AVBJ GD-EA

19 January 1970

SUBJECT: Army Medical Department Activities Report
(RCS MED 41 (R4)) CY69

THRU: Commanding Officer
68th Medical Group
APO 96491

Commanding General
44th Medical Brigade
APO 96384

TO: The Surgeon General
ATTN: MEDDD-OH
Department of the Army
Washington, D.C., 20315

Transmitted herewith is the Army Medical Department Activities Report for calendar year 1969.

FOR THE COMMANDER:

[Signature]
WILLIS H. BURROUGHS JR
1LT, MSC
Asst Adjutant
DEPARTMENT OF THE ARMY
HEADQUARTERS, 12TH EVACUATION HOSPITAL (SMBL)
APO San Francisco 96353

Army Medical Department Activities Report
(RCS MED 41 (R4))

1 January 1969 - 31 December 1969

WILLIS H. BURROUGHS JR
LT, MSC
Command Historian
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I

MISSION

The stated mission of the 12th Evacuation Hospital (SMBL) under the applicable Table Of Organization And Equipment is "to provide hospitalization for all classes of patients within the combat zone." This mission has been accomplished during the report period; however, an added mission has been concurrently accomplished. That mission has been, and is, to provide an extensive medical and surgical consultation service on an outpatient service basis. Further, this hospital performed extensive emergency medical treatment of recently wounded or injured patients. This treatment is at a significantly high level so as to require an expanded Emergency Service.

The 12th Evacuation Hospital (SMBL) provides specialized treatment in designated specialties in meeting its comprehensive health care mission. These specialties include: anesthesiology, cardiology, internal medicine, ophthalmology, otolaryngology, radiology, general surgery, maxillofacial surgery, oral surgery, orthopedic surgery, urology, dental service, physical therapy, pathology and clinical laboratory service.

II

ORGANIZATION

The 12th Evacuation Hospital (SMBL) is organized under Table Of Organization And Equipment Number 8-581E as amended through Change 6. On 5 March 1969, Modification Table Of Organization And Equipment Number 8-581EFO8, P00269 was published. On 10 April 1969, Modification Table Of Organization And Equipment Number 08-581E PAC 8/69 was published; and, on 24 April 1969 a reorganization was promulgated under USARPAC General Order 329. The changes of both modifications were implemented. There were changes in commissioned officer authorizations as well as in enlisted authorizations. Authorization for commissioned officer positions was later further amended. Enlisted authorization was adjusted from 213 to 199 enlisted positions. On 20 December 1969, a Projected Requisitioning Authority (PRA) was forwarded by the Commanding Officer, 68th Medical Group. This PRA provided for assignment of 26 Medical Corps, 8 Medical Service Corps, 60 Army Nurse Corps, 2 Dental Corps and 1 Army Medical Specialist Corps Officer in the MOS and grades as shown on inclosure 1.
III

PERSONNEL

Personnel occupying key command, staff and operational positions:

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION</th>
<th>PERIOD OF ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mims C. Aultman, LTC, MC</td>
<td>Commanding Officer</td>
<td>1Jan69-31Jul69</td>
</tr>
<tr>
<td>Joseph L. Motoe, Jr., LTC, MC</td>
<td>Commanding Officer</td>
<td>1Aug69-30Aug69</td>
</tr>
<tr>
<td>Leon M. Dixon, COL, MC</td>
<td>Commanding Officer</td>
<td>1Sep69-31Dec69</td>
</tr>
<tr>
<td>Harris R. Hill, LTC, MSC</td>
<td>Executive Officer</td>
<td>1Jan69-10Aug69</td>
</tr>
<tr>
<td>John B. Kelly, MAJ, MSC</td>
<td>Executive Officer</td>
<td>1Aug69-31Dec69</td>
</tr>
<tr>
<td>Joseph L. Motes, LTC, MC</td>
<td>Chief, Prof, Svc.</td>
<td>1Jan69-6Apr69</td>
</tr>
<tr>
<td>William G. Sullivan, LTC, MC</td>
<td>Chief, Prof, Svc.</td>
<td>7Apr69-24Sep69</td>
</tr>
<tr>
<td>Franklin M. Soriano, LTC, MC</td>
<td>Chief, Prof, Svc.</td>
<td>25Sep69-31Dec69</td>
</tr>
<tr>
<td>Mary F. McLean, LTC, ANC</td>
<td>Chief Nurse</td>
<td>1Jan69-23Nov69</td>
</tr>
<tr>
<td>Helene D. Carroll, LTC, ANC</td>
<td>Chief Nurse</td>
<td>24Nov69-31Dec69</td>
</tr>
<tr>
<td>Clayton R. Reigar, MC, AMEDD</td>
<td>CSM</td>
<td>1Jan69-14May69</td>
</tr>
<tr>
<td>Fredrick Crauswell, CSM, AMEDD</td>
<td>CSM</td>
<td>15May69-31Dec69</td>
</tr>
</tbody>
</table>

Total assigned personnel as of 31 December 1969:

<table>
<thead>
<tr>
<th></th>
<th>MC</th>
<th>MSC</th>
<th>ANC</th>
<th>AMSC</th>
<th>CHC</th>
<th>DC</th>
<th>WO</th>
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</tr>
</thead>
<tbody>
<tr>
<td>E-2</td>
<td>28</td>
<td>8</td>
<td>58</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>98</td>
</tr>
</tbody>
</table>

Generally the adequacy of assigned personnel was satisfactory until on or about 1 November 1969. After that date, the replacement stream slowed while losses continued at a steady rate. By mid-December only 144 enlistedmen were present for duty (as opposed to 199 authorized). Concurrently the patient census rose to between 225 and 250 personnel in an inpatient status. (Bed occupancy rate: 80-90%). In the latter part of December a replacement packet arrived bringing the present for duty enlisted strength up to 187 personnel as of 31 December 1969.

In considering personnel, it should be noted that a large evacuation hospital commander has a continuing responsibility for award of the Purple Heart to those wounded in combat. A suitable clerk has not been provided for this full time task. Further there is no provision for the position of Chief of Professional Services. This is a highly important function, especially during periods of mass casualty incidents where rapid and effective triage must be accomplished.
The applicable Table Of Organization And Equipment was basically designed for a semi-mobile evacuation hospital. The 12th Evacuation Hospital is not semi-mobile. It is a fixed medical activity. A substantial portion of the equipment is non TOE and non-standard. This equipment is used by very highly skilled medical personnel to insure continuance of the extremely low morbidity/mortality rates in the Vietnam conflict. However such equipment does require addition of certain technical skills and increased manning levels.

The civilian local national (IN) work force at this hospital constitutes a vital segment of the total personnel picture. The civilian labor force consists of three types of personnel based on method of payment: permanent hire IN paid from appropriated funds, daily hires paid on a day to day basis from assistance-in-kind funds and house maids paid from non-appropriated funds collected from individuals using the maid service.

Permanent hire IN are authorized by a TDA and Program 6, a conversion of military positions to civilian positions. Skilled labor is difficult to find in Cu Chi District (Hau Nghia Province), however all skilled labor positions were filled during 1969.

There were no TOE authorizations for civilian administrators or supervisors, therefore, these jobs were accomplished as an additional duty.

Pay for both daily hires and permanent hires was picked up in Long Binh by an officer. This required a minimum of one day per week considering that the pay turn-back was accomplished the week after the pay was picked up. Without authorization for personnel to handle this work force, other areas suffered somewhat as a result of this additional duty.

IV

OPERATIONS AND TRAINING

The 12th Evacuation Hospital continued to provide medical support for the 25th Infantry Division and attached units plus elements of the 1st Air Cavalry Division and the 1st Infantry Division in the III Corps tactical area of the Republic of Vietnam. From its location at Cu Chi Base Camp, the hospital provided medical support during the following combat campaigns: Vietnam Counteroffensive Phase VII terminated 22 February 1969; Tet 69/Counteroffensive - 23 February 1969-8 June 1969; Unnamed Eleventh Campaign - 9 June 1969-termination to be announced.
Two 107mm rockets struck the hospital on 26 February 1969. One man was wounded. Additionally the hospital was involved in numerous mass casualty operations generated as the result of hostile action at Cu Chi, Tay Ninh, Dau Tieng and the surrounding tactical area. In one incident on 2 February 1969, 176 patients were provided emergency medical treatment in less than 24 hours.

As noted under paragraph I, hospital operations are characterized by receipt and treatment of very recently wounded personnel. Since many engagements with the enemy were conducted in the immediate vicinity of Cu Chi Base Camp, casualties resulting from such contacts were medevaced by helicopter directly from the site of injury to the hospital. This has resulted in participation in medical care heretofore more noted in battalion aid stations and division clearing stations.

In addition to its operational mission within the combat zone, the unit also engaged in several training periods. Normal unit training was conducted in CBR, Military Justice, weapons familiarity, and maintenance procedures. Further the medical and nursing staffs engaged in weekly professional and in-service education and training programs.

Also in the area of training, the hospital sponsored and conducted several health care courses for Vietnamese local and Popular Forces. The courses were designed to provide instruction in basic sanitation, first aid, and simple nursing procedures. Each course was approximately 80 hours in length, with reinforcement instruction through participation in Medical Civic Action Program (MEDCAP) outings.

V

MATERIAL

Overall logistical support was good. Medical supply and maintenance support was excellent, while in areas other than medical, the support was fair to good.

Medical supply support was timely and responsive to the needs of the hospital. Problems encountered have been minimal and none have been of a recurring or a critical nature.

Medical maintenance support was timely. Movement of the direct support for repair parts from the First Platoon, 32d Medical Depot at Long Binh to the 32d Medical Depot at Cam Ranh Bay has added lead time to the procurement of repair parts. As of the end of the report period this has not seriously hindered the mission of the hospital.
Laundry support was greatly enhanced with the addition of installation laundry facilities within the confines of Cu Chi Base Camp.

Prior to this, laundry support was sporadic. Organic laundry equipment was subject to frequent breakdowns and non-availability of repair parts, and the available contract services were not suited to the needs of the hospital. At the end of the report period the support was excellent, and the installation facilities have eased the burden so that organic equipment could be repaired and with this additional time, orders for the Prescribed Load List have been filled.

Support for motor operations was poor. Absence of key personnel has greatly hindered the effective operation of the motor pool and non-availability of repair parts has also affected the maintenance and repair of vehicles.

As the report period ends, key personnel have been provided, and the latter combined with a strong emphasis on first echelon maintenance has greatly improved the quality of vehicle maintenance and overall support for the hospital's mission.

General Supply support has been fair. Problems encountered have been the non-availability of expendable consumable supplies. These items are not of a critical nature, but they do effect the smooth functioning and administration of the hospital.

VI
CONSTRUCTION

Major Construction
Major construction during 1969 consisted of construction of one BOQ of approximately 1,500 square feet. Prior to its erection there were not sufficient quarters within which to house officer personnel.

Minor Construction
Minor construction to include facility addition and improvement included.

Electrical upgrading which was begun in early 1969 with the inclusion of the unit in the Cu Chi Base Camp central power system. As a segment of this action a new distribution system was constructed and the generators formerly used to provide electrical power were removed with the exception of the emergency standby generators.
All patient care and administrative areas were rewired and new lighting equipment was installed. Billet and ramp areas still require rewiring and new lighting fixtures.

Central air conditioning of surgery, recovery ward, and WOQ's was accomplished during 1969.

Under an RMK-311 contract new window style air conditioners were installed in ten wards and the outpatient clinic. A supplementary contract to complete the remaining wards and clinics has been submitted.

Repainting of the hospital exterior and interior was accomplished during 1969; however, the exterior paint had severely deteriorated by the end of the report period.

An area beautification program was implemented during the last quarter of the year. As of the end of the period approximately 30 assorted native plants, bushes and trees were planted.

Revetment of all patient care areas and hospital staff billets was completed during 1969.

A special Facilities Review Board was activated by MACV. During November 1969 it reviewed the requirement for, and plans of, a medical supply warehouse and a central sewage system. Both improvements were approved by this Board. The Engineer drawings on the sewage system have been completed.

Minor new construction was curtailed during the second half of 1969. All O&M minor new construction projects over a funded cost of $500 must be approved by the Commanding General, 44th Medical Brigade.

The Executive Officer, 12th Evacuation Hospital is a member of the Cu Chi Base Development Planning Board.

VII

PREVENTIVE MEDICINE

Medical Statistical Data

The health, well-being and physical fitness of personnel assigned to the 12th Evacuation Hospital during the 12 months of 1969 was at a high level. The monthly active duty army strength fluctuated between 285 and 310. The Monthly report of daily noneffectiveness rate per 1000 average strength active duty army varied between 4.2 and 9.2.
with an average of 5.87. This is reflected by the 231 total admissions, of which 208 were in the disease category, and the remaining 23 were in the non-battle injury category. These admissions were accounted for in a descending order of prevalence by common respiratory diseases (38 cases), diarrheal diseases (24 cases), non-battle injuries (23 cases), skin diseases (13 cases), psychiatric character and behavior disorders (9 cases), FUO (8 cases), and infectious hepatitis (4 cases). There was not a single case of malaria which reflects on the cooperation and acceptance by the personnel of the weekly chloroquine-primaquine chemoprophylaxis.

Environmental Sanitation

Mess facilities consistently maintained a high degree of sanitary standards. Food storage and refrigeration is satisfactory. Garbage and trash disposal is adequate. Mess personnel and Vietnamese civilian food-handlers are carefully screened, chest x-rayed and periodically reexamined.

The operating suite remains unsafe and a hazard due to flooding when it rains and because the rough and uneven concrete floor is impossible to keep clean. Requests were submitted for installation of tile on the floor and a work order has been approved for painting the floor.

Bathing and washroom facilities in the WOQ's are very satisfactory but those for patients behind C Ramp and that for male officers far detached from the BOQ's leave much to be desired.

Latrines for patients behind C Ramp and for the male officers are sub-standard. Waste disposal into a septic tank installed earlier this year is satisfactorily serviced and maintained by a civilian contractor. Waste disposal from burn out latrines certainly leaves much to be desired and replacement with flush toilets and piped sewage into a septic tank is highly recommended for sanitary reasons and personal comfort.

Preventive Measures And Personal Hygiene

Immunization and weekly anti-malaria chemoprophylaxis with chloroquine-primaquine was strictly adhered to and was well accepted by all personnel.

Personal hygiene among personnel of 12th Evacuation Hospital remained at a high level.
Patient Care and Evacuation

Patient Care

1. Hospital Statistics

In the 12 months of 1969 there were 11,148 patients admitted to the 12th Evacuation Hospital. 6,205 patients or 55.66% were wounded in action. 3,709 patients or 33.37% were admitted for disease. 1,234 patients or 11.07% had non-battle injuries. 854 patients or 7.7% were Civilian War Casualty Program (CWCP) patients.

There were 11,068 dispositions. 4,904 patients (44.08%) returned to duty. 3,748 patients (33.72%) were evacuated out of country. 2,142 patients (19.21%) were evacuated in-country. 274 patients died representing a mortality rate of 2.45%.

The average length of hospital stay per patient was 5.1 days.

There were 17,991 patients treated at the outpatient clinic. There were 6,030 dental patients treated.

Forty Medcap sessions were conducted and treatment was rendered to 4,061 Vietnamese patients.

There were 90,686 x-ray procedures and 155,691 laboratory procedures performed and 14,817 units of whole blood were transfused.

2. Surgical Service

8,197 patients were admitted to the Surgical Service of which 6200 (75.6%) were WIA, 1,206 (14.71%) were NBI, and 791 (9.64%) were in the "other surgery category".

5,392 patients (65.78%) were U.S. military and 2,807 patients (34.25%) were non-U.S. military. This latter category comprised of Vietnamese Armed Forces, Free World Forces and enemy casualties, Vietnamese civilians, U.S. civilians and other foreign nationals.

Of the U.S. military patients admitted 3,928 (72.85%) were wounded in action, 836 (15.51%) had non-battle injuries and 628 (11.83%) had various surgical conditions categorized as "other surgery". Of those wounded in action, 512 (13.03%) were returned to duty, 2,622 (66.91%) were evacuated to U.S. medical facilities in the PACOM.
609 (15.54%) were evacuated in-country either to other U.S. medical facilities for further treatment or stabilization prior to further disposition, or to convalescent centers for recuperation and reconditioning prior to return to duty. There were 72 deaths among those wounded in action representing a mortality rate of 1.63%. The remaining 120 patients were dispositioned to their respective branch of service medical facility. Of those patients with non-battle injuries 275 (32.88%) returned to duty, 399 (47.72%) were evacuated out of country, 157 (18.77%) were evacuated in-country, and 6 died, representing a mortality rate of 0.71%.

Of the non-U.S. military admissions, 2272 (80.90%) were WIA, 371 (13.19%) were NBI, and 164 (5.84%) were in the "other surgery" category. Of those WIA's, 1194 (52.55%) returned to duty and 121 (5.32%) died. Of those NBI's 262 (70.81%) returned to duty and 14 (3.78%) died.

A total of 8,407 operative procedures were performed. 5,272 were major operations. 3,135 were minor operations. These operations consisted of 4,751 debridements, 1,490 delayed primary closures, 616 thoracotomies (126 open thoracotomies and 490 closed thoracotomies), 961 laparotomies, 2,227 fractures, 465 major amputations, 168 minor amputations, 253 vascular injuries, 3 craniotomies and 280 eye injuries, with 14,817 units of whole blood transfused.

A total of 5,502 anaesthetic procedures were administered. 5,124 were general anaesthesia techniques. 378 were spinal block or local anaesthesia techniques.

There were 231 deaths in the Surgical Service. This represented a mortality rate of 3.45%. There was a total of 8,001 dispositions from the Surgical Service, of which, 2,451 (29.9%) returned to duty, 3,167 (38.6%) were evacuated out of country, 1,274 (15.5%) were evacuated in-country and 788 (9.6%) were in the "other dispositions" category.

There were 204 cases of surgical infection. When the total operative procedures is considered, these represented an operative infection rate of 2.42%. When the total surgical admissions is considered, these represented an over-all surgical rate of 2.48%.

On the average about 12-14 physicians comprise the professional staff of the Surgical Service, consisting of 5-6 General Surgeons, 1 Thoracic Surgeon, 3-4 Orthopedists, 1 Urologist, 1 Ophthalmologist, 1 Otorhinolaryngologist and 1 Oral Surgeon. The ENT and Oral Surgeons worked closely and treated jointly maxillo-facial and head-neck injuries, excluding intracranial and spinal injuries.
Each subspecialty service conducted and maintained its respective out-patient clinic.

The Emergency Room is under the direct supervision and control of the Chief of Professional Services who acts as the triage officer and assigns priorities for resuscitation, surgical operations and evacuations. This arrangement best met the demands of mass casualties and near-mass casualties. When available, 1-3 General Medical Officers were assigned to the Emergency Room, but for over a month in September-October 1969, due to non-availability of General Medical Officers, the entire MC Staff of the hospital rotated calls at the E.R. on 12-hour shifts. This placed an added burden on the busy specialists already pressed by work in their own fields of specialty. This calls attention to the necessity of at least three, (preferably four) General Medical Officers to staff the Emergency Room of a busy evacuation hospital.

There were 138 elective operations performed of which 2 were complicated by infection. This represented an elective surgery operative infection rate of 1.44% which compares well with that of state-side hospitals. When the O.R. schedule permitted, elective operations were performed and almost exclusively on Vietnamese patients. These were undertaken to implement the Civilian War Casualty Program, the Medical Civic Action Program and the USARV Reconstructive Surgery Program on ARVN Patients.

Open thoracotomies were performed more frequently during the last half of the year with the addition of a Thoracic Surgeon and assignment of more aggressive, younger, well-trained General Surgeons. This aggressive approach is based on the recognition and acceptance of the destructive pathologic effect and the inevitable early and late complications of high velocity wounds of the chest. There were at least 6 cases of high velocity wounds who were treated conservatively only to die later of intrapulmonary parenchymal bleeding, intrabronchial bleeding or secondary bleeding, the terminal event being either hypoxia or exsanguination.

The rear portion of one surgical ward which was less exposed to the hospital traffic and consisting of 4 beds (but expandable to 6 beds and 1 crib), was designated as a Burn Unit where all patients with 2nd and/or 3rd degree burns comprising 10% or more of total body surface or with similar burns involving the respiratory tract, face, neck, genitalia, perineum, groins, axillae, hands and feet are admitted. Fluid therapy based on the Brooke General Hospital formula is instituted in the Emergency Room and burn debridement, with p;isoheax wash, is carried out either at the E.R. or in the O.R.
Sulfamylon cream is immediately applied after debridement. The patient is laid on a double layer of sterile bed sheets, covered with similar sterile sheets and then transported to the Burn Unit. A general surgeon is assigned to each burn patient upon arrival at the E.R., and treats this patient until evacuated. Phosphorous burns are initially neutralized with 5% Copper Sulfate solution, debrided, then treated with sodium bicarbonate paste compresses for 24 to 48 hours and then Sulfamylon cream is applied twice a day with thermal burns. The Sulfamylon cream is thoroughly washed off before each re-application.

The occurrence of "wet lung syndrome" and respiratory insufficiency in the severely traumatized and severely burned patients has been minimized by the prompt performance of tracheostomy and early initiation of ventilatory assistance with a Volume-controlled respirator at the slightest indication of respiratory impairment. An SOP for aseptic technique in tracheostomy care and proper cleansing and sterilization of respirator connecting components was adopted to reduce the incidence of introducing infection into the respiratory tree.

Sepsis, Pseudomonas pneumonia, and bleeding stress ulcers accounted for many of the fatal postoperative complications. Invariably, a causal relationship was found between these complications and concealed deep body-cavity abscesses or extensive surface wound suppurations. The most common organism cultured from wound exudates and respiratory secretions was Pseudomonas aerogenosa followed by Klebsiella, Aerobacter, Paracolon bacilli and Staphylococcus aureus.

2. Medical Service

During 1969, there were 2,086 military personnel admitted to the Medical Service at the 12th Evacuation Hospital. The most frequent reportable diseases were malaria with 411 cases (267 were falciparum, 132 vivax and 12 mixed infections), 104 cases of hepatitis, and 89 cases of apparent scrub typhus were also treated. Five cases of meliodosis were encountered.

The 12th Evacuation Hospital had no deaths from malaria, and no major complications from the therapeutic drugs. Three patients with falciparum malaria did develop acute renal failure. One responded to Lasix and intravenous fluid therapy, but the other two had to be evacuated to the 3rd Field Hospital for treatment in the renal unit. All the patients with vivax malaria did well and were returned to their units directly from the 12th Evacuation Hospital, except for four patients who were transferred to the Sixth Convalescent Center because of significant anemia.
The hepatitis patients all recovered without significant complications. None were treated with steroids. 89 patients had illnesses characterized by high sustained fever, macular rash on the trunk, severe headache and responded to tetracycline therapy. The serologies that were returned from the 9th Medical Laboratory were positive for scrub typhus. All responded well to therapy, and were returned to duty.

Five cases of melioidosis were encountered. Three of these cases presented as a chronic lung abscess. One patient with pneumonia and septicemia died, but his course was complicated by agranulocytosis, presumably secondary to dapsone. The fifth patient had pneumonitis, septicemia and meningitis.

In 1969 there were five deaths on the medical service. Four of which were due to agranulocytosis, presumably secondary to dapsone. Three of these died from overwhelming septicemia with positive blood cultures. Two were infected with Staphylococcus aureus, and the other with pseudomonas pseudomallei. The fourth patient was apparently recovering with a return of neutrophiles in his peripheral blood. When he died suddenly on the ward, presumably from a pulmonary embolus. The fifth death was from an anaphylactic reaction to hypaque which was given for an intravenous pyelogram, during a hypertensive work up. In summary, all deaths at the 12th Evacuation were due to some type of drug action.

During 1969 the Medical Service conducted activities in addition to inpatient treatment. The Medical Service held medical clinics three times per week. On the average clinic day, 14 patients were examined and treated. The general medical officers from the nearby dispensaries have started to attend the daily rounds of the Medical Service. At present, two general medical officers attend regularly and several others appear infrequently. This program has developed a good support between the general medical officer and the internist. At present they frequently follow the patients from their dispensaries who have been admitted to the hospital. Because of a shortage of general medical officers at the 12th Evacuation Hospital, the Medical Service has taken over the routine sick call for the Hospital Personnel.

4. Nursing Service

Activity during the report period was characterized by refinement of previously implemented nursing procedures and by implementation of additional methods in order to provide a wider range of services.
After extensive physical renovation, a second Intensive Care Unit was opened in November. It has a capacity of 20 beds and is staffed with five nurses and two medical specialists. This ICU is primarily utilized in the care and treatment of burn, orthopedic, and vascular surgery cases. Length of stay for vascular surgical cases averages 12 days. Prior to the opening of this ward, burn patients were treated on the post-operative wards. On many occasions this created a staffing problem in attempts to provide adequate care for both burn patients and post-operative cases. During the period November-December, four cases of severe phosphorus burns were admitted to this ward. These cases required 24 hour nursing care.

Full nursing coverage for each 24 hours is required for the post-operative ward. In addition to these patients recently released from surgery, all patients requiring use of volume controlled respirators are cared for on this ward. During the period of this report, an average of two patients per day required this care.

An intravenous additive program was initiated during the period. Pharmacy specialists, under the supervision of nursing personnel, were utilized on the intensive care and recovery wards to assist in the preparation of intravenous therapy solutions. This enabled the ward nurses to have considerably more time for patient care responsibilities.

One of the busiest hospital activities during this period was the Emergency Service. Staffed with five Army Nurse Corps Officers, eight enlisted men and appropriate physicians, this activity undertook the following procedures:
- Debridements - 1192
- Delayed Primary Closures - 492
- Primary Closures - 387
- Chest tubes inserted - 359
- I & D - 70
- Open Chest Massage - 19
- Tracheotomy - 19

The six room operating suite was staffed with five nurse anesthetists, ten operating room nurses, and 13 enlisted operating specialists. Also assigned is one crash specialist. An average of four rooms are used during the day with 2 to 3 rooms in use at night. The staff has been adequate during the peak periods and has the capacity in emergencies to maintain three rooms continuously for 24 hours at least a 5-day period.
Army Nurse Corps officers perform duty as aeromedical evacuation attendants to accompany seriously ill patients who must be transported to other medical facilities by Army helicopter.

Two hospital wards are staffed with MOS 91C Medical Specialists. Nurse supervision is provided. Both ambulatory and semi-ambulatory patients are treated on these wards. The personnel assigned to those wards have performed their duties in an outstanding manner. They have been very alert to the condition of the patients and have thus required minimum supervision.

The Civilian War Casualty Program ward of 30 beds was staffed with three Army Nurse Corps officers, four enlistedmen, and one Vietnamese interpreter. An average of one baby has been delivered each month. Through interpreters, the patients are taught to care for their tracheotomy tubes, dressing change and gastrostomy tube feeding.

Three Vietnamese Health Care Courses were organized and conducted by the Nursing Service. Presented to Regional and Popular Force soldiers, the classes stressed basic health measures, emergency medical treatment and sanitation. Approximately 45 students were graduated.

Many awards for outstanding performance of duty were presented to Nursing Service personnel during the report period. Bronze Stars were presented to six officers and eight enlistedmen. Fourteen Army Commendation Medals were presented to officers and 47 to enlistedmen. Eleven USARV Certificates of Achievement were presented to enlisted medical specialists.

Evacuation

Certain policies were formulated to control and prevent inappropriate or unnecessary evacuation of patients in certain injury categories requiring transfer to special treatment centers in the USARV Hospital chain or in mass casualty situations. The Chief of Professional Services determined the propriety of and the priority for evacuation and has the sole authority, delegated by the Hospital Commander, to request a Medevac helicopter. No patient was evacuated before his vital signs were stabilized, blood loss replaced, airway instituted, fractures splinted and bleeding controlled. Pure head injury patients that were treatable and those head injury patients that were treatable but with minimal and minor extremity or superficial body wounds were stabilized and then transferred as soon as possible to a neurosurgical center hospital. Head injury patients with associated thoracic, abdominal, blood vessel, and extensive extremity and bone injuries are retained and operated upon and then evacuated 12-24 hours later when
stabilized. Expectant and obviously non-salvageable head injury patients were not evacuated. In the very rare instance when a clinical improvement was observed during the stabilization period evacuation was done during the daylight hours. All unconscious head-injury patients were endotracheally intubated, given assisted ventilation with 100% oxygen through an Ambu bag and were accompanied by an ANC officer during the evacuation.

IX

ASSISTANCE PROVIDED CIVILIAN AND NON-US MILITARY PERSONNEL

Surgical Training of Vietnamese Military Physicians

Captain DO HIU TUOC, an ARVN surgeon was assigned to the 12th Evacuation Hospital in April 1969 for surgical training. He was well received. During his tenure he rotated through the General Surgery Service and the Orthopedic Service on a proctorship basis which proved to be very beneficial and successful. Captain Tuoc was assigned to Cong Hoa ARVN Hospital in Saigon after he left the 12th Evacuation Hospital in October 1969.

Medical Civic Action Program (MEDCAP)

There were 40 MEDCAP sessions conducted in Cu Chi. 4,061 Vietnamese patients were treated. A MEDCAP team consisting of 1-2 MC's, 1 DC, 2 ANC, 1 NCOIC, 2 medical specialists, 1 dental assistant and 2 interpreters were sent to the village on Thursday afternoons when security permitted.

Practical Nursing Program for Vietnamese Girls

Classes in practical nursing were conducted by the Nursing Service for young Vietnamese girls. It was felt that this program accomplished its purpose but that it could be better implemented and funded.

Civilian War Casualty Program

854 Vietnamese indigenous civilians injured as a direct result of war were admitted. One 30 bed ward was designated for these patients and was invariably filled to capacity.
INSPECTIONS AND VISITS

The Annual General Inspection was conducted by the USARV IG Team on 18–21 August 1969. The hospital received a satisfactory rating (based on a satisfactory-unsatisfactory rating scale). Some of the areas cited as outstanding or excellent were registrar activities, general overall activities, planning and operations, security, logistic readiness, medical and general supply activities, medical maintenance and civic actions program. Quarterly Command Inspections were completed by the Commanding Officer, 68th Medical Group.

The Command Maintenance Inspection was conducted by the 44th Medical Brigade CMD Team on 28 January 1969. The overall rating was satisfactory.

The Commanding Generals and Assistant Division Commanders of the 25th Infantry Division, 1st Air Cavalry Division, 1st Infantry Division and 82nd Airborne Division made weekly visits to the patients. These visits provided a solid factor in continued excellent morale among the patients.

Many entertainment troupes to include Bob Hope and Neil Armstrong, Johnny Grant, Miss America and the 25th Infantry Division Band visited the patients.

Other celebrities visiting the patients included the New Christy Minstrels, Terrance Cardinal Cooke, Dr. Oswald Hoffman, Denny McLain and other members of the 1969 Major League Baseball Caravan, and Gypsy Rose Lee.

CONFERENCES

The Commanding Officer, Executive Officer, and Chief Nurse attended quarterly Conferences at the 68th Medical Group. The Chief, Professional Services attended surgical conferences sponsored by the II Field Force Surgeon on a quarterly basis. The Chief, Supply and Services Branch and the Registrar attended administrative conferences sponsored by the II Field Force Surgeon. Two members of the professional staff gave presentations to the II Field Force Surgeons.
Problem

An increasing outpatient responsibility requiring treatment or consultation service. Involved are not only U.S. Military personnel and Free World Military Forces personnel but also U.S. and Vietnamese civilians.

Discussion

Neither the physical facilities nor the TOE were structured to support treatment of 17,991 outpatients and 11,123 inpatients in 1969. This further taxed an already burdened staff by requiring physicians and enlisted medical specialists to perform duty in the Outpatient Clinic in addition to their assigned duties.

Possible Solution

Enlargement of the present clinic area (now approximately 1700 square feet). Such addition would provide necessary waiting space and allow creation of adequately sized examination and treatment rooms.

Augmentation of the staff by utilizing medical personnel (physicians, medical specialists, x-ray and laboratory technicians) from adjacent medical units (i.e., divisional),