

DEPARTMENT OF THE AIR FORCE

(1)

# Eleventh Annual Report of the USAF MEDICAL SERVICE



1 July 1963-30 June 1964

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The Office of the Surgeon General  
United States Air Force

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DEPARTMENT OF THE AIR FORCE

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**Eleventh Annual Report**  
of the  
**USAF MEDICAL SERVICE**



**1 July 1963-30 June 1964**

**Prepared by  
The Office of the Surgeon General  
United States Air Force**

Prepared by the Office of the Special Assistant for Information, Office of the Surgeon General. Based upon reports prepared by the staff offices and commands. Credit should be given to the Surgeon General, USAF, for quotation or reproduction of any material from this volume.

## FOREWORD

This report summarizes the problems, policies, and activities of the Air Force Medical Service during the period 1 July 1963—30 June 1964. Part I offers a narrative and analysis of the principal developments. Part II presents biostatistical studies.

In the field of medical staffing, the Air Force faced two great personnel problems in this period: (1) that of retaining in the service a sufficient number of career physicians and dentists; and (2) that of recruiting a sufficient number of properly-trained personnel to carry on research in aerospace medicine. The first problem resulted from the relative insufficiency of medical pay scales, as compared with those in private practice. The second resulted from the need to retain Air Force leadership in aerospace medicine during a period of rapid scientific and technological advance.

In the field of hospitalization and related activities, the improvements the Air Force Medical Service made in its system of aeromedical evacuation ranked among the leading developments of fiscal year 1964. These improvements included the further centralization of control over aeromedical evacuation in Europe and the United States and in the use of better aircraft.

The health of the Air Force, which was already excellent in fiscal year 1963, became still better in fiscal year 1964. Admission rates for nonbattle injury remained at 23 per 1,000 average strength, but admission rates for disease per 1,000 average strength declined from 176 to 166. The noneffective ratio per 100 strength fell from .74 to .71 and the hospitalized ratio per 100 strength dropped from .57 to .55.

During the period of this report, the Office of the Surgeon General launched an important plan to reorganize the Air Force Medical Service by creating within it a Biomedical Sciences Corps. This plan was still under consideration by the Air Staff as fiscal year 1964 ended. It has subsequently entered into force. It can be expected among other things to provide an additional driving force behind the progress the Air Force has long been achieving in aerospace medical science and technology.



R. L. BOHANNON  
Major General, USAF, MC  
Surgeon General

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**Part I**

**THE USAF MEDICAL SERVICE  
MAJOR ACTIVITIES**

**1 JULY 1963-30 JUNE 1964**

## Organization

The USAF Medical Service provides the medical support necessary to maintain the highest combat readiness and effectiveness of the Air Force. The Surgeon General, USAF, supervises the Air Force Medical Service, reports directly to the Air Force Chief of Staff, and serves as the medical staff adviser to both the Secretary of the Air Force and the Chief of Staff. Every major Air Force command has a command surgeon who supervises the medical service of the command and is responsible to the major air commander.<sup>1</sup>

In fiscal year 1964, at the Office of the Surgeon General, Washington, D. C., three directors and two Assistant Surgeons General reported directly to the Surgeon General or to his Deputy, as follows: (1) the Director of Professional Services; (2) the Director of Medical Staffing and Education; (3) the Director of Plans and Hospitalization; (4) the Assistant Surgeon General for Dental Services; and (5) the Assistant Surgeon General for Veterinary Services (Table 1).

TABLE 1.—Office of the Surgeon General: Principal Organizational Components and Administrators,  
1 July 1963–30 June 1964

Surgeon General .....	Maj. Gen. Oliver K. Niess, USAF, MC (Ret.), succeeded on 1 December 1963 by Maj. Gen. Richard L. Bohannon, USAF, MC
The Deputy Surgeon General .....	Maj. Gen. Richard L. Bohannon, USAF, MC, succeeded on 1 December 1963 by Brig. Gen. Kenneth E. Pletcher, USAF, MC
Assistant Surgeon General for Dental Services .....	Maj. Gen. Maurice C. Harlan, USAF, DC (Ret.), succeeded on 30 June 1964 by Col. (later Brig. Gen.) Benjamin W. Dunn, USAF, DC
Assistant Surgeon General for Veterinary Services .....	Col. Robert R. Miller, USAF, VC, succeeded on 1 October 1963 by Col. Charles H. Snider, USAF, VC
Director of Professional Services .....	Maj. Gen. Aubrey L. Jennings, USAF, MC (Ret.), succeeded on 8 November 1963 by Brig. Gen. Don S. Wenger, USAF, MC
Director of Medical Staffing and Education .....	Brig. Gen. Larry A. Smith, USAF, MC, succeeded on 17 September 1963 by Col. (later Brig. Gen.) Thomas H. Crouch, USAF, MC
Director of Plans and Hospitalization .....	Brig. Gen. Raymond T. Jenkins, USAF, MC

On 30 June 1964, personnel authorizations for the Office of the Surgeon General totalled 110 for members of the Air Force and 193 for civilians. The Directorate of Plans and

Hospitalization remained the largest of the organizational components, having more than half of the civilian authorizations and more than one-third of the military (Table 2).

<sup>1</sup>Air Force Regulation 20-28, "Organization—General, the Medical Service," 8 March 1960.

ORGANIZATION

TABLE 2.—Office of the Surgeon General:  
Authorized Strength, 30 June 1964

Component	Military	Civilian	Total
Executive .....	6	16	22
Assistant Surgeon General for Dental Services.....	5	4	9
Assistant Surgeon General for Veterinary Services	3	2	5
Directorate of Profes- sional Services .....	30	35	65
Directorate of Medical Staffing and Education	24	38	62
Directorate of Plans and Hospitalization .....	42	98	140
<b>Total .....</b>	<b>110</b>	<b>193</b>	<b>303</b>

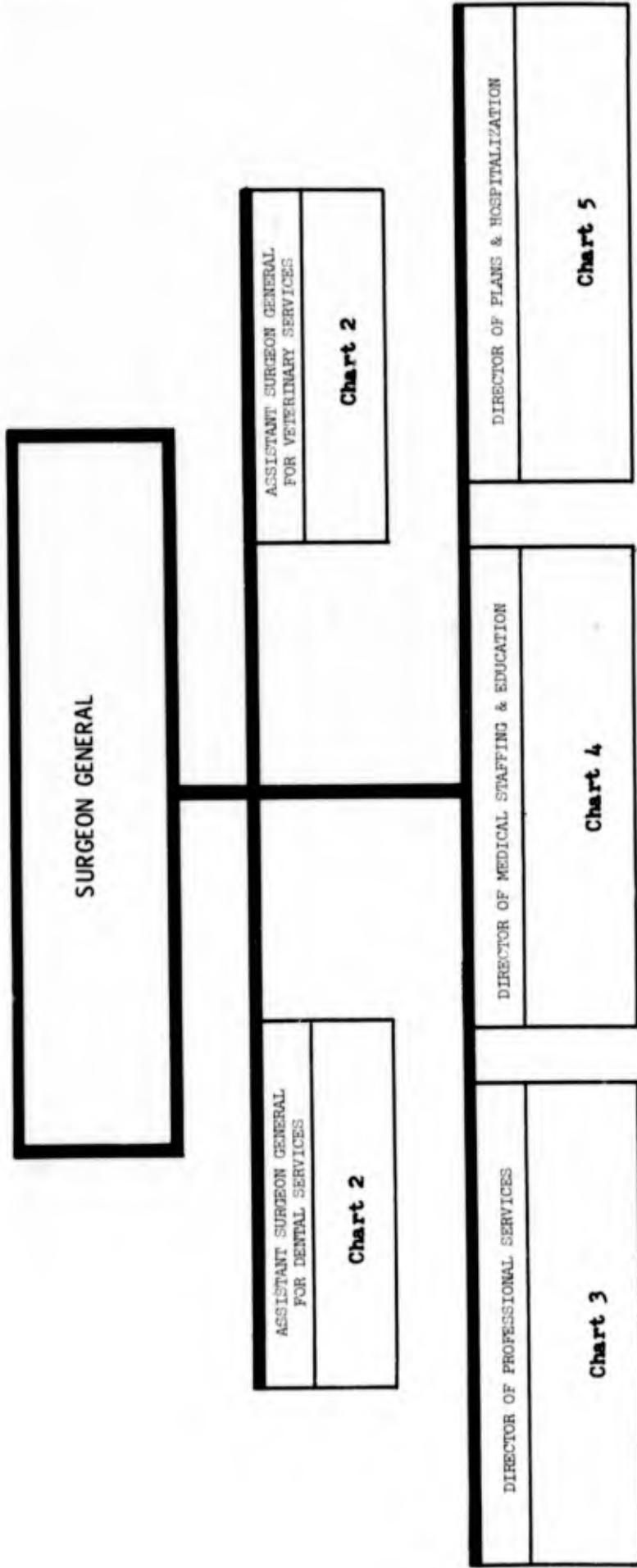
Since 30 June 1963, military authoriza-  
tions had been reduced by three, and civil-  
ian, by one.<sup>2</sup>

<sup>2</sup> Cf. Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963* (Washington: Government Printing Office, 1964), p. 2.

The total assigned strength of 295 on 30 June 1964 was slightly less than that author-  
ized (Table 3).

TABLE 3.—Office of the Surgeon General:  
Assigned Strength, 30 June 1964

Component	Military	Civilian	Total
Executive .....	5	17	22
Assistant Surgeon General for Dental Services.....	5	4	9
Assistant Surgeon General for Veterinary Services	3	2	5
Directorate of Professional Services .....	28	33	61
Directorate of Medical Staffing and Education .....	24	38	62
Directorate of Plans and Hospitalization .....	42	94	136
<b>Total .....</b>	<b>107</b>	<b>188</b>	<b>295</b>



JANUARY 1964

CHART 1.—Office of the Surgeon General.

<b>ASSISTANT SURGEON GENERAL FOR VETERINARY SERVICES</b>
Subsistence Inspection Veterinary Public Health Research Support Government-owned Animal Medical Service

<b>ASSISTANT SURGEON GENERAL FOR DENTAL SERVICES</b>
Dental Professional Standards Dental Personnel Resources Dental Research and Clinical Requirements

JANUARY 1964

CHART 2.—Assistant Surgeon General for Dental Services; Assistant Surgeon General for Veterinary Services.

**DIRECTOR OF PROFESSIONAL SERVICES**

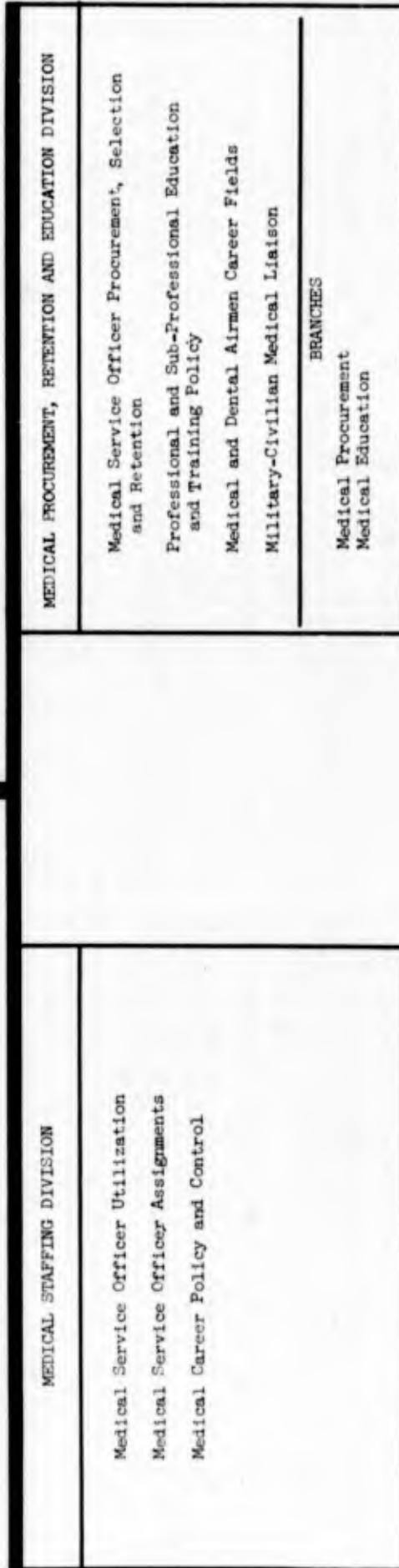
AEROSPACE MEDICINE DIVISION	PHYSICAL STANDARDS DIVISION	CONSULTANTS DIVISION
Flight Medicine: Flight Crew Effectiveness; Bioastronautic Activities; Aviation Physiology Nuclear Medicine Military Public Health and Occupational Medicine Clinical Research and Research Requirements	Physical Standards Physical Examination Reviews Physical Disability Retirement	Professional Medical Consultants National Civilian Consultant Activities and Programs Military Consultant Programs Professional Medical Programs Medical Legislative & Legal Matters

JANUARY 1964

CHART 3.—Director of Professional Services, Office of the Surgeon General.

**DIRECTOR OF MEDICAL STAFFING AND EDUCATION**

MEDICAL SUPPORT GROUP		
Medical Service Corps	Medical Specialist Corps	Nurse Corps
Policy and Advice for Respective Corps		



MAY 1964

**CHART 4.—Director of Medical Staffing and Education, Office of the Surgeon General.**

DIRECTOR OF PLANS AND HOSPITALIZATION

<p><b>PLANS AND OPERATIONS DIVISION</b></p> <p>Medical Wartime and Long Range Planning Plans and Policies for Medical Units, Missions, Organization, Unit Training, and Manpower Requirements Aeromedical Evacuation Medical Program Guidance Hospitalization Hospitals Management Work Measurement Program</p>	<p><b>MATERIEL DIVISION</b></p> <p>Medical Materiel Policies, Procedures and Plans Medical Materiel Requirements Medical Inventory Management System Materiel Allowances for Medical Units Materiel Guidance for Wartime Plans Medical Materiel Operations Analysis Materiel Standardization</p>	<p><b>FINANCIAL PROGRAMS DIVISION</b></p> <p>Medical Service Budget Financial Plans Medical Accounting Systems Patient Workloads</p>	<p><b>BIOMETRICS DIVISION</b></p> <p>Medical Records and Reporting System Collection, Analysis and Presentation of Medical Statistical Data</p>	<p><b>FACILITIES DIVISION</b></p> <p>Medical Facilities Programming, Design and Construction Surveillance Medical Facilities Design Criteria (Preliminary Plans) Installed Equipment Schedules Facilities Maintenance, Rehabilitation and Modification Medical Construction Liaison Officers Medical Facilities Acquisition and Disposition</p>
<p><b>BRANCHES</b></p> <p>Plans Operations Manpower Hospitals Management</p>	<p><b>BRANCHES</b></p> <p>Equipping Authorization &amp; Materiel Review Materiel Management &amp; Procedures</p>	<p><b>BRANCHES</b></p> <p>Fund Accounting Programs</p>		

APRIL 1964

CHART 5.—Director of Plans and Hospitalization, Office of the Surgeon General.

## Medical Staffing and Education

The leading developments in medical staffing and education during the period 1 July 1963—30 June 1964 related to (1) the utilization of personnel, (2) the procurement of officers, and (3) education.

### Utilization of Personnel

On 30 June 1964, the assigned officer strength of the USAF Medical Service stood at 11,663, including 486 hospital residents and interns. An appreciable increase occurred during the fiscal year in the number of physicians, which rose from 3,652 on 30 June 1963 to 3,870 on 30 June 1964. The assigned strength of the Nurse Corps, the second largest component of the Medical Service, stood almost unchanged at 3,412 (Table 4).

TABLE 4.—Personnel on Active Duty on 30 June 1963 and 30 June 1964, by Category<sup>a</sup>

	30 June 1963	30 June 1964
<i>Officers</i>		
Medical Corps .....	3,652	3,870
Dental Corps .....	1,995	1,854
Veterinary Corps .....	331	337
Medical Service Corps .....	2,069	1,982
Nurse Corps .....	3,409	3,412
Medical Specialist Corps .....	189	208
<b>Total .....</b>	<b>11,645</b>	<b>11,663</b>
<i>Airmen</i>		
Medical Duties .....	21,505	22,050
Dental Duties .....	3,265	3,223
<b>Total .....</b>	<b>24,770</b>	<b>25,273</b>

<sup>a</sup> Office of the Surgeon General, USAF, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963* (Washington: Government Printing Office, 1964), p. 10; idem, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Letter to Air Force Historical Division Liaison Office, 6 August 1964, Attachment 1, p. 2.

In fiscal year 1964, only 13 per cent of

the assigned physicians and only 15% of the assigned dentists had more than ten years of active military experience. The difficulty of retaining career physicians and dentists constituted one of the primary problems of the Air Force Medical Service.<sup>1</sup>

The number of flight surgeons and flight medical officers on flying status rose gradually during the fiscal year, while the number of flight nurses remained stable. The flying status inventory for flight surgeons expanded from 526 in July, 1963, to 580 in June, 1964, while the number of flight medical officers rose from 392 to 496 during the same period. The inventory for flight nurses grew from 149 to 154 (Table 5).

TABLE 5.—Flying Status Inventory of Flight Surgeons, Flight Medical Officers, and Flight Nurses, Fiscal Year 1964<sup>a</sup>

Month	Flt. Surg	Flt. Med. Off.	Flt. Nurses
July .....	526	392	149
August .....	521	386	152
September .....	516	380	153
October .....	534	397	153
November .....	546	480	153
December .....	550	489	153
January .....	560	478	153
February .....	564	479	154
March .....	568	489	153
April .....	578	493	153
May .....	580	497	153
June .....	580	496	154

<sup>a</sup> Medical Staffing Division, Directorate of Medical Staffing and Education, Office of the Surgeon General, *Semiannual History, July-December, 1963*, p. 4; idem, *Semiannual History, January-June, 1964*, p. 4.

### Movement of Certain Functions to Texas

In order to provide liaison between the Office of the Surgeon General and the new USAF Military Personnel Center at Ran-

<sup>1</sup> "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Attachment 1, p. 1.

## USAF MEDICAL SERVICE

dolph Air Force Base, Texas, and for other purposes, Headquarters Command, USAF, established the 1086th Medical Service Squadron, 1070th Medical Service Group, at Randolph, effective 1 September 1963. In addition to the liaison function, the 1086th Medical Service Squadron would implement procurement, selection, and staffing, establish policies and physical standards for selection, retention, and retirement, including physical qualifications for flying, and monitor the application of physical standards throughout the Air Force.

It was subsequently found that it would not be possible to complete the requisite transfer of personnel from the Office of the Surgeon General to Randolph Air Force Base until 1965. This delay was imposed by the necessity of constructing a building to house the Personnel Center and by the need to provide full supporting services.<sup>2</sup>

### Changes in Officer Classification

Some of the spectacular advances which had been made since World War II in aerospace medicine and rocketry were reflected in certain changes in specialty titles. On 16 March 1964, the specialty title for AFSC 9116 was changed from "Sanitary and Industrial Hygiene Engineer, Staff," to "Bio-Environmental Engineer, Staff," while the specialty title for AFSC 9124 was changed from "Sanitary and Industrial Hygiene Engineer" to "Bio-Environmental Engineer." These changes were based upon a detailed study not only of the nature of the work, but also of the requirements for it, and of problems of procurement, utilization, education, training, and retention.<sup>3</sup>

### Separation of Reserve Officers

During the first half of the fiscal year, the Air Force adopted the policy that the maximum active duty career of Reserve officers would, with certain exceptions, be 20 years

<sup>2</sup> Medical Staffing Division, Semiannual History, July-December, 1963, pp. 1-2.

<sup>3</sup> Medical Staffing Division, Semiannual History, January-June, 1964, p. 5.

of active Federal military service. In accordance with this decision, the Air Force assigned the necessary dates of separation to all Reserve officers serving on active duty in the grades of Colonel and below. These dates basically would represent the completion of 20 years of active Federal military service.

Procedures and criteria were at the same time established to retain for an additional two years about 20 per cent of those completing 20 years of service on active duty. Procedures and criteria were also established for retaining 5 per cent for a normal commissioned career of 28 to 30 years.

When the first board met on 14 October 1963 to apply the new concept, it considered 328 medical personnel who would complete 20 or more years of service in fiscal years 1965 and 1966 and retained 64 on active duty to complete 22 years of service. The board also retained 4 beyond 22 years of service for a normal 28- or 30-year commissioned career.<sup>4</sup>

The second board held under this program convened at Headquarters, USAF, on 4 May 1964. The board considered 159 medical personnel who would complete 20 years of active military service in fiscal years 1967 and 1968. Fifty-six medical personnel from the first program were also considered for retention beyond 22 years of service for a normal 28- or 30-year commissioned career. As in the first program, basic criteria were established to retain approximately 20 per cent of those completing 20 years of service on active duty for an additional 2 years and 5 per cent for a normal commissioned career beyond 22 years. As a result, the board recommended that a total of 32 be retained.<sup>5</sup>

### Procurement and Education

The Medical Service had good success with both its procurement and its educational programs during fiscal year 1964.

<sup>4</sup> Medical Staffing Division, Semiannual History, July-December, 1963, p. 3.

<sup>5</sup> Medical Staffing Division, Semiannual History, January-June, 1964, pp. 1-2.

MEDICAL STAFFING AND EDUCATION

Medical Corps

For fiscal year 1964, the procurement objective of the Medical Corps was 1,370 physicians, but the number who entered upon active duty during the period was only 1,273.<sup>6</sup> These figures represented a considerable increase over the comparable figures for fiscal year 1963, however, when the objective had been only 768, and 802 had entered upon active duty.<sup>7</sup> In both years, these officers were procured chiefly through the Armed Forces Physicians' appointment and Residency Consideration Program (the Berry Plan) and the Selective Service System. Other sources of procurement included direct volunteering and Air Force-sponsored training programs.

The Berry Plan was a major source of qualified specialists. The plan gave interns having unfulfilled Selective Service obligations an opportunity to secure Reserve commissions, finish their internship, and then be considered for further deferment from active duty until they finished residency training. In fiscal year 1964, 686 Air Force Reserve physicians were thus deferred for residency training.<sup>8</sup> In fiscal year 1963, only 368 had been deferred for this purpose.<sup>9</sup>

At the end of fiscal year 1964, the Air Force had 1,622 physicians in residency training under the Berry Plan. This represented an increase of nearly 300 in 12 months.<sup>10</sup> These 1,622 residents would be-

<sup>6</sup> Medical Procurement Branch, Medical Procurement, Retention, and Education Division (formerly Medical Procurement and Education Division), Directorate of Medical Staffing and Education, Office of the Surgeon General, Semiannual History, January-June, 1964, p. 2.

<sup>7</sup> Office of the Surgeon General, USAF, *Tenth Annual Report of the USAF Medical Service*, p. 11.

<sup>8</sup> Medical Procurement Branch, Medical Procurement, Retention, and Education Division, Directorate of Medical Staffing and Education, Semiannual History, January-June, 1964, p. 5.

<sup>9</sup> Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service*, p. 2.

<sup>10</sup> Medical Procurement Branch, Semiannual History, January-June, 1964, p. 5; cf. Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963*, p. 12.

come available for active duty during the four fiscal years 1965-1968. According to specialty, the most numerous categories were internal medicine, obstetrics, pediatrics, psychology, surgery, and radiology. Two hundred sixty-one residents were in internal medicine and 220 were in obstetrics, while only 28 were in aviation medicine (Table 6).

TABLE 6.—Berry Plan Participants in Deferred Status During FY 1964, by Specialty<sup>a</sup>

Specialty	Available for Active Duty in				TOTAL
	FY 65	FY 66	FY 67	FY 68	
9326 Gen Pract	--	5	6	--	11
9336 Prev Med	1	--	--	--	1
9346 Occ Med	--	1	--	1	2
9356 Avn Med	18	15	15	20	68
9366 Ped	51	64	80	--	195
9376 Phys Med	--	3	2	2	7
9386 Int Med	52	85	68	56	261
9416 Surg	20	31	49	47	147
9426 Urol	2	8	18	16	44
9436 Opth	8	13	22	8	51
9446 Otol	7	18	19	15	59
9456 Neur Surg	0	3	3	4	10
9466 Thor Surg	3	3	--	5	11
9476 Plas Surg	3	0	2	5	10
9486 Orthoped	15	22	19	24	80
9496 O. B.	35	55	56	74	220
9526 Pul Med	1	--	1	1	3
9536 Gastro Ent	3	2	4	6	15
9546 Cardiology	4	2	4	9	19
9556 Dermatology	6	5	15	7	33
9566 Allergy	1	--	--	3	4
9576 Neurol	3	4	8	17	32
9586 Psych	24	51	23	51	149
9626 Pathology	6	12	9	27	54
9636 Radiology	26	27	31	19	103
9646 Spec Weap Def	--	--	--	--	0
9656 Anesth	12	14	7	--	33
Total	301	443	461	417	1622

<sup>a</sup> Medical Procurement Branch, Semiannual History, January-June, 1964, p. 6.

Although the Air Force thus continued to make good progress in building up a pool of Reserve medical specialists by deferring them for residency training under the Berry Plan, the Department of Defense developed still another means of accomplishing that objective. During the period July-December,

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1963, the Department of Defense authorized the Secretaries of the Army, the Navy, and the Air Force to grant additional residency deferments in selected professional specialties to physicians having unfulfilled Selective Service obligations. They would have to accept a Reserve commission, but they would not necessarily be brought to active duty when they became board-eligible. All physicians deferred for residency training under the new plan, and not subsequently brought to active duty, would be required to maintain a Ready Reserve status for three years after completion of training, unless they were obligated for some other reason to serve longer. Once put into Reserve status, they would not be ordered to active duty except in time of war, a national emergency declared by Congress, a national emergency declared by the President, or as otherwise authorized by law.<sup>11</sup>

During fiscal year 1964, 146 other physicians voluntarily accepted commissions in the Air Force, and 110 were commissioned through a special draft call placed by the Selective Service System on 2 March 1964.

The need to acquire properly trained personnel to carry on research in aerospace medicine created one of the most important problems the USAF Medical Service faced in fiscal year 1964. It was estimated that by 1972 it would be necessary to have an additional 600 or 700 technical and professional specialists on active duty and assigned to research. This would represent an increase in research personnel of approximately 72 per cent.<sup>12</sup>

As a means of procuring physicians, the Air Force continued to offer training and financial sponsorship to exceptional men who desired careers in the Medical Service. So far as physicians are concerned, there

were four such programs: (1) the Senior Medical Student Program, (2) the Military Internship Program, (3) the Civilian Internship Program, and (4) the Residency Training Program. The first three were direct procurement programs. The fourth offered a service opportunity to physicians already on active duty. In this way it indirectly influenced procurement. During fiscal year 1964, the Air Force selected 102 senior medical students, 84 military interns, and 11 civilian interns.

During the same period, 300 career physicians were in residency training in clinical specialties under Air Force sponsorship. Nearly half of these physicians were taking their training in civilian medical centers, while the remainder were nearly all in Air Force and Army hospitals. In addition, 47 physicians were in residencies in aviation medicine, and 1, in occupational medicine. Moreover, as of 30 June 1964, 95 physicians were receiving internship training. Nearly all of the latter were in Air Force hospitals.

In order to encourage physicians to remain in the Air Force, the Office of the Surgeon General laid increased emphasis on the expansion of educational programs.

The Wilford Hall USAF Hospital, Lackland Air Force Base, Texas, was invited to propose a continuing Medical Education Program for fiscal year 1966. Such a program would increase the attractiveness of a professional career in the Air Force. It was thought that courses of three to five days on specific subjects might be conducted annually by departmental chairmen at Wilford Hall. It was conceived that such courses might be offered not only to Air Force personnel, but also to professional personnel of other government agencies and to civilian physicians. Other projects for the expansion of teaching at the Wilford Hall USAF Hospital pertained to such varied subjects as psychiatry, hand surgery, general surgery, pathology, hematology, pulmonary disease, renal disease, pediatric allergy, and basic sciences.

The USAF School of Aerospace Medicine, Brooks Air Force Base, Texas, also partici-

<sup>11</sup> Procurement Branch, Semiannual History, July-December, 1963, pp. 2-3.

<sup>12</sup> Office of the Surgeon General, "Data for Annual Report of the Secretary of the Air Force," Attachment 1, pp. 1-2.

pated in this educational expansion. The School extended its instruction both in bio-environmental engineering and in occupational medicine.<sup>13</sup>

#### Dental Corps

Five hundred sixty-two dentists entered upon active duty in fiscal year 1964. The procurement objective had been only 508. Nevertheless, the assigned strength of the Dental Corps at the end of the fiscal year was 32 short of the expected strength.

For fiscal year 1965, the procurement goal was set at 562. No problems were expected in meeting this goal. Under the Department of Defense Armed Forces Reserve Dental Officer Commissioning Program, 847 of the June, 1964 graduates were allocated to the Air Force. As of 30 June 1964, 452 of these had applied and 270 had been accepted.<sup>14</sup> This plan helped dentists to fulfill their two-year obligation under the Universal Military Training and Service Act with as little delay as possible. Since the program started in fiscal year 1956, it had been the primary source of dentists for the Air Force.<sup>15</sup>

The Air Force also conducted a Dental Internship Program. This, like the internship programs which the Air Force conducted for physicians, had the purpose of recruiting career officers. On 30 June 1964, 32 dental officers were undertaking dental internships. All of these internships were in Air Force Hospitals.<sup>16</sup> By 30 June 1964, 51 applications for the program had been received for fiscal year 1965 and 40 had been accepted.<sup>17</sup>

<sup>13</sup> Medical Procurement, Retention, and Education Division, Semiannual History, January-June, 1964, pp. 2-3, 8-12.

<sup>14</sup> Medical Procurement Branch, Semiannual History, January-June, 1964, pp. 7-8.

<sup>15</sup> [Medical Procurement Branch], "Data for Defense Study of Military Compensation," Memorandum, 1962, pp. 4-5.

<sup>16</sup> Medical Education Branch, Semiannual History, January-June, 1964, pp. 2-3.

<sup>17</sup> Medical Procurement Branch, Semiannual History, January-June, 1964, p. 17.

The residency training program which the Air Force conducted for dentists corresponded to that which it conducted for physicians. As of 30 June 1964, 33 career dentists were in residency training under Air Force sponsorship. Eleven of these dentists were in Air Force hospitals and 22 were in civilian hospitals.<sup>18</sup>

#### Veterinary Corps

The procurement objective for the Veterinary Corps was met in spite of an increase of 59 over the initial goal. By 30 June 1964, 98 veterinarians had been called to active duty.

For fiscal year 1965, procurement activity for Doctors of Veterinary Medicine in the Reserve component was limited to filling losses that would occur through normal attrition. A total of 92 volunteer applications were received, of which 13 were disapproved. It resulted that by 30 June 1964, 79 applications were processed and four former officers were recalled.<sup>19</sup>

The Air Force also had training programs for veterinarians. On 30 June 1964, nine veterinary officers were enrolled in residency training in Air Force facilities.<sup>20</sup>

#### Medical Service Corps

Procurement efforts to meet the objective of 257 Medical Service Corps officers for duty during fiscal year 1964 fell short by 13. The end strength of 1,982 for fiscal year 1964 was nevertheless in conformity with the desired strength. Procurement for fiscal year 1965 was proceeding on schedule on 30 June 1964 for all categories except that of Bioenvironmental Engineering. An increase in applicants was expected through the AFROTC.<sup>21</sup>

<sup>18</sup> Medical Education Branch, Semiannual History, January-June, 1964, p. 3.

<sup>19</sup> Medical Procurement Branch, Semiannual History, January-June, 1964, pp. 3, 8.

<sup>20</sup> Medical Education Branch, Semiannual History, January-June, 1964, p. 3.

<sup>21</sup> Medical Procurement Branch, Semiannual History, January-June, 1964, p. 3.

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Medical Service Corps officers engaged extensively in graduate training under Air Force sponsorship. Sixty-two Medical Service Corps officers were selected for graduate training during fiscal year 1964. Forty-nine sought the Master's degree and 8 sought the Ph.D. degree.<sup>22</sup>

Airmen also had valuable training opportunities. On 30 June 1964, 32 airmen were studying under the Airman Education and Commissioning Program to complete undergraduate training for baccalaureate degrees that would qualify them for commissions.<sup>23</sup>

### Nurse Corps

Despite a national shortage of professional nurses, the Air Force continued to meet its nurse procurement requirements. The projected fiscal year 1964 objective was

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<sup>22</sup> Medical Service Corps, Office of the Surgeon General, Semiannual History, January-June, 1964, p. 3.

<sup>23</sup> *Ibid.*, p. 4.

reduced from 825 to 710 at the beginning of the third quarter. This new objective was exceeded as 734 nurses were commissioned or processed for recall.<sup>24</sup> The end strength objective was exceeded by 143.

For fiscal year 1965, the procurement objective was set at 739. By 30 June 1964, 246 nurse applications were already in process, and it was expected that the objective for fiscal year 1965 could be met without much difficulty.<sup>25</sup>

### Medical Specialist Corps

Procurement of Medical Specialist Corps officers in fiscal year 1964 fell 17 short of the desired objective of 60. The chief difficulty was in obtaining dietitians. Procurement experience for the Medical Specialist Corps continued to improve, however, and no serious problems existed.<sup>26</sup>

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<sup>24</sup> Medical Procurement Branch, Semiannual History, January-June, 1964, p. 10.

<sup>25</sup> *Ibid.*, p. 3.

<sup>26</sup> *Ibid.*, p. 4.

## Hospitalization

Activities related to hospitalization were concerned among other things with hospitals management, aeromedical evacuation, manpower, financial programs, materiel, biometrics, and the construction of medical facilities.

### Hospitals Management

On 30 June 1964, the USAF Medical Service had 209 fixed medical treatment facilities in operation. One hundred twenty-seven of these were in CONUS (the Continental United States, excluding Alaska and Hawaii) and 82 were Overseas. In all, these facilities contained 10,707 operating beds, of which 8,274 were in CONUS (Table 7).

TABLE 7.—Number of USAF Fixed Medical Treatment Facilities and Operating Beds, 30 June 1964, by Category and Area<sup>a</sup>

Type of Facility	Number of Facilities	Number of Operating Beds
<i>CONUS (Excluding Alaska and Hawaii)</i>		
Hospitals .....	93	8,163
Dispensaries, Class-A .....	16	111
Dispensaries, Class-B .....	18	
	—	—
	127	8,274
<i>Overseas (Including Alaska and Hawaii)</i>		
Hospitals .....	28	2,185
Dispensaries, Class-A .....	25	248
Dispensaries, Class-B .....	29	
Total .....	82	2,433
Grand Total .....	209	10,707

<sup>a</sup> Hospitals Management Branch, Plans and Operations Division, Directorate of Plans and Hospitalization, Semiannual History, January-June, 1964, p. 1.

These totals represented a slight decline from 30 June 1963, when the USAF Medical

Service was operating 211 fixed medical treatment facilities having 11,047 operating beds. While the total number of hospitals in CONUS remained the same, the number of operating beds declined from 8,316 to 8,163. At the same time, the number of Class-A Dispensaries in the United States and overseas was slightly reduced, while the number of Class-B Dispensaries overseas was increased by 5.<sup>1</sup> Class-B Dispensaries have no operating beds.

During fiscal year 1964, the American Hospital Association accredited 7 additional Air Force hospitals, of which 3 were in the United States, 3 in France, and 1 in Turkey.<sup>2</sup> This raised the total of accredited Air Force hospitals to 106<sup>3</sup> (Table 8).

TABLE 8.—Number of Hospitals Accredited on 30 June 1963 and 30 June 1964

End of Fiscal Year	CONUS	Overseas	Total
1963 .....	80	19	99
1964 .....	83	23	106

In all, the American Hospital Association surveyed 41 Air Force hospitals during fiscal year 1964. Thirty-four of these surveys were occasioned by the necessity of periodic re-accreditation.<sup>4</sup>

<sup>1</sup> Cf. Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963* (Washington: Government Printing Office, 1964), p. 14.

<sup>2</sup> Hospitals Management Branch, Plans and Operations Division, Directorate of Plans and Hospitalization, *Semiannual History, July-December, 1963*, p. 3; *idem*, *Semiannual History, January-June, 1964*, pp. 2-3.

<sup>3</sup> Cf. Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963*, p. 14.

<sup>4</sup> Hospitals Management Branch, *Semiannual History, July-December 1963*, p. 3; *idem*, *Semiannual History, January-June, 1964*, pp. 2-3.

## USAF MEDICAL SERVICE

For the Dependents' Medical Care Program, which enabled dependents to receive extensive medical care at Government expense from civilian physicians and civilian hospitals, the Air Force obligated more than \$25 million during fiscal year 1964. This represented an increase of \$3 million over fiscal year 1963. The average cost per physician's claim in fiscal year 1964 rose by \$3.00 over the previous fiscal year, while the average cost per hospital claim rose by \$15.00

The Dependents' Medical Care Program began in December, 1956. By 30 June 1964, the Air Force had obligated for this purpose \$194 million (Table 9).

TABLE 9.—*Dependents' Medical Care Program, Fiscal Years 1963 and 1964<sup>a</sup>*

Fiscal Year	Average Cost Per Physician's Claim	Average Cost Per Hospital Claim	Total Obligated by Air Force
1963 -----	\$78	\$149	\$22,200,000
1964 -----	81	164	25,205,000

<sup>a</sup> Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963*, p. 15; idem, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Letter to Air Force Historical Division Liaison Office, 6 August 1964, Attachment 9.

In April, 1964, the Assistant Secretary of Defense (Manpower) distinguished between the entitlements that dependents of active duty members of the Air Force have under the Dependents' Medical Care Program, and the lesser entitlements of retired members and their dependents. In a memorandum to the Service Secretaries concerning drug and prescription services for dependents and retired personnel, the Assistant Secretary of Defense (Manpower) stated that "by law dependents of active duty members have a greater entitlement to care in military medical facilities than do retired members and their dependents." Consequently, dependents of active duty members should be given precedence over retired members and their dependents in receiving drug and prescription services, in the event

that resources became insufficient.<sup>5</sup> In passing this information to the major Commands, the Office of the Surgeon General stated, however, that "withdrawal, curtailment or suspension of services should be effected only when no other course of action to resolve shortage of funds or other resources is feasible."<sup>6</sup>

### Aeromedical Evacuation

Certain improvements the Air Force made in its system for aero-medical evacuation ranked among the leading developments of fiscal year 1964. These improvements consisted of the further centralization of control over aeromedical evacuation in Europe and the United States and in the use of better aircraft.

During the latter half of the fiscal year, the Chief of Staff, USAF, approved a plan submitted jointly by the Commander-in-Chief, United States Air Forces in Europe (USAFE) and the Commander, Military Air Transport Service (MATS), to transfer to the latter on 1 July 1964 the responsibility for the operation of the USAFE aeromedical evacuation system.

Also approved during the period was a plan submitted by the Commander, MATS, to transfer the domestic aeromedical evacuation mission from the 1st Aeromedical Transport Group, Brooks Air Force Base, Texas, to the 1405th Aeromedical Transport Wing, Scott Air Force Base, Illinois. The 1405th Wing was accordingly activated on 1 June 1964, and the 1st Aeromedical Transport Group was deactivated on 8 June 1964. The control center moved from Kelly Air

<sup>5</sup> Assistant Secretary of Defense (Manpower), Memorandum to the Secretary of the Army, the Secretary of the Navy, and the Secretary of the Air Force, Subj: Drug and Prescription Services for Dependents and Retired Personnel, 27 April 1964, Copy in Attachment 2, Hospitals Management Branch, Semiannual History, January-June, 1964.

<sup>6</sup> Deputy Surgeon General, Letter to all Major Commands, Subj: Drug and Prescription Services for Dependents and Retired Personnel, 27 May 1964, Hospitals Management Branch, Semiannual History, January-June, 1964, Attachment 1.

Force Base, Texas, to Scott Air Force Base in conjunction with the reorganization. The maintenance of the entire fleet was also centralized at Scott. These changes were designed not only to give MATS better control over its domestic operations, but also to cut costs.

The Air Force in fiscal year 1964 commenced with the first phase of a program to provide improved aeromedical evacuation aircraft for the domestic system, the USAFE theater, and the PACAF theater. PACAF received 2 C-118's to replace 2 C-54's, and MATS received 6 C-118's. Of the latter, 2 replaced 2 C-131's in the domestic system, and 4 replaced 4 C-54's in the USAFE theater. This meant that for the first time the domestic system would have transcontinental non-stop capability and the USAFE and PACAF theaters would have pressurized aircraft.

As another possible improvement, the Armed Services Medical Regulating Office (ASMRO) began a test of a new method of regulating patients from Europe and the Pacific. The new method provided confirmation of the CONUS destination hospital prior to the departure of a patient from an oversea hospital. Hitherto, patients could not learn where they were destined until they arrived in the United States. The new procedure expedited the movement of dependents, automobiles, and household goods from overseas. As the fiscal year ended, ASMRO was evaluating the early results of the test. It seemed likely that the procedure being tested would be finally adopted for the routine transfer of Armed Forces patients from overseas to CONUS hospitals.<sup>7</sup>

**Manpower**

The total authorized strength of the USAF Medical Service on 30 June 1964

<sup>7</sup> Office of the Surgeon General, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Attachment 5; Hospitals Management Branch, Semiannual History, July-December, 1963, pp. 4-5; idem, Semiannual History, January-June, 1964, pp. 4-5.

for officers, airmen, and civilians, including both operating spaces and permanent-change-of station (PCS) student spaces, stood at 50,183. This total included authorizations for 11,804 officers and 9,919 civilians (Table 10).

TABLE 10.—Authorized Strength of the USAF Medical Service on 30 June 1964<sup>a</sup>

Category	Operating Spaces	PCS Student Spaces	Total
Officers .....	10,741 <sup>b</sup>	1,063	11,804
Airmen .....	27,800 <sup>c</sup>	660	28,460
Civilians .....	9,919 <sup>d</sup>	0	9,919
Total .....	48,460	1,723	50,183

<sup>a</sup> Manpower Branch, Plans and Operations Division, Semiannual History, January-June, 1964, p. 1.  
<sup>b</sup> Includes 197 line officers.  
<sup>c</sup> Includes 3,373 non-medical airmen authorized in medical functions.  
<sup>d</sup> Includes 1,382 Budget Project 690 civilian authorizations in medical research activities.

As compared with 30 June 1963, the foregoing figures for 30 June 1964 represent a reduction of 701 in total authorizations, of which 526 were civilian operating spaces (Table 11).

TABLE 11.—Authorized Strength of the USAF Medical Service on 30 June 1963<sup>a</sup>

Category	Operating Spaces	PCS Student Spaces	Total
Officers .....	10,725 <sup>b</sup>	1,062	11,787
Airmen .....	27,798 <sup>c</sup>	854	28,652
Civilians .....	10,445 <sup>d</sup>	0	10,445
Total .....	48,968	1,916	50,884

<sup>a</sup> Manpower Branch, Semiannual History, January-June, 1963, p. 1.  
<sup>b</sup> Includes 197 line officers.  
<sup>c</sup> Includes 3,389 non-medical airmen authorized in medical functions.  
<sup>d</sup> Includes 1,420 Budget Project 690 civilian authorizations in medical research activities.

During fiscal year 1964, the ratio of assigned support-type personnel per physician at USAF medical treatment facilities was 11.5. This represented only a slight increase over 30 June 1963, when that ratio stood at 11.1. The number of physicians assigned to these facilities, including civilians, had

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declined slightly; for these assignments totalled 3,081 on 30 June 1963, but only 2,971 on 30 June 1964.<sup>8</sup>

**Financial Programs**

In October, 1963, the Air Force estimated in its submission to the Office of the Secretary of Defense that it would need authority to obligate more than \$187 million in fiscal year 1965 for medical purposes other than research and development. About two-thirds of this amount would be needed for the operation and maintenance of medical treatment facilities. The remainder would be required to pay for the medical care of Air Force members and their dependents in non-Air Force facilities, for the initial outfitting of medical facilities, for the procurement of war-readiness materiel, for medical education and training, and for medical administration (Table 12).

TABLE 12.—Fiscal Year 1965 Budget as Estimated by Air Force<sup>a</sup>

Project	Title	Estimate In Thousands of Dollars)
472	Initial Outfitting of Medical Facilities and War Readiness Materiel Procurement	\$ 11,053
473	Medical Education and Training	3,389
475	Medical Care in Non-Air Force Facilities	45,557
477	Medical Administration	1,950
478	Operation and Maintenance of Medical Treatment Facilities	125,779
Total Obligational Authority		187,728
Reimbursements		25,890
New Obligational Authority		\$161,838

<sup>a</sup> Financial Programs Division, Semiannual History, Directorate of Plans and Hospitalization, July-December, 1963, p. 2.

For these budget projects, the President requested Congress in January, 1964, for a total obligational authority of more than

<sup>8</sup> Manpower Branch, Semiannual History, January-June, 1963, p. 2; idem, Semiannual History, January-June, 1964, p. 2.

\$176 million. This figure was reached largely by reducing the estimates for the operation and maintenance of medical treatment facilities (Budget code 478) and for the category entitled "Initial Outfitting of Medical Facilities and War Readiness Materiel Procurement" (Budget code 472) (Table 13).

TABLE 13.—Fiscal Year 1965 President's Budget<sup>a</sup>

Project <sup>b</sup>	Estimate (In Thousands of Dollars)
472	\$ 7,174
473	3,373
475	45,272
477	1,938
478	118,633
Total Obligational Authority	176,390
Reimbursements	25,890
New Obligational Authority	\$150,500

<sup>a</sup> Financial Programs Division, Semiannual History, January-June, 1964, p. 1.

<sup>b</sup> For titles of projects, see Table 12.

As finally authorized by Congress, the total obligational authority for these projects was slightly larger than the President had requested. Considerable changes, however, had been made in the authorizations for particular items. The largest single reduction amounted to more than \$3 million and involved a limitation of treatment capability to 30 per cent of military and civilian personnel in the event of an attack by biological or chemical weapons, instead of the 100 per cent formerly planned. Reductions of more than a million dollars were also made in Congressional authorizations for other phases of war readiness material procurement under Budget Code 372.

On the other hand, the Congressional authorization for fiscal year 1965 for medical care in non-Air Force facilities was more than \$3 million above the President's request. This increase was attributed to a rise in hospital rates affecting the Dependents' Medical Care Program and to an increase in hospital workloads for dependents.

Another major increase authorized by Congress above the President's request re-

sulted from higher requirements for real property maintenance under Budget Code 478. More than \$1.5 million in authorization was required to complete certain repairs in Alaska which had been necessitated by the great Alaskan earthquake<sup>9</sup> (Table 14) of 27 March 1964. Elmendorf Air Force Base, with the USAF Hospital Elmendorf, the largest military medical facility and specialized treatment center in the Alaskan Theater, was located near the center of the greatest destructive forces.<sup>10</sup>

TABLE 14.—Fiscal Year 1965 Congressional Authorizations<sup>a</sup>

Project <sup>b</sup>	Estimate (In Thousands of Dollars)
472	\$ 2,226
473	3,248
475	48,539
477	1,937
478	122,067
Total Obligational Authority	178,017
Reimbursements	24,758
New Obligational Authority	\$153,259

<sup>a</sup> Financial Programs Division Semiannual History, January-June, 1964, p. 1.

<sup>b</sup> For titles of projects, see Table 12.

### Materiel

During fiscal year 1964, the Air Force purchased medical materiel valued at \$41.2 million. This total was the same as that reported for fiscal year 1963.<sup>11</sup> In both fiscal years, more than two thirds of the totals

<sup>9</sup> Financial Programs Division, Semiannual History, January-June, 1964, pp. 1-3.

<sup>10</sup> See the valuable medical history of this event by Herbert H. Kerr, Col., USAF, MC, Surgeon, Alaskan Command and the Alaskan Air Command, "Earthquake," *The USAF Medical Service Digest*, XV, No. 9 (September, 1964), pp. 2-9.

<sup>11</sup> Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963* (Washington: Government Printing Office, 1964), p. 15.

consisted of expenditures for medical supplies for current patient care. Equipment for current use, materiel to support war plans, and non-medical items accounted for the remainder (Table 15).

TABLE 15.—Expenditures for Medical Materiel, Fiscal Year 1964, in Millions of Dollars<sup>a</sup>

Item	Cost
Supplies for current patient care	\$28.0
Equipment for current use	4.7
Materiel to support war plans	3.9
Non-medical items	4.6
Total	\$41.2

<sup>a</sup> Calculated from Materiel Division, Directorate of Plans and Hospitalization, *Semiannual History, July-December, 1963*, p. 5, and Materiel Division, *Semiannual History, January-June, 1964*, p. 3.

During fiscal year 1964, Air Force bases continued to maintain an excellent record for filling medical materiel requisitions "off-the-shelf" and therefore without delay. At the same time, these bases economically kept their inventories low. Thus, during the period January-June, 1964, all but 6 out of 172 bases were able to fill 95 per cent of these requisitions immediately; yet, medical supply officers kept the Air Force inventory of operating supplies down to only 2.2 months of stock-on-hand.<sup>12</sup>

### Biometrics

The health of the Air Force, which was already excellent in fiscal year 1963, became still better in fiscal year 1964. Admission rates for nonbattle injury remained the same, but admission rates for disease declined 10 per 1,000 average strength to 166. The noneffective ratio per 100 strength and the hospitalized ratio per 100 strength also declined, and the daily average number of Air Force personnel occupying beds in any facility fell by 269 (Table 16).

<sup>12</sup> Materiel Division, *Semiannual History, January-June, 1964*, pp. 1-2.

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TABLE 16.—A Comparison of Selected Biostatistical Indexes for Fiscal Years 1963 and 1964<sup>a</sup>

Index	FY 1963	FY 1964
Average strength of Air Force personnel	870,291	865,517
Admissions per year per 1,000 average strength:		
All causes	199	189
Diseases	176	166
Nonbattle injury	23	23
Noneffective ratio (per 100 strength)	.74	.71
Hospitalized ratio (per 100 strength)	.57	.55
Daily average number of Air Force personnel occupying beds in any facility	4,998	4,729
Number of inpatient facilities (end of year)	174	162
Number of operating beds (end of year)	11,078	10,677
Average number of patients occupying beds in Air Force facilities:		
Total	8,772	8,364
Air Force	4,200	3,924
Other military	389	339
Nonmilitary	4,183	4,101
Number of births in Air Force facilities <sup>b</sup>	66,112	64,819
Outpatient visits in Air Force facilities <sup>b</sup>	15,393,665	15,763,887
Flight physical exams done at Air Force facilities <sup>b</sup>	212,915	214,207
Other complete physical exams <sup>b</sup>	513,087	519,655
Immunizations done at Air Force facilities <sup>b</sup>	10,219,371	8,782,648

<sup>a</sup> Office of the Surgeon General, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Attachment 7.  
<sup>b</sup> Data for FY 1964 adjusted to 365 days.

**Facilities**

In December, 1963, Congress approved \$16.5 million for the construction of medical items in the Fiscal Year 1964 Military Construction Program, exclusive of items related to research. The Air Force had originally requested Congress for \$26 million for this program.

During the period October–December, 1963, the Department of Defense reviewed the Military Construction Program for fiscal year 1965. The Air Force portion of the program provided for about \$42 million in medical items other than those in support of medical research. The \$42 million program included 9 Replacement Composite Medical Facilities, 7 Composite Medical Facility Additions, 4 new dispensaries, various dental clinics, and several other projects. The Secretary of Defense reviewed these items and deleted 4 Replacement Com-

posite Medical Facilities, 3 Composite Medical Facility Additions, and 2 new dispensaries. The Secretary of Defense approved the program in the amount of \$27.3 million for presentation to Congress in January, 1964.<sup>13</sup> As submitted to Congress after further changes, the program totalled \$26.5 million. On 30 June 1964, the program was still under Congressional review.<sup>14</sup>

During fiscal year 1964, the Air Force completed 16 medical construction projects. These included 6 Composite Medical Facilities, of which the largest were a 300-bed Composite Medical Facility (CMF) at Sheppard Air Force Base, Texas, another with 225 beds at Maxwell Air Force Base,

<sup>13</sup> Facilities Division, Semiannual History, July–December, 1963, pp. 2–6.

<sup>14</sup> Facilities Division, Semiannual History, January–June, 1964, pp. 2–5.

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Alabama, and still another, with 200 beds, at Clark Air Base, Philippine Islands (Tables 17 and 18).

TABLE 17.—Medical Facilities Completed in Fiscal Year 1964, by Category<sup>a</sup>

Category	Number
Composite Medical Facility -----	5
Composite Medical Facility Addition -----	1
Class-A Dispensary -----	1

TABLE 17.—Continued

Category	Number
Class-A Dispensary Addition -----	1
Dental Clinic -----	3
Dental Clinic Addition -----	2
Class-B Dispensary -----	1
Radiological Health Laboratory Addition -----	1
Military Industrial Dispensary -----	1
<b>Total -----</b>	<b>16</b>

<sup>a</sup> See Table 18, Below.

TABLE 18.—Medical Facilities Completed, Fiscal Year 1964, by Location and Description<sup>a</sup>

Location	Description
Barksdale Air Force Base (AFB), La.	Composite Medical Facility (CMF) Addition, Air Force Clinic. Fiscal Year (FY) 1962 Authorization and Appropriation. Date of Completion, July, 1963.
Barksdale AFB, La.	Dental Clinic Addition w/6 Dental Operating Rooms (DOR) and Area Prosthetic Laboratory. FY 1962 Authorization and Appropriation. Date of Completion, July, 1963.
Castle AFB, Del.	CMF w/50 Beds and 16 DOR. FY 1961 Authorization and Appropriation. Beneficial Occupancy Date (BOD), February, 1964.
Clark Air Base, P. I.	CMF w/200 Beds, 16 DOR, and an Area Prosthetic Laboratory. FY 1960 Authorization and Appropriation. BOD, May, 1964.
Duluth Municipal Airport	Class-A Dispensary Addition incl. 6 DOR. FY 1963 Authorization and Appropriation. BOD, February, 1964.
Dyrbakir Air Station, Turkey	Class-B Dispensary. FY 1961 Authorization and Appropriation. Date of Completion, September, 1963.
George AFB, Calif.	CMF w/50 Beds and 12 DOR. FY 1960 Authorization and Appropriation. Date of Completion, October, 1963.
Larson AFB, Wash.	Dental Clinic Addition w/4 DOR. Authorization and Appropriation. Date of Completion, October, 1963.
Lincoln AFB, Nebr.	Class-A Dispensary w/15 Beds. FY 1962 Authorization and Appropriation. BOD, January, 1964.
Lowry AFB, Colo.	Dental Clinic w/26 DOR and Area Prosthetic Laboratory. FY 1962 Authorization and Appropriation. Date of Completion, July, 1963.
Maxwell AFB, Ala.	CMF w/225 Beds and 14 DOR. FY 1961 Authorization and Appropriation. BOD, March, 1964.
Olmsted AFB, Pa.	Military and Industrial Dispensary. FY 1960 Authorization and Appropriation. Date of Completion, October, 1963.
Sheppard AFB, Tex.	CMF w/300 Beds. FY 1959 Authorization. Date of Completion, October, 1963.
Sheppard AFB, Tex.	Dental Clinic w/32 DOR. FY 1961 Authorization and Appropriation. Date of Completion, October, 1963.
Wright-Patterson AFB, O.	Radiological Health Laboratory Addition. FY 1963 Authorization and Appropriation. BOD, January, 1964.
Wright-Patterson AFB, O.	Dental Clinic w/22 DOR. FY 1962 Authorization and Appropriation. Date of Completion, September, 1963.

<sup>a</sup> Facilities Division, Semiannual History, July-December, 1963, pp. 7-8; idem, Semiannual History, January-June, 1964, pp. 6-7.

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Under construction on 30 June 1964 were 12 medical construction projects. These included a Biological System Research Laboratory at the USAF School of Aerospace Medicine, Brooks Air Force Base, Texas, several Composite Medical Facilities, and a large Dental Clinic (Tables 19 and 20).

TABLE 19.—*Medical Facilities Under Construction, 30 June 1964, by Category\**

Category	Number
Composite Medical Facility .....	7
Class-A Dispensary .....	2
Dental Clinic .....	1
Dental Clinic Addition .....	1
Biosystems Research Laboratory .....	1
<b>Total</b> .....	<b>12</b>

\* See Table 20, below.

TABLE 20.—*Medical Facilities Under Construction, 30 June 1964, by Location and Description\**

Location	Description
Brooks AFB, Tex.	USAF School of Aerospace Medicine, Biosystems Research Laboratory. FY 1959 Authorization and FY 1963 Appropriation. Estimated BOD, September, 1964.
Lackland AFB, Tex.	Dental Clinic w/52 DOR, Area Prosthetic Laboratory, and Classroom. FY 1963 Authorization and Appropriation. Estimated BOD, November, 1964.
Langley AFB, Va.	CMF w/125 Beds. FY 1963 Authorization and Appropriation. Estimated BOD, March, 1966.
Little Rock AFB, Ark.	CMF w/50 Beds. FY 1962 Authorization and Appropriation. Estimated BOD, July, 1964.
March AFB, Calif.	CMF w/200 Beds. FY 1962 Authorization and FY 1963 Appropriation. Estimated BOD, March, 1965.
Nellis AFB, Nev.	CMF w/50 Beds and 14 DOR. FY 1963 Authorization and Appropriation. Estimated BOD, November, 1964.
Offutt AFB, Nebr.	CMF w/125 Beds and 22 DOR. FY 1963 Authorization and Appropriation. Estimated BOD, January, 1965.
Patrick AFB, Fla.	CMF w/75 Beds. FY 1963 Authorization and Appropriation. Estimated BOD, July, 1965.
RAF Lakenheath, England	CMF w/115 Beds and 6 DOR. FY 1961 Authorization and Appropriation. Estimated BOD, November, 1964.
Suffolk County AFB, N. Y.	Class-A Dispensary w/12 Beds. FY 1963 Authorization and Appropriation. Estimated BOD, July, 1964.
Wakkanai Air Station, Japan	Class-A Dispensary w/12 Beds. FY 1963 Authorization and Appropriation. Estimated BOD, November, 1964.
Westover AFB, Mass.	Dental Clinic Addition w/7 DOR and Area Prosthetic Laboratory. FY 1963 Authorization and Appropriation. Estimated BOD, June, 1964.

\* Facilities Division, *Semiannual History*, January-June, 1964, pp. 7-8.

On 30 June 1964, medical items which were under design, having received Congressional Authorization and Appropriation, totalled 20. These were chiefly in the United

States, but they also included facilities in Turkey, Korea, Pakistan, and Japan.<sup>15</sup>

<sup>15</sup> *Ibid.*, pp. 8-11.

## Professional Services

Activities in professional services dealt with aerospace medicine, physical standards, and specialty consultation.

### Aerospace Medicine

The work of the Air Force in aerospace medicine related among other things to flight medicine, aviation physiological training, military public health and occupational medicine, bionucleonics, and bioenvironmental engineering.

### Flight Medicine

Some of the important problems that arose in flight medicine included the provision of personnel for NASA, the treatment of malaria, and the relation of anti-smoking drugs to flying. Other problems and activities involved de-sensitization injections for the relief of allergy, the medical records of flying personnel, flight surgeons' ratings and the evaluation of airlift procedures.

**Personnel Support for NASA.**—The planning of medical monitor support to NASA for Project Gemini required much detailed study that was still in progress as fiscal year 1964 ended. These studies dealt with questions as to the numbers and types of personnel needed, how they were to be scheduled, and what training they should have.

**The Treatment of Malaria.**—With regard to malaria, both the Tactical Air Command (TAC) and the Pacific Air Command (PACAF) raised questions about the use of chloroquine-primaquine phosphate tablets in flying personnel who served in areas where the disease was endemic. When the Tactical Air Command requested authority

to administer suppressive dosage of these tablets to aircrew members operating in or returning from such areas, the Office of the Surgeon General replied that it did not object to the use of this drug in such circumstances and that the possibility of adverse reactions was slight. Nevertheless, it was said, flight surgeons should learn to recognize these reactions and should know the necessary therapy for them.<sup>1</sup>

**Anti-Smoking Drugs and Flying.**—Early in calendar year 1964, the U.S. Public Health Service published information on the health hazards of smoking cigarettes. This publication stimulated widespread use of patented medications intended to curb the desire to smoke. Many aircrew members began to take such medications in the belief that they were harmless. Most of these medications were known to contain lobeline. Lobeline is a powerful drug that can affect the heart and consciousness of some persons.

To combat this problem, the Office of the Surgeon General informed all major commands of the dangers inherent in anti-smoking drugs and requested these commands to instruct all flying personnel that the usual precautions against self-medication apply. The Office of the Surgeon General also disseminated this warning through the *USAF Medical Service Digest and other publications*.<sup>2</sup>

**The Relief of Allergy.**—Early in the fiscal year, the Air Force Systems Command (AFSC) requested the Office of the Surgeon

<sup>1</sup> Flight Medicine Section, Aerospace Medicine Division, Directorate of Professional Services, Semiannual History, July–December, 1963, p. 2.

<sup>2</sup> Flight Medicine Section, Semiannual History, January–June, 1964, pp. 4–5.

General for guidance concerning the administration of desensitization shots to flying personnel for the relief of seasonal allergy. The reply stated that these shots were an accepted therapeutic and prophylactic measure for the relief of such allergy and that they did not in themselves constitute a hazard to a crew member. Clinical judgment as to the effectiveness of desensitizing agents was to be the prime consideration and could be of decisive importance; for the proven severity of an allergy could result in temporary suspension from flying. The Office of the Surgeon General also pointed out that specific written guidance on desensitization shots was not available, since this was a question for clinical judgment.<sup>3</sup>

**Medical Records.**—Correspondence from major commands and Aerospace Medicine Reports from both domestic and overseas areas contained many complaints from organizations gaining flying personnel that the medical records of these men were incomplete or out of date. Many records lacked waivers for disqualifying medical defects or failed to include copies of recent physical examinations. Air Force Form 137, "Footprint Record," was frequently illegible or absent. The time it took the gaining organizations to bring these records up to date strained relations between flight surgeon and flyer and hampered the accomplishment of the mission.

To solve this problem, the Office of the Surgeon General reminded the major commands of the provisions of AFM 160-1, pertaining to the physical examination of personnel programmed for permanent-change-of-station (PCS) moves. The commands were requested to bring the medical records of all flying personnel up to date and to verify the adequacy of these records prior to all PCS moves.<sup>4</sup>

<sup>3</sup> Flight Medicine Section, Semiannual History, July-December, 1963, p. 10.

<sup>4</sup> Flight Medicine Section, Semiannual History, January-June, 1964, pp. 5-6.

**Flight Surgeons' Ratings.**—From 1 July 1963 to 30 June 1964, the Office of the Surgeon General approved the professional qualifications of 8 officers for the rating of Chief Flight Surgeon, 15 for the rating of Senior Flight Surgeon, and 95 for that of Flight Surgeon.<sup>5</sup>

**Evaluation of an Airlift Exercise.**—During the latter part of October, 1963, when the Air Force was conducting an exercise known as Operation "Big Lift", a representative of the Office of the Surgeon General participated as the medical member of the USAF Observation Team. The medical portion of the report which this team later submitted to the Chief of Staff, USAF, contained the following conclusions and recommendations:

1. No medical problems were encountered during the embarkation or debarkation phase of the operation.

2. Excellent surveillance of food-serving facilities and crew billets was maintained.

3. Directors of Base Medical Services understood the scope of the operation and had made adequate preparation to provide medical coverage for both aircrew and ground support personnel.

4. Aircraft accident plans to provide for continuous emergency coverage had been developed.

5. Procedures had been established for hospital management of mass aircraft casualties, including the setting up of additional beds, the securing of blood, and the augmentation of personnel.

6. Latrine facilities aboard the C-135 and the C-130 were unsatisfactory for this type of movement. Further evaluation would be required, in order to correct these deficiencies.

7. Personnel in the C-130 were too crowded to permit them to relax. It would be necessary either to re-distribute the personal equipment, or to reduce the number of personnel carried.

<sup>5</sup> Flight Medicine Section, Semiannual History, July-December, 1963, p. 9; idem, Semiannual History, January-June, 1964, p. 4.

8. In isolated instances, unnecessary requirements or inadequate planning had interfered with the crew's ability to obtain the minimum rest that was necessary. At one base, flight clothing was not permitted in the dining facility. At another base, no provision had been made to billet the crews. This had made it necessary for the crews to draw bed clothing and to make their beds after they arrived.<sup>6</sup>

#### Aviation Physiological Training

Through its Aviation Physiological Training Program, Air Force flying personnel learned to recognize, understand, and overcome the physiological stresses encountered in military aviation and space flight.

On 30 June 1964, the Air Force operated 39 active physiological training units. These units utilized personal protective equipment, low pressure chambers, and specialized escape trainers. All but three units were in the United States. During fiscal year 1964, one had been deactivated at Johnson Air Station, Japan, and one had been activated at MacDill Air Force Base, Florida. The three still outside the United States were situated at Kadena Air Base, Okinawa, Wiesbaden Air Base, Germany, and Albrook Air Force Base, Canal Zone. Of these 39 units, 17 were authorized to conduct pressure suit training with low pressure auxiliary chambers.

All physiological training units also fitted and inspected oxygen masks and helmets for aircrews, inspected oxygen systems, helped with flying safety campaigns, and advised the Directors of Base Medical Services during accident investigations.

At the end of fiscal year 1964, the Aviation Physiological Training Program had an authorized manning of 115 officer spaces and 579 airman spaces. The total assigned strength of the 39 units, however, stood at 95 officers and 576 airmen. Of prime importance from a manning point of view was

<sup>6</sup> Flight Medicine Section, Semiannual History, July-December, 1963, p. 8.

the action accomplished, during the course of a specialty shredout of 1435A/1515A, Physiological Support Officers, to identify rated officers who were being used as Aviation Physiologists. This identification prevented the loss of many well-qualified instructors.

Under the Physiological Training Program, 49,522 aircrew personnel completed original, passenger, or refresher training during the fiscal year, while 1,292 completed pressure suit training.<sup>7</sup>

Training in emergency escape from disabled aircraft was strongly emphasized. On 30 June 1964, the Air Force was utilizing 15 live-charge ejection seat trainers. The Air Training Command (ATC) continued to train all undergraduates in the MH-15 trainer. At the same time, the Air Defense Command (ADC) gave annual training to 400 tactical aircrew personnel by sending a team with a mobile MH-15 trainer to the bases where the trainees were. This saved money.

The physiological training units of ATC operated eight Personal Equipment Mobile Training Teams. These teams visited bases throughout the United States and provided instruction in the use of new and improved items of personal protective and survival equipment. Within the USAFE area, the same function was performed by the 18th Physiological Training Flight at Wiesbaden, Germany. The 15th Physiological Training Flight at Kadena Air Base, Okinawa, provided the same service for PACAF.<sup>8</sup>

Certain changes in training requirements appeared in August, 1963, with the publication of AFR 50-27, "Air Force Physiological Training Program." This regulation eliminated a requirement for refresher training of aircrew personnel who fly in air-

<sup>7</sup> Aviation Physiology Section, Aerospace Medicine Division, Semiannual History, July-December, 1963, pp. 1-3; idem, Semiannual History, January-June, 1964, pp. 1-2.

<sup>8</sup> Aviation Physiological Training Section, January-June, 1964, pp. 3, 5.

craft that normally operate below 10,000 ft. On the other hand, the regulation made ejection seat training in a live-charge trainer mandatory.

The ADC received a waiver to paragraph 19e, AFR 60-16, "General Flight Rules," to enable aircrew members to exceed 50,000 ft. on specified intercept missions without wearing pressure suits. The ADC had in effect contended that the pressurization system under reference was highly reliable and that in the event of decompression, the period of exposure to the hazard would be brief. The Office of the Surgeon General pointed out the risks inherent in operation above 50,000 ft. without pressure suits; nevertheless, the waiver was necessary to the performance of the specified missions.

Among the many requests for information that the Office of the Surgeon General received from the major commands during the period was an inquiry from the Continental Air Command as to the meaning of some of the requirements for original training that appeared in AFR 50-27. The Office of the Surgeon General informed CCNAC that with certain exceptions involving local rescue operations by helicopter, all aircrew trainees must complete an original course of instruction in aviation physiology as outlined in paragraph 7 of AFR 50-27 before they may be awarded an aeronautical rating or designation.<sup>9</sup>

#### **Military Public Health and Occupational Medicine**

Activities in Military Public Health and Occupational Medicine included (1) educational work on the cardiopulmonary effects of cigarette smoking; (2) special reporting procedures for streptococcal and meningococcal infections; and (3) improved procedures for detecting tuberculosis.

In January, 1964, the U. S. Public Health Service published a report, "Smoking and Health," that gave unqualified support to

<sup>9</sup> Aviation Physiology Section, Semiannual History, July-December, 1963, pp. 9, 10.

a program the Air Force Medical Service had established as early as 1962: the USAF health education program to prevent cardiopulmonary disease from cigarette smoking. Under this program, the Air Force distributed several hundred copies of "Smoking and Health" to Air Force physicians.<sup>10</sup>

The high incidence of streptococcal disease at Loring Air Force Base, Maine, required the Air Force to establish special procedures by which the Director of Base Medical Services at Loring Air Force Base would report directly to the Commission on Streptococcal and Staphylococcal Diseases, Armed Forces Epidemiological Board. Although the majority of these cases were among school-age dependents, the immediate military objective of this special surveillance was to maintain the Strategic Air Command mission by early detection of any significant trends among military personnel.<sup>11</sup>

Special arrangements were also made for reports and cultures of meningococcal infections to be sent directly from all bases to the Chairmen of the Committee on Meningitis, Armed Forces Epidemiological Board. This committee was endeavoring to detect any sulfa-resistant organisms that might be present. The U. S. Navy had detected such organisms at its San Diego Training Center.

In order to combat tuberculosis, the Air Force issued a new regulation (AFR 161-16), which initiated certain tests for all USAF personnel and their dependents departing from the United States or returning from abroad, and for all personnel entering upon active duty. The measure was expected to facilitate early detection of the disease.<sup>12</sup>

<sup>10</sup> Military Public Health and Occupational Medicine Section, Aerospace Medicine Division, Semiannual History, January-June, 1964, p. 1.

<sup>11</sup> Office of the Surgeon General, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Letter to Air Force Historical Division Liaison Office, 6 August 1964, Attachment 4, p. 3; Military Public Health and Occupational Medicine Section, Semiannual History, January-June, 1964, pp. 2-3.

<sup>12</sup> Military Public Health and Occupational Medicine Section, January-June, 1964, pp. 3, 5.

### Bionucleonics

Significant developments in bionucleonics during fiscal year 1964 included the completion and publication of a manual on the establishment and operation of clinical radioisotope centers. This manual provided long-awaited guidance not otherwise available in print. Other documents written or published during the period included Air Force Manual 160-10, "Medical X-Ray Protection," which was published jointly by the Army and the Air Force. A directive entitled "Control and Recording of Ionizing Radiation," which was intended to supersede AFR 160-31, was fully coordinated throughout the three Services and the Department of Defense. When the fiscal year ended, this directive was awaiting publication as a tri-service document.<sup>13</sup>

The many other activities of the Office of the Surgeon General in bionucleonics included the development of requirements for stockpiling medical materiel for defense against agents of biological and chemical warfare. Differences of views on this subject between the three Services led to the appointment by the Deputy Assistant Secretary of Defense (Health and Medical) of a medical advisory panel to evaluate the program. The work of this panel in fiscal year 1964 resulted in closer coordination of the stockpiling program by the three Services.<sup>14</sup>

### Bioenvironmental Engineering

Leading developments in bioenvironmental engineering related among other things to (1) water pollution; (2) potentially toxic and hazardous materials; (3) missile safety; and (4) the contamination of certain missile sites by fungus. Other important developments related to (5) the recruitment and retention of bioenvironmental engineer

officers; (6) noise control; and (7) the reorganization of certain Medical Service functions.

Water pollution was the subject of a joint survey which the U. S. Public Health Service and the Office of the Surgeon General conducted at 94 installations. The survey resulted in a recommendation that the U. S. Public Health Service should establish uniform standards of water quality that all Federal establishments should observe.

The publication in November of AFR 161-18, "Use of Potentially Toxic Agents and Hazardous Materials," disseminated to Air Force commands and Air Force contractors information on how to request guidance from the Medical Service on that major problem of bioenvironmental engineering. The regulation also embodied provisions for the development and application of necessary precautions in producing, handling, storing and using material or agents which may be dangerous to human, animal, or plant life, or which can create a major ecological change.

In this and other ways bioenvironmental engineering support of the occupational health aspects of the aerospace medical program and of work on missile safety expanded considerably. For example, bioenvironmental engineers working in conjunction with aerospace medical officers served actively as members of missile accident investigation teams.<sup>15</sup>

The problems that arose from the growth of fungus in certain missile silos were solved after bioenvironmental engineers had secured laboratory identification of the various fungi and had recommended the application of copper sulphate. These growths, had they not been eliminated, would have affected communications equipment.

An improved program for recruitment and retention of bioenvironmental engineer officers was established through the efforts of both the Office of the Surgeon General

<sup>13</sup> Office of the Surgeon General, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Attachment 4, p. 2.

<sup>14</sup> Bionucleonics Section, Aerospace Medicine Division, Semiannual History, July-December, 1963, pp. 1-3.

<sup>15</sup> Bioenvironmental Engineering Section, Aerospace Medicine Division, Semiannual History, July-December, 1963, pp. 5-7.

and the Deputy Chief of Staff, Personnel, USAF Headquarters. The object was to obtain 15 officers annually from the AFROTC Program. The initial effort, though not begun until the spring of 1964, resulted in 7 approved applicants who would enter graduate training as soon as they had received their Bachelor's degree and had been commissioned.

In co-operation with the Directorate of Civil Engineering, the Office of the Surgeon General developed criteria for suppressing noise from jet engine run-ups. The new criteria would give the commands better means of determining whether they should procure equipment to suppress such noise.

During the latter half of fiscal year 1964, the Surgeon General approved, for submission to the Air Staff, a proposal to reorganize the Medical Service by creating within it a Biomedical Sciences Corps. This proposal was being considered by the Air Staff when fiscal year 1964 ended. The proposed new corps would be composed of officers qualified in scientific and engineering fields allied to medicine. Personnel already in the Medical Service Corps, for example, who had such qualifications, would become members of the new corps. The proposed reorganization appeared likely to lead to an enhancement of Medical Service capabilities in both clinical medicine and aerospace medicine and to be required by the scientific changes that were rapidly occurring in both of these fields. The plan was also expected to facilitate procurement and to improve the utilization, career progression, and retention of the officers involved.<sup>16</sup>

### Research

The Air Force operated four large laboratories that specialized in aerospace medicine: (1) the 6570th Aerospace Medical Research Laboratories (AMRL), Wright-Patterson Air Force Base, Ohio; (2) the USAF School of Aerospace Medicine (SAM), Brooks Air

Force Base, Texas; (3) the Arctic Aero-medical Laboratory (AAL), Fort Jonathan Wainwright, Alaska; and (4) the 6571st Aeromedical Research Laboratory (ARL), Holloman Air Force Base, New Mexico. These laboratories were all under the Air Force Systems Command (AFSC), Andrews Air Force Base, Maryland. The AFSC administered them through the Aerospace Medical Division (AMD) at Brooks. Of these four laboratories, AMRL and SAM were the largest.

The AFSC also operated several other facilities that carried on aerospace medical research. These included the Air Force Flight Test Center, Edwards Air Force Base, California, and the Air Force Missile Test Center, Patrick Air Force Base, Florida.

The large volume of publications resulting from such research during the fiscal year included many that dealt with problems involved in space travel, as well as many that dealt with other aspects of aerospace and clinical medicine. For example, the AMRL published in-house or contractual studies on (1) the potability of water distilled from urine, (2) the therapy for cases of acute toxicity from missiles, (3) diets for space travellers, and (4) the possible physiological effects of prolonged weightlessness and inactivity.

In its efforts to develop an effective system for providing astronauts with drinking water on long voyages, the AMRL monitored a 16-week experiment in which male volunteers drank water distilled from their own urine. For the first half of this period, the subjects drank only ordinary distilled water. For the next half, they depended partially or entirely upon the urine distillate. They proved unable to distinguish any difference between those two kinds of water, and they supposed they had been drinking nothing but urine distillate from the beginning. The urine distillate had previously been treated so as to improve its odor and flavor. Blood counts, liver tests, and urinalyses were made on the men, to learn whether the urine distillate caused any ill effects. All

<sup>16</sup> Idem, Semiannual History, January-June, 1964, pp. 1-5.

results were normal. The investigators therefore concluded that long-term ingestion of water distilled from urine has no adverse effect upon human beings.

Nevertheless, the experimenters did find evidence that bacteria had grown in the urine distillate. As a means of eliminating this growth, they suggested a further experiment to investigate the possibility that bacterial growth could be eliminated by treating the raw urine with an antibiotic.<sup>17</sup>

Scientists of the AMRL meanwhile developed a method for treating men who in the future might become acutely poisoned from severe exposure to a much-used missile fuel—UDMH (1,1-dimethylhydrazine). No one had yet been acutely poisoned from this fuel, so far as was known, but the Air Force considered it prudent to be prepared against such a misfortune. Air Force scientists had learned from previous experiments with laboratory animals that UDMH poisoning can cause nausea, vomiting, convulsions, cardiovascular collapse, and death. They had also learned that pyridoxine hydrochloride (PIN•HCL) and pyridoximine dihydrochloride (PAM•2HCL), which are forms of vitamin B<sub>6</sub>, tend to prevent seizures caused by certain derivatives of hydrazine.<sup>18</sup> Thus, by injecting different doses of these chemicals into mice, rats, dogs, and monkeys that had been poisoned by UDMH, the AMRL scien-

tists arrived at a recommended therapy for UDMH poisoning in human beings. The investigators concluded that PIN•HCL was the therapeutic agent of choice for injection into human beings and specified the required dosage and other therapeutic measures. At the same time, the investigators emphasized the fact that the treatment they recommended had no precedent.<sup>19</sup>

As to food for space travel, a research contractor for the AMRL conducted various experiments to analyze reactions to a pre-cooked-dehydrated "space rations" diet during a period of confinement lasting 28 days. These experiments covered many sorts of possible physiological and psychological effects of such a diet, including aspects of psychomotor and perceptual performance, social and group behavior, and the acceptability of such rations. The reactions of a group of subjects receiving a diet composed of frozen, fresh, and heat-processed foods were compared with those receiving the pre-cooked--dehydrated diet. The frozen, fresh, and heat-processed foods were consistently judged more acceptable and palatable than the same food substances when dehydrated. The experiments indicated, however, that under the given conditions, which involved isolation, low physical activity, and minimal stress, the pre-cooked-dehydrated diet produced no consistent adverse effect on the psychological, physiological, psychomotor, or social functioning of the subjects. No generalizations were made, however, as to possible reactions to a pre-cooked-dehydrated diet under highly stressful conditions.<sup>20</sup>

In order to develop a better understanding of the metabolic and hemodynamic effects of a state of prolonged inactivity that might be comparable to that of space travel, the AMRL monitored a study in which four healthy young men lay in bed for 42 days. These subjects were on a fixed diet; they

<sup>17</sup> D. de Steiguer and A. T. Pessa, *A Study of the Effects of Long-Term Ingestion of Recovered Water: Human Ingestion Trials*, Aerospace Medical Research Laboratories (AMRL) Technical Documentary Report (TDR) No. 63-70 (October, 1963), pp. iii, 1-8.

<sup>18</sup> Kenneth C. Back, Milton K. Pinkerton, and Anthony A. Thomas, *Therapy of Acute UDMH Intoxication*, AMRL-TDR-63-44 (June, 1963), pp. iii and 1, citing K. C. Back and A. A. Thomas, "Pharmacology and Toxicology of 1, 1-Dimethylhydrazine (UDMH)," *Am. Ind. Hyg. Assoc. J.* 24:23, 1963, B. Dubnick, G. A. Leeson, and C. C. Scott, "Effects of Forms of B<sub>6</sub> on Acute Toxicity of Hydrazines," *Toxicol. Appl. Pharmacol.*, 2: 403, 1960, and J. L. Reeves, *Influence of Large Doses of Pyridoxine Hydrochloride on the Convulsigenic Activity of UDMH in Monkeys*, School of Aerospace Medicine Report 62-31, Brooks Air Force Base, Texas, 1961.

<sup>19</sup> K. C. Back, et al., *Therapy of Acute UDMH Intoxication*, pp. iii, 7.

<sup>20</sup> R. J. Senter, *Research on the Acceptability of Precooked Dehydrated Foods During Confinement*, AMRL, TDR-63-9 (January, 1963), pp. iii, 39.

were free to move their arms and legs; and the beds were stationery, rather than oscillating.

It was found that the most prominent alteration in the circulation following bed rest was the marked impairment in the ability of these subjects to maintain the upright posture. However, the consistent increase in cardiac output that these subjects displayed when work load increased following bed rest indicated that the function of the myocardium as a pump was not seriously impaired by inactivity. The heart rate response to standardized exercise was markedly elevated at the end of the bed rest. This, of course, indicated a marked deterioration in physical work capacity. After a three-week post-bed-rest reconditioning period, physical work capacity had almost returned to pre-bed-rest levels.

In all four subjects, a marked increase in the urinary excretion of calcium and phosphorus occurred. The increase in urinary output of calcium, which in some cases was more than doubled, started during the first six days in bed. This observation, which was similar to one made before in the case of subjects immobilized in plaster casts, showed that a considerable calcium excretion occurs even if a supine subject can move his extremities. It therefore appeared possible that reduced gravitational stress or hypodynamic states rather than immobilization, as such, may have a deteriorating effect upon the skeletal system.<sup>21</sup>

Several experiments were conducted or monitored by the Arctic Aeromedical Laboratory which are of general interest in relation to survival and the effects of exposure to cold. For instance, one common hazard of foot travel in the Arctic is that of accidental coldwater immersion in the dead of winter while on the trail and far from shelter. A series of experiments was therefore conducted to determine how critical a haz-

ard to man partial cold water immersion would be during the Arctic winter, and how long a time would be available before frostbite could be expected. At ambient temperatures ranging from 2 to 45 degrees below zero Fahrenheit, one subject immersed his right leg to the knee in water for 10 seconds. After 10 seconds the subject either stood at rest or exercised. The data indicated that footgear should not be removed after accidental partial cold water immersion and that, even with no activity, a person has approximately 30 minutes before any danger of frostbite occurs. It was found that exercising or walking prolongs tolerance time a great deal and that even at very low temperatures one may walk for hours before foot temperature becomes dangerously low.<sup>22</sup>

At the USAF School of Aerospace Medicine, Air Force scientists likewise conducted or monitored a large number of studies concerned with space travel and many other aspects of aerospace medicine. Such studies dealt, for example, with (1) the effects of chronic, low-level doses of ionizing radiation, (2) psychological problems that could arise in space travel, and (3) decompression sickness.

In 1954, the Air Force began a study of the long-term effects of chronic exposure to low dose levels of ionizing radiation. During fiscal year 1964, the USAF School of Aerospace Medicine published a report summarizing some of the results which had been obtained during the past four years. These results were concerned with effects on the peripheral blood, longevity, and the working performance of *Macaca Mulatta* monkeys. It was the general conclusion that the long-term survivors of the chronic irradiation program showed no increased mortality after 9 years of exposure. Furthermore, an examination of the blood elements of the survivors indicated that these elements were essentially normal.

<sup>21</sup> N. C. Birkhead, J. J. Blizzard, J. W. Daly, et al., *Cardiodynamic and Metabolic Effects of Prolonged Bed Rest*, AMRL-TDR-63-37 (May, 1963), pp. 5, 32, 34, 37.

<sup>22</sup> James H. Veghte, Capt., USAF, *Effects of Partial Cold Water Immersion on Man in the Arctic*, Arctic Aeromedical Laboratory (AAL), TDR-63-24 (June, 1963), p. iii, 1, 3.

Psychological tests on the same subjects showed that such irradiation increased their concentration of attention. The irradiated monkeys demonstrated increased facility in learning those tasks that placed a premium on attention to the site of food reward, but decreased facility in learning tasks that required attention to peripheral cues.<sup>23</sup>

Members of the Neuropsychiatry Department at the School conducted a series of eight Two-Man Space Cabin Simulator experiments in which they utilized closed-circuit television and surveillance microphones to observe crew interactions. The investigators also debriefed the subjects systematically after the tests were over and studied the diaries the men kept throughout their confinement. The tests simulated conditions in two 30-day flights at 18,000 feet and four 17-day flights at 33,500 feet. For purposes of comparison, the subjects took two 17-day control flights at ground-level atmospheric pressure. All crew members were rated pilots. Although all received an extensive psychiatric and psychologic evaluation as part of their pre- and postflight medical evaluation, no psychiatric selection was made of the crews, and no attempt was made to match certain types of personality.

It seemed from these tests that although these subjects were in many cases unsuited to each other and felt much mutual hostility, they considered the mission goals so important that they were able to prevent this hostility from erupting enough to impair their working relationships seriously. The observations made concerning sleep did not justify confident and precise conclusions, but it appeared likely that such subjects can be flexible in adjusting to unaccustomed and varying sleep patterns. More research would be necessary on this question. It was more clear that the necessity of enduring long periods of relatively monotonous monitoring while avoiding the deleterious effects of

boredom and fatigue could present a really significant and major problem. This problem of boredom with monitoring could be significantly aggravated in space flight by the relative lack of motility and the limited opportunities for diversionary and recreational activity which would exist.

The investigators concluded that all of the aspects mentioned above could assume increased significance during the combined stresses of actual space flight. They therefore recommended that attention be focused on the foregoing areas during selection and training. They urged that, in order to maintain optimum performance and judgment under stress, individuals should be selected whose personalities offer the least difficulties on these points.<sup>24</sup>

Since one hazard a man on a space mission might have to face is that of being decompressed in a vacuum, the question arises whether, if that happened and he survived, he could recover his normal physiological and psychological functions. It could also be necessary to the success of a space mission to be able to make a good estimate as to how long a man would be likely to take to recover from such an ordeal. In order to develop answers to these questions, scientists at the School took 31 squirrel monkeys, taught them a complex task, subjected most to different periods of vacuum (2 millimeters of mercury), put a few under low pressure, and kept the rest at normal pressure. The main object of the experiment, then, was to learn whether the survivors of the vacuum would be able to perform the same series of tasks just as well after being decompressed in a vacuum as they had done before.

When the survivors were tested six days later, all performed their tasks as well as the monkeys did that had remained at normal pressure. Thus the main question was answered. Other facts were also learned. One

<sup>23</sup> Donald R. Anderson, *Latent Effects of Chronic Irradiation on Longevity and the Peripheral Blood Elements of the Monkey, Macaca Mulatta*, SAM-TDR-63-55 (September, 1963), pp. 1, 5.

<sup>24</sup> Earl H. Cramer, Capt., USAF, MC, and Don E. Flinn, Lt. Col., USAF, MC, *Psychiatric Aspects of the SAM Two-Man Space Cabin Simulator*, SAM-TDR-63-27 (Sept., 1963), pp. iii, 1-3.

monkey died in a group of five that had been exposed to the vacuum for only 11 seconds. Another died in a group of five that had been exposed to the vacuum for 90 seconds. Hence, it was concluded that decompression to a vacuum entails a risk to life even though the exposure is only for a few seconds.

Furthermore, it was found that the monkeys that had been most severely decompressed took much more time to recover to apparent normality than did the others. They were less inclined to eat and drink within the first few hours after the test, and they lost more weight. Their hearing and vision was also temporarily impaired.

The investigators recognized that it would not be possible to extrapolate confidently to man from findings based on the squirrel monkey. Nevertheless, as they thought, these findings gave reason for optimism on the chances a man might have to recover completely if he survived a similar experience. At the same time, they considered that the impairment of normal vision, hearing, locomotion, and eating which the monkeys experienced after being exposed for 60 or 90 seconds to a vacuum made it doubtful whether an astronaut would be able to perform anything other than the simplest of tasks within the first few days if he were exposed to anything other than the very shortest of decompression intervals.<sup>25</sup>

The therapy for decompression sickness constituted another important topic for research at the School. In one experiment, the investigators used a vacuum chamber to produce decompression sickness in 21 large dogs. These dogs had previously been anesthetized and appropriately instrumented to detect or measure the usual signs of the disorder. The experimenters produced venous bubbles, pulmonary hypertension, and tachypnea in these dogs by decompressing some of them from a pressure of one atmosphere to that of 150,000 feet, and

<sup>25</sup> Duane M. Rumbaugh and Joseph W. Ternes, *Learning Set Performance of Squirrel Monkeys after Rapid Decompression to Vacuum*, SAM-TDR-64-42 (October, 1964), pp. iii, 1-7.

others from a pressure of six atmospheres down to one. Recompression reversed the signs of the sickness. Even though the recompression did not make the bubbles disappear, it made them smaller. The amount of recompression necessary to reverse the signs varied between individual animals. For example, one animal needed to be overcompressed to three atmospheres absolute in order to restore normal respiratory frequency and normal diastolic pressure in the pulmonary artery. Others apparently needed only small overpressures.

In any case, the investigators recommended the use of the same treatment tables that the U. S. Navy has found effective in the management of diver's bends. They also concluded that it would be desirable to have a lightweight portable chamber capable of producing six atmospheres absolute, so that victims of decompression sickness could be properly transported to the necessary treatment facilities.<sup>26</sup>

### Physical Standards

The work of the Office of the Surgeon General in Physical Standards during fiscal year 1964 included (1) the complete revision of AFM 160-1, "Medical Examination"; (2) changes in requirements for admission to the Air Force Academy; (3) efforts to develop procedures for restoring Pilot-Physicians to flying status; and (4) a movement to standardize Service Academy medical examinations.

Included in the revised AFR 160-1 were revisions of AFR 160-4, "Footprinting Program"; AFR 160-10 "Periodic Medical Examinations;" AFR 160-115, "Medical Examination of Air Force Academy applicants;" and AFR 160-21, "USAF Central Electrocardiographic Record Library."

<sup>26</sup> Robert G. McIver, Major, USAF, MC, and Sidney D. Leverett, Jr., Capt., USAF, MSC, *Studies in Decompression Sickness: Cardiorespiratory Responses of Anesthetized Dogs to Compression Therapy Following Experimental Decompression Sickness*, SAM-TDR-63-94 (December, 1963), pp. iii, 1-8.

Major changes in the manual were numerous. They included (1) provision for the recording of a baseline electrocardiograph (ECG) for nonflying personnel; (2) an annual ECG for flying personnel on and after their 35th birthday; (3) the establishment of standards for intraocular tension and the outlining of techniques for measuring pressure; (4) revision of the criteria for the evaluation of examinees having a history of head injury; and (5) the liberalization of Air Force weight standards to conform with Department of Defense Directive 1145.1, of 15 November 1955.

Meanwhile, the Office of the Surgeon General arranged that more stringent standards of visual acuity should henceforth be required of applicants for admission to the Air Force Academy. Previous entry requirements had permitted a visual acuity of 20/100, although these did not meet the requirements for pilot training. This change reflected an Air Force need to increase the number of young pilots. The latter were needed to replace expected losses from retirement and from other physical problems of aging among the present pilot population.<sup>27</sup>

In order to deal with the problem of restoring Pilot-Physician and Navigator-Physicians to flying status, the Physical Standards Division of the Office of the Surgeon General proposed in January, 1964, that a board be established to review the applications of formerly-rated physicians who wished to serve as career officers in aviation medicine. This board was to advise the Surgeon General on the desirability of restoring particular medical officers to flying status in their pilot or navigator ratings. The Surgeon General accordingly ordered that a Review Board for application of Medical Officers be established.

<sup>27</sup> Physical Standards Division, Directorate of Professional Services, *Semiannual History, July-December, 1963*, pp. 1-3, 5.

During the same month, the Secretaries of the Army, the Navy, and the Air Force directed that a joint study be made of the mental and physical admission standards of the three Service Academies, with the object of making such examinations as uniform as possible. At several ensuing tri-Service meetings it was therefore suggested that while certain differences in physical qualifications should be preserved between the Services, the medical examinations for the three Academies should be made identical. This, it was thought, would make it possible for any one of certain designated Army, Navy, or Air Force facilities to examine a candidate for any one of the Academies. At a tri-Service meeting held in June, 1964, an effort was made to secure the approval and implementation of these proposals by 1 July 1964. Pending the development of methods to secure an equitable distribution of the workload, the Air Force demurred. The reason for this demurrer was that the Air Force operated 109 examining centers, whereas the Army operated only 40, and the Navy, only 18.<sup>28</sup>

During fiscal year 1964, the Retirements and Separations Section of the Physical Standards Division, Office of the Surgeon General, moved to Randolph Air Force Base, Texas, to operate as a field extension of the Physical Standards Division. The remainder of the division was to follow at a later date. As indicated above, these changes were intended to enable the Office of the Surgeon General to give continuous medical support to the new USAF Military Personnel Center at Randolph.<sup>29</sup>

<sup>28</sup> *Idem*, *Semiannual History, January-June, 1964*, pp. 2-3.

<sup>29</sup> *Supra*, pp. 9-10; Physical Standards Division, *Semiannual History, July-December, 1963*, p. 1; *idem*, *Semiannual History, January-June, 1964*, p. 1; Office of the Surgeon General, *Tenth Annual Report of the USAF Medical Service, 1 July 1962-30 June 1963* (Washington: Government Printing Office, 1964), p. 11.

USAF MEDICAL SERVICE

TABLE 21.—Physical Standards Evaluations, July–December, 1963 <sup>a</sup>

Physical Examinations Reviewed and Certified		10,698
Flying Status Cases		1,055
National Guard	248	
Aviation Medical Examiners	274	
Flight Nurses	26	
Pilot Training	3	
Military Assistance Program Students	54	
Indefinite Suspensions	289	
Return to Flying	101	
Reel Operators	1	
Flight Surgeons	1	
Air Force Academy	2	
Military Academy Graduates	14	
Naval Academy Graduates	11	
Air Traffic Controllers	31	
Air Force Commission and General Service		7,549
AFPTR Regular Apmts	3,363	
Other Regular Air Force Apmts	1,134	
Reserve AF Apmts	2,539	
EAD'S	24	
Career Reserve Status	149	
Enlistments	192	
Military Academy Graduates	49	
Naval Academy Graduates	55	
Periodic Examinations	44	
Physical Examinations for Retirement		2,014
Officers	598	
Airmen	1,416	
Physical Examinations for Separation		80
Officers	66	
Airmen	14	
Aeronautical Orders Processed		15
School of Aerospace Medicine Consultations		227
Requests for Humanitarian Reassignments Processed		367
Requests for Medical Reassignments Processed		1
Names Checked on Promotion Lists		3,003
Boards		6,295
Physical Evaluation Boards		4,143
Physical Evaluation Boards—Active		
Permanent Retirement	1,286	
Temporary Retirement	618	
Discharge with Severance Pay	513	
Discharge without Severance Pay	154	
Returned to Duty (Physically Fit)	541	
Other than AFM 35-4	14	
Retained on Physically Restricted Status List	5	
Total	3,131	
Physical Evaluation Boards—Reexaminations		
Permanent Retirement	405	
Retained on Temporary Disability Retired List	442	
Discharged with Severance Pay	107	
Physically Fit—Discharged without Severance Pay	34	
Other—Discharged without Severance Pay	4	
Returned to Duty (Physically Fit)	20	
Total	1,012	

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TABLE 21.—Physical Standards Evaluations, July-December, 1963 <sup>a</sup>—Continued

Medical Board Report of Proceedings held under the provisions of Section 603, Title 37, U. S. Code, to determine mental competency of concerned individuals .....	24	
Medical Board Reports of Proceedings held under Chapter 9, AFM 35-4 (Discharge for Physical Disability which Existed Prior to Service) .....	1,150	
Medical Board Report of Proceedings held under Chapter 2, AFM 35-4 .....	782	
Boards for Correction of Military Records .....	183	
Central Aircrew Medical Review Boards .....	12	
Line of Duty Boards .....	1	
Correspondence .....		5,618
Executive Office .....	326	
Appointments, Enlistments and Retentions .....	1,616	
Aircrew Standards .....	1,281	
Separations and Retirements .....	2,395	
<b>GRAND TOTAL EVALUATIONS</b> .....		<b>26,224</b>

<sup>a</sup> Physical Standards Division, "Statistical Report," in Semiannual History, July-December, 1963.

TABLE 22.—Physical Standards Evaluations, January-June, 1964 <sup>a</sup>

Physical Examinations Reviewed and Certified .....		10,286
Flying Status Cases .....	1,021	
National Guard .....	195	
Aviation Medical Examiners .....	266	
Flight Nurses .....	12	
Pilot Training .....	1	
Military Assistance Program Students .....	65	
Indefinite Suspensions .....	328	
Return to Flying .....	98	
Air-borne Parachutist .....	1	
Air Force Academy Graduates .....	6	
Naval Academy Graduates .....	4	
Military Academy Graduates .....	24	
Air Traffic Controllers .....	21	
Air Force Commission and General Service .....	6,214	
AFPTR Regular Apmts .....	312	
Other Regular Air Force Apmts .....	2,136	
Reserve AF Apmts .....	3,242	
EAD'S .....	3	
Career Reserve Status .....	263	
Enlistments .....	81	
Periodic Medical Examinations .....	97	
Air Force Academy Graduates .....	6	
Naval Academy Graduates .....	4	
Military Academy Graduates .....	70	
Physical Examinations for Retirement .....	2,928	
Officers .....	802	
Airmen .....	2,126	
Physical Examinations for Separation .....	105	
Officers .....	77	
Airmen .....	26	
AFA Cadets .....	2	

USAF MEDICAL SERVICE

TABLE 22.—Physical Standards Evaluations, January-June, 1964 <sup>a</sup>—Continued

Aeronautical Orders Processed .....		2
School of Aerospace Medicine Consultations .....		217
Requests for Humanitarian Reassignments .....		533
Names Checked for Promotion .....		4,296
Boards .....		5,749
Physical Evaluation Boards .....	4,069	
Physical Evaluation Boards—Active .....		
Permanent Retirement .....	1,634	
Temporary Retirement .....	617	
Discharge with Severance Pay .....	586	
Discharge without Severance Pay .....	154	
Returned to Duty (Physically Fit) .....	533	
Other than AFM 35-4 .....	18	
Retained on Physically Restricted Status List .....	6	
Total .....	3,148	
Physical Evaluation Boards—Reexaminations .....		
Permanent Retirement .....	439	
Retained on Temporary Disability Retired List .....	333	
Discharged with Severance Pay .....	93	
Physically Fit—Discharged without Severance Pay .....	31	
Other—Discharged without Severance Pay .....	4	
Returned to Duty (Physically Fit) .....	21	
Total .....	921	
Medical Board Report of Proceedings held under the provisions of Section 603, Title 37, U. S. Code, to determine mental competency of concerned individuals .....		26
Medical Board Report of Proceedings held under Chapter 9, AFM 35-4 (Discharge for Physical Disability which Existed Prior to Service) .....		770
Medical Board Report of Proceedings held under Chapter 3, AFM 35-4 .....		684
Boards for Correction of Military Records .....		187
Central Aircrew Medical Review Boards .....		13
Correspondence .....		8,505
Executive Office .....	560	
Appointments, Enlistments and Retentions .....	1,990	
Aircrew Standards .....	1,539	
Separations and Retirements .....	4,416	
GRAND TOTAL EVALUATIONS .....		29,588

<sup>a</sup> Physical Standards Division, "Statistical Report," in Semiannual History, January-June, 1964.

### Consultation

Routine actions of the Consultants Division in the Office of the Surgeon General continued to include professional recommendations regarding the staffing and education of highly specialized professional personnel, the appointment of civilian consultants, and the development of policies and programs in the professional specialties.

Developments in specialty care included the codification of medical professional policy by the drafting of a document which, when published, would contain in one ready reference the professional medical policy guidance of the Office of the Surgeon General on all subjects requiring it. The document would cover such subjects as the policy on the use of controversial drugs at Air Force medical

facilities and the accomplishment of elective surgical procedures. The document was expected to be ready for publication in fiscal year 1965.<sup>30</sup>

On 8 June 1964, the USAF Military Consultant Program was slightly revised with the publication of AFR 160-51, "Military Consultant Histopathology Program." The new regulation incorporated the former AFR 160-116, "Histopathology Centers." With the exception of the 810th Medical Group at Fairchild Air Force Base, Washington, for

which the USAF Hospital Travis, Travis Air Force Base, California, would provide pathology service, each of the 13 consultant centers in the United States would assume responsibility for histopathology service in its respective consultant area.<sup>31</sup>

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<sup>30</sup> Consultants Division, Directorate of Professional Services, *Semiannual History, July-December, 1963*, pp. 1-2; *idem*, *Semiannual History, January-June, 1964*, pp. 1-2.

<sup>31</sup> "Military Consultant Program," *The USAF Medical Service Digest*, XV, No. 8 (August, 1964), p. 5.

## Dental Services

On 30 June 1964, the Air Force was operating 433 fixed dental facilities and 13 trailer-mounted dental units. These 446 facilities contained a total of 2,481 Dental Operating Rooms (DOR).

During the fiscal year, the number of Air Force bases whose dental services had received accreditation from the American Dental Association rose from 49 to 77. On 30 June 1964, 34 additional facilities were under inspection for dental accreditation.<sup>1</sup>

Of the 1,876 officers assigned to the Dental Service on 30 June 1964, 550 were members of the Regular Air Force and 415 were Career Reserve officers. The largest category was that of Dental Officer, General, which accounted for 1,459 officers. Other leading categories were those of Prosthodontist and Oral Surgeon (Table 23).

TABLE 23.—*Dental Assignments by Specialty, 30 June 1964*<sup>a</sup>

Air Force Specialty Code	Air Force Specialty	Assigned
0002	General Officer	0
9816	Dental Staff Officer	161
9826	Dental Officer, General	1459
9836	Oral Surgeon	89
9846	Periodontist	51
9856	Prosthodontist	101
9866	Orthodontist	13
9876	Oral Pathologist	2
Total		1876 <sup>b</sup>

<sup>a</sup> *Ibid.*, p. 1.

<sup>b</sup> This figure includes interns, residents, permanent-change-of-station (PCS) students, and pipeline personnel.

Of these officers, 37 were Board certified (Table 24).

<sup>1</sup> Assistant Surgeon General for Dental Services, Semiannual History, January-June, 1964, p. 6.

TABLE 24.—*Board-Certified Dental Officers on Active Duty, 30 June 1964*<sup>a</sup>

Specialty	Officers
Oral Surgery	12
Oral Pathology	2
Periodontics	11
Prosthodontics	12
Total	37

<sup>a</sup> *Ibid.*, p. 5.

Leading developments during the fiscal year included activities related to (1) training, (2) dental care for dependents, and (3) research.

### Training

In fiscal year 1964, the Air Force enlarged both its dental internship program and its residency training program. A two-year residency program in the specialties of prosthodontics and periodontics was established at the USAF Hospital Andrews, Andrews Air Force Base, Maryland, and at the USAF Hospital Wright-Patterson, Wright-Patterson Air Force Base, Ohio. At the same time, the Air Force designated Keesler Air Force Base, Mississippi, as an additional training center for the dental internship training program. Both of these programs were thus enlarged without the use of additional funds, equipment, or manpower.

The graduate training program also made good progress. During the first half of the fiscal year, the Air Force selected 23 dental officers for such training in a wide range of dental specialties. Periodontics and Prosthodontics each took 7 officers, while Oral Surgery, General Dentistry, and Crown and Bridge each accounted for 2 more and

the Laboratory Officer's Course, Orthodontics, and Oral Pathology, 1 each.<sup>2</sup>

### Dental Care for Dependents

The proposals which the Assistant Surgeon General for Dental Services had developed in fiscal years 1961 and 1962 for legislation that would authorize a Dependent's Dental Care Program similar to the existing Dependent's Medical Care Program were still under study in the Office of the Secretary of Defense as fiscal year 1964 ended. On 2 December 1963, the Director, Legislative Reference Service, Department of Defense, informed the Service Secretaries that the reason why the Denticare proposals could not be included in the Department of Defense Legislative Program for the 88th Congress was that the Office of the Secretary of Defense was studying "the whole range of corollary benefits" that the military already receive and was comparing them with those available to Government workers and persons in private enterprise.

<sup>2</sup> Assistant Surgeon General for Dental Services, Semiannual History, July-December, 1963, pp. 2-3; *idem*, Semiannual History, January-June, 1964, p. 2; Office of the Surgeon General, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Letter to USAF Historical Division Liaison Office, 6 August 1964, Attachment 3, p. 1.

This comparative study of benefits was in turn but a part of a more general study of military pay in which the Office of the Secretary of Defense was engaged. A decision on Denticare would therefore be reached at some other date.<sup>3</sup>

### Research

The high incidence of dental decay throughout the Air Force and the consequent loss of duty time which this caused prompted the Dental Sciences Division, USAF School of Aerospace Medicine, Brooks Air Force Base, Texas, to try to develop a mouthwash that would prevent such decay. Having found a promising stannous fluoride formula that one could administer to oneself, the School applied to the Food and Drug Administration for permission to test it clinically.<sup>4</sup>

<sup>3</sup> Assistant Surgeon General for Dental Services, Semiannual History, July-December, 1963, p. 4, with Attachment 1, Memorandum for the Secretary of the Air Force from the Department of Defense, Office of General Counsel, Subject: Proposed Legislation "To Provide Additional Dental Care for Dependents of Members of the Uniformed Services," 2 December 1963.

<sup>4</sup> Office of the Surgeon General, "Data for Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Attachment 3, p. 1.

## Veterinary Services

In fiscal year 1964, the main activities of the Air Force Veterinary Service included food inspection, technical assistance to foreign countries, medical research, training, and veterinary support to the Air Force on scientific problems.

The Air Force Veterinary Service, in that fiscal year, inspected more than one-half billion dollars' worth of subsistence. In addition to destination inspections for wholesomeness, the Veterinary Service assisted the Defense Subsistence Supply Center in procurement and in verifying inspection by contractors. The Veterinary Service also supported eight U.S. Marine Corps installations by the assignment of veterinary officers and airmen. In consequence of its efforts to provide American bases abroad with safer and better local supplies, the Veterinary Service did much to improve foreign agriculture, animal husbandry, and marketing. For such achievements, the 59th Veterinary Inspection Flight in Ireland received a Presidential Unit Citation for Meritorious Service. The Veterinary Service also continued effective work in the development of agriculture and animal husbandry in the Azores Islands. Veterinary food technologists, moreover, continued to furnish research assistance and guidance to the Pan American Health Organization and the Joint U. S.-Argentine Commission on Foot-and-Mouth Disease.<sup>1</sup>

The large number of requests that USAF Headquarters received for veterinary radiobiologists, physiologists, laboratory animal medicine specialists, and related biomedical specialists demonstrated a persistent need for

advanced training in fields to which veterinary medicine is allied. Four officers accordingly began a two-year residency program in laboratory animal medicine, conducted by the Aerospace Medical Division, Air Force Systems Command.

Fourteen other veterinary officers entered graduate training at universities: 5 in radiobiology, 3 in public health, 2 in pathology, and 1 each in food technology, physiology, experimental animal surgery, and biomedical electronics.<sup>2</sup>

The Assistant Surgeon General for Veterinary Services undertook or completed numerous personnel actions that would greatly broaden Veterinary Service support to the Air Force on scientific problems. These actions included the assignment of a veterinary radiobiologist to the Radiological Health Laboratory, Wright-Patterson Air Force Base, Ohio, the creation of a new space for a veterinary radiobiologist with the Atomic Energy Commission, and the creation of an additional space for a veterinary radiobiologist with the Armed Forces Radiological Research Institute. Negotiations with the Royal Air Force were expected to result in the assignment of a veterinary research officer to the RAF Institute of Aviation Medicine, Farnborough, England. A personnel action was also in process to assign to the U. S. Naval School of Aviation Medicine, Pensacola, Florida, an Air Force veterinarian having a background in laboratory animal medicine.

<sup>1</sup> Office of the Surgeon General, "Data for the Annual Report of the Secretary of the Air Force, Fiscal Year 1964," Letter to USAF Historical Division Liaison Office, 6 August 1964, Attachment 2.

<sup>2</sup> Assistant Surgeon General for Veterinary Services, Semiannual History, July-December, 1963, pp. 5-6; *idem*, Semiannual History, January-June, 1964, pp. 5-6.

Other new or transferred spaces of a research character to be filled by the Air Force Veterinary Service included the establishment of a space at the USAF School of Aerospace Medicine, Brooks Air Force Base, Texas; the transfer of a space from the Joint U. S.-Argentine Commission on Foot and Mouth Disease, Buenos Aires, Argentina, to the USAF School of Aerospace

Medicine; and the creation of a space at the 6570th Aerospace Medical Research Laboratories, Wright-Patterson Air Force Base, Ohio. This expansion of Air Force veterinary research responsibilities was therefore one of considerable magnitude.<sup>3</sup>

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<sup>3</sup> Assistant Surgeon General for Veterinary Services, Semiannual History, January-June, 1964, pp. 1, 5-6.

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**Part II**  
**BIostatistics FOR 1963**

**Summary Statistics**  
**for**  
**Calendar Years 1959 through 1963**  
**and**  
**Analysis of Individual Medical Records**  
**for**  
**Calendar Year 1963**

## A. Summary

The various morbidity indexes in Table 1 below all portray the improvement in the health of Air Force military personnel. Medical noneffectiveness decreased from 0.93 per 100 strength in 1959 to 0.72 in

1963. This is a result of the reduced admission rate (from 246 per year per 1,000 strength in 1959 to 195 in 1963) and the small but steady decrease in average days lost from duty per admission.

TABLE 1.—Selected Morbidity Indexes—Air Force Military Personnel Wherever Treated: 1959–63

Year	Admission rate (per 1,000)	Average number of days lost per admission	Noneffectiveness		Hospitalized ratio (per 100)
			Noneffective ratio (per 100)	Average number of days lost per Air Force person	
1959	246	13.7	.93	3.4	.72
1960	237	13.7	.89	3.3	.68
1961	208	13.6	.77	2.8	.60
1962	202	13.5	.75	2.7	.58
1963	195	13.5	.72	2.6	.56

The health of the Air Force is affected by several factors, including the characteristics of the population served and the kinds of illnesses it experiences. In 1963 the programmed reduction in Air Force military strength, and the release of National Guard and Reserve units called to duty in 1961-62 for the national emergencies, resulted in a decrease of nearly 8,000 active duty military personnel. There has also been a decrease in the Air Force dependent population (estimated) for the first time.

While the Air Force population is of course composed primarily of young males, there has been a shift to older ages. For example, in 1959, 9.6 percent of Air Force personnel were 40 years old and over; in 1963, 11.0 percent were in this age group. Officer personnel aged 40 and over increased from 23.8 percent in 1959 to 33.5 percent in 1963.

## B. Workload

During 1963 there were 400,237 inpatient admissions to Air Force medical treatment facilities, or an average of 1,097 per

day. Of this number, about one third were Air Force military patients. Of the 8,563 average daily beds occupied, however, about one half were occupied by these Air Force patients, due to their longer average stay than other patients. Other workload indexes are shown in Table 2. For 1963, Air Force military patients remained in Air Force hospital beds an average of 10.8 days, while dependent patients remained in Air Force hospitals an average of only 5.6 days per admission. (Note that the 10.8 days for Air Force military patients are bed days in Air Force hospitals, whereas the 13.5 days as shown in Table 1 are hospital and quarters days, or time in an excused-from-duty status, for Air Force military patients treated in all facilities, including Army, Navy, Veterans Administration, and civilian.)

There was a continuous increase in outpatient visits during the 5-year period, 1959 through 1963; see Appendix Table 14. The increase no doubt reflects the continued effort to treat patients on an outpatient basis rather than as inpatients whenever possible. For Air Force military patients the aim has

been to reduce time lost from duty. For dependent patients restrictions on inpatient care under the Medicare program may contribute to the increased outpatient care.

TABLE 2.—Selected Workload Indexes at Air Force Medical Facilities: 1962-63

Index	Average Daily	
	1962	1963
Population served:*		
Air Force EAD military personnel	876,095	868,461
Dependents of Air Force EAD military	1,636,300	1,588,300
Air Force Retired military	58,617	75,566
Dependents of Air Force Retired military	88,000	113,000
Admissions: Total	1,118	1,097
Air Force military	386	377
Army and Navy military	37	35
Military dependents	637	625
All other	57	60
Beds occupied: Total	8,863	8,563
Air Force military	4,237	4,061
Army and Navy military	402	363
Military dependents	3,578	3,488
All other	646	651
Outpatient visits: Total	41,678	42,803
Air Force military	15,179	15,395
Army and Navy military	758	714
Military dependents	22,761	23,587
All other	2,980	3,107
Births	186	178
Flight physical examinations	622	583
Other complete physicals	1,488	1,397
Immunizations	23,701	28,260

\* The total population served is not on record and is therefore unknown, but the 4 groups listed constitute the bulk of those eligible.

## C. Medical Care

Medical care is provided to various groups of personnel in a number of ways at Air Force medical treatment facilities. The type of care and the workload generated thereby are shown for the first time in this Annual Report, in Appendix Tables 16 through 22. In Appendix Table 16 the data shown are for the clinical service which actually was responsible for the medical care provided inpatients treated at 14 Air Force

specialty hospitals. Since not all of the clinical specialties are provided at each of these hospitals, the data for a given specialty, even when listed, are not necessarily comparable or additive from hospital to hospital. For statistical purposes it is more meaningful to arrange data in groupings called "specialty areas." These are the medical specialties which presumably would have treated the cases had such specialties been available. Such data are shown in Appendix Tables 17, 18 and 19.

Three specialty areas (obstetrics, medicine, and surgery) were responsible for more than 50 percent of the 401,872 patients discharged from treatment during 1963, but accounted for only 45 percent of the average daily patient load for these patients. This indicates that the average duration in these three areas was slightly less than the average of all cases (7.7 days). Long-term cases in the pulmonary disease and thoracic surgery areas (which are treated in only a few Air Force hospitals) averaged approximately 25 days.

The numbers of surgical procedures reported at 14 specialty hospitals are shown in Appendix Table 21, and Appendix Table 22 gives similar data by type of beneficiary for all Air Force medical treatment facilities, worldwide. There were 250,656 surgical procedures, excluding transfusions and unspecified general procedures, reported for all Air Force facilities during 1963. Of this number, only 22.4 percent were for military patients. Sixty-eight percent were for military dependent patients, which includes the large number (99,523) of obstetrical surgery cases.

## D. Morbidity

Trends of noneffective ratios and admission rates are shown in Tables 3 and 4. These indexes show the general decrease of illness in the Air Force. Considerable reductions (50 percent) have occurred in the noneffectiveness due to infective and parasitic diseases, and diseases of the skin and cellular tissue, between 1955 and 1963. Exceptions

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to the downward trend are admissions for mental, psychoneurotic, and personality disorders, diseases of the circulatory system, and diseases of the bones and organs of movement. Circulatory system diseases are commonly associated with an older population which suggests that the increasing age of the military population may offer an explanation. Studies done at other times, how-

ever, have shown that the increase in age is not solely responsible for the reported increase of heart disease. Admissions for diseases of the bones and organs of movement increased by 25 per cent but the noneffectiveness from this class changed little during the period, indicating a shorter duration of illness per case.

TABLE 3.—Noneffective Ratios for Diagnosis Classes—Air Force Personnel: 1955-63

Diagnosis class	Noneffective per 100,000 strength								
	1955	1956	1957	1958	1959	1960	1961	1962	1963
All diseases and conditions -----	†953	†925	†1,049	†964	†917	†915	†790	†747	†736
Infective and parasitic diseases -----	103	100	94	77	67	69	60	54	51
Neoplasms -----	37	36	34	36	38	36	34	37	35
Allergic, endocrine system, metabolic, and nutritional diseases -----	22	20	23	24	23	24	20	17	17
Diseases of the blood and blood-forming organs -----	1	3	2	2	2	2	2	2	2
Mental, psychoneurotic, and personality disorders -----	103	102	100	93	93	100	89	82	87
Diseases of the nervous system and sense organs -----	43	48	52	57	54	54	46	41	38
Diseases of the circulatory system -----	59	52	62	57	62	64	62	60	61
Diseases of the respiratory system -----	116	97	191	126	96	95	75	73	66
Diseases of the digestive system -----	91	90	91	97	102	103	93	90	87
Diseases of the genitourinary system -----	42	39	41	41	39	37	33	33	30
Deliveries and complications of pregnancy, childbirth, and the puerperium -----	1	1	1	—	—	—	0	0	0
Diseases of the skin and cellular tissue -----	42	37	38	39	37	33	28	25	21
Diseases of the bones and organs of movement -----	87	87	95	100	103	114	91	82	84
Congenital malformations -----	8	8	7	8	9	8	7	6	7
Symptoms and ill-defined conditions -----	36	44	48	42	35	31	28	30	34
Accidents, poisonings, and violence -----	160	160	165	157	150	134	115	108	109
Supplementary classification for special admissions -----	3	3	5	7	7	8	7	5	7

† Ratios based on individual record data are not identical with the officially reported noneffective ratios based on summary reports, for which see Table 1 and Appendix Table 6.

In addition to the primary concern of returning people to good health, the Air Force is vitally interested in the time required to return patients to duty. Sick days are nonproductive man days paid for, and are thus a loss of military resources. For cases returned to duty in 1963, Appendix Table 51 shows the average duration of ill-

nesses observed, and the number of elapsed days after admission on which specified proportions (50%, 75% and 90%) of cases were returned to duty. These statistics provided guidance to the clinician, whose contribution to the reduction of noneffectiveness is in shortening the patient's illness rather than in preventing it.

## SUMMARY

TABLE 4.—Admission Rates for Diagnosis Class—Air Force Personnel: 1955-63

Diagnosis class	Admissions per year per 100,000 strength								
	1955	1956	1957	1958	1959	1960	1961	1962	1963
All diseases and conditions	†25,137	†24,924	†33,971	†27,943	†24,347	†23,876	†20,676	†20,026	†19,463
Infective and parasitic diseases	2,164	2,389	2,128	1,745	1,522	1,598	1,450	1,214	1,401
Neoplasms	599	499	529	543	564	544	515	529	511
Allergic, endocrine system, metabolic, and nutritional diseases	445	439	463	468	432	413	369	361	340
Diseases of the blood and blood-forming organs	19	11	15	19	18	22	21	26	21
Mental, psychoneurotic, and personality disorders	915	924	891	851	825	924	852	878	980
Diseases of the nervous system and sense organs	800	788	846	926	842	832	761	746	714
Diseases of the circulatory system	850	759	857	900	900	902	880	906	882
Diseases of the respiratory system	6,429	5,794	13,860	8,138	6,020	5,970	4,429	4,353	3,885
Diseases of the digestive system	3,311	3,239	3,359	3,626	3,456	3,437	3,035	2,917	2,845
Diseases of the genitourinary system	1,452	1,398	1,445	1,463	1,294	1,295	1,183	1,168	1,096
Deliveries and complications of pregnancy, childbirth, and the puerperium	26	25	25	22	20	19	18	15	15
Diseases of the skin and cellular tissue	1,578	1,462	1,521	1,653	1,511	1,349	1,141	1,037	897
Diseases of the bones and organs of movement	1,186	1,272	1,390	1,545	1,554	1,620	1,535	1,495	1,487
Congenital malformations	94	100	90	91	87	96	93	92	104
Symptoms and ill-defined conditions	1,747	2,012	2,728	2,104	1,757	1,518	1,404	1,471	1,590
Accidents, poisonings, and violence	3,323	3,569	3,584	3,541	3,251	3,036	2,750	2,601	2,464
Supplementary classification for special admissions	199	242	238	306	293	299	240	217	230

† Rates based on individual medical record data are not identical with the officially reported admission rates based on summary reports, for which see Table 1 and Appendix Table 5.

## E. Permanent Manpower Losses

During 1963 there were 3,515 losses to the service, by retirement through Physical Evaluation Board (PEB) system or by death. These cases spent 314,723 days in an excused-from-duty status before leaving the service, an average of 90 days per case, as compared with 12 days per case for those returned to duty. (In many instances the medical service has returned a person to duty with a recommendation for administrative discharge from the Air Force. The number who were eventually so discharged is not reported.)

There were 1,916 retirements and separa-

tions through the PEB system. Of this total, 37 percent were for mental, psychoneurotic, and personality disorders. For a percentage distribution of other diagnosis classes, see Table 5. The trend in the rates of separation has been downward in all diagnosis classes. Rates of retirement and separation are shown in Table 6.

Death rates by cause are shown in Table 7. The death rate for diseases has been increasing for several years up to 1962. The death rates for injuries have fluctuated, but in general they have decreased. The mortality rate for motor vehicle accidents, however, has been increasing for the last two years.

TABLE 5.—Separations and Retirements for Physical Disability Under the Physical Evaluation System for Diagnosis Classes, by Type of Separation—Air Force Personnel: 1963

Diagnosis class	Number of separations	Percent within each type of separation				Percent within each diagnosis class					
		All separations	Permanent	Temporary	With severance pay <sup>1</sup>	Without severance pay <sup>1</sup>	All separations	Permanent	Temporary	With severance pay <sup>1</sup>	Without severance pay <sup>1</sup>
All diseases and conditions	1,916	100.0	100.0	100.0	100.0	100.0	100.0	34.3	37.5	21.0	7.3
Infective and parasitic diseases	76	4.0	.6	9.7	.2	.7	100.0	5.3	92.1	1.3	1.3
Neoplasms	154	8.0	14.3	7.9	.2	1.4	100.0	61.0	37.0	.6	1.3
Allergic, endocrine system, metabolic, and nutritional diseases	72	3.8	4.3	2.4	5.2	4.3	100.0	38.9	23.6	29.2	8.3
Diseases of the blood and blood-forming organs	—	—	—	—	—	—	—	—	—	—	—
Mental, psychoneurotic, and personality disorders	709	37.0	16.0	34.4	66.4	64.7	100.0	14.8	34.8	37.7	12.7
Diseases of the nervous system and sense organs	160	8.4	10.4	7.8	6.0	8.6	100.0	42.5	35.0	15.0	7.5
Diseases of the circulatory system	249	13.0	20.7	14.9	1.0	1.4	100.0	54.6	43.0	1.6	.8
Diseases of the respiratory system	49	2.6	5.6	.8	.7	2.2	100.0	75.5	12.2	6.1	6.1
Diseases of the digestive system	68	3.5	5.0	1.9	4.5	2.2	100.0	48.5	20.6	26.5	4.4
Diseases of the genitourinary system	25	1.3	1.5	1.3	1.0	1.4	100.0	40.0	36.0	16.0	8.0
Diseases of the skin and cellular tissue	12	.6	.5	.7	.7	.7	100.0	25.0	41.7	25.0	8.3
Diseases of the bones and organs of movement	166	8.7	11.6	5.8	10.0	5.8	100.0	45.8	25.3	24.1	4.8
Congenital malformations	15	.8	.6	.4	.7	3.6	100.0	26.7	20.0	20.0	33.3
Symptoms and ill-defined conditions	23	1.2	.9	1.3	1.5	1.4	100.0	26.1	39.1	26.1	8.7
Accidents, poisonings, and violence	119	6.2	6.2	9.9	1.2	1.4	100.0	34.5	59.7	4.2	1.7
Supplementary classifications for special admissions	19	1.0	1.8	.7	.5	—	100.0	63.2	26.3	10.5	—

<sup>1</sup> For a definition of separation with severance pay see paragraph 18, AFM 35-4, Physical Evaluation for Retention, Retirement and Separation.

<sup>2</sup> Existed prior to entry into active military service and was not aggravated by such active duty.

## SUMMARY

TABLE 6.—Rates of Separation for Physical Disability Under the Physical Evaluation System, by Underlying Cause—Air Force Personnel: 1959-63

Underlying cause	Disability separations per year per 100,000 strength				
	1959	1960	1961	1962	1963
All diseases and conditions -----	438	406	334	231	221
Infective and parasitic diseases -----	19	16	12	9	9
Neoplasms -----	25	22	20	18	18
Allergic, endocrine system, metabolic, and nutritional diseases -----	23	22	16	8	8
Mental, psychoneurotic, and personality disorders -----	121	113	95	80	82
Diseases of the nervous system and sense organs -----	48	46	42	24	18
Diseases of the circulatory system -----	60	59	55	34	29
Diseases of the digestive system -----	27	21	16	11	8
Diseases of the bones and organs of movement -----	52	56	33	17	19
Accidents, poisonings, and violence -----	24	18	17	11	14
All other diseases and conditions -----	37	34	27	18	16

TABLE 7.—Noncombat Death Rates by Cause—Air Force Personnel: 1959-63

Causative agent	Deaths per year per 100,000 strength				
	1959	1960	1961	1962	1963
All causes -----	175	164	157	170	159
Disease -----	43	47	48	55	50
Injury -----	132	117	109	115	110
Agents of aviation -----	39	27	28	39	29
Motor vehicle accidents -----	57	56	47	48	50
Firearms -----	14	9	10	9	9
Poisonings -----	6	6	5	4	4
Machinery, tools, and related agents -----	5	4	3	2	2
Drownings -----	3	5	4	4	5
All other injuries -----	8	10	12	9	11

## F. Appendix Tables: 1963

### SYMBOLS USED IN TABLES

- Quantity, rate, or percentage is zero because reported frequency is zero.
- Rate or computed quantity is too small to be shown (less than  $\frac{1}{2}$  of the smallest unit presented in the table, but not zero).
- (\*) Measure based on too few cases to provide reliable information; computed in some instances only.
- (blank) Class or item not applicable.

Age—STRENGTH

APPENDIX TABLE 1.—Average Strength of All Air Force Personnel, by Age, Sex, and Category—World-wide: 1963

Age group	Both sexes	Male			Female			Pilots <sup>2</sup>
		Total	Officers	Airmen <sup>1</sup>	Total	Officers	Airmen	
All ages, world-wide -----	868,461	859,668	129,873	729,795	8,793	3,908	4,885	55,701
Estimated age distribution <sup>3</sup>								
Under 20 years -----	113,639	112,077	1,362	110,715	1,562	11	1,551	—
20-24 years -----	271,285	268,036	15,334	252,702	3,249	822	2,427	1,755
25-29 years -----	169,688	168,320	27,745	140,575	1,368	978	390	9,876
30-34 years -----	139,097	138,242	22,825	115,417	855	688	167	12,237
35-39 years -----	75,048	74,344	18,622	55,722	704	577	127	9,007
40-44 years -----	66,285	65,797	30,177	35,620	488	377	111	16,632
45-49 years -----	25,809	25,425	11,060	14,365	384	344	40	5,756
50-54 years -----	6,415	6,275	2,325	3,950	140	100	40	368
55 and over -----	1,195	1,152	423	729	43	11	32	70

<sup>1</sup> Include aviation cadets with a reported average strength of 359, but exclude 2,460 USAF Academy Cadets.

<sup>2</sup> Include 5,273 pilots reported as not on flying status.

<sup>3</sup> Age distributions are estimates derived from the Sample Survey, AF-P3.

Source: USAF Personnel Report (SS-PS-1A and SS-PS-1B) and Sample Survey (AF-P3).

APPENDIX TABLE 2.—Average Strength of Air Force Officer Flying Personnel, by Age and Rating—World-wide: 1963

Age group	All flyers	Rated					Non-Rated <sup>1</sup>
		Total	Pilots	Navigators	Observers	Flight Surgeons	
All ages, world-wide -----	73,591	70,360	50,428	18,578	792	562	3,231
Estimated age distribution <sup>2</sup>							
Under 20 years -----	—	—	—	—	—	—	—
20-24 years -----	6,521	4,570	1,734	2,831	4	1	1,951
25-29 years -----	16,300	15,483	9,709	5,693	41	40	817
30-34 years -----	16,472	16,275	11,741	4,201	232	101	197
35-39 years -----	10,358	10,257	8,030	1,974	174	79	101
40-44 years -----	17,315	17,221	14,057	2,774	254	136	94
45-49 years -----	6,103	6,048	4,778	1,097	79	94	55
50-54 years -----	433	419	325	8	7	79	14
55 and over -----	89	87	54	—	1	32	2

<sup>1</sup> Includes flight medical officers, flight nurses, and other crew and noncrew flyers who have no aeronautical rating.

<sup>2</sup> Age distributions are derived from the USAF Personnel Report, SS-PS-322.

For explanation of symbols, see p. 52.

Source: USAF Personnel Report (SS-PS-1A, SS-PS-1B, and SS-PS-322).

**STRENGTHS—Length of Service**

**APPENDIX TABLE 3.—Average Strength of All Air Force Personnel, by Present Continuous Length of Active Military Service, Sex and Category—World-wide: 1963**

Continuous length of active military service	Both sexes	Male			Female		
		Total	Officers	Airmen <sup>1</sup>	Total	Officers	Airmen
All personnel, world-wide	868,461	859,668	129,873	729,795	8,793	3,908	4,885
Estimated length of service distribution <sup>2</sup>							
Less than 1 month	10,408	10,310	187	10,123	98	11	87
1 month but less than 3	21,770	21,333	1,322	20,011	437	89	348
3 months but less than 6	28,746	28,218	4,434	23,784	528	212	316
6 months but less than 12	46,638	45,804	4,212	41,592	834	423	411
1 year but less than 2	101,554	99,906	6,599	93,307	1,648	534	1,114
2 years but less than 3	91,640	90,253	5,546	84,707	1,387	289	1,098
3 years but less than 4	62,572	61,818	5,253	56,565	754	256	498
4 years but less than 5	35,677	35,236	4,844	30,392	441	212	229
5 years but less than 6	28,162	27,844	3,498	24,346	318	223	95
6 years but less than 7	32,791	32,448	4,423	28,025	343	256	87
7 years but less than 8	40,471	40,262	4,973	35,289	209	122	87
8 years but less than 9	46,024	45,862	4,926	40,936	162	122	40
9 years but less than 10	31,131	30,957	6,494	24,463	174	134	40
10 years and over	290,877	289,417	73,162	216,255	1,460	1,025	435

<sup>1</sup> Include aviation cadets with a reported average strength of 359, but exclude 2,460 USAF Academy Cadets.

<sup>2</sup> Length of service distributions are estimates derived from Sample Survey, AF-P3.

Source: USAF Personnel Report (SS-PS-1A) and Sample Survey (AF-P3).

**APPENDIX TABLE 4.—Average Strength of Officer Personnel, by Present Continuous Length of Active Military Service, Flying Status, Pilots and Other Rated Flyers—World-wide: 1963**

Continuous length of active military service	All officers	Flyers				Non-flyers
		Total	Rated		Non-rated <sup>1</sup>	
			Pilots	Other		
All personnel, world-wide	133,781	73,591	50,428	19,932	3,231	60,190
Estimated length of service distribution <sup>2</sup>						
Less than 1 month	198	51	24	27	—	147
1 month but less than 3	1,351	325	47	109	169	1,026
3 months but less than 6	4,578	961	202	137	622	3,617
6 months but less than 12	4,605	1,134	166	219	749	3,471
1 year but less than 2	7,072	1,843	818	574	451	5,229
2 years but less than 3	5,907	2,504	794	1,654	56	3,403
3 years but less than 4	5,716	3,305	1,387	1,791	127	2,411
4 years but less than 5	5,284	3,503	1,577	1,531	395	1,781
5 years but less than 6	3,782	2,103	1,280	738	85	1,679
6 years but less than 7	4,775	2,994	1,885	1,053	56	1,781
7 years but less than 8	5,156	3,297	2,312	957	28	1,859
8 years but less than 9	5,203	3,839	2,608	1,203	28	1,364
9 years but less than 10	6,742	4,770	3,580	1,162	28	1,972
10 years and over	73,412	42,962	33,748	8,777	637	30,450

<sup>1</sup> Includes flight medical officers, flight nurses, and other crew and non crew flyers who have no aeronautical rating.

<sup>2</sup> Length of service distributions are estimates derived from the Sample Survey, AF-P3.

Source: USAF Personnel Report (SS-PS-1B) and Sample Survey (AF-P3).

Admission Rates—INDEXES OF HEALTH AND MEDICAL WORKLOAD

APPENDIX TABLE 5.—Admission Rates for Major Illness Groups, by Month—Air Force Military Personnel on Extended Active Duty: 1959-63

[Admissions per year per 1,000 strength]

Major illness group and calendar year	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>WORLD-WIDE</b>													
<b>All causes:</b>													
1959 -----	246	274	289	294	284	232	232	221	223	237	236	223	206
1960 -----	237	278	306	276	245	225	212	208	230	230	232	218	189
1961 -----	208	244	247	246	224	208	192	188	194	189	208	189	170
1962 -----	202	244	242	233	210	202	180	184	190	190	201	185	160
1963 -----	195	225	252	239	210	189	169	177	176	184	193	169	164
<b>Disease:</b>													
1959 -----	214	241	256	263	252	199	196	188	152	206	205	195	180
1960 -----	208	252	278	248	216	195	182	176	201	200	202	193	163
1961 -----	182	219	220	221	198	182	164	160	168	164	181	166	147
1962 -----	177	220	217	208	187	176	152	159	165	165	176	163	139
1963 -----	172	202	228	217	188	164	145	152	150	160	169	148	143
<b>Nonbattle injury:</b>													
1959 -----	32	33	33	31	32	33	36	33	31	31	31	28	26
1960 -----	29	26	28	28	29	30	30	32	29	30	30	25	26
1961 -----	26	25	27	25	26	26	28	28	26	25	27	23	23
1962 -----	25	24	25	25	23	26	28	25	25	25	25	22	21
1963 -----	23	23	24	22	22	25	24	25	26	24	24	21	21
<b>CONTINENTAL UNITED STATES (Excludes Alaska and Hawaii)</b>													
<b>All causes:</b>													
1959 -----	232	263	275	285	276	218	219	209	210	225	218	204	186
1960 -----	221	265	285	259	231	206	198	191	212	215	216	203	173
1961 -----	196	227	237	240	215	198	178	176	184	178	195	175	158
1962 -----	193	230	232	221	203	192	172	179	184	183	191	174	149
1963 -----	185	214	238	226	199	179	160	167	168	175	181	158	153
<b>Disease:</b>													
1959 -----	203	232	244	255	246	187	185	178	180	197	191	179	162
1960 -----	195	241	260	233	205	178	169	161	186	188	189	180	151
1961 -----	172	203	212	216	191	173	152	149	159	155	170	154	137
1962 -----	170	207	207	197	181	168	147	154	161	160	169	154	129
1963 -----	163	193	217	205	178	156	137	144	144	153	159	138	134
<b>Nonbattle injury:</b>													
1959 -----	29	31	31	30	30	31	34	31	30	28	27	25	24
1960 -----	26	24	25	26	26	28	29	30	26	27	27	23	22
1961 -----	24	24	25	24	24	25	26	27	26	23	25	21	21
1962 -----	23	23	25	24	22	24	25	25	23	23	22	20	20
1963 -----	22	21	21	21	21	23	23	23	24	22	22	20	19

**INDEXES OF HEALTH AND MEDICAL WORKLOAD—Admission Rates**

**APPENDIX TABLE 5.—Admission Rates for Major Illness Groups, by Month—Air Force Military Personnel on Extended Active Duty: 1959-63—Continued**

[Admissions per year per 1,000 strength]

Major illness group and calendar year	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>OUTSIDE CONTINENTAL UNITED STATES (Includes Alaska and Hawaii)</b>													
<b>All causes:</b>													
1959 -----	283	303	329	321	305	267	267	254	259	268	286	274	262
1960 -----	285	316	366	324	285	281	254	255	282	276	280	263	238
1961 -----	243	295	277	265	249	239	234	225	225	223	246	234	206
1962 -----	231	287	270	269	230	234	206	200	210	214	234	222	196
1963 -----	230	258	294	278	244	218	199	210	203	215	233	209	203
<b>Disease:</b>													
1959 -----	245	265	290	286	268	230	227	216	224	230	242	237	228
1960 -----	249	283	330	289	248	244	221	219	244	237	242	229	202
1961 -----	212	266	246	238	220	209	199	192	193	190	213	204	176
1962 -----	201	258	242	241	205	202	170	172	180	183	201	191	169
1963 -----	201	228	263	253	216	190	169	179	173	185	203	183	177
<b>Nonbattle injury:</b>													
1959 -----	38	38	39	35	37	37	40	38	35	38	44	37	34
1960 -----	36	33	36	35	37	37	33	36	38	39	39	34	36
1961 -----	31	29	31	27	29	30	35	33	32	33	33	30	30
1962 -----	30	29	28	28	25	32	36	28	30	31	33	31	27
1963 -----	29	30	31	25	28	28	30	31	30	30	30	26	26

Source: Surgeon's Brief Report (AF Form 491), Report of Patients (AF Form 235) and USAF Personnel Report (RCS: SS-PS-588).

Ratios—INDEXES OF HEALTH AND MEDICAL WORKLOAD

APPENDIX TABLE 6.—Noneffective Ratios for All Causes, by Month—Air Force Military Personnel on Extended Active Duty—World-wide: 1959-63

[Personnel not available for duty because of medical reasons per 100 strength]

Calendar year	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1959 -----	.93	.93	.99	1.01	1.00	.92	.88	.88	.90	.91	.93	.91	.84
1960 -----	.89	.93	1.02	.99	.94	.90	.85	.84	.86	.87	.87	.84	.78
1961 -----	.77	.80	.86	.86	.82	.79	.76	.75	.76	.74	.75	.73	.68
1962 -----	.75	.75	.80	.80	.77	.76	.73	.73	.74	.76	.75	.72	.67
1963 -----	.72	.75	.83	.82	.76	.72	.69	.68	.69	.70	.72	.70	.64

Source: Surgeon's Brief Report (AF Form 491), Report of Patients (AF Form 235a) and USAF Personnel Report (RCS: SS-PS-588).

APPENDIX TABLE 7.—Hospitalized Ratios, by Month—Air Force Military Personnel on Extended Active Duty—World-wide: 1959-63

[Patients occupying beds per 100 strength]

Calendar year	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1959 -----	.72	.73	.79	.80	.77	.71	.68	.68	.70	.71	.72	.70	.59
1960 -----	.68	.70	.76	.76	.73	.69	.65	.64	.67	.67	.68	.65	.54
1961 -----	.60	.63	.67	.66	.63	.61	.58	.59	.59	.58	.59	.57	.48
1962 -----	.58	.58	.61	.61	.60	.59	.56	.56	.58	.59	.59	.55	.48
1963 -----	.56	.58	.63	.62	.59	.57	.54	.53	.54	.55	.57	.55	.46

Source: Beds and Patients Report (DD Form 443), Surgeon's Brief Report (AF Form 491), Report of Patients (AF Form 235b), and USAF Personnel Report (RCS: SS-PS-588).

INDEXES OF HEALTH AND MEDICAL WORKLOAD—Outpatient Visit Rates

APPENDIX TABLE 8.—Outpatient Visit Rates for Air Force Military Personnel on Extended Active Duty at Air Force Bases, by Month: 1959-63

[Number of visits per year per man on active duty]

Area and calendar year	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>World-wide:</b>													
1959 ---	6.0	6.1	6.5	6.4	6.3	5.8	6.1	5.8	5.9	6.2	6.2	5.9	5.6
1960 ---	6.2	6.2	6.8	6.7	6.3	6.0	6.2	5.9	5.2	6.3	6.4	6.3	5.7
1961 <sup>1</sup> ---	6.8	7.1	7.4	7.5	7.1	7.1	7.3	6.0	6.8	6.6	6.8	6.4	5.9
1962 <sup>1</sup> ---	6.8	7.2	7.3	7.0	6.8	6.9	6.8	6.5	7.0	6.8	7.1	6.8	5.8
1963 <sup>1</sup> ---	7.0	7.2	7.5	7.2	7.3	6.7	6.8	6.9	7.0	7.0	7.5	6.6	6.2
<b>Continental United States<sup>2</sup>:</b>													
1959 ---	5.8	5.8	6.2	6.2	6.1	5.6	5.8	5.4	5.6	6.0	5.9	5.6	5.3
1960 ---	6.0	5.9	6.4	6.5	6.2	5.8	5.9	5.7	5.9	6.0	6.1	6.0	5.4
1961 <sup>1</sup> ---	6.8	7.0	7.4	7.6	7.2	7.1	7.2	5.9	6.9	6.7	6.9	6.4	5.9
1962 <sup>1</sup> ---	6.9	7.2	7.4	7.0	6.9	6.9	6.8	6.6	7.0	6.9	7.1	6.8	5.8
1963 <sup>1</sup> ---	7.1	7.2	7.6	7.4	7.4	6.8	7.0	7.0	7.1	7.1	7.5	6.6	6.2
<b>Outside Continental United States<sup>3</sup>:</b>													
1959 ---	6.8	6.6	7.1	7.0	6.9	6.5	6.9	6.7	6.9	6.9	7.0	6.7	6.5
1960 ---	7.0	7.0	7.8	7.3	6.8	6.6	7.0	6.6	6.9	7.1	7.1	7.1	6.6
1961 <sup>1</sup> ---	6.8	7.4	7.5	7.5	7.1	7.0	7.4	6.3	6.5	6.3	6.7	6.3	5.9
1962 <sup>1</sup> ---	6.7	7.2	6.8	6.8	6.7	7.0	6.5	6.4	6.7	6.4	7.2	6.7	5.8
1963 <sup>1</sup> ---	6.7	7.1	7.2	6.7	7.0	6.6	6.3	6.6	6.6	6.7	7.4	6.7	6.3

<sup>1</sup> Not strictly comparable with data for previous years due to change in definition of an outpatient visit.

<sup>2</sup> Excludes Alaska and Hawaii.

<sup>3</sup> Includes Alaska and Hawaii.

Source: Surgeon's Brief Report (AF Form 491), Outpatient Report (DD Form 444), and Report of Patients (AF Form 235).

Size of Facility—USE OF FACILITIES

APPENDIX TABLE 9.—Distribution of Air Force Inpatient Facilities, by Size Group: 1959-63

Area and size group (operating beds)	Number of facilities as of the end of the year				
	1959	1960	1961	1962	1963
Continental United States <sup>1</sup> , total -----	123	117	114	113	110
25 bed group (less than 38 beds) -----	45	41	37	51	44
50 bed group (38-62 beds) -----	40	36	38	23	31
75 bed group (63-87 beds) -----	14	17	14	17	13
100 bed group (88-112 beds) -----	10	7	10	7	7
125-150 bed group (113-162 beds) -----	3	5	4	4	4
175-300 bed group (163-312 beds) -----	6	6	6	7	7
350-450 bed group (313-487 beds) -----	4	4	4	3	3
500 bed group (488 beds or more) -----	1	1	1	1	1
Outside Continental United States <sup>2</sup> , total -----	64	61	65	63	55 <sup>3</sup>
25 bed group (less than 38 beds) -----	44	40	44	47	41
50 bed group (38-62 beds) -----	7	7	6	5	3
75 bed group (63-87 beds) -----	2	3	5	4	5
100 bed group (88-112 beds) -----	5	5	4	2	1
125-150 bed group (113-162 beds) -----	1	1	1	1	1
175-300 bed group (163-312 beds) -----	4	4	4	4	4
350-450 bed group (313-487 beds) -----	1	1	1	1	1
500 bed group (488 beds or more) -----	—	—	—	—	—

<sup>1</sup> Excludes Alaska and Hawaii.

<sup>2</sup> Includes Alaska and Hawaii.

<sup>3</sup> Excludes 1 non-fixed hospital operating 36 beds.

Source: Beds and Patients Report (DD Form 443) and Report of Patients (AF Form 235b).

**USE OF FACILITIES—Command**

**APPENDIX TABLE 10.—Distribution of Air Force Inpatient Facilities and of Operating Beds, by Command:  
1959-63**

[As of the end of the calendar year]

Area and command	1959		1960		1961		1962		1963	
	Number of—		Number of—		Number of—		Number of—		Number of—	
	Facilities	Operating beds	Facilities	Operating beds	Facilities	Operating beds	Facilities	Operating beds	Facilities	Operating beds
World-wide -----	187	12,219	178	12,208	179	12,197	176	11,105	165 <sup>1</sup>	10,859
Continental United States <sup>2</sup> : -----	123	9,092	117	9,118	114	9,076	113	8,450	110	8,384
Air Defense Command -----	25	652	19	599	21	680	22	510	21	519
Air Force Logistics Command -----	9	680	9	735	9	735	9	735	8	720
Air Force Systems Command -----	5	440	5	440	6	1,355	5	1,345	5	1,345
Air Training Command -----	20	2,760	20	2,712	17	1,492	16	1,230	16	1,235
Air University -----	1	400	1	400	1	325	1	275	1	250
Continental Air Command -----	3	123	2	83	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Headquarters Command -----	1	250	1	250	1	250	1	250	1	250
Military Air Transport Service -----	7	954	6	914	6	964	6	950	6	1,020
Strategic Air Command -----	40	2,196	43	2,270	42	2,545	41	2,365	39	2,205
Tactical Air Command -----	11	625	10	580	10	595	11	655	12	705
USAF Academy -----	1	12	1	135	1	135	1	135	1	135
Outside Continental United States <sup>4</sup> : -----	64	3,127	61	3,090	65	3,121	63	2,655	55	2,475
Air Defense Command -----	1	40	2	31	2	31	2	29	2	29
Alaskan Air Command -----	3	325	3	325	3	325	2	210	2	220
Caribbean Air Command -----	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Military Air Transport Service -----	4	125	4	120	3	85	3	69	3	64
Pacific Air Forces -----	9	741	8	716	8	716	9	641	9	598
Strategic Air Command -----	13	465	11	400	11	410	11	325	8	275
US Air Forces in Europe -----	34	1,431	33	1,498	38	1,554	36	1,381	31	1,289

<sup>1</sup> Excludes 1 non-fixed hospital operating 36 beds.

<sup>2</sup> Excludes Alaska and Hawaii.

<sup>3</sup> No inpatient facilities in operation.

<sup>4</sup> Includes Alaska and Hawaii.

Source: Beds and Patients Report (DD Form 443) and Report of Patients (AF Form 235b).

**Beds by Command—USE OF FACILITIES**

**APPENDIX TABLE 11.—Average Number of Operating and of Occupied Beds, by Command: 1959-63**

Command	Number of—		Percent of operating beds occupied
	Operating beds	Occupied beds	
<b>World-wide, total:</b>			
1959.....	12,103	8,925	74
1960.....	12,182	8,750	72
1961.....	12,137	8,469	70
1962.....	11,460	8,863	77
1963.....	11,021	8,563	78
<b>Continental United States<sup>1</sup>, total:</b>			
1959.....	8,892	6,562	74
1960.....	9,080	6,544	72
1961.....	9,038	6,417	71
1962.....	8,625	6,873	80
1963.....	8,439	6,729	80
<b>Air Defense Command:</b>			
1959.....	560	345	62
1960.....	617	398	65
1961.....	626	409	65
1962.....	592	451	76
1963.....	540	409	76
<b>Air Force Logistics Command:</b>			
1959.....	676	510	75
1960.....	732	500	68
1961.....	735	517	70
1962.....	735	599	81
1963.....	732	581	79
<b>Air Force Systems Command:</b>			
1959.....	440	260	59
1960.....	440	271	62
1961.....	536	358	67
1962.....	1,349	1,036	77
1963.....	1,345	1,056	79
<b>Air Training Command:</b>			
1959.....	2,726	2,024	74
1960.....	2,728	1,958	72
1961.....	2,412	1,667	69
1962.....	1,318	993	75
1963.....	1,237	1,023	83
<b>Air University:</b>			
1959.....	400	283	71
1960.....	400	224	56
1961.....	344	204	59
1962.....	312	211	68
1963.....	263	181	69
<b>Continental Air Command:</b>			
1959.....	133	59	44
1960.....	96	49	51
1961.....	35	7	20
1962.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
1963.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Headquarters Command:</b>			
1959.....	250	203	81
1960.....	250	226	90
1961.....	250	224	90
1962.....	250	225	90
1963.....	250	231	92

USE OF FACILITIES—Beds by Command

APPENDIX TABLE 11. Average Number of Operating and of Occupied Beds, by Command: 1959-63—Continued

Command	Number of—		Percent of operating beds occupied
	Operating beds	Occupied beds	
<b>Military Air Transport Service:</b>			
1959	946	798	84
1960	914	688	75
1961	922	738	80
1962	946	834	88
1963	1,001	806	81
<b>Strategic Air Command:</b>			
1959	2,145	1,687	79
1960	2,256	1,810	80
1961	2,452	1,871	76
1962	2,346	2,033	87
1963	2,256	1,876	83
<b>Tactical Air Command:</b>			
1959	604	387	64
1960	615	410	67
1961	591	374	63
1962	642	412	64
1963	680	487	72
<b>USAF Academy:</b>			
1959	12	6	50
1960	32	10	31
1961	135	48	36
1962	135	79	59
1963	135	79	59
<b>Outside Continental United States*, total:</b>			
1959	3,211	2,363	74
1960	3,102	2,206	71
1961	3,099	2,052	66
1962	2,835	1,990	70
1963	2,582	1,834	71
<b>Air Defense Command:</b>			
1959	40	27	68
1960	33	16	48
1961	31	15	48
1962	30	20	67
1963	29	18	62
<b>Alaskan Air Command:</b>			
1959	340	234	69
1960	325	226	70
1961	325	227	70
1962	260	206	79
1963	220	167	76
<b>Caribbean Air Command:</b>			
	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Military Air Transport Service:</b>			
1959	125	77	62
1960	123	58	47
1961	102	48	47
1962	69	46	67
1963	66	40	61

**Beds by Command—USE OF FACILITIES**

**APPENDIX TABLE 11. Average Number of Operating and of Occupied Beds,  
by Command: 1959-63—Continued**

Command	Number of—		Percent of operating beds occupied
	Operating beds	Occupied beds	
<b>Pacific Air Forces:</b>			
1959.....	743	537	72
1960.....	728	486	67
1961.....	716	462	65
1962.....	684	441	64
1963.....	613	475	77
<b>Strategic Air Command:</b>			
1959.....	465	340	73
1960.....	433	309	71
1961.....	410	269	66
1962.....	328	260	79
1963.....	304	221	73
<b>United States Air Forces in Europe:</b>			
1959.....	1,498	1,148	77
1960.....	1,460	1,111	76
1961.....	1,515	1,031	68
1962.....	1,464	1,017	69
1963.....	1,350	913	68

<sup>1</sup> Excludes Alaska and Hawaii.

<sup>2</sup> No inpatient facilities in operation.

<sup>3</sup> Includes Alaska and Hawaii.

Source: Beds and Patients Report (DD Form 443) and Report of Patients (AF Form 235b).

USE OF FACILITIES—Personnel Occupying Beds

APPENDIX TABLE 12.—Average Number of Air Force Military Personnel on Extended Active Duty Occupying Beds, by Agency Operating the Facility and by Month: 1959-63

Agency operating facility and calendar year	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>WORLD-WIDE</b>													
<b>In all facilities:</b>													
1959	5,996	6,234	6,682	6,713	6,496	5,990	5,718	5,730	5,885	5,908	5,976	5,828	4,862
1960	5,528	5,813	6,309	6,238	5,905	5,631	5,286	5,220	5,403	5,423	5,490	5,288	4,386
1961	4,943	5,096	5,485	5,413	5,155	5,008	4,733	4,798	4,819	4,801	4,987	4,912	4,161
1962	5,055	5,052	5,389	5,388	5,283	5,238	4,930	4,306	5,091	5,144	5,186	4,919	4,175
1963	4,860	5,037	5,468	5,420	5,109	4,914	4,645	4,593	4,685	4,809	4,943	4,787	3,963
<b>In Air Force facilities:</b>													
1959	4,789	4,996	5,435	5,460	5,251	4,749	4,505	4,498	4,627	4,660	4,790	4,661	3,893
1960	4,449	4,668	5,028	4,982	4,755	4,527	4,250	4,208	4,349	4,389	4,462	4,261	3,552
1961	4,050	4,134	4,454	4,423	4,266	4,127	3,855	3,867	3,882	3,957	4,135	4,092	3,449
1962	4,237	4,240	4,549	4,559	4,441	4,368	4,101	4,091	4,265	4,309	4,307	4,137	3,523
1963	4,061	4,308	4,676	4,578	4,295	4,101	3,843	3,793	3,870	4,012	4,088	3,968	3,254
<b>In Army facilities:</b>													
1959	797	769	782	782	824	819	831	829	844	853	818	785	635
1960	707	782	882	870	785	752	672	652	668	659	653	633	487
1961	531	597	660	624	543	524	547	543	544	488	494	442	372
1962	459	464	463	459	476	479	457	460	463	470	514	437	362
1963	485	439	481	529	492	500	479	487	499	497	523	495	406
<b>In Navy facilities:</b>													
1959	338	399	391	400	354	355	313	333	337	318	295	307	262
1960	287	292	329	310	287	275	279	273	294	289	285	293	244
1961	264	279	283	285	266	276	246	263	269	256	249	271	229
1962	242	232	260	253	259	276	249	236	242	250	246	224	178
1963	215	200	219	215	225	210	212	215	224	210	231	227	193
<b>In other facilities:</b>													
1959	72	70	74	71	67	67	69	70	77	77	73	75	72
1960	85	71	70	76	78	77	85	87	92	86	90	101	103
1961	98	86	88	81	80	81	85	125	124	100	109	107	111
1962	117	116	117	117	107	115	123	119	121	115	119	121	112
1963	99	90	92	98	97	103	111	98	92	90	101	97	110

Personnel Occupying Beds—USE OF FACILITIES

CONTINENTAL UNITED STATES  
(Excludes Alaska and Hawaii)

In all facilities:	4,661	4,789	5,184	5,243	5,074	4,680	4,431	4,501	4,631	4,633	4,609	4,512	3,700
1959	4,339	4,572	4,942	4,945	4,651	4,427	4,135	4,115	4,258	4,260	4,291	4,160	3,355
1960	3,883	3,979	4,300	4,278	4,089	3,968	3,744	3,772	3,821	3,756	3,878	3,834	3,206
1961	3,995	3,909	4,195	4,222	4,184	4,146	3,893	3,923	4,097	4,112	4,136	3,883	3,260
1962	3,858	3,962	4,265	4,224	4,026	3,910	3,715	3,684	3,759	3,873	3,955	3,818	3,146
In Air Force facilities:	3,633	3,751	4,126	4,182	4,034	3,612	3,395	3,449	3,543	3,555	3,605	3,503	2,879
1959	3,421	3,580	3,829	3,854	3,670	3,486	3,262	3,252	3,362	3,387	3,433	3,301	2,671
1960	3,144	3,172	3,437	3,446	3,336	3,221	3,003	3,014	3,047	3,073	3,184	3,171	2,642
1961	3,331	3,259	3,514	3,562	3,503	3,428	3,216	3,265	3,424	3,411	3,413	3,262	2,740
1962	3,221	3,396	3,638	3,567	3,373	3,251	3,062	3,037	3,105	3,238	3,285	3,167	2,576
In Army facilities:	657	620	633	634	666	678	686	686	715	718	674	663	520
1959	578	661	741	741	645	613	539	529	544	532	515	505	379
1960	413	467	532	507	441	418	447	416	422	368	368	330	255
1961	338	337	341	332	354	360	339	334	338	362	386	310	260
1962	362	310	350	379	366	382	367	371	377	370	388	375	314
In Navy facilities:	303	351	351	357	310	329	286	300	304	289	261	274	232
1959	261	266	307	278	262	252	256	248	263	258	259	268	216
1960	236	256	257	252	243	250	220	233	235	222	225	236	206
1961	218	206	233	222	229	252	222	215	223	232	225	201	155
1962	186	172	193	186	197	185	187	190	197	184	195	190	161
In other facilities:	68	67	74	70	64	61	64	66	69	71	69	72	69
1959	79	65	65	72	74	76	78	86	89	83	84	86	89
1960	89	84	74	73	69	69	74	109	117	93	101	97	103
1961	108	107	107	106	98	106	116	109	112	107	112	110	105
1962	89	84	84	92	90	92	99	86	80	81	87	86	95

OUTSIDE CONTINENTAL UNITED STATES  
(Includes Alaska and Hawaii)

In all facilities:	1,335	1,445	1,498	1,470	1,422	1,310	1,287	1,229	1,254	1,275	1,367	1,316	1,162
1959	1,189	1,241	1,367	1,293	1,254	1,204	1,151	1,105	1,145	1,163	1,199	1,128	1,031
1960	1,060	1,117	1,185	1,135	1,066	1,040	989	1,026	998	1,045	1,109	1,078	955
1961	1,060	1,143	1,194	1,166	1,099	1,092	1,037	983	994	1,032	1,050	1,036	915
1962	1,002	1,075	1,203	1,196	1,083	1,004	930	909	926	936	988	969	817

USE OF FACILITIES—Personnel Occupying Beds

APPENDIX TABLE 12.—Average Number of Air Force Military Personnel on Extended Active Duty Occupying Beds, by Agency Operating the Facility and by Month: 1959-63—Continued

Agency operating facility and calendar year	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		OUTSIDE CONTINENTAL UNITED STATES—Continued (Includes Alaska and Hawaii)											
<b>In Air Force facilities:</b>													
1959	1,156	1,245	1,309	1,278	1,217	1,137	1,110	1,049	1,084	1,105	1,185	1,158	1,014
1960	1,028	1,088	1,199	1,128	1,085	1,041	988	956	987	1,002	1,029	960	881
1961	906	962	1,017	977	930	896	852	853	835	884	951	921	807
1962	906	981	1,035	997	938	940	885	826	841	898	894	875	783
1963	840	912	1,038	1,011	922	850	781	756	765	774	803	801	678
<b>In Army facilities:</b>													
1959	140	149	149	148	158	141	145	143	129	135	144	122	115
1960	129	121	141	129	140	139	133	123	124	127	138	128	108
1961	117	130	128	117	102	106	100	127	122	120	126	112	117
1962	121	127	122	127	122	119	118	126	125	108	128	127	102
1963	123	129	131	150	126	118	112	116	122	127	135	120	92
<b>In Navy facilities:</b>													
1959	35	48	40	43	44	26	27	33	33	29	34	33	30
1960	26	26	22	32	25	23	23	25	31	31	26	25	28
1961	28	23	26	33	23	26	26	30	34	34	24	35	23
1962	24	26	27	31	30	24	27	21	19	18	21	23	23
1963	29	28	26	29	28	25	25	25	27	26	36	37	32
<b>In other facilities:</b>													
1959	4	3	—	1	3	6	5	4	8	6	4	3	3
1960	6	6	5	4	4	1	7	1	3	3	6	15	14
1961	9	2	14	8	11	12	11	16	7	7	8	10	8
1962	9	9	10	11	9	9	7	10	9	8	7	11	7
1963	10	6	8	6	7	11	12	12	12	9	14	11	15

Source: Beds and Patients Report (DD Form 443) and Report of Patients (AF Form 235b).

Patients Occupying USAF Beds—USE OF FACILITIES

APPENDIX TABLE 13.—Average Number of Patients Occupying Beds in Air Force Facilities, by Type of Beneficiary, and by Month: 1959-63

Calendar year and type of beneficiary	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>WORLD-WIDE</b>													
1959: Total	8,925	9,218	9,845	9,775	9,517	8,835	8,418	8,425	8,700	8,827	9,003	8,954	7,767
Air Force EAD mil personnel	4,789	4,996	5,435	5,460	5,251	4,749	4,505	4,498	4,627	4,660	4,790	4,661	3,893
Army and Navy EAD mil personnel	399	454	455	442	449	396	359	359	360	397	378	397	348
All other patients	3,737	3,768	3,955	3,873	3,817	3,690	3,554	3,568	3,713	3,770	3,835	3,896	3,426
1960: Total	8,750	9,003	9,596	9,554	9,025	8,706	8,423	8,326	8,685	8,641	8,782	8,782	7,526
Air Force EAD mil personnel	4,449	4,668	5,028	4,982	4,755	4,527	4,250	4,208	4,349	4,389	4,462	4,261	3,552
Army and Navy EAD mil personnel	387	408	404	390	365	358	355	365	400	388	406	423	376
All other patients	3,914	3,927	4,164	4,182	3,905	3,821	3,818	3,753	3,936	3,864	3,914	4,098	3,598
1961: Total	8,469	8,802	9,213	9,120	8,676	8,546	8,056	7,979	8,174	8,335	8,620	8,673	7,508
Air Force EAD mil personnel	4,050	4,134	4,454	4,423	4,266	4,127	3,855	3,867	3,882	3,957	4,135	4,092	3,449
Army and Navy EAD mil personnel	376	437	394	404	366	392	352	334	356	380	358	371	365
All other patients	4,043	4,231	4,356	4,293	4,044	4,027	3,849	3,778	3,936	3,998	4,127	4,210	3,694
1962: Total	8,863	9,070	9,517	9,548	9,142	8,935	8,597	8,555	8,902	8,913	8,924	8,677	7,639
Air Force EAD mil personnel	4,237	4,240	4,549	4,559	4,441	4,368	4,101	4,091	4,265	4,309	4,307	4,137	3,523
Army and Navy EAD mil personnel	402	424	436	430	385	392	392	384	407	393	409	407	360
All other patients	4,224	4,406	4,532	4,559	4,316	4,175	4,104	4,080	4,230	4,211	4,208	4,133	3,756
1963: Total	8,563	9,186	9,737	9,416	8,850	8,456	8,091	8,011	8,283	8,477	8,646	8,438	7,266
Air Force EAD mil personnel	4,061	4,308	4,676	4,578	4,295	4,101	3,843	3,793	3,870	4,012	4,088	3,968	3,254
Army and Navy EAD mil personnel	363	422	424	369	369	364	362	376	351	357	333	317	313
All other patients	4,139	4,456	4,637	4,469	4,186	3,991	3,886	3,842	4,062	4,108	4,225	4,153	3,699
<b>CONTINENTAL UNITED STATES (Excludes Alaska and Hawaii)</b>													
1959: Total	6,562	6,719	7,221	7,212	7,082	6,528	6,178	6,243	6,447	6,495	6,587	6,547	5,556
Air Force EAD mil personnel	3,633	3,751	4,126	4,182	4,034	3,612	3,395	3,449	3,543	3,555	3,605	3,503	2,879
Army and Navy EAD mil personnel	175	221	190	199	216	194	165	147	151	154	153	161	153
All other patients	2,754	2,747	2,905	2,831	2,832	2,722	2,618	2,647	2,753	2,786	2,829	2,883	2,524
1960: Total	6,544	6,715	7,142	7,171	6,761	6,498	6,315	6,240	6,487	6,470	6,604	6,597	5,565
Air Force EAD mil personnel	3,421	3,580	3,829	3,854	3,670	3,486	3,262	3,252	3,362	3,387	3,433	3,301	2,671
Army and Navy EAD mil personnel	191	206	206	183	172	178	183	178	199	203	205	206	175
All other patients	2,932	2,930	3,107	3,134	2,919	2,834	2,870	2,810	2,926	2,880	2,966	3,090	2,719
1961: Total	6,417	6,561	6,904	6,872	6,578	6,455	6,073	6,872	6,278	6,358	6,590	6,644	5,679
Air Force EAD mil personnel	3,144	3,172	3,437	3,446	3,336	3,231	3,003	3,014	3,047	3,073	3,184	3,171	2,642
Army and Navy EAD mil personnel	172	217	174	175	175	168	141	153	166	176	176	174	172
All other patients	3,101	3,172	3,293	3,251	3,067	3,056	2,929	2,895	3,065	3,109	3,230	3,299	2,865

USE OF FACILITIES—Patients Occupying USAF Beds

APPENDIX TABLE 13.—Average Number of Patients Occupying Beds in Air Force Facilities, by Type of Beneficiary, and by Month:  
1959-63—Continued

Calendar year and type of beneficiary	Average for calendar year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>CONTINENTAL UNITED STATES</b> (Excludes Alaska and Hawaii)—Continued													
1962: Total	6,873	6,931	7,255	7,340	7,096	6,905	6,640	6,705	7,037	7,001	6,952	6,747	5,907
Air Force EAD mil personnel	3,331	3,259	3,514	2,562	3,503	3,428	3,216	3,265	3,424	3,411	3,413	3,262	2,740
Army and Navy EAD mil personnel	174	206	187	188	156	164	167	171	174	179	167	176	155
All other patients	3,368	3,466	3,554	3,590	3,437	3,313	3,257	3,269	3,439	3,411	3,372	3,309	3,012
1963: Total	6,729	7,174	7,540	7,336	6,916	6,642	6,351	6,305	6,579	6,766	6,845	6,671	5,702
Air Force EAD mil personnel	3,221	3,396	3,638	3,567	3,373	3,251	3,062	3,037	3,105	3,238	3,285	3,167	2,576
Army and Navy EAD mil personnel	164	206	180	175	158	165	158	166	159	169	150	143	141
All other patients	3,344	3,572	3,722	3,594	3,385	3,226	3,131	3,102	3,315	3,359	3,410	3,361	2,985
<b>OUTSIDE CONTINENTAL UNITED STATES</b> (Includes Alaska and Hawaii)													
1959: Total	2,363	2,499	2,624	2,563	2,435	2,307	2,240	2,182	2,253	2,332	2,416	2,407	2,111
Air Force EAD mil personnel	1,156	1,245	1,309	1,278	1,217	1,137	1,110	1,049	1,084	1,105	1,185	1,158	1,014
Army and Navy EAD mil personnel	224	233	265	243	233	202	194	212	209	243	225	236	195
All other patients	983	1,021	1,050	1,042	985	968	936	921	960	984	1,006	1,013	902
1960: Total	2,206	2,287	2,454	2,383	2,264	2,208	2,108	2,086	2,198	2,171	2,178	2,185	1,961
Air Force EAD mil personnel	1,028	1,088	1,199	1,128	1,085	1,041	988	956	987	1,002	1,029	960	881
Army and Navy EAD mil personnel	196	202	198	207	193	180	172	187	201	185	201	217	201
All other patients	982	997	1,057	1,048	986	987	948	943	1,010	984	948	1,008	879
1961: Total	2,052	2,241	2,309	2,248	2,098	2,091	1,983	1,917	1,896	1,977	2,030	2,029	1,829
Air Force EAD mil personnel	906	962	1,017	977	930	896	852	853	835	884	951	921	807
Army and Navy EAD mil personnel	204	220	220	229	191	224	211	181	193	204	182	197	193
All other patients	942	1,059	1,072	1,042	977	971	920	883	868	889	897	911	829
1962: Total	1,990	2,139	2,262	2,208	2,046	2,030	1,957	1,850	1,865	1,912	1,972	1,930	1,732
Air Force EAD mil personnel	906	981	1,035	997	938	940	885	826	841	898	894	875	783
Army and Navy EAD mil personnel	228	218	249	242	229	228	225	213	233	214	242	231	205
All other patients	856	940	978	969	879	862	847	811	791	800	836	824	744
1963: Total	1,834	2,012	2,197	2,080	1,934	1,814	1,740	1,706	1,704	1,711	1,801	1,767	1,564
Air Force EAD mil personnel	840	912	1,038	1,011	922	850	781	756	765	774	803	801	678
Army and Navy EAD mil personnel	199	216	244	194	211	199	204	210	192	188	183	174	172
All other patients	795	884	915	875	801	765	755	740	747	749	815	792	714

Source: Beds and Patients Report (DD Form 443), and Report of Patients (AF Form 235b).

Outpatient Data—USE OF FACILITIES

APPENDIX TABLE 14.—Outpatient Visits at Air Force Facilities, by Type of Beneficiary: 1959-63

[Per 365 days]

Area and calendar year	Total	Air Force	Army and Navy	All other
<b>World-wide</b>				
1959 -----	12,282,159	4,669,819	176,639	7,435,701
1960 -----	12,892,714	4,698,261	191,611	8,002,842
1961 <sup>1</sup> -----	14,186,832	5,233,794	238,480	8,714,558
1962 <sup>1</sup> -----	15,212,544	5,540,186	276,798	9,395,560
1963 <sup>1</sup> -----	15,623,083	5,619,310	260,478	9,743,295
<b>Continental United States <sup>2</sup></b>				
1959 -----	8,882,974	3,274,071	77,033	5,531,870
1960 -----	9,387,990	3,355,716	102,521	5,929,753
1961 <sup>1</sup> -----	10,752,138	3,933,127	136,158	6,682,853
1962 <sup>1</sup> -----	11,748,244	4,170,902	151,081	7,426,261
1963 <sup>1</sup> -----	12,148,633	4,262,963	142,619	7,743,051
<b>Outside Continental United States <sup>2</sup></b>				
1959 -----	3,399,185	1,395,748	99,606	1,903,831
1960 -----	3,504,724	1,342,545	89,090	2,073,089
1961 <sup>1</sup> -----	3,434,694	1,300,667	102,322	2,031,705
1962 <sup>1</sup> -----	3,464,300	1,369,284	125,717	1,969,299
1963 <sup>1</sup> -----	3,474,450	1,356,347	117,859	2,000,244

<sup>1</sup> Not strictly comparable with data for previous years, due to change in definition of an outpatient visit.

<sup>2</sup> Excludes Alaska and Hawaii.

<sup>3</sup> Includes Alaska and Hawaii.

Source: Outpatient Report (DD Form 444), and Report of Patients (AF Form 235).

APPENDIX TABLE 15.—Selected Outpatient Activities at Air Force Facilities: 1959-63

[Per 365 days]

Area and calendar year	Flight physical exams	Other complete physical exams	Immunizations
<b>World-wide:</b>			
1959 -----	209,328	429,447	7,316,082
1960 -----	219,697	438,789	7,246,784
1961 -----	258,258	557,275	7,474,433
1962 -----	227,168	543,258	8,650,898
1963 -----	212,933	509,940	10,315,018
<b>Continental United States <sup>1</sup>:</b>			
1959 -----	178,684	329,239	5,437,969
1960 -----	189,750	329,247	5,388,902
1961 -----	227,065	463,326	5,678,570
1962 -----	196,638	437,473	6,685,641
1963 -----	180,517	418,162	7,774,678
<b>Outside Continental United States <sup>2</sup>:</b>			
1959 -----	30,644	100,208	1,878,113
1960 -----	29,947	109,542	1,857,882
1961 -----	31,193	93,949	1,795,863
1962 -----	30,530	105,785	1,965,257
1963 -----	32,416	91,778	2,540,340

<sup>1</sup> Excludes Alaska and Hawaii.

<sup>2</sup> Includes Alaska and Hawaii.

Source: Outpatient Report (DD Form 444), and Report of Patients (AF Form 235).

MEDICAL CARE—Clinic Service, 14 AF Hospitals

APPENDIX TABLE 16.—Inpatients Treated\* and Length of Stay by Clinic Service—Fourteen Air Force Specialty Hospitals: 1963

Clinic service	Total	Andrews	Carswell	Chanute	Eglin	Keesler	Maxwell	Scott	Sheppard	Travis	Wilford Hall	Wright-Patterson	Clark	Tachikawa	Wiesbaden
<b>Total:</b>															
Cases.....	124,051	9,151	7,783	6,347	5,978	10,184	6,834	5,728	7,156	8,819	20,493	8,844	7,273	9,530	9,931
Average daily patient load 1.....	3981.7	249.0	227.0	155.9	172.8	293.7	191.8	257.9	251.3	338.1	839.0	319.1	207.0	209.7	269.3
Average stay 2.....	11.7	9.9	10.6	9.0	10.6	10.5	10.2	16.4	12.8	14.0	14.9	13.2	10.4	8.0	9.9
<b>MEDICAL SERVICES:</b>															
<b>Allergy:</b>															
Cases.....	48	15	1	—	1	—	—	—	—	—	1	—	2	1	27
Average daily patient load 1.....	2.4	.9	0	—	.6	—	—	—	—	—	0	—	.1	0	.8
Average stay 2.....	18.3	20.9	2.0	—	214.0	—	—	—	—	—	9.0	—	22.0	4.0	10.7
<b>Cardiology:</b>															
Cases.....	1,146	309	—	—	—	—	1	62	44	—	714	4	—	—	12
Average daily patient load 1.....	64.7	18.2	—	—	—	—	.1	3.4	3.3	—	39.0	.2	—	—	.6
Average stay 2.....	20.6	21.5	—	—	—	—	22.0	20.2	27.3	—	19.9	16.5	—	—	18.5
<b>Dermatology:</b>															
Cases.....	557	40	21	19	—	21	14	23	16	30	66	15	71	64	157
Average daily patient load 1.....	22.1	2.3	.5	.6	—	.8	.5	.8	.3	1.5	2.5	.9	2.1	2.6	6.9
Average stay 2.....	14.5	20.6	8.4	10.8	—	13.8	12.6	12.4	7.2	18.1	13.6	21.3	11.0	14.7	16.1
<b>Gastroenterology:</b>															
Cases.....	638	248	—	—	—	—	—	—	—	—	366	—	—	—	24
Average daily patient load 1.....	33.1	11.9	—	—	—	—	—	—	—	—	20.6	—	—	—	.6
Average stay 2.....	18.9	17.5	—	—	—	—	—	—	—	—	20.6	—	—	—	8.7
<b>Hematology:</b>															
Cases.....	66	64	—	—	—	—	—	—	—	—	2	—	—	—	—
Average daily patient load 1.....	3.1	3.0	—	—	—	—	—	—	—	—	.1	—	—	—	—
Average stay 2.....	17.1	17.2	—	—	—	—	—	—	—	—	13.5	—	—	—	—
<b>Medicine:</b>															
Cases.....	18,335	865	1,032	1,717	1,059	2,064	1,448	980	1,191	1,408	1,134	1,308	1,611	1,117	1,401
Average daily patient load 1.....	693.7	23.0	44.6	39.1	28.2	56.6	63.3	46.5	39.0	79.8	69.7	62.8	63.1	31.7	46.2
Average stay 2.....	13.8	9.7	15.8	8.3	9.7	10.0	16.0	17.3	11.9	20.7	22.4	17.5	14.3	10.4	12.0
<b>Neurology:</b>															
Cases.....	2,139	141	—	3	—	97	17	157	96	285	522	221	214	197	189
Average daily patient load 1.....	112.8	12.0	—	0	—	8.7	.5	7.2	6.0	16.1	25.7	17.1	9.2	5.7	4.7
Average stay 2.....	19.3	31.1	—	2.0	—	32.6	10.1	16.7	22.7	20.6	18.0	28.3	15.7	10.6	9.0
<b>Pediatrics:</b>															
Cases.....	6,354	372	000	310	212	631	758	261	256	481	732	378	466	408	489
Average daily patient load 1.....	112.1	4.6	6.3	4.6	2.3	7.8	11.3	4.8	3.5	7.7	24.5	10.7	8.3	6.3	9.2
Average stay 2.....	6.4	4.5	3.9	5.5	4.0	4.5	5.5	6.7	5.0	5.9	12.2	10.4	6.5	5.6	6.8

Clinical Service, 14 AF Hospitals—MEDICAL CARE

<b>Pediatrics—newborn:</b>															
Cases	16,051	1,509	981	809	1,013	1,603	778	742	952	1,162	2,162	1,097	558	1,528	1,157
Average daily patient load <sup>1</sup>	203.1	15.9	14.1	10.3	12.4	20.2	10.0	8.9	13.3	15.9	25.8	14.5	6.9	19.2	15.6
Average stay <sup>2</sup>	4.6	3.9	5.3	4.6	4.5	4.6	4.7	4.4	5.1	5.0	4.4	4.8	4.5	4.6	4.9
<b>Psychiatry:</b>															
Cases	6,916	347	109	328	594	584	368	82	863	525	1,159	565	407	453	532
Average daily patient load <sup>1</sup>	552.1	33.3	1.8	13.3	77.1	59.6	13.6	1.1	101.2	61.1	3.2	60.5	16.5	17.6	22.1
Average stay <sup>2</sup>	29.1	35.0	6.1	14.8	47.4	37.3	13.4	4.7	42.8	42.5	23.1	39.1	14.8	14.2	15.2
<b>Pulmonary disease:</b>															
Cases	1,509	161	—	—	—	—	—	245	—	—	1,085	—	—	10	8
Average daily patient load <sup>1</sup>	160.8	8.3	—	—	—	—	—	74.5	—	—	75.1	—	—	2.5	.4
Average stay <sup>2</sup>	38.9	18.8	—	—	—	—	—	111.0	—	—	25.3	—	—	92.4	16.5
<b>SURGICAL SERVICES:</b>															
<b>Gynecology:</b>															
Cases	6,445	599	612	314	392	515	330	289	397	384	979	583	239	263	549
Average daily patient load <sup>1</sup>	98.9	10.0	9.5	3.8	4.1	8.5	6.0	4.5	4.7	3.7	19.7	7.5	3.7	4.2	9.0
Average stay <sup>2</sup>	5.6	6.1	5.7	4.4	3.8	6.0	6.7	5.7	4.3	3.6	7.4	4.7	5.7	5.8	6.0
<b>Hand surgery:</b>															
Cases	316	—	—	—	—	—	—	—	—	—	315	1	—	—	—
Average daily patient load <sup>1</sup>	19.7	—	—	—	—	—	—	—	—	—	19.7	0	—	—	—
Average stay <sup>2</sup>	227	—	—	—	—	—	—	—	—	—	22.8	2.0	—	—	—
<b>Neurosurgery:</b>															
Cases	2,705	3	153	1	—	52	1	1	—	447	948	371	—	287	441
Average daily patient load <sup>1</sup>	151.6	.5	9.4	—	—	2.4	0	0	—	24.4	50.6	26.3	—	17.7	20.4
Average stay <sup>2</sup>	20.5	61.3	22.4	—	—	16.6	2.0	5.0	—	19.9	19.5	25.8	—	22.5	16.8
<b>Obstetrics:</b>															
Cases	18,818	1,674	1,211	929	1,151	1,915	1,123	835	1,043	1,268	2,394	1,326	738	1,903	1,308
Average daily patient load <sup>1</sup>	216.9	15.7	16.7	10.5	11.7	24.6	13.1	10.1	13.5	15.2	25.2	15.5	8.5	21.1	16.1
Average stay <sup>2</sup>	4.2	3.4	5.0	4.1	3.7	4.6	4.3	4.4	4.7	4.4	3.8	4.3	4.2	4.1	4.5
<b>Ophthalmology:</b>															
Cases	2,859	156	188	182	76	141	142	132	158	153	601	361	175	239	155
Average daily patient load <sup>1</sup>	89.3	7.8	3.9	5.7	1.1	3.6	4.2	3.2	4.1	8.3	22.7	9.3	6.4	4.7	4.3
Average stay <sup>2</sup>	11.4	18.1	7.6	11.5	5.4	9.3	10.8	8.9	9.4	19.7	13.8	9.4	13.4	7.2	10.2
<b>Oral surgery:</b>															
Cases	1,650	64	150	164	185	68	49	34	44	54	350	50	117	117	204
Average daily patient load <sup>1</sup>	51.0	2.0	2.4	3.4	1.9	3.6	1.3	1.4	.9	1.3	13.7	2.1	3.9	3.5	9.4
Average stay <sup>2</sup>	11.3	11.3	5.9	7.7	3.7	19.5	10.0	14.9	7.7	9.0	14.3	15.5	12.3	10.8	16.8
<b>Orthopedics:</b>															
Cases	11,202	891	1,109	525	524	796	405	474	492	814	1,905	618	714	806	1,129
Average daily patient load <sup>1</sup>	642.6	38.7	74.9	37.0	18.0	53.3	22.8	45.4	23.3	50.9	135.7	35.6	27.1	31.3	48.5
Average stay <sup>2</sup>	20.9	15.9	24.7	25.7	12.6	24.4	20.5	35.0	17.3	22.8	26.0	21.0	13.9	14.2	15.7
<b>Otolaryngology:</b>															
Cases	5,542	377	252	205	121	284	302	311	297	364	1,152	486	296	539	556
Average daily patient load <sup>1</sup>	106.7	7.6	2.8	3.1	1.6	5.3	6.9	4.9	3.8	8.0	34.5	7.1	5.2	5.9	9.9
Average stay <sup>2</sup>	7.0	7.4	4.1	5.6	4.8	6.8	8.3	5.8	4.7	8.0	10.9	5.3	6.4	4.0	6.5

See footnotes at end of table.

APPENDIX TABLE 16.—Inpatients Treated\* and Length of Stay by Clinic Service—Fourteen Air Force Specialty Hospitals: 1963—Continued

Clinic service	Total	Andrews	Carswell	Chanute	Eglin	Keesler	Maxwell	Scott	Shepard	Travis	Wilford Hall	Wright-Patterson	Clark	Tachikawa	Wiesbaden
<b>SURGICAL SERVICES—Continued</b>															
Plastic surgery:															
Cases	1,121	—	—	—	—	233	—	—	—	265	540	83	—	—	—
Average daily patient load <sup>1</sup>	44.0	—	—	—	—	7.5	—	—	—	8.2	24.2	4.1	—	—	—
Average stay <sup>2</sup>	14.3	—	—	—	—	11.8	—	—	—	11.2	16.4	18.0	—	—	—
Surgery:															
Cases	12,998	955	858	651	451	737	793	607	835	836	2,188	976	1,095	996	1,020
Average daily patient load <sup>1</sup>	402.9	24.4	26.0	19.6	10.4	21.5	29.6	21.3	24.3	22.2	85.5	31.9	32.8	25.2	28.2
Average stay <sup>2</sup>	11.3	9.3	11.1	11.0	8.5	10.6	13.6	12.8	10.6	9.7	14.3	11.9	10.9	9.2	10.1
Thoracic surgery:															
Cases	597	—	—	—	—	4	13	61	1	109	317	—	1	17	74
Average daily patient load <sup>1</sup>	41.0	—	—	—	—	.1	1.0	4.7	0	4.7	25.6	—	.2	.8	3.8
Average stay <sup>2</sup>	25.1	—	—	—	—	10.0	29.2	28.3	3.0	15.7	29.5	—	74.0	17.5	18.6
Urology:															
Cases	6,039	361	509	190	199	439	292	432	471	234	861	401	569	585	499
Average daily patient load <sup>1</sup>	157.1	9.1	13.9	4.8	3.4	10.2	7.5	15.0	10.2	9.1	25.5	13.0	12.8	9.7	12.9
Average stay <sup>2</sup>	9.5	9.2	10.1	9.2	6.3	8.5	9.4	12.7	7.9	14.2	10.8	11.9	8.2	6.0	9.4

\*Based on disposition.

<sup>1</sup> (Bed days in year)/365.<sup>2</sup> Average days of bed occupancy per case in this facility.

For explanation of symbol, see p. 52.

Source: Individual Medical Records.

Specialty Area, All Patients—MEDICAL CARE

APPENDIX TABLE 17.—Total Diagnoses Reported, Number of Dispositions and Bed Occupancy, by Specialty Area\*—  
Air Force Medical Treatment Facilities, Worldwide: 1963

Specialty area*	Total diagnoses reported in each specialty area				Number of dispositions in each specialty area (sole and primary diagnoses only)		
	All ages	Under 28 days	1 mo (28 days) to 13 yrs	14 yrs and over	Number of completed cases	Total days lost from duty	Average days per completed case
Total.....					401,872	8,531.0	7.7
<b>MEDICAL SPECIALTY:</b>							
Allergy.....	4,627	18	1,368	3,241	3,082	57.5	6.8
Cardiology.....	12,119	266	952	10,901	5,356	270.2	18.4
Dermatology.....	7,018	301	991	5,726	4,174	90.3	7.9
Gastroenterology.....	17,371	178	3,512	13,681	15,255	151.7	3.6
Hematology.....	5,763	561	1,397	3,805	1,244	37.6	11.0
Medicine.....	102,964	4,106	18,106	80,752	69,371	1,480.8	7.8
Neurology.....	10,782	187	2,714	7,881	6,279	229.9	13.4
Psychiatry.....	22,020	16	471	21,533	14,946	789.4	19.3
Pulmonary Disease.....	4,730	96	398	4,236	2,016	129.9	23.5
<b>SURGICAL SPECIALTY:</b>							
Gynecology.....	29,818	4	109	29,705	16,842	254.8	5.5
Neurosurgery.....	9,871	193	1,957	7,721	6,104	242.2	14.5
Obstetrics.....	98,827	645	62	98,120	82,539	965.1	4.3
Ophthalmology.....	8,273	129	2,211	5,933	4,753	110.1	8.5
Oral surgery.....	6,219	14	483	5,722	3,979	44.1	4.0
Orthopedics.....	43,756	403	4,532	38,821	31,356	1,071.4	12.5
Otolaryngology.....	44,602	104	15,589	28,909	33,424	326.9	3.6
Plastic surgery.....	1,267	127	354	786	705	24.2	12.5
Surgery.....	78,568	1,046	11,107	65,745	54,642	1,384.2	9.2
Thoracic surgery.....	3,340	69	353	2,918	1,945	135.1	25.3
Urology.....	31,979	755	6,299	24,925	19,097	379.8	7.3
Undetermined.....	30,949	468	5,951	24,530	24,763	355.9	5.2

\*For definition of specialty area, see appendix notes.

NOTE.—Data exclude 64,294 cases of newborn.

For explanation of symbols, see p. 52.

Source: Individual Medical Records.

**MEDICAL CARE—Specialty Area, EAD Military Patients**

**APPENDIX TABLE 18.—Number of Dispositions Among Extended Active Duty Military Patients, by Specialty Area\*—  
Air Force Medical Treatment Facilities, Worldwide: 1963**

(Distribution of sole and primary diagnoses)

Specialty area*	Air Force		Army		Navy	
	Number of dispositions	Average daily patient load	Number of dispositions	Average daily patient load	Number of dispositions	Average daily patient load
Total.....	152,994	4,275.8	8,337	213.5	2,995	86.3
<b>MEDICAL SPECIALTY:</b>						
Allergy.....	1,139	27.3	58	1.0	14	.2
Cardiology.....	1,901	144.2	49	1.7	19	.8
Dermatology.....	2,379	55.9	189	5.2	52	.9
Gastroenterology.....	9,056	73.8	403	4.2	92	.8
Hematology.....	143	8.8	6	.3	1	0
Medicine.....	36,670	805.7	1,609	41.7	467	12.5
Neurology.....	2,297	118.8	115	3.8	63	2.5
Psychiatry.....	8,520	630.1	389	9.8	101	2.7
Pulmonary disease.....	876	76.0	20	.4	10	.2
<b>SURGICAL SPECIALTY:</b>						
Gynecology.....	280	4.5	4	0	2	0
Neurosurgery.....	2,876	157.4	226	9.8	143	4.2
Obstetrics.....	124	1.2	4	0	2	0
Ophthalmology.....	1,883	66.6	98	3.4	42	.9
Oral surgery.....	2,606	30.6	123	2.2	38	.6
Orthopedics.....	18,881	712.1	1,222	44.1	494	23.5
Otolaryngology.....	18,147	180.5	781	10.2	221	3.1
Plastic surgery.....	296	11.2	8	.2	5	.1
Surgery.....	25,231	729.0	1,821	49.7	761	23.0
Thoracic surgery.....	966	79.1	26	.8	33	1.3
Urology.....	8,906	193.3	612	15.4	192	4.3
Undetermined.....	9,817	169.8	574	9.4	243	4.5

\*For definition of specialty area, see appendix notes.  
For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

**Specialty Area, Non EAD Military Patients—MEDICAL CARE**

APPENDIX TABLE 19.—Number of Dispositions Among Patients Other than Extended Active Duty Military, by Specialty Area\*—Air Force Medical Treatment Facilities, Worldwide: 1963

Specialty area*	All non EAD cases		Number of dispositions of—						
	Number of dispositions	Average daily patient load	Dependents of active duty military personnel			Retired U.S. mil personnel	Active duty for training	Air Force Academy Cadets	All other personnel
			Air Force	Army & Navy	All other <sup>1</sup>				
<b>Total</b> .....	237,546	3,955.5	180,991	18,711	19,416	11,610	508	715	5,595
<b>MEDICAL SPECIALTY:</b>									
Allergy.....	1,871	28.9	1,414	167	182	73	2	3	30
Cardiology.....	3,387	123.4	1,065	174	500	1,357	10	2	279
Dermatology.....	1,554	28.4	1,120	110	174	77	6	10	57
Gastroenterology.....	5,704	72.9	4,336	478	422	202	18	74	174
Hematology.....	1,094	28.5	772	107	113	85	—	—	17
Medicine.....	30,625	620.9	21,310	2,408	3,101	2,526	96	119	1,065
Neurology.....	3,804	104.8	2,578	286	371	435	6	6	122
Psychiatry.....	5,936	146.8	3,980	403	502	791	24	23	213
Pulmonary disease.....	1,110	53.2	532	81	131	302	1	—	63
<b>SURGICAL SPECIALTY:</b>									
Gynecology.....	16,556	250.2	12,599	1,412	2,418	17	—	—	110
Neurosurgery.....	2,859	70.7	1,964	221	289	187	23	32	143
Obstetrics.....	82,409	963.8	72,583	6,788	2,485	10	2	—	541
Ophthalmology.....	2,730	39.2	1,938	218	263	213	1	6	91
Oral surgery.....	1,212	10.7	878	63	65	171	—	—	35
Orthopedics.....	10,759	291.7	6,834	731	1,497	762	103	207	625
Otolaryngology.....	14,275	133.1	11,511	1,015	1,161	284	46	41	217
Plastic surgery.....	396	12.7	298	23	44	19	1	1	10
Surgery.....	26,829	582.5	18,103	2,042	3,298	2,163	99	137	987
Thoracic surgery.....	920	53.8	548	48	109	168	4	1	42
Urology.....	9,387	166.9	6,453	793	852	950	15	14	310
Undetermined.....	14,129	172.2	10,175	1,143	1,439	818	51	39	464

\*For definition of specialty area, see appendix notes.

<sup>1</sup> Includes dependents of retired or deceased military, of Coast Guard, of Public Health Service, of Coast and Geodetic Survey, of allied and neutral military, and of authorized civilian employees.

<sup>2</sup> Includes other uniformed services (see footnote <sup>1</sup>), VA beneficiaries, authorized civilian employees and unknown.

For explanation of symbols, see p. 52.

Source: Individual Medical Records.

MEDICAL CARE—Specialty Area, by Reporting Command

APPENDIX TABLE 20.—Number of Diagnoses Reported by Specialty Area\* and Reporting Command—Air Force Medical Treatment Facilities, World-wide: 1963

Specialty area*	All comds	ADC	AFLC	AFSC	ATC	AU	AAC	HQ-COMD	MATS	PACAF	SAC	TAC	USAF	USAFE	OTHER <sup>†</sup>	
Total.....	639,355	45,732	39,545	52,005	67,958	10,591	13,265	14,052	48,273	34,296	190,940	45,193	6,773	70,001	931	
<b>MEDICAL SPECIALTY:</b>																
Allergy.....	4,627	328	262	348	434	88	58	103	350	346	1,371	333	40	554	12	
Cardiology.....	12,119	804	859	1,262	1,199	389	222	302	1,323	435	3,354	1,022	101	839	8	
Dermatology.....	7,018	478	337	656	714	119	138	142	473	573	2,065	402	51	847	23	
Gastroenterology.....	17,371	1,842	878	1,087	2,018	242	209	395	895	1,035	5,213	1,104	220	2,197	36	
Hematology.....	5,763	314	334	603	526	105	135	150	454	277	1,811	534	52	465	3	
Medicine.....	102,964	8,756	5,384	7,931	12,832	1,890	1,830	2,199	7,675	5,235	28,922	6,384	1,059	12,681	186	
Neurology.....	10,782	584	757	1,310	1,199	217	163	247	978	599	2,875	660	109	1,072	12	
Pediatrics—Newborn.....	64,492	4,365	4,732	4,465	6,517	781	1,554	1,510	4,828	2,770	20,775	5,312	656	6,227	—	
Psychiatry.....	22,020	1,260	1,317	2,455	3,047	433	623	459	1,636	1,480	5,195	1,107	117	2,849	42	
Pulmonary disease.....	4,730	264	269	520	480	113	74	110	628	313	1,197	331	25	397	9	
<b>SURGICAL SPECIALTY:</b>																
Gynecology.....	29,818	1,941	2,329	1,585	3,268	631	383	540	1,841	985	10,224	2,931	353	2,807	—	
Neurosurgery.....	9,871	633	570	832	946	102	128	177	965	527	2,884	611	146	1,335	15	
Obstetrics.....	98,827	6,559	7,052	7,169	9,789	1,425	2,525	2,158	7,245	4,201	32,173	8,123	1,032	9,375	1	
Ophthalmology.....	8,273	299	598	1,041	868	228	227	266	709	652	1,850	437	69	1,011	18	
Oral surgery.....	6,219	400	135	705	618	46	323	68	358	394	1,842	500	33	792	5	
Orthopedics.....	43,756	3,096	2,354	4,022	4,263	596	840	1,152	3,546	2,671	12,320	2,343	621	5,861	71	
Otolaryngology.....	44,602	3,582	2,805	3,216	4,900	810	1,180	1,172	3,156	2,722	12,024	3,150	487	5,297	101	
Plastic surgery.....	1,267	65	45	292	154	19	15	54	132	39	296	60	8	88	—	
Surgery.....	78,568	5,443	4,985	6,744	8,109	1,218	1,429	1,735	6,004	4,672	23,739	5,417	1,115	7,844	114	
Thoracic surgery.....	3,340	159	105	691	330	81	60	69	407	144	740	204	8	340	2	
Urology.....	31,979	1,819	1,743	2,758	3,427	630	548	626	2,401	2,690	9,483	2,129	244	3,389	32	
Undetermined.....	30,949	2,741	1,695	2,313	2,320	428	601	418	2,209	1,536	10,587	2,099	227	3,734	41	

\*For definition of specialty area, see appendix notes.

†Include CONAC, Hq USAF, and USAFSO.

For explanation of symbols, see p. 52.

Source: Individual Medical Records.

Surgical, 14 AF Hospitals—MEDICAL CARE

APPENDIX TABLE 21.—Number of Surgical Operations and Selected Procedures Reported by Fourteen Air Force Specialty Hospitals: 1963

Surgical classification or body site	Total	Andrews	Carawell	Chanute	Eglin	Keesler	Maxwell	Scott	Shepherd	Travis	Wilford Hall	Wright-Patterson	Clark	Tachikawa	Wiesbaden
All surgical operations and procedures	103,643	7,278	6,197	3,905	3,740	8,641	4,531	5,145	5,716	9,222	25,607	5,853	3,574	7,421	6,813
I. Neurosurgery	5,261	101	481	86	27	367	189	223	90	581	1,915	296	78	396	431
Brain and meninges	1,396	11	91	6	3	66	15	44	10	175	653	93	13	82	134
Spinal cord and coverings	3,323	67	327	57	17	260	144	140	70	354	1,135	156	50	289	257
Spinal puncture	1,991	50	126	52	12	169	118	131	67	143	808	45	32	120	118
Other operations on spinal cord and coverings	1,332	17	201	5	5	91	26	9	3	211	327	111	18	167	139
Peripheral nerves and sympathetic system	542	23	63	23	7	41	30	39	10	52	127	47	15	25	40
II. Surgery of the eye, ear, nose and throat	7,419	471	481	320	119	436	371	390	426	524	1,583	721	283	735	559
Eye	2,190	117	188	154	42	141	105	116	127	135	441	306	79	194	45
Ear	1,447	114	85	77	45	95	76	56	121	74	292	138	39	83	152
Nose	815	43	33	28	9	72	76	35	33	95	170	79	25	63	54
Paranasal sinuses	224	25	8	2	8	8	10	3	15	13	87	3	9	9	24
Pharynx, tongue and palate	2,190	133	136	43	10	78	63	162	116	123	423	170	117	361	255
Tonsillectomy	1,767	118	119	29	6	68	42	146	87	72	284	147	101	342	206
Other operations on pharynx, tongue and palate	423	15	17	14	4	10	21	16	29	51	139	23	16	19	49
Larynx and trachea	553	39	31	16	5	42	41	18	14	84	170	25	14	25	29
III. Oral surgery	2,162	123	202	207	179	109	67	54	54	112	457	75	171	131	221
Extraction of tooth	692	40	62	94	8	53	22	17	21	26	151	21	78	41	58
Surgical removal of tooth	500	9	46	38	148	13	9	4	4	13	125	18	5	44	24
Alveolectomy	189	15	22	24	6	1	7	4	—	9	18	11	41	5	26
Other oral surgery	781	59	72	51	17	42	29	29	29	64	163	25	47	41	113
IV. Thoracic surgery	2,654	103	68	47	27	107	82	260	61	192	1,414	33	61	64	135
Heart and pericardium	453	3	1	1	—	—	2	6	—	8	433	—	2	—	3
Great vessels (intrathoracic)	80	1	3	—	1	—	1	2	—	4	63	—	—	—	1
Lungs and pleura	329	13	4	8	2	13	11	54	10	38	124	6	10	8	28
Surgical collapse therapy	37	—	1	—	—	7	1	5	—	5	6	2	5	4	1
Bronchi	819	17	16	10	9	30	30	66	20	75	448	11	20	21	46
Mediastinum and chest wall	930	69	43	28	15	55	37	127	31	62	340	12	24	31	56
V. Gastrointestinal and abdominal surgery (including proctologic)	9,423	822	583	382	222	532	546	652	395	650	2,333	523	392	577	814
Abdominal wall	2,311	233	192	138	56	131	154	115	108	149	394	159	109	183	190
Hernioplasty	2,099	222	182	127	52	121	142	107	92	135	321	151	106	166	175
Other operations on abdominal wall	212	11	10	11	4	10	12	8	16	14	73	8	3	17	15
Esophagus	463	30	8	7	5	25	29	22	8	43	218	14	4	11	39

MEDICAL CARE—Surgical, 14 AF Hospitals

APPENDIX TABLE 21.—Number of Surgical Operations and Selected Procedures Reported by Fourteen Air Force Specialty Hospitals: 1963—Continued

Surgical classification or body site	Total	Andrews	Carswell	Chanute	Eglin	Keesler	Maxwell	Scott	Travis	Wilford Hall	Wright-Patterson	Clark	Tachikawa	Wiesbaden
<b>V. Gastrointestinal and abdominal surgery—Continued</b>														
Stomach.....	725	67	40	13	15	44	21	49	53	226	42	8	20	115
Intestines.....	432	33	37	16	12	21	28	21	24	123	20	16	22	37
Appendix.....	1,420	142	74	58	69	107	113	56	103	213	76	47	124	136
Liver and bile ducts.....	1,243	102	75	44	23	66	63	84	95	341	67	23	82	121
Biopsy of liver.....	492	26	15	14	5	17	15	51	9	185	19	12	17	66
Cholecystectomy.....	604	63	54	29	12	43	39	28	43	98	41	15	47	49
Other operations on liver and bile duct.....	156	13	6	1	6	6	9	5	11	58	7	3	18	6
Other abdominal surgery.....	639	36	45	33	16	37	39	31	43	156	54	31	36	71
Laparotomy.....	417	17	24	26	12	17	23	22	19	113	38	26	20	32
Other abdominal operations.....	242	19	21	7	4	20	16	9	12	43	16	5	16	39
Rectum and anus.....	2,170	179	112	73	26	101	99	274	140	662	91	154	99	105
Hemorrhoidectomy.....	419	55	25	19	10	8	22	21	16	56	41	46	38	27
Sigmoidectomy.....	914	31	8	12	2	22	23	224	11	493	17	11	6	13
Other operations on rectum and anus.....	837	93	79	42	14	71	54	29	28	113	33	97	55	54
<b>IV. Genitourinary surgery</b>	14,733	1,098	990	650	656	1,214	696	903	893	2,437	988	726	1,277	1,115
Kidney.....	672	24	44	15	11	26	20	41	32	291	32	19	21	41
Ureter.....	217	12	20	10	17	10	17	18	8	30	10	25	7	18
Bladder.....	2,778	146	246	90	45	179	128	193	95	496	216	223	230	199
Cystoscopy.....	2,429	124	224	82	38	161	107	150	76	524	195	183	220	172
Other operations on bladder.....	349	22	22	8	7	18	21	37	19	72	21	40	10	27
Urethra.....	1,374	39	95	49	32	120	61	164	32	88	88	117	83	121
Dilation of urethra with sound.....	676	8	49	19	21	94	19	57	4	43	43	78	48	56
Other operations on urethra.....	698	31	46	30	11	26	42	107	28	45	45	39	35	65
Prostate and seminal vesicles.....	371	29	24	16	9	21	21	32	17	107	16	15	4	20
Testis and epididymis.....	388	34	19	10	19	24	19	24	30	91	29	17	21	27
Spermatic cord and vas deferens.....	378	36	17	28	14	25	22	22	30	71	29	16	25	23
Penis and scrotum.....	8,555	778	525	432	509	809	408	409	613	1,163	568	294	886	666
Circumcision.....	8,436	768	518	425	506	805	406	407	600	1,133	564	287	875	654
Other operations on penis and scrotum.....	119	10	7	7	3	4	2	2	13	30	4	7	11	12
<b>VII. Gynecological and obstetrical surgery</b>	31,383	3,010	2,035	1,467	1,790	3,231	1,750	1,673	2,004	4,105	2,128	1,076	2,581	2,165
Ovary.....	757	64	52	43	27	57	62	41	37	105	47	29	71	85

Surgical, 14 AF Hospitals—MEDICAL CARE

Uterus and supporting structures.....	5,019	484	200	273	597	380	149	359	301	527	398	245	298	330
<i>Dilation and curettage, uterus</i> .....	2,977	280	129	179	402	237	58	251	201	252	240	146	174	167
<i>Other operations on uterus and supporting structures</i> .....	2,042	204	71	94	195	143	91	108	100	275	153	99	124	163
<i>Vagina</i> .....	841	58	30	45	192	50	24	50	23	58	52	22	41	137
<i>Vulva and perineum</i> .....	192	9	4	4	11	16	11	10	10	32	6	15	19	19
<i>Obstetric surgery</i> .....	24,574	2,395	1,190	1,441	2,374	1,242	1,448	1,548	1,997	3,383	1,625	765	2,152	1,594
<i>Artificial rupture of membrane</i> .....	833	181	---	---	29	91	57	138	265	17	5	8	34	8
<i>Delivery, spontaneous</i> .....	7,626	564	571	306	558	408	392	236	603	907	485	289	945	866
<i>Delivery by obstetrical forceps</i> .....	7,330	864	181	638	938	321	317	661	486	1,086	537	219	430	238
<i>Breech extraction</i> .....	471	51	30	47	62	13	8	22	32	69	30	7	58	26
<i>Cesarean section</i> .....	545	38	29	20	44	32	26	29	35	89	47	33	62	26
<i>Epistomy</i> .....	6,075	566	349	356	627	290	290	400	432	902	445	171	519	387
<i>Repair of laceration, obstetric</i> .....	700	101	18	18	60	53	45	18	102	90	51	21	49	27
<i>Other obstetric surgery</i> .....	994	30	12	56	56	34	313	44	42	223	25	17	55	16
VIII. Orthopedic surgery.....	8,417	465	358	240	470	189	285	259	747	3,011	419	262	498	577
<i>Bones</i> .....	4,762	274	181	98	221	100	144	96	464	1,953	214	132	254	311
<i>Joints, cartilages and bursas</i> .....	2,460	114	132	75	144	58	90	87	204	781	139	77	165	161
<i>Muscles, tendons, and tendon sheaths and fascia</i> .....	1,037	64	41	64	92	24	46	65	70	235	50	46	73	93
<i>Amputations, disarticulations, and plastic revisions</i> .....	158	13	4	3	13	7	5	11	9	42	16	7	6	12
IX. Other general and specialized surgery.....	22,191	1,085	388	480	2,175	641	705	1,337	3,155	8,352	670	525	1,162	796
<i>Peripheral blood vessels</i> .....	1,273	70	13	10	35	59	67	56	90	514	80	41	70	80
<i>Lymphatic system</i> .....	432	18	2	2	11	21	35	9	37	214	13	11	7	38
<i>Plastic surgery</i> .....	1,553	40	27	64	228	31	41	57	187	593	85	38	43	87
<i>Surgery of endocrine system</i> .....	1,157	57	65	33	67	56	60	56	122	219	95	63	51	116
<i>Surgery of breast</i> .....	1,269	98	51	27	89	69	52	62	161	276	83	59	65	63
<i>General surgery of head and neck, n.e.c.</i> .....	1,135	82	40	33	68	60	42	63	93	281	41	104	80	83
<i>General surgery of trunk</i> .....	2,095	174	67	54	100	68	64	115	129	675	107	158	147	114
<i>General surgery of extremities</i> .....	13,277	546	123	257	1,577	277	344	919	2,336	5,580	166	51	699	215

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

**MEDICAL CARE—Surgical, All AF Facilities**

APPENDIX TABLE 22.—Number of Surgical Operations and Selected Procedures Reported by Type of Beneficiary—  
Patients Discharged from Air Force Medical Treatment Facilities, World-wide: 1963

Surgical classification or body site	All operations	Active duty military		Retired military	Non military services	Dependents of—		Other 1	
		EAD	Other 1			EAD military	Retired and deceased military		
All surgical operations and procedures.....	Number.....	250,656	55,561	529	5,656	261	171,240	12,625	4,784
	Percent.....	100.0	22.2	0.2	2.3	0.1	68.3	5.0	1.9
I. Neurosurgery.....		9,663	4,191	31	532	17	4,217	493	182
Brain and meninges.....		1,686	628	1	124	1	818	85	29
Spinal cord and coverings.....		6,354	2,745	26	311	9	2,819	325	119
Spinal puncture.....		4,872	1,780	22	218	7	2,523	250	72
Other operations on spinal cord and coverings.....		1,482	965	4	93	2	296	75	47
Peripheral nerves and sympathetic system.....		1,623	818	4	97	7	580	83	34
II. Surgery of the eye, ear, nose, and throat.....		16,718	4,594	21	401	17	10,255	1,133	297
Eye.....		3,703	1,022	2	183	3	2,147	243	103
Ear.....		2,751	684	—	46	—	1,803	181	37
Nose.....		1,679	1,241	13	36	5	295	71	18
Paranasal sinuses.....		363	222	—	13	1	106	12	9
Pharynx, tongue, and palate.....		7,297	1,079	5	38	5	5,535	545	90
Tonsillectomy.....		6,402	887	3	7	5	4,941	484	75
Other operations on pharynx, tongue and palate.....		895	192	2	31	—	594	61	15
Larynx and trachea.....		925	346	1	85	3	369	81	40
III. Oral surgery.....		6,544	4,405	19	336	15	1,521	145	103
Extraction of tooth.....		2,654	1,612	4	189	6	737	62	44
Surgical removal of tooth.....		1,436	1,094	4	27	3	272	24	12
Alveolectomy.....		694	480	—	53	1	139	7	14
Other oral surgery.....		1,760	1,219	11	67	5	373	52	33
IV. Thoracic surgery.....		3,842	1,888	5	336	15	1,263	254	81
Heart and pericardium.....		477	93	—	24	1	316	42	1
Great vessels (intrathoracic).....		99	36	—	4	—	55	3	1
Lungs and pleura.....		426	283	—	31	1	83	21	7
Surgical collapse therapy.....		57	21	—	8	—	25	2	1
Bronchi.....		1,113	539	—	142	5	340	61	26
Mediastinum and chest wall.....		1,670	916	5	127	8	444	125	45
V. Gastrointestinal and abdominal surgery (including proctologic).....		29,270	12,500	60	1,813	70	12,237	1,898	692
Abdominal wall.....		8,411	3,475	29	536	16	3,878	330	147
Hernioplasty.....		7,853	3,284	27	496	15	3,611	288	132
Other operations on abdominal wall.....		558	191	2	40	1	267	42	15
Esophagus.....		626	269	1	55	8	238	39	16

See footnotes at end of table.

Surgical, All AF Facilities—MEDICAL CARE

APPENDIX TABLE 22.—Number of Surgical Operations and Selected Procedures Reported by Type of Beneficiary—Patients Discharged from Air Force Medical Treatment Facilities, World-wide: 1963—Continued

Surgical classification or body site	All operations	Active duty military		Retired military	Non military services	Dependents of—		Other 1
		EAD	Other 1			EAD military	Retired and deceased military	
<b>V. Gastrointestinal and abdominal surgery—Continued</b>								
Stomach.....	1,451	713	—	174	4	440	81	39
Intestines.....	1,090	390	2	145	4	381	118	50
Appendix.....	5,532	1,995	15	88	7	2,862	436	129
Liver and bile ducts.....	3,213	965	2	220	8	1,604	318	96
<i>Biopsy of liver.....</i>	822	486	—	79	1	174	61	21
<i>Cholecystectomy.....</i>	1,944	387	1	100	5	1,182	210	59
<i>Other operations on liver and bile ducts.....</i>	447	92	1	41	2	248	47	16
Other abdominal surgery.....	2,071	518	3	122	8	1,170	186	64
<i>Laparotomy.....</i>	1,363	353	2	86	7	760	111	44
<i>Other abdominal operations.....</i>	708	165	1	36	1	410	75	20
Rectum and anus.....	6,876	4,175	8	473	15	1,664	390	151
<i>Hemorrhoidectomy.....</i>	1,937	1,239	1	103	4	456	86	48
<i>Sigmoidoscopy.....</i>	1,909	1,101	2	161	3	487	117	38
<i>Other operations on rectum and anus.....</i>	3,030	1,835	5	209	8	721	187	65
<b>VI. Genitourinary surgery.....</b>	<b>15,066</b>	<b>6,427</b>	<b>18</b>	<b>901</b>	<b>31</b>	<b>6,660</b>	<b>687</b>	<b>342</b>
Kidney.....	1,205	583	1	68	1	447	74	31
Ureter.....	335	126	2	31	1	140	24	11
Bladder.....	4,560	1,532	6	368	15	2,205	299	135
<i>Cystoscopy.....</i>	3,957	1,396	6	307	10	1,861	259	118
<i>Other operations on bladder.....</i>	603	136	—	61	5	344	40	17
Urethra.....	2,185	470	1	60	1	1,472	123	58
<i>Dilation of urethra with sound.....</i>	982	158	1	22	—	720	45	36
<i>Other operations on urethra.....</i>	1,203	312	—	38	1	752	78	22
Prostate and seminal vesicles.....	539	206	—	245	6	43	21	18
Testis and epididymis.....	894	446	1	36	2	335	58	16
Spermatic cord and vas deferens.....	1,298	473	3	67	1	700	35	19
Penis and scrotum.....	4,050	2,591	4	26	4	1,318	53	54
<i>Circumcision.....</i>	3,738	2,380	3	13	4	1,244	45	49
<i>Other operations on penis and scrotum.....</i>	312	211	1	13	—	74	8	5
<b>VII. Gynecological and obstetrical surgery.....</b>	<b>127,217</b>	<b>296</b>	<b>1</b>	<b>33</b>	<b>3</b>	<b>119,636</b>	<b>5,242</b>	<b>2,006</b>
Ovary.....	2,751	42	—	2	—	2,397	256	54
Uterus and supporting structures.....	21,103	191	1	16	2	17,916	2,608	369
<i>Dilation and curettage, uterus.....</i>	13,265	124	1	10	1	11,522	1,372	235
<i>Other operations on uterus and supporting structures.....</i>	7,838	67	—	6	1	6,394	1,236	134
Vagina.....	3,026	22	—	3	1	2,569	385	46
Vulva and perineum.....	814	28	—	1	—	696	80	9
Obstetric surgery.....	99,523	13	—	11	—	96,058	1,913	1,528
<i>Artificial rupture of membranes.....</i>	5,237	—	—	—	—	5,083	85	69

See footnotes at end of table.

**MEDICAL CARE—Surgical, All AF Facilities**

APPENDIX TABLE 22.—Number of Surgical Operations and Selected Procedures Reported by Type of Beneficiary—  
Patients Discharged from Air Force Medical Treatment Facilities, World-wide: 1963—Continued

Surgical classification or body site	All operations	Active duty military		Retired military	Non military services	Dependents of—		Other <sup>2</sup>
		EAD	Other <sup>1</sup>			EAD military	Retired and deceased military	
<b>VII. Gynecological and obstetrical surgery</b> —Continued								
<i>Delivery, spontaneous</i> .....	33,288	3	—	2	—	32,026	832	425
<i>Delivery by obstetric forceps</i> ..	1,891	—	—	1	—	1,821	35	34
<i>Breech extraction</i> .....	1,765	—	—	—	—	1,702	41	22
<i>Cesarean section</i> .....	2,157	1	—	—	—	2,050	60	46
<i>Episiotomy</i> .....	24,841	1	—	3	—	24,060	380	397
<i>Repair of laceration, obstetric</i> ..	2,738	1	—	—	—	2,631	47	59
<i>Other obstetric surgery</i> .....	27,606	7	—	5	—	26,685	433	476
<b>VIII. Orthopedic surgery</b> .....	18,609	10,030	286	544	46	6,016	1,201	486
Bones.....	10,736	5,307	93	331	24	3,858	799	324
Joints, cartilage, and bursas.....	5,194	3,415	171	130	13	1,132	240	93
Muscles, tendons, tendon sheaths, and fascia.....	2,322	1,145	22	55	5	901	144	50
Amputations, disarticulations and plastic revisions.....	357	163	—	28	4	125	18	19
<b>IX. Other general and specialized surgery</b> ..	23,727	11,230	88	760	47	9,435	1,572	595
Peripheral blood vessels.....	2,609	926	3	157	4	1,273	159	87
Lymphatic system.....	739	323	—	65	2	264	72	13
Plastic surgery.....	2,451	1,110	5	71	1	1,039	149	76
Surgery of the endocrine system..	878	175	1	19	1	570	95	17
Surgery of breast.....	2,816	168	1	10	2	2,085	467	83
General surgery of head and neck, n.e.c.....	4,021	2,270	16	190	8	1,274	168	95
General surgery of trunk.....	4,078	2,799	18	93	13	957	147	51
General surgery of extremities...	6,135	3,459	44	155	16	1,973	315	173

<sup>1</sup> Includes USAF Academy Cadets, Cadets of other Service Academies, and personnel on active duty for training.

<sup>2</sup> Includes dependents of nonmilitary Uniformed Services and of authorized civilian employees, allied and neutral military, VA beneficiaries, authorized civilian employees and unknown.

For explanation of symbols, see p. 52.

Source: Individual Medical Records.

APPENDIX TABLE 23.—Incidence and Admissions for Specified Diagnosis Categories—All Air Force Personnel, by Category—World-wide: 1963

Diagnosis category	All personnel		Officers		Airmen		Aviation cadets	
	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)
All diseases and conditions	211,395	169,026	30,081	23,260	181,234	145,696	80	70
I. Infective and parasitic diseases	13,477	12,164	1,546	1,425	11,927	10,735	4	4
Tuberculosis, pulmonary, active	123	113	11	11	112	102	—	—
Tuberculosis, pulmonary, activity undetermined	46	21	7	3	39	18	—	—
Pleural tuberculosis	50	33	4	1	46	32	—	—
Tuberculosis of meninges and central nervous system	2	2	—	—	2	2	—	—
Tuberculosis, all other forms	44	21	8	5	36	16	—	—
Early syphilis	91	81	1	1	90	80	—	—
Other syphilis and its sequelae	110	55	3	2	107	53	—	—
Acute or unspecified gonorrhoea	342	219	2	2	340	217	—	—
All other gonococcal infections	44	28	1	1	43	27	—	—
Chancroid	17	7	—	—	17	7	—	—
All other venereal diseases	38	22	2	1	36	21	—	—
Bacillary dysentery	74	71	9	8	65	63	—	—
Amebiasis	32	25	8	5	24	20	—	—
Food poisoning (infection and intoxication)	109	109	6	6	103	103	—	—
All other infectious diseases commonly arising in intestinal tract	133	130	8	7	125	123	—	—
Scarlet fever and streptococcal sore throat	2,458	2,171	233	207	2,225	1,964	—	—
Meningococcal meningitis	13	13	—	—	13	13	—	—
All other bacterial diseases	129	93	13	9	116	84	—	—
Vincent's infection	59	44	7	6	52	38	—	—
All other spirochetal and leptospirochetal infections	1	1	1	1	—	—	—	—
Poliomyelitis, acute	—	—	—	—	—	—	—	—
Acute epidemic encephalitis	34	30	2	1	32	29	—	—
Smallpox	—	—	—	—	—	—	—	—
Measles	308	297	30	28	278	269	—	—
Rubella (German measles)	1,435	1,419	63	63	1,371	1,355	1	1
Chickenpox	330	327	46	46	282	281	—	—
Zoster (herpes)	82	72	13	12	69	60	—	—
Mumps	1,469	1,384	246	236	1,223	1,148	—	—
Infectious hepatitis	775	743	123	118	652	625	—	—
Infectious mononucleosis (glandular fever)	1,429	1,385	180	180	1,249	1,205	—	—
All other diseases attributable to viruses	2,555	2,430	360	341	2,195	2,089	—	—
All rickettsial diseases	3	3	2	2	1	1	—	—

MORBIDITY—Incidence and Admissions, All Air Force

APPENDIX TABLE 23.—Incidence and Admissions for Specified Diagnosis Categories—All Air Force Personnel, by Category—World-wide: 1963—Continued

Diagnosis category	All personnel		Officers		Airmen		Aviation cadets	
	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)
<b>I. Infective and parasitic diseases—Continued</b>								
Malaria, all forms.....	25	24	5	5	20	19	—	—
Protozoan infections.....	4	1	—	—	4	1	—	—
Ankylostomiasis.....	23	16	1	1	22	15	—	—
Ascariasis.....	3	3	—	—	3	3	—	—
Other worm infestation.....	39	30	14	12	25	18	—	—
Dermatophytosis.....	585	377	40	22	542	352	3	3
Other fungus infections.....	223	169	52	45	171	124	—	—
Scabies.....	10	7	—	—	10	7	—	—
Pediculosis.....	12	3	—	—	12	3	—	—
All other infective and parasitic diseases.....	218	185	43	37	175	148	—	—
<b>II. Neoplasms.....</b>	<b>5,535</b>	<b>4,441</b>	<b>1,026</b>	<b>732</b>	<b>4,504</b>	<b>3,704</b>	<b>5</b>	<b>5</b>
Malignant neoplasms.....	804	710	218	195	586	515	—	—
Benign neoplasms, except pilonidal cyst.....	2,322	1,462	556	302	1,766	1,160	—	—
Pilonidal cyst.....	2,216	2,122	212	205	1,999	1,912	5	5
Neoplasms of unspecified nature.....	193	147	40	30	153	117	—	—
<b>III. Allergic, endocrine system, metabolic, and nutritional diseases.....</b>	<b>4,930</b>	<b>2,955</b>	<b>910</b>	<b>497</b>	<b>4,019</b>	<b>2,458</b>	<b>1</b>	<b>—</b>
Hay fever.....	220	92	56	16	164	76	—	—
Asthma.....	548	425	79	63	469	362	—	—
Urticaria.....	402	327	54	41	348	286	—	—
All other allergic disorders.....	476	358	78	64	398	294	—	—
Diseases of thyroid gland.....	334	262	77	59	257	203	—	—
Diabetes mellitus.....	1,325	708	306	153	1,019	555	—	—
All other diseases of other endocrine glands.....	83	52	13	8	70	44	—	—
Avitaminoses and other metabolic disorders.....	1,542	731	247	93	1,294	638	1	—
<b>IV. Diseases of the blood and blood-forming organs.....</b>	<b>504</b>	<b>179</b>	<b>93</b>	<b>30</b>	<b>411</b>	<b>149</b>	<b>—</b>	<b>—</b>
<b>V. Mental, psychoneurotic, and personality disorders.....</b>	<b>9,976</b>	<b>8,515</b>	<b>732</b>	<b>605</b>	<b>9,240</b>	<b>7,906</b>	<b>4</b>	<b>4</b>
Schizophrenic disorders (dementia praecox).....	875	851	67	63	808	788	—	—
All other psychoses.....	425	322	61	48	364	274	—	—

Incidence and Admissions, All Air Force—MORBIDITY

Anxiety reaction without mention of somatic symptoms.....	1,499	1,303	119	98	1,378	1,203	2	2
Dissociative and conversion reaction.....	278	229	16	13	262	216	—	—
Depressive reaction.....	1,098	959	121	104	977	855	—	—
Psychoneuroses with somatic symptoms (somatization reaction).....	634	533	63	52	570	480	1	1
All other psychoneurotic disorders.....	197	160	35	25	162	135	—	—
Pathological personality.....	821	692	23	16	798	676	—	—
Immature personality.....	2,600	2,221	74	60	2,526	2,161	—	—
Alcoholism, chronic and unspecified.....	570	388	38	27	532	361	—	—
Other drug addiction.....	3	1	—	—	3	1	—	—
Primary childhood behavior disorders.....	8	7	—	—	8	7	—	—
Mental deficiency and learning defects.....	12	4	2	—	10	4	—	—
Transient personality disorders.....	867	790	97	89	769	700	1	1
All other disorders of character, behavior, and intelligence.....	89	55	16	10	73	45	—	—
<b>VI. Diseases of the nervous system and sense organs.....</b>	<b>9,523</b>	<b>6,205</b>	<b>1,499</b>	<b>939</b>	<b>8,024</b>	<b>5,266</b>	<b>—</b>	<b>—</b>
Vascular lesions affecting central nervous system.....	157	97	30	18	127	79	—	—
Meningitis, except meningococcal and tuberculous.....	121	106	29	24	92	82	—	—
Encephalitis, myelitis, and encephalomyelitis (except acute epidemic).....	74	38	8	7	66	31	—	—
Epilepsy.....	515	424	56	40	459	384	—	—
Migraine.....	264	211	47	36	217	175	—	—
Other diseases of central nervous system.....	212	125	35	19	177	106	—	—
Diseases of nerves and peripheral ganglia.....	1,658	1,100	319	204	1,339	896	—	—
Conjunctivitis and ophthalmia.....	342	248	37	27	305	221	—	—
Other inflammatory diseases of eye.....	724	533	99	73	625	460	—	—
Refractive errors.....	179	61	31	4	148	57	—	—
All other diseases of eye.....	1,973	1,204	285	172	1,688	1,032	—	—
Blindness.....	67	18	7	2	60	16	—	—
Otitis externa.....	279	171	26	15	253	156	—	—
Otitis media.....	920	598	115	70	805	528	—	—
Other diseases of ear and mastoid process.....	1,087	863	209	175	878	688	—	—
Deafness and impaired hearing.....	951	408	166	53	785	355	—	—
<b>VII. Diseases of the circulatory system.....</b>	<b>10,998</b>	<b>7,657</b>	<b>2,484</b>	<b>1,700</b>	<b>8,509</b>	<b>5,953</b>	<b>5</b>	<b>4</b>
Rheumatic fever.....	57	50	5	3	52	47	—	—
Chronic rheumatic heart disease.....	266	150	34	22	192	128	—	—
Arteriosclerotic heart disease, including coronary disease.....	2,260	1,477	640	433	1,620	1,044	—	—
Other chronic and degenerative heart disease.....	66	41	11	7	55	34	—	—
Acute and sub-acute endocarditis, acute myocarditis, and pericarditis.....	108	76	20	15	88	61	—	—
Functional, other, and unspecified diseases of heart.....	581	339	155	99	426	240	—	—
Hypertensive disease.....	2,375	1,492	562	356	1,813	1,136	—	—
Varicose veins of lower extremities.....	464	376	77	56	387	320	—	—

MORBIDITY—Incidence and Admissions, All Air Force

APPENDIX TABLE 23.—Incidence and Admissions for Specified Diagnosis Categories—All Air Force Personnel, by Category—World-wide: 1963—Continued

Diagnosis category	All personnel		Officers		Airmen		Aviation cadets	
	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)
<b>VII. Diseases of the circulatory system—Continued</b>								
Hemorrhoids.....	3,030	2,458	608	469	2,418	1,986	4	3
Varicocele.....	164	103	14	9	150	94	—	—
Phlebitis and thrombophlebitis.....	572	453	106	85	466	368	—	—
Other diseases of circulatory system.....	1,095	642	252	146	842	495	1	1
<b>VIII. Diseases of the respiratory system</b> .....	<b>37,841</b>	<b>33,740</b>	<b>5,392</b>	<b>4,728</b>	<b>32,436</b>	<b>29,000</b>	<b>13</b>	<b>12</b>
Acute upper respiratory infections.....	19,576	18,099	2,653	2,471	16,914	15,620	9	8
Influenza.....	3,713	3,641	562	551	3,151	3,090	—	—
Pneumonia, all forms.....	4,798	4,393	647	573	4,150	3,819	1	1
Acute bronchitis.....	3,160	2,749	484	419	2,674	2,328	2	2
Bronchitis, chronic and unqualified.....	827	497	130	89	697	408	—	—
Hypertrophy of tonsils and adenoids.....	1,008	935	64	60	944	875	—	—
Pertonsillar abscess (quinsy).....	241	205	10	8	231	197	—	—
Chronic sinusitis.....	396	172	108	41	288	131	—	—
Deflected nasal septum.....	1,107	965	212	182	895	783	—	—
Other diseases of nose and throat.....	882	583	220	135	662	448	—	—
Pleurisy.....	521	413	69	57	452	356	—	—
Spontaneous pneumothorax.....	649	617	55	53	593	563	1	1
Other chronic interstitial pneumonia.....	54	25	8	5	46	20	—	—
Bronchiectasis.....	81	51	13	7	68	44	—	—
All other diseases of respiratory system.....	828	395	157	77	671	318	—	—
<b>IX. Diseases of the digestive system</b> .....	<b>29,140</b>	<b>24,709</b>	<b>4,688</b>	<b>3,783</b>	<b>24,441</b>	<b>20,916</b>	<b>11</b>	<b>10</b>
Dental diseases and conditions.....	3,617	2,575	289	211	3,328	2,364	—	—
Diseases of buccal cavity.....	478	375	57	44	420	330	1	1
Diseases of esophagus.....	209	112	55	29	154	83	—	—
Ulcer of stomach and duodenum.....	3,290	2,859	556	462	2,734	2,397	—	—
Gastritis and duodenitis.....	1,634	1,459	189	160	1,445	1,299	—	—
Other diseases of stomach and duodenum.....	71	37	19	7	52	30	—	—

Incidence and Admissions, All Air Force—MORBIDITY

Acute appendicitis (incl. appendicitis unqualified).....	1,912	1,875	216	212	1,695	1,662	1	1
Inguinal hernia.....	2,884	2,539	601	505	2,281	2,032	2	2
Other hernia.....	1,520	1,087	401	270	1,119	817	—	—
Gastroenteritis and colitis, acute, except ulcerative age 4 weeks and over.....	8,820	8,586	1,218	1,182	7,597	7,399	5	5
Anal fissure and fistula.....	603	453	164	111	437	341	2	1
Abscess of anal and rectal regions.....	642	600	102	94	540	506	—	—
Other diseases of intestine and peritoneum.....	1,915	1,162	484	262	1,431	900	—	—
Diseases of liver.....	508	250	93	51	415	199	—	—
Diseases of gallbladder and biliary ducts.....	811	586	210	161	601	425	—	—
Diseases of pancreas.....	226	154	34	22	192	132	—	—
<b>X. Diseases of the genito-urinary system.....</b>	<b>12,811</b>	<b>9,520</b>	<b>2,075</b>	<b>1,469</b>	<b>10,734</b>	<b>8,050</b>	<b>2</b>	<b>1</b>
Nephritis and nephrosis.....	287	195	47	37	240	158	—	—
Infections of kidney.....	917	676	163	116	754	560	—	—
Calculi of kidney and ureter.....	1,646	1,462	414	366	1,231	1,095	1	1
Cystitis.....	683	402	143	87	540	315	—	—
Nongonococic urethritis (nonvenereal).....	294	152	35	17	259	135	—	—
All other diseases of urinary system.....	702	423	144	82	558	341	—	—
Prostatitis.....	1,367	866	220	149	1,147	717	—	—
Orchitis and epididymitis.....	2,066	1,619	226	174	1,840	1,445	—	—
Redundant prepuce and phimosis.....	2,415	2,221	143	126	2,272	2,095	—	—
All other diseases of male genital organs.....	1,877	1,087	341	182	1,535	905	1	—
Gynecomastia and mastitis, male.....	172	143	21	18	151	125	—	—
Other diseases of breast; diseases of ovary, Fallopian tube, and parametrium.....	134	98	61	42	73	56	—	—
Diseases of uterus.....	54	31	29	14	25	17	—	—
Disorders of menstruation.....	191	143	86	58	105	85	—	—
Other female conditions and diseases of genital organs.....	6	2	2	1	4	1	—	—

MORBIDITY—Incidence and Admissions, All Air Force

APPENDIX TABLE 23.—Incidence and Admissions for Specified Diagnosis Categories—All Air Force Personnel, by Category—World-wide: 1963—Continued

Diagnosis category	All personnel		Officers		Airmen		Aviation cadets	
	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)
XI. Deliveries and complications of pregnancy, childbirth and the puerperium.....	131	126	43	41	88	85	—	—
XII. Diseases of the skin and cellular tissue.....	10,154	7,789	1,002	693	9,138	7,084	14	12
Furuncle and carbuncle.....	717	622	79	65	637	556	1	1
Cellulitis and abscess.....	5,184	4,284	413	326	4,761	3,949	10	9
Other infections of skin and subcutaneous tissue.....	835	526	79	53	756	473	—	—
Seborrheic dermatitis.....	71	26	21	6	50	20	—	—
Eczema.....	74	59	9	6	65	53	—	—
Occupational and other dermatitis.....	558	419	75	49	482	369	1	1
Erythematous conditions.....	175	147	19	15	156	132	—	—
Psoriasis and similar conditions.....	218	123	45	20	173	103	—	—
Pruritus and related conditions.....	148	88	22	13	126	75	—	—
Other hypertrophic and atrophic conditions of skin.....	183	112	27	11	156	101	—	—
Diseases of nail.....	405	350	22	20	383	330	—	—
Diseases of sweet and sebaceous glands.....	507	309	60	38	446	271	1	—
Other diseases of skin.....	1,079	724	131	71	947	652	1	1
XIII. Diseases of the bones and organs of movement.....	16,515	12,912	2,543	1,851	13,965	11,057	7	4
Rheumatoid arthritis and allied conditions.....	307	237	62	43	245	194	—	—
Arthritis, all other forms.....	1,923	1,144	448	229	1,474	914	1	1
Rheumatism.....	995	925	132	120	862	804	1	1
Malunion and nonunion of fracture.....	343	244	29	17	313	226	1	1
Osteomyelitis, periostitis, osteitis, osteochondrosis, and other diseases of bone.....	558	403	53	37	505	366	—	—
Internal derangement of knee joint.....	1,173	1,079	118	104	1,055	975	—	—
Displacement of intervertebral disc.....	1,492	1,371	310	269	1,182	1,102	—	—
Affection of sacroiliac joint.....	164	152	21	20	143	132	—	—
Ankylosis and other diseases of joint.....	1,464	935	181	97	1,283	838	—	—
Synovitis, bursitis, and tenosynovitis.....	2,039	1,739	265	207	1,774	1,532	—	—
Diseases of muscle, tendon, and fascia, n.e.c.....	1,652	1,504	269	246	1,383	1,258	—	—
Residuals and/or recurrences of traumas, n.e.c.....	2,562	1,835	363	253	2,195	1,581	4	1
Other diseases of musculoskeletal system.....	1,843	1,344	292	209	1,551	1,135	—	—

Incidence and Admissions, All Air Force—MORBIDITY

XIV. Congenital malformations.....	1,438	907	196	111	1,242	796	—	—
XVI. Symptoms, senility, and ill-defined conditions.....	16,192	13,807	2,395	2,020	13,786	11,776	11	11
Diarrhea, cause unknown.....	189	171	55	50	134	121	—	—
All other symptoms.....	3,646	2,807	544	397	3,199	2,407	3	3
Observation for disease.....	11,607	10,346	1,715	1,524	9,884	8,814	8	8
Drunkennes, simple.....	459	299	19	11	440	288	—	—
Ill-defined and unknown causes (incl. senility).....	291	184	62	38	229	146	—	—
XVII. Accidents, poisonings, and violence.....	29,750	21,400	2,672	1,954	27,075	19,443	3	3
XVIII. Supplementary classifications for special admissions.....	2,480	2,000	785	682	1,695	1,318	—	—

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.  
 For explanation of symbols, see p. 52.  
 Source: Individual Medical Records.

APPENDIX TABLE 24.—Incidence and Admission, by Flying Status—Air Force Officers, by Flying Status—World-wide: 1963

## MORBIDITY—Incidence and Admissions, Officers

Diagnosis category	Officers on flying status						Officers not on flying status						
	All officers		Pilot		Non-pilot		Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)					
	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)	Incidence (total diagnoses reported)	Admissions (sole and primary diagnoses)							
All diseases and conditions	30,081	23,260	12,351	9,946	8,590	6,865	3,761	3,081	2,489	684	592	17,730	13,314
I. Infective and parasitic diseases	1,546	1,425	656	605	453	417	203	188	153	35	35	890	820
Tuberculosis, pulmonary, active	11	11	4	4	3	3	1	1	1	—	—	7	7
Tuberculosis, pulmonary, activity undetermined	7	3	—	—	—	—	—	—	—	—	—	7	3
Pleural tuberculosis	4	1	1	—	1	—	—	—	—	—	—	3	1
Tuberculosis of meninges and central nervous system	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, all other forms	8	5	5	4	3	3	2	1	1	—	—	3	1
Early syphilis	1	1	—	—	—	—	—	—	—	—	—	1	1
Other syphilis and its sequelae	3	2	1	1	1	1	—	—	—	—	—	2	1
Acute or unspecified gonorrhoea	2	2	—	—	—	—	—	—	—	—	—	2	2
All other gonococcal infections	1	1	1	1	—	—	1	1	1	—	—	—	—
Chancroid	—	—	—	—	—	—	—	—	—	—	—	—	—
All other venereal diseases	2	1	1	—	—	—	1	—	—	—	—	1	1
Bacillary dysentery	9	8	3	3	2	2	1	1	1	—	—	6	5
Amebiasis	8	5	2	1	2	1	—	—	—	—	—	6	4
Food poisoning (infection and intoxication)	6	6	5	5	3	3	2	2	—	2	2	1	1
All other infectious diseases commonly arising in intestinal tract	8	7	5	4	2	1	3	3	2	1	1	3	3
Scarlet fever and streptococcal sore throat	233	207	103	95	71	65	32	30	24	6	6	130	112
Meningococcal meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—
All other bacterial diseases	13	9	7	5	5	3	2	2	1	1	1	6	4
Vincent's infection	7	6	3	3	1	1	2	2	1	1	1	4	3
All other spirochetal and leptospirochetal infections	1	1	—	—	—	—	—	—	—	—	—	1	1
Polioomyelitis, acute	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute epidemic encephalitis	2	1	—	—	—	—	—	—	—	—	—	2	1
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	30	28	9	8	8	7	1	1	1	—	—	21	20
Rubella (German measles)	63	63	19	19	13	13	6	6	6	—	—	44	44
Chickenpox	48	46	27	27	17	17	10	10	8	—	—	21	19
Zoster (herpes)	13	12	4	3	3	2	1	1	1	—	—	9	9
Mumps	246	236	109	104	67	64	42	40	40	—	—	137	132
Infectious hepatitis	123	118	72	69	59	57	13	12	11	—	—	51	49
Glandular fever (infectious mononucleosis)	180	180	64	64	33	33	31	31	23	8	8	116	116

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All other diseases attributable to viruses.....	360	124	114	100	93	24	21	22	19	2	2	236	227
All tickle diseases.....	2	1	1	—	—	1	1	—	—	1	1	1	1
Malaria, all forms.....	5	4	4	4	4	—	—	—	—	—	—	—	—
Protozoan infections.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Ankylostomiasis.....	1	1	1	1	1	—	—	—	—	—	—	—	—
Ascariasis.....	—	—	—	—	—	—	—	—	—	—	—	5	4
Other worm infestation.....	14	9	8	8	7	1	1	1	1	2	2	22	12
Dermatophytosis.....	40	18	10	10	5	8	5	6	3	7	7	21	17
Other fungus infections.....	52	31	28	19	17	12	11	5	4	—	—	—	—
Scabies.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Pediculosis.....	—	—	—	—	—	—	—	—	—	—	—	—	—
All other infective and parasitic diseases.....	43	23	19	17	14	6	5	6	5	—	—	20	18
<b>II. Neoplasms.....</b>	<b>1,026</b>	<b>419</b>	<b>302</b>	<b>307</b>	<b>213</b>	<b>112</b>	<b>89</b>	<b>100</b>	<b>78</b>	<b>12</b>	<b>11</b>	<b>607</b>	<b>430</b>
Malignant neoplasms.....	218	195	71	58	52	20	19	20	19	—	—	140	124
Benign neoplasms, except pilonidal cyst.....	556	302	113	173	90	43	23	41	22	2	1	340	189
Pilonidal cyst.....	212	205	108	68	65	43	43	34	34	9	9	101	97
Neoplasms of unspecified nature.....	40	30	14	8	6	6	4	5	3	1	1	26	20
<b>III. Allergic, endocrine system, metabolic, and nutritional diseases.....</b>	<b>910</b>	<b>497</b>	<b>283</b>	<b>202</b>	<b>126</b>	<b>81</b>	<b>52</b>	<b>71</b>	<b>46</b>	<b>10</b>	<b>6</b>	<b>627</b>	<b>319</b>
Hay fever.....	56	16	7	15	4	6	3	5	3	1	—	35	9
Asthma.....	79	63	20	18	15	5	5	3	3	2	2	56	43
Urticaria.....	54	41	28	21	16	7	5	6	4	1	1	26	20
All other allergic disorders.....	78	64	40	32	27	13	11	13	11	—	—	38	32
Diseases of thyroid gland.....	77	59	32	26	19	13	10	11	9	2	1	45	33
Diabetes mellitus.....	306	153	69	52	36	17	14	14	7	3	2	237	108
All other diseases of other endocrine glands.....	13	8	2	2	1	1	1	1	1	—	—	11	6
Avitaminoses and other metabolic disorders.....	247	93	68	49	17	19	8	18	8	1	—	179	68
<b>IV. Diseases of the blood and blood-forming organs.....</b>	<b>93</b>	<b>30</b>	<b>24</b>	<b>16</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>8</b>	<b>5</b>	<b>—</b>	<b>—</b>	<b>69</b>	<b>18</b>
<b>V. Mental, psychoneurotic, and personality disorders.....</b>	<b>732</b>	<b>605</b>	<b>196</b>	<b>124</b>	<b>102</b>	<b>72</b>	<b>65</b>	<b>59</b>	<b>52</b>	<b>13</b>	<b>13</b>	<b>536</b>	<b>438</b>
Schizophrenic disorders (dementia praecox).....	67	63	15	14	8	6	6	6	6	—	—	52	49
All other psychoses.....	61	48	13	11	9	3	2	2	1	1	1	48	37
Anxiety reaction without mention of somatic symptoms.....	119	98	33	23	17	10	8	8	6	2	2	86	73
Disassociative and conversion reaction.....	16	13	3	3	2	1	1	1	1	—	—	13	10
Depressive reaction.....	121	104	22	20	11	10	9	10	9	—	—	99	84
Psychoneuroses with somatic symptoms (somatization reaction).....	63	52	24	11	8	13	13	12	12	1	1	39	31
All other psychoneurotic disorders.....	25	25	10	8	3	7	6	7	6	—	—	25	17
Pathological personality.....	23	16	4	4	2	2	2	—	—	2	2	19	12
Immature personality.....	74	60	14	12	7	6	5	3	2	3	3	60	48
Alcoholism, chronic and unspecified.....	38	27	9	8	6	1	1	1	1	—	—	29	20
Other drug addiction.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Primary childhood behavior disorders.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Mental deficiency and learning defects.....	2	—	—	—	—	—	—	—	—	—	—	—	—
Transient personality disorders.....	97	89	42	29	27	13	12	9	8	4	4	55	50
All other disorders of character, behavior, and intelligence.....	16	10	5	3	3	—	—	—	—	—	—	11	7

MORBIDITY—Incidence and Admissions, Officers

APPENDIX TABLE 24.—Incidence and Admissions for Specified Diagnosis Categories—Air Force Officers, by Flying Status—World-wide: 1963—Continued

Diagnosis category	Officers on flying status										Officers not on flying status		
	All officers		Total		Pilot		Non-pilot				Total	Incidence (total and reported)	Admissions (sole and primary diagnoses)
	Incidence (total and reported)	Admissions (sole and primary diagnoses)	Incidence (total and reported)	Admissions (sole and primary diagnoses)	Incidence (total and reported)	Admissions (sole and primary diagnoses)	Other rated	Non-rated	Incidence (total and reported)	Admissions (sole and primary diagnoses)			
<b>VI. Diseases of the nervous system and sense organs.</b>	1,499	939	468	309	345	224	85	101	69	22	16	1,031	630
Vascular lesions affecting central nervous system.	30	18	9	5	8	5	1	1	—	—	—	21	13
Meningitis, except meningococcal and tuberculous.	29	24	9	7	7	5	2	2	2	—	—	20	17
Encephalitis, myelitis, and encephalomyelitis (except acute epidemic).	8	7	2	1	2	1	—	—	—	—	—	6	6
Epilepsy.	56	40	16	12	12	9	4	3	2	1	1	40	28
Migraine.	47	36	10	8	8	7	2	2	1	—	—	37	28
Other diseases of central nervous system.	35	19	7	4	5	2	2	2	2	—	—	28	15
Diseases of nerves and peripheral ganglia.	319	204	117	82	78	57	39	32	20	7	5	202	122
Conjunctivitis and ophthalmia.	37	27	19	14	12	9	7	6	4	1	1	18	13
Other inflammatory diseases of eye.	99	73	32	23	18	13	10	13	9	1	1	67	50
Other diseases of eye.	31	4	19	1	17	1	2	2	—	—	—	12	3
Refractive errors.	285	172	76	52	64	41	11	7	7	5	4	209	120
All other diseases of eye.	7	2	1	—	1	—	—	—	—	—	—	6	2
Blindness.	26	15	8	5	7	5	1	1	—	—	—	18	10
Otitis externa.	115	70	47	28	34	20	13	9	6	4	2	68	42
Otitis media.	209	175	60	52	44	39	16	14	12	2	1	149	123
Other diseases of ear and mastoid process.	166	53	36	15	28	10	5	7	4	1	1	130	38
Deafness and impaired hearing.	2,484	1,700	849	619	595	425	194	217	165	37	29	1,635	1,081
<b>VII. Diseases of the circulatory system.</b>	5	3	2	2	1	1	1	1	—	1	1	3	1
Rheumatic fever.	34	22	5	3	2	1	3	2	2	1	—	29	19
Chronic rheumatic heart disease.	640	433	142	95	106	70	36	32	22	4	3	498	338
Arteriosclerotic heart disease, including coronary disease.	11	7	2	2	2	2	—	—	—	—	—	9	5
Other chronic and degenerative heart disease.	20	15	6	5	3	2	3	3	3	—	—	14	10
Acute and sub-acute endocarditis, acute myocarditis, and pericarditis.	155	99	56	34	36	21	20	17	11	3	2	99	65
Functional, other, and unspecified diseases of heart.	562	356	160	117	113	81	47	34	25	13	11	402	239
Hypertensive disease.	77	56	29	19	23	14	6	6	5	—	—	48	37
Varicose veins of lower extremities.	608	469	330	260	224	180	106	94	70	12	10	278	209
Hemorrhoids.	14	9	7	4	6	3	1	1	1	—	—	7	5
Varicocele.	106	85	39	33	25	19	14	12	12	2	2	67	52
Phlebitis and thrombophlebitis.	252	146	71	45	54	31	17	16	14	1	—	181	101
Other diseases of circulatory system.													

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	5,392	4,728	2,367	2,105	1,647	1,455	720	650	572	514	148	136	3,025	2,623
<b>VIII. Diseases of the respiratory system</b> .....														
Acute upper respiratory infections.....	2,653	2,471	1,190	1,108	794	739	396	369	309	285	87	84	1,463	1,363
Influenza.....	562	551	238	234	162	160	76	74	63	61	13	13	324	317
Pneumonia, all forms.....	647	573	327	298	236	212	91	86	78	75	13	11	320	275
Acute bronchitis.....	484	419	203	176	146	127	57	49	48	41	8	8	281	243
Bronchitis, chronic and unqualified.....	130	89	34	25	26	20	8	5	6	4	2	1	96	64
Hypertrophy of tonsils and adenoids.....	64	60	30	27	18	15	12	12	8	8	4	4	34	33
Pertonsillar abscess (quincy).....	10	8	5	4	2	2	3	2	3	2	—	—	5	4
Chronic sinusitis.....	108	41	48	17	40	14	8	3	7	3	1	—	60	24
Deflected nasal septum.....	212	182	92	82	65	58	27	24	19	17	8	7	120	100
Other diseases of nose and throat.....	220	135	91	54	72	43	19	11	14	8	5	3	129	81
Pleurisy.....	69	57	26	22	25	21	7	7	1	1	—	—	43	35
Spontaneous pneumothorax.....	55	53	25	24	18	17	7	7	5	5	2	2	30	29
Other chronic interstitial pneumonia.....	8	5	3	2	2	2	1	1	—	—	1	1	5	3
Bronchiectasis.....	13	7	3	2	2	1	1	—	1	—	—	—	10	5
All other diseases of respiratory system.....	157	77	52	30	39	24	13	6	10	4	3	2	105	47
<b>IX. Diseases of the digestive system</b> .....														
Dental diseases and conditions.....	4,688	3,783	1,945	1,614	1,317	1,090	628	524	499	404	129	120	2,743	2,169
Diseases of buccal cavity.....	289	211	96	64	68	45	28	19	24	17	4	2	193	147
Diseases of esophagus.....	57	44	23	18	18	13	5	5	5	5	—	—	34	26
Ulcer of stomach and duodenum.....	55	29	18	12	14	12	4	—	4	—	—	—	37	17
Gastritis and duodenitis.....	556	462	186	159	131	113	55	46	52	43	3	3	370	303
Other diseases of stomach and duodenum.....	189	160	83	75	59	54	24	21	21	18	3	3	106	85
Acute appendicitis (incl. appendicitis unqualified).....	19	7	8	3	6	3	2	—	2	—	—	—	11	4
Inguinal hernia.....	216	212	104	102	66	64	38	38	30	30	8	8	112	110
Other hernia.....	601	505	311	260	224	189	87	71	76	62	11	9	290	245
Gastroenteritis and colitis, except ulcerative, age 4 weeks and over.....	401	270	159	118	118	87	41	31	36	27	5	4	242	152
Anal fissure and fistula.....	1,218	1,182	548	529	316	308	232	221	151	141	81	80	670	653
Abscess of anal and rectal regions.....	164	111	70	44	50	30	20	14	18	12	2	2	94	67
Other diseases of intestine and peritoneum.....	102	94	53	50	40	38	13	12	10	10	3	2	49	44
Diseases of liver.....	484	262	176	99	132	78	44	21	36	15	8	6	308	163
Diseases of gallbladder and biliary ducts.....	93	51	29	15	24	13	5	2	4	1	1	1	64	36
Diseases of pancreas.....	210	161	67	55	44	37	23	18	23	18	—	—	143	106
	34	22	14	11	7	6	7	5	7	5	—	—	20	11
<b>X. Diseases of the genito-urinary system</b> .....														
Nephritis and nephrosis.....	2,075	1,469	792	616	561	433	231	183	203	160	28	23	1,283	853
Infections of kidney.....	47	37	15	15	12	12	3	3	2	2	1	1	32	22
Calculi of kidney and ureter.....	163	116	58	47	45	38	13	9	9	6	4	4	105	69
Cystitis.....	414	366	187	172	130	121	57	51	53	47	4	3	227	194
Nongonococcal urethritis (nonvenereal).....	143	87	42	25	26	13	16	12	15	11	1	1	101	62
All other diseases of urinary system.....	35	17	14	9	11	7	3	2	3	2	—	—	21	8
Prostatitis.....	144	82	68	43	47	29	21	14	18	14	3	—	76	39
Orchitis and epididymitis.....	220	149	99	75	71	52	28	23	24	19	4	4	121	74
Redundant prepuce and phimosis.....	226	174	108	91	69	61	39	30	35	26	4	4	118	83
All other diseases of male genital organs.....	143	126	63	53	49	40	14	13	13	12	1	1	80	73
Gynecomastia and mastitis, male.....	341	182	128	78	98	57	30	21	27	18	3	3	213	104
Other diseases of breast; diseases of ovary, Fallopian tube, and parametrium.....	21	18	7	6	3	3	4	3	3	3	1	—	14	12
Diseases of uterus.....	61	42	1	1	—	—	1	—	—	—	1	1	60	41
	29	14	—	—	—	—	—	—	—	—	—	—	29	14



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Synovitis, bursitis, and tenosynovitis.....	265	207	107	85	87	69	20	16	18	14	2	2	158	122
Diseases of muscle, tendon, and fascia, n.e.c.-	269	246	142	130	94	84	48	46	41	39	7	7	127	116
Residuals and/or recurrences of traumas, n.e.c.-	363	253	156	124	113	93	43	31	34	24	9	7	207	129
Other diseases of musculoskeletal system.....	292	209	95	69	67	50	28	19	27	18	1	1	197	140
XIV. Congenital malformations.....	196	111	77	41	55	27	22	14	20	12	2	2	119	70
XVI. Symptoms, senility, and ill-defined conditions.....	2,395	2,020	1,005	882	692	598	313	284	258	233	55	51	1,390	1,138
Diarrhea, cause unknown.....	55	50	20	17	13	10	7	7	5	5	2	2	35	33
All other symptoms.....	544	397	198	150	145	103	53	47	35	30	18	17	346	247
Observation for disease.....	1,715	1,524	760	699	521	478	239	221	205	189	34	32	955	825
Drunkenness, simple.....	19	11	9	5	5	2	4	3	4	3	—	—	10	6
Ill-defined and unknown causes (incl. senility).....	62	38	18	11	8	5	10	6	9	6	1	—	44	27
XVII. Accidents, poisonings, and violence.....	2,672	1,954	1,397	994	893	627	504	367	390	283	114	84	1,275	960
XVIII. Supplementary classifications for special admissions.....	785	682	436	411	379	358	57	53	49	45	8	8	349	271

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.  
For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

APPENDIX TABLE 25.—Admissions for Specified Diagnosis Categories by Age—All Air Force Personnel, World-wide: 1963

Diagnosis category	All ages	Age group								
		Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over
All diseases and conditions.....	1,169,026	21,159	53,046	27,636	24,960	15,252	15,618	8,004	2,509	813
I. Infective and parasitic diseases.....	2,12,164	2,486	4,356	2,054	1,709	742	534	205	61	16
Tuberculosis, pulmonary, active.....	113	9	29	17	22	13	13	7	3	—
Tuberculosis, pulmonary, activity undetermined.....	21	—	1	2	2	5	5	4	1	—
Pleural tuberculosis.....	33	2	12	7	7	2	2	1	—	—
Tuberculosis of meninges and central nervous system.....	2	—	—	—	—	1	1	—	—	—
Tuberculosis, all other forms.....	21	1	3	5	5	1	2	4	—	—
Early syphilis.....	81	11	44	11	9	4	2	—	—	—
Other syphilis and its sequelae.....	55	5	23	12	3	5	5	1	—	1
Acute or unspecified gonorrhoea.....	219	36	135	28	14	6	—	—	—	—
All other gonococcal infections.....	28	2	10	5	3	5	—	—	3	—
Chancroid.....	7	1	3	1	2	—	—	—	—	—
All other venereal diseases.....	22	2	9	8	2	1	—	—	—	—
Bacillary dysentery.....	71	25	30	7	4	2	2	1	—	—
Amebiasis.....	25	—	6	6	6	5	1	1	—	—
Food poisoning (infection and intoxication).....	109	30	53	14	3	5	2	1	1	—
All other infectious diseases commonly arising in intestinal tract.....	130	36	72	8	6	3	4	1	—	—
Scarlet fever and streptococcal sore throat.....	2,171	412	796	430	307	116	78	21	10	1
Meningococcal meningitis.....	13	7	4	2	—	—	—	—	—	—
All other bacterial diseases.....	93	10	39	13	16	7	3	4	1	—
Vincent's infection.....	44	17	20	5	2	—	—	—	—	—
All other spirochetal and leptospirochetal infections.....	1	—	—	—	1	—	—	—	—	—
Poliomyelitis, acute.....	—	—	—	—	—	—	—	—	—	—
Acute epidemic encephalitis.....	30	5	10	4	8	1	2	—	—	—
Smallpox.....	—	—	—	—	—	—	—	—	—	—
Measles.....	297	98	138	34	16	3	5	3	—	—
Rubella (German measles).....	1,419	785	502	80	39	6	5	1	1	—
Chickenpox.....	327	38	105	74	71	22	12	4	1	—
Zoster (herpes).....	72	5	22	9	12	8	8	5	1	2
Mumps.....	1,384	92	284	359	383	147	84	29	6	—
Infectious hepatitis.....	2,743	46	281	171	118	66	39	14	5	2
Infectious mononucleosis (glandular fever).....	1,385	378	823	129	40	7	5	3	—	—
All other diseases attributable to viruses.....	2,430	323	646	461	462	234	197	75	24	7
All rickettsial diseases.....	3	—	1	—	—	—	2	—	—	—
Malaria, all forms.....	24	4	7	8	2	—	3	—	—	—



MORBIDITY—Admissions by Age

APPENDIX TABLE 25.—Admissions for Specified Diagnosis Categories by Age—All Air Force Personnel, World-wide: 1963—Continued

Diagnosis category	Age group										All ages	
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over			
<b>V. Mental, psychoneurotic, and personality disorders—Continued</b>												
Immature personality.....	775	809	254	176	105	73	27	—	—	1		
Alcoholism, chronic and unspecified.....	6	12	26	66	115	93	48	21	—	1		
Other drug addiction.....	1	—	—	—	—	—	—	—	—	—		
Primary childhood behavior disorders.....	6	1	—	—	—	—	—	—	—	—		
Mental deficiency and learning defects.....	4	3	—	—	1	—	—	—	—	—		
Transient personality disorders.....	105	215	142	140	83	60	37	6	—	1		
All other disorders of character, behavior, and intelligence.....	6	11	7	11	4	5	7	3	—	1		
	503	1,449	961	1,048	764	829	421	168	—	61		
<b>VI. Diseases of the nervous system and sense organs.....</b>												
Vascular lesions affecting central nervous system.....	97	11	3	9	18	26	15	9	—	4		
Meningitis, except meningococcal and tuberculous.....	106	34	26	16	6	3	—	—	—	—		
Encephalitis, myelitis, and encephalomyelitis (except acute epidemic).....	38	10	6	7	4	5	—	1	—	—		
Epilepsy.....	424	134	58	75	47	36	12	3	—	—		
Migraine.....	211	48	43	47	18	24	7	3	—	—		
Other diseases of central nervous system.....	125	33	22	12	17	13	12	2	—	3		
Diseases of nerves and peripheral ganglia.....	1,100	219	171	171	160	184	82	24	—	12		
Conjunctivitis and ophthalmia.....	248	89	44	32	19	17	6	—	—	—		
Other inflammatory diseases of eye.....	533	162	84	91	53	47	25	10	—	2		
Refractive errors.....	61	34	5	8	5	2	3	1	—	—		
All other diseases of eye.....	1,204	200	164	180	141	165	99	40	—	22		
Blindness.....	18	3	2	4	1	2	3	1	—	1		
Otitis externa.....	171	55	36	30	12	10	8	2	—	—		
Otitis media.....	598	137	128	123	65	51	22	10	—	1		
Other diseases of ear and mastoid process.....	863	135	123	176	135	148	79	36	—	7		
Deafness and impaired hearing.....	408	45	46	67	63	96	48	26	—	9		
	2,767	1,026	856	1,148	1,120	1,674	1,034	397	—	147		
<b>VII. Diseases of the circulatory system.....</b>												
Rheumatic fever.....	50	15	8	8	3	5	—	—	—	—		
Chronic rheumatic heart disease.....	150	25	32	25	15	26	12	5	—	4		
Arteriosclerotic heart disease, including coronary disease.....	1,477	7	30	129	226	487	365	147	—	70		
Other chronic and degenerative heart disease.....	41	12	3	12	6	4	1	2	—	—		

Admissions by Age—MORBIDITY

Acute and sub-acute endocarditis, acute myocarditis, and pericarditis.....	76	4	19	11	25	9	4	4	—	—	2
Functional, other, and unspecified diseases of heart.....	339	21	41	47	54	47	69	40	18	—	33
Hypertensive disease.....	1,492	7	86	98	189	252	429	282	116	—	4
Varicose veins of lower extremities.....	376	22	87	55	47	58	60	33	10	—	8
Hemorrhoids.....	2,458	87	523	418	491	369	377	149	36	—	—
Varicocele.....	103	25	40	17	7	3	8	—	3	—	—
Phlebitis and thrombophlebitis.....	453	24	76	65	83	63	84	40	13	—	5
Other diseases of circulatory system.....	2,642	39	86	72	78	69	121	108	47	—	21
<b>VIII. Diseases of the respiratory system.....</b>	<b>433,740</b>	<b>4,539</b>	<b>10,567</b>	<b>6,498</b>	<b>5,495</b>	<b>2,751</b>	<b>2,328</b>	<b>1,137</b>	<b>320</b>	<b>—</b>	<b>99</b>
Acute upper respiratory infections.....	318,099	2,553	6,081	3,561	3,011	1,319	1,016	441	89	—	26
Influenza.....	3,641	338	1,083	806	659	312	275	129	31	—	8
Pneumonia, all forms.....	4,393	845	1,122	726	703	415	333	175	55	—	16
Acute bronchitis.....	2,749	344	654	541	454	289	266	141	48	—	12
Bronchitis, chronic and unqualified.....	497	23	72	69	54	71	87	72	35	—	14
Hypertrophy of tonsils and adenoids.....	935	118	515	181	79	28	9	4	1	—	—
Pertonsillar abscess (quinsy).....	205	33	93	36	24	10	7	1	1	—	—
Chronic sinusitis.....	172	13	35	33	27	22	22	16	2	—	2
Deflected nasal septum.....	965	87	344	177	145	77	90	35	10	—	—
Other diseases of nose and throat.....	2,583	44	143	81	106	78	73	40	13	—	4
Pleurisy.....	413	29	118	79	88	42	36	12	6	—	3
Spontaneous pneumothorax.....	617	80	257	154	65	31	14	5	2	—	—
Other chronic interstitial pneumonia.....	25	—	5	1	6	1	7	4	—	—	1
Bronchiectasis.....	51	5	10	8	11	7	5	1	1	—	3
All other diseases of respiratory system.....	395	18	35	45	63	49	88	61	26	—	10
<b>IX. Diseases of the digestive system.....</b>	<b>24,709</b>	<b>2,749</b>	<b>7,818</b>	<b>3,900</b>	<b>3,458</b>	<b>2,361</b>	<b>2,581</b>	<b>1,330</b>	<b>389</b>	<b>—</b>	<b>121</b>
Dental diseases and conditions.....	2,575	598	1,098	261	206	163	150	70	21	—	15
Diseases of buccal cavity.....	375	63	130	62	43	25	27	19	4	—	2
Diseases of esophagus.....	112	7	20	12	19	21	18	10	5	—	—
Ulcer of stomach and duodenum.....	2,859	85	447	473	553	447	503	238	79	—	34
Gastritis and duodenitis.....	1,459	180	452	257	209	134	138	69	17	—	3
Other diseases of stomach and duodenum.....	37	1	5	2	6	7	10	4	2	—	—
Acute appendicitis (incl. appendicitis unqualified).....	1,875	375	823	288	184	83	72	39	9	—	2
Inguinal hernia.....	2,539	204	701	336	347	271	396	219	54	—	11
Other hernia.....	1,087	17	105	111	176	189	271	153	45	—	20
Gastroenteritis and colitis, except ulcerative, age 4 weeks and over.....	8,586	1,086	3,513	1,660	1,097	535	442	190	52	—	11
Anal fissure and fistula.....	453	19	86	76	94	68	67	33	8	—	2
Abscess of anal and rectal regions.....	600	38	155	102	140	78	48	28	9	—	2

See footnotes at end of table.

MORBIDITY—Admissions by Age

APPENDIX TABLE 25.—Admissions for Specified Diagnosis Categories by Age—All Air Force Personnel, World-wide: 1963—Continued

Diagnosis category	Age group										All ages
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over		
<b>XI. Diseases of the digestive system—Continued</b>											
Other diseases of intestine and peritoneum.....	63	213	165	189	156	206	122	33	10		
Diseases of liver.....	1	27	14	35	51	53	51	17	1		
Diseases of gallbladder and biliary ducts.....	5	42	65	116	105	145	72	29	7		
Diseases of pancreas.....	2	10	16	44	28	35	13	5	1		
	828	3,181	1,696	1,429	883	903	406	132	62		
<b>X. Diseases of the genitourinary system.....</b>											
Nephritis and nephrosis.....	12	43	37	38	19	38	11	4	3		
Infections of kidney.....	34	163	120	129	90	89	37	13	1		
Calculi of kidney and ureter.....	40	267	304	325	196	207	94	22	7		
Cystitis.....	38	120	69	63	33	42	24	11	2		
Nongonococcal urethritis (nonvenereal).....	13	68	28	21	5	15	1	1	—		
All other diseases of urinary system.....	24	105	87	71	37	63	25	8	3		
Prostatitis.....	57	220	129	160	113	119	49	13	6		
Orchitis and epididymitis.....	165	492	320	270	197	107	52	10	6		
Redundant prepuce and phimosis.....	282	1,245	368	184	85	38	15	4	—		
All other diseases of male genital organs.....	93	312	165	133	76	157	83	38	30		
Gynecomastia and mastitis, male.....	31	56	18	10	8	13	4	2	1		
Other diseases of breast, diseases of ovary, Fallopian tube and parametrium.....	16	27	20	12	9	6	5	2	1		
Diseases of uterus.....	4	9	9	2	1	3	1	1	1		
Disorders of menstruation.....	19	54	21	11	14	16	4	3	1		
Other female conditions and diseases of genital organs.....	—	—	1	—	—	—	1	—	—		
	126	68	14	13	4	3	—	—	—		
<b>XI. Deliveries and complications of pregnancy, childbirth and the puerperium.....</b>	1,244	2,897	1,229	1,123	539	466	215	53	22		
<b>XII. Diseases of the skin and cellular tissue.....</b>											
Furuncle and carbuncle.....	76	226	120	109	37	38	14	2	—		
Cellulitis and abscess.....	788	1,562	654	612	288	251	90	34	4		
Other infections of skin and subcutaneous tissue.....	71	220	98	64	30	19	16	5	3		
Seborrheic dermatitis.....	2	6	1	8	1	3	3	1	1		
Eczema.....	7	14	13	9	5	4	7	—	—		
Occupational and other dermatitis.....	41	142	67	83	40	28	9	3	6		
Erythematous conditions.....	30	60	22	12	8	8	5	1	1		

Admissions by Age—MORBIDITY

	123	13	36	23	16	14	10	10	10	1	3
Psoriasis and similar conditions.....	123	13	36	23	16	14	10	10	10	1	—
Pruritus and related conditions.....	88	4	29	16	13	7	10	10	6	—	3
Other hypertrophic and atrophic conditions of skin.....	112	15	33	16	22	11	9	9	5	1	—
Diseases of nail.....	350	95	173	34	13	17	9	9	8	—	1
Diseases of sweat and sebaceous glands.....	309	38	121	49	48	19	23	10	10	—	1
Other diseases of skin.....	724	64	275	116	114	62	54	32	32	5	2
<b>XIII. Diseases of the bones and organs of movement.....</b>	<b>5 12,912</b>	<b>953</b>	<b>3,304</b>	<b>2,065</b>	<b>2,251</b>	<b>1,472</b>	<b>1,647</b>	<b>837</b>	<b>270</b>	<b>110</b>	
Rheumatoid arthritis and allied conditions.....	237	6	40	35	40	37	48	23	5	3	3
Arthritis, all other forms.....	1,144	44	135	117	135	141	251	187	85	49	3
Rheumatism.....	925	74	246	141	180	118	112	42	9	3	—
Malunion and nonunion of fracture.....	244	24	93	50	31	21	9	15	1	—	—
Osteomyelitis, periostitis, osteitis, osteochondrosis, and other diseases of bone.....	403	59	138	64	53	34	35	15	4	1	1
Internal derangement of knee joint.....	2 1,079	115	398	199	172	82	81	22	8	1	1
Displacement of intervertebral disc.....	1,371	33	151	219	329	225	253	121	30	10	10
Affection of sacroiliac joint.....	152	6	31	23	23	35	21	9	3	1	1
Ankylosis and other diseases of joint.....	935	105	326	176	130	57	97	32	9	3	3
Synovitis, bursitis, and tenosynovitis.....	3 1,739	132	513	287	283	188	196	98	27	13	13
Diseases of muscle, tendon, and fascia, n.e.c.....	1,504	99	354	251	323	183	168	91	26	9	9
Residuals and/or recurrences of traumas, n.e.c.....	1,835	165	544	286	326	186	192	97	32	7	7
Other diseases of musculoskeletal system.....	1,344	91	335	217	226	165	184	85	31	10	10
<b>XIV. Congenital malformations.....</b>	<b>2 907</b>	<b>129</b>	<b>290</b>	<b>147</b>	<b>143</b>	<b>69</b>	<b>79</b>	<b>39</b>	<b>6</b>	<b>4</b>	
<b>XVI. Symptoms, senility, and ill-defined conditions.....</b>	<b>5 13,807</b>	<b>1,655</b>	<b>4,113</b>	<b>2,084</b>	<b>2,022</b>	<b>1,456</b>	<b>1,508</b>	<b>739</b>	<b>185</b>	<b>42</b>	
Diarrhea, cause unknown.....	171	8	36	33	31	20	17	23	3	—	—
All other symptoms.....	2 2,807	373	850	426	416	278	269	141	43	10	10
Observation for disease.....	2 10,346	1,202	3,084	1,553	1,504	1,111	1,178	550	133	30	30
Drunkenness, simple.....	2 299	55	97	39	35	30	23	14	3	2	2
Ill-defined and unknown causes (incl. senility).....	184	17	46	33	36	17	21	11	3	—	—
<b>XVII. Accidents, poisonings, and violence.....</b>	<b>4 21,400</b>	<b>3,406</b>	<b>8,652</b>	<b>3,535</b>	<b>2,652</b>	<b>1,361</b>	<b>1,147</b>	<b>492</b>	<b>126</b>	<b>23</b>	
<b>XVIII. Supplementary classifications for special admissions.....</b>	<b>2 2,000</b>	<b>145</b>	<b>444</b>	<b>232</b>	<b>228</b>	<b>164</b>	<b>335</b>	<b>318</b>	<b>110</b>	<b>23</b>	

NOTE.—Class XV. Certain Diseases of Early Infancy, not applicable to military patients  
 1 Include 29 admissions ages unknown not distributed according to age group.  
 2 Include 1 admission age unknown not distributed according to age group.  
 3 Include 2 admissions ages unknown not distributed according to age group.  
 4 Include 6 admissions ages unknown not distributed according to age group.  
 5 Include 3 admissions ages unknown not distributed according to age group.  
 For explanation of symbols, see p. 52.  
 Source: Individual Medical Records.

**MORBIDITY—Injuries, All Air Force**

APPENDIX TABLE 26.—Admissions for Injuries, by Nature of Injury and Causative Agent—All Air Force Personnel, World-wide: January–June 1963

Nature of injury	All causes	Aviation	Motor vehicle	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	Joint Armed Forces Causative Agent Code No.						
		000-099	100-189	300-399	900-919	920-929	190-299 400-899 930-999
All accidents, poisonings, and violence.....	10,699	251	2,443	1,050	1,571	1,801	3,583
Fracture, depressed, compound, skull.....	10	—	6	—	1	1	2
Fracture, compound, n.e.c.....	279	9	130	41	22	15	62
Fracture, depressed, simple, skull.....	10	—	4	1	2	—	3
Fracture, compression, vertebra.....	94	10	50	—	20	5	9
Fracture, n.e.c.....	2,029	71	628	110	549	378	293
Wound, incised and/or lacerated.....	1,241	16	544	300	134	49	198
Wound, punctured.....	58	1	4	34	2	3	14
Wound, penetrating and/or perforating.....	58	2	3	22	3	2	26
Wound, n.e.c.....	129	—	—	2	—	—	127
Abrasion, contusion, and blister.....	1,191	36	444	123	194	158	236
Dislocation, joint.....	334	4	62	6	81	111	70
Sprains and strains.....	3,298	51	203	23	421	884	1,716
Concussion of brain.....	430	13	221	16	77	52	51
Hematoma and/or hemorrhage, traumatic.....	222	2	33	18	43	70	56
Foreign body retained.....	119	—	3	37	2	3	74
Burns.....	280	7	3	223	—	1	46
Injury to nerves and spinal cord, n.e.c.....	6	—	1	—	1	—	4
Effects of poisons.....	174	—	—	1	—	1	172
Effects of weather, exposure, and related conditions.....	174	12	1	2	—	7	152
Other and unspecified injuries and reactions.....	563	17	103	91	19	61	272

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

Injuries, All Air Force—MORBIDITY

APPENDIX TABLE 27.—Admissions for Injuries, by Nature of Injury and Causative Agent—All Air Force Personnel, World-wide: July-December 1963

Nature of injury	All causes	Aviation	Motor vehicles	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	DDDIC Causative Agent Code No.						
		000-049	100-130	601-699	900-929	201-239	140-199 250-279 300-599 700-789 800-889 930-999
All accidents, poisonings, and violence .....	10,701	126	2,658	946	1,293	2,025	3,513
Fracture of skull, excluding face bones .....	89	—	52	5	12	3	17
Fracture of face bones .....	480	2	146	16	55	92	169
Fracture of spine and trunk .....	295	10	169	2	58	37	19
Fracture of upper limb .....	648	6	216	53	150	143	80
Fracture of lower limb .....	912	18	244	91	208	223	128
Dislocation without fracture .....	400	1	64	6	54	177	98
Sprains and strains of joints and adjacent muscles .....	2,834	31	195	32	317	854	1,405
Head injuries (excluding skull fracture) .....	938	6	534	43	128	81	146
Internal injuries of chest, abdomen, and pelvis .....	128	4	68	9	10	20	17
Laceration and open wound of face, neck, and trunk .....	520	5	261	70	25	24	135
Laceration and open wound of upper limb .....	465	4	46	231	28	11	145
Laceration and open wound of lower limb .....	279	1	45	94	19	19	101
Laceration and open wounds of multiple location .....	114	2	71	15	4	3	19
Superficial injury .....	372	7	148	49	25	26	107
Contusion and crushing with intact skin surface .....	1,013	12	274	100	168	246	213
Effects of foreign body entering through orifice .....	47	—	—	36	—	—	11
Burns .....	337	9	11	20	3	—	294
Injury to nerves and spinal cord without bone injury .....	26	—	7	6	3	2	8
Effects of poisons .....	183	—	—	—	2	—	181
Effects of weather, exposure, and related conditions .....	127	4	—	4	—	10	109
Other and unspecified injuries and reactions .....	494	4	107	54	24	54	251

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

**MORBIDITY—Injuries, Officer Flyers**

APPENDIX TABLE 28.—Admissions for Injuries by Nature of Injury and Causative Agent—Air Force Officers on Flying Status, World-wide: January-June 1963

Nature of injury	All causes	Aviation	Motor vehicle	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	Joint Armed Forces Causative Agent Code No.						
		000-099	100-189	300-399	900-919	920-929	190-299 400-899 930-999
All accidents, poisonings, and violence.....	497	62	82	13	54	133	153
Fracture, depressed, compound, skull.....	—	—	—	—	—	—	—
Fracture, compound, n.e.c.....	5	1	4	—	—	—	—
Fracture, depressed, simple, skull.....	—	—	—	—	—	—	—
Fracture, compression, vertebra.....	11	7	2	—	1	—	1
Fracture, n.e.c.....	113	18	22	1	22	41	9
Wound, incised and/or lacerated.....	35	3	15	5	3	2	7
Wound, punctured.....	2	—	—	1	—	—	1
Wound, penetrating and/or perforating.....	2	—	—	1	—	—	1
Wound, n.e.c.....	6	—	—	—	—	—	6
Abrasion, contusion, and blister.....	44	8	19	—	3	7	7
Dislocation, joint.....	25	1	3	—	5	12	4
Sprains and strains.....	177	11	3	—	13	58	92
Concussion of brain.....	11	—	7	—	3	—	1
Hematoma and/or hemorrhage, traumatic.....	12	2	3	—	1	4	2
Foreign body retained.....	4	—	—	2	—	—	2
Burns.....	5	2	—	2	—	—	1
Injury to nerves and spinal cord, n.e.c.....	—	—	—	—	—	—	—
Effects of poisons.....	4	—	—	—	—	—	4
Effects of weather, exposure, and related conditions.....	6	5	—	—	—	—	1
Other and unspecified injuries and reactions.....	35	4	4	1	3	9	14

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

Injuries, Officer Flyers—MORBIDITY

APPENDIX TABLE 29.—Admissions for Injuries by Nature of Injury and Causative Agent—Air Force Officers on Flying Status, World-wide: July-December 1963

Nature of injury	All causes	Aviation	Motor vehicles	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	DDDIC Causative Agent Code No.						
		000-049	100-130	601-699	900-929	301-239	120-199 250-279 300-599 800-889 700-789 930-999
All accidents, poisonings, and violence.....	497	52	75	23	50	114	183
Fracture of skull, excluding face bones.....	4	—	3	—	1	—	—
Fracture of face bones.....	12	—	4	—	1	5	2
Fracture of spine and trunk.....	22	7	6	—	3	5	1
Fracture of upper limb.....	24	—	8	1	3	10	2
Fracture of lower limb.....	39	2	8	—	10	13	6
Dislocation without fracture.....	20	—	—	—	6	10	4
Sprains and strains of joints and adjacent muscles.....	177	14	10	2	8	51	92
Head injuries (excluding skull fracture).....	31	4	19	—	2	2	4
Internal injuries of chest, abdomen, and pelvis.....	8	3	5	—	—	—	—
Laceration and open wound of face, neck, and trunk.....	16	4	5	1	—	1	5
Laceration and open wound of upper limb.....	10	—	—	6	1	—	3
Laceration and open wound of lower limb.....	16	1	—	6	4	—	5
Laceration and open wounds of multiple location.....	5	—	2	—	—	—	3
Superficial injury.....	12	4	1	2	1	1	3
Contusion and crushing with intact skin surface.....	30	4	2	2	7	12	3
Effects of foreign body entering through orifice.....	3	—	—	2	—	—	1
Burns.....	21	4	1	—	—	—	16
Injury to nerves and spinal cord without bone injury.....	3	—	1	1	—	—	1
Effects of poisons.....	6	—	—	—	—	—	6
Effects of weather, exposure, and related conditions.....	12	2	—	—	—	2	8
Other and unspecified injuries and reactions.....	26	3	—	—	3	2	18

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

**MORBIDITY—Injuries, Officer Nonflyers**

APPENDIX TABLE 30.—Admissions for Injuries, by Nature of Injury and Causative Agent—Air Force Officers not on Flying Status, World-wide: January–June 1963

Nature of injury	All causes	Aviation	Motor vehicle	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	Joint Armed Forces Causative Agent Code No.						
		000-099	100-189	300-399	900-919	920-929	190-299 400-899 930-999
All accidents, poisonings, and violence.....	497	7	80	35	71	116	188
Fracture, depressed, compound, skull.....	1	—	1	—	—	—	—
Fracture, compound, n.e.c.....	10	—	6	—	1	1	2
Fracture, depressed, simple, skull.....	—	—	—	—	—	—	—
Fracture, compression, vertebra.....	2	1	—	—	1	—	—
Fracture, n.e.c.....	107	1	22	7	36	32	9
Wound, incised and/or lacerated.....	41	—	20	10	2	2	7
Wound, punctured.....	4	—	—	2	—	—	2
Wound, penetrating and/or perforating.....	1	—	—	—	—	—	1
Wound, n.e.c.....	1	—	—	1	—	—	—
Abrasion, contusion, and blister.....	26	1	12	1	5	4	3
Dislocation, joint.....	21	1	4	—	7	7	2
Sprains and strains.....	201	3	10	—	13	52	123
Concussion of brain.....	11	—	4	—	1	3	3
Hematoma and/or hemorrhage, traumatic.....	13	—	1	2	3	5	2
Foreign body retained.....	3	—	—	1	—	—	2
Burns.....	10	—	—	7	—	—	3
Injury to nerves and spinal cord, n.e.c.....	—	—	—	—	—	—	—
Effects of poisons.....	4	—	—	1	—	—	3
Effects of weather, exposure, and related conditions.....	7	—	—	—	—	—	7
Other and unspecified injuries and reactions.....	34	—	—	3	2	10	19

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

Injuries, Officer Nonflyers—MORBIDITY

APPENDIX TABLE 31.—Admissions for Injuries, by Nature of Injury and Causative Agent—Air Force Officers not on Flying Status, World-wide: July–December 1968

Nature of injury	All causes	Aviation	Motor vehicle	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	DDDIC Causative Agent Code No.						
		000-049	100-309	601-699	900-929	201-239	120-199 250-279 300-599 800-889 700-789 930-999
All accidents, poisonings, and violence.....	463	8	105	30	48	108	164
Fracture of skull, excluding face bones.....	3	—	3	—	—	—	—
Fracture of face bones.....	14	—	8	—	—	4	2
Fracture of spine and trunk.....	16	2	9	—	4	1	—
Fracture of upper limb.....	27	—	8	—	6	11	2
Fracture of lower limb.....	38	2	12	3	9	6	6
Dislocation without fracture.....	15	—	2	—	2	7	4
Sprains and strains of joints and adjacent muscles.....	163	—	9	—	14	50	90
Head injuries (excluding skull fracture).....	34	—	23	1	3	5	2
Internal injuries of chest, abdomen, and pelvis.....	3	—	—	1	—	2	—
Laceration and open wound of face, neck, and trunk.....	14	—	5	1	—	3	5
Laceration and open wound of upper limb.....	17	1	1	11	1	1	2
Laceration and open wound of lower limb.....	16	—	5	7	—	1	3
Laceration and open wounds of multiple location.....	9	2	6	1	—	—	—
Superficial injury.....	16	—	2	3	1	4	6
Contusion and crushing with intact skin surface.....	32	1	11	1	8	10	1
Effects of foreign body entering through orifice.....	2	—	—	—	—	—	2
Burns.....	7	—	—	—	—	—	7
Injury to nerves and spinal cord without bone injury.....	—	—	—	—	—	—	—
Effects of poisons.....	9	—	—	—	—	—	9
Effects of weather, exposure, and related conditions.....	3	—	—	—	—	—	3
Other and unspecified injuries and reactions....	25	—	1	—	—	3	21

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

**MORBIDITY—Injuries, All Airmen**

APPENDIX TABLE 32.—Admissions for Injuries, by Nature of Injury and Causative Agent—All Air Force Airmen, World-wide: January–June 1963

Nature of injury	All causes	Aviation	Motor vehicle	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	Joint Armed Forces Causative Agent Code No.						
		000-099	100-189	300-399	900-919	920-929	190-299 400-899 930-999
All accidents, poisonings, and violence.....	9,705	182	2,281	1,002	1,446	1,552	3,242
Fracture, depressed, compound, skull.....	9	—	5	—	1	1	2
Fracture, compound, n.e.c.....	264	8	120	41	21	14	60
Fracture, depressed, simple, skull.....	10	—	4	1	2	—	3
Fracture, compression, vertebra.....	81	2	48	—	18	5	8
Fracture, n.e.c.....	1,809	52	584	102	491	305	275
Wound, incised and/or lacerated.....	1,165	13	509	285	129	45	184
Wound, punctured.....	52	1	4	31	2	3	11
Wound, penetrating and/or perforating.....	55	2	3	21	3	2	24
Wound, n.e.c.....	122	—	—	1	—	—	121
Abrasion, contusion, and blister.....	1,121	27	413	122	186	147	226
Dislocation, joint.....	288	2	55	6	69	92	64
Sprains and strains.....	2,920	37	190	23	395	774	1,501
Concussion of brain.....	408	13	210	16	73	49	47
Hematoma and/or hemorrhage, traumatic.....	197	—	29	16	39	61	52
Foreign body retained.....	112	—	3	34	2	3	70
Burns.....	265	5	3	214	—	1	42
Injury to nerves and spinal cord, n.e.c.....	6	—	1	—	1	—	4
Effects of poisons.....	166	—	—	—	—	1	165
Effects of weather, exposure, and related conditions.....	161	7	1	2	—	7	144
Other and unspecified injuries and reactions.....	494	13	99	87	14	42	239

For explanation of symbols see p. 52.  
Source: Individual Medical Records.

Injuries, All Airmen—MORBIDITY

APPENDIX TABLE 33.—Admissions for Injuries, by Nature of Injury and Causative Agent—All Air Force Airmen, World-wide: July-December 1963

Nature of injury	All causes	Aviation	Motor vehicle	Machinery, tools, and related agents	Falls or jumps	Athletics and sports	All other causes
	DDIC Causative Agent Code No.						
		000-049	100-119	601-699	900-929	201-239	120-199 250-279 300-599 800-889 700-789 930-999
All accidents, poisonings, and violence.....	9,741	66	2,408	893	1,195	1,803	3,376
Fracture of skull, excluding face bones.....	82	—	46	5	11	3	17
Fracture of face bones.....	454	2	134	16	54	83	165
Fracture of spine and trunk.....	257	1	154	2	51	31	18
Fracture of upper limb.....	597	6	200	52	141	122	76
Fracture of lower limb.....	835	14	224	88	189	204	116
Dislocation without fracture.....	365	1	62	6	46	160	90
Sprains and strains of joints and adjacent muscles.....	2,494	17	176	30	295	753	1,223
Head injuries (excluding skull fracture).....	873	2	492	42	123	74	140
Internal injuries of chest, abdomen, and pelvis..	117	1	63	8	10	18	17
Laceration and open wound of face, neck, and trunk.....	490	1	251	68	25	20	125
Laceration and open wound of upper limb.....	438	3	45	214	26	10	140
Laceration and open wound of lower limb.....	247	—	40	81	15	18	93
Laceration and open wounds of multiple location.....	100	—	63	14	4	3	16
Superficial injury.....	344	3	145	54	23	21	98
Contusion and crushing with intact skin surface.....	951	7	261	97	153	224	209
Effects of foreign body entering through orifice.....	42	—	—	34	—	—	8
Burns.....	309	5	10	20	3	—	271
Injury to nerves and spinal cord without bone injury.....	23	—	6	5	3	2	7
Effects of poisons.....	168	—	—	—	2	—	166
Effects of weather, exposure, and related conditions.....	112	2	—	3	—	8	99
Other and unspecified injuries and reactions....	443	1	36	54	21	49	282

For explanation of symbols see p. 52.  
Source: Individual Medical Records.

## MORBIDITY—Noneffective Ratios

APPENDIX TABLE 34.—Noneffective Ratios and Measures of Variability for Diagnosis Classes—All Air Force Personnel, World-wide: 1963

[For explanation of variability measures, see Appendix Note 8. The sum of rates and ratios may differ slightly from totals due to automatic machine rounding]

Diagnosis class	Percent of total days lost	Noneffective ratio and variability measures		
		Noneffective ratio (per 100,000)	Standard error	Coefficient of variation (percent)
All diseases and conditions	100.00	†735.84	4.27	.58
I. Infective and parasitic diseases.....	6.88	50.59	1.29	2.54
II. Neoplasms.....	4.72	34.70	1.02	2.93
III. Allergic, endocrine system, metabolic, and nutritional diseases.....	2.32	17.04	.62	3.62
IV. Diseases of the blood and blood-forming organs.....	.23	1.69	.25	14.86
V. Mental, psychoneurotic, and personality disorders.....	11.81	86.89	1.67	1.92
VI. Diseases of the nervous system and sense organs.....	5.16	37.94	.98	2.58
VII. Diseases of the circulatory system.....	8.24	60.63	1.29	2.13
VIII. Diseases of the respiratory system.....	8.95	65.88	.77	1.16
IX. Diseases of the digestive system.....	11.88	87.45	1.12	1.28
X. Diseases of the genito-urinary system.....	4.13	30.36	.60	1.99
XI. Deliveries and complications of pregnancy, childbirth, and the puerperium.....	.04	.30	.04	13.60
XII. Diseases of the skin and cellular tissue.....	2.90	21.37	.42	1.99
XIII. Diseases of the bones and organs of movement.....	11.46	84.31	1.48	1.75
XIV. Congenital malformations.....	.91	6.73	.40	5.89
XVI. Symptoms and ill-defined conditions.....	4.59	33.80	.57	1.69
XVII. Accidents, poisonings, and violence.....	14.81	108.99	2.12	1.95
XVIII. Supplementary classifications for special admissions.....	.97	7.16	.42	5.88

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.

†Ratios based on individual medical record data are not identical with the officially reported noneffective ratios, see Table 1 and Appendix Table 6.

Source: Individual Medical Records.

Rates and Ratios by Diagnosis—MORBIDITY

APPENDIX TABLE 35.—Incidence Rates, Admission Rates, and Noneffective Ratios for Specified Diagnosis Categories—All Air Force Personnel, World-wide: 1963  
 [For explanation of the standard error of the noneffective ratio, see Appendix Note 8. The sum of rates and ratios may differ slightly from intermediate or grand totals due to automatic machine rounding]

Diagnosis category	Incidence (total diagnoses reported)		Admissions (sole and primary diagnoses)		Noneffectiveness		
	Cases per year per 100,000	Percent of total	Percent of total	Admissions per year per 100,000	Percent of total days lost	Ratio per 100,000	Standard error of noneffective ratio
All diseases and conditions.....	24,341	100.00	100.00	†19,463	100.00	†735.84	4.27
I. Infective and parasitic diseases.....	1,552	7.20	7.20	1,401	6.88	50.59	1.29
Tuberculosis, pulmonary, active.....	14	.07	.07	13	1.23	9.07	.97
Tuberculosis, pulmonary, activity undetermined.....	5	.01	.01	?	.10	.72	.24
Pleural tuberculosis.....	6	.02	.02	4	.12	.87	.25
Tuberculosis of meninges and central nervous system.....	(*)	(*)	(*)	(*)	.02	.11	.09
Tuberculosis, all other forms.....	5	.01	.01	2	.09	.70	.20
Early syphilis.....	10	.05	.05	9	.03	.20	.03
Other syphilis and its sequelae.....	13	.03	.03	6	.04	.26	.12
Acute or unspecified gonorrhea.....	39	.13	.13	25	.07	.49	.05
All other gonorrheic infections.....	5	.02	.02	3	.03	.21	.06
Chancroid.....	2	(*)	(*)	1	(*)	.02	.01
All other venereal diseases.....	4	.01	.01	3	.01	.07	.02
Bacillary dysentery.....	9	.04	.04	8	.02	.15	.02
Amebiasis.....	4	.01	.01	3	.02	.12	.03
Food poisoning (infection and intoxication).....	13	.06	.06	13	.01	.05	.01
All other infectious diseases commonly arising in intestinal tract.....	15	.08	.08	15	.03	.24	.03
Scarlet fever and streptococcal sore throat.....	283	1.28	1.28	250	.36	2.67	.07
Meningococcal meningitis.....	1	.01	.01	1	.01	.08	.03
All other bacterial diseases.....	15	.06	.06	11	.03	.25	.05
Vincent's infection.....	7	.03	.03	5	.01	.06	.01
All other spirochetal and leptospiretetal infections.....	(*)	(*)	(*)	(*)	(*)	.01	.01
Poliomyelitis, acute.....	—	—	—	—	—	—	—
Acute epidemic encephalitis.....	4	.02	.02	3	.03	.25	.08
Smallpox.....	—	—	—	—	—	—	—
Measles.....	35	.18	.18	34	.08	.59	.04
Rubella (German measles).....	165	.84	.84	163	.21	1.53	.05
Chicken pox.....	38	.19	.19	38	.13	.92	.07
Zoster (herpes).....	9	.04	.04	8	.03	.24	.04
Mumps.....	169	.82	.82	159	.57	4.17	.13
Infectious hepatitis.....	89	.44	.44	86	1.31	9.67	.47

See footnotes at end of table.

MORBIDITY—Rates and Ratios by Diagnosis

APPENDIX TABLE 35.—Incidence Rates, Admission Rates, and Noneffective Ratios for Specified Diagnosis Categories—All Air Force Personnel, World-wide: 1963  
—Continued

[For explanation of the standard error of the noneffective ratio, see Appendix Note 8. The sum of rates and ratios may differ slightly from intermediate or grand totals due to automatic machine rounding]

Diagnosis category	Incidence (total diagnoses reported)		Admissions (sole and primary diagnoses)		Noneffectiveness		
	Cases per year per 100,000	Percent of total	Admissions per year per 100,000	Percent of total days lost	Ratio per 100,000	Standard error of effective ratio	
<b>I. Infective and parasitic diseases—Continued</b>							
Infectious mononucleosis (glandular fever).....	165	.82	159	1.05	7.69	.26	
All other diseases attributable to viruses.....	294	1.44	280	.46	3.40	.11	
All rickettsial diseases.....	(*0)	(*0)	(*0)	(*0)	.01	.01	
Malaria, all forms.....	3	.01	3	.01	.09	.02	
Protozoan infections.....	(*0)	(*0)	(*0)	(*0)	.01	.01	
Ankylostomiasis.....	3	.01	2	(*0)	.03	.01	
Ascariasis.....	(*0)	(*0)	(*0)	(*0)	.01	.01	
Other worm infestation.....	4	.02	3	.02	.18	.10	
Dermatophytosis.....	67	.22	43	.15	1.08	.08	
Other fungus infections.....	26	.10	19	.29	2.10	.29	
Scabies.....	1	(*0)	1	(*0)	.01	(*0)	
Pediculosis.....	1	(*0)	(*0)	(*0)	(*0)	(*0)	
All other infective and parasitic diseases.....	25	.11	21	.31	2.26	.29	
<b>II. Neoplasms.....</b>							
Malignant neoplasms.....	637	2.63	511	4.72	34.70	1.02	
Benign neoplasms, except pilonidal cyst.....	93	.42	82	2.17	15.94	.88	
Pilonidal cyst.....	267	.86	168	.95	7.00	.37	
Neoplasms of unspecified nature.....	255	1.26	244	1.51	11.08	.32	
	22	.09	17	.09	.68	.11	
<b>III. Allergic, endocrine system, metabolic, and nutritional diseases.....</b>							
Hay fever.....	568	1.75	340	2.32	17.04	.62	
Asthma.....	25	.05	11	.04	.32	.05	
Urticaria.....	63	.25	49	.32	2.38	.22	
All other allergic disorders.....	46	.19	38	.08	.62	.06	
Diseases of thyroid gland.....	55	.21	41	.10	.76	.07	
Diabetes mellitus.....	38	.16	30	.30	2.19	.22	
All other diseases of other endocrine glands.....	153	.42	82	.87	6.41	.39	
Avitaminoses and other metabolic disorders.....	10	.03	6	.10	.75	.23	
	178	.43	84	.49	3.60	.25	

Rates and Ratios by Diagnosis—MORBIDITY

	58	.11	21	.23	1.69	.25
IV. Diseases of the blood and blood-forming organs.....	1,149	5.04	980	11.81	86.89	1.67
V. Mental, psychoneurotic, and personality disorders.....						
Schizophrenic disorders (dementia praecox).....	101	.50	98	3.59	26.44	1.10
All other psychoses.....	49	.19	37	.95	7.01	.53
Anxiety reaction without mention of somatic symptoms.....	173	.77	150	1.04	7.62	.41
Dissociative and conversion reaction.....	32	.14	26	.26	1.91	.21
Depressive reaction.....	126	.57	110	1.67	12.28	.59
Psychoneuroses with somatic symptoms (somatization reaction).....	73	.32	61	.46	3.35	.35
All other psychoneurotic disorders.....	23	.09	18	.26	1.93	.28
Pathological personality.....	95	.41	80	.67	4.97	.32
Immature personality.....	299	1.31	256	1.98	14.57	.49
Alcoholism, chronic and unspecified.....	66	.23	45	.28	2.09	.24
Other drug addiction.....	(*0)	(*0)	(*0)	(*0)	(*0)	(*0)
Primary childhood behavior disorders.....	1	(*0)	1	(*0)	.03	.01
Mental deficiency and learning defects.....	1	(*0)	(*0)	.01	.10	.05
Transient personality disorders.....	100	.47	91	.53	3.86	.31
All other disorders of character, behavior, and intelligence.....	10	.03	6	.10	.73	.16
VI. Diseases of the nervous system and sense organs.....	1,097	3.67	714	5.16	37.94	.98
Vascular lesions affecting central nervous system.....	18	.06	11	.24	1.79	.27
Meningitis, except meningococcal and tuberculous.....	14	.06	12	.08	.55	.08
Encephalitis, myelitis, and encephalomyelitis (except acute epidemic).....	9	.02	4	.07	.52	.12
Epilepsy.....	59	.25	49	.52	3.84	.32
Migraine.....	30	.12	24	.06	.41	.05
Other diseases of central nervous system.....	24	.07	14	.29	2.13	.31
Diseases of nerves and peripheral ganglia.....	191	.65	127	1.14	8.37	.47
Conjunctivitis and ophthalmia.....	39	.15	29	.04	.32	.03
Other inflammatory diseases of eye.....	83	.32	61	.44	3.26	.32
Refractive errors.....	21	.04	7	.02	.15	.04
All other diseases of eye.....	227	.71	139	1.05	7.75	.43
Blindness.....	8	.01	2	.04	.33	.10
Otitis externa.....	32	.10	20	.05	.35	.05
Otitis media.....	106	.35	69	.30	2.21	.18
Other diseases of ear and mastoid process.....	125	.51	99	.41	3.02	.18
Deafness and impaired hearing.....	110	.24	47	.40	2.94	.28
VII. Diseases of the circulatory system.....	1,266	4.53	882	8.24	60.63	1.29
Rheumatic fever.....	7	.03	6	.11	.78	.15
Chronic rheumatic heart disease.....	26	.09	17	.27	2.00	.28

MORBIDITY—Rates and Ratios by Diagnosis

APPENDIX TABLE 35.—Incidence Rates, Admission Rates, and Noneffective Ratios for Specified Diagnosis Categories—All Air Force Personnel, World-wide: 1963

[For explanation of the standard error of the noneffective ratio, see Appendix Note 8. The sum of rates and ratios may differ slightly from intermediate or grand totals due to automatic machine rounding]

Diagnosis category	Incidence (total diagnoses reported)		Admissions (sole and primary diagnoses)		Noneffectiveness		
	Cases per year per 100,000	Percent of total	Percent of total	Admissions per year per 100,000	Percent of total days lost	Ratio per 100,000	Standard error of non-effective ratio
<b>VII. Diseases of the circulatory system—Continued</b>							
Arteriosclerotic heart disease, including coronary disease	260	.87		170	3.35	24.64	.91
Other chronic and degenerative heart disease	8	.02		5	.07	.51	.13
Acute and sub-acute endocarditis, acute myocarditis, and pericarditis	12	.04		9	.09	.68	.12
Functional, other, and unspecified diseases of heart	67	.20		39	.24	1.74	.21
Hypertensive disease	273	.88		172	1.33	9.79	.46
Varicose veins of lower extremities	53	.22		43	.26	1.89	.14
Hemorrhoids	349	1.45		283	1.08	7.92	.21
Varicocele	19	.06		12	.06	.43	.06
Phlebitis and thrombophlebitis	66	.27		52	.33	2.46	.20
Other diseases of circulatory system	126	.38		74	1.06	7.80	.59
	4,357	19.96		3,885	8.95	65.88	.77
<b>VIII. Diseases of the respiratory system</b>							
Acute upper respiratory infections	2,254	10.71		2,084	2.95	21.73	.36
Influenza	428	2.15		419	.56	4.09	.08
Pneumonia, all forms	552	2.60		506	1.90	13.95	.32
Acute bronchitis	364	1.63		317	.60	4.44	.12
Bronchitis, chronic and unqualified	95	.29		57	.50	3.69	.30
Hypertrophy of tonsils and adenoids	116	.55		108	.27	2.00	.08
Pertonsillar abscess (quinsy)	28	.12		24	.05	.35	.03
Chronic sinusitis	46	.10		20	.09	.67	.08
Deflected nasal septum	127	.57		111	.38	2.82	.13
Other diseases of nose and throat	102	.34		67	.27	1.97	.13
Pleurisy	60	.24		48	.22	1.60	.23
Spontaneous pneumothorax	75	.36		71	.46	3.36	.20
Other chronic interstitial pneumonia	6	.01		3	.05	.38	.12
Bronchiectasis	9	.03		6	.07	.49	.10
All other diseases of respiratory system	95	.23		45	.59	4.35	.37
	3,355	14.62		2,845	11.88	87.45	1.12
<b>IX. Diseases of the digestive system</b>							
Dental diseases and conditions	416	1.52		297	.50	3.67	.13

Rates and Ratios by Diagnosis—MORBIDITY

Diseases of buccal cavity.....	55	.22	43	.13	.97	.08
Diseases of esophagus.....	24	.07	13	.07	.52	.10
Ulcer of stomach and duodenum.....	379	1.69	329	2.90	21.32	.61
Gastritis and duodenitis.....	188	.86	168	.38	2.78	.16
Other diseases of stomach and duodenum.....	8	.02	4	.05	.38	.09
Acute appendicitis (incl. appendicitis unqualified).....	220	1.11	216	1.17	8.63	.26
Inguinal hernia.....	332	1.50	292	1.69	12.46	.29
Other hernia.....	175	.64	125	.95	7.02	.29
Gastroenteritis and colitis, except ulcerative, age 4 weeks and over.....	1,016	5.08	989	1.07	7.88	.18
Anal fissure and fistula.....	69	.27	52	.28	2.09	.15
Abscess of anal and rectal regions.....	74	.36	69	.24	1.77	.10
Other diseases of intestine and peritoneum.....	221	.69	134	1.16	8.50	.51
Diseases of liver.....	58	.15	29	.48	3.55	.39
Diseases of gallbladder and biliary ducts.....	93	.35	67	.62	4.53	.26
Diseases of pancreas.....	26	.09	18	.19	1.37	.21
<b>X. Diseases of the genito-urinary system.....</b>	<b>1,475</b>	<b>5.63</b>	<b>1,096</b>	<b>4.13</b>	<b>30.36</b>	<b>.60</b>
Nephritis and nephrosis.....	33	.12	22	.40	2.93	.32
Infections of kidney.....	106	.40	78	.27	1.96	.15
Calculi of kidney and ureter.....	190	.86	168	.62	4.58	.22
Cystitis.....	79	.24	46	.12	.86	.07
Nongonococcal urethritis (nonvenereal).....	34	.09	18	.05	.34	.04
All other diseases of urinary system.....	81	.25	49	.36	2.66	.24
Prostatitis.....	157	.51	100	.30	2.24	.11
Orchitis and epididymitis.....	238	.96	186	.66	4.84	.17
Redundant prepuce and phimosis.....	278	1.31	256	.57	4.16	.11
All other diseases of male genital organs.....	216	.64	125	.65	4.76	.26
Gynecomastia and mastitis, male.....	20	.08	16	.06	.43	.06
Other diseases of breast; diseases of ovary, Fallopian tube, and parametrium.....	15	.06	11	.04	.28	.04
Diseases of uterus.....	6	.02	4	.01	.05	.01
Disorders of menstruation.....	22	.08	16	.04	.26	.04
Other female conditions and diseases of genital organs.....	1	(*)	(*)	(*)	.01	.01
<b>XI. Deliveries and complications of pregnancy, childbirth and the puerperium.....</b>	<b>15</b>	<b>.07</b>	<b>15</b>	<b>.04</b>	<b>.30</b>	<b>.04</b>
<b>XII. Diseases of the skin and cellular tissue.....</b>	<b>1,169</b>	<b>4.61</b>	<b>897</b>	<b>2.90</b>	<b>21.37</b>	<b>.42</b>
Furuncle and carbuncle.....	83	.37	72	.16	1.20	.07
Cellulitis and abscess.....	597	2.53	493	1.34	9.85	.23
Other infections of skin and subcutaneous tissue.....	96	.31	61	.17	1.22	.08
Seborrheic dermatitis.....	8	.02	3	.01	.11	.03
Eczema.....	9	.03	7	.05	.34	.06

APPENDIX TABLE 35.—Incidence Rates, Admission Rates, and Noneffective Ratios for Specified Diagnosis Categories—All Air Force Personnel, World-wide: 1963

[For explanation of the standard error of the noneffective ratio, see Appendix Note 8. The sum of rates and ratios may differ slightly from intermediate or grand totals due to automatic machine rounding]

Diagnosis category	Incidence (total diagnoses reported)		Admissions (sole and primary diagnoses)		Noneffectiveness		
	Cases per year per 100,000	Percent of total	Admissions per year per 100,000	Percent of total days lost	Ratio per 100,000	Standard error of non-effective ratio	
<b>XII. Disease of the skin and cellular tissue—Continued</b>							
Occupational and other dermatitis.....	64	.25	48	.15	1.11	.10	
Erythematous conditions.....	20	.09	17	.09	.67	.09	
Psoriasis and similar conditions.....	25	.07	14	.10	.74	.11	
Pruritus and related conditions.....	17	.05	10	.07	.52	.09	
Other hypertrophic and atrophic conditions of skin.....	21	.07	13	.07	.54	.10	
Diseases of nail.....	47	.21	40	.12	.91	.07	
Diseases of sweat and sebaceous glands.....	58	.18	36	.12	.85	.07	
Other diseases of skin.....	124	.43	83	.45	3.33	.23	
	1,902	7.64	1,487	11.46	84.31	1.48	
<b>XIII. Diseases of the bones and organs of movement.....</b>							
Rheumatoid arthritis and allied conditions.....	35	.14	27	.39	2.85	.31	
Arthritis, all other forms.....	221	.68	132	1.61	11.82	.67	
Rheumatism.....	115	.55	107	.30	2.20	.13	
Malunion and nonunion of fracture.....	39	.14	28	.38	2.77	.33	
Osteomyelitis, periostitis, osteitis, osteochondrosis, and other diseases of bone.....	64	.24	46	.61	4.48	.49	
Internal derangement of knee joint.....	135	.64	124	1.25	9.22	.39	
Displacement of intervertebral disc.....	172	.81	158	2.05	15.12	.56	
Affection of sacroiliac joint.....	19	.09	18	.09	.69	.12	
Ankylosis and other diseases of joint.....	169	.55	108	1.11	8.19	.53	
Synovitis, bursitis, and tenosynovitis.....	235	1.03	200	.68	4.99	.24	
Diseases of muscle, tendon, and fascia, n.e.c.....	190	.89	173	.52	3.80	.20	
Residuals and/or recurrences of traumatism, n.e.c.....	295	1.09	211	1.26	9.26	.47	
Other diseases of musculoskeletal system.....	212	.80	155	1.21	8.93	.45	
	166	.54	104	.91	6.73	.40	
<b>XIV. Congenital malformations.....</b>							
	1,864	8.17	1,590	4.59	33.80	.57	
<b>XVI. Symptoms, senility, and ill-defined conditions.....</b>							
Diarrhea, cause unknown.....	22	.10	20	.05	.33	.04	
All other symptoms.....	420	1.66	323	1.18	8.68	.34	

Rates and Ratios by Diagnosis—MORBIDITY

Observation for disease.....	1,337	6.12	1,191	3.20	23.56	.43
Drunkness, simple.....	53	.18	34	.03	.24	.02
Ill-defined and unknown causes (incl. senility).....	34	.11	21	.14	1.00	.15
<b>XVII. Accidents, poisonings, and violence.....</b>	<b>3,426</b>	<b>12.67</b>	<b>2,464</b>	<b>14.81</b>	<b>108.99</b>	<b>2.12</b>
<b>XVIII. Supplementary classifications for special admissions.....</b>	<b>286</b>	<b>1.18</b>	<b>230</b>	<b>.97</b>	<b>7.16</b>	<b>.42</b>

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.

†Rates and ratios based on individual medical record data are not identical with the officially reported admission rates and noneffective ratios for which see Table 1 and Appendix Tables 5 and 6.

For explanation of symbols, see p. 52.

Sources: Individual Medical Records.

MORBIDITY—Noneffective Ratios by Command

APPENDIX TABLE 36.—Noneffective Ratios for Selected Diagnosis Classes—All Air Force Personnel, by Command of Assignment: 1963

(Personnel not available for duty because of medical reasons per 100,000 strength)

Command of assignment	All disease and conditions	Infective and parasitic diseases	Neoplasms	Allergic, endocrine system, metabolic and nutritional diseases	Mental, psychoneurotic and personality disorders	Diseases of the nervous system and sense organs	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genitourinary system	Diseases of the skin and cellular tissue	Diseases of the bones and organs of movement	Symptoms and ill-defined conditions	Accidents, poisoning, and violence
All Air Force personnel, world-wide.....	1736	51	35	17	87	38	61	66	87	30	21	84	34	109
Air Defense Command.....	722	41	34	16	81	38	58	64	91	29	21	82	40	111
AF Communications Service.....	573	47	28	15	70	25	35	53	67	25	21	60	27	88
AF Logistics Command <sup>1</sup> .....	1,314	41	51	37	313	82	85	90	113	47	21	126	35	243
Air Force Systems Command.....	925	60	49	18	136	51	99	89	115	35	24	85	35	108
Air Training Command.....	754	58	27	13	135	39	51	86	77	25	27	66	22	104
Air University.....	721	27	35	23	97	36	76	76	111	26	13	75	26	65
Alaskan Air Command.....	768	69	32	19	79	49	53	58	114	27	20	69	38	109
Continental Air Command.....	920	14	21	30	104	55	166	60	141	34	24	135	23	80
Headquarters Command.....	717	62	51	14	78	45	73	70	100	28	16	84	25	64
Headquarters USAF.....	897	32	35	35	17	50	172	66	160	68	21	149	16	56
Military Air Transport Service.....	696	53	34	17	69	31	60	52	87	28	19	79	29	112
Pacific Air Force.....	755	54	41	18	90	37	55	63	76	42	29	77	38	118
Strategic Air Command.....	696	46	33	17	67	37	61	57	85	30	19	88	37	107
Tactical Air Command.....	633	36	38	16	65	35	56	47	71	26	18	74	32	105
USAF Security Service.....	536	45	30	9	47	25	32	57	73	28	20	50	24	87
US Air Forces in Europe.....	877	79	34	20	76	38	64	89	100	34	24	92	49	164
USAF Southern Command.....	1,019	39	46	18	53	81	165	121	103	49	27	73	42	198

†Ratios based on individual medical record data are not identical with the officially reported noneffective ratios for which see Appendix Table 5.

<sup>1</sup> Patients assigned to other commands awaiting PEB separations were put on patient status and assigned to AFLC, January-September.

Source: Individual Medical Records.

Admissions Rates by Command, All Air Force—MORBIDITY

APPENDIX TABLE 37.—Admission Rates for Selected Diagnosis Classes—All Air Force Personnel, by Command of Assignment: 1963

(Admissions per year per 100,000 strength)

Command of assignment	All diseases and conditions	Infective and parasitic diseases	Neoplasms	Allergic, endocrine system, metabolic and nutritional diseases	Mental, psychoneurotic and personality disorders	Diseases of the nervous system and sense organs	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genito-urinary system	Diseases of the skin and cellular tissue	Diseases of the bones and organs of movement	Symptoms and ill-defined conditions	Accidents, poisonings, and violence
Air Force personnel, world-wide.....	119,463	1,401	511	340	980	714	882	3,885	2,845	1,096	897	1,487	1,500	2,464
Air Defense Command.....	20,372	1,163	528	323	957	744	927	4,300	3,084	992	850	1,381	1,786	2,837
AF Communications Service.....	16,301	1,438	437	270	825	523	627	3,223	2,270	1,057	870	1,019	1,324	2,109
Air Force Logistics Command <sup>1</sup> .....	23,411	1,264	501	470	1,795	971	1,123	5,183	3,083	1,325	916	1,844	1,367	3,199
Air Force Systems Command.....	24,206	1,751	558	381	1,052	900	1,253	5,979	3,900	1,172	946	1,662	1,684	2,651
Air Training Command.....	17,990	2,051	435	259	1,404	613	643	4,047	2,287	812	1,066	993	1,062	1,991
Air University.....	16,284	747	345	327	896	514	868	4,837	2,250	1,008	458	1,195	1,195	1,541
Alaskan Air Command.....	21,852	3,666	506	224	1,070	924	846	3,394	3,326	817	836	1,245	1,575	2,383
Continental Air Command.....	18,360	706	510	628	785	706	1,373	3,531	3,178	1,138	824	1,608	1,138	1,705
Headquarters Command.....	19,947	2,009	482	228	607	607	808	4,536	2,911	786	705	1,406	915	1,705
Headquarters USAF.....	21,898	1,151	460	422	268	978	1,419	4,717	3,586	1,611	748	2,359	1,016	2,339
Military Air Transport Service.....	16,690	1,080	464	309	729	558	843	3,175	2,450	921	749	1,274	1,307	2,317
Pacific Air Forces.....	19,930	1,194	471	401	1,060	798	912	3,602	2,710	1,759	1,219	1,308	1,583	2,628
Strategic Air Command.....	18,777	1,124	541	375	876	712	940	3,162	2,894	1,143	829	1,622	1,764	2,492
Tactical Air Command.....	16,786	855	550	301	678	658	787	2,987	2,632	976	819	1,293	1,635	2,345
USAF Security Service.....	18,554	1,216	526	259	785	614	676	4,204	2,776	1,213	975	1,001	1,487	2,447
U.S. Air Forces in Europe.....	26,662	2,102	569	457	1,205	1,004	996	5,705	3,532	1,354	999	1,834	2,335	3,992
USAF Southern Command.....	23,893	1,089	363	726	1,452	1,089	1,525	5,374	2,760	1,307	1,307	2,251	2,179	2,397

† Rates based on individual medical record data are not identical with the officially reported admission rates for which see Appendix Table 6.  
<sup>1</sup> Patients assigned to other commands awaiting PEB separations were put on patient status and assigned to AFLC, January-September.  
 Source: Individual Medical Records.

MORBIDITY—Admission Rates by Command, Officers

APPENDIX TABLE 38.—Admission Rates for Selected Diagnosis Classes—Air Force Officers, by Command of Assignment: 1963  
(Admissions per year per 100,000 strength)

Command of assignment	All diseases and conditions	Infective and parasitic diseases	Neoplasms	Allergic, endocrine system, metabolic and nutritional diseases	Mental, psychoneurotic and personality disorders	Diseases of the nervous system and sense organs	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genitourinary system	Diseases of the skin and cellular tissue	Diseases of the bones and organs of movement	Symptoms and ill-defined conditions	Accidents, poisonings, and violence
Air Force officers.....	17,387	1,065	547	372	452	702	1,271	3,534	2,828	1,008	518	1,384	1,510	1,461
Air Defense Command.....	17,255	722	534	419	402	755	1,568	3,653	2,898	763	484	1,264	1,404	1,691
AF Communications Service.....	18,632	1,044	812	541	464	966	966	3,518	2,474	1,546	464	1,160	2,010	1,121
Air Force Logistics Command <sup>1</sup> .....	24,375	1,396	669	582	989	844	1,920	6,254	3,490	1,193	698	2,036	1,832	1,832
Air Force Systems Command.....	18,929	1,319	492	402	603	805	1,464	4,917	3,006	1,095	492	1,252	1,464	1,252
Air Training Command.....	17,006	1,389	589	316	582	737	1,010	3,403	2,925	989	526	1,249	1,193	1,740
Air University.....	11,375	496	210	180	361	496	601	3,140	1,818	887	255	571	1,007	977
Alaskan Air Command.....	23,382	2,859	483	97	396	676	1,932	3,865	2,705	1,063	773	966	2,029	1,256
Continental Air Command.....	19,294	441	441	992	441	992	1,985	2,977	3,859	1,323	772	2,205	992	1,213
Headquarters Command.....	12,294	1,137	419	239	269	434	1,062	2,498	2,184	733	284	1,062	897	778
Headquarters USAF.....	18,318	1,025	420	263	158	841	1,629	3,942	3,390	1,577	526	1,524	920	1,104
Military Air Transport Service.....	17,092	982	487	369	453	403	1,150	3,207	2,695	1,024	512	1,226	1,167	1,595
Pacific Air Forces.....	20,672	1,057	503	624	485	970	1,109	4,176	3,604	1,386	710	1,525	1,837	1,889
Strategic Air Command.....	16,302	947	630	366	434	668	1,314	2,749	2,603	1,162	521	1,411	1,655	1,457
Tactical Air Command.....	15,168	760	620	339	327	667	1,017	2,631	2,701	900	468	1,006	1,731	1,438
USAF Security Service.....	16,037	872	581	116	232	581	1,395	3,312	2,673	1,162	232	1,104	1,859	1,569
U.S. Air Forces in Europe.....	22,558	1,717	414	438	451	938	1,279	5,542	3,264	1,340	694	1,608	2,180	2,229
USAF Southern Command.....	15,556	370	370	—	—	1,111	1,852	4,444	3,704	1,111	370	1,481	370	370

<sup>1</sup> Patients assigned to other commands awaiting PEB separations were put on patient status and assigned to AFLC, January-September.  
Source: Individual Medical Records.

APPENDIX TABLE 39.—Admission Rates for Selected Diagnosis Classes—Air Force Airmen, by Command of Assignment: 1963  
(Admissions per year per 100,000 strength)

Command of assignment	All diseases and conditions	Infective and parasitic diseases	Neoplasms	Allergic, endocrine system, metabolic and nutritional diseases	Mental, psychoneurotic and personality disorders	Diseases of the nervous system and sense organs	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genitourinary system	Diseases of the skin and cellular tissue	Diseases of the bones and organs of movement	Symptoms and defined conditions	Accidents, poisonings, and violence
All Air Force Airmen.....	19,841	1,462	505	335	1,077	717	811	3,949	2,848	1,096	966	1,506	1,604	2,647
Air Defense Command.....	20,787	1,222	527	310	1,031	743	842	4,488	3,108	1,022	899	1,396	1,837	2,989
AF Communications Service.....	16,149	1,463	413	252	849	494	605	3,204	2,257	1,025	897	1,010	1,280	2,174
Air Force Logistics Command <sup>1</sup> .....	23,155	1,228	456	440	2,009	1,004	912	4,898	2,975	1,360	973	1,792	1,244	3,562
Air Force Systems Command.....	26,642	1,950	588	371	2,259	944	1,156	6,470	4,313	1,207	1,156	1,852	1,785	3,297
Air Training Command.....	18,126	2,143	413	251	1,519	596	592	4,137	2,198	788	1,141	957	1,044	2,026
Air University.....	24,340	1,159	567	567	1,776	543	1,307	7,620	2,959	1,208	789	1,332	1,504	2,466
Alaskan Air Command.....	21,680	3,752	508	238	1,146	952	724	3,341	3,345	789	843	1,276	1,525	2,509
Continental Air Command.....	17,844	853	548	426	974	548	1,035	3,837	2,801	1,035	853	1,279	1,218	2,071
Headquarters Command.....	26,353	2,380	509	223	751	681	700	5,403	3,220	808	885	1,553	923	2,100
Headquarters USAF.....	31,560	1,489	567	851	567	1,348	851	6,809	4,113	1,702	1,348	4,610	1,277	5,674
Military Air Transport Service.....	16,808	1,100	459	297	785	589	780	3,169	2,401	900	797	1,284	1,335	2,464
Pacific Air Forces.....	19,806	1,217	465	364	1,156	769	879	3,506	2,561	1,821	1,304	1,272	1,541	2,752
Strategic Air Command.....	19,203	1,155	526	377	952	719	875	3,233	2,944	1,140	882	1,659	1,783	2,670
Tactical Air Command.....	17,066	871	538	295	739	656	747	3,049	2,620	989	880	1,343	1,619	2,502
USAF Security Service.....	18,723	1,239	522	269	822	616	627	4,264	2,783	1,216	1,025	994	1,462	2,506
U.S. Air Forces in Europe.....	27,302	2,162	593	460	1,322	1,015	952	5,730	3,574	1,357	1,047	1,870	2,360	4,267
USAF Southern Command.....	25,926	1,265	361	903	1,807	1,084	1,445	5,601	2,529	1,355	1,536	2,439	2,620	2,891

<sup>1</sup> Patients assigned to other commands awaiting PEB separations were put on patient status and assigned to AFLC, January-September.  
Source: Individual Medical Records.

MORBIDITY—Flyer Noneffectiveness, Rated Officers (Flyers)

APPENDIX TABLE 40.—Noneffectiveness due to Temporary Removals from Flying Duty for Selected Diagnosis Classes—Air Force Rated Officers (Flyers) by Command of Assignment: 1963

(Rates are average number of noneffectives per 100,000 rated officer strength, based only on cases returned to flying duty)

Command of assignment or age	All diseases and conditions	Infective and parasitic diseases	Neoplasms	Allergic, endocrine system, metabolic and nutritional diseases	Mental, psychoneurotic and personality disorders	Diseases of the nervous system and sense organs	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genitourinary system	Diseases of the skin and cellular tissue	Diseases of the bones and organs of movement	Symptoms and ill-defined conditions	Accidents, poisonings, and violence
All Air Force rated officers.....	1,662	84	45	45	32	98	71	394	253	88	38	101	129	261
Air Defense Command.....	1,433	71	40	51	16	71	74	376	171	45	35	88	82	290
Air Force Logistics Command.....	1,741	84	(*21)	45	(*21)	56	53	466	417	86	46	86	183	164
Air Force Systems Command.....	1,545	79	13	73	(*90)	65	41	316	386	109	22	62	109	179
Air Training Command.....	1,526	79	24	27	43	178	73	420	195	47	28	98	82	217
Air University.....	1,320	107	(*13)	31	24	35	93	229	276	137	31	26	149	167
Continental Air Command.....	1,801	49	(*17)	(*9)	(*4)	291	—	228	359	(*50)	55	63	501	175
Hq Command and Hq USAF.....	795	35	32	12	17	49	57	79	244	45	26	51	69	81
Military Air Transport Service.....	2,026	81	42	47	17	45	66	621	342	115	64	131	101	296
Pacific Air Force.....	2,046	94	35	43	(*7)	156	63	450	253	180	49	152	213	352
Strategic Air Command.....	1,705	89	52	52	38	115	76	394	223	93	35	128	113	269
Tactical Air Command.....	1,888	101	45	25	27	137	58	400	266	81	39	82	244	371
U.S. Air Force in Europe.....	1,906	106	136	60	31	77	96	488	208	59	44	60	221	299
All other commands.....	1,434	29	48	51	83	37	59	241	278	66	51	37	67	334
20-24 years.....	1,536	93	47	22	78	50	22	519	149	64	33	46	74	322
25-29 years.....	1,661	91	57	29	31	71	52	511	172	81	40	76	108	323
30-34 years.....	1,595	112	46	34	40	93	27	432	178	103	34	85	118	260
35-39 years.....	1,779	100	24	59	19	107	132	345	311	100	36	117	153	266
40 years and over.....	1,682	51	47	65	23	124	87	288	352	90	42	131	149	207

For explanation of symbols, see p. 52.  
Source: AF Form 1042.

Rates of Temporary Removal from Flying Duty—MORBIDITY

APPENDIX TABLE 41.—Rates of Temporary Removal From Flying Duty for Selected Diagnosis Classes—Air Force Rated Officers (Flyers)  
By Command of Assignment: 1963

(Rates are numbers per year per 100,000 rated officer strength, based only on cases returned to flying duty)

Command of assignment or age	All diseases and conditions	Infective and parasitic diseases	Neoplasms	Allergic, endocrine system, metabolic and nutritional diseases	Mental, psychoneurotic and personality disorders	Diseases of the nervous system and sense organs	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Diseases of the genitourinary system	Diseases of the skin and cellular tissue	Diseases of the bones and organs of movement	Symptoms and ill-defined conditions	Accidents, poisonings, and violence
All Air Force rated officers.....	41,428	1,725	445	621	196	1,885	753	18,866	5,230	1,583	1,232	1,639	2,256	4,504
Air Defense Command.....	39,789	1,485	570	690	155	1,743	811	18,332	4,454	1,018	1,260	1,554	1,905	5,748
Air Force Logistics Command.....	41,638	1,379	(*259)	690	(*431)	1,724	1,293	18,534	4,483	1,638	1,121	1,552	3,276	4,741
Air Force Systems Command.....	29,850	1,392	164	928	(*109)	1,282	737	13,179	3,902	1,201	737	1,146	2,183	2,647
Air Training Command.....	45,290	1,977	504	560	187	2,015	709	23,671	5,298	1,063	1,007	1,380	2,238	4,234
Air University.....	18,240	639	(*152)	365	213	822	335	7,613	2,284	1,035	914	792	1,096	1,827
Continental Air Command.....	27,928	1,351	(*225)	(*450)	(*225)	1,577	—	10,360	4,054	(*225)	1,577	1,802	1,577	4,279
Hq Command and Hq USAF.....	12,373	452	429	135	(*68)	519	542	3,116	2,393	881	226	790	1,264	1,355
Military Air Transport Service.....	68,125	2,429	588	1,006	248	2,142	1,032	32,197	9,731	2,560	2,364	2,273	3,265	6,570
Pacific Air Forces.....	53,244	2,454	471	908	(*168)	3,059	639	20,538	6,992	2,837	1,815	2,454	4,773	4,504
Strategic Air Command.....	39,666	1,807	467	566	201	2,012	746	17,663	5,037	1,553	1,070	1,914	1,922	4,545
Tactical Air Command.....	45,088	1,289	327	472	200	2,414	599	22,109	4,756	2,051	1,452	1,470	3,086	5,555
U.S. Air Forces in Europe.....	51,405	2,862	409	639	307	2,478	971	25,549	5,983	1,456	1,533	1,124	2,478	5,416
All other commands.....	26,512	1,244	565	509	(*170)	848	678	11,023	3,053	1,470	848	848	1,244	2,883
20-24 years.....	59,300	2,648	853	788	219	2,276	416	20,190	6,805	2,166	1,554	875	1,816	6,368
25-29 years.....	56,443	2,648	523	620	168	2,357	626	28,573	4,680	1,679	1,615	1,311	1,996	6,349
30-34 years.....	45,069	2,151	406	713	172	2,163	504	22,187	2,955	1,720	1,364	1,671	1,960	4,762
35-39 years.....	35,995	1,326	283	624	244	1,794	1,024	15,424	2,486	1,560	1,141	1,745	2,096	4,007
40 years and over.....	27,987	1,241	400	526	206	1,338	955	9,737	2,154	1,321	871	1,926	1,943	2,974

For explanation of symbols, see p. 52.  
Source: AF Form 1042.

**DISABILITY SEPARATIONS—Age**

APPENDIX TABLE 42.—*Separations and Retirements for Physical Disability Under the Physical Evaluation System, by Underlying Cause and Age—All Air Force Personnel, World-wide: 1963*

Underlying cause	All ages	Age group								
		Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over
All diseases and conditions.....	1,916	137	460	272	249	207	243	231	75	42
I. Infective and parasitic diseases.....	76	12	29	7	9	3	6	5	4	1
Tuberculosis of respiratory system.....	61	9	25	3	8	3	5	4	3	1
Tuberculosis, other forms.....	5	1	2	1	—	—	—	1	—	—
Venereal diseases.....	—	—	—	—	—	—	—	—	—	—
Poliomyelitis.....	—	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases.....	10	2	2	3	1	—	1	—	1	—
II. Neoplasms.....	154	8	27	19	21	14	28	21	10	6
Malignant neoplasms.....	146	6	26	17	21	12	28	21	9	6
Benign and unspecified neoplasms.....	8	2	1	2	—	2	—	—	1	—
III. Allergic, endocrine system, metabolic, and nutritional diseases.....	72	7	18	11	8	6	14	4	3	1
Asthma.....	15	2	5	4	—	3	—	1	—	—
Other allergic disorders.....	—	—	—	—	—	—	—	—	—	—
Diabetes mellitus.....	47	5	11	4	7	2	13	2	3	—
Diseases of other endocrine glands.....	4	—	1	3	—	—	—	—	—	—
Other metabolic diseases.....	6	—	1	—	1	1	1	1	—	1
VI. Diseases of the blood and blood-forming organs.....	—	—	—	—	—	—	—	—	—	—
V. Mental, psychoneurotic, and personality disorders.....	700	52	193	135	128	85	55	51	10	—
Schizophrenic disorders (dementia praecox).....	388	38	125	79	71	48	16	9	2	—
Manic-depressive reaction.....	40	1	6	8	7	5	5	7	1	—
Other psychoses.....	43	1	7	4	13	4	3	8	3	—
Anxiety reaction without mention of somatic symptoms.....	43	2	8	14	7	2	7	2	1	—
Dissociative and conversion reaction.....	10	—	4	1	4	—	—	1	—	—
Obsessive-compulsive reaction.....	9	—	3	3	1	1	—	1	—	—
Neurotic-depressive reaction.....	135	7	32	21	19	21	20	13	2	—
Somatization reaction.....	15	1	3	1	5	2	1	2	—	—
Other, mixed, and unspecified psychoneurotic disorders.....	5	—	1	1	—	2	—	1	—	—
Disorders of character, behavior, and intelligence.....	21	2	4	3	1	—	3	7	1	—
VI. Diseases of the nervous system and sense organs.....	160	14	42	19	15	17	30	14	7	2
Vascular lesions affecting central nervous system.....	13	1	2	—	1	1	4	3	1	—

Age-DISABILITY SEPARATIONS

APPENDIX TABLE 42.—Separations and Retirements for Physical Disability Under the Physical Evaluation System, by Underlying Cause and Age—All Air Force Personnel, World-wide: 1963—Continued

Underlying cause	All ages	Age group								
		Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over
<b>VI. Diseases of the nervous system and sense organs—Continued</b>										
Multiple sclerosis.....	4	—	2	—	1	1	—	—	—	—
Epilepsy.....	27	3	12	4	3	—	4	1	—	—
Diseases of nerves and peripheral ganglia.....	32	5	6	6	3	5	5	1	1	—
Other diseases of the nervous system.....	24	3	6	3	1	2	7	1	1	—
Inflammatory diseases of eye.....	7	—	3	2	1	—	1	—	—	—
Other diseases and conditions of the eye.....	36	2	10	1	3	6	4	5	3	2
Diseases of ear and mastoid process.....	17	—	1	3	2	2	5	3	1	—
<b>VII. Diseases of the circulatory system.....</b>	<b>249</b>	<b>4</b>	<b>8</b>	<b>16</b>	<b>18</b>	<b>35</b>	<b>52</b>	<b>77</b>	<b>23</b>	<b>16</b>
Rheumatic fever with or without heart involvement.....	2	1	—	1	—	—	—	—	—	—
Chronic rheumatic heart disease.....	15	—	4	4	2	2	—	2	—	1
Arteriosclerotic and degenerative heart disease.....	160	—	2	7	9	26	40	57	11	8
Other diseases of heart.....	5	1	—	—	2	1	1	—	—	—
Hypertensive disease.....	21	—	—	2	2	1	6	7	2	1
General arteriosclerosis.....	21	—	1	—	1	1	3	4	7	4
Other diseases of the circulatory system.....	25	2	1	2	2	4	2	7	3	2
<b>VIII. Diseases of the respiratory system.....</b>	<b>49</b>	<b>4</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>9</b>	<b>15</b>	<b>3</b>	<b>6</b>
<b>IX. Diseases of the digestive system.....</b>	<b>68</b>	<b>3</b>	<b>17</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>8</b>	<b>11</b>	<b>6</b>	<b>2</b>
Ulcer of stomach and duodenum.....	23	1	8	1	2	3	4	3	—	1
Other diseases of digestive system.....	45	2	9	5	7	3	4	8	6	1
<b>X. Diseases of the genito-urinary system.....</b>	<b>25</b>	<b>1</b>	<b>9</b>	<b>5</b>	<b>—</b>	<b>2</b>	<b>4</b>	<b>—</b>	<b>2</b>	<b>2</b>
Nephritis and nephrosis.....	15	1	4	4	—	—	4	—	—	2
Diseases of kidney and ureter, excluding nephritis.....	7	—	3	1	—	2	—	—	1	—
Other diseases of the genito-urinary system.....	3	—	2	—	—	—	—	—	1	—
<b>XI. Deliveries and complications of pregnancy, childbirth and the puerperium.....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>XII. Diseases of the skin and cellular tissue.....</b>	<b>12</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>XIII. Diseases of the bones and organs of movement.....</b>	<b>166</b>	<b>11</b>	<b>37</b>	<b>20</b>	<b>18</b>	<b>22</b>	<b>20</b>	<b>27</b>	<b>5</b>	<b>6</b>
Arthritis and rheumatism, except rheumatic fever.....	71	4	15	6	5	9	11	13	3	5

**DISABILITY SEPARATIONS—Age**

**APPENDIX TABLE 42.—Separations and Retirements for Physical Disability Under the Physical Evaluation System, by Underlying Cause and Age—All Air Force Personnel, World-wide: 1963—Continued**

Underlying cause	All ages	Age group								
		Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over
<b>XIII. Diseases of the bones and organs of movement—Continued.</b>										
Osteomyelitis and periostitis.....	6	—	5	—	1	—	—	—	—	—
Other diseases of the bone.....	13	1	3	1	1	3	1	3	—	—
Internal derangement of knee joint.....	1	1	—	—	—	—	—	—	—	—
Displacement of intervertebral disc.....	8	—	—	1	—	1	2	3	—	1
Ankylosis of joint.....	18	2	3	4	2	1	2	4	—	—
Other diseases of joint.....	9	2	2	2	1	1	—	1	—	—
Curvature of spine.....	—	—	—	—	—	—	—	—	—	—
Flatfoot.....	1	1	—	—	—	—	—	—	—	—
Other deformities.....	19	—	3	3	2	4	4	2	1	—
Other diseases of the musculo-skeletal system.....	20	—	6	3	6	3	—	1	1	—
<b>XIV. Congenital malformations.....</b>	<b>15</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>XVI. Symptoms and ill-defined conditions..</b>	<b>23</b>	<b>2</b>	<b>11</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>—</b>	<b>—</b>
<b>XVII. Accidents, poisonings, and violence....</b>	<b>119</b>	<b>16</b>	<b>53</b>	<b>19</b>	<b>12</b>	<b>10</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>—</b>
<b>XVIII. Supplementary classifications for special admissions.....</b>	<b>19</b>	<b>—</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>7</b>	<b>4</b>	<b>—</b>	<b>—</b>

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.  
 For explanation of symbols, see p. 52.  
 Source: Individual Medical Records.

**Length of Service—DISABILITY SEPARATIONS**

**APPENDIX TABLE 43.—Separations and Retirements for Physical Disability Under the Physical Evaluation System, by Underlying Cause and Present Continuous Length of Active Military Service—All Air Force Personnel, World-wide: 1963**

Underlying cause	All personnel	Present continuous length of service							
		Under 1 month	1-2 months	3-5 months	6-11 months	1 year	2 years	3 years	4 or more years
All diseases and conditions.....	1 1,916	14	22	27	72	147	173	116	1,343
I. Infective and parasitic diseases.....	2 76	2	1	3	3	11	10	5	40
Tuberculosis of respiratory system.....	2 61	1	—	3	3	9	8	4	32
Tuberculosis, other forms.....	5	—	—	—	—	1	1	1	2
Venereal diseases.....	—	—	—	—	—	—	—	—	—
Poliomyelitis.....	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases.....	10	1	1	—	—	1	1	—	6
II. Neoplasms.....	154	2	—	1	4	7	8	9	123
Malignant neoplasms.....	146	1	—	1	3	7	7	8	119
Benign and unspecified neoplasms.....	8	1	—	—	1	—	1	1	4
III. Allergic, endocrine system, metabolic, and nutritional diseases.....	72	—	—	1	4	8	7	2	50
Asthma.....	15	—	—	1	2	—	4	—	8
Other allergic disorders.....	—	—	—	—	—	—	—	—	—
Diabetes mellitus.....	47	—	—	—	2	7	2	2	34
Diseases of other endocrine glands.....	4	—	—	—	—	—	1	—	3
Other metabolic diseases.....	6	—	—	—	—	1	—	—	5
IV. Diseases of the blood and blood-forming organs.....	—	—	—	—	—	—	—	—	—
V. Mental, psychoneurotic, and personality disorders.....	2 709	3	13	10	31	62	85	44	460
Schizophrenic disorders (dementia praecox).....	388	1	8	1	19	48	55	31	225
Manic-depressive reaction.....	2 40	—	1	1	2	—	—	1	34
Other psychoses.....	43	—	—	1	1	4	2	2	33
Anxiety reaction without mention of somatic symptoms.....	43	1	1	—	2	1	3	2	33
Dissociative and conversion reaction.....	10	1	—	—	—	1	1	1	6
Obsessive-compulsive reaction.....	9	—	—	1	1	1	1	—	5
Neurotic-depressive reaction.....	135	—	2	4	3	7	18	5	96
Somatization reaction.....	15	—	—	1	1	—	4	—	9
Other, mixed, and unspecified psychoneurotic disorders.....	5	—	—	—	—	—	1	—	4
Disorders of character, behaviour, and intelligence.....	21	—	1	1	2	—	—	2	15
VI. Diseases of the nervous system and sense organs.....	160	2	—	3	6	14	14	12	109
Vascular lesions affecting central nervous system.....	13	—	—	—	1	—	—	1	11

See footnotes at end of table.

**DISABILITY SEPARATIONS—Length of Service**

**APPENDIX TABLE 43.—Separations and Retirements for Physical Disability Under the Physical Evaluation System, Underlying Cause and Present Continuous Length of Active Military Service—All Air Force Personnel, World-wide: 1963—Continued**

Underlying cause	All personnel	Present continuous length of service							
		Under 1 month	1-2 months	3-5 months	6-11 months	1 year	2 years	3 years	4 or more years
<b>VI. Diseases of the nervous system and sense organs—Continued</b>									
Multiple sclerosis.....	4	—	—	—	—	1	—	1	2
Epilepsy.....	27	1	—	2	1	5	3	1	14
Diseases of nerves and peripheral ganglia.....	32	—	—	—	2	4	2	2	22
Other diseases of the nervous system...	24	1	—	—	—	3	5	1	14
Inflammatory diseases of eye.....	7	—	—	—	—	—	—	3	4
Other diseases and conditions of the eye.	36	—	—	1	2	1	3	3	26
Diseases of ear and mastoid process....	17	—	—	—	—	—	1	—	16
<b>VII. Diseases of the circulatory system.....</b>	<b>249</b>	<b>2</b>	<b>—</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>7</b>	<b>236</b>
Rheumatic fever with or without heart involvement.....	2	1	—	—	—	—	—	—	1
Chronic rheumatic heart disease.....	15	—	—	—	—	—	1	3	11
Arteriosclerotic and degenerative heart disease.....	160	—	—	1	—	—	—	2	157
Other diseases of heart.....	5	1	—	—	—	—	—	—	4
Hypertensive disease.....	21	—	—	—	—	—	—	—	21
General arteriosclerosis.....	21	—	—	—	—	—	—	1	20
Other diseases of the circulatory system.	25	—	—	1	—	—	1	1	22
<b>VIII. Diseases of the respiratory system.....</b>	<b>49</b>	<b>—</b>	<b>2</b>	<b>—</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>42</b>
<b>IX. Diseases of the digestive system.....</b>	<b>68</b>	<b>1</b>	<b>—</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>8</b>	<b>6</b>	<b>45</b>
Ulcer of stomach and duodenum.....	23	—	—	1	2	2	3	2	13
Other diseases of digestive system.....	45	1	—	2	—	1	5	4	32
<b>X. Diseases of the genito-urinary system.....</b>	<b>25</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>2</b>	<b>—</b>	<b>3</b>	<b>19</b>
Nephritis and nephrosis.....	15	—	—	—	—	2	—	—	13
Diseases of kidney and ureter, excluding nephritis.....	7	—	—	—	—	—	—	2	5
Other diseases of the genito-urinary system.....	3	—	—	1	—	—	—	1	1
<b>XI. Deliveries and complications of pregnancy, childbirth, and the puerperium.....</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>XII. Diseases of the skin and cellular tissue.....</b>	<b>12</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>2</b>	<b>8</b>
<b>XIII. Diseases of the bones and organs of movement.....</b>	<b>166</b>	<b>1</b>	<b>3</b>	<b>—</b>	<b>7</b>	<b>15</b>	<b>11</b>	<b>8</b>	<b>121</b>
Arthritis and rheumatism, except rheumatic fever.....	71	1	2	—	3	5	5	4	51
Osteomyelitis and periostitis.....	6	—	—	—	—	1	1	—	4
Other diseases of the bone.....	13	—	—	—	1	—	—	3	9
Internal derangement of knee joint.....	1	—	—	—	—	1	—	—	—

## Length of Service—DISABILITY SEPARATIONS

**APPENDIX TABLE 43.—Separations and Retirements for Physical Disability Under the Physical Evaluation System  
Underlying Cause and Present Continuous Length of Active Military Service—All Air Force Personnel,  
World-wide: 1963—Continued**

Underlying cause	All per- sonnel	Present continuous length of service							
		Under 1 month	1-2 months	3-5 months	6-11 months	1 year	2 years	3 years	4 or more years
<b>XIII. Diseases of the bones and organs of movement—Continued</b>									
Displacement of intervertebral disc.....	8	—	—	—	—	—	—	—	8
Ankylosis of joint.....	18	—	—	—	—	1	3	—	14
Other diseases of joint.....	9	—	1	—	1	2	—	—	5
Curvature of spine.....	—	—	—	—	—	—	—	—	—
Flatfoot.....	1	—	—	—	—	1	—	—	—
Other deformities.....	19	—	—	—	1	1	1	1	15
Other diseases of the musculoskeletal system.....	20	—	—	—	1	3	1	—	15
<b>XIV. Congenital malformations.....</b>	<b>15</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>6</b>
<b>XVI. Symptoms and ill-defined conditions.....</b>	<b>23</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>10</b>
<b>XVII. Accidents, poisonings, and violence.....</b>	<b>119</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>10</b>	<b>13</b>	<b>21</b>	<b>13</b>	<b>58</b>
<b>XVIII. Supplementary classifications for special admissions.....</b>	<b>19</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>—</b>	<b>1</b>	<b>16</b>

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.

<sup>1</sup> Include 2 separations present length of service unknown, not distributed by group.

<sup>2</sup> Include 1 separation present length of service unknown, not distributed by group.

For explanation of symbols, see p. 52.

Source: Individual Medical Records.

DISABILITY SEPARATIONS—Type of Separation and Flying Status

APPENDIX TABLE 44.—Separations and Retirements for Physical Disability Under the Physical Evaluation System, by Underlying Cause and by Type of Separation—All Air Force Personnel, by Category, World-wide: 1963

Underlying cause	All personnel	Officers						Airmen								
		On flying status			Not on flying status			Retirement			Separation					
		Total	Retirement		Total	Retirement		Total	Retirement		Total	Separation				
			Perma- nent	Tempo- rary		Perma- nent	Tempo- rary		Perma- nent	Tempo- rary		Perma- nent	Tempo- rary			
With- sev- er- ance pay <sup>1</sup>	With- out sev- er- ance pay <sup>2</sup>	With- sev- er- ance pay <sup>1</sup>	With- out sev- er- ance pay <sup>2</sup>	With- sev- er- ance pay <sup>1</sup>	With- out sev- er- ance pay <sup>2</sup>	With- sev- er- ance pay <sup>1</sup>	With- out sev- er- ance pay <sup>2</sup>									
All diseases and conditions.....	1,916	68	33	23	8	4	194	98	52	19	25	1,654	526	643	375	110
I. Infective and parasitic diseases.....	76	1	—	1	—	—	3	—	3	—	—	72	4	66	1	1
Tuberculosis of respiratory system.....	61	1	—	1	—	—	1	—	1	—	—	59	2	56	—	1
Tuberculosis, other forms.....	5	—	—	—	—	—	—	—	—	—	—	5	1	4	—	—
Venereal diseases.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases.....	10	—	—	—	—	—	2	—	2	—	—	8	1	6	1	—
II. Neoplasms.....	154	11	8	2	—	—	20	16	4	—	—	123	70	51	1	1
Malignant neoplasms.....	146	10	7	2	—	—	20	16	4	—	—	116	68	48	—	—
Benign and unspecified neoplasms.....	8	1	1	—	—	—	—	—	—	—	—	7	2	3	1	1
III. Allergic, endocrine system, metabolic, and nutritional diseases.....	72	1	—	—	—	—	7	5	1	1	—	64	23	16	20	5
Asthma.....	15	—	—	—	—	—	1	1	—	—	—	14	3	2	7	2
Other allergic disorders.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diabetes mellitus.....	47	1	—	—	—	—	5	3	1	1	—	41	19	8	11	3
Diseases of other endocrine glands.....	4	—	—	—	—	—	—	—	—	—	—	4	1	2	1	—
Other metabolic diseases.....	6	—	—	—	—	—	1	1	—	—	—	5	—	4	1	—
IV. Diseases of the blood and blood-forming organs.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
V. Mental, psychoneurotic, and personality disorders.....	709	17	1	7	7	2	58	10	15	17	16	634	94	225	243	72
Schizophrenic disorders (dementia praecox).....	388	7	—	5	2	—	24	1	9	8	6	357	32	165	111	49
Manic-depressive reaction.....	40	1	—	—	1	—	4	1	1	1	1	35	8	16	8	3
Other psychoses.....	43	—	—	—	—	—	4	1	1	1	1	39	14	11	14	—
Anxiety reaction without mention of somatic symptoms.....	43	—	—	—	—	—	4	3	—	—	—	39	3	6	25	5
Dissociative and conversion reaction.....	10	—	—	—	—	—	—	—	—	—	—	10	—	1	7	2
Obsessive-compulsive reaction.....	9	2	—	—	1	1	3	1	—	1	1	4	—	1	2	1
Neurotic-depressive reaction.....	135	3	—	1	2	—	16	3	3	5	5	116	26	16	65	9
Somatization reaction.....	15	2	—	1	—	—	1	—	—	1	—	7	3	1	7	1
Other, mixed, and unspecified psychoneurotic disorders.....	5	1	—	—	1	—	—	—	—	—	—	4	—	2	2	—
Disorders of character, behaviour, and intelligence.....	21	1	1	—	—	—	2	—	1	—	1	18	8	6	2	2

**Type of Separation and Flying Status—DISABILITY SEPARATIONS**

	160	7	5	2	—	—	17	10	4	—	3	136	53	50	24	9
<b>VI. Diseases of the nervous system and sense organs.....</b>																
Vascular lesions affecting central nervous system.....	13	2	2	—	—	—	—	—	—	—	—	11	4	7	—	—
Multiple sclerosis.....	4	—	—	—	—	—	—	—	—	—	—	4	—	4	—	—
Epilepsy.....	27	2	—	2	—	—	3	2	—	—	—	22	3	7	6	6
Diseases of nerves and peripheral ganglia.....	32	2	2	—	—	—	—	—	—	—	—	30	9	12	8	1
Other diseases of the nervous system.....	24	—	—	—	—	—	—	—	2	—	—	21	7	13	1	—
Inflammatory diseases of eye.....	7	—	—	—	—	—	2	2	—	—	—	5	—	2	—	—
Other diseases and conditions of the eye.....	36	1	1	—	—	—	7	4	2	—	—	28	20	3	3	2
Diseases of ear and mastoid process.....	17	—	—	—	—	—	2	2	—	—	—	15	10	2	3	—
<b>249</b>	<b>10</b>	<b>6</b>	<b>4</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>39</b>	<b>23</b>	<b>16</b>	<b>—</b>	<b>—</b>	<b>200</b>	<b>107</b>	<b>87</b>	<b>4</b>	<b>2</b>
<b>VII. Diseases of the circulatory system.....</b>																
Rheumatic fever with or without heart involvement.....	2	—	—	—	—	—	—	—	—	—	—	2	1	1	—	—
Chronic rheumatic heart disease.....	15	—	—	—	—	—	—	—	—	—	—	15	6	5	3	1
Arteriosclerotic and degenerative heart disease.....	160	8	4	4	—	—	25	15	10	—	—	127	66	61	—	—
Other disease of heart.....	5	1	1	—	—	—	1	—	1	—	—	3	1	1	—	1
Hypertensive disease.....	21	—	—	—	—	—	4	2	2	—	—	17	13	3	1	—
General arteriosclerosis.....	21	1	1	—	—	—	2	2	—	—	—	18	12	6	—	—
Other diseases of the circulatory system.....	25	—	—	—	—	—	7	4	3	—	—	18	8	10	—	—
<b>49</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>41</b>	<b>31</b>	<b>4</b>	<b>3</b>	<b>3</b>
<b>VIII. Diseases of the respiratory system.....</b>																
<b>68</b>	<b>3</b>	<b>3</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>14</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>51</b>	<b>21</b>	<b>12</b>	<b>17</b>	<b>1</b>
<b>IX. Diseases of the digestive system.....</b>																
Ulcer of stomach and duodenum.....	23	1	1	—	—	—	6	2	1	1	2	16	6	—	10	—
Other diseases of digestive system.....	45	2	2	—	—	—	8	7	1	—	—	35	15	12	7	1
<b>25</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>22</b>	<b>8</b>	<b>8</b>	<b>4</b>	<b>2</b>
<b>X. Diseases of the genito-urinary system.....</b>																
Nephritis and nephrosis.....	15	—	—	—	—	—	2	1	1	—	—	13	5	5	3	—
Diseases of kidney and ureter, excluding nephritis.....	7	—	—	—	—	—	1	1	—	—	—	6	3	2	1	—
Other diseases of the genito-urinary system.....	3	—	—	—	—	—	—	—	—	—	—	3	—	1	—	2
<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>XI. Deliveries and complications of pregnancy, childbirth, and the puerperium.....</b>																
<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>XII. Diseases of the skin and cellular tissue.....</b>																
<b>12</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>11</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>1</b>
<b>XIII. Diseases of the bones and organs of movement.....</b>																
<b>166</b>	<b>9</b>	<b>6</b>	<b>3</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>16</b>	<b>12</b>	<b>2</b>	<b>—</b>	<b>2</b>	<b>141</b>	<b>58</b>	<b>37</b>	<b>40</b>	<b>6</b>
Arthritis and rheumatism, except rheumatic fever.....	71	3	2	1	—	—	7	6	—	—	1	61	29	15	17	—
Osteomyelitis and periostitis.....	6	—	—	—	—	—	—	—	—	—	—	6	1	4	1	—
Other diseases of the bone.....	13	1	1	—	—	—	2	2	—	—	—	10	2	5	3	—
Internal derangement of knee joint.....	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—
Displacement of intervertebral disc.....	8	1	1	—	—	—	1	1	—	—	—	6	2	4	—	1
Ankylosis of joint.....	18	2	1	1	—	—	1	—	1	—	—	15	8	4	2	2
Other diseases of joint.....	9	—	—	—	—	—	1	—	—	—	—	8	3	1	2	—
Curvature of spine.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Flatfoot.....	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Other deformities.....	19	1	—	1	—	—	2	2	—	—	—	16	7	1	7	1
Other diseases of the musculoskeletal system.....	20	1	1	—	—	—	2	1	1	—	—	17	6	3	7	1
<b>15</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>12</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>4</b>

See footnotes at end of table.

DISABILITY SEPARATIONS—Type of Separation and Flying Status

APPENDIX TABLE 44.—Separations and Retirements for Physical Disability Under the Physical Evaluation System, by Underlying Cause and by Type of Separation—All Air Force Personnel, by Category, World-wide: 1963—Continued

Underlying cause	All personnel	Officers						Airmen							
		On flying status			Not on flying status			Retirement		Separation					
		Retirement		Separation	Retirement		Separation	Per- ma- nent	Tem- po- rary	With- sev- er- ance pay <sup>1</sup>	With- sev- er- ance pay <sup>1</sup>				
		Per- ma- nent	Tem- po- rary	With- sev- er- ance pay <sup>1</sup>	With- sev- er- ance pay <sup>1</sup>	Total	Total								
XVI. Symptoms and ill-defined conditions.....	23	—	1	—	—	3	1	1	—	1	19	5	7	6	1
XVII. Accidents, poisonings, and violence.....	119	6	3	—	—	1	1	—	—	—	112	37	68	5	2
XVIII. Supplementary classifications for special admissions.....	19	—	—	—	—	3	2	1	—	—	16	10	4	2	—

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.  
<sup>1</sup> For a definition of separation with severance pay, see para 18, AFM 35-4, Physical Evaluation for retention, retirement, and separation.  
<sup>2</sup> Existed prior to entry into active military service and was not aggravated by such duty.  
 For explanation of symbols, see p. 52.  
 Source: Individual Medical Records.

APPENDIX TABLE 45.—Noncombat Deaths, by Underlying Cause and Age—All Air Force Personnel, by Category—World-wide: 1963.

Underlying cause	All deaths	Category		Age group									
		Officers	Airmen (including aviators, cadets)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over	
All diseases and conditions.....	1 1,385	353	1,032	88	391	219	224	140	177	104	34	5	
I. Infective and parasitic diseases.....	4	—	4	—	1	—	1	—	—	2	—	—	
Tuberculosis, all forms.....	—	—	—	—	—	—	—	—	—	—	—	—	
Acute poliomyelitis.....	—	—	—	—	—	—	—	—	—	—	—	—	
Other infective and parasitic diseases.....	4	—	4	—	1	—	1	—	—	2	—	—	
II. Neoplasms.....	62	16	46	1	6	3	11	9	14	10	6	2	
Malignant neoplasms.....	61	15	46	1	6	3	10	9	14	10	6	2	
Benign and unspecified neoplasms.....	1	1	—	—	—	—	1	—	—	—	—	—	
III. Allergic, endocrine system, metabolic, and nutritional diseases.....	1	—	1	—	—	—	—	—	1	—	—	—	
IV. Diseases of the blood and blood-forming organs.....	1	—	1	—	—	—	—	—	—	—	—	—	
V. Mental, psychoneurotic, and personality disorders.....	2	1	1	—	—	1	—	—	1	—	—	—	
VI. Diseases of the nervous system and sense organs.....	24	1	23	1	4	5	3	2	7	—	2	—	
Vascular lesions affecting central nervous system.....	18	1	17	—	3	5	2	2	5	—	1	—	
Other diseases of the nervous system and sense organs.....	6	—	6	1	1	—	1	—	2	—	1	—	
VII. Diseases of the circulatory system.....	2 218	61	157	1	3	6	29	33	70	54	19	2	
Arteriosclerotic and degenerative heart disease.....	172	49	123	1	—	3	19	27	57	45	19	1	
Other diseases of heart.....	13	2	11	—	2	—	3	4	4	—	—	—	
Hypertensive disease.....	10	3	7	—	—	—	2	2	4	2	—	—	
General arteriosclerosis.....	5	1	4	—	—	1	1	—	2	1	—	—	
Other diseases of the circulatory system.....	2 18	6	12	—	1	2	4	—	3	6	—	1	

See footnotes at end of table.

DEATHS—All Air Force

APPENDIX TABLE 45.—Noncombat Deaths, by Underlying Cause and Age—All Air Force Personnel, by Category—World-wide: 1963.—Continued

Underlying cause	All deaths	Category		Age group								
		Officers	Airmen (including aviation cadets)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over
VIII. Diseases of the respiratory system.....	14	2	12	1	1	4	4	—	1	3	—	—
Acute upper respiratory infections.....	—	—	—	—	—	—	—	—	—	—	—	—
Influenza.....	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia.....	5	1	4	—	1	1	—	—	—	2	—	—
Other diseases of respiratory system.....	9	1	8	1	—	3	3	—	1	1	—	—
IX. Diseases of the digestive system.....	20	6	14	2	—	—	4	6	6	2	—	—
X. Diseases of the genito-urinary system.....	5	1	4	—	2	—	—	1	2	—	—	—
XI. Deliveries and complications of pregnancy, childbirth, and the puerperium.....	—	—	—	—	—	—	—	—	—	—	—	—
XII. Diseases of the skin and cellular tissue.....	—	—	—	—	—	—	—	—	—	—	—	—
XIII. Diseases of the bones and organs of movement.....	9	1	8	—	3	1	2	2	—	1	—	—
XIV. Congenital malformations.....	—	—	—	—	—	—	—	—	—	—	—	—
XVI. Symptoms and ill-defined conditions.....	71	16	55	4	21	7	4	10	12	10	3	—
XVII. Accidents, poisonings, and violence.....	3 954	248	706	78	350	192	166	76	63	22	4	1
XVIII. Supplementary classifications for special admissions.....	—	—	—	—	—	—	—	—	—	—	—	—

NOTE.—Class XV. Certain Diseases of Early Infancy, not applicable to military patients.  
 1 Include 3 deaths ages unknown not distributed according to age group.  
 2 Include 1 death age unknown not distributed according to age group.  
 3 Include 2 deaths ages unknown not distributed according to age group.  
 For explanation of symbols, see p. 52.  
 Source: Individual Medical Records.

APPENDIX TABLE 46.—Noncombat Deaths, by Underlying Cause and Age—Air Force Personnel on Flying Status by Category—World-wide: 1963

Underlying cause	All deaths	Category		Age group										
		Officers	Airmen (including aviation cadets)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over		
All diseases and conditions.....	1 227	185	42	1	26	69	65	25	35	5				
I. Infective and parasitic diseases.....														
Tuberculosis, all forms.....														
Acute poliomyelitis.....														
Other infective and parasitic diseases.....														
II. Neoplasms.....	4	3	1			1	1	1	1					
Malignant neoplasms.....	4	3	1			1	1	1	1					
Benign and unspecified neoplasms.....														
III. Allergic, endocrine system, metabolic, and nutritional diseases.....														
IV. Diseases of the blood and blood-forming organs.....														
V. Mental, psychoneurotic, and personality disorders.....														
VI. Diseases of the nervous system and sense organs.....	1		1					1						
Vascular lesions affecting central nervous system.....	1		1					1						
Other diseases of the nervous system and sense organs.....														
VII. Diseases of the circulatory system.....	20	11	9				3	6	9	2				
Artherosclerotic and degenerative heart disease.....	17	9	8				2	6	8	1				
Other diseases of heart.....	1	1				1								
Hypertensive disease.....	1	1							1					
General arteriosclerosis.....														
Other diseases of the circulatory system.....	1		1							1				

See footnotes at end of table.

DEATHS—Flyers

APPENDIX TABLE 46.—Noncombat Deaths, by Underlying Cause and Age—Air Force Personnel on Flying Status by Category—World-wide: 1963—Continued

Underlying cause	All deaths	Category		Age group									
		Officers	Airmen (including aviation cadets)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over	
VIII. Diseases of the respiratory system.....	2	2	—	—	—	1	1	—	—	—	—	—	—
Acute upper respiratory infections.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia.....	1	1	—	—	—	1	—	—	—	—	—	—	—
Other diseases of respiratory system.....	1	1	—	—	1	—	—	—	—	—	—	—	—
IX. Diseases of the digestive system.....	1	1	—	—	—	—	—	—	1	—	—	—	—
X. Diseases of the genito-urinary system.....	—	—	—	—	—	—	—	—	—	—	—	—	—
XI. Deliveries and complications of pregnancy, childbirth, and the puerperium.....	—	—	—	—	—	—	—	—	—	—	—	—	—
XII. Diseases of the skin and cellular tissue.....	—	—	—	—	—	—	—	—	—	—	—	—	—
XIII. Diseases of the bones and organs of movement.....	—	—	—	—	—	—	—	—	—	—	—	—	—
XIV. Congenital malformations.....	—	—	—	—	—	—	—	—	—	—	—	—	—
XVI. Symptoms and ill-defined conditions.....	3	3	—	—	—	—	—	1	—	1	—	—	—
XVII. Accidents, poisonings, and violence.....	1 196	165	31	1	26	66	60	16	23	3	—	—	—
XVIII. Supplementary classifications for special admissions.....	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTE.—Class XV. Certain Diseases of Early Infancy, not applicable to military patients.

<sup>1</sup> Include 1 death, age unknown, not distributed by age group.

For explanation of symbols, see p. 52.

Source: Individual Medical Records.

APPENDIX TABLE 47.—Noncombat Deaths, by Underlying Cause and Age—Air Force Personnel Not on Flying Status, by Category—World-wide: 1963

Underlying cause	All personnel	Category		Age group										
		Officers	Airmen (including aviation cadets)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over		
All diseases and conditions.....	11,136	161	975	86	360	147	157	114	137	94	34	5		
I. Infective and parasitic diseases.....	4	—	4	—	1	—	—	—	—	2	—	—		
Tuberculosis, all forms.....	—	—	—	—	—	—	—	—	—	—	—	—		
Acute poliomyelitis.....	—	—	—	—	—	—	—	—	—	—	—	—		
Other infective and parasitic diseases.....	4	—	4	—	1	—	—	—	—	2	—	—		
II. Neoplasms.....	56	11	45	1	6	1	10	8	12	10	6	2		
Malignant neoplasms.....	55	10	45	1	6	1	9	8	12	10	6	2		
Benign and unspecified neoplasms.....	1	1	—	—	—	—	1	—	—	—	—	—		
III. Allergic, endocrine system, metabolic, and nutritional diseases.....	1	—	1	—	—	—	—	—	1	—	—	—		
IV. Diseases of the blood and blood-forming organs.....	1	—	1	—	—	—	—	—	—	—	—	—		
V. Mental, psychoneurotic, and personality disorders.....	2	1	1	—	—	1	—	—	1	—	—	—		
VI. Diseases of the nervous system and sense organs.....	23	1	22	1	4	5	3	1	7	—	2	—		
Vascular lesions affecting central nervous system.....	17	1	16	—	3	5	2	1	5	—	1	—		
Other diseases of the nervous system and sense organs.....	6	—	6	1	1	—	1	—	2	—	1	—		
VII. Diseases of the circulatory system.....	3192	47	145	1	3	6	26	27	59	48	19	2		
Arteriosclerotic and degenerative heart disease.....	149	37	112	1	—	3	17	21	47	40	19	1		
Other diseases of heart.....	12	1	11	—	2	—	2	4	4	—	—	—		
Hypertensive disease.....	9	2	7	—	—	—	2	2	3	2	—	—		
General arteriosclerosis.....	5	1	4	—	—	1	1	—	2	1	—	—		
Other diseases of the circulatory system.....	317	6	11	—	1	2	4	—	3	5	—	1		

See footnotes at end of table.

DEATHS—Nonflyers

APPENDIX TABLE 47.—Noncombat Deaths, by Underlying Cause and Age—Air Force Personnel Not on Flying Status, by Category—World-wide: 1963—Continued

Underlying cause	All personnel	Category		Age group								
		Officers	Airmen (including aviation cadets)	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 and over
VIII. Diseases of the respiratory system.....	12	—	12	1	1	3	3	—	1	3	—	—
Acute upper respiratory infections.....	—	—	—	—	—	—	—	—	—	—	—	—
Influenza.....	4	—	4	—	1	1	—	—	—	2	—	—
Pneumonia.....	8	—	8	1	—	2	3	—	1	1	—	—
Other diseases of respiratory system.....	—	—	—	—	—	—	—	—	—	—	—	—
IX. Diseases of the digestive system.....	17	4	13	2	—	—	4	6	3	2	—	—
X. Diseases of the genito-urinary system.....	5	1	4	—	2	—	—	1	2	—	—	—
XI. Deliveries and complications of pregnancy, childbirth, and the puerperium.....	—	—	—	—	—	—	—	—	—	—	—	—
XII. Diseases of the skin and cellular tissue.....	—	—	—	—	—	—	—	—	—	—	—	—
XIII. Diseases of the bones and organs of movement.....	9	1	8	—	3	1	2	2	—	1	—	—
XIV. Congenital malformations.....	—	—	—	—	—	—	—	—	—	—	—	—
XVI. Symptoms and ill-defined conditions.....	68	13	55	4	21	6	4	9	11	10	3	—
XVII. Accidents, poisonings, and violence.....	2 746	82	664	76	319	124	104	59	40	18	4	—
XVIII. Supplementary classifications for special admission.....	—	—	—	—	—	—	—	—	—	—	—	—

NOTE.—Class XV. Certain Diseases of Early Infancy, not applicable to military patients.  
 1 Include 2 deaths ages unknown not distributed according to age group.  
 2 Include 1 death age unknown not distributed according to age group.  
 For explanation of symbols, see p. 52.  
 Source: Individual Medical Records.

Injuries—DEATHS

APPENDIX TABLE 48.—Noncombat Deaths Due to Injuries, by Causative Agent—All Air Force Personnel, by Category—World-wide: Jan-Jun 1963

Causative agent	All personnel	Officers					Non flying	Airmen (including aviation cadets)
		Total	Flying					
			Total	Pilot	Other rated	Non rated		
All deaths due to injuries.....	482	122	89	70	17	2	33	360
Aviation.....	152	89	69	55	12	2	20	63
Military aircraft accidents.....	143	84	65	52	11	2	19	59
Nonmilitary aircraft accidents.....	7	5	4	3	1	—	1	2
Agents other than aircraft accidents.....	2	—	—	—	—	—	—	2
Land transport.....	190	14	4	3	1	—	10	176
Motor vehicle.....	190	14	4	3	1	—	10	176
Traffic accidents.....	185	14	4	3	1	—	10	171
To pedestrian.....	9	—	—	—	—	—	—	9
To motorcyclist.....	9	—	—	—	—	—	—	9
To occupant of military passenger motor vehicle.....	2	—	—	—	—	—	—	2
To occupant of truck or bus.....	4	—	—	—	—	—	—	4
To occupant of other passenger motor vehicle.....	152	13	4	3	1	—	9	139
Other.....	9	1	—	—	—	—	1	8
Nontraffic accidents.....	5	—	—	—	—	—	—	5
Other land transport accidents.....	—	—	—	—	—	—	—	—
Water transport.....	2	—	—	—	—	—	—	2
Machinery, tools, and related agents.....	13	1	—	—	—	—	1	12
Machinery and tools.....	—	—	—	—	—	—	—	—
Electricity, except lightning.....	3	—	—	—	—	—	—	3
Hot or corrosive substance, including steam, liquids, and solids.....	—	—	—	—	—	—	—	—
Fire and explosion.....	8	—	—	—	—	—	—	8
Sharp objects and instruments.....	2	1	—	—	—	—	1	1
Instrumentalities of war (excl. firearms).....	—	—	—	—	—	—	—	—
Firearms.....	34	4	4	3	1	—	—	30
Revolver.....	14	1	1	1	—	—	—	13
Machine gun, rifle, or shotgun.....	17	2	2	2	—	—	—	15
Other small arms.....	4	1	2	—	1	—	—	2
Poisonings.....	23	4	3	2	1	—	1	19
Solid and liquid substances and pesticides.....	4	1	—	—	—	—	1	3
Gases and vapors.....	20	3	3	2	1	—	—	17
Prophlactic reactions and therapeutic misadventures.....	1	—	—	—	—	—	—	1

**DEATHS—Injuries**

APPENDIX TABLE 48.—*Noncombat Deaths Due to Injuries, by Causative Agent—All Air Force Personnel, by Category—World-wide: Jan-Jun 1953—Continued*

Causative agent	All personnel	Officers					Non flying	Airmen (including aviation cadets)
		Total	Flying					
			Total	Pilot	Other rated	Non rated		
Falls, athletics, and environment .....	16	—	—	—	—	—	—	16
Falls or jumps .....	9	—	—	—	—	—	—	9
Athletics and sports .....	7	—	—	—	—	—	—	7
Weather, elements, and related agents ..	—	—	—	—	—	—	—	—
Miscellaneous .....	48	9	8	6	2	—	1	39
Drowning and submersion .....	18	1	1	1	—	—	—	17
Hanging .....	7	—	—	—	—	—	—	7
Fight or assault, unarmed .....	—	—	—	—	—	—	—	—
All other agents .....	24	8	7	5	2	—	1	16

For explanation of symbols, see p. 52.  
Source: Individual Medical Records.

Injuries—DEATHS

APPENDIX TABLE 49.—*Noncombat Deaths Due to Injuries, by Causative Agent—All Air Force Personnel, by Category—World-wide: Jul-Dec 1963*

Causative agent	All personnel	Officers					Non flying	Airmen (including aviation cadets)
		Total	Flying					
			Total	Pilot	Other rated	Non rated		
All external causes.....	472	126	77	54	17	6	49	346
Air transport (including spacecraft).....	103	90	63	49	10	4	27	13
Involving military aircraft.....	97	85	60	47	9	4	25	12
Involving nonmilitary aircraft.....	6	5	3	2	1	—	2	1
Spacecraft.....	—	—	—	—	—	—	—	—
Land transport.....	240	19	9	3	5	1	10	221
Motor vehicle traffic accidents.....	240	19	9	3	5	1	10	221
<i>Nonmilitary owned vehicle</i> .....	237	19	9	3	5	1	10	218
<i>Military owned vehicle</i> .....	3	—	—	—	—	—	—	3
Motor vehicle nontraffic accidents.....	—	—	—	—	—	—	—	—
<i>Nonmilitary owned vehicle</i> .....	—	—	—	—	—	—	—	—
<i>Military owned vehicle</i> .....	—	—	—	—	—	—	—	—
Other land transport accidents.....	—	—	—	—	—	—	—	—
Water transport.....	8	—	—	—	—	—	—	8
Athletics and sports.....	3	—	—	—	—	—	—	3
Swimming, diving, and water polo.....	—	—	—	—	—	—	—	—
All other athletics and sports.....	3	—	—	—	—	—	—	3
Reactions, complications and misadventures in medical or surgical procedures, including late complications or late effects.....	2	—	—	—	—	—	—	2
Instrumentalities of war, when employed by the enemy in wartime.....	1	—	—	—	—	—	—	1
Accidents in connection with own instrumentalities of war, when employed as such in wartime.....	—	—	—	—	—	—	—	—
Guns, explosives, and related agents, except when used as instrumentalities of war in wartime.....	44	6	2	1	—	1	4	38
Bullets or other projectile from small arms weapons.....	41	4	1	—	—	1	3	37
All other guns, explosives, and related agents.....	3	2	1	1	—	—	1	1
Machinery, tools, and selected agents.....	5	1	1	1	—	—	—	4
Cutting and piercing instruments and objects.....	2	1	1	1	—	—	—	1
Electricity, except lightning and burns from electrically heated objects.....	—	—	—	—	—	—	—	—
All other machinery, tools and related agents.....	3	—	—	—	—	—	—	3

**DEATHS—Injuries**

**APPENDIX TABLE 49.—Noncombat Deaths Due to Injuries, by Causative Agent—All Air Force Personnel, by Category—World-wide: Jul-Dec 1963—Continued**

Causative agent	All personnel	Officers					Non flying	Airmen (including aviation cadets)
		Total	Flying					
			Total	Pilot	Other rated	Non rated		
Poisons, fire, hot or corrosive substances.....	16	3	1	—	1	—	2	13
Poisonings.....	12	3	1	—	1	—	2	9
Stings or bites of venomous reptiles or orthopods.....	—	—	—	—	—	—	—	—
Fire, explosion with fire, conflagration.....	4	—	—	—	—	—	—	4
Hot or corrosive substances.....	—	—	—	—	—	—	—	—
Specified environmental factors.....	22	2	—	—	—	—	2	20
Falls and miscellaneous, other or unspecified agents.....	28	5	1	—	1	—	4	23
Falls or jumps.....	3	—	—	—	—	—	—	3
Hanging, suffocation, and strangulation.....	4	—	—	—	—	—	—	4
All other agents.....	21	5	1	—	1	—	4	16

For explanation of symbols see p. 52.  
Source: Individual Medical Records.

APPENDIX TABLE 50.—*Incidence, Admissions, and Noneffectiveness, for Diagnosis Classes—Air Force Female Personnel, World-wide: 1963*  
 [For explanation of the standard error of the noneffective ratio, see Appendix Note 8. The sum of rates and ratios may differ slightly from totals due to automatic machine rounding]

Diagnosis class	Incidence (total diagnoses reported)			Admissions (sole and primary diagnoses)			Noneffectiveness		
	Number	Percent of all incidence	Cases per year per 100,000	Number	Percent of all admissions	Admissions per 100,000	Percent of all days lost	Non-effective ratio per 100,000	Standard error
All diseases and conditions.....	4,456	100.0	50,677	3,548	100.0	40,350	100.0	1,379	61.4
I. Infective and parasitic diseases.....	263	5.9	2,991	242	6.8	2,752	6.2	85	11.3
II. Neoplasms.....	199	4.5	2,263	136	3.8	1,547	6.7	93	13.3
III. Allergic, endocrine system, metabolic, and nutritional diseases.....	88	2.0	1,001	54	1.5	614	3.2	43	11.7
IV. Diseases of the blood and blood-forming organs.....	40	.9	455	9	.3	102	.2	3	1.8
V. Mental, psychoneurotic, and personality disorders.....	283	6.4	3,218	257	7.2	2,923	21.0	290	42.2
VI. Diseases of the nervous system and sense organs.....	164	3.7	1,865	106	3.0	1,206	3.0	41	6.8
VII. Diseases of the circulatory system.....	131	2.9	1,490	85	2.4	967	5.1	71	17.7
VIII. Diseases of the respiratory system.....	835	18.7	9,496	750	21.1	8,530	9.2	128	13.5
IX. Diseases of the digestive system.....	512	11.5	5,823	428	12.1	4,868	8.1	112	12.3
X. Diseases of the genito-urinary system.....	529	11.9	6,016	377	10.6	4,288	7.7	107	11.8
XI. Deliveries and complications of pregnancy, childbirth, and the puerperium.....	131	2.9	1,490	126	3.6	1,433	2.1	30	4.0
XII. Diseases of the skin and cellular tissue.....	160	3.6	1,820	113	3.2	1,285	2.3	31	4.7
XIII. Diseases of the bones and organs of movement.....	301	6.8	3,423	217	6.1	2,468	9.8	135	14.8
XIV. Congenital malformations.....	19	.4	216	11	.3	125	.9	13	5.3
XVI. Symptoms and ill-defined conditions.....	383	8.6	4,356	345	9.7	3,924	5.6	77	8.7
XVII. Accidents, poisonings, and violence.....	341	7.7	3,878	255	7.2	2,900	7.1	98	15.6
XVIII. Supplementary classifications for special admissions.....	77	1.7	876	37	1.0	421	1.7	23	10.2

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.  
 Source: Individual Medical Records.

APPENDIX TABLE 51.—Duration of Illness for Specified Diagnosis Categories—Air Force Patients Returned to Duty, World-wide: 1963

[For explanation of range of reliability, see Appendix Note 8]

Diagnosis category	Average number of days lost		Range of reliability of average days lost ( $\pm 2$ standard errors)		Day on which specified proportion of cases were returned to duty						Number of illnesses observed in total Air Force	
	Sole	Primary	Sole	Primary	Primary						Sole	Primary
					50% (median)	75%	90%	50% (median)	75%	90%		
<b>All diseases and conditions</b>	9.6	23.8	9.5-9.6	23.4-24.3	5	10	22	10	27	58	138,370	27,579
<b>I. Infective and parasitic diseases</b>	9.7	28.7	9.3-10.0	24.9-32.4	5	9	21	10	20	48	10,697	1,382
Tuberculosis, pulmonary, active	154.9	333.5	79.6-230.2	291.1-376.0	142	279	322	326	413	483	13	46
Tuberculosis, pulmonary, activity undetermined	88.7	110.5	27.2-150.1	4.1-216.9	20	103	267	17	(*)	(*)	12	8
Pleural tuberculosis	35.9	112.3	14.5-57.3	(*)	15	30	95	(*)	(*)	(*)	23	3
Tuberculosis of meninges and central nervous system	103.0	256.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1	1
Tuberculosis, all other forms	71.3	108.3	27.4-115.3	(*)	36	96	128	(*)	(*)	(*)	12	3
Early syphilis	6.7	9.4	5.2-8.2	6.2-12.5	5	10	13	10	14	16	59	21
Other syphilis and its sequelae	4.4	52.8	2.6-6.1	2.0-107.5	5	4	12	11	19	179	43	12
Acute or unspecified gonorrhea	6.1	9.2	5.3-6.9	7.1-11.3	5	7	13	7	10	18	151	68
All other gonococcal infections	17.8	61.2	9.9-25.6	(*)	7	21	48	(*)	(*)	(*)	24	4
Chancroid	6.7	20.0	3.2-10.2	(*)	6	(*)	(*)	(*)	(*)	(*)	6	1
All other venereal diseases	7.7	16.2	5.5-9.9	(*)	8	11	12	(*)	(*)	(*)	17	5
Bacillary dysentery	6.5	8.7	5.5-7.5	(*)	5	7	11	(*)	(*)	(*)	68	3
Amebiasis	16.0	7.0	9.1-23.0	(*)	9	23	37	(*)	(*)	(*)	23	2
Food poisoning (infection and intoxication)	1.3	9.0	1.2-1.4	(*)	1	1	2	(*)	(*)	(*)	107	2
All other infectious diseases commonly arising in intestinal tract	5.6	21.0	4.3-6.9	(*)	3	5	13	(*)	(*)	(*)	128	2
Scarlet fever and streptococcal sore throat	3.7	6.1	3.6-3.8	5.3-6.9	3	5	6	5	7	11	1,992	179
Meningococcal meningitis	15.1	31.3	10.0-20.2	(*)	14	21	25	(*)	(*)	(*)	10	3
All other bacterial diseases	7.4	14.8	4.5-10.3	7.5-22.1	3	6	12	6	22	27	80	13
Vincent's infection	4.0	4.6	3.3-4.8	(*)	3	6	8	(*)	(*)	(*)	39	5
All other spirochetal and leptospirochetal infections	40.0	—	(*)	—	(*)	(*)	(*)	—	—	—	1	—
Poliomyelitis, acute	16.7	94.2	10.3-23.2	(*)	12	17	39	(*)	(*)	(*)	25	4
Acute epidemic encephalitis	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—
Measles	5.3	14.1	5.0-5.7	10.5-17.7	5	7	8	11	18	27	265	32
Rubella (German measles)	3.3	5.8	3.2-3.4	4.3-7.2	3	4	6	4	7	10	1,380	39
Chickenpox	8.4	19.1	8.0-8.9	4.7-33.5	8	10	13	11	12	13	311	16
Zoster (herpes)	9.0	25.3	6.3-11.7	10.1-40.6	6	11	15	12	(*)	(*)	66	6
Mumps	8.8	12.7	8.5-9.1	11.8-13.5	8	11	14	12	16	20	1,121	263
Infectious hepatitis	39.1	53.2	36.8-41.5	44.9-61.4	32	49	71	48	69	104	671	70
Infectious mononucleosis (glandular fever)	16.7	23.3	16.0-17.5	21.0-25.6	14	22	31	19	30	44	1,202	181
All other diseases attributable to viruses	4.1	8.0	4.0-4.3	6.1-10.0	3	5	7	(*)	(*)	8	2,261	168
All rickettsial diseases	11.5	19.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2	1
Malaria, all forms	11.5	14.2	6.5-16.5	(*)	7	14	22	(*)	(*)	(*)	20	4
Protozoan infections	42.0	—	—	(*)	—	—	—	(*)	(*)	(*)	—	1

Ankylostomiasis.....	6.4	9.0	3.5-9.4	(*)	5	7	16	(*)	(*)	14	2
Ascariasis.....	10.3	—	(*)	—	(*)	(*)	(*)	—	—	3	—
Other worm infestation.....	18.4	22.2	4.4-41.2	(*)	3	8	24	(*)	(*)	25	5
Dermatophytosis.....	7.8	10.8	6.9-8.8	(*)	6	9	15	23	23	227	149
Other fungus infections.....	31.1	56.2	24.3-37.9	(*)	18	35	69	63	143	136	30
Scabies.....	4.3	—	2.6-6.0	(*)	4	(*)	(*)	—	—	7	—
Pediculosis.....	4.0	4.5	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1	2
All other infective and parasitic diseases.....	28.8	53.5	23.3-34.3	(*)	15	45	67	53	122	151	28
<b>II. Neoplasms.....</b>											
.....	16.7	33.3	16.0-17.5	(*)	10	20	37	43	77	3,602	617
Malignant neoplasms.....	41.2	56.8	36.4-46.1	(*)	26	60	104	43	76	346	160
Benign neoplasms, except pilonidal cyst.....	11.4	26.1	10.5-12.3	(*)	7	14	23	14	33	1,176	270
Pilonidal cyst.....	16.0	23.3	15.3-16.6	(*)	12	21	34	18	33	1,959	163
Neoplasms of unspecified nature.....	10.6	26.0	8.6-12.5	(*)	6	15	22	10	29	121	24
<b>III. Allergic, endocrine system, metabolic, and nutritional diseases.....</b>											
.....	12.2	24.1	11.4-12.9	(*)	6	14	29	13	30	2,084	780
Hay fever.....	6.5	15.1	5.1-8.0	(*)	4	10	15	8	18	51	40
Asthma.....	11.7	21.1	9.7-13.7	(*)	5	13	30	13	31	303	96
Urticaria.....	5.7	7.9	4.8-6.7	(*)	3	6	11	5	7	284	42
All other allergic disorders.....	5.7	12.3	4.9-6.6	(*)	4	6	11	5	13	308	49
Diseases of thyroid gland.....	21.7	43.3	18.3-25.1	(*)	14	27	48	20	58	209	52
Diabetes mellitus.....	19.4	26.8	17.1-21.8	(*)	11	22	46	17	37	365	294
All other diseases of other endocrine glands.....	21.3	35.7	11.2-31.4	(*)	11	21	52	16	34	100	15
Avitaminoses and other metabolic disorders.....	10.9	23.8	9.8-12.0	(*)	7	14	23	13	28	532	192
<b>IV. Diseases of the blood and blood-forming organs.....</b>											
.....	24.5	40.0	14.2-34.7	(*)	14	30	45	21	51	114	62
<b>V. Mental, psychoneurotic, and personality disorders.....</b>											
.....	19.5	30.2	18.8-20.1	(*)	9	24	51	15	38	6,265	1,081
Schizophrenic disorders (dementia praecox).....	52.3	67.3	47.2-57.5	(*)	43	75	108	68	92	256	43
All other psychoses.....	39.7	55.5	33.0-46.4	(*)	26	63	89	39	92	166	73
Anxiety reaction without mention of somatic symptoms.....	11.7	24.2	10.5-12.9	(*)	4	12	33	9	29	64	140
Dissociative and conversion reaction.....	18.4	24.5	14.5-22.2	(*)	9	22	48	17	30	158	39
Depressive reaction.....	25.3	40.1	23.1-27.4	(*)	14	36	62	24	62	664	118
Psychoneuroses with somatic symptoms (somatization reaction).....	11.1	27.6	9.5-12.6	(*)	5	12	28	16	39	59	89
All other psychoneurotic disorders.....	21.4	30.2	16.7-26.0	(*)	14	32	49	21	42	99	31
Pathological personality.....	21.2	28.2	18.8-23.6	(*)	12	25	51	15	32	72	67
Immature personality.....	19.6	25.5	18.5-20.7	(*)	12	24	47	14	32	65	225
Alcoholism, chronic and unspecified.....	10.9	22.2	8.7-13.0	(*)	6	12	23	10	19	214	163
Other drug addiction.....	4.0	—	(*)	(*)	(*)	(*)	(*)	—	—	1	—
Primary childhood behavior disorders.....	12.0	—	2.0-22.0	(*)	5	(*)	(*)	—	—	7	—
Mental deficiency and learning defects.....	57.5	58.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2	1
Transient personality disorders.....	14.3	21.1	12.8-15.9	(*)	6	15	38	10	23	714	74
All other disorders of character, behavior, and intelligence.....	21.0	21.9	11.6-30.5	(*)	7	38	51	10	25	26	18

See footnotes at end of table.

APPENDIX TABLE 51.—Duration of Illness for Specified Diagnosis Categories—Air Force Patients Returned to Duty, World-wide: 1963—Continued  
 [For explanation of range of reliability, see Appendix Note 8]

Diagnosis category	Average number of days lost		Range of reliability of average days lost ( $\pm 2$ standard errors)		Day on which specified proportion of cases were returned to duty						Number of illnesses observed in total Air Force	
	Sole	Primary	Sole	Primary	Sole			Primary			Sole	Primary
					50% (median)	75%	90%	50% (median)	75%	90%		
<b>VI. Diseases of the nervous system and sense organs</b>	12.5	28.7	12.0-13.1	26.8-30.6	6	14	30	15	40	66	4,611	1,386
Vascular lesions affecting central nervous system	39.7	52.5	23.1-56.4	39.0-65.9	27	39	84	49	72	112	27	41
Meningitis, except meningococcal and tuberculous acute	14.0	30.0	11.0-16.9	19.4-40.6	9	16	32	22	46	56	88	16
Encephalitis, myelitis, and encephalomyelitis (except acute epidemic)	21.9	74.2	11.0-32.9	36.1-112.3	17	24	39	59	81	179	23	10
Epilepsy	16.5	40.9	14.7-19.2	33.7-48.2	8	27	44	39	56	89	286	97
Migraine	3.4	14.6	4.3-6.4	8.9-20.2	3	6	14	9	21	28	194	16
Other diseases of central nervous system	30.9	58.6	24.0-37.7	32.1-85.1	16	50	78	38	65	142	82	24
Diseases of nerves and peripheral ganglia	16.4	36.4	14.6-18.2	31.5-41.3	8	20	36	25	50	85	834	226
Conjunctivitis and ophthalmia	3.7	6.1	3.0-4.4	3.9-8.2	2	4	7	4	7	12	211	37
Other inflammatory diseases of eye	13.4	27.1	11.6-15.3	20.6-33.5	7	16	34	14	33	61	407	118
Refractive errors	7.0	10.1	3.3-10.7	4.1-16.0	3	8	14	7	9	10	42	19
All other diseases of eye	13.5	29.8	12.1-14.8	26.2-33.3	6	14	34	21	42	67	881	292
Blindness	33.8	51.3	16.8-50.8	28.0-74.7	27	41	66	46	66	99	6	9
Otitis externa	4.8	10.8	4.1-5.5	5.4-16.3	4	6	9	7	9	19	139	31
Otitis media	8.1	15.7	7.0-9.2	12.7-18.7	4	9	18	7	20	38	386	207
Other diseases of ear and mastoid process	9.0	20.0	8.3-9.8	15.4-24.6	6	11	19	9	25	46	716	144
Deafness and impaired hearing	13.9	34.0	12.1-15.7	22.9-45.0	8	18	34	19	37	56	289	99
<b>VII. Diseases of the circulatory system</b>	14.9	34.9	14.3-15.5	33.2-36.5	8	17	33	22	49	82	5,126	2,162
Rheumatic fever	48.7	40.2	33.6-63.9	17.2-63.2	31	59	106	36	37	96	36	11
Chronic rheumatic heart disease	26.1	33.6	17.2-35.0	23.7-43.4	13	29	69	19	46	85	73	58
Arteriosclerotic heart disease, including coronary disease	36.1	50.0	33.1-39.1	46.8-53.2	27	51	87	41	70	100	551	706
Other chronic and degenerative heart disease	29.5	30.4	15.4-43.5	12.6-48.3	18	36	48	31	31	31	31	7
Acute and sub-acute endocarditis, acute myocarditis, and pericarditis	23.8	20.3	18.7-28.8	10.0-30.7	18	29	50	15	15	15	62	9
Functional, other, and unspecified diseases of heart	9.7	28.5	7.5-11.9	20.1-36.9	4	10	22	14	38	74	238	84
Hypertensive disease	12.5	28.2	11.2-13.7	25.4-30.9	7	13	30	16	37	64	890	570
Varicose veins of lower extremities	14.5	22.3	13.2-15.7	15.5-29.2	12	18	24	16	25	38	307	68
Hemorrhoids	9.2	16.1	8.9-9.5	14.7-17.5	7	13	21	14	21	29	2,096	361
Varicocoele	12.1	15.9	9.8-14.5	11.0-20.7	9	16	22	14	22	24	73	28
Phlebitis and thrombophlebitis	12.9	30.4	11.3-14.6	22.7-38.1	7	14	28	18	37	58	361	88
Other diseases of circulatory system	19.4	49.0	16.0-22.9	40.9-57.0	7	21	49	33	69	120	408	172
<b>VIII. Diseases of the respiratory system</b>	5.2	12.6	5.2-5.3	11.9-13.3	4	6	9	6	12	29	30,261	3,411

Duration of Illness—SPECIAL TOPICS

Acute upper respiratory infections.....	3.6	5.9	3.5-3.6	5.3-6.4	3	4	6	4	6	10	16,590	1,507
Influenza.....	3.5	5.5	3.4-3.5	4.7-6.3	3	4	6	4	6	9	3,452	188
Pneumonia, all forms.....	9.0	18.1	8.7-9.3	16.3-19.9	7	10	17	11	23	37	3,898	490
Acute bronchitis.....	4.7	7.7	4.6-4.9	6.7-8.7	4	6	8	5	9	15	2,422	326
Bronchitis, chronic and unqualified.....	9.7	34.5	8.1-11.3	28.4-40.5	5	10	21	19	50	83	288	184
Hypertrophy of tonsils and adenoids.....	6.5	9.2	6.3-6.8	7.7-10.8	6	8	11	7	11	14	845	90
Pertonsillar abscess (quincy).....	5.2	7.4	4.7-5.6	4.5-10.3	5	6	8	5	7	13	183	17
Chronic sinusitis.....	10.5	14.7	8.4-12.6	10.4-19.0	7	14	21	9	17	35	114	56
Deflected nasal septum.....	8.5	12.7	8.1-9.0	10.2-15.1	7	10	15	8	13	24	797	168
Other diseases of nose and throat.....	8.8	16.5	7.9-9.7	13.3-19.7	6	12	18	11	19	42	456	125
Pleurisy.....	8.2	30.2	6.2-10.1	17.8-42.7	4	6	11	10	37	60	356	56
Spontaneous pneumothorax.....	15.4	34.0	14.1-16.7	24.9-43.2	10	17	35	25	46	75	561	53
Other chronic interstitial pneumonia.....	46.1	52.3	14.1-78.2	27.5-77.1	10	41	167	63	50	82	17	7
Bronchiectasis.....	27.6	34.4	15.7-39.4	18.5-50.3	10	36	79	21	50	32	32	16
All other diseases of respiratory system.....	24.8	37.9	20.9-28.6	30.2-45.6	13	33	64	21	46	99	245	128
<b>IX. Diseases of the digestive system.....</b>	<b>8.7</b>	<b>20.5</b>	<b>8.5-8.9</b>	<b>19.7-21.3</b>	<b>4</b>	<b>11</b>	<b>22</b>	<b>12</b>	<b>26</b>	<b>47</b>	<b>20,601</b>	<b>3,968</b>
Dental diseases and conditions.....	3.9	5.9	3.6-4.1	5.3-6.5	3	4	6	4	6	11	1,813	759
Diseases of buccal cavity.....	7.5	11.9	6.7-8.3	7.0-16.8	6	9	15	8	12	18	320	55
Diseases of esophagus.....	9.9	24.3	6.6-13.3	10.2-38.4	4	10	23	7	24	62	84	26
Ulcer of stomach and duodenum.....	19.1	33.6	18.4-19.8	31.1-36.1	15	26	38	25	43	63	2,183	629
Gastritis and duodenitis.....	4.7	14.0	4.4-5.0	11.1-16.9	3	5	10	8	15	34	1,285	172
Other diseases of stomach and duodenum.....	22.4	46.5	11.1-33.6	29.5-63.5	8	24	81	43	66	85	24	12
Acute appendicitis (incl. appendicitis unqualified).....	12.4	28.3	12.0-12.8	25.4-31.2	10	15	22	22	34	53	1,618	252
Inguinal hernia.....	15.0	17.8	14.6-15.3	16.7-18.8	13	21	25	15	23	31	2,013	524
Other hernia.....	17.6	27.0	16.6-18.5	24.0-30.0	15	23	32	20	34	59	768	315
Gastroenteritis and colitis, acute, except ulcerative age 4 weeks and over.....	2.8	5.9	2.7-2.9	5.0-6.9	2	3	5	4	6	11	8,204	380
Anal fissure and fistula.....	12.9	18.1	11.6-14.1	15.0-21.2	9	17	25	15	19	32	341	111
Abscess of anal and rectal regions.....	8.8	13.3	8.0-9.5	11.2-15.3	6	11	18	11	20	27	530	99
Other diseases of intestine and peritoneum.....	15.6	28.5	14.2-16.9	24.6-32.5	9	20	37	16	34	73	833	291
Diseases of liver.....	29.0	42.4	23.6-34.4	30.8-53.9	21	35	69	30	50	83	131	100
Diseases of gallbladder and biliary ducts.....	19.5	32.4	17.7-21.2	28.5-36.3	16	27	37	26	41	62	358	225
Diseases of pancreas.....	15.6	30.2	10.8-20.4	22.1-38.4	9	17	28	17	42	71	96	48
<b>X. Diseases of the genito-urinary system.....</b>	<b>7.8</b>	<b>17.7</b>	<b>7.6-8.0</b>	<b>16.5-18.8</b>	<b>5</b>	<b>9</b>	<b>15</b>	<b>9</b>	<b>20</b>	<b>42</b>	<b>7,700</b>	<b>1,776</b>
Nephritis and nephrosis.....	32.1	48.2	25.3-38.8	36.0-60.3	22	41	72	35	67	103	113	61
Infections of kidney.....	6.3	20.2	5.8-6.9	15.6-24.9	5	7	11	9	22	52	549	125
Calculi of kidney and ureter.....	7.9	20.0	7.4-8.5	17.0-23.0	5	9	18	12	28	50	1,258	199
Cystitis.....	5.4	11.0	4.8-6.0	7.8-14.2	4	6	9	6	10	19	302	100
Nongonococcal urethritis (nonvenereal).....	6.5	8.5	5.3-7.7	6.3-10.6	5	8	13	7	11	19	108	44
All other diseases of urinary system.....	12.4	30.0	9.9-15.0	24.0-36.1	5	14	25	15	42	69	260	155
Prostatitis.....	7.0	11.3	6.5-7.6	10.0-12.6	5	8	14	8	14	22	624	242
Orchitis and epididymitis.....	8.7	13.1	8.3-9.1	11.1-15.0	7	11	17	9	15	25	1,337	279
Redundant prepuce and phimosis.....	5.6	8.5	5.5-5.8	7.6-9.4	5	7	10	7	11	18	1,987	234
All other diseases of male genital organs.....	9.9	24.8	5.2-10.6	21.0-28.5	7	13	21	15	29	55	826	256
Gynecomastia and mastitis, male.....	7.5	28.5	6.2-8.8	13.3-43.7	5	9	15	16	30	54	130	13
Other diseases of breast; diseases of ovary, Fallopian tube and parametrium.....	7.4	16.9	5.4-9.3	10.2-33.7	4	8	13	11	29	35	79	19
Diseases of uterus.....	4.3	7.2	3.1-5.4	1.5-12.9	3	6	9	3	6	10	25	6

See footnotes at end of table.



Other diseases of musculoskeletal system.....	16.2	32.7	14.8-17.7	28.3-37.1	8	19	38	22	42	77	1,070	239
XIV. Congenital malformations.....	16.9	31.1	15.0-18.9	26.0-36.2	10	18	35	16	37	69	574	291
XVI. Symptoms, senility, and ill-defined conditions.....	6.6	14.3	6.4-6.8	13.3-15.2	4	7	14	7	17	36	12,110	1,648
Diarrhea, cause unknown.....	5.3	12.2	4.1-6.6	6.5-18.0	3	6	11	7	16	32	150	21
All other symptoms.....	7.6	18.7	7.1-8.1	16.1-21.3	4	8	15	10	22	41	2,383	395
Observation for disease.....	6.4	13.1	6.2-6.6	12.1-14.2	4	7	14	7	16	33	9,194	1,139
Drunkenness, simple.....	2.1	3.9	1.9-2.3	3.0-4.8	2	2	4	2	5	9	229	69
Ill-defined and unknown causes (incl. senility).....	13.8	25.8	10.0-17.6	9.6-41.9	5	15	35	12	26	66	154	24
XVII. Accidents, poisonings, and violence.....	9.7	26.0	9.4-10.0	24.6-27.4	4	8	21	8	25	67	15,328	5,748
XVIII. Supplemental classifications for special admissions.....	9.2	19.8	8.1-10.3	15.2-24.3	3	7	20	6	22	52	1,737	252

NOTE.—Class XV, Certain Diseases of Early Infancy, not applicable to military patients.  
 For explanation of symbols, see p. 52.  
 Source: Individual Medical Records.

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## G. Appendix Notes

### 1. Sources of Data

The USAF medical reporting system is designed to provide data on the health of Air Force personnel and on the utilization of USAF facilities, to local station commanders and through successively higher echelons to the Chief of Staff, USAF. Air Force medical treatment facilities submit reports and records to the Surgeon General, USAF, through command channels. The Surgeon General, USAF, also receives reports and records for Air Force military personnel treated at non-Air Force facilities.

The data in this Annual Report (except for certain data specifically indicated by footnotes were derived from the following: (Instructions for preparing the separate forms in use at end of 1963 are given in AFM 160-20).

Name	Form	Period in which form was rendered
Surgeon's Brief Report	AF Form 491	January 1959-June 1961
Beds and Patients Report	DD Form 443	January 1959-June 1961
Outpatient Report	DD Form 444	January 1959-June 1961
Report of Patients	AF Forms 235, 235a, 235b	July 1961-December 1963
Medical Recommendation for Flying Duty	AF Form 1042	January 1961-December 1963
Clinical Record Cover Sheet	DD Form 481	January 1955-June 1961
Clinical Record Cover Sheet	AF Form 565	July 1961-December 1963

**Report of Patients (AF Forms 235, 235a, 235b: AFM 160-20).** This report provides monthly data on various aspects of medical workload capability, and utilization of Air Force medical treatment facilities. It also provides data on admissions and total sick days. Similar data are supplied by Army and Navy on Air Force personnel treated by those services. Thus, periodic information is provided on the extent of morbidity and medical noneffectiveness for Air Force military

personnel. Appendix Tables 5 through 15 are derived primarily from the Report of patients (and earlier versions thereof) and from Army and Navy counterpart reports for Air Force personnel treated by those services.

**Clinical Record Cover Sheet (AF Form 565: AFM 160-20).** The Clinical Record Cover Sheet provides demographic and diagnosis information on each patient treated or observed at an Air Force medical treatment facility. A record is received for each active duty Air Force person who is admitted (excused) from duty for medical treatment or observation and for each non-Air Force person admitted to the wards of an Air Force medical treatment facility. For 1960 and subsequent years, counts of admissions during a year are estimated from counts of discharges from treatment during that year. (Only for long-term illnesses exhibiting a secular change to do such estimates introduce the possibility of a meaningful bias.) Similar records pertaining to Air Force military personnel are received from the other military services. Data from these individual medical records of Air Force military personnel on extended active duty are shown in Appendix Tables 23-39, and 42-51. These records are also the source of data tabulations of medical care provided at USAF medical treatment facilities: Appendix Tables 16 through 22.

**Medical Recommendation for Flying Duty (AF Form 1042: AFR 161-20).** AF Form 1042, "Medical Recommendation for Flying Duty," is prescribed for use when a change in a flyer's physical status affects his physical capability to fly. These records provide demographic and diagnosis information on each officer who is excused from flying duty for medical reasons. Information concerning illnesses that have terminated in return to flying is shown in Appendix Tables 40 and 41.

## 2. Diagnosis Nomenclature and Statistical Classification

Effective 1 July 1963 the Air Force adopted the Department of Defense Disease and Injury Codes (AFM 160-24). Prior to this date the Joint Armed Forces Statistical Classification and Basic Diagnostic Nomenclature of Diseases and Injuries (AFR 160-13 and 160-13A) was in effect. These instructions were the principal basis for the recording and reporting morbid conditions during 1963. In the main, the classifications correspond to the major diagnosis classes of the International Statistical Classification of the World Health Organization. However, the individual categories in Section XVII (accidents, poisonings, and violence) are not comparable under the two systems. Therefore in most of the Appendix Tables no subclassifications are shown for Section XVII. For tables showing only injury data, these are presented in two half year periods for 1963. The recording and reporting of surgical operations and specified procedures continue to be prescribed by AFR 160-13, Parts V and VI.

## 3. Separations for Physical Disability

Data shown in Appendix Tables 35 through 37 are derived from individual medical records pertaining to Air Force personnel separated or retired under Chapter 61, Title 10, United States Code (formerly Title IV of the Career Compensation Act of 1949, Public Law 351), and processed through the Physical Evaluation Board system.

## 4. Noncombat Deaths

Appendix Tables 38 through 42 are based on the noncombat deaths occurring among Air Force personnel, Carded for Record Only (CRO) deaths (that is, persons not in a patient status at the time of death) have been included in counts of deaths, although these CRO deaths are excluded from admissions, incidence, and noneffectiveness. Tabular data show the underlying cause of

death, which has been selected in accordance with Articles 9 and 12, Regulation No. 1, of the World Health Organization.

## 5. Explanation of Terms

*Admission*—For military personnel, admission as used in this report indicates that an individual has been excused from duty for treatment as a hospital bed occupant or in quarters. It is the enrollment in a patient status extending midnight of the day on which a military person reports for treatment. Such a patient is considered as admitted (excused) from duty only once during a continuous period of treatment. Admissions from duty include also patients admitted to nonmilitary medical facilities, and admissions of persons from AWOL. Transfers from one medical facility to another, persons treated on an outpatient basis, cases (deaths) carded for record only, and admissions of those AWOL (10 days or less) from a patient status are not counted as admissions from duty. For patients who are not military personnel on active duty, admissions refer only to individuals enrolled as inpatients (bed occupants) at Air Force medical treatment facilities. (See also *Inpatient admission*.)

*Air Force Academy cadet*—Cadet attending the United States Air Force Academy. Academy cadets are not assigned to active organized Air Force units. (See also *Aviation cadet*.)

*Air Force personnel*—Air Force military personnel on extended active duty. Air Force Academy cadets are not extended active duty military personnel. (See also *Military personnel*.)

*Army personnel*—Army military personnel on extended active duty (unless indicated otherwise). (See also *Military personnel*.)

*Aviation cadet*—An Active duty Air Force person in training to become a commissioned Air Force officer with aeronautical rating. (See also *Air Force Academy cadet*.)

## APPENDIX NOTES

*Clinic (specialty) service*—A hospital service or clinical specialty actually organized and staff to operate as such. Identification (and statistical classification) by clinic service depends on the existence of such a service in the hospital in question. Differences in organization between hospitals would therefore ordinarily preclude the summation of clinic service data. (See also *Specialty area*.)

*Duration of illness*—The total time in an excused-from-duty status (whether in hospital, dispensary, quarters, or on sick leave) during one episode of illness. The average duration is the number of sick days (excused from duty) divided by the number of separate episodes of illness (admissions or final dispositions). This is equivalent to "days lost per admission." (See also *Length of (hospital) stay*.)

*Excusal from duty (for medical reasons)*—See *Admission*.

*Excusal from flying*—An action in which there is waiver of the requirement to meet flight requirements for a period not to exceed 3 months following physical incapacitation to fly as a result of an aviation accident or other hazardous duty. (See also *Flying status*.)

*Existed prior to service (EPTS)*—This term denotes a condition determined to have existed prior to the person's entry into active military service.

*Extended active duty (EAD)*—In this Annual Report, any period of active duty in excess of a designated number of days, currently in excess of ninety days.

*Flyer noneffectiveness*—Flyer noneffectiveness is the loss of man-days by rated officers (flyers) from flying duty, in this context for medical reasons.

*Flying status*—This refers to the status of one who is currently required by competent orders to participate regularly and frequently in aerial flight (see AFM 35-13). As used in this Annual Report, on flying status includes all individuals on

flying status immediately prior to admission for treatment. (See also *Rated officer*.)

*Illness*—A continuous period of treatment or observation. (See also *Admission*.)

*Incidence*—In this Annual Report, the reported frequency, or count, of a diagnosis, or group of diagnoses, as distinguished from number of patients admitted. (See also *Admission*.)

*Inpatient*—A patient admitted to the wards of a hospital or a class "A" dispensary. (See also *Patients occupying beds*.)

*Inpatient admission*—The enrollment of a patient for care on the wards of a hospital or a class "A" dispensary.

*Length of (hospital) stay*—The number of inpatients days at one hospital (or dispensary) for a given episode of illness. The average length of stay is the number of bed occupancy days divided by the number of inpatient admissions (including those received by transfer). (See also *Duration of illness*.)

*Military personnel*—That group of persons who are enlisted, commissioned, or certified by warrant as members of an armed service, whether on extended active duty, or active duty for training, reservist on active duty, retired, or deceased.

*Navy personnel*—Navy military personnel on extended active duty (unless indicated otherwise). The term Navy includes Marines, unless otherwise stated. (See also *Military personnel*.)

*Noneffectiveness*—Noneffectiveness is the loss of man-days from duty, in this context for medical reasons (See also *Flyer noneffectiveness*.)

*Operating bed*—This term, as used in Part II of this Annual Report, applies to beds with staff and equipment ready for the care of patients, whether in a hospital or a class "A" dispensary. It therefore refers to both hospital operating beds and dispensary beds.

*Outpatient*—For military personnel, a patient who receives medical advice or treatment while on a duty status. For nonmili-

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tary person, a patient not admitted as an inpatient.

*Outpatient visit*—For 1961–63 one visit is counted each time an outpatient or quarters patient received advice and/or treatment at an organized clinic or specialty service. More than one visit per patient may be counted on a given day. For 1960 and prior years only one visit is counted for each outpatient who presents himself or is visited for medical advice and/or treatment on a given day.

*Patients occupying beds*—Patients having an assigned hospital bed as of midnight of a given day. Included are patients on pass not in excess of 72 hours, and newborn infants remaining after discharge of the mother from the hospital. Excluded are patients subsisting out, on leave, or AWOL; transient patients; newborn infants whose mothers are still patients in the hospital. (See also *Inpatient*.)

*Primary diagnosis*—The most important diagnosis reported for an admission when more than one diagnosis is reported. (For each multiple diagnosis case, one and only one diagnosis is listed as primary.) (See also *Sole diagnosis*.)

*Rated officer*—An officer holding a currently effective USAF aeronautical rating. (See also *Flying status*.)

*Sole diagnosis*—The only diagnosis reported for an admission.

*Specialty area*—A grouping of diagnosis categories into a medical specialty which presumably would have treated such cases if that clinic service were available. Data are so classified without regard to existing clinic services, and are therefore comparable and additive, from hospital to hospital. (See also *Clinic (specialty) service*.)

### 6. Rates and Ratios

**Rate.** Rates always involve the concept of time (week, month, year). A rate indicates the number of events which occur during a given period of time in relation to the number of units to which this event can occur.

The quotient should always be expressed with reference to a unit of time; if not expressed, it is implied. The computed rate is usually multiplied by some power of 10 (as 100, 1,000, or 100,000) for convenience of expression.

**Ratio.** A ratio is a quotient which denotes the relation in size of one number to another. When a ratio is likely to be less than one, it may be multiplied by some power of 10 (as 100, 1,000, or 100,000) for convenience.

**Year.** In the computation of annual rates in this report the number days per year is 365 or 366 as appropriate. (In earlier Annual Reports 52 and 53 week years were used for certain rates.)

**Admission Rate.** The admission rate is a measure of the frequency with which military patients are excused from duty for medical reasons. In order to permit comparison of number of admissions among unequal periods of time and among differing strengths, the numbers of admissions are converted to common units of time and strength. In military medical statistics, the respective units conventionally used are "per year," and "per 1,000 strength" or "per 100,000 strength." An annual admission rate for part of a year is based on the number of admissions that would have occurred during the entire year if they were to occur at the same frequency as in the period of observation. An annual admission rate per 1,000 average strength is computed as follows:

$$\frac{\text{Admission during period} \times \text{Number of such periods in a year} \times 1,000}{\text{Means strength during period}}$$

**Incidence Rate.** The incidence rate is a measure of the frequency with which a specified disease (diagnosis or group of diagnoses) is reported in a population. Annual incidence rates are computed in the same manner as annual admission rates except that the number of reported cases (diagnoses) is used in the formula instead of the number of admissions.

**Noneffective Ratio (Medical).** The medical noneffective ratio is weighted average of the proportions of strength not available for duty, for medical reasons, each day (of the period for which it is computed), whether under treatment as an inpatient, in quarters, on sick leave, or AWOL from a patient status for 10 days or less. The ratio is usually expressed as noneffectives per 1,000 strength or per 100 strength (for example, 6.9 per 1,000 is the same as .69 per 100). It is computed for a specified period, per 1,000 strength, thus:

$$\frac{\text{Number of sick days in period X 1,000}}{\text{Mean strength X Number of calendar days in period}}$$

Flyer noneffectiveness is the weighted average of the proportions of flyer strength not available for flying duty, for medical reasons, each day. The ratio per 1,000 rated officer flyer strength, for a specified period, is computed thus:

$$\frac{\text{Number of days lost from flying duty in period X 1,000}}{\text{Mean rated officer flyer strength X Number of calendar days in period}}$$

**Hospitalized Ratio.** The hospitalized ratio is the weighted average of the proportions of strength in an inpatient status each day (of the period for which it is computed). It differs from the noneffective ratio in that it includes only bed occupancy days in the hospital or class "A" dispensary. The hospitalized ratio is usually expressed per 100 strength and is computed for a specified period thus:

$$\frac{\text{Number of bed occupancy days in period X 100}}{\text{Mean strength X Number of calendar days in period}}$$

**Bed Occupancy Ratio.** The bed occupancy is the proportion of operating beds occupied on a specified day, or it is the weighted average of such proportions for a period of time, usually expressed as a percent. For a specified period, percent bed occupancy is computed thus:

$$\frac{\text{Average daily number of patients occupying beds during period X 100}}{\text{Mean number of operating beds during period}}$$

**Days Lost Per Person.** The average number of days lost per person is a measure of non-effectiveness which expresses the number of sick days that would be lost by each person if all the sick days within a period were divided equally among the total strength. It is computed as follows:

$$\frac{\text{Number of sick days in period}}{\text{Mean strength during period}}$$

It can also be calculated from the noneffective ratio, thus:

$$\frac{\text{Noneffective ratio X Number of calendar days in period}}{\text{Power of 100 in which noneffective ratio is expressed}}$$

**Days Lost Per Admission.** The average number of days lost per admission expresses the number of sick days that would be lost by each patient if all the sick days were divided equally among them. It is computed for a specified period as follows:

$$\frac{\text{Number of sick days}}{\text{Number of admissions}}$$

It can also be computed thus:

$$\frac{\text{Noneffective ratio (per 1,000) X Number of calendar days in year}}{\text{Annual admission rate (per 1,000)}}$$

## 7. Rounding

In printed tables, as elsewhere, a computed number is usually rounded to the nearest digit in the last position shown, from an actual computation which carried digits farther to the right. In modern automatic data processing, automatic rounding is readily accomplished, but adjustment for the sake of balancing the summation is considered mechanically impractical. For this reason, occasional instances will be encountered in which the sum of a column of printed figures does not equal the printed total.

## 8. Sampling Variability

The numbers of events reported for Air Force personnel represent complete counts of such events. However, when numbers are used for analytical purposes, such as for the comparison of rates over a time period, for different commands, or between age groups,

an observed frequency is treated as a sample, i.e., one of a series of possible frequencies that could have arisen under the same circumstances. The sampling variability of a computed (observed) value may be estimated according to certain familiar statistical assumptions. The standard error is a measure of this variability; it is usually small when the number of events is large and vice versa. When the number of events is very small (perhaps less than 100) considerable caution must be used in interpreting such data.

**Rates**

Appendix Tables 35, 37-39, and 41 contain rates based on the experience of the Air Force.

The variability of a rate is commonly expressed by a range from  $2\sigma$  below to  $2\sigma$  above its computed value, where

$$2\sigma = 2 \sqrt{\frac{R(1-R)}{N}}$$

R is the computed rate expressed as a pure number (for example, .002, not 2 per 1,000), and N is the population on which the rate is based. The  $2\sigma$  range is then also a pure number, and should be multiplied by the same power of 10 as the rate under consideration. Roughly speaking, there is only one chance in 20 that the true rate lies outside the range,  $R \pm 2\sigma$ .

**Average Duration of illness.** Average durations of illnesses are shown in Appendix Table 51 with the number of such illnesses reported and the range of reliability from  $2\sigma_m$  below to  $2\sigma_m$  above each average. The computation is:

$$2\sigma_m = 2 \sqrt{\frac{\sum d^2}{c(c-1)} - \frac{(\sum d)^2}{c^2(c-1)}}$$

where  $\sum d$  is the sum of all days lost for the illness in question,  $\sum d^2$  is the sum of the squares of the days lost for each case, and c is the number of cases reported. There is about one chance in 20 that the true average lies outside the computed range of reliability of average days lost (average  $\pm 2$  standard errors).

Appendix Tables 34 and 35 show the standard errors,  $\sigma_N$ , of the noneffective ratios, N. These are computed as follows:

$$\sigma_N = \sqrt{\frac{d^2}{M}}$$

where  $\sum d^2$  = the sum of the squares of the days lost for each case, and M = total man-days experienced by the population (normally mean strength times the number of days in the period).

**Coefficient of Variation.** A standard error is a measure of the degree of variability in the same units as the rate or ratio in question. To relate this measure of dispersion to its point of reference, the mean of the distribution and to make more meaningful comparisons between rates and ratios which differ greatly in magnitude, the standard error is divided by the rate or ratio to provide the coefficient of variation. This number is conventionally expressed as a percent, thus (for a noneffective ratio, for example):

$$C. \text{ of } V. = \frac{100\sigma_N}{N}$$