains procedures for credentialling, utilization, and evaluation of nurse clinicians, while chapter 7 of AR 40-2, entitled "Pharmacy Management," governs the use of nurse clinicians in the writing of prescriptions. The revised AR 40-2 will become effective on 1 July 1975. Guidance concerning the administration of local anesthesia by nurse clinicians was provided by TB MED 43, "Local Anesthetic Agents," dated 12 March 1973, and by DA Message 2015012, "Regional Anesthesia," dated 9 June 1973. During the past year, a series of guidelines for implementing TB MED 43 were published.

Continuing education for nurses.--By a recent amendment to its Nurse Practice Act, to become effective on 1 January 1978, the State of California will require evidence of continuing education as a prerequisite for relicensure. As a result, plans are currently underway to provide a means whereby Army Nurse Corps officers can meet this requirement when residing in that State.

#### Optometry Consultant

New Optometry Consultant.--COL Henry E. Maes, Optometry Consultant and chief of the Optometry Section of the Medical Service Corps, retired during the year and was replaced in January 1975 by LTC Gene M. Bourland. LTC Bourland, who was assigned to the Office The Surgeon General from Brooke Army Medical Center, Fort Sam Houston, Texas, was hospitalized soon after assuming his new duties (February 1975) and continued in a convalescent status for the

remainder of the fiscal year. During this time, LTC John Leddy served as Acting Optometry Consultant.

Strength. -- A shortage of optometrists continued to be very much in evidence during the past year, with both actual and authorized strengths falling well below the worldwide requirement of 297. The authorized strength for optometrists as of 30 June 1975 was 248, whereas the actual strength was 213. One year ago, these figures were 324 and 215, respectively. The 58 losses and 54 accessions during the reporting period marked the second consecutive year in which procurement efforts have failed to meet personnel needs.

Low morale and job dissatisfaction among Army optometrists once again appeared to be the major reason for poor retention and procurement. This is especially true among younger officers, who express concern about relatively low entry grades, lack of promotion opportunities, and a workload which allows insufficient time for more specialized practice such as the fitting of contact lenses. Efforts are underway in an attempt to correct these grievances in so far as possible.

Training. -- No optometrists were attending senior service schools or enrolled in long-term civilian education programs during the past year.

#### Pharmacy Consultants

Procurement of Pharmacists. -- With no draft, registered pharmacists were no longer being brought into the Army as enlisted personnel. Consequently the number of commissioned pharmacists was being increased and the end strength of 193 was a new all time high for pharmacy officers.

Two senior officers were selected for promotion to Colonel making a total of three. More than half of the total number of officers were in a career status. Procurement and retention were most encouraging as the level of professional services provided was equivalent to or surpassed that of the civilian medical facilities.

Psychology fellowships.-- A newly developed 1-year post doctoral fellowship in child psychology is currently awaiting approval by The Surgeon General. This fellowship has been designed as a training program to be conducted by the Child Guidance Service at Walter Reed Army Medical Center, with an initial authorization of one space. Fellowship programs for military psychologists in organizational development and neuro-psychological testing are in the planning stage, and approval of these is expected during fiscal year 1976. In view of the difficulties encountered in obtaining funds for post doctoral training, the development of relevant programs utilizing existing military facilities and professional staffs was considered appropriate.

Procurement of psychologists.--The loss of the Graduate Student Program was a serious setback for the procurement of psychologists, and the problem has been exacerbated by the failure to include training spaces for psychologists in the Army Health Professions Scholarship Program. Direct appointments are not expected to provide sufficient personnel, which in turn means that the recruitment and retention of psychologists will be an increasing cause for concern.

#### Ambulatory Care

Convalescent leave policy.--DOD Directive 1327.5, dated 29 June 1974, requires that the granting of convalescent leave in excess of 30 days be controlled by a departmental headquarters.

Instructions for implementing this directive are contained in AR 630-5, which became effective on 1 June 1975, and which includes the provision that requests for convalescent leave in excess of 30 days are to be forwarded to the Consultants and Ambulatory Care Division, OTSG, for action. Since the professional personnel of this division who are responsible for approving these requests do not have a complete knowledge of the patient's condition nor the physician-patient relationship required for an appropriate evaluation, such control as outlined in the above-mentioned Army regulation may prove difficult to maintain. Moreover, these personnel must rely on the judgement of the hospital commander when approving or disapproving a request for extended convalescent leave. At the close of the reporting period, it was still too early to make a determination as to the ability of the division to effect adequate control measures.

#### Implementation of Family Practice Program

Each existing family practice residency maintained its accreditation and the total number of entering residents was 50. No new residencies were begun. A new service practice was initiated at Ft. Sill, OK, and family practice coverage was provided to Carlisle Barracks, PA.

## Health and Environment

Occupational medicine.--The impact of the Occupational Safety and Health Act (OSHA) upon Army operations continued to be stressed during the past year. In connection with this, various documents published by the National Institute of Occupational Safety and Health (NIOSH) were reviewed and provisions made for compliance wherever applicable. Numerous occupational health and safety surveillance programs are in existence Armywide, and these continued to receive the full support of the Medical Department.

A growing awareness of the need for environmental improvement has given rise to an increase in the number of occupational surveys and environmental impact statements handled by this office. A continuation of this trend is expected.

Support in the form of environmental control and medical surveillance was provided to the demilitarization project underway at Rocky Mountain Arsenal. This is a large undertaking, involving the dismantling of chemical munitions and the destruction or neutralization of their toxic contents. The medical support techniques developed during the course of the operation will be used as a model for future projects of this type, which are expected to receive an increasingly higher priority. Concern has arisen over certain deficiencies noted in the protective equipment ensemble used by project personnel, and corrective action is being taken.

Aviation medicine.--The outstanding hearing protection provided by the SPH-4 aviator's helmet has been proven through continued usage; however, other parts of the helmet have been shown to be in need of improvement. To accomplish the required changes, the preparation of a product improvement proposal (PIP) is presently underway. It should be emphasized that the proposed modifications will in no way degrade the hearing protection afforded.

The danger to helicopter crewmen from post-crash fire is a problem that has received considerable attention in recent years. One solution has been the development of a crash-resistant fuel system, and to date, a significant number of these systems have been installed on helicopters in the Medical Department inventory, markedly reducing the incidence of post-crash fire. In spite of this improvement, however, the need for a single-piece, fire-resistant suit for aviators--and for tank crewmen as well--continues to be recognized. A development program to provide this item is expected to be undertaken in the near future.

Aviation physical examinations continued to be performed and evaluated through the centralized procedure established during fiscal year 1974. Under this system, any physician may perform a type B examination and forward the results to the Evaluation and Review Branch of the Aeronautical Center, Fort Rucker, Alabama, where it is reviewed by a flight surgeon and either approved or recommended for waiver. The adoption of a centralized review procedure was made necessary by a decrease in the number of flight

surgeons, and although not an optimal solution, it appears to be the best method for handling the current problem.

Medical entomology.--Protection from the threat to public health and economic interests posed by the importation of disease vectors or agricultural pests into the continental United States requires constant vigilance. This was demonstrated once again during the past fiscal year when quarantinable pests were intercepted on five separate occasions in overseas retrograde cargo shipments from the Western Pacific area. In an effort to preclude further incidents, an intensified inspection and fumigation program was instituted on Okinawa.

On the basis of a worldwide review of AMEDD laboratory services, completed during fiscal year 1974, the health and environmental resources of the separate laboratories were consolidated under the Army Environmental Hygiene Agency. One result of this action has been to make a more uniform and comprehensive medical entomology program available to all military installations. In addition, consolidation has enhanced the value of the services and support provided by the medical entomologist to the military mission.

As of 30 June 1975, 69 medical entomologists were on active duty worldwide. Of these, seven were enrolled in graduate-level training programs leading to doctoral or master's degrees.

Environmental samples, including soil, sediment, fish, and birds, were collected from each of 34 major installations as part of



the DA Pesticide Monitoring Program. A subsequent evaluation of these samples provided data on the spatial and temporal distribution of pesticides, and this information subsequently served as a basis for the instituting of certain operational changes believed necessary to minimize the adverse environmental impact of DA pest management programs. An examination of stratified soil samplings, for instance, revealed technical deficiencies in storage and pest-control shop areas. Additionally, a more conservative use of pesticides in residential and recreational areas was indicated.

Investigation of incidents of environmental damage in which the improper use of pesticides is suspected forms a second means by which the monitoring program attempts to control the use of these chemicals. Several such incidents involving minor, but nonetheless objectionable, fish kills on golf course areas were investigated during the reporting period and found to have been caused by excessive use of pesticides.

Since the development and implementation of an instructional program during fiscal year 1973, a total of 319 individuals have been given training in pest control operations. The program is conducted by the Academy of Health Sciences and is designed to accord with Federal regulations concerning the training and certification of pesticide applicators.

Radiological hygiene.--Excellent progress was made on the implementation of the National Evaluation of X-Ray Trends (NEXT) program, which was put into operation at 17 installations during the

year. The limited data available thus far indicate that equipment and procedures are in conformance with civilian practice.

The Medical Department began cooperating with the Food and Drug Administration's Bureau of Radiological Health (BRH) and various State radiation protection officers in the development of the NEXT program during fiscal year 1974. The purpose is to assess patient radiation exposures during certain diagnostic x-ray procedures of special concern and also to evaluate the safety of various technical procedures and equipment conditions. Implementation of the NEXT program is being carried out on a triservice basis, with the three Surgeons General participating through an interagency agreement with the BRH.

The information generated by the NEXT program is being evaluated in concert with the Environmental Protection Agency for the purpose of developing guidelines for radiation dosage which can be used by all Federal agencies.

Radiation protection surveys conducted by the Army Environmental Hygiene Agency continued to disclose 70mm Photo-fluorographic (PFG) x-ray units which exceeded the exposure levels defined in TB MED 62. As a result, a message was sent to the field directing that all 70mm PFG x-ray units which fail to meet these standards, and which cannot economically be repaired, be disposed of as unserviceable.

Environmental engineering.--Environmental engineering

accomplishments during the year included the providing of guidance to the Environmental Protection Agency (EPA) concerning the Army's experience with the drinking water surveillance program. The knowledge gained from this experience will be utilized by the EPA to draft national guidelines for implementing the Safe Drinking Water Act of 1974. The Army's drinking water surveillance program was begun in July 1972. Under its provisions, AMEDD laboratories perform annual chemical analyses of the drinking water supplied to Army facilities, and the collected data are stored in a central file maintained by the Army Environmental Hygiene Agency.

Technical consultation on the design of special water systems continued to be provided to the Walter Reed Project Office. This is being done in order to meet the stringent quality requirements commensurate with the scope of medical care envisioned for the expanded hospital complex.

Fluoridation policies were modified during the year to permit the use of higher concentrations of this chemical in the water supplies of schools and similar institutions. Recent studies have shown that a higher level of fluoridation in school water supplies provides demonstrable protection to students who otherwise drink non-fluoridated water.

In other activity, toxicological standards for nine common industrial wastes were recommended to the Army Materiel Command. These will in turn be incorporated into plans currently being prepared for the modernization of ammunition production facilities.

Disease control.--The incidence of communicable disease among Army personnel worldwide continued to remain relatively stable during fiscal year 1975. A slight increase was noted in the number of meningococcal meningitis cases, and viral hepatitis rates, although stabilized, continued to remain high in Europe. The following is a summary of trends in five of the more important diseases:

Acute respiratory (adenovirus) disease. The use of adenovirus vaccines, types 4 and 7, continued to result in a marked reduction in the number of basic trainees admitted to hospitals. These vaccines are given to all new recruits between October and May, the peak of the respiratory disease season. To ascertain the effectiveness of the vaccination program, weekly reports of all acute respiratory disease (ARD) hospital admissions and throat cultures are compiled, and serological studies of ARD admissions are made. An analysis of this data has shown that the vaccination program prevents more than 14,000 admissions and over 40,000 hospital days per year. As an additional precaution, all basic combat training centers are being closely monitored to make possible the rapid identification of other agents which may emerge to replace adenovirus types 4 and 7.

Viral hepatitis. The sharp outbreak of hepatitis which occurred in Europe during fiscal year 1974 has abated. After reaching a peak of 27 cases per 1,000 average strength per year in November 1973, monthly rates have now become stabilized at 9-13 cases per 1,000 per year; however, this level is still approximately five times

greater than that experienced before the outbreak. Intensive monitoring of reported cases is continuing in order to establish their respective epidemiological patterns.

**Meningococcal meningitis.** Since fiscal year 1972, vaccine against type C meningitis (Neisseria meningitidis) has been given to all recruits, resulting in a very significant reduction in the number of cases. Armywide, the incidence of meningococcal meningitis peaked at 451 in 1968 and by 1973 had declined to low of 15. A total of 29 cases were reported during the past year, an increase of 7 over fiscal year 1974. Most of this increase appears to have been due to types B and Y, against which no effective vaccine yet exists. In addition to type C vaccine, the Walter Reed Army Institute of Research has succeeded in developing a vaccine effective against type A meningitis. Although type A infections have been rare thus far among Army personnel, large epidemics have occurred in both Europe and South America, and for this reason, supplies of the vaccine are being procured on a contingency basis.

**Venereal disease.** After showing a general decline during fiscal year 1974, venereal disease (VD) rates remained nearly stable during fiscal year 1975, with the highest incidence continuing to be recorded in Korea. The Department of the Army policy requiring nonpunitive control measures and confidentiality of the doctor-patient relationship was reaffirmed once again. Efforts in VD education continued to be expanded, and updated guidelines for medical management of patients were published.

Rubella. Prevention of rubella infection in women of child-bearing age has been shown to be effective in lessening the risk of congenital rubella syndrome, and immunization of school children, especially prepubertal females, is a well accepted, highly recommended procedure. Vaccination of post partum females is also valuable when based on a program of prenatal serologic testing for rubella, along with an assurance that the individual will not become pregnant for at least 2 months following inoculation. Serologic testing is recommended for all prenatal patients regardless of whether vaccination is contemplated. Guidance for implementing these practices has been published, and several programs are currently underway. The use of rubella vaccine for mass prophylaxis of basic combat trainees has been authorized since fiscal year 1973.

Community health nursing.--The activities of the Health Nursing consultant were centered around the areas of professional nursing, planning and participation in educational programs, health nurse career monitoring, communicable disease policy, and development of health education materials. Community Health and Environmental Science, the MOS-producing short course taught at the Academy of Health Sciences, continued to provide most of the officers entering the health nursing field during the past year.

Selected health nurses employed in the Army's tuberculosis control program were authorized to write refill INH (isoniazid) drug prescriptions, thereby enhancing their role in this activity. These nurses also began assisting in the development of active-patient

discharge programs.

## Logistics and Facilities

Direct Order Inventory System.--During fiscal year 1975, the Army Medical Department began to use a new system for supplying nonstandard, recurring-demand items to its health care facilities within the continental United States. Under this arrangement, known as the Direct Order Inventory System (DOIS), applicable items are stocked at commercially owned regional distribution centers in quantities determined by an analysis of the use patterns experienced by the military medical facilities in that region. Hospitals or other facilities needing these items may request and receive them directly from the distributor. One regional center can support a number of facilities, and use of the system should result in a reduction of inventory investment, clerical support requirements, production lead time, backorders, obsolescence of stocks, and required storage space. Additionally, the Direct Order Inventory System can be incorporated into the triservice regionalization plan and when fully developed, could be operated nationally at the Defense Personnel Support Center level.

Improved logistics support system.--A major program to improve logistics management in Army health care facilities, which has been under development in recent years, was put into limited operation during the current reporting period. The new system

operates on a 7-day, 24-hour basis, and its implementation has resulted in numerous economies and improved services. Directors of logistics assume complete responsibility for all logistical operations, thereby relieving skilled professional health care personnel of these duties. This in turn results in improved patient care.

Early in the fiscal year, a controlled test of the new system was conducted at Moncrief Army Hospital, Fort Jackson, South Carolina, and the success of this experiment led to its installation at several other CONUS treatment facilities. A further expansion is planned for fiscal year 1976.

In order to familiarize user personnel with the system techniques, a training film (TF 8-4867) entitled "The Story of Emily" was produced and distributed to Army audio-visual support centers. The film depicts the use of the new system as it would be applied to support the professional staff of an Army hospital.

Optical fabrication program.--A total of 1,020,700 pairs of spectacles were fabricated in Army optical laboratories worldwide during fiscal year 1975. This was less than 1 percent (approximately 0.7 percent) below the output for fiscal year 1974 and represents a leveling off of the annual declines in production experienced since fiscal year 1970. The number of spectacles fabricated for members of the active Army, retirees, and dependents showed an increase,



while production for the Navy and Air Force continued to decline. Table 10 provides optical fabrication program production statistics for fiscal years 1971-1975.

Hospital construction.--One hospital construction project was completed during the current reporting period. This was a clinic addition to Patterson Army Hospital, Fort Monmouth, New Jersey.

In addition to the one completed project, six others, begun during preceeding years, continued in progress as of 30 June 1975. These were as follows:

1. Dwight David Eisenhower Army Medical Center, Fort Gordon, Georgia: new 760-bed hospital.
2. Womack Army Hospital, Fort Bragg, North Carolina: clinic addition.
3. Walter Reed Army Medical Center, Washington, D.C.: new 1280-bed hospital.
4. Martin Army Hospital, Fort Benning, Georgia: clinic addition.
5. McDonald Army Hospital, Fort Eustis, Virginia: clinic addition.
6. Leonard Wood Army Hospital, Fort Leonard Wood, Missouri: clinic addition.

The following hospital construction projects were begun

during the past year:

1. U.S. Military Academy, West Point, New York: new 65-bed hospital.
2. Kenner Army Hospital, Fort Lee, Virginia: clinic addition.
3. Redstone Arsenal, Alabama: new 40-bed hospital.
4. Irwin Army Hospital, Fort Riley, Kansas: clinic addition.
5. DeWitt Army Hospital, Fort Belvoir, Virginia: electrical/mechanical upgrading.
6. Dunham Army Hospital, Carlisle Barracks, Pennsylvania: electrical/mechanical upgrading.

Other Medical/Dental Construction Projects

The following projects were also under way at the close of FY 1975:

a. New 28 treatment room dental clinics at the following locations:

- (1) Fort Lewis, WA
- (2) Fort Carson, CO
- (3) Fort Hood, TX
- (4) Fort Bragg, NC
- (5) Fort Campbell, KY
- (6) Fort Leonard Wood, MO
- (7) Fort Jackson, SC
- (8) Fort Sill, OK

b. Western Medical Institute of Research, Presidio of San Francisco, CA: Phase III of new laboratory.

- c. Fort Detrick, MD:
  - (1) Refuse Incinerator
  - (2) Water Plant waste treatment facilities
  - (3) Water pollution control monitoring station
  - (4) Electric power improvements
- d. Walter Reed Army Medical Center, Washington, DC:
  - (1) Hospital parking facilities
  - (2) New barracks and enlisted open mess
  - (3) New laundry
- e. Fort Gordon, GA: New medical barracks
- f. Tobyhanna Army Depot, PA: Medical equipment maintenance facility.
- g. Redstone Arsenal, AL: Troop health clinic
- h. Medical/Dental Clinics at the following locations:
  - (1) Presidio of Monterey, CA
  - (2) Seneca Army Depot, NY
  - (3) Fort Bliss, TX

Table 10 .--Spectacle fabrication support  
rendered by Army optical laboratories worldwide  
fiscal years 1971-75  
(thousands of pairs)

Recipient	1971	1972	1973	1974	1975
Total output worldwide.....	1,515.9	1,219.2	1,094.1	1,027.9	1,020.7
Army.....	876.5	591.3	486.5	432.6	439.8
Navy.....	46.5	24.0	20.1	18.3	14.8
Air Force.....	425.1	413.0	374.9	355.0	332.4
Other (includes dependents and retirees).....	167.8	190.9	212.6	222.0	233.7

Source: Optical Laboratory Report, MED-199.

## Army Stock Fund

Procurement Funds. -- The Army Stock Fund provides for the acquisition of long-lead-time items required by AMEDD treatment facilities at the retail level. Wholesale functions are managed by US Army Medical Materiel Agency. Fiscal year 1975 Army Stock Fund sales of medical-dental items were \$126.1 million worldwide. Total <sup>Peacetime Force Materiel</sup> assets on hand and on order were \$47.8 million. Worldwide, Army Stock Fund, Medical Dental Materiel, and Prepositioned War Reserve Requirements managed by US Army Medical Materiel Agency amounted to \$186.5 million. Assets on hand and on order were \$120 million.

Medical care support equipment required in the operation of TDA Army Medical Department activities and facilities is financed by the Other Procurement, Army (OPA) appropriation. Requirements are reported through Medical Care Support Equipment (MEDCASE) to OTSG for subsequent funding by the OPA appropriation. The approved FY 1975 OPA Program was \$36.0 million, a 34 percent increase over FY 1974. A major portion of the increase is for equipment requirements for programmed major medical military construction projects: new hospitals (Walter Reed, US Military Academy, Fort Gordon); hospital clinic additions (Benning, Eustis, Lee, Monmouth, Riley, Wood); new health clinics (Bliss, Presidio of Monterey); and new dental clinics (Bragg, Campbell, Carson, Hood, Jackson, Lewis).

Automated Systems. → SAILS ABX is aimed at giving the Army a single automated supply system. System design had substantially been completed in FY 75. An Initial Design Review of system features was held in Hawaii to discuss shortcomings and operational problems, and to propose solutions. The system was determined to be sound, but required some reconfiguration to reduce run time and to provide the capability for processing in both an OS and DOS executive software mode.

Plans were finalized for extension of the "B" Depot portion of SAILS ABX in Europe depots and planning was begun to extend SAILS ABX in USAMEDCOMEUR and US Army Health Services Command in CONUS. System testing and development was constrained during the year due to a lack of travel funds.

Several key events occurred during FY 75 in the AMEDDPAS (Property Accountability Control) system. The system was designated as an Interim DA Standard System (Class A2) by the Director, Management Information Systems, Office of the Vice Chief of Staff of the Army. This designation permits full extension of AMEDDPAS to medical activities in CONUS. To further facilitate CONUS extension the system machine language was converted from AUTOCODER to COBOL. The conversion resulted in an ability to run AMEDDPAS on computers now used to support installation level administrative tasks.

While AMEDDPAS is planned for extension to virtually all CONUS MEDDACs and Medical Centers there remains a controversy between Office, Deputy Chief of Staff for Logistics, Director, Management Information

Systems Offices, AVCSA, and the Army Medical Department over which property book system will become the standard Army system for the AMEDD, the ODCSLOG Property Book/Army Equipment Status Report or AMEDDPAS. This controversy was not resolved during the year.

## TRI-SERVICE MEDICAL INFORMATION SYSTEM

During FY 75 the concept for a TRIMIS system was further defined. TRIMIS is a computer system designed to operate within hospital walls and to tie together medical and supply information. The system envisioned will be composed of subsystems to support operations in logistics, food service, the laboratory, pharmacy, radiology and central appointments. System design concepts envision use of a single data base to service all subsystems and a communication network to move information into and out of the data base in response to the needs of hospital administrators and health care providers.

The logistics subsystem known as the Hospital Logistics Subsystem (HLS) involves automated support to the following functions:

- a. management of consumable and reusable supplies and equipment
- b. preventive maintenance and repair of equipment
- c. general housekeeping and specialized area decontamination
- d. materiel distribution and removal services
- e. various catalogs for ordering supplies and equipment and scheduling services
- f. manual and automated management actions to control subsystem operations

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## Patient Administration Office

Reorganization and redesignation of the Patient Administration and Biostatistics Office.--During the past year, a reorganization and redesignation of the Patient Administration and Biostatistics Office was accomplished. Effective 27 January 1975, the Patient Administration Systems and Biostatistics Element of this office was detached and reassigned to the Health Services Command; those elements remaining under the jurisdiction of The Surgeon General were redesignated as the Patient Administration Office. The detached functions were relocated to Fort Sam Houston, Texas.

Patient administration course.--On 20-22 May 1975, a short course entitled "Current Trends in Patient Administration" was conducted at the Academy of Health Sciences. It was attended by 85 conferees, who represented all but two of the Medical Department Activities in the continental United States. The selection of topics was deemed excellent on the basis of favorable course critiques, and Fort Sam Houston made a favorable impression as a site for the meeting because of cost advantages in travel and housing, and by the immediate availability of knowledgeable speakers.

Freedom of Information Act.--Classes on the provisions and implications of the Freedom of Information Act (FOIA) were conducted for all elements of the Surgeon General's Office. Additionally, a supplement to AR 340-17, "Release of Information and Records from

Army Files," containing in-house guidance for the FOIA was published and distributed. Guidance for field use of this supplemental information was provided by a DA message.

Revision of selected Army regulations.--In other activity during the reporting period, revisions of the following Army regulations were completed: AR 40-350, "Medical Regulating To and Within The Continental United States"; AR 40-15, "Medical Warning Tag and Emergency Medical Identification Symbol"; AR 40-16, "Special Notification-Injury Cases"; and AR 40-2, "Army Medical Treatment Facilities, General Administration."

#### Plans and Operations

Realignment of medical units.--During the past year, three Medical Department units were discontinued; one was reassigned; and two were organized. Those organizations discontinued were as follows:

1. U.S. Army Medical Research Laboratory, Fort Knox, Kentucky, effective 1 July 1974.
2. Staff Support Activity, Office of The Surgeon General, effective 21 October 1974.
3. U.S. Army Health Services Data Systems Agency, Fort Detrick, Maryland, effective 21 October 1974.

Effective 1 July 1974, the Blood Donor Center of the U.S. Army Medical Research Laboratory, U.S. Army Medical Research and Development Command, was reassigned to the Commander, U.S. Army

Health Service Command.

The following units were organized:

1. U.S. Army Medical Department Personnel Support Agency, Washington, D.C., effective 21 October 1974.
2. U.S. Army Triservice Medical Information Systems Agency, Washington, D.C., effective 1 November 1974.

Armed Forces Regional Health Services System.--In operation in the continental United States since 1 October 1973, the Armed Forces Regional Health Services System has encouraged cooperation between medical representatives of the component services at all levels. Commanders and chiefs of services of all medical facilities in specified geographical areas now meet on a regular basis to solve mutual problems and to insure the highest achievable quality and quantity of patient care within existing resource, personnel, and fiscal constraints. Manpower shortages in critical specialties are being offset by local or regional agreements to share available personnel to the maximum extent.

At the Department of Defense level, the three Surgeons General, encouraged by the favorable trends in CONUS, have initiated action to extend the regionalization concept to oversea commands. The establishment of a triservice neurosurgical treatment center in Europe was also recommended.

In other activity aimed at improving the regionalization system, a triservice working group under the guidance of the three Surgeons General completed a review of terms, definitions, and policies

pertaining to admissions, discharges, patient leave programs, and biostatistical data collection. Many variances among the three military departments were thereby resolved, representing a tremendous step forward in establishing uniform patient management procedures. On 30 August 1974, the proposed changes were submitted to the Assistant Secretary of Defense (Health and Environment) for review and subsequent revision of applicable DOD directives.

## DIRECTORATE OF RESOURCES MANAGEMENT

### Planning and Policies

Surveys of military medical resources management.---Two major studies of Defense Department medical services continued in progress during the year and were extended into fiscal year 1976. The largest of these, a combined OMB/HEW/DOD (Office of Management and Budget/Department of Health, Education and Welfare/Department of Defense) study initiated during fiscal year 1974, is designed to assess the future capabilities of current military medical programs and to recommend needed improvements, including cost-saving measures where applicable. It may well be one of the most important and far-reaching surveys of AMEDD operations undertaken in recent years. The second study is the Denver Test, which is attempting to achieve maximum utilization of Army health care facilities through revision of current practices within the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Underutilization of existing DOD medical facilities has been one of the principal issues cited by recent Congressional investigations of the soaring costs and alleged mismanagement of CHAMPUS.

### Programing and Analysis

Medical workloads.---The medical care composite workload in

Army facilities continued to decline during fiscal year 1975, although the rate of decrease was considerably less than that experienced during fiscal year 1974.

The most significant trend was a 9 percent decrease in bed occupancy among all patient categories, while over the same period the strength of the Army decreased by only 1 percent. A reduction in the bed-occupancy rate was primarily the result of a shorter length of patient stay, which for all patient categories declined from an average of 8.36 days during fiscal year 1974 to 7.76 days during the past year. For active-duty personnel, the average length of stay during fiscal year 1975 was 9.86 days, compared to 11.24 days during fiscal year 1974.

A comparison of the average daily workload during fiscal year 1975 with that during fiscal year 1974 reveals a decrease of 1.7 percent in the number of Medical Care Composite Units (MCCU's) accomplished worldwide. Additionally, the number of admissions to Army facilities worldwide declined by 2.3 percent; beds occupied decreased by 9.2 percent; live births declined by 14.3 percent; and the number of clinic visits increased by 3.5 percent. The increase in clinic visits is indicative of the continuing emphasis being placed on outpatient care.

Prices.--The cost of inpatient care at Army medical treatment facilities rose by 13.6 percent during fiscal year 1975, averaging \$138.15 per day worldwide. Since fiscal year 1970,

inpatient costs have increased by 220.1 percent. Among the major commands, the highest expenses were incurred in Korea, where an average day of inpatient care cost \$155.11. The lowest cost, \$132.13, per day, was recorded in USARJ (United States Army, Japan). For the second consecutive year, the cost of inpatient care in Army facilities was greater than that at civilian community hospitals, which was estimated to be \$127.36 per day.

The cost of outpatient care also continued to increase, averaging \$15.35 per visit worldwide. This is 7.0 percent above the cost of a similar visit during fiscal year 1974 and is 113.2 percent above fiscal year 1970 levels. Among the major commands, the highest cost per visit, \$20.23, was incurred in USARJ, and the lowest, \$14.99, in the MEDDAC's under the jurisdiction of the Health Services Command.

In contrast to inpatient and outpatient medical care, the cost of a dental procedure in Army facilities declined by 4.9 percent during the past year, averaging \$9.42 per treatment. The cost of a similar procedure during fiscal year 1974 was \$9.91, while in fiscal year 1970 it was \$4.80. Dental procedures were most expensive in USAREUR (United States Army, Europe), averaging \$9.90, and least expensive in Korea, where the average cost was \$8.95 per procedure.

#### Manpower Programing

Officer authorizations.--Total authorizations for AMEDD officers decreased from 16,122 on 30 June 1974 to 15,722 as of 30

June 1975. The largest loss, 396 spaces, occurred in the Medical Service Corps. All other corps underwent smaller reductions, except the Medical Corps, which gained 210 positions. The following is a comparison of fiscal yearend authorizations by corps for 1974 and 1975:

<u>Fiscal Year</u>	<u>MC</u>	<u>DC</u>	<u>VC</u>	<u>MSC</u>	<u>ANC</u>	<u>AMSC</u>	<u>Total</u>
1974	4,302	1,822	488	5,210	3,830	470	16,122
1975	4,512	1,800	450	4,814	3,706	440	15,722

During the last half of fiscal year 1975, the Manpower Programing Division and all major Medical Department commands were required to undertake a complete review of fiscal year 1976 requirements and authorizations for AMEDD officer positions, including grades and MOS's (military occupational specialties). Although not completed, this re-evaluation has thus far resulted in the elimination of 893 AMEDD officer operating positions for fiscal year 1976. It is scheduled to continue until the submission of the fiscal year 1978-1982 Program Objective Memorandum document in May 1976.

Personnel utilization.--A total of 49,792 personnel were utilized in patient care activities in fixed Army hospitals worldwide during the past year, compared to 51,358 utilized during fiscal year 1974. Of these, 30,677 were military and 19,115 were civilian, both of which represent reductions from fiscal year 1974 operating levels.

The fiscal year 1975 programed patient care staffing ratio



per 100 average daily medical care composite units was placed at 125.0, the level at which it has remained since fiscal year 1972. The actual staffing ratio was 132.6, marking the third consecutive year in which the actual staffing ratio has exceeded the programmed figure. Actual staffing ratios have risen each year since fiscal year 1970 as the result of both a conscious effort to improve inadequacies, as well as overstrengths resulting from a rapid decline in Army strength.

#### Budget and Fiscal

Total dollar resources expended to accomplish the Army medical mission during fiscal year 1975 increased by \$36.2 million to a level of \$1,144.6 million. This occurred despite the fact that OMA (operation and maintenance, Army) direct expenditures decreased from \$607.7 million during fiscal year 1974 to \$506.2 million during fiscal year 1975 due to the transfer of CHAMPUS programing and operational responsibility to the Department of Defense on 1 July 1974. The increase can be attributed primarily to (1) the continued increase in civilian salaries authorized by Congress, (2) the DA-directed civilianization of enlisted personnel spaces, and (3) the continued rise in the cost of medical supplies. The latter increase was mainly the result of technological change. OMA gross obligations (direct plus reimbursable) by major command for fiscal years 1971-1975 are presented in table 11.

In addition to OMA funds, other costs for Army medical operations were incurred in the following categories in the amounts indicated:

<u>Category</u>	<u>Amount (millions of dollars)</u>
Military Personnel, Army.....	\$467.9
Reserve personnel, Army.....	9.6
Other procurement, Army.....	35.0
Research and development, Army.....	57.9
Military construction, Army.....	<u>68.0</u>
Total.....	\$638.4

Table 11  
OMA medical service activities worldwide  
gross obligations, by major command

fiscal years 1971-1975  
[millions of dollars]

Command	1971	1972	1973	1974	1975
Total OMA <sup>1</sup> .....	\$692.6	\$831.8	\$893.9	\$1,013.5	\$548.8
The Surgeon General.....	495.3	620.5	658.5	543.3	28.0
U.S. Army Health Services Command <sup>2</sup> .....	--	--	---	367.0	436.9
U.S. Army, Europe.....	29.9	34.9	44.5	59.0	59.4
U.S. Army, Japan <sup>3</sup> .....	--	--	--	--	10.4
Korea <sup>3</sup> .....	--	--	--	--	3.6
U.S. Continental Army Command.....	126.8	139.0	148.2	--	--
U.S. Army, Pacific <sup>4</sup> .....	24.6	25.1	27.8	30.5	--
Other.....	16.0	12.3	14.9	13.7	10.5

<sup>1</sup> Includes direct and reimbursable obligations.

<sup>2</sup> Activated 1 July 1973. <sup>3</sup> Activated 1 July 1974.

<sup>4</sup> Deactivated 1 July 1974.

Source: Status of Approved Operating Budget, RCS CSC FA-218.

## CORPS ACTIVITIES

### Medical Corps

Strength and trends.---The number of medical officers on active duty as of 30 June 1975 was 4,496, or 16 less than the authorized strength of 4,512. By way of comparison, the actual and authorized strengths as of 30 June 1974 were 4,403 and 4,302, respectively.

In the second year of an all-volunteer environment, the principal concern of the Medical Corps continued to be the procurement and retention of qualified personnel. The Corps remained heavily dependent on medical officers obligated under the discontinued Berry Plan, who represented approximately one-half of the active physician force. Without them, it is certain that in the absence of a "doctor draft," the Medical Corps could not have accomplished its mission during fiscal year 1975.

One approach to the problem of physician retention has been to provide increased financial incentives for those medical officers who agree to remain on active duty, and to this end, Congress, on 6 May 1974, passed the Uniformed Services Variable Incentive Pay Act. The impact of this legislation was lessened, however, when its implementation was delayed by the Department of Defense, giving rise to serious dissatisfaction among military physicians. Discontent

was particularly acute among medical officers with significant obligations, especially Berry Plan physicians. Moreover, implementation, once begun, turned into an ordeal due to the large number of individual situations that began to surface as experience was gained.

The employment of physician extenders (paramedics) is another method being pursued to help alleviate the shortage of medical officers and make maximum use of existing manpower resources. During the year, additional physicians' assistants were assigned to maneuver battalions, where, along with those assigned during fiscal year 1974, they have quickly proven the wisdom of implementing this program. Several areas, however, are in need of improvement. Among these are the further refinement of a continuing medical education program and a career-progression plan for physicians' assistants, some diversification of assignments, and the appointment of a part-time consultant to serve as their advocate and point of contact in the Medical Corps Career Activities Office.

An increase in the number of applications received from physicians with prior military service was also a promising development. Among the factors cited by these applicants as being influential in their decision to seek a return to active duty were dissatisfaction with various aspects of the Medicare and Medicaid programs, the threat of national health insurance, and the sharply rising cost of malpractice insurance. These and other considerations are apparently serving to make a career in military

medicine more attractive.

Primary care.--Medical residency programs during fiscal year 1975 were characterized by an increased emphasis on primary care specialties, including family practice, internal medicine, pediatrics, and obstetrics and gynecology. This shift of emphasis was directed by The Surgeon General and is in accord with the importance now being placed on primary care in civilian medical practice.

#### Dental Corps

Strength.--At the close of fiscal year 1975, there were 1,856 dentists on active duty Armywide, an increase of 58 over the actual strength at the end of fiscal year 1974. During the same period, the authorized strength of the Dental Corps declined from 1,822 to 1,800, resulting in a yearend overstrength of approximately 3 percent.

Revised Oral Health Maintenance Program.--On 4 October 1974, a modification of the Oral Health Maintenance Program was announced through the publication of a Headquarters, Department of the Army letter directing commanders to require all military personnel under their jurisdiction to receive an annual oral health evaluation during their anniversary month of birth. This evaluation is to include a complete dental and oral examination, counseling concerning oral self-care, and, if needed, an appointment for corrective treatment.

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Before implementation of the revised program, only those personnel over 25 years of age were required to have an annual dental evaluation; however, an assessment of dental emergency rates and their adverse effect on mission accomplishment indicated that all soldiers, regardless of age, should receive an annual checkup. In this manner, the dental care received over the course of an entire career should not only reduce the dental emergency rate and loss of duty time, but should also result in the completion of significant dental care before retirement. To assist commanders in ensuring that all personnel receive the annual evaluation when required, the examination was entered as a monthly suspense item in the Standard Installation/Division Personnel System (SIDPERS).

Dental care policy.--As part of the continuing effort to maintain the highest standards of dental health throughout the Army, the Assistant Surgeon General for Dental Services issued several policy directives pertaining to the delivery of dental care. Procedures were established and disseminated concerning the use of inhalation and intravenous sedation in the general dentistry environment; the continuation of the program of self-application of stannous fluoride preventive dentistry paste; the disinfection and sterilization of dental instruments and materials; and the supplemental fluoridation of water supplies at isolated facilities, such as schools, located in areas where the main water system is not fluoridated.

Organizational review of dental services.--On 11 February 1975, The Surgeon General announced the formation of an ad hoc committee to review the current organization of dental services and make appropriate recommendations for improvements where indicated. The Assistant Surgeon General for Dental Services was appointed to chair the committee, which, in addition to himself, was comprised of the Directors of Health Care Operations, Resources Management, and Personnel. On 22 May 1975, the committee submitted its findings and recommendations to The Surgeon General, and these are currently being studied. If approved, the recommendations will be implemented during fiscal year 1976.

Publications.--Several technical publications were rewritten during the year in order to provide dental officers with up-to-date professional guidance. Included among these were Technical Bulletin, Medical (TB MED) 5, "Preventive Dentistry"; TB MED 148, "Regional Dental Activity Prosthodontic Service"; TB MED 250, "Recording Dental Examinations, Diagnoses and Treatments"; and TB MED 266, "Disinfection and Sterilization of Dental Instruments and Materials."

In addition to the above-mentioned technical bulletins, minimum requirements for the continuing education of dental officers, as well as for enlisted and civilian Dental Therapy Assistants, were recently published, and a major modification in reporting dental workloads was announced through publication of a revised AR 40-184, "Dental Service Report." This change, which will involve more



detailed reporting based on actual dental procedures, was necessary in order to bring the Army system more in line with the Navy and Air Force workload reporting systems.

### Veterinary Corps

Strength.--Veterinary officers on active duty at the close of fiscal year 1975 numbered 431, a decline of approximately 6.5 percent compared to those on active duty at the close of fiscal year 1974. The authorized Corps strength was also reduced during the same period to a fiscal yearend level of 450, or approximately 8 percent less than the authorized strength as of 30 June 1974.

Training.--On 1 January 1975, the U.S. Army Veterinary Service training mission was transferred to the Academy of Health Sciences, Fort Sam Houston, Texas. As a consequence, the U.S. Army Medical Department Veterinary School, Fort Sheridan, Illinois, was deactivated on 31 January 1975, bringing to a close a period of long and distinguished service. The Veterinary School was established at the Chicago General Supply Depot in 1920 and in 1970 was the recipient of the Department of the Army Distinguished Military School Award. For 54 years it offered courses for both officer and enlisted veterinary service personnel and, in addition, provided training materials to units in the field. The transfer of the mission represented a cost savings and was part of the Army's overall effort to reduce support activities and increase its combat structure.

In keeping with the emphasis on interservice cooperation, the Army and Air Force Veterinary Services have agreed upon a plan for the mutual training of enlisted veterinary specialists. Under the terms of the agreement, the Air Force will consolidate/collocate all of its veterinary service training programs at Brooks Air Force Base, Texas, and the Army will provide 8 weeks of training for Air Force veterinary specialists at the Academy of Health Sciences. This training will be given in concert with the U.S. Army Basic Food Inspection Procedures Course periodically scheduled by the Academy for the training of personnel in MOS 91R10. Eventually, all Army/Air Force veterinary courses will share areas of mutual applicability. Training specific to the mission of the Air Force Veterinary Service will continue to be offered at Brooks Air Force Base.

Food Hygiene Activities. -- During fiscal year 1975, Veterinary Service personnel inspected over 17.6 billion pounds of food, rejecting some 64.8 million. Personnel continued to study the feasibility of establishing microbiological standards for certain food products such as comminuted meats and salads. This study, began during fiscal year 1974, has proven to be a difficult task due to numerous variables such as the microbiological quality of ingredients, processing and packaging methods, and storage conditions and temperatures. If the effort is successful, however, it would be of considerable value to public health and quality assurance personnel in both the military and civilian communities.

Periodically, the Food and Drug Administration and the

U.S. Department of Agriculture issue hazardous food recalls or alerts due to reports of contamination such as botulism, foreign material, or other conditions which render food products unfit for human consumption. On such occasions, immediate action is required to identify, locate, and suspend from issue food items potentially dangerous to the health of members of the Armed Forces and their dependents. To help meet this need as efficiently as possible, the Office of the Chief, U.S. Army Veterinary Corps, recently took action which resulted in the establishment of a formal military recall system designated as the "Notification System for Hazardous Food Recalls." Additionally, AR 40-660 was published containing guidelines for implementing the new system. As a result, a plan of operation is now in existence whereby accountable officers and inspection personnel can be quickly alerted to such emergencies on a worldwide basis.

#### Medical Service Corps

Strength.--The authorized strength of the Medical Service Corps as of 30 June 1975 was 4,814, whereas the actual strength as of the same date was 4,957. This represents a decline of approximately 7 percent in both the actual and authorized Corps strengths, and is generally in accord with the pattern noted throughout the Army. Among MSC officers in grades O-5 and O-6, the number of those on active duty fell below authorized levels, while in grades O-4 and below, the opposite was true. Overall distribution by grade was as follows:

<u>Grade</u>	<u>Authorized</u>	<u>Actual</u>
Brigadier General (O-7).....	1	1
Colonel (O-6).....	202	155
Lieutenant Colonel (O-5).....	571	459
Major (O-4).....	811	850
Captain (O-3).....	1,917	1,992
1st Lieutenant/2d Lieutenant (O-2/O-1)	<u>1,312</u>	<u>1,500</u>
Total.....	4,814	4,957

As in previous years, MSC officers continued to be well represented among major Army commands and activities worldwide, providing essential support in a variety of missions. The following is illustrative of the Corps' worldwide distribution:

<u>Command</u>	<u>Number Assigned</u>
Health Services Command.....	2,114
The Surgeon General/Field Operating Agencies..	348
United States Army, Europe.....	506
Korea (Eighth Army).....	87
United States Army, Japan.....	79
Army Air Defense Command.....	1
Army Communications Command.....	1
Training and Doctrine Command.....	80
Development and Readiness Command.....	26
Military District of Washington.....	2
Forces Command.....	824

<u>Command</u>	<u>Number Assigned</u>
Recruiting Command.....	7
Thailand.....	10
Department of the Army (Headquarters).....	92
Department of the Army (Field Operating Agencies)	16
Department of Defense.....	<u>38</u>
Total.....	4,231

The remaining 726 MSC officers on active duty were listed as reimbursables or as transients, patients, and students (TP&S).

Organizational review.---The Medical Service Corps is a complex organization composed of numerous interdisciplinary skills. In an effort to ensure that its various missions are accomplished as efficiently as possible during an era of severe budgetary and personnel constraints, fiscal year 1975 was devoted to a review of current personnel, materiel, and fiscal policies. The meeting of materiel needs and the effective utilization of equipment are expected to remain as one of the Corps' primary concerns for the remainder of this decade and into the next. It will require a dedicated effort on the part of each officer.

Considerable emphasis was placed on achieving a more effective utilization of available personnel through the development of an improved career management program and a redefinition of basic manpower requirements. The Corps is also reexamining the needs of its personnel for continuing education with the goal of

ensuring that all of its members are provided with adequate educational opportunities. Cross training of MSC officers has been initiated in several vital areas, which should serve to make the Corps more responsive to the needs of the Medical Department. Additionally, a Senior Advisory Council has been established to provide a forum for constructive ideas from all members of the Corps.

#### Army Nurse Corps

Strengths and trends.--At the beginning of fiscal year 1975, the actual strength of the Army Nurse Corps was 3,731, or 25 more than the authorized strength of 3,706; however, by the close of the year, both the actual and authorized strengths stood at 3,706. Approximately 2,221 civilian nurses were employed to augment this professional staff. Grade distribution among ANC officers showed no significant change during the reporting period, and as of 30 May 1975, 80 percent were company grade and 20 percent were field grade. The number of Regular Army officers increased from 956 to 989. Male officers continued to account for 26 percent of the active Corps strength, and the number of married officers remained at 38 percent. Of those married, 73 percent were male, which is essentially the same proportion as in the previous year.

As in fiscal year 1974, an effort was made to keep the number of PCS (permanent change of station) moves among ANC personnel to a minimum. Among the steps taken to achieve this goal

was a modification of rotation policies for all foreign service tours (FST's) through the imposition of an involuntary extension of 3 months in long-tour areas (e.g., USAREUR) and a 1-month extension in short-tour areas (e.g., Korea). Other actions included liberalization of FST extension policies and stabilization of duty tours from 3 to 4 years. A reduction of the funds available for PCS moves also served to decrease the number of reassignments within the continental United States.

Several closings, downgradings, and/or termination of nursing services at various AMEDD treatment facilities necessitated the relocation of numerous ANC officers. Among these were the termination of OB-GYN nursing services at the Fort Meade, Fort Devens, Fort Lee, Fort Eustis, and Fort Monmouth U.S. Army Medical Department Activities (MEDDAC's) and the closure of the MEDDAC at Dugway Proving Ground, Utah. The deletion of military spaces at the U.S. Army Health Clinic, Thailand, and at the Minneapolis Army Health Clinic, as well as the closure of the U.S. Army Health Clinic, Fort McArthur, California, also resulted in ANC transfers. Additionally, conversion of the MEDDAC at Carlisle Barracks, Pennsylvania, into a health clinic reduced the authorized ANC spaces there from nine to four.

Other actions which brought about a reduction of ANC personnel authorizations included the reorganization of the Eighth U.S. Army, Korea; the proposed transfer of the U.S. Army Hospital, Okinawa, to the U.S. Navy; and plans to downgrade the U.S. Army

Hospital, Camp Zama, Japan, to health clinic status.

Career development.--A total of 430 ANC officers participated in clinical nursing specialty and career courses during the past year. These were distributed as follows:

<u>Course</u>	<u>Attendance</u>
Anesthesiology for ANC Officers.....	46
Community and Environmental Science.....	24
Operating Room Nursing.....	35
Nurse Clinician, Ambulatory Care.....	32
Nurse Clinician, Intensive Care.....	48
Nurse Clinician, Obstetrics & Gynecology.....	16
Nurse Clinician, Pediatrics.....	32
Nurse Clinician, Psychiatric/Mental Health....	24
Maternity and Gynecology Nursing.....	29
AMEDD Officers Advanced Course.....	65
Command and General Staff College.....	1
Health Care Administration.....	4
Long-term civilian education (includes some carry-over input from previous year)	
Doctoral programs.....	2
Master's Degree Program.....	41
Degree completion programs.....	<u>31</u>
Total.....	430

In addition to those attending the above-listed courses,



approximately 200 officers participated in various military and civilian short-term educational programs.

During fiscal year 1975, the Army Nurse Corps Educational Program continued to focus on preparing nurse practitioners to function in the various specialty fields of the Nurse Clinician Program. Clinical practice programs are designed to promote maximum utilization of professional nursing skills within the AMEDD health care delivery system and currently include psychiatric/mental health, ambulatory care, obstetrics and gynecology, pediatrics, intensive care, and nurse midwifery.

The 12-week Maternity and Gynecology Nursing Course established during fiscal year 1974 at Tripler Army Medical Center has enhanced the Medical Department's capabilities for providing highly qualified maternal and child health nurses. Moreover, graduates of this program provide the Army Nurse Corps with a potential source of personnel for the more advanced obstetrical and gynecological and nurse midwifery programs.

Negotiations with the University of Texas during the past year resulted in an affiliation agreement whereby the University will award graduate-level credits to qualified graduates of the five nurse clinician programs. This affiliation will strengthen these programs and assist ANC officers in obtaining college credit for their work. In addition, the members of the nurse clinician pro-

gram faculty are eligible under the terms of the agreement for credentialling and appointment to the faculty of the University.

Under a separate agreement, graduates of the 9-week Community Health and Environmental Science Course may obtain graduate-level credit from Tulane University.

Efforts continued to obtain a university affiliation for the 104-week Anesthesiology Nursing Course currently conducted at William Beaumont Army Medical Center. This course was developed to replace the former U.S. Army-University of Hawaii program in medical, surgical, and anesthesiology nursing.

In other training developments, a special 1-week course in regional anesthesia was conducted for selected nurse anesthetists. Graduates are qualified to assist in the new teaching and credentialling program for nurse anesthetists in the regional anesthesia specialty.

#### Army Medical Specialist Corps

Strengths and trends.--The authorized strength of the Army Medical Specialist Corps for fiscal year 1975 was 440, a reduction of approximately 6.4 percent from the 470 spaces authorized for fiscal year 1974. These positions were distributed among the three sections of the Corps as follows: Dietitian Section, 186; Physical Therapist Section, 183; and Occupational Therapist Section, 71. The actual yearend strength was 449, consisting of 179 dietitians,

191 physical therapists, and 79 occupational therapists. Male officers continued to comprise approximately 38 percent of the Corps' active strength, with the highest percentage in occupational therapy and the lowest in dietetics. Forty-three percent (200 officers) of the Corps held Regular Army commissions.

Personnel changes.--On 12 July 1974, COL Patricia Accountius was sworn in for a 4-year statutory term as chief of the Dietitian Section and as assistant chief of the Army Medical Specialist Corps. She replaced COL Virginia McGary, who retired in late June 1974 for reasons of health.

An additional change in the Office of the Chief, AMSC, occurred on 30 June 1975 when COL Mary F. Westhoven, assistant chief of the Corps and Chief, Physical Therapist Section, retired from active duty. LTC Mary Van Harn, chief of the Physical Therapy Section at Walter Reed Army Medical Center, was selected to replace Colonel Westhoven. She will be sworn in on 1 July 1975.

Other key personnel changes within the Corps occurred at Headquarters, U.S. Army Health Services Command, with the retirement in August 1974 of COL Mary Preston, Dietetic Consultant. LTC Janet Hammill was appointed as her replacement.

COL June E. Williams, former chief of the AMSC (January 1970-December 1973), was sworn in as Deputy Superintendent, Academy of Health Sciences, in August 1974. She was chosen for the post late in fiscal year 1974, and her selection marks the first time

that the position has been filled by other than a Medical or Dental Corps officer.

In another personnel action of note, LTC James Johnson assumed the duties of Dietetic Consultant in Headquarters, United States Army, Europe, in July 1974.

Reorganization.—Organizational changes implemented during the reporting period resulted in the deletion of spaces for a Chief, Physical Therapist Section, and Chief, Occupational Therapist Section, from the TDA (table of distribution and allowances) for the Office of The Surgeon General. These spaces, along with their functions, were retained, however, as statutory positions, and the individuals selected to fill them will serve both in their statutory position and as chief of their respective sections at Walter Reed Army Medical Center. Also deleted from the TDA for the OTSG was the position of Nutritionist, Health and Environment Division, Directorate of Health Care Operations. LTC Barbara Brady, the incumbent in this position, was transferred to Brooke Army Medical Center, Fort Sam Houston, Texas.

For the first time in recent years, an AMSC officer was assigned with primary duties in the area of personnel career activities. The officer assigned to this position, LTC (P) Dorothy Street, continued in her statutory position as Assistant Chief, AMSC, and Chief, Occupational Therapy Section; however, upon completion of her statutory tour, she will begin working full time in the newly created

Army Medical Department Personnel Support Agency (AMEDDPERSA).

Personnel accomplishments.--In January 1975, eight AMSC officers were awarded the A prefix for professional excellence by The Surgeon General. Receiving the awards were dietitians, COL Patricia Accountius and LTC (P) Janet Hammill; physical therapists, COL Mary Westhoven, LTC Elizabeth Hamilton, LTC Virginia Metcalf, and LTC Violet Pfeiffer; and occupational therapists, COL Virginia Barr and LTC Bernadine Choren.

Upon her retirement from active duty, COL Mary Preston, former Dietetic Consultant to the Commanding General, U.S. Army Health Services Command, received the AMEDD Medallion from The Surgeon General in recognition of her almost 30 years of outstanding service.

Education and training.--A total of 14 AMSC officers were enrolled in civilian graduate schools during the year, 9 at the master's degree level and 5 at the doctoral level. Six officers were students in the U.S. Army-Baylor University Program in Health Care Administration, and of these, three were in the academic phase and three were in the residency program. In an effort to upgrade the level of military education among Corps members, several officers enrolled in either the AMEDD Officer Advanced Course or the Command and General Staff Officer Course through the correspondence of USAR School Program. Additionally, one officer attended the resident course at the Command and General Staff College. Procurement program

participants included 16 officers in the two dietetic internships, 2 in the Occupational Therapy Clinical Affiliation, and 37 in the U.S. Army-Baylor University Program in Physical Therapy.

Dietitian Section.--Work continued during the year on a task analysis of the enlisted food-service MOS, 94F, in the three skill levels, 20, 40, and 50. The task group was successful in completing the initial plans for centralizing the teaching of the 94F20 course at the Academy of Health Sciences. Consolidation of this course, currently conducted at four medical centers, will provide improved educational opportunities for the students, as well as better utilization of food-service officer and enlisted personnel. Completion of this project is scheduled for fiscal year 1976.

Physical Therapist Section.--On 18 December 1974, 21 individuals graduated from the U.S. Army-Baylor University Program in Physical Therapy. Of the 21 graduates, 9 were men, which is an increase of 5 over the previous fiscal year.

In keeping with the trend of recent years, physical therapists continued to assume broader clinical responsibilities during fiscal year 1975, principally in the areas of musculoskeletal screening and electromyographic testing. The expanding role of physical therapists is part of the Medical Department's effort to offset current and projected physician shortages by making maximum use of auxilliary personnel and allied health professionals.

Occupational Therapist Section.--Occupational therapists

were actively involved during the past year in the drug and alcohol abuse rehabilitation program being conducted at Schofield Barracks, Hawaii. This program is based upon behavior modification techniques and is designed to assist the drug or alcohol dependent soldier by providing him with substitute activities which are more socially acceptable. Results thus far have been encouraging.

In other activity during the reporting period, members of the Occupational Therapist Section continued to participate in a space criteria study of medical facilities operated by the Department of Defense. The purpose of this triservice review, which is expected to be completed during fiscal year 1976, is to recommend modification of these criteria where required.

## RESEARCH AND DEVELOPMENT

### Medical Research

Infectious disease research program.--History yields many explicit lessons concerning the impact of infectious disease on military operations. During the U.S. experience in Vietnam/Southeast Asia, for example, the number of hospital admissions due to combat injuries was consistently exceeded by the number of disease admissions, and most of these were attributable to infectious diseases. In view of this, one of the U.S. Army Medical Research and Development Command's (USAMRDC) major missions is to seek methods for improving the prevention and treatment of such diseases. This is accomplished through the infectious disease research program, which is a large-scale, integrated effort against malaria, dengue, bacterial and non-bacterial diarrheal diseases, infectious dermatologic diseases, meningococcal meningitis, respiratory disease, and a range of other diseases of potential or actual military importance.

The capability for infectious disease research was enhanced by completion of facility renovations at the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), Fort Detrick, Maryland. Class III containment facilities for the safe handling of highly virulent and infectious microorganisms were effectively tripled, and the total complex is now one of the premier laboratories in the world for infectious disease research, especially that



involving hazardous microorganisms. Although the primary mission of USAMRIID encompasses defense against biological agents, the capabilities of the facility allow research on a wide range of hazardous organisms of importance to military operations.

Bolivian hemorrhagic fever.--Research on Bolivian hemorrhagic fever (BHF), a very virulent disease endemic to certain areas of South America, is an example of the capabilities of the USAMRIID complex. Investigation and experimentation in recent years have demonstrated that monkey immune serum can be successfully employed in both the treatment and prophylaxis of BHF in monkeys, and it followed, therefore, that the established monkey model was the logical tool for the assessment of human immune serum.

In order to begin the testing of human immune serum, a project was undertaken during fiscal year 1975, through which 220 units of plasma were obtained by plasmapheresis from 16 immune donors. These units were then fractionated and lyophilized (freeze dried). In-vitro tests showed that the product had a plaque reduction neutralization titer of about 1: 2,000, and efficacy studies using the rhesus monkey model of the human disease indicated that 0.5 ml/kg given within 4 hours was sufficient to protect the monkeys from early clinical and late neurological signs of the disease. Lesser quantities, while protecting against death, did not prevent acute manifestations of the illness. The human immune globulin thus appeared to be equally as efficacious as the previously

described monkey immune globulin in protecting against this severe hemorrhagic disease. (For details concerning the testing of monkey immune globulin, consult the Annual Reports of The Surgeon General for fiscal years 1973 and 1974.)

The value of this mode of therapy was recently demonstrated when a research investigator was accidentally exposed to the BHF virus and given human immune globulin post exposure. In spite of developing a viremia of 2 day's duration--evidence of positive infection--no other signs of the illness were observed in what would otherwise have been a fatal exposure.

Antimalarial research.--The occurrence of drug-resistant falciparum malaria had a major impact on operations during the Vietnam experience, and malaria in general continues to be a threat to military operations in endemic areas. For this reason, one of the largest research efforts of recent years has been the quest for better antimalarial drugs. To achieve this goal the USAMRDC operates a highly integrated program which includes (a) drug screening; (b) new drug synthesis; (c) use of animal model systems for production, formulation, safety, efficacy, and pharmacological testing; and (d) safety and efficacy testing with human volunteers. To date, over 240,000 different compounds have been tested for antimalarial activity using a rodent screen, and, in addition, over 7,400 target compounds have been synthesized. Strains of Plasmodia which are resistant to all standard antimalarials have been recognized in several geographical areas, and screens using these strains have been

established. One drug, mefloquine (WR 142,490), currently in its final stages of testing, has been found curative in man against Plasmodium falciparum and may be a significant addition to the antimalarial armamentarium. Another drug combination, Fansidar R, appears promising as a prophylactic agent, requiring only monthly administration to be effective.

Control of insect disease vectors.--Many diseases of military importance, particularly parasitic diseases, depend upon insects for transmission to man. Research on the ecology, classification, and control of disease vectors is thus an important part of disease prevention.

One of the accomplishments of the past year was the initiating of a study to determine the feasibility of using systemic insecticides for control of ectoparasite vectors among animal populations which act as reservoirs of disease, especially plague. Also, a new method for the bioassay of insect repellents was developed, utilizing a modified membrane feeder. This will in turn allow for standardized comparisons of repellent effectiveness.

A unique new crystallization procedure was developed which simplifies the host identification of infected mosquitoes, thereby improving capabilities for epidemiological studies of vector-borne diseases with significant animal reservoirs.

As a further aid for field studies of mosquito-borne disease, an identification manual of malaria vector species in Thailand was published.

Trans Amazon basin project.---A research project of special importance was the continuation of a study of the basic epidemiology of disease in the Trans Amazon basin of Brazil and the relating of these diseases to population shifts as the area is colonized. This approach is of military significance because of the parallel with an operational situation in which troops are sent into areas with no immunologic protection against the diseases to which they will be exposed. Thus far, two such diseases have been noted. One of these is a "flu like" malady caused by the Oropouche virus, and the second is a severe, incapacitating illness designated as the hemorrhagic syndrome of Altamira. It is apparently caused by the bite of a blackfly. Other disease-vector-man relationships are currently under study, including the epidemiology of malaria.

Diarrheal disease.---One of the earliest and most incapacitating health problems encountered by troops during military operations is diarrheal disease. Research on enteric disorders during fiscal year 1975 focused on preventive measures which can be used in the future to reduce the incidence of these infections among soldiers exposed to overseas and other foreign environments.

Escherichia coli enterotoxins, for example, were characterized immunologically, and the antigenicity of these materials assessed as to their ability to induce serum antitoxins. This evaluation may in turn lead to the establishment of effective antitoxic immunity as a means of preventing disease due to enterotoxigenic E. coli. Enterotoxigenic E. coli are also being investigated as a cause of

nonspecific diarrheas, including traveler's diarrhea, in widespread geographical locations.

Other research included studies of local immunity to cholera enterotoxin, experiments designed to study the release of IgA (immunoglobulin) from gastrointestinal crypt cells, and development of an enzyme-linked immunoassay (ELISA) to quantify globulins and antibodies to cholera toxin.

Several projects were undertaken to identify the etiologic agents of acute, infectious, nonbacterial enteritis in man, and to study the pathogenesis of infection in order to provide the information necessary to achieve the ultimate goal of prevention and cure. Pathophysiological studies showed that two etiologic parvovirus agents produce a mucosal lesion of the proximal small intestine in man, whereas the structure of the gastric mucosa remains unaltered. Experiments utilizing organ cultures of human intestine revealed that exogenously applied human interferon markedly inhibits the replication of an enteric virus, echovirus type II. A reovirus-like pathogen in the stools of infants hospitalized with nonbacterial enteritis was identified by immune electron microscopy. Many of these children developed a serologic response to this agent, and serum antibodies were detected by complement fixation and immunofluorescence techniques. The findings of these studies revealed previously unknown pathophysiological events in nonbacterial enteritis and demonstrated that both parvovirus- and reovirus-like agents appear to be responsible for many cases of the disease in humans.

Dermatologic disease.--Another disease complex that was found incapacitating during military operations in Vietnam was infectious dermatologic disease. Research in this area during the past fiscal year included an experiment which monitored the onset of delayed type hypersensitivity (DTH) responses to trichophyton antigen in guinea pigs inoculated with spores of Trichophyton mentagrophytes. The animals were observed to develop positive skin tests and lymphocyte transformation ratios at 11 to 12 days post spore inoculation, at which time also the lesion reached its maximum degree of erythema. These test results were used to develop in-vitro assays for cell-mediated immunity (CMI) to help determine further the role of lymphocytes in fungal infection.

A quantitative dermatophyte infection model was developed in guinea pigs, by which it was shown that a relative immunity occurs after dermatophyte infection and that this immunity is present on the surface of the skin. An exhibit of this model won a silver award at the American Academy of Dermatology meeting in December 1974.

Other accomplishments during the period included the devising of a replica plating method for the identification of species and biotypes of micrococcaceae. This method was found to be as accurate as the current standard, yet less costly, less laborious, and far more rapid.

Meningococcal disease.--Although continued use of the Army-developed type C vaccine has greatly reduced the seriousness of meningococcal meningitis as a health problem in basic combat

training centers, the reappearance of the disease in another strain --type B, for example--remains a potential threat. Research is therefore continuing in an effort to develop protective measures against group B meningococcal disease. During the past year, a method of passive protection against meningococcal shock syndrome was advanced by demonstrating that immune globulin prevented severe hypersensitivity reactions.

Dengue and other diseases.--Work on vaccines against dengue virus continued to progress, and chemotherapy screening programs paralleling the above-mentioned antimalarial program were used to seek improved drug therapies against leishmaniasis, trypanosomiasis, and schistosomiasis.

#### Surgical Research

Treatment of shock.--Clinical studies to determine the effectiveness of an antiserum in the treatment of bacteremia and septic shock were underway at the close of the reporting period at both in-house and extramural facilities. Preliminary studies have thus far demonstrated a greatly increased survivability among animals treated with the antiserum versus those not treated. Successful development of an effective antiserum will save countless lives from the dreaded and highly fatal complication of septic shock.

Storage and preservation of whole blood.--A cooperative effort was initiated during the year between in-house and extramural contract investigators to facilitate the carrying out in the near

future of a clinical testing program for a chemical preservative known as citrate-phosphate-dextrose-adenine. The use of this new preservative solution in combination with recently developed storage techniques for whole blood has made it possible to extend the shelf-life of human blood from the previous maximum of 21 days to a potential of 42 days. Increased shelf-life has been accomplished by prolonging the preservation period of intra-erythrocytic metabolic intermediates (adenosine triphosphate and 2,3 diphosphoglycerate), which have been shown to be important to the functioning of a red cell in transporting oxygen. This is a significant development in that the availability of transfusable blood to the wounded soldier will be markedly increased.

Dental surgery.--New, more effective and economical methods of maxillofacial reconstruction are constantly being sought and studied in an effort to decrease the ravages of combat facial trauma. With this goal in mind, recent research programs have centered around tricalcium phosphate, a biodegradable material which has been shown to be (a) biocompatible, (b) capable of promoting rapid bone regeneration, (c) a viable alternative to autogenous bone grafting, and (d) useful in block or granular form for oral and periodontal defect obliteration. Currently, studies are in progress which aim at improving the quality of this material and decreasing the bone replacement factor even further, while at the same time maximizing its potential through discoveries of new applications.



## Materiel Development

Improved field x-ray system.--A research effort begun during fiscal year 1974 to develop a logistically simple diagnostic field x-ray technique continued to make progress. Following a successful demonstration with a breadboard flying spot whole body scanning x-ray system, a prototype, sufficiently sophisticated to establish the feasibility/practicality of the system as a field item, is being designed and constructed.

Field sterilization equipment.--A project to develop improved methods and equipment for the sterilization of medical/surgical supplies in the field has been underway since fiscal year 1973. By the close of fiscal year 1975, prototypes of field cleaning and sterilizing equipment had been designed and were ready for the contractor engineering test phase. In addition, the necessary arrangements and facility modifications were completed for user evaluation at an Army medical installation. This will be done to demonstrate equipment feasibility, as well as to provide data for the full-scale development phase to follow. Every effort has been made to achieve an equipment design which is both light in weight and economical to use.

Patient holding and evacuation bag.--Evaluation of several different approaches resulted in the selection of a promising design for a heated patient holding and evacuation bag, and prototypes based on this design will be constructed under a recently approved

contract. Operational and developmental testing will follow.

#### Biomedical Stress

Alcohol and drug abuse.---In recent years, the problem of alcohol and drug abuse has become a major source of concern to the Army. In response to this concern, the USAMRDC, under the direction of The Surgeon General, has undertaken numerous in-house and extramural studies in an attempt to gain deeper insight into the physiological and psychological effects of alcohol and drug dependency, and to discover new methods of prevention and treatment. The following is a summary of the various projects underway during fiscal year 1975:

1. An epidemiological study was conducted at a large Army installation in an effort to determine the impact of social and environmental factors on drug abuse, and to ascertain which, if any, of these influences might be modified to (a) reduce initial drug usage, (b) disrupt its maintenance, or (c) treat its consequences. The results of a previous prevalence survey at the same installation indicated that out of a random sampling of soldiers in pay grades E-5 and below, five percent were intermittent and opportunistic heroin users. In addition, 22 percent of those surveyed were users of more than one drug; 18 percent used marijuana exclusively; and 7 percent were exclusive users of drugs other than marijuana. During the most recent study, data was obtained through urine screening, individual and group interview questionnaires, demographic and

contract. Operational and developmental testing will follow.

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population dynamics studies, and participant observation; it is currently being evaluated.

2. Research continued on an experimental analysis of the relationship between drug usage and behavior modification. Investigators were able to show that the development of a tolerance to the behavioral effects of the drug, delta-9-tetrahydrocannabinol, can be controlled by manipulating the contingencies under which a continuing pattern of behavior can be maintained. The occurrence or nonoccurrence of such a tolerance was therefore demonstrated to be dependent upon behavioral rather than physiological variables. Analysis of the drug/behavior interrelationship is part of a larger program, the purpose of which is to describe the functional correlation between environmental variables and the behavior and physiology of an organism under conditions likely to affect the health of the soldier.

3. An effort is underway to document the patterns of endocrinological anomalies associated with heroin withdrawal in soldiers, who, because of age, health, and route of administration, may represent a unique population group. Thus far, suppression of cortisol and testosterone, coupled with an elevation of thyroxine, followed by a gradual return of all three to basal levels, appear to be the most striking features of the early withdrawal period.

4. Electrophysiological, biochemical, and behavioral data was obtained from two groups of heroin users, those undergoing complete abstinence and normal control subjects. Additionally, a

metric to scale the abstinence-induced perturbations from normalcy was developed and applied to the information thus derived. Currently, abnormalities in biorhythmic functions relating to sleep, activity, and endocrinology are being delineated.

5. In a separate extramural contract study, continuous 24-hour electroencephalographic (EEG) data obtained from heroin-dependent soldiers during withdrawal indicated a definite disruption in the total sleep pattern when compared with EEG recordings obtained from control subjects. This was the first drug abuse study in which such information was obtained by continuous monitoring, and further analysis of the data will permit an in-depth evaluation of the EEG patterns and cycles associated with heroin withdrawal.

6. Studies of heroin self-administration in baboons revealed an associated reduction in food intake which was both profound and debilitating. The initial unit dose is a powerful determinant of the ultimate intake level; however, considerable exposure to the drug may be necessary before a sustained, stable intake is attained.

7. Rats with experimental bile fistulas are being used as a model for an investigation of the biliary excretion of drugs. Thus far, examination of the bile of rats injected with morphine revealed the presence of morphine glucuronide, but no morphine. Quantitative, synchronous changes in the levels of glucose and fatty acids in the bile were also noted. The information gained from this project should enable researchers to evaluate the biliary

system as a route of drug excretion.

8. The initial results of a study of methaqualone metabolism in humans indicated that patterns of urinary metabolites may be useful in establishing the time of ingestion.

9. Research into the effects of environmental changes on the metabolism of drugs of abuse revealed that rats kept on pyridoxine-deficient diets experience less severe withdrawal from morphine than do rats maintained on normal diets.

10. In a study of the psychopharmacological effects of alcohol, it was found that the manipulation of aversive consequences in the environment of a non-human primate lawfully and systematically influences the levels of water as well as alcohol ingestion. It was thus concluded that increased alcohol ingestion is not necessarily dependent upon a stressful environment.

11. The influence of alcohol and marijuana on vision and visual performance is currently being investigated under an extramural research contract. Test results have thus far shown that use of these substances produces a clear, dose-related impairment of the subjects' ability to track and identify detail in moving targets. Recovery time following bright-light exposure also increases at the target-contrast and alcohol-dose levels tested.

Community mental health.--Fiscal year 1975 was marked by several major accomplishments in the Computer Support to Military Psychiatry (COMPSY) project. One of these was the completion of a computer-assisted inpatient psychiatric information system at Walter

Reed Army Medical Center (WRAMC). This system now includes full on-line automation of the mental status examination, the MMPI personality test, demographic information, a history of present illness, and the military and social background of each patient. An outpatient COMPSY system, initiated during fiscal year 1973 at the Fort Benning and Fort Meade mental hygiene consultation services, reached the stage of full implementation. In addition, major advances were made in the development of outpatient COMPSY systems at the WRAMC psychiatric outpatient and child guidance clinics.

At the close of the fiscal year, a protocol for an Army psychiatric epidemiology research project was being studied. The protocol will describe methods for the study of (a) the accuracy of existing information on the incidence and prevalence of psychiatric disorders in the Army; (b) the potentially alterable factors used to define a high-risk subpopulation; and (c) the adequacy of the existing treatment system based on independent assessments of the needs of the demographically changing Army community (e.g., more women, more minorities, and an all-volunteer environment).

Psychology.--A project is currently underway to identify and investigate the variables associated with social rank, behavior, and organization among a group of monkeys. On the basis of the work done to date, a positive relationship has been shown to exist between the magnitude of a frustration ratio (obtained from an operant paradigm designed to produce frustration) and the social status of the animals.

Experimental manipulation of social status is reliably reflected by changes in the performance of an operant task. Blood samples were taken from the group both before and after alteration of the social hierarchy, and an analysis of circulating testosterone levels from these samples will be forthcoming.

#### Environmental Health and Safety

Aviation medicine.--Several studies of visual performance using the AN/PVS-5 night vision goggles (NVG) were completed. Although use of the NVG causes an initial loss of dark adaptation, visual sensitivity returns to a maximum within 2 to 3 minutes. Dark-adaptation tests associated with use of the goggles showed that a 2-minute recovery time is critical to flight safety, especially to nap-of-the-earth flight. Additional studies revealed that afterimages may be expected while using the NVG; however, these are a normal physiological phenomenon and need not be of concern to the user.

An evaluation of a gold electroplated aviator ophthalmic frame was completed, and test results indicated that the nickel-silver base metal used in the frame is a cause of contact dermatitis.

Several emergency medical equipment units were assessed for use in helicopter air ambulances, including a portable defibrillator/monitor, an inflight oxygen analyzer, portable ventilators, and blood pressure measuring devices. Helicopter compatibility problems were experienced with all items. In addition, specific utilization techniques and procedures were evaluated in



helicopter aeromedical evacuation scenarios.

An experimental high performance personnel rescue hoist was tested and evaluated during the year, with particular attention being given to the physiological effects of the 500-feet-per-minute lift capability, noise-level factors, and ancillary biomedical performance data. The study results verified the feasibility of using flywheel-stored kinetic energy as a source of power for the hoist; however, the equipment reviewed was a one-of-a-kind experimental model which will require extensive engineering research before prototype development can begin. The physiological effects, as evidenced for example by the change in heart rates caused by the rapid lift speed, were identifiable but still within acceptable limits.

The U.S. Army Aeromedical Research Laboratory (USAARL), Fort Rucker, Alabama, was selected as the Army's most improved research and development laboratory and presented with a Special Award for Accomplishment by the Assistant Secretary of the Army. Highlights in a long list of achievements include the development of specifications for protective helmets for armor personnel and aircrews; design of acoustic protective devices and improved thermal protective clothing; post crash fire-survivability research; parachute medicine; aircraft visibility improvement; bioengineering research of aircraft escape systems and crashworthy troop seats; development of an objective aircrew performance methodology; and many other projects directly related to the health, safety, and efficiency of the soldier. USAARL

has more recently accepted research responsibility for the aeromedical evacuation portion of the Military Assistance to Safety and Traffic (MAST) program and has been given the lead laboratory role in vision and bioacoustic research for The Surgeon General.

USAARL was also presented with the Army Aviation Accident Prevention Award of Honor in recognition of its accident-free flying record totaling 12,500 hours and extending over the preceding 36 months. This outstanding achievement demonstrates the effectiveness of the laboratory's aviation accident prevention program, which is based upon sound safety procedures and the integration of accident prevention doctrine into all test and training activities.

The ordered growth of scientists at the Aeromedical Research Laboratory, augmented by appropriate scientific equipment, has provided the Army with a research resource that continues to identify and resolve deficiencies in life-support equipment. This has in turn resulted in real dollar savings and the conservation of the Army's most valuable resource, the soldier's fighting strength.

Environmental medicine.--During the past fiscal year, the U.S. Army Research Institute of Environmental Medicine (USARIEM) expanded its mission to incorporate The Surgeon General's responsibility for medical evaluation of and research on the Army's physical fitness program. In accomplishing this mission, an analysis of the Pro-Life Program of the 2d Infantry Division in Korea was completed, as well as other studies at various installations.

In Korea, the 2d Infantry Division's program was found to be effective in terms of raising the physical stamina of all age groups and in reducing excess body weight. This research is already giving rise to changed concepts in Army physical fitness training.

Research efforts also resulted in progress being made on several problems affecting the conduct of military operations in harsh environments. An example of this was the development of an effective means of preventing acute mountain sickness (AMS), which consists of combining a short-term residence at low altitude with the administration of acetazolamide prior to ascent to a higher altitude. Another accomplishment was the establishment of rat and dog models for use in the study of heat stroke in man. These models, in addition to providing a means of exploring new methods of prevention and treatment, will make possible a study of the factors contributing to a predisposition to heat stress problems.

Another item of note was the development of tests designed to sensitively measure the small group performance of highly specialized Army teams under conditions of environmental stress. Using these tests, a study of the effects of altitude on the performance capability of a field artillery battery's fire direction center was completed. The formal sequence for processing fire missions was observed to be most disrupted during the first 2 to 6 hours at high altitude, with maximal symptoms occurring after 32 hours. One member of the team developed moderate to severe AMS.

The AGA thermovision camera was adopted for the evaluation of footwear. This technique allows USARIEM to rapidly provide guidance in footwear design to the Army Materiel Development and Readiness Command and to recommend changes in insulation distribution and thickness to provide adequate foot protection.

Radiation.--Studies continued to be conducted into the biomedical effects of argon, ruby, neodymium, and carbon dioxide lasers, all of which will present a significant hazard to combat personnel if appropriate safeguards are not implemented. During the past year, for example, the threshold for minimal retinal damage from laser radiation was found to increase proportionally with increases in the wavelength of the laser in that portion of the spectrum between 441.6 nm and 1,064 nm, with a difference of more than three orders of magnitude between the shortest and longest wavelengths.

Initial studies were completed on the behavioral effects of microwave radiation. The experimentation was carried out with rats exposed to five different radiation frequencies, and as a result, a definite correlation was established between the level of frequency and the point at which the exposed animals stopped performing simple tasks.

Prototype electrodes and thermistor probes were developed for use in microwave fields, and evaluation of these devices was begun. When completed, this research will provide the basis for reaffirmation or modification of the existing safety standards for

microwave exposure.

In general, microwave radiation has been shown to affect the central nervous system, the eye, and the behavior of exposed animals. Because of the variations in effect observed at differing frequencies and power levels, the microwave radiation research program is being directed toward determining the optimal frequency of concern.

Sanitary Engineering.---Progress continued to be made in the field of environmental sanitation, with several projects initiated in prior years being brought to completion. The following is a summary of the principal developments:

1. Interim in-stream standards were recommended to the Environmental Protection Agency (EPA) as a result of continuing mammalian and aquatic bioassay research into the effects of wastewater components produced by the manufacturing of munitions. Included in the survey program were wastewaters from the manufacture of TNT, RDX/HMX, nitrocellulose, nitroglycerine, and white phosphorus.

2. A problem-definition study of 16 contaminants found in the soil and water at Rocky Mountain Arsenal was completed. To adequately assess the risks to man, vegetation, wild and domestic animals, and aquatic organisms, a detailed literature review of toxicological and chemical data was included in the research effort.

3. Promising chemical detoxification procedures were developed for the safe disposal of organo-phosphorus pesticides at the installation level.

4. Design criteria for a system capable of treating all

nonsanitary wastewater from field medical units to a quality acceptable for direct recycling and reuse were completed.

5. A continued improvement was noted in the virus concentration techniques used to evaluate water and wastewater quality and treatment efficiency.

6. A new, improved field procedure for measuring the free available chlorine residual in treated water was developed. This method overcomes the interferences that gave false readings with the old procedure.

7. A concept-feasibility study of an Army environmental information system was brought to a close. The results are being evaluated..

8. Design and operational criteria were finalized concerning disposal by land application of wastewater which contains pesticides and heavy metal.

9. Automated laboratory procedures were developed for analysing nitrocellulose particles in the wastewater produced by munitions plants.

Military environment.--A study of the prevalence of premature hearing loss within suspected "high-risk" branches of the Army was completed, and the results suggested that among personnel in infantry, armor, and artillery units, the percentage of those with hearing deficiencies was approximately the same for each branch. Of particular interest was the relationship noted

between the length of service and the incidence of hearing defects. From 20 to 30 percent of all personnel with 2 or more years of service in one of the above-mentioned branches exhibit clinically significant hearing loss, whereas among soldiers with 15 or more years of service, the proportion exceeds 50 percent.

#### Budget

The total cost of the Army's medical research and development program for fiscal year 1975 was \$57.9 million, of which \$40.8 million (approximately 70 percent) was expended on in-house projects and \$17.1 million (approximately 30 percent) went to cover the cost of out-of-house contractual obligations. When compared to fiscal year 1974, the above-listed expenditures show a decrease of \$3.2 million in the total cost of the program, which is attributable to a decline in the contractual research effort amounting to \$6.9 million. This reduction was partially offset by an increase of \$3.7 million in the cost of in-house research.

## MEDICAL INTELLIGENCE

The United States Army Medical Intelligence and Information Agency (USAMIIA) is charged with the production of scientific and technical (S&T) and general medical intelligence (GMI) for The Surgeon General and, through agreement, for the Department of the Army and the Department of Defense. When requested, USAMIIA also provides support to other intelligence-gathering agencies.

Production of medical intelligence.--On 1 July 1974, the Agency began the preparation of GMI in the form of medical capability studies of individual countries. These reports contain information on environmental health factors, epidemiology, public health services, military medical services, medical facilities, medical personnel and training, medical materiel, and research and development. To support this endeavor, USAMIIA entered into a contractual agreement with the Federal Research Division of the Library of Congress. Thus far, eight such studies have been completed, ~~and include the countries of Bangladesh, Egypt, Saudi Arabia, Jordan, Syria, Panama, Thailand, and North Korea.~~

Two primary studies of foreign scientific and technological capabilities were also completed. These were (1) Biological Effects of Electromagnetic Radiation--Eurasian Communist Countries, and (2) Physiological Adaptation to High Terrestrial Altitude--Eurasian Communist Countries.



Nonaligned

Biomedical

Intelligence Agency

related developments

Republic of China (PR

Support giv

included the initiati

Reserve personnel ass

to use USAMIIA GMI da

Evasion, Resistance a

two U.S. Army Reserve

designees successfully

for training purposes.

#### Expansion of

taken during the year

capabilities and to ma

information more effic

developments:

1. The Agenc

data bases: (a) Locke

Corporation Search Serv

USAMIIA to the Defense

Alexandria, Virginia, w

2. The need f

In other production-related activ

publication of a weekly intelligence brief

This action was taken as part of the Agency

to provide current medical intelligence to

users, including those involved in plans, 1

Three Military Intelligence Deta

and 424th, continued to make positive cont

intelligence mission by providing analytic

and GMI projects.

#### Support activities.--USAMIIA pro

U.S. Army Foreign Science and Technology C

Charlottesville, Virginia, by supplying me

research capability intelligence for inclu

biological warfare capabilities studies.

to the following projects:

1. Chemical Warfare Capabiliti

2. Chemical Warfare Capabiliti

Countries

3. Biological Warfare Capabili

4. Biological Warfare Capabili

Countries

5. Combined Chemical and Biolo

USSR

6. Combined Chemical and Biolo

NATO

recognized, and arrangements were completed for purchasing the necessary equipment.

3. Several steps were taken to meet requirements for additional personnel, including the identification and approval of a librarian's position. Other personnel actions involved the hiring of three intelligence research specialists and the development of an additional clerk typist's position.

4. With the cooperation of the chief of the Veterinary Corps, a requirement was established for the assignment of a veterinary officer as chief of a new USAMIIA branch which will have the responsibility for monitoring diseases of military and global significance.

5. As part of the continuing effort to satisfy tri-service medical intelligence requirements, a Naval Liaison Officer position was established. This officer acts as the (formal) interface with the Agency for the exchange of medical information and for expeditious completion of Navy quick reaction medical intelligence requirements.

by the Health Services  
Historical Unit. The  
program as of 30 June ]

## MEDICAL HISTORY PROGRAM

1. World War  
continuing with the res  
War Against Japan," and  
Operations." Both of t  
The manuscripts for "Me  
"Preventive Medicine, V  
Public Health" were at  
index for each volume w  
during fiscal year 1976  
and revisions for a vol  
writing of a summary vol  
subseries. An additions  
was overdue for delivery

2. Korea. Two vo  
dealing with the adminis  
the post World War II an  
professional services du  
projects remain in a defi

3. Vietnam/Southe  
with the AMEDD experience  
stages of preparation. (

### Discontinuance of the AMEDD Historical

June 1975, the U.S. Army Medical Department Hist  
Detrick, Maryland, was discontinued and its miss  
equipment resources transferred to the U.S. Army  
History (CMH), Washington, D.C. The former hist  
be physically relocated to Washington, D.C. The  
reorganization and a specific date for the reloc  
to be worked out. Appropriate steps are to be t  
the continuance of a viable medical history prog  
that pertaining to clinical studies. Pending it  
relocation, the medical history function will be  
the AMEDD History Division, Center of Military H

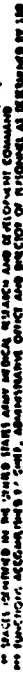
### Status of historical program.--The Me

historical program continued to move forward du  
Publications included "Neuropsychiatry in World  
Overseas Theaters"; "Emergency War Surgery, Fir  
Revision of the Emergency War Surgery NATO Hand  
of Defense project directed by The Surgeon Gene  
of Military Medicine," a Bicentennial booklet p

specialists, either singly or in teams, with editorial assistance and overall program coordination provided by The Historical Unit (Medical History Division). Included among these are volumes covering internal medicine (2 vols., multi-author), the blood program, neuropsychiatry and related specialties (multi-author), pathology and laboratory sciences, surgery (multi-author), anesthesiology (multi-author), and wound ballistics. In-house military historians were actively engaged in writing the histories of Army Nurse Corps, Dental Corps, and Veterinary Corps activities in Vietnam/Southeast Asia, as well as a monograph dealing with Army air ambulance evacuation. Preparation of the history of Army Medical Specialist Corps activities has been deferred due to the retirement of the assigned military historian, and research and writing of a monograph dealing with the medical activities of the U.S. Army Special Forces is scheduled to begin pending the arrival of the assigned military historian.

4. Miscellaneous projects. Research and writing of a history of the Medical Service Corps to 1947 was being continued by an in-house civilian historian, while a history of the Army Nurse Corps to 1947 was being written out-of-house by a retired military historian. Other projects underway in-house at the close of the reporting period included a history of the Army Medical Department from 1775 to 1818, a history of AMEDD participation in disaster relief, and a booklet entitled "Army Nurse Corps Historical Highlights."

## OFFICE OF THE SURGEON GENERAL (TDA CSW00LAA)



R. J. Deane