

THE USAF MEDICAL SERVICE

AND

THE KOREAN WAR (1950-1953)

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Introduction

This is a preliminary study of the activities of the USAF Medical Service in the Korean War (1950-1953). The material is organized by topics. Chapter I portrays the strength of the Medical Service at the outbreak. Chapter II describes the personnel expansion which followed. Chapter III shows how medical treatment facilities also grew, and how important aeromedical evacuation was to the United Nations forces. Chapter IV deals with the supply of blood and blood derivatives. Chapter V describes the professional, dental, and veterinary services that Far East Air Forces gave the troops.

This study has no body of conclusions at its end, because research is not sufficiently advanced. More historical raw material exists, and this will be exploited in a later and fuller account. Especial acknowledgements are owing the Archives Branch, USAF Historical Division, Research Studies Institute, Air University, for organizing and lending to the Office of the Surgeon General an indispensable collection of unit histories from Far East Air Forces for use in this inquiry.

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Chapter I

ORGANIZATION AND MISSION

1) On 25 June 1950 armies belonging to the Peoples Democratic Republic of Korea (North Korea), a protégé of Soviet Union and Communist China, crossed the 38th parallel into the territory of the Republic of Korea (South Korea), a protégé of the United States. The land, sea, and air forces of the United States promptly went to the aid of the South Koreans. The United States designated the Far East Command (FEC), then under General of the Army Douglas MacArthur, as the United Nations Command (UNC/FEC). British, Australian, South African, and other troops and aircraft then joined the Americans and the South Koreans in the fight.

2) During the summer of 1950, the North Koreans conquered nearly the whole country and drove the defenders down to Pusan, on the southern coast. In September, however, American and South Korean forces landed at Inchon, on the West Coast near Seoul, and sped north. At the same time, other Americans and South Koreans broke out of the "Pusan perimeter." In November United Nations troops reached the vicinity of the Chinese border on the Yalu River. The Chinese then came over the border in great numbers and drove United Nations soldiers back to the south of Seoul. The United Nations Command recaptured Seoul in the spring of 1951 and set up a line to the north of it, and remained there to the end of the war.

3) Truce negotiations started early in the summer of 1951. Ground action abated, but did not cease. USAF operations to destroy MIGs, dams, and airfields continued up to the signature of an armistice on 27 July 1953. This armistice left Korea still divided in the middle.¹ It is on that date that this history ends.

4) Far East Air Forces (FEAF) conducted the Air Force operations in the war in immediate subordination to UNC/FEC. FEAF had its headquarters in Tokyo. Lt. Gen. George E. Stratemeyer commanded FEAF up to June, 1951, when Lt. Gen. O. P. Weyland succeeded him. Brig. Gen. Clyde L. Brothers, USAF, MC, served as Air Surgeon, FEAF, until Brig. Gen. (later Maj. Gen.) John M. Hargreaves, USAF, MC,² succeeded him in July, 1952.³

5) FEAF comprised (1) the Fifth Air Force, which conducted tactical and other air operations in Korea; (2) the FEAF Bomber Command, which carried on long-range

bombardment operations over Korea; (3) the 315th Air Division (Combat Cargo), which among other things controlled the 801st Medical Air Evacuation Squadron and all theater airlift; (4) the Far East Material Command (FEMCom), which in July 1952 was redesignated the Far East Air Logistics Force (FEALog For); (5) the Japan Air Defense Force (JADF), which replaced the 314th Air Division in March, 1952; (6) the Twentieth Air Force, on Okinawa; (7) the Thirteenth Air Force in the Phillipines.⁴

6) The Fifth Air Force was FEAF=s largest subordinate command. Its mission, in general, was to maintain air superiority in the combat zone; to conduct Joint planning, training, and operations with UN ground and naval forces; to provide escort, when requested by the Commander, FEAF, the Commander, FEAF Bomber Command or the Commander, 315 Air Division; to conduct search and rescue activities; to provide for the maintenance, operation, and internal security of assigned air bases; to control anti-aircraft artillery other than that of Army-organic units; to conduct air reconnaissance; and to perform special missions as directed by the commander, FEAF.⁵

7) During the first half of the war, the Fifth Air Force operated from both Japan and Korean. Deployment depended among other things upon the course of the ground war and the availability of suitable airfields. During the latter half of the war, nearly the entire tactical unit strength of the Fifth Air Force was based in Korea. The Fifth Air Force during that period had a divided headquarters comprising a forward echelon at Seoul, and a rear echelon at Taegu, in the south.⁶

8) FEAF Bomber Command had its headquarters at Yokota Air Base, near Tokyo. it was directly responsible for conducting long-range bombardment operations, attacking and destroying targets in support UNC forces in Korea, conducting air reconnaissance as necessary, assisting in the defense of Japan and the Ryukus, and planning and training for Strategic Air Command operations in the Far East. It possessed operational control of B-29's on Kadena Air Force Base, Okinawa, and of B-29's and other aircraft at Yokota. As all of the units of this command were tenants on the bases they occupied, they drew logistical support from the Japan Air Defense Force on Honshu, and from the Twentieth Air Force on Okinawa.

9) The mission of the 315th Air Division required it to provide continuing and air evacuation support for UNC forces in Korea and within the FEC as required; to conduct airborne missions and aerial re-supply; to establish and operate aerial ports of embarkation; and to provide air transportability and airborne training. Headquarters was

at Higashi Fuchu, near Tokyo. The 801st Medical Air Evacuation Squadron had detachments where needed in Japan and Korea.⁷

10) Although the major defense mission of the Japan Air Defense Force -- the air defense of the Japanese Islands -- did not relate directly to the Korean air war, that command provided logistical support for Fifth Air Force detachments at bases in Japan and furnished administrative service to the 315th Air Division. Moreover, the Japan Air Defense Force provided the Fifth Air Force and, squadrons upon various occasions when needed.⁸

11) The Far East Air Logistics Force, which was responsible for the supply and maintenance of USAF units in the Far East, operated a great air depot at Tachikawa Air Base, near Tokyo, and controlled other depots at Iwakuni Air Base, in southwest Honshu, and at Clark Air Force Base, Luzon, Philippine Islands. In January, 1953, still another depot was established at Chinhae (K-10) airfield in southeast Korea, near Pusan.

12) Since it was a part of the mission of the Twentieth Air Force to defend and support the operations of the FEAF Bomber Command organization based at Kadena, the Twentieth likewise participated indirectly in the Korean hostilities. It had also contributed to FEAF Bomber Command, its 19th Bombardment Group, Medium, consisting of three squadrons of B-29's.⁹

13) The Thirteenth Air Force was little involved in the operations in Korea. Like the Twentieth Air Force, however, it had furnished certain combat units to other commands for use in Korea.¹⁰

14) Supporting FEAF on 25 June 1950 was the newly created USAF Medical Service, together with other components of the National Military Establishment. Like the Medical Services of the Army and the Navy, the general policy control of the Director of Medical Services, Office of Medical Services, Department of Defense.

15) The Director also exercised general control over the utilization of personnel and facilities belonging to these three Medical Services.¹¹ The Director was at that time Richard C. Meiling, M.D., of Ohio State University.¹²

16) When the Korean War began, the USAF Medical Service was only one year old. It had commenced operations on 1 July 1949,¹³ with 3,704 officers who had transferred from the Army.¹⁴ The distribution of these officers by corps was as follows:

Medical Corps

Regulars.....	407
Reserves.....	<u>775</u>
Total.....	1182

Dental Corps

Regulars	174
Reserves	<u>250</u>
Total.....	424

Veterinary Corps

Regulars	42
Reserves	<u>36</u>
Total	78

Nurse Corps

Regulars	305
Reserves	<u>892</u>
Total.....	1,197

Medical Service Corps

Regulars	157
Reserves	<u>576</u>
Total	733

Women=s Medical Specialist Corps

(Occupational, therapists, physical therapists, and dietitians)

Regulars	31
Reserves.....	<u>59</u>
Total	90

16) During the next 12 months, various Reservists returned to civilian life. The total active-duty commissioned strength of the Medical Service therefore declined to 3,431 on 30 June 1950, when the distribution was as follows.

Medical Corps	891
Dental Corps	556
Veterinary Corps	78
Nurse Corps	1,155
Medical Service Corps	672
Womens= Medical Specialist Corps	<u>79</u>
Total	3,431

At that time about 8,000 enlisted men were on duty with the Medical Service at Air Force installations.¹⁷

17) In June 1950, the Air Force was not increasing the total number of its military personnel. From 30 June 1949 to 30 June 1950 the military personnel strength of the Air Force had declined from 419,347 to 411,277.¹⁸

18) At the outbreak of hostilities, every corps in the USAF Medical Service was far below the personnel strength which the Office of the Surgeon General had deemed necessary for peacetime purposes. The Directorate of Plans and Hospitalization, Office of the Surgeon General, had estimated medical personnel requirements to support a 48-group Air Force of 416,000 strength, as follows:¹⁹

<u>Corps</u>	<u>Basic Air Force Activity</u>	<u>Joint Staffing in Army Hospitals</u>	<u>Total</u>
Medical Corps	1,268	406	1,674
Dental Corps	708	31	739
Veterinary Corps	108	2	110
Medical Service Corps	718	121	839
Nurse Corps	991	367	1,358
Womens= Medical Specialist Corps	86	77	163
Enlisted (medical)	<u>13,116</u>	<u>1,480</u>	<u>14,596</u>
Total	16,995	2,484	19,479

A comparison of these figures with those given above on the actual strength of the Medical Service on 30 June 1950 shows that the Medical Corps, especially, was gravely understaffed.

19) The decline in officer strength which took place during the first year of USAF medical operations was roughly matched by a decline in the number of USAF medical facilities and authorized operating beds. The Medical Service began on 1 July 1949 with 78 hospitals and 7,050 beds. Because the number of beds occupied dropped, the number of operating beds which were authorized fell to 6,200 by 1 July 1950. The number of hospitals went down to 73.²⁰

20) At that time less than half of all hospitalized Air Force personnel were actually in Air Force hospitals. In June, 1950, when the average number of Air Force personnel occupying beds in medical facilities, worldwide, was 5,210, the number of Air Force personnel in Army facilities was 2,768. At that time, only 2,201 were in facilities of the Air Force.²¹

21) Throughout the entire Korean War, the Surgeon General, USAF, was Major General Harry G. Armstrong, USAF, MC. Major General Armstrong had succeeded Major General Grow as Surgeon General on 1 December 1949.²² The Office of the Surgeon General, located in Washington, D.C., consisted of (1) the Surgeon General's immediate office, which included his Deputy; (2) the Assistant for Dental Services; (3) the Assistant for Veterinary Services; (4) the Directorate of Professional Services; (5) the Directorate of Medical Staffing and Education; and (6) the Directorate of Plans and Hospitalization. Like the two Assistants, the three Directors reported directly to the Surgeon General and his Deputy.²³

Chapter II

PERSONNEL AND TRAINING

22) When the United States intervened in the war at the end of June, Far East Air Forces therefore found itself acutely short in all categories of medical personnel. Officer personnel assigned to the Medical Service in FEAF on 1 July 1950 consisted of 37 in the Medical Corps, 33 in the Dental Corps, 6 in the Veterinary Corps, 53 in the Medical Service Corps, and 31 in the Nurse Corps. These shortages were only partially alleviated by the prompt fulfillment of emergency requisitions, and by the reacquisition of USAF officers on duty with the Army. The most serious deficiencies were in the categories of flight surgeons, aviation medical examiners, and aircraft observers, medical.¹

23) During the first three months of the fighting FEAF requisitioned in this way 73 Medical Service officers and 126 medical enlisted men. Of the officers, 30 were in the Nurse Corps; 15 were Flight Surgeons; 13 were Unrated Medical Corps officers; 3 were in the Veterinary Corps; and 12 were in the Medical Service Corps.²

24) So far as the Surgeon's Section of FEAF was concerned, there had been no change in the organizational structure, or in the personnel assigned, due to the outbreak of hostilities. The war brought greater responsibilities, but the mission of the Surgeon General remained the same: to supervise all activities relative to health, preventive medicine, aviation medicine, and air evacuation, and to advise the Commanding General and Staff Officers on all matters pertaining to medical activities.

25) The FEAF Surgeon's Section was organized as a major Staff Division, with the Surgeon directly responsible to the Commanding General for all medical services of the command. Immediately under the Surgeon were three Directorates: Dental Service, Administration, and Professional Service. A Medical Service Corps officer served as Director of Administration. Under that directorate were the Preventive Medicine Division and the Medical Statistical Division, which were also under Medical Service Corps Officers. And so, with the addition of the Surgeon himself, then a colonel in the Medical Corps, and the Director of Dental Service, who was a Colonel in the Dental Corps, the FEAF Surgeon's Section worked with only five officers.³

26) This section immediately faced the problem of how to shift medical personnel around quickly enough to meet the demand for aeromedical evacuation and for tremendously increased activities at various Air Bases. The Surgeon's Section thus shifted personnel from commands within Japan and elsewhere, which were not actively engaged, leaving only those personnel necessary for giving minimum medical service. By these means, FEAF did its best to utilize its existing medical personnel strength to the greatest possible extent, while waiting for additional personnel to arrive from the United States.

27) Many of the Medical Corps officers who were to come from the United States were at that time undergoing training in Army hospitals as residents and Assistant Residents. It was understood however, that after hostilities were over, they would be permitted to resume their interrupted training programs.⁴ These physicians generally were young and inexperienced, but they developed their skill in aviation medicine rapidly, and learned quickly to take good care of their crew members.⁵

28) The shortage was therefore great. However, the Communist aggression in Korea had Amarked the beginning of a new military policy for the United States."⁶ It had Amade it possible to start the rebuilding of the armed forces to the strength required for the security of the United States.=⁷

29) In July, 1950, the Air Force began to grow. On 7 July it was authorized an additional military strength of 29,927 officers and airmen, and a Reserve recall program was instituted to fulfill this quota. On 14 July an additional force of 20,662 was approved. On 12 January 1951 the President authorized the Air Force to build to a strength of 1,061,000 by 30 June 1952. A strong upsurge of enlistments ensued. By 30 June 1951, the number of military personnel in the Air Force had reached 788,381.⁸

30) During the first year of the Korean War, the Medical Service was therefore obliged to expand very quickly. Quick action was necessary not only to meet the grave personnel deficiencies in the Far East, but also to keep up with the rapid growth of the Air Force as a whole.

31) This expansion of the Medical Service was enormously facilitated by the passage, in September 1950, of the "Doctors' Draft" -- Public Law 779, 81st Congress. This law; amended the Selective Service act by setting up a system of priorities for the drafting of medical and similar personnel for all of the Armed Forces. These priorities varied

according to previous military service, government sponsored training, and draft deferment for educational purposes. The recruiting letters which the Office of the Surgeon General sent out after the Doctors' Draft was passed elicited thousands of applications for commissions in the USAF Medical Service. Between 1 July and 31 December 1950, the Office of the Surgeon General received 3,958 applications for Reserve commissions and 259 applications for Regular Commissions.⁹

32) Increases in officer personnel followed rapidly. On 30 June 1951 the total officer corps strength stood at 8,281. This was distributed, by Corps, as follows:¹⁰

Medical Corps	2,800
Dental Corps.....	1,307
Veterinary Corps.....	194
Nurse Corps	2,284
Women=s Medical Specialist Corps	96
Medical Service Corps	<u>1,600</u>
Total.....	8,281

The number of airmen had reached 17,127.¹¹

33) Thus, in the year that had passed since the Communist attack in Korea, the number of officers in the Medical Service as a whole had more than doubled, while the Medical Corps, itself, had more than tripled. Moreover, the number of Regulars in that corps had risen to 650.¹²

34) It naturally followed that in Far East Air Forces the shortage of Medical Service personnel began to become less severe during 1951. By the end of that calendar year, however, the problem of getting adequate replacements for personnel lost by rotation to the United States was still a serious one. On 31 December 1951, officer assignments in the Medical Service of FEAF totaled 236 in the Medical Corps, 161 in the Dental Corps, 14 in the Veterinary Corps, 146 in the Medical Service Corps, 210 in the Nurse Corps, 146 in the Women's Medical Specialist Corps.¹³ While assignments in the Dental Corps had quintupled since 1 July 1950; those in the Medical Corps and the Air Force Nurse Corps had increased almost sevenfold.

35) Meanwhile, at Headquarters, in the Office of the Surgeon General, the Directorate of Medical Staffing and Education was monitoring new and accelerated training program

which had become necessary not only for direct support in Korea, but also for the support of the Air Force as a whole. These programs were conducted mainly at the US School of Aviation Medicine, Randolph Field, Texas, and at the Gunter Branch of the USAF School of Aviation Medicine, Gunter Air Force Base, Alabama. Between 1 January and 30 June 1951, a total of 1,039 officers and airmen in all categories of technical training, including those of flight surgeon, aviation medical examiner, and flight nurse, were graduated from the School of Aviation Medicine. Flight surgeons were considered the most important of the students, and they received the most intensive training. However, the training of flight nurses was also pressed, since these were needed for aeromedical evacuation duties in Korea.¹⁴ During fiscal year 1951 the number of designated flight nurses increased from 256 to 463.¹⁵

36) Aeromedical evacuation and other operations in Korea and Japan required extensive training programs for airmen. The Gunter Branch of the School of Aviation Medicine was created in October, 1950, and courses were set up for aeromedical technicians, aeromedical specialists, and Medical Service technicians. In October, a quota of 358 basic airmen a month was allotted for training in medical technology surgical technology, X-ray technology, medical laboratory technology, and pharmacy. In November, 1950, 2,100 basic airmen were assigned directly to Air Force hospitals for training as medical or dental helpers.

37) For fiscal year 1951, contracts in the amount of \$1,200,000 were let with civilian institutions to train 952 technicians in the X-ray, dental laboratory, preventive medicine, and veterinary technologies. Arrangements were made, at the same time, to train 50 dental technicians every 4 weeks at the Great Lakes Naval Training Center. Arrangements were also made with the Department of the Navy to train 49 Air Force technicians, each month, in the X-ray, medical laboratory, and 16 pharmacy technologies.¹⁶

38) During the next fiscal year (30 June 1951-30 June 1952), the expansion of the Air Force continued, and the number of military personnel reached 973,474 at the end of that period.¹⁷ The number of officers in the USAF Medical Service rose in the meantime from 8,281 to 10,264,¹⁸ and the number of airmen rose from 17,127 to 27,316.¹⁹ The officer strength was still far below total requirements, which were estimated at 1,186 for 1 July 1952.²⁰ The gravest deficiency was still in the Medical Corps, which then had an active strength of 3,064, as compared with a requirement for 3,309. The number of Regulars in the Medical Corps had risen only slightly and now stood at 673. Serious deficiencies also existed in the Nurse Corps and in the Women's Specialist Medical Corps. The estimated requirement for nurses

was 3,257, but the active strength of that corps was only 2,931. In the Women=s Medical Specialist Corps, the active strength was only 129, in comparison with a requirement for 292.²¹

39) In Korea, the Fifth Air Force had on 25 June 1952 an assigned strength of 155 officers, 16 nurses, and 538 airmen, as compared with an authorized strength of 157 officers, 64 nurses, and 596 airmen. The Fifth Air Force needed no more nurses at that time, because it had only two units which were operating hospitals. These were the 3d Medical Group, 3d Bombardment Wing, Light, at Kunsan (K-8) airfield on the west coast of Korea, and the 67th Medical Group, 67th Tactical Reconnaissance Wing, at Kimpo (K-14) airfield near Seoul. Other Fifth Air Force units were at that time operating dispensaries having no beds authorized.²²

40) Attrition due to rotation in the Fifth Air Force during June was then being adequately met by the assignment of 13 Medical Officers, 2 Nurses, and 8 Medical Service Corps Officers to the various units of the command.

41) In that month the Fifth Air Force had just completed a personnel survey, however, which indicated a need for another colonel, another major, 3 additional lieutenants, and 60 more captains. Of the latter, 49 were dentists. Ninety more airmen were also needed, including 48 for the Dental Corps.

42) This personnel survey revealed, moreover, that the Fifth Air Force had an acute shortage of field grade medical officers having experience as Medical Group Commanders. In June, 1953, of the nine (9) medical groups authorized the Fifth Air Force, two (2) were commanded Lt. Colonels, two (2) by Majors, and five (5) by Captains.

43) The Fifth Air Force Surgeon made it clear in presenting his recommendations at that time that it was not his intention to imply that the ability of the company grade officers was questioned; on the contrary, he said, in all instances these young officers had done an admirable job in their assignments. Nevertheless, he stated, the majority of the Wing Commanders wished to have a Field Grade Officer as Staff Advisor on Medical Service matters; for the experience which such an assistant normally required was not found in a younger officer who had had only one or two years of active military service.²³

44) During the next fiscal year (30 June 1952-30 June 1953) the Air Force grew only

slightly, while the total officer strength of the Medical Service began to approach the estimated requirements for the first time in history. On 30 June 1953 -- less than a month before the hostilities ended in Korea -- the Air Force had 977,953 military personnel,²⁴ While the Medical Services had 10,651 officers²⁵, and 27,855 airmen.²⁶ Officer requirements were estimated at 11,098. The active strength of the Medical Corps was now 3,430, as compared with a requirement for 3,465. The only corps which were still much below the estimated requirements were the Nurse Corps and the Women's Medical Specialist Corps. The former had an active strength of 2,991, and a requirement for 3,267; the latter had an active strength of 146, and a requirement for 251.²⁷ The number of Regulars in the Medical Corps had crawled up to 735. Those in the Nurse Corps numbered only 379.²⁸

45) In Korea, during the period January - June 1953, the average strength of Medical Service personnel in the Fifth Air Force was 59 Medical Officers, 47 Dental Officers, 34 ESC Officers, 4 Veterinary Officers, 24 AFNC Officers, and 683 Airmen. These personnel were assigned to Medical Groups supporting wings, and to Medical Squadrons supporting Air Base Groups. The Medical Service of the Fifth Air Force also supported an average of 8,156 SCARWAF (Special Category Army Personnel with Air Force) Aviation Engineer Personnel who were attached. There was also assigned to the Fifth Air Force, in addition to the foregoing Medical Service personnel, an average of 8 SCARWAF Medical Officers and 75 SCARWAF Enlisted Men.²⁹

46) At that time, the ratio of Fifth Air Force medical personnel to strength served was as follows:

1 MC	per	596 personnel
1 DC	per	767 personnel
1 MSC	per	1,176 personnel
1 VC	per	9,976 personnel
1 AF	per	1,663 personnel
1 Airman	per	53 personnel

47) Even up to the end of the war, the Fifth Air Force was short of both medical and dental officers. There were also shortages of personnel in some of the Airman specialties, such as pharmacy and medical supply, but these shortages were not so serious as those in the professional categories.

48) The Fifth Air Force did valuable work in training medical personnel of the Republic of Korea Air Force (ROKAF). During the period January-June 1953, for example, seventeen ROKAF Flight Surgeons received training in various Fifth Air Force medical units. The length of training varied in each case according to the abilities of the individual ROKAF Flight Surgeon to absorb the information. Upon completion of the course, each ROKAF Flight Surgeon was capable of performing a complete examination in detail and of understanding the duties of the Flight Surgeon.³⁰

49) The 67th Medical Group, 67th Tactical Reconnaissance Wing, at its hospital at Kimpo (K-14) airfield northwest of Seoul, established a formal course in February, 1953, for a group of ROKAF medical personnel consisting of 2 Medical Officers, 3 Medical Administrative Officers, 1 Dental Officers, and 14 Airmen. These personnel received twelve weeks of training in all phases of operation of Air Force Hospital. Both the 67th Medical Group and the students considered the course very successful.³¹

50) Of these ROKAF officers, two were assigned to sick call one to the dental clinic, one to medical supply, and two to hospital administration. Those assigned to sick call helped in the dispensary and flight surgeon's office and in the ward rounds, assisted in surgery and physical examinations, and observed medical flight line activities. The ROKAF officer assigned to the dental clinic did the work of an USAF dental officer and used established USAF procedures.

51) The ROKAF airmen included medical and surgical, administrative, laboratory, preventive medicine and veterinary, and medical supply, technicians. The medical and surgical technicians received instructions regarding sick call, emergency procedures, the flight surgeon's office, the wards, and the operating room. The X-ray technicians received training in anatomy and physiology, the positioning of patients, exposure factors, darkroom technique, special examinations, and administrative functions. The pharmacy technician worked alongside USAF technicians compounding drugs, filling prescriptions, requisitioning supplies, auditing narcotics, and carrying out any other duties regularly performed in a pharmacy. The preventive medicine and veterinary technicians carried out sanitary inspections, controlled rodents, examined food handlers, tested the water, and inspected food. The administrative technicians worked in the hospital adjutant's office and learned military and medical correspondence, regulations, and files. After a few weeks, these technicians became capable of setting up and maintaining an out-patient records file.

52) Different types of technicians had different problems in learning this material. For

medical and surgical technicians, the main problem seemed to be to understand the phraseology of official Air Force forms and regulation. On the other hand, the X-ray technicians did not have so much trouble of this sort, because it was easy to teach them with charts and graphs. The problem which the pharmacy technicians had was not so much with the phraseology of Air Force regulations, as with learning the English names for drugs, viruses, and bacteria. What they had learned before about these things they had learned in German.³²

Chapter III

HOSPITALIZATION AND EVACUATION

Hospitalization

53) The expansion of the Air Force which was initiated by the Korean War necessitated a great expansion of USAF medical facilities. Between 30 June 1950 and 30 June 1952 the number of Air Force medical facilities, worldwide, rose from 73 to 162, and the number of operating beds went from 6,200 to 18,872.¹ This expansion had so far been accomplished merely by modifying and rehabilitating existing structures. There had not yet been any major construction.²

54) By 30 June 1953, however, when hostilities were about to end, and the members of medical treatment facilities and operating beds stood at 180 and 17,713, respectively,³ a program of new construction was "well under way."⁴ By this time, about four-fifths of all hospitalized Air Force personnel were being taken care of in Air Force hospitals,⁵ rather than in those of some other Service. The great increase since June, 1950 in the ability of the Air Force to care for its own personnel was attributed to an improvement both in medical facilities⁶ and in professional staffs.⁷

55) At the outbreak of the Korean War, the Air Force had no hospitals in either Korea or Japan.⁸ These were needed: though not so much for Air Force battle casualties, as for non-battle injuries and disease.⁹ The first Air Force infirmaries in the Far East which provided direct support in the Korean conflict were set up in August, 1950 at Haneda Air Base, Japan; Misawa Air Base, Japan; and Johnston Island Air Base, Johnston Island. The facilities at Haneda and Misawa started with fifteen operating beds each, while that at Johnston Island had 20.¹⁰

56) United States Army hospitals furnished nearly all hospitalization for USAF personnel in Japan and Korea until the following year. In February 1951, the Air Force established a 50-bed hospital at Itazuke Air Base, Japan. In April, the Air Force acquired three former Army hospitals at Nagoya Air Base, Johnson Air Base, and FEAMCOM (Tachikawa) Air Base, Japan. Prior to their transfer, these hospitals had been staffed jointly by Army and Air Force personnel. Thereafter, the Air Force assessed responsibility for their staffing and operation.¹¹ The hospital at Nagoya had 800 operating beds, while those at Tachikawa

and Johnson had 300 and 200, respectively. Large numbers of Air Force personnel were located at these bases, and the acquisition of these hospitals conformed with the Air Force medical policy of providing hospital care at base level,¹² so far as possible.

57) Moreover, Air Force liaison detachments located at eight large U.S. Army hospitals in Japan, for the purpose of facilitating the administrative management of Air Force patients. These detachments were commanded by Medical Service Corps officers, assisted by airmen.¹³

58) Army hospitals in Japan continued to take care of a large proportion of Air Force patients. In March 1951, prior to the acquisition of the Air Force of the former Army hospital at Nagoya, Tachikawa, and Johnson Air Base, the daily average number of USAF personnel hospitalized in the Far East, excluding the Philippines, was 831; but only 80 were in USAF facilities. In April, following the transfer, the total remained at 831, while the number in USAF facilities rose to 239. As late as December 1952, when the total stood at 889, only 519 were in USAF facilities.¹⁴

59) Air Force hospitals in Japan also took care of considerable numbers of Army personnel. In March 1951, when the average number of beds occupied in USAF facilities in the Far East, excluding the Philippines, was 100, Army personnel occupied only 17. In April, when the number of occupied beds rose to 868, Army personnel occupied 596. In December, 1952, when the number of occupied beds stood at 666, Army personnel still occupied 95.¹⁵

60) By the end of the conflict, Far East Air Forces was operating six fixed USAF hospitals and two fixed infirmaries. At the same time, MATS was operating one fixed infirmary in Japan, one on Guam, and one on Johnston Island. These were serving the medical air evacuation route from Japan to the United States.

61) At that time FEAF's largest hospitals were at Nagoya Air Base, Tachikawa Air Base, and Johnson Air Base. The hospital at Nagoya had 400 operating beds; that at Tachikawa, 300; and that at Johnson, 200. FEAF's hospitals at Ashiya Air Base, Itazuke Air Base, and Misawa Air Base had 50 operating beds each. FEAF's infirmaries at Iwakuni Air Base and Miho Air Base had 20 operating beds each. MATS had 15 operating beds at Haneda Air Base, Japan, and 20 at Johnston Air Force Base, Johnston Island.¹⁶

62) In Korea itself, the Fifth Air Force had four unfixed or semi-fixed 50-bed hospitals in

June, 1953. These were operated by the 3d Medical Group, 3d Bombardment Wing, Light (B26), at Kunsan (K-8) airfield; the 8th Medical Group, 8th Fighter Bomber Wing (F86), at Suwon (K-13) airfields the 18th Medical Group, 18th Fighter Bomber Wing (F86), at Osan (K-55) airfield; and the 67th Medical Group, 67th Tactical Reconnaissance Wing (RF80, RB26, RF86), at Kimpo (K-14) airfield. All of these airfields, with the exception of Kunsan, on the West Coast, were in the general vicinity of Seoul.¹⁷

63) At this time the Fifth Air Force was also operating various dispensaries. These served under the 6147th Tactical Control Group (T-6) at Chunchon (K-47) airfield, northeast of Seoul; the 6151st Air Base Squadron at Taegu; the 6154th Air Base Group at Seoul; the 6167th Air Base Squadron at Taegu (K-2) airfield; the 6164th Air Advisory Group, Detachment 2, at K-18; the 502d Tactical Control Group at Seoul; and the 417th Aviation Engineer Brigade at Taegu. A 25-bed infirmary, moreover, was being remodeled for operation by the 58th Medical Group, 58th Fighter Bomber Wing (F84) at K-2, while a 50-bed hospital was under construction for operation by the 17th Medical Group, 17th Bombardment Wing (B-26) at E-9.¹⁸

64) Besides these facilities, the Fifth Air Force was also furnishing certain hospital services for the Republic of Korea Air Force (ROKAF). To the Fifth Air Force there was assigned as part of the 6146th Air Advisory Group, a medical section consisting of one Medical Officer, two Air Force Nurse Corps (AFNC) Officers, one Dental Corps Officer, and six medical Airmen. This medical section supervised and assisted in the operation of a twenty five bed ROKAF hospital at Kangneung (K-18) airfield¹⁹ on the east central coast.

65) In 1953 the Fifth Air Force Medical Service was organized as follows. The Office of the Surgeon consisted of four divisions: a Professional Division, an Administrative Division, a Dental Division, and a Preventive Medicine Division. The Professional Division included an Aeromedical Section and a Psychiatric Section. The Administrative Division dealt with personnel, medical supply, and biometrics. The Preventive Medicine Division consisted of a Veterinary Section, a Sanitation Section, and an Entomology Section.

66) The Office of the Surgeon supervised the work of eight Medical Groups (the 3rd, 4th, 8th, 17th, 18th, 51st, 58th, and 67th), the 5th Epidemiological Flight, and seven other units. The latter provided dispensary and other services.²⁰ Seven of these Medical Groups were authorized 17 officers and 70 airmen.²¹

67) The 5th Epidemiological Flight, which replaced the 1st Epidemiological Flight in 1952, was primarily used in carrying out the Insect and Rodent Control Program of the Fifth Air Force. Nevertheless, the services of the Aerial Spray Program which the 5th Epidemiological Flight operated were available to all Air Force, Army, Navy, and Marine 22 units in Korea. The Flight was based in July, 1953 at Seoul City Airport (K-16).²³

68) K-13 and K-14 each accommodated two wings, and each wing had a medical group which was authorized a 50-bed hospital. Experience had proved, however, that these bases needed only one 50-bed hospital each. Therefore, the Fifth Air Force worked out a system by which one medical group at each base provided hospitalization for both wings, while the other medical group at that base performed other medical services for its own wing only. Had each medical group operated a 50-bed hospital as authorized, 4 more officers and 30 more airmen would have been required at each base.²⁴

69) The Fifth Air Force issued regulations in March, 1953, which defined the respective responsibilities of the various Medical Groups at K-13 and K-14. K-13 had, besides the 8th Medical Group, the 51st Medical Group, 51st Fighter Interceptor Wing. K-14 had, besides the 67th Medical Group, the 4th Medical Group, 4th Fighter Interceptor Wing.

70) The commanding officers of the 51st and 4th Medical Groups were made responsible for providing, for their respective wings and attached units, outpatient dispensaries services, an Air Crew Effectiveness Program, a first aid and medical training program, and dental service. Each of these commanding officers was also responsible for coordinating with the commanding officer of the other medical group on his base the attachment of necessary medical personnel for the base hospital.

71) The responsibilities of the commanding officers of the 8th and 67th Medical Groups were much more extensive. For the service of their own wings they exercised the same responsibilities as the commanding officers of the 51st and 4th Medical Groups. For the base as a whole, however, each was responsible for many other services. Thus each exercised command of a USAF Hospital which would provide in-patient care for all assigned and attached units. Each commanding officer was also responsible for directing a sanitary and preventive medicine program at his base. Each was responsible for providing adequate crash and emergency ambulance service at his base. Finally, each commanding officer of these two medical groups was responsible for providing and maintaining for his entire base a clinical laboratory, an X-ray service, a pharmacy, and a

medical supply service.²⁵

72) Although the Fifth Air Force Surgeon reported in 1953 that the Air Force hospitals in Korea were "entirely adequate," he said that there had been many difficulties in building them. No two hospitals, dispensaries, or infirmaries were of the same construction. The plans and drawings for them had not been standardized.

73) The Surgeon therefore recommended that the Air Force develop standard, portable, packaged hospitals, infirmaries, and dispensaries, for use under such conditions as obtained in Korea. He stated that such kits or units would be economical than the shells and Quonset huts the Air Force was then using.²⁶

Aeromedical Evacuation

74) During the second year of the Korean conflict, General Matthew B. Ridgeway, Commanding General of the United Nations forces in Korea, singled out aeromedical evacuation for specks] praise in the Nineteenth Report of the United Nations Command in Korea to the United Nations Security Council. "High praise," he said, "must be paid to the elements engaged in evacuation by air of wounded personnel and of individuals from behind enemy lines."²⁷ "Countless numbers of soldiers," as he said, and countless numbers of men who would have become prisoner, had been "saved by prompt and efficient action of the air rescue and evacuation units." The wounded United Nations soldier in Korea, he added, had a better chance of recovery than the soldier of any previous war. This, he stated, was "not only by virtue of improved medical treatments available at all echelons, but also in large measure because of his ready accessibility to major medical installations provided by rapid air evacuation."²⁸

75) There were other weighty testimonials to the importance of this function. Upon his return from a visit to Air Force medical facilities in the Far East in early 1951, Doctor Elmer L. Henderson, President of the American Medical Association, described air evacuation as "the greatest thing that has come out of this Korean incident as concerns saving lives of soldiers."²⁹ In 1952 the Office of the Surgeon General stated that "responsible medical officers at the front line in Korea" had "estimated that without rapid transportation by helicopter and immediate emergency aid including blood transfusions, 80 per cent of the wounded would have died."³⁰ The inadequacy of surface communications in Korea tended to make evacuation by ambulance dangerous, impracticable, or impossible.³¹

76) On 7 September 1949, the Secretary of Defense designated air transportation as the primary means of evacuation in both peace and war and delegated the responsibility for the evacuation of sick and wounded personnel directly to USAF. For wartime, hospital ships and hospital trains were designated as supplemental and alternative means of evacuation.³² Within the combat zone, on the other hand, the other military services also utilized the helicopter to evacuate the wounded from the scene of battle.³³

77) In general, the evacuation procedure was as follows: helicopters and other aircraft of the 3d Air Rescue Squadron, MATS, and other units removed sick and wounded personnel of all services, or downed flyers, from the fighting fronts or behind enemy lines, to Army mobile surgical hospitals or other facilities. C-47s, C-54s, and other aircraft, carrying nurses and medical technicians of the 801st Medical Air Evacuation Squadron, 315th Air Division (Combat Cargo), and other units, transported the sick and wounded further, if necessary, to hospitals in Japan or Korea. C-54s, C-97s, and other aircraft, carrying nurses and medical technicians of the 1453d Air Evacuation Squadron, MATS, removed patients from Japan to Travis Air Force Base, California. The MATS system then carried them further, if necessary, to other hospitals in the United States.³⁴

78) It was reported officially in June, 1953 that since the beginning of the Korean War, troop carrier aircraft and medical crews of the 801st Medical Air Evacuation Squadron had flown more than 12,000 flights, operated out of more than 35 Korean airstrips, and carried more than 280,000 patients.³⁵ The number of Korean War evacuees who had received in-flight medical care between Japan and the United States from MATS medical crews was reported at the same time as 41,267.³⁶ It was also stated officially that between 10 August 1950 and 30 June 1952, 4,981 wounded had been picked up by USAF helicopters and evacuated to mobile hospitals.³⁷

79) In May 1951, Maj. Gen. Harry G. Armstrong, USAF, MC, the Air Force Surgeon General, described the record of the 3d Air Rescue Squadron and of the 801st Medical Air Evacuation Squadron in the Korean War as "one of the brightest chapters in the history of our Air Force."³⁸ He stated that when the Communists first launched their drive across the 38th parallel, the Fifth Air Force had only the minimum personnel considered necessary to manage the normal peacetime air evacuation workload. Aircrews and air evacuation technicians had therefore found it necessary to fly "as many as three round trips a day to Korea from Japan and return during the initial weeks of the conflict." Twenty-six air evacuation personnel in the Far East, he added, had been

awarded decorations for bravery in action or for services performed, and the 801st Medical Air Evacuation Squadron was "the first unit of the Air Force in that theater to be awarded the Distinguished Unit Citation."³⁹

80) On 18 December 1950, the 801st Medical Air Evacuation Squadron had received a Distinguished Unit Citation for gallantry and heroism while participating in battle casualty operations in Korea during the periods 21-30 September and 1-10 December.⁴⁰ The commendation stated that in September, during the battle for Seoul which followed the waterborne invasion at Inchon on the west coast, this squadron had evacuated 1,449 battle casualties from the Suwon and Kimpo airstrips. The squadron had carried out this operation "under the fire of large concentrations of enemy troops in the surrounding areas."⁴² Two aircraft had been so badly damaged by enemy fire that complete destruction was required.⁴³

81) The action of 1-10 December has been described the Medical Department of the U.S. Navy as "one of the most prodigious air evacuations of casualties in military history.≡ In consequence of the general retreat of United Nations forces which commenced at the end of November,⁴⁵ the First Marine Division had found itself completely surrounded by Chinese communist forces in the vicinity of the Chosin (Chosin or Changjin) Reservoir, in northeast Korea. The First Marine Division was faced with the necessity of cutting its way through eight Chinese divisions to the seacoast. The Marines felt confident of their ability to do so, if only their casualties could be evacuated.⁴⁶ They therefore worked night and day in below-zero weather to scratch out airstrips at Hagaru-ri and Koto-ri from soil frozen as hard as concrete.⁴⁷ C-47s of the 21st Troop Carrier Squadron, 315th Air Division, carrying personnel of the 801st Medical Air Evacuation Squadron, then flew in and took out an average of 34 patients per flight. Although many C-47s were hit by small-arms fire and one crashed on takeoff, not one patient was injured during this evacuation. The evacuation by these means of 4,689 casualties enabled the Marines to reach the Hamhung-Hungnam defense perimeter, on the northeastern seacoast, by December 11.⁴⁸

82) Thus, as the Distinguished Unit Citation for the 801st Medical Air Evacuation Squadron stated, the personnel of the squadron had operated from inadequate airstrip facilities in an area entirely surrounded by enemy troops, and had been subjected to hostile fire on the ground, as well as in the air. The citation continued:

The members of the 801st Medical Air Evacuation Squadron in both of these operations unhesitatingly risked their lives again and again in order

to provide the necessary medical attention to the wounded members of the United Nations' Forces. The personal bravery, technical abilities and devotion to duty displayed by the personnel of the 801st Medical Air Evacuation Squadron thus reflect great credit on themselves and the United States Air Force.⁴⁹

83) Just as the 801st Medical Air Evacuation Squadron had been the first USAF unit in the theater to receive a Distinguished Unit Citation,⁵⁰ so also the 1453d Medical Air Evacuation Squadron was to be the first USAF organization in the Korean War to receive a Meritorious Unit Commendation.⁵¹ This commendation referred not only to aeromedical evacuation from Japan to the United States, but also to action in the combat zone in September 1950, after the withdrawal of American and South Korean forces to the neighborhood of Pusan.⁵²

84) The commendation stated that the 1453d Medical Air Evacuation Squadron had distinguished itself by an exceptionally meritorious conduct in the performance of outstanding service from 27 June to 31 December 1950.⁵³ During this period, the squadron had evacuated 16,604 battle casualties over a distance of more than 90,000,000 patient miles between the Far East theater of operations and military hospitals in the United States. This mission had been accomplished without a single fatality.⁵⁴

85) The squadron was credited in the commendation with having saved many thousands of lives by its constant innovation and development of air evacuation techniques and procedures: particularly in reducing the time of transit, improving medical care, and increasing patient comfort. Moreover, in September, 1950, members of the squadron had unhesitatingly entered the combat operational zone at Pusan airstrip in Korea and evacuated 950 battle casualties under conditions of probable if not imminent attack by the enemy. And thus the rare technical ability and the exceptional devotion to duty displayed by the personnel of the 1453d Medical Air Evacuation Squadron were in keeping with the highest traditions of the service, and reflected great credit upon the Squadron, the Far East Air Forces, and the United States Air Force.⁵⁵

86) Aeromedical evacuation was many times faster and much more comfortable than land or sea evacuation. In the spring of 1951, upon the return of the Air Force Surgeon General from his tour of completion in the Far East, certain civilian consultants who had accompanied him took occasion to compare air evacuation with land and sea evacuation. They stated that evacuation from Korea through Japan to the United States would take

from 3 to 4 weeks by boat and train, whereas seriously wounded patients could be airlifted to the United States in 36 hours. These consultants pointed out that air evacuation was also the most economical method of evacuation, because it saved a great deal of time, required only a few medical personnel en route, and utilized space on returning cargo aircraft which would otherwise have been vacant.⁵⁶ These comparisons as to speed were, in fact, conservatively stated: for by 1953, if not before, the wounded could be moved over MATS Pacific Division from Japan to the U. S. in 26 hours, if circumstances required.⁵⁷

87) Personnel shortages, inadequate helicopter capability, deficient training, and the lack of established air evacuation procedures, contributed to the difficulty of these activities. A shortage of flight nurses at the beginning of July 1950 necessitated emergency requisitions, while a shortage of enlisted technicians made it necessary for them to get their training on the job.⁵⁸ In 1950 the 3d Air Rescue Squadron was dependent upon H-5 helicopters. These could carry only two litter patients at a time.⁵⁹

88) Aeromedical evacuation in and between Japan and Korea involved complicated problems of coordination which it took time to solve. The Far East command did not issue a directive on the subject until December, 1951. In the beginning, moreover, communications were poor between Japan and Korea. In Japan, the inadequacy of information on patient-movement replacements in Korea made it difficult or impossible to schedule outgoing cargo-carrying aircraft to suit the needs of incoming patients. Patients and aircraft frequently experienced long waits for each other. For these and other reasons, the Army sent many of its patients to Japan by sea.⁶⁰

89) Responsibilities for the various phases of aeromedical evacuation were often vague and indefinite. Often it was not clear, for example, who was responsible for the operation of casualty-staging facilities. In February, 1951, the commanding officer of the 801st Medical Air Evacuation Squadron complained in a letter to FEAF that patients waiting in such facilities often went without food for long periods. He considered the operation of these facilities the responsibility of the sending agency - whether Army, Navy, or Air Force - but pointed out that so long as a directive was lacking in the theater, responsibility could not be fixed.⁶¹ Even after the Far East Command Directive was issued, however, there were "still many Army and Air Force personnel in wide disagreement on the concepts of how much Air Evacuation should be handled by Army and how much by Air Force and how much within each of the two Armed Services should be done by different sub-commands."⁶²

90) Eventually, a system was developed pragmatically, which represented considerable improvement. Near the end of the Korean War, this system was described in part as follows:

The using agency - whether Army, Navy, or Air Force - has only to furnish its air evacuation requirements to an Air Force Air Evacuation Liaison Officer who relays the information to the air evacuation operations officer (MSC Officer) of the 315th Air Division. Here coordination is effected with the Army Medical Evacuation Officer, and aircraft flying scheduled cargo runs are designated to pick up patients on their return trips, at the time and place specified. Thus air evacuation is integrated with operational schedules. Movement of patients now has the highest priority. In emergencies patients may be moved without regard to cargo.⁶³

91) From its experience with aeromedical evacuation in Korea and Japan, FEAF drew the following lessons before the end of the conflict.

1. In every theater of operations there should be a definite air evacuation plan, and this plan should be disseminated to all units within the command.
2. The air evacuation squadron assigned to the theater should be kept up to authorized personnel and equipment strength at all times.
3. All aircraft to be used for the purpose within the theater should be under a single transport headquarters. The air evacuation squadron should be assigned to this headquarters. Such centralization would make more aircraft available and would permit critically short medical personnel to be used more efficiently.
4. Medical air evacuation should have top priority within the theater.
5. All cargo air evacuation assigned to a combat theater should be properly equipped to do air evacuation at all times.
6. The Air Force should assume and maintain the responsibility for operating patient holding facilities.

7. A portable aspirator, modified for 24-volt current, should be adopted or an item of equipment authorized to air evacuation squadrons.

8. Only school-trained air evacuation technicians should be furnished air evacuation squadrons as combat crew replacements. These technicians should be especially designated for this operation prior to their departure from the Zone of Interior.

9. A field-grade Medical Service Corps Officer, experienced in all phases of troop carrier operations, should be attached to the office of the theater surgeon in a combat theater of operations.⁶⁴

Chapter IV

MATERIEL

92) FEAF was responsible for the initial issue of medical materiel to Air Force medical units in Korea, but the Army was responsible for subsequent support there. The Army's Japan Medical Depot at Yokohama likewise supported Air Force medical units in Japan, and the RYCOM (Ryukus Command) Army Depot supplied Air Force medical units on Okinawa.

93) The Air Force had a certain equity of stocks at the Japan Medical Depot, but no Air Force assets existed at the RYCOM Army Depot, other than certain materiel which needed to be held in readiness against the eventuality of extended operations.¹

94) Misunderstandings arose in the beginning as to responsibilities for providing medical materiel. For example, of the three Bomber groups of B-29's which arrived at Kadena Air Base, Okinawa, from the United States and Guam, only one brought any medical supplies for itself. Each of these groups had been authorized a medical fly-away kit containing a thirty day level of medical supplies. These kits had been left behind.

95) The Army Medical Depot at Kadena took immediate action to secure additional supplies and to make its existing stocks available where most needed. After about three months, stock levels improved and medical supplies began to come in steadily. The Surgeon of the Twentieth Air Force subsequently recommended that in the future, units of squadron size or larger, moving from one base to another, take along enough medical supplies for thirty days of operation, in estimating how much would be sufficient, he said, they should take into consideration the facilities at the receiving base, the climate, the season of the year, and the health hazards prevailing there. Such units should be able to operate independently of base supply stocks during that period. Furthermore, he recommended, the incoming units should give the receiving base sufficient notice to enable it to procure an adequate store of medical supplies to provide for the needs that would arise after the initial thirty-day period had expired.²

96) Similar problems arose in Japan. Some units arrived there from overseas without their authorized medical supplies and equipment, and the Japan Medical Depot was at first unable to meet these needs. Often it was necessary, therefore, for the medical units which

were already in Japan, and which were expected to remain there, to turn their equipment over to the medical units which were departing for Korea. Delays in securing replacement of equipment so surrounded were often considerable.³

The Supply of Blood

97) On the other hand, the Air Force Medical Service played a leading role in the collection, processing, and transportation of blood to fighting fronts and facilities in Korea, Japan, and elsewhere. At the end of the first year of hostilities, the Office of the Secretary of Defense stated that aeromedical evacuation of casualties and improved blood and plasma treatment were the two more reasons why the percentage of combat casualties who died after admission to a hospital was only 2.6, as compared with 4.5 in World War II.⁴ The use of plasma in forward areas in Korea kept many of the wounded alive until they could be evacuated to places where the whole blood was available.⁵ MATS carried blood to FEAF by fast air express from Travis Air Force Base, California, beginning in August, 1950.

98) The collection and processing of blood was administered by the Blood and Blood Derivatives Group under the supervision of the Directorate of the Armed Services Medical Procurement Agency. This directorate consisted of Army, Navy, and Air Force representatives. The Air Force member became chairman in May, 1952.⁶

99) This work had required much preparation. At the end of World War II, the armed services had dismantled their blood-processing laboratories and had transferred excess stocks of plasma to the American Red Cross. The latter had distributed this plasma to civilian institutions. The armed services had retained no reserves of either whole blood or plasma.⁷

100) In October 1949, Dr. Richard I. Meiling, Director of Medical Services, Office of the Secretary of Defense, appointed a group to make recommendations on how to meet requirements for blood, blood derivatives, and plasma substitutes in both peace and war. As a result of this study, an Armed Services Blood Group induced commercial organizations to develop processing laboratories for the purpose.

101) The outbreak of hostilities in Korea made the need for whole blood even more urgent, however, than the need to build up plasma stocks. Accordingly, the American Red Cross collected whole blood from its blood donor centers throughout the country and

delivered it to the Armed Services Whole Blood Processing Center at Travis Air Force Base, California. After the blood was given certain treatment, it was carried to Tokyo via Honolulu, where MATS had established re-icing facilities. In Tokyo, it was delivered to the Army's 406th General Laboratory at Haneda Air Base. It was then inspected, repacked, and re-iced for shipment to Korea. In Korea, it was flown to the combat area by helicopter, or otherwise.

102) Since the amount of blood being collected by the American Red Cross from civilians proved insufficient to build up armed services plasma stocks and to meet the needs for whole blood at the same time, the Secretary of Defense announced in August, 1951, that an Armed Forces Blood Donor Program was also being established. The Armed Forces Medical Policy Council, Office of the Secretary of Defense, was to provide policy guidance, while the Armed Services Medical Procurement Agency was to act as coordinator. As a result of this action, the rate of total blood collections quintupled.⁸ The Department of the Air Force directed every level of command to join wholeheartedly in this program, and established collection centers at such places as Lowry Air Force Base, Colorado, Lackland Air Force Base, Texas, and Sheppard Air Force Base, Texas. The Office of the Surgeon General sponsored exhibits in cooperation with the Red Cross, while National Guard and Reserve components were asked to give blood on drill nights.⁹ By the end of the Korean War, the work of the Blood and Blood Derivatives Group of the Armed Services Medical Procurement Agency had thus achieved success.¹⁰

Chapter V

PROFESSIONAL CARE

103) Professional care in the Far East Air Forces involved extensive activities in preventive medicine, aviation medicine, specialty care, dentistry, and veterinary services.

Preventive Medicine

104) Many of the principal problems of preventive medicine which the USAF faced in the Korean War arose from low standards of individual and community hygiene, venereal disease, the ubiquity of arthropod vectors of disease, and the high prevalence of tuberculosis among natives.¹

Sanitation and Hygiene

106) Fecal contamination constituted the main problem of hygiene. The Koreans used human excrement for fertilizer. Fruit, vegetables, and water were therefore unsafe in most places.²

107) Other hygienic or related problems arose from (1) insufficient training of both officers and airmen in personal hygienic practices under field conditions;³ (2) inadequate refrigeration at some Korean bases; (3) unsanitary practices by some Korean contractors in disposing of trash and garbage; (4) insufficient hot water for dishwashing;⁴ and (5) dirty and diseased food handlers. Inadequate refrigeration was considered responsible for several minor outbreaks of staphylococcus food poisoning in Korea.⁵

107) The action which the Medical Service took to improve sanitation and hygiene in Korea and Japan included the institution of an intensive program of training for all personnel in the Air Force; the procurement of iodine water - purification tablets for individual use; careful studies of water systems;⁶ and surveillance over farms and restaurants.⁷

108) After the first summer of fighting in Korea, the FEAF Surgeon concluded that the most important lesson the USAF Medical Service had learned was the need for broad and intensive training of both officers and airmen in field sanitation and personal hygiene. In

their understanding of how to live, eat, sleep and work under primitive field conditions in Korea, Okinawa, and Japan, USAF officers and airmen were babes in the woods, as he reported. They knew and cared nothing about mess sanitation, disposing of human excreta and kitchen refuse, protecting themselves against disease-bearing insects and pests, or the protection of the skin. Such ignorance and indifference, he said, had inevitably resulted in outbreaks of gastrointestinal diseases, and in scabies and skin rashes, as well as a few cases of malaria and encephalitis. He ascribed the Air Force's failure to give proper training in these matters to acute shortages of Medical Service personnel since World War II.⁸

109) The sanitary conditions of Air Force mess halls in Korea often suffered from a lack of screens; from poor refrigeration; from inadequate supervision of Korean food handlers; and from the unhygienic condition of the latrines which these food handlers used. All Korean food handlers were, moreover, found infested with pin worms, round worms, whip worms, or hook worms. It was impossible to keep Koreans dewormed, because they continued to eat native food off-base.⁹

110) Korean food handlers were potential carriers of tuberculosis and amoebic dysentery. Tuberculosis, in both its pulmonary and its extrapulmonary forms, was the most devastating of all diseases encountered.¹⁰ The Fifth Air Force maintained a close X-ray check of Korean food handlers, because from 10 to 30 percent of the Korean population were believed tubercular.

111) However, it was almost impossible for the Fifth Air Force, with its limited laboratory facilities, to detect food handlers who carried amoebic dysentery. It was therefore fully recognized that serious outbreaks of food-poisoning could occur at any time. The Fifth Air Force Surgeon considered that the only defense available against the contracting of amoebic dysentery from food handlers was to supervise them carefully in the mess halls, so as to make sure that their bodies were clean and that they were not suffering from some acute infection.¹¹

Communicable Disease

112) Gonorrhoea accounted for the majority of venereal infections among Air Force personnel in Japan, Korea, and Okinawa. Syphilitic infections were comparatively rare. In Korea and Okinawa, the incidence of chancroid among Air Force personnel approached that of gonorrhoea. It was observed that since chancroid can be prevented almost 100

percent by prompt washing with soap and water after exposure, its high incidence is another reflection of primitive sanitary environment.¹² Nearly all venereal patients were treated as outpatients.

113) The Fifth Air Force claimed a modest degree of success in reducing the incidence of venereal disease in early 1953. During the calendar year 1952, the average VD rate per thousand per annum for all personnel of the Fifth Air Force had been 400. During the first six months of calendar year 1953, this rate went down to 350. The Fifth Air Force Surgeon believed that this reduction was due to a strong educational program which he had initiated early in that year.

114) The Fifth Air Force also had a measure of success in preventing infectious hepatitis. In the first six months of the calendar year 1952, the average rate per thousand per annum for infectious hepatitis was 2. In the first six months of calendar year 1953, this rate was only 1. The Fifth Air Force Surgeon attributed this decline to two factors: (1) during the second half of 1952, the Fifth Air Force had improved its water purification plants; and (2) the Surgeon had established a policy that all syringes used for immunization and dental work be autoclaved, rather than either chemically sterilized or boiled.¹³

115) The following arthropod vectors of disease were described as ubiquitous: The mosquito vectors of malaria, filariasis, yellow fever, dengue and viral encephalitis; the louse and mite vectors of the Rickettsial diseases; the rat flea vector of plague and of murine typhus.¹⁴

116) Under suspicion as vector of epidemic hemorrhagic fever were the mite Laelaps jettmari and various trombiculid mites.¹⁵ Up to the close of hostilities, however, only four cases of hemorrhagic fever had occurred among Air Force or SCARWAF personnel in Korea. One case was fatal. These cases had all occurred under field conditions -- and not on air base sites.¹⁶

117) On the other hand, not all of the diseases which these arthropods might carry were necessarily endemic. Thus, although the mosquito Aedes Aegypti was everywhere, there was no yellow fever, and while the rat flea was also multitudinous, there was no plague. Still, plague was reported to have occurred sporadically in neighboring areas of China.¹⁷

118) In 1951, the 1st Epidemiological Flight activated an Air Force Aerial Spraying unit to prevent epidemics of malaria, Japanese-B encephalitis, and other insect-borne

diseases.¹⁸ The unit used C-46-type aircraft for spraying large areas, and T-6s or other single-engine planes for small areas.¹⁹ Seoul, Taegu, and Pusan, for example, were sprayed once a week that summer.²⁰ It was said that the most important lesson learned was that effective spraying required thorough training.²¹

Admission Rates

119) After returning for a tour of Korea, Japan, and Okinawa, in the summer of 1952, Dr. Ernest L. Stebbins and Dr. Abel Wolman, National Civilian Consultants to the Surgeon General, remarked that in spite of the hazardous environmental conditions which prevailed in that area, admission rates in hospitals and dispensaries were Aamazingly low.²² The Consultant for Sanitary Engineering, Doctor Wolman, felt that Adisease rates in general≡ were so low that they constituted Aa remarkable tribute to the preventive medicine activities, not only of the Air Force, but of the total military forces in the Far East.≡²³

120) Statistical studies made in 1953 by the Office of the Surgeon General for the period of July 1951 - December 1952 indicated that Air Force personnel were about as healthy in Korea, Japan, and Okinawa, as they were in other overseas areas. Data obtained from summary reports indicated that for the Far East, excluding the Philippines, the annual rate of admission to inpatient treatment for all causes was the same as it was for all other overseas areas combined. The admission rate for disease was a little lower for the latter areas, while the rate for non-battle injuries was a little higher. All of these rates were higher, however, than they were for Air Force personnel in the United States. The foregoing comparisons appear from the following table:²⁴

Admissions of Air Force Personnel (July 1951 - December 1952)

	<u>RATE PER YEAR PER 1,000 AVERAGE STRENGTH</u>		
	<u>ALL CAUSES</u>	<u>DISEASE</u>	<u>NON-BATTLE INJURY</u>
Worldwide	322	282	40
Far East (excluding Philippines)	360	317	42
All other overseas areas	360	309	50

121) The rate at which Air Force battle casualties were admitted for treatment was Aexceedingly low≡ during the whole Korean War.²⁵ The highest year was 1951 when the rate was 0.19 per year per 1,000 strength. This figure represented only 0.05 percent of all

admissions in that year. Far greater numbers were killed, or reported missing, than were admitted to hospitals as battle casualties.²⁶

122) For USAF personnel in the Far East, excluding the Philippines, acute respiratory infections constituted the leading cause of admission²⁷ during the period of July 1951 - December 1952, just as it did for the Air Force as a whole.²⁸ For the entire Air Force, the rate of admission for diseases of the respiratory system was about 115 per 1,000 in calendar year 1951, and about 84 per 1,000, in calendar year 1952.²⁹ For the Far East, excluding the Philippines, the rate of admission for acute respiratory conditions was reported as 88 for the period of July 1951 through December 1952.³⁰ Therefore, the incidence of acute respiratory conditions was probably no greater for Air Force personnel in Korea, Japan, and Okinawa, than it was for the Air Force as a whole, during the period under reference.

123) Other leading causes of admission in the Korean theater included (1) disease of the skin and cellular tissue, and (2) diseases of the digestive system. The rate of admission for diseases of the digestive system was apparently about the same for the Far East, excluding the Philippines, as it was for the whole Air Force. For the Far East, excluding the Philippines, this rate, as indicated by summary reports, was 37 per 1,000 per year for the period of July 1951 - December 1952.³¹ For the Air Force as a whole, the same rate was about 39 and 37, respectively for calendar years 1951 and 1952.³² On the other hand, the rate for diseases of the skin and cellular tissues was apparently much higher among personnel engaged in Korean operations than it was in the rest of the Air Force. The rate for the period July 1951 - December 1952, with reference to the Far East, excluding the Philippines, was 38.³³ For the entire Air Force, it was about 20 and 18 for calendar years 1951 and 1952 respectively.³⁴ The following table reproduces a report on this subject which was made by the Biometrics Division in 1951:³⁵

Admissions and Percentage Distribution of Diagnostic
Classes of Diseases Reported in USAF Personnel
Engaged in Korean Operations: July 1951 - December 1952

<u>Category</u>	<u>Rate*</u>	<u>Percent of all Diagnostic classes of diseases</u>
All Diseases	317**	100.0
<u>Diagnoses</u>		
Acute Respiratory Infections	88	24
Special Admissions ***	47	13
Diseases of Skin and Cellular Tissue	38	11
Diseases of the Digestive System	37	10
Diseases of the Genito-Urinary System	28	8
Infective and Parasitic Diseases	22	6
Diseases of the Eye, Ear, Nose, and Throat	22	6
Mental, Psychoneurotic and Personality Disorders and Diseases of the Nervous System	14	4
Diseases of the Circulatory System	11	3
Venereal Diseases ****	10	3
All Other Diseases	43	12

*Admissions per year per 1,000 average strength

**Because patients are frequently admitted with more than one diagnosis, the total number of diagnosis exceeds the total number of patients admitted.

***Includes admissions for observation, simple drunkenness, malingering, and undetermined diagnoses.

****Includes only those cases treated on an inpatient status

Source: Morbidity Report, DD Form 442

Aviation Medicine

124) Far East Air Force's activities in aviation medicine were concerned with the

promotion of the general effectiveness, flying safety, physical fitness, and mental health of aircrews, and with measures for improving the ability of downed flyers to survive and escape from the enemy.

125) In Korea, attempts to maintain the physical fitness of flyers through organized athletics met with almost insuperable obstacles. Water for showers were very scarce, and athletic equipment was exceedingly difficult to obtain. It was reported that at some bases, several thousand officers and men shared 15 shower heads. This discouraged participation in sports.

126) The mental health program was more successful. An officer trained in neuropsychiatry circulated freely among the bases in Korea and endeavored to check trouble early. If a case presented a problem in therapy which was insurmountable in Korea, the patient was flown to Japan and provided with the services of a certified board member of psychiatry. By these methods, anxiety reactions from flying in combat were not permitted to pass to the point of no-return, and few flyers having such reactions were permanently lost to the United States Air Force.³⁶ Some cases were returned to fully flying duty. Nevertheless, FEAF Headquarters considered this problem of fear-of-flying as one of the principal problems which it encountered in aviation medicine. It reported that although fear-of-flying was a perennial problem in all of the Air Force, it was perhaps more prevalent here in the Far East due to the combat hazards involved in addition to those of normal flight.³⁷

127) Measures taken to promote the flying safety of aircrews included an extensive program of training³⁸ and the maintenance of surveillance over equipment.³⁹

128) All crewmembers of FEAF received regular lectures on flying safety. These lectures were supplemented by demonstrations, applicatory exercises, and films. The subjects treated included oxygen equipment and discipline, hypoxia, explosive decompression, G-forces, environmental temperature extremes, night vision, causes and prevention of fatigue, toxic gases, high-speed and high altitude bailouts, and psychological stresses in combat flying.⁴⁰

129) Training in techniques of survival, escape and evasion included many courses on medical subjects, such as hygiene, sanitation, nutrition, and first aid. FEAF flight surgeons entered the FEAF Escape and Evasion School as students, and afterwards gave medical training to aircrews in their own organizations. This training also emphasized the

hygienic aspects of food and drink, and the development of proficiency in first aid.

130) Medical officers were also active in developing special equipment for purposes of survival. They compared immersion suits, for example, by personally testing them in the Han River in wintertime. Since cockpit size varied widely between fighters, medical officers experimented with and proposed different methods of packing dinghies, paddles, radio, and other equipment necessary to maintain life.⁴¹

131) Hypoxia constituted one of the FEAF's major continuing problems in aviation medicine. Accident investigations revealed that many cases of hypoxia had resulted from the fact that the victim of it had borrowed an oxygen mask which did not fit him. Other cases of hypoxia had resulted from the fact that oxygen equipment had not been adequately tested before use.⁴²

132) However, there were often other causes, too. Fifth Air Force Headquarters noted an increase in hypoxia cases in early 1953 and found that this trend had resulted not only from inadequate inspection of oxygen masks as to condition and fit, but also from a failure to maintain oxygen regulators in good condition.

133) Fifth Air Force Headquarters had learned, moreover, that many of the oxygen masks which the flyers were then using had become dangerously deteriorated. The Fifth Air Force Surgeons and the Fifth Air Force Directorate of Material subsequently succeeded in obtaining enough masks to eliminate most of the worn-out masks, but they were unable to obtain all of the new masks which were needed in the small and medium sizes. What made this shortage even more serious was the fact that there was also a great shortage of small and medium P-1a and P-3 helmets. Since it was difficult to fit small masks on large helmets, the few, new small masks that became available could sometimes not be effectively used.⁴³

134) In order to solve problems arising from inadequate understanding of such equipment, FEALogFOR established a combat Indoctrination Unit at Fuchu Air Base, Japan, in May, 1953. This unit became responsible for furnishing and fitting all necessary personnel equipment for every pilot assigned to Fifth Air Force. This service was supervised by a qualified Flight Surgeon who also showed the flyer how to use and take care of his equipment.

135) Such instruction had previously been given by the Personal Equipment Officer of

each squadron. Many of these officers had not been well trained. Besides, they often worked under the supervision of the Flight Surgeons and Aviation Medical Examiners who had not been well trained, either.

136) In many cases, the poor training of Flight Surgeons and Aviation Medical Examiners in regard to personal equipment was due to the fact that they were new to the Air Force. In other cases, it was often due to the fact that their recent duty had been in Zone of Interior (ZI) hospitals where they had had no occasion to study such equipment.⁴⁴

137) Aeromedical research suffered from an acute shortage of qualified Flight Surgeons. Although the investigation of all problems which might adversely affect the health, efficiency, or safety of flying personnel was the responsibility of each unit's Flight Surgeon, such activities were severely curtailed throughout the war by the lack of a sufficient number of either Aviation Medical Examiners or Flight Surgeons.

138) In the Fifth Air Force, even up to the early months of 1953, almost every Flight Surgeon was assigned to more than one squadron at a time.

139) The Fifth Air Force tried to alleviate this shortage by assigning General Duty physicians as squadron surgeons. The Fifth Air Force taught these physicians to consider themselves as unit doctors capable of dealing with any problems that might arise, including problems of sanitation and psychology.

140) This system proved very successful. Many unit commanders reported that these doctors had developed into excellent squadron surgeons and that some of them were better than the regularly-qualified Flight Surgeons.

141) By the time hostilities were about to end, a sufficient number of Flight Surgeons and Aviation Medical Examiners were assigned to the Fifth Air Force to enable it to carry out an effective aeromedical program. This program was developed so as to stress a very close relationship between the Flight Surgeon and the members of his squadron. In maintaining this relationship, most Flight Surgeons lived with their squadrons and paid close attention to all matters, such as morale, fatigue, hypoxia, excessive G-forces, and first aid, which might affect fighting efficiency.⁴⁵ In general, flying personnel in the Fifth Air Force reacted favorably to these efforts.⁴⁶

142) One reported deficiency, however, in the aviation medicine capabilities of the Fifth

Air Force, continued until after the Korean war had ended. In September, 1953, the Fifth Air Force Surgeon stated that after much observation, he had reached the conclusion that the average Flight Surgeon and Aviation Medical Examiner needed much additional training in the care of diseases and injuries of the eyes, ears, nose, and throat.

143) He therefore recommended that training in this subject at the School of Aviation Medicine should include a sufficient amount of practical demonstration on live patients; and that before students graduated, they should be required to apply what they had learned. He pointed out that Flight Surgeons who had been so trained would not be reluctant to care for aerootitis and aerosinusitis, and would be able to differentiate between purulent and allergic rhinitis, including identification of nasal polyps. Very few Flight Surgeons and Aviation Medical Examiners in the Fifth Air Force, he said, were able either to use a head mirror or to visualize a naso pharynx or a larynx⁴⁷

Specialty Care

144) Because of the long distances involved in patient evacuation to the United States, FEAF developed a comprehensive and self-sufficient medical service which maintained high standards of clinical medicine. Outpatient care was satisfactory. Medical officers continually endeavored to develop a strong sense of personal relationship between the doctor and the patient. The treatment of psychiatric patients as outpatients was very successful, and they were returned to combat with notable speed.

145) It was not often feasible to obtain the services of qualified civilian consultants for this theater, but qualified military personnel were available in the medical specialties. Nearly all specialties were represented by board members or by board-qualified personnel. The specialties which were most commonly used, such as internal medicine and surgery, were distributed quite generally throughout the command. Other specialties were concentrated at a few large hospitals.⁴⁸

146) In June 1953, the Fifth Air Force has Board or Board-qualified medical officers in seven medical specialties: (1) Internal Medicine; (2) General Surgery; (3) Psychiatry; (4) Radiology; (5) Ophthalmology; (6) Otolaryngology, and (7) Pediatrics. Consultants from other FEAF organizations were also available on call for emergency consultations and for periodic visits to Fifth Air Force units for the purpose of giving necessary instruction. Of the twenty-two medical officers having specialty ratings in the Fifth Air Force on 30 June 1953, eight were also either Flight Surgeons or Aviation Medical Examiners. Of these

eight, five were filling Staff or Command positions, as well.

147) The Fifth Air Force endeavored to place one Internist and one General Surgeon in each of its hospitals. In many cases, a shortage of specialists made it impossible to attain this staffing objective, until hostilities were about to close.

148) In the Fifth Air Force three Medical Officers had C ratings in Internal Medicine, while four had D ratings. The latter had received special training ranging from thirteen to twenty-eight months. In some instances, a lack of laboratory facilities and diagnostic equipment limited the specialty care that they could give. Cases expected to extend over thirty days were usually evacuated.

149) In General Surgery, the Fifth Air Force had four Medical Officers assigned with C ratings, and four with D ratings. After being stabilized or given emergency treatment, critical cases and those expected to extend over a long period were evacuated from Korea to better-equipped, definitive hospitals in Japan. Also usually evacuated were compound and long bone fractures. Since the Fifth Air Force had no orthopedic surgeons, orthopedic surgery was included under General Surgery. Chronic orthopedic problems were seen by a travelling FEAF consultant.

150) In Otolaryngology, the Fifth Air Force had one specialist. This officer had primary duty as Surgeon, Fifth Air Force, but he also conducted regular Ear, Nose, and Throat (ENT) clinic consultations, and performed ENT surgery at various medical installations. Because Aviation Medical Examiners badly needed ENT training, FEAF instituted an intensive one-week course on the subject in 1953.

151) The specialties of Psychiatry, Radiology, and Pediatrics were also represented by officers who had other duties as their primary ones. One psychiatrist had primary duty as Wing Surgeon, while remaining available for Psychiatric Boards. Another remained available on call to all medical units and bases for consultation. In Radiology, the officer assigned had primary duty as Wing Surgeon, but he served also as Fifth Air Force and FEAF consultant. In ophthalmology, the officer assigned had duty as a Squadron Flight Surgeon; but at the same time, he also served as a consultant for the Fifth Air Force; conducted a regular eye clinic; and performed required surgery. In pediatrics, the Fifth Air Force had no requirement whatever,⁴⁹ since dependents were not allowed to accompany military personnel to Korea.⁵⁰ Nevertheless, one officer was assigned in pediatrics. He was given primary duty as a Wing Surgeon and Hospital Commander.⁵¹

Dental Services

152) Far East Air Forces provided Air Force personnel in Korea with excellent dental care for both emergency and routine conditions. FEAF maintained dental attendance near front-line areas, as well as in rear-echelon locations. Dental services near the front-line areas were important to the morale of men serving in the war zone.⁵²

153) At the beginning of 1953, FEAF had an assigned strength of 169 dental officers and 287 dental airmen, against an authorized strength of 191 and 298, respectively. By 30 June 1953, dental officer authorizations had risen to 212; and dental airmen authorizations, to 336. These officers were effectively utilized. They were thoroughly interviewed when they reported for duty, and they were then given assignments in accordance with their skills and the needs of the command.

154) Far East Air Forces conducted many training courses to improve the skills of both dental officers and airmen. The courses for dental officers included not only a number of formal courses which were conducted at the various bases, but also informal training. The latter included on-the-job training, personal instruction by specialist consultants, and periodic professional seminars. One seminar, for example, which was held at the FEAMCOM Dental Clinic, in Japan, was attended by 65 USAF dental officers, 180 Japanese dentists, and a number of Army and Navy dentists. The program included discussions and lectures on all phases of dentistry.⁵³

155) Dental airmen took their training at their bases in accordance with a definite curriculum. Such training was the responsibility of a dental officer appointed for the purpose at each base. For airmen, the results of this instruction determined precedence in promotion. Airmen took courses in the fields of Adental technician≅ and Adental laboratory technician.≅⁵⁴ They also had on-the-job training under a preventive dental health and maintenance officer. Such training devoted much attention to techniques of oral prophylaxis and to methods of instructing patients on oral hygiene and gum massage.⁵⁵

156) Many large dental clinics in FEAF had their own prosthetic laboratories. Small clinics used the Central Dental Laboratory at FEAMCOM air base.⁵⁶ Due to the low priority given to such mail, the Fifth Air Force found that from Korea it required from six to eight weeks to complete a case, even without a Atry-in≅. When a Atry-in≅ was desired,

completion required several weeks more.⁵⁷ in every other respect, however, the prosthetic service was excellent.⁵⁸

157) In Korea, the Dental Service of the Fifth Air Force operated in June, 1953, with 47 dental officers and 74 airmen assigned, as compared with 55 dental officers and 72 airmen authorized. The object was to give the best possible dental care to troops in all areas -- however remote -- with the least possible expenditure of travel time for all concerned.

158) To meet these needs, the AMobile Dental Operating Clinic Trailer[≅] went into even the most inaccessible areas. Each mobile trailer accommodated two dental officers, together with their airmen assistants. These trailers had the most modern and complete Dental Operating Chairs, Units, and X-ray machines, together with Dental Laboratory Facilities.

159) Along with this mobile service, the Fifth Air Force Dental Service operated, in June, 1953, twenty-two other dental clinics, housed in Quonset huts. The whole system was flexible, and dental officers moved from station to station as needed.⁵⁹

160) Ground and air alerts, evacuation training, electrical power and heating failures, shortages of potable water, and the absence or insufficiency of fixed dental equipment, X-ray apparatus, and personnel, hampered dental service in the field.⁶⁰ As late as September, 1953, it was estimated that the Dental Service in the Fifth Air Force was losing 1,500 man-hours per month, on account of power failures.⁶¹ The FEAF Dental Surgeon used these and other statistics on power failures at FEAF installations as a basis for requesting USAF to include Auxiliary Power Generators and a Voltage Control Panel in the Dental Equipment component lists. Voltage fluctuations ranged from 75 to 120 volts during duty hours and impaired rotary type electrical equipment.⁶²

161) Also notable in the work of the Fifth Air Force Dental Service was the extent to which it endeavored to give assistance and instruction to Korean dentists through the 6146th Air Advisory Group. Wherever possible, Fifth Air Force dentists taught them American procedures and American methods of using instruments and equipment. USAF dentists worked side by side with Koreans. Due to language difficulties, instruction could often be visual only, but even this helped immeasurably.⁶³

Veterinary Services

162) The mission of the Veterinary Service of FEAF was (a) to provide veterinary food inspection for FEAF; (b) to provide veterinary medical services pertaining to FEAF sentry dogs and privately-owned animals; and (c) to assist in the FEAF medical program as required.⁶⁴ Such assistance included much work in preventive medicine.

163) By the end of June, 1953, the number of veterinary officers assigned to FEAF had increased to 23; and probably this number was nearly sufficient.⁶⁵ Until then, however, the shortage of veterinary personnel in the Fifth Air Force had been critical and had impaired efficiency. It was only when the hostilities were nearly over that an adequate number began to arrive for assignment. The Fifth Air Force veterinary service immediately began to show improvement.⁶⁶

Food Inspection

164) The Army was responsible for inspecting food in connection with procurement for troop issue. Air Force veterinarians assisted the Army in conducting Class III and Class IV inspection in the areas of Nagoya and Misawa, Japan.⁶⁷ Class III inspection was conducted in food processing plants during manufacture and packaging. Class IV inspection was carried on at food processing plants or at government installations at the time when the government accepted or purchased the food. Thus, foods found acceptable under Class III inspection were re-inspected under Class IV procedures when delivered. In such a case, Class IV inspection was intended to determine soundness, as well as sanitary and other conditions which might have changed during transit. On the other hand, if any food had not been inspected during processing, Class IV inspection also included examination for type, class, and grade.⁶⁸

165) Air Force veterinary officers also maintained a very close Asurveillance inspection over Air Force food. This type of inspection, which included Classes V-IX, covered government-owned foods from the time of their final acceptance or purchase up to the time when they were issued to military personnel or were transferred to other government agencies.⁶⁹ Such surveillance was exercised over millions of pounds of food. A relatively small amount was found unsatisfactory. The deficiencies were attributed to inadequate refrigeration space on bases long supply lines which also had inadequate refrigeration, and unduly prolonged storage.⁷⁰

Sentry Dogs

166) FEAF set up a Sentry Dog Training Program in June, 1952, and found its dogs extremely useful in guarding Air Force installations. FEAF obtained these dogs from Japanese kennel clubs, and the future handlers of the dogs then trained them for six weeks. FEAF then assigned the dogs to various bases and sites. By June, 1953, FEAF had sentry dogs at 39 different locations.

167) FEAF reported at that time in every place where it had used these dogs, theft and pilferage had stopped. Water points in Korea were also more secure when the dogs were near. The morale and confidence of the air policemen were bolstered, too.⁷¹

Filariasis

168) FEAF estimated that about 80 percent of all dogs in Japan were infected with dirofilaria immitis (heartworm). FEAF therefore found it impossible to prevent sentry dogs from becoming infected. In February, 1953, FEAF commenced a study of the effectiveness of various drugs and other methods of treatment or prevention. This project had the cooperation of both the Army and the Japanese veterinarians at Tokyo University. It was still in progress when hostilities ended. It appeared that if treatment for the parasite was started early in the infection stage, the dogs responded exceptionally well. On the other hand, eleven dogs who had already become heavily infected died during treatment.⁷²

Rabies

169) Rabies had a low incidence in Japan on a whole, but it was endemic in Tokyo and Yokohama.⁷³ In Korea, where it was also endemic, rabies created a serious problem. Korean dogs roamed around the bases in packs, preying on garbage. Although the Fifth Air Force tried to rid these bases of these dogs, some American military personnel were bitten by dogs known to be rabid. Pasteur treatment was often necessary,⁷⁴ but no one in FEAF caught rabies.