

HEADQUARTERS TRIPLER GENERAL HOSPITAL GEP-MTB

OFFICE OF THE COMMANDING OFFICER

In reply refer to:

319.1

Honolulu

January 25, 1940.

Subject: Annual Report of Tripler General Hospital.

To: The Surgeon General, U. S. Army, Washington, D. C.
THRU: The Surgeon, Hawaiian Department, Fort Shafter, T. H.

1. The following Annual Report of Tripler General Hospital for the calendar year ending December 31, 1939 is submitted in compliance with Paragraph 3, AR 40-1005.

2. LOCATION AND PURPOSE.

a. Tripler General Hospital is located on North King Street in Honolulu about three miles from the business center. The hospital reservation is adjacent to the Hawaiian Department Headquarters and about one quarter mile from Fort Shafter, garrisoned by the 64th Coast Artillery.

The hospital functions as a general hospital for the entire Hawaiian Department and as a station hospital for the posts of the Honolulu Sector - Forts Shafter, Rager, Delaney, Armstrong, Kaneohe, Hawaiian Ordnance Depot and Hickam Field - with a combined strength of 7022. It operates a general dispensary serving Department Headquarters and all active and retired personnel and their dependents residing in the City of Honolulu and vicinity. The salubrious climate of the Hawaiian Islands has induced many retired officers and their families to make their permanent homes here; and this has placed an increased demand on the out-patient service. A considerable number of Veterans' Administration, WPA and HCC patients are given both hospitalization and out-patient treatment with proper authority.

In order that this hospital may function in reality as a general hospital, a permanent hospitalization policy for the Hawaiian Department is essential. At present the Tripler General Hospital is primarily a large station hospital for the Honolulu Sector and a similar setup exists at Schofield Barracks for the Schofield sector. There is no real general hospital in the department.

The mission of the Medical Department in these islands, as elsewhere, resolves itself into two very important, highly specialized, but widely divergent fields: (a) Tactical training in consonance with the defense plans of the Commanding General and, (b) The care of the sick. Concentration

of effort in either of these directions will result in efficiency of the highest order; but attempts by any commanding officer or staff to cover both fields inevitably results in mediocrity in each. To efficiently carry out the tactical missions of the Medical Department contemplates thorough indoctrination in tactics, only acquired by years of specialized training. Likewise, proficiency in hospital administration and the care of the sick requires long service at the bedside and thorough familiarity with hospital problems. Rarely has an individual's experience been extensive in both directions.

Therefore, it appears logical to concentrate on tactical training at Schofield Barracks, where a medical regiment is available and to provide for major hospitalization for the entire Hawaiian Department at the Tripler General Hospital through new construction, the installation of modern equipment and the concentration of specialists. The adoption of this policy would reduce the costs of future maintenance; obvious economies in the purchase of expensive technical equipment, with simplification of supply problems, would follow; and facilities for the comfort and care of the sick would be inestimably improved.

b. The climate is excellent. During the year the mean temperature was 76.60° F., with a minimum of 64° F. and a maximum of 85° F. There are no sharply demarcated dry and rainy seasons, as in the true tropics; but during the so-called "Rena seasons", from November to March, the rainfall is considerable. The rainfall for the year was 36.23".

3. BUILDINGS AND GROUNDS.

a. Capacity: There are a total of twenty-eight buildings, two of which are located on the Department Headquarters reservation and are used as quarters and utility building (laundry) for the Commanding Officer of this hospital. Six of the buildings are large 2-story type wards, making a total of twelve wards, one of which, however, has been remodelled and partitioned and serves as a medical library, conference room, and physiotherapy department. Moving the library and conference room and reopening this section as a ward is contemplated in the near future, giving 10 additional inside beds and 16 additional beds on porches. The remaining eleven wards are used for patients and have an actual inside bed capacity of 170. All of these wards have large, rocky, comfortable screened porches in which there are 197 beds set up and in use, chiefly for convalescents. These could be used in emergency, however, for any type of case. This gives an actual bed capacity of 375, with an extension capacity up to 500. The remainder of the buildings serve as barracks, noncommissioned officer quarters, and utility buildings and five of these are temporary.

B. Condition of Buildings: (1) In general the condition of the twenty-eight buildings of the Tripler General Hospital is good, with the following exceptions:

(1) Building No. 1, constructed in 1907 as a small station hospital, is the initial unit from which the present plant grew. It houses administration offices on the first floor and the laboratory service, office of the chief of medical service, allergy clinic and basal metabolic and electrocardiographic rooms on the second. This building is thoroughly infested with termites, including sheathing, sills, floor joists, studs and even the wooden lathes beneath the plaster. Termite control methods, to be effective, would practically involve rebuilding the structure. It is integrally gone. Extensive repairs are not feasible and early replacement would be in the interests of economy provided that now, permanent construction is to be delayed for over 5 years.

(2) Building No. 20 - A small frame building, 20' x 48', used as a barracks for approximately 13 men of the night duty shift, is a makeshift structure, poorly constructed, insanitary, hot and its use for housing soldiers is indefensible. Further delay in replacing this structure, pending new, permanent construction, is not justifiable. It should be replaced at once with a suitable, temporary, frame building.

(3) Building No. 14 - A small building housing the Quartermaster offices and storeroom has been adversely reported upon in previous years and replacement recommended. It is believed, however, that the interests of economy would be served better by deferring replacement until material funds become available for permanently housing its activities in a proper utility building, which would house, also, warehouses, shops and motor transport facilities.

With the exception of the buildings commented above, all others are integrally sound, including footings, sills, floor joists, studs, rafters and roofs. They are well preserved and with reasonable annual expenditures for maintenance they could readily be utilized for another decade. Ward buildings are of the 2-story, pavilion type with wide, sheltered porches. They are pleasant, airy and admirably suited to climatic conditions in the tropics or, as here, the sub-tropics.

However, in view of the gradual growth of this plant from a small station hospital; the age of the buildings; the very unsatisfactory improvisations in alterations, repairs and especially equipment that have crept in; and the constant fire hazard that is inseparable from frame construction, the buildings are not suited to the purposes of a thoroughly modern, general hospital. Therefore, the recommendation of previous commanding officers is urgently reiterated that authorization and appropriation be obtained from

the Congress, at an early date, for modern, permanent, fireproof hospital construction.

It should be borne in mind that the repeated recommendations for new construction, and their crystallization into its inclusion as a project in the approved War Department Housing Program, have been suicidal to much needed maintenance, improvement and modernization of the present plant. As far back as 1926, the Department Commander, following a thorough personal inspection of the hospital, stated, "It would seem the commanding officers of this institution for some years back have been so much infatuated with the idea of economy that many minor defects that should have been corrected have been passed over until it became absolutely necessary to make the repairs". (MED) 632, TON, Office of the Department Commander, HHD, Oct. 9, 1929). Another evidence of the paralyzing effect of contemplated new construction is shown in a letter from the Commanding Officer of this hospital to the Surgeon General's Office, dated November 16, 1936, in which he said, "In view of the fact that the new hospital is still a possibility, I do not deem it advisable to do any more for Tripler than is necessary to carry on". Many more illustrations might be cited from the records.

With definitive action on new permanent construction deferred from year to year, and with further delay now anticipated, it is believed that the time has passed for further temporizing in effecting mandatory projects for the maintenance, equipment and modernization of so much of the present plant as enters into the comfort, care and proper treatment of the sick. The type of economy that contemplates interdiction of all immediate spending, but which results in ultimate waste and inefficiency, should be superseded by thrift, which contemplates immediate spending, but spending with forethought, in order to promote efficiency and avoid ultimate waste.

g. The roads, walks and grounds of the reservation are in good condition. Other than general upkeep, they have not demanded any large scale changes or improvements during the year. The heavy rainfall promotes rapid growth of grass and shrubbery which necessitates continuous cutting. The beautification of the grounds is a continuous process and it may be said that the appearance of this reservation fits in well with the surrounding community. See Exhibit A - Repair, Alteration and Maintenance to Buildings, Grounds and Roads.

4. SANITATION.

a. Water Supply: The water supply is adequate and of excellent quality. It is obtained from a deep well located on the post of Fort Shafter and is delivered by gravity from a reservoir without purification as it is free from original pollution.

b. Food Supply: The ration allowance has been adequate throughout the year. The Quartermaster operates an excellent sales store in the City of Honolulu where about 81% of the food supplies are purchased. The food products so obtained have been very good with the exception of issue eggs and bread. Authority has been obtained to draw sales bread instead of issue bread and the use of fresh eggs purchased locally has improved the mess materially. The value of commissaries purchased during the year was \$73,377.92 as compared to \$42,027.66 in 1935. There are many good markets in Honolulu and with the present transportation facilities food supply is no problem. Most of our vegetables and fruits are purchased from the Sector Market, the sale prices and inspection of which are regulated by Army authorities. The system is satisfactory and affords an ample supply with little inconvenience. Milk, ice cream and butter are purchased from local firms who have a contract with the commissary. Dairies are inspected by the Department veterinarian and our own laboratory tests both milk and ice cream at frequent intervals. Recently Birdseye frozen vegetables have been used whenever possible as they are far superior to canned and most locally grown vegetables. In the future the substitution of Birdseye products for canned foods is contemplated on a larger scale.

c. Operation of Messes: Two messes are operated; a general mess and a nurses' mess. (1) The nurses' mess is located in the Nurses' Mess and functions very satisfactorily. (2) The general mess feeds the ambulant patients and the Medical Detachment. There were 452,734 meals served during the year, as follows: Patients 249,006, Medical Detachment 192,009, Civilian Employees 11,745. The number of trays served to bed patients was 101,250; the number of meals served to patients in the mess hall was 147,756. The General Mess Hall has a capacity of 240. However, it was not constructed for the purpose. It is comprised of a series of adjoining spaces, including former porches and corridors, all with different ceiling levels and types of ceilings, and the main section is badly cut up with supporting center posts. Posts and pillars are of different sizes and types. These improvisations combine to produce a cheerless and somber mess hall. It is felt that these spaces can readily be converted into an attractive and satisfactory mess hall by the removal of center posts and the substitution of transverse overhead trusses to support the floor and by installing new ceilings of uniform height and type and neatly boxing exposed pillars and beams.

The messing facilities, with a few exceptions, represent an heterogeneous aggregation of improvisations extending back over many years and the equipment is obsolete, unsightly and, in many instances, insanitary. With this equipment, economical operation of the mess is impossible and the use of an excessive number of kitchen personnel, both civilian and enlisted, is required. Proper food service is a consideration of the very first importance in the care of the sick. It not only lifts the morale in a class of persons whose morale is low but it contributes very materially toward the satisfactory

progress of patients and shortening of the period of illness. Proper facilities for meeting these requirements are mandatory.

With the view in mind that the installation of a self-service cafeteria system would come in the near future, a "serve yourself" system was recently instituted. The menus have been amplified and, in addition to a regular menu, four vegetables are served instead of two, thus giving a wider variety from which to choose. In the short time that the new system has been in effect the meals have been much more satisfactory and the amount of edible waste has been reduced from 1 1/2 pounds to 3 ounces per patient per day. At the same time that this "serve yourself" system was introduced in the general mess, food carts were put in use to carry food to the various wards. Patients on the regular diet are served at the bedside, directly from the cart, which gives them a larger choice of foods, steaming hot food and a concomitant saving in the amount of edible waste has resulted from this system.

4. Sewage and Refuse Disposal: Sewage and refuse disposal is satisfactory. Cartage is sold and removed by contract.

5. Flies, Mosquitoes, and Other Insects: There are practically no flies and although mosquitoes are prevalent, there are no malaria bearing species. The control of mosquitoes is not considered a problem. Bedbugs have been eliminated and, during the last 6 months, none have been reported throughout the hospital. Cockroaches are prevalent, however, the number has been kept down by repeated spraying of diet kitchens and corridors. Termites have always been a problem and always will be in frame construction. A termite control detail works continuously and effects considerable control of the insects. One of the buildings is damaged to such an extent that nothing short of complete salvage will help. No rats have been observed in the hospital.

5. PATIENTS.

Patients are received by informal transfer from all posts in the Honolulu Sector, namely Forts Shafter, Armstrong, DeFussy, Ruger, Kamehameha, Hickam Field, and the Hawaiian Ordnance Depot. Luke Field no longer exists as a post, the garrison having been incorporated into that at Hickam Field. Patients are admitted by formal transfer from the Kilmer Military Camp, Hawaii, U. S. Army transports and Schofield Barracks. In the instance of Schofield Barracks, only those cases are transferred in which it is believed treatment in this hospital would be more conducive to return to health. Such cases are few. Department Headquarters admits patients direct, as this hospital functions as the station hospital for that command. By mutual agreement with the Navy, five of their obstetrical cases are confined here each month. The number of retired personnel and their dependents being cared for is increasing rapidly, due to the fact that these islands are becoming a mecca for such personnel.

6. MOVEMENT OF THE YEAR.

There were 3417 admissions during the year with 186 remaining cases on January 1, 1939, making a total of 3603 patients accounted for during the year. (See chart next page). There were 15 deaths (See Exhibit B), and 113 births during the year.

7. ORGANIZATION.

The organization consists of two major divisions, Administrative and Professional.

a. Composition of Administrative Division: The Administrative Division is divided into various departments in charge of officers designated as follows, who are responsible directly to the Commanding Officer for the proper conduct and administration of their respective departments:

- (1) Adjutant
- (2) Chaplain
- (3) Chief Nurse
- (4) Commanding Officer, Detachment of Patients
- (5) Commanding Officer, Medical Detachment
- (6) Fire Marshal
- (7) Medical Inspector
- (8) Medical Supply Officer
- (9) Mess Officer
- (10) Police Officer
- (11) Post Exchange Officer
- (12) Quartermaster
- (13) Receiving and Evacuating Officer
- (14) Recreational Officer
- (15) Recruiting Officer
- (16) Registrar
- (17) Summary Court Officer
- (18) Training Officer
- (19) Investigating Officer.

b. Composition of Professional Division: The Professional Division consists of five services, as follows:

- (1) Medical
- (2) Surgical
- (3) Laboratory
- (4) Out-Patient
- (5) Dental.

All of the professional services are in charge of an officer who is designated as Chief of Service. Each service is subdivided into sections, each of which has an officer in charge, known as Chief of Section.

Chiefs of Services are responsible directly to the Commanding Officer for proper administration of their service; Chief of Sections to their Chiefs of Service; and Ward Officers to their Chiefs of Section.

10. PROFESSIONAL SERVICE.

4. The Medical Service. Chiefs of Service; Lieut. Colonel Douglas B. Hobano, Medical Corps, January 1st to September 19th, 1939; Lieut. Colonel E. L. Cook, Medical Corps, September 20 to December 31, 1939.

The service is divided into sections as follows:

- (1) Officers' Section: One ward of fifteen beds, shared with the Surgical Service (administered by the Medical Service).
- (2) Women's Section: One ward of twelve beds, shared with the Surgical Service (administered by the Surgical Service).
- (3) General Medical Section: One ward of 45 beds.
- (4) Acute Respiratory Section: One ward of 45 beds.
- (5) Contagious Disease Section: One ward of 36 beds.
- (6) Neuropsychiatric Section: One ward of 42 beds subdivided into closed mental, prison, and open neuropsychiatric.

In addition, the office of the Chief of the Service has connected with it the Allergy, Basal Metabolic, and Electrocardiographic Sections.

Personnel: There are four full time officers, including the Chief of Service, assigned during the year.

Equipment: Satisfactory. There were no major replacements during the year and none are contemplated during 1940.

Capacity: The allotment of beds has been sufficient to meet the requirements and the present division into sections has been satisfactory.

Movement of the Sick:

Completed cases during 1939 (interward transfers not included)	1226
Disposition in completed cases (duty or corresponding status)	11 1/2
Transferred to the mainland	70
Died	10
CDD Locally	4

Diseases of the acute respiratory group have continued to be the greatest single cause of admission. These diseases have, in many cases, been of mild or moderate severity. Fifteen cases of bronchopneumonia were treated with one death, a member of the Philippine Constabulary Band en route to San Francisco, admitted here February 10th and died two days later of pneumonia complicated by paralytic ileus. Three cases of pneumococcus pneumonia (Type III, IV, and VII) were treated with sulfapyridine with excellent results. In two the temperature returned to normal within twenty-four hours

after the drops were started and recovery was uneventful. In one temperature returned to normal within three days and likewise recovery was uncomplicated.

Cause of Death: There were ten deaths on the service during the year. See Exhibit D.

There were seventy patients returned to the mainland for medical reasons during 1939, the great majority being soldiers of short service and having disabilities which existed prior to enlistment. When it was determined a soldier would not be physically or mentally qualified for service in this department after a sufficient period of observation and treatment, transfer to the States was recommended. The great majority of patients transferred had permanent disabilities.

Section VIII Cases: During 1939 thirty-eight cases were examined and certificates furnished prior to action of Section VIII boards as required by Hawaiian Department Regulations.

The following statistics show the extent of activity in the various clinics which are under the supervision of the Medical Service:

Allergy Clinic:

Number of patients studied and treated	275
Total patient clinic days	4226
Treatments given	3790
Total tests made	13268

Following is a diagnostic classification of cases treated:

Hay fever	95	Dermatophytosis	20
Bronchial Asthma	62	Eczema	10
Hay Fever and Asthma Combined	15	Gastrointestinal allergy	8

Electrocardiography Clinic: 196 tracings were made during the year.

Basal Metabolic Clinic: 154 tests were made during the year.

b. The Surgical Service. Chief of Service: Major Paul A. Brickley, Medical Corps, during the entire year.

The service is divided into sections as follows:

- (1) Operating Room and Anesthesia.
- (2) General Surgery: One ward of 45 beds.
- (3) Orthopedic: One ward of 45 beds.
- (4) Genito-urinary: One ward of 45 beds.
- (5) Obstetrics: One ward of 10 beds.
- (6) Gynecology and Women: One ward of 12 beds which is shared with the Medical Service (administered by the Surgical Service)
- (7) Officers: One ward of 15 beds, shared with the Medical Service (administered by the Medical Service).
- (8) Roentgenological and Physiotherapy.

The obstetrical ward has connected with it prenatal and well baby clinics. The Office of the Chief of the Service has connected with it gynecological and surgical out-patient consulting clinics.

Personnel: During the greater part of the year there have been five officers on duty with the Service. In the near future a new surgical ward will be available (approved construction) and, with the moving of the medical library, old Ward 3 will again become available for patients. These added wards are to become surgical wards and it is felt that five officers on the service will not be enough. It is recommended that seven officers be the minimum available. The work of enlisted men has been highly satisfactory throughout the year.

Equipment: The operating section equipment is, as a whole, excellent. Although the sterilization equipment is old, it has given very little inconvenience. Steps have been taken for its replacement as it is not believed it would function throughout another year. The greatest difficulty encountered with the present equipment has been the ceiling operating lamp which has given no end of trouble. It is believed that this inferior grade of light (Standard Item 78335) should not be purchased in the future. Instruments and drugs have been of the highest quality and the armamentarium on hand is sufficient to do any operation required at this hospital.

Capacity: Four wards are assigned exclusively to the Surgical Service and two additional ones, Officers' Ward and Women's Ward, are shared jointly with the Medical Service. This makes approximately 150 beds available to the service. Throughout the year it has been necessary to utilize from 15 to 30 beds on the MEHT and (open) Neuropsychiatric Wards to care for ambulatory and enlisted patients from the General Surgery and Orthopedic Sections. The opening of two new surgical wards as mentioned above will alleviate this difficulty in the future. Beds for female patients are always at a premium and there is a rather lengthy waiting list for elective surgery. However, due to close cooperation between the medical and surgical services, all acute cases are admitted immediately.

Movement of the Sick: During the year there were approximately 1641 patients admitted to the Surgical Service.

23 cases were transferred to Letterman General Hospital for further observation and treatment which is approximately 50% less than the number returned during 1938 and is undoubtedly due to more care in physical examinations at time of enlistment. 13 of the cases returned were for incapacities entirely service connected.

There were six deaths on the service during the year; one from septicemia complicated by diabetes mellitus; one from peritonitis following second stage operation for excision of adenocarcinoma of rectosigmoid; one from osteomyelitis of right pubic bone; one from severe burns 20 hours after injury; one from fractured skull 22 hours after injury; one from immediate postoperative death following resection for advanced carcinoma of the stomach. For causes of death see Exhibit D (all services of the hospital).

Operating Room and Anesthesia Section: Personnel has been adequate throughout the year; two nurses are on duty at all times, one functioning as general supervisor and scrub nurse, the other as anesthetist. Four enlisted men are assigned to this section, and their work has been highly satisfactory.

The following list of surgical procedures was accomplished during the year

Appendectomy:	Acute gangrenous with perforation	= 4
	Acute gangrenous	----- 4
	Acute suppurative	----- 48
	Acute catarrhal	----- 23
	Chronic catarrhal	----- 4
	Prophylactic	----- 16
	Total	93
Aspiration:	Knee: Bursitis	----- 3
	Synovitis	----- 46
	Suppurative arthritis	----- 2
	Chest: Empyema	----- 1
	Pleural effusion	----- 2
	Biopsy of tumor of Bladder	----- 1
	Blood transfusion	----- 20
	Circumcision	----- 121
Cystoscopy:	Complete	----- 69
	Simple	----- 29
	Fulguration of bladder papilloma	----- 1
	Cholecystectomies	----- 3
	Dilation of Anal Sphincter	----- 1
Excisions:	Aneurysmal sac femoral vein	----- 1

Adenoidectomy - - - - -	21
Cataract extraction - - - - -	9
Chalazion, curettment of - - - - -	13
Cyst, excision of: Inclusion, orbit - - - - -	3
Sebaceous, nose - - - - -	3
Dacryocystorhinostomy - - - - -	1
Dislocation, lens - - - - -	2
Electrocauterization, inferior turbinate - - - - -	1
Eye, enucleation of - - - - -	1
Filiform, buccal surface cheek, excision of - - - - -	1
Foreign body, head, imbedded in nose, tympanum - - - - -	1
Foreign body, dental needle along nasal ascending ramus of mandible - - - - -	1
Fractures: Nose, reduction of, closed method - - - - -	9
Maxilar bone, depressed, open method - - - - -	2
Iridectomy and suture for prolapse, traumatic - - - - -	1
Iridotomy, for occlusion of pupil by iris - - - - -	1
Mastoidectomy, radical - - - - -	1
Myringotomy - - - - -	9
Ocular muscle surgery: Tenotomy - - - - -	6
Advancement - - - - -	3
Papilloma, excision of: Larynx - - - - -	1
Cheek - - - - -	1
Tongil pillar - - - - -	1
Ptoxis, Wheeler operation for correction - - - - -	1
Plastic surgery: Ear, lop ear - - - - -	1
Nose; Saddle nose, cartilage Transplant - - - - -	2
Hump nose, reduction of hump - - - - -	16
Displacement of nose, refracture and realignment - - - - -	4
Narrowing of wide tip - - - - -	2
Deformity of tip, remodeling - - - - -	2
Long hanging tip, correction of - - - - -	1
Columnella, loss of, rebuilt by flap operation - - - - -	1
Columnella, wide, narrowing of - - - - -	5
Scars, defensing, excised - - - - -	2
Orbit: Retraction of lids by diathermy, relaxation of - - - - -	1
Polypectomy - - - - -	16
Pterygium, transplantation - - - - -	7
Sinus surgery: Ethmoid osteotomy - - - - -	6
Sinusotomy, maxillary; Caldwell-Luc Modified Denker Simple - - - - -	3 4 13
Submucous resection - - - - -	24
Tonsillotomy - - - - -	334
Xanthelasma, excision of - - - - -	4
Minor operations, miscellaneous - - - - -	69

d. The Out-Patient Service. Chiefs of Service were as follows: Lieut. Colonel Minor F. Feich, Medical Corps, January 1st to September 19th, 1939; Captain Lewis W. Kirsman, Medical Corps, September 14th to December 31st, 1939.

Function: This service functions primarily as a general clinic for the treatment of all patients not requiring hospitalization. This includes physical examinations, minor surgical procedures, general medical treatments and a sorting out procedure whereby patients are referred to the proper Out-Patient clinics of the professional service.

The medical officer on the service also acts as Attending Surgeon, making home visits to sick military personnel and their dependents residing in the city of Honolulu. In this respect there were 205 such cases treated with a total of 538 home visits during the year.

In addition to the care of the sick, various routine examinations are made, including applicants for commission in the Officers Reserve Corps; applicants for appointment to the United States Military Academy; ROTC students; applicants for enlistment in the Army; applicants for employment under the United States Civil Service Commission; school children's routine examinations; and examinations for communicable disease prior to sailing on Army transports.

Personnel: The personnel consists of one medical officer, one nurse, one noncommissioned officer and one enlisted man. This number of personnel has proved to be adequate. However, the nurse assigned to the service assists in the prenatal and well baby clinics two mornings each week. During this time no nurse is present in the clinic, except in emergency when one is called from the Surgical Service. This arrangement has not been entirely satisfactory.

Patients: All persons entitled to medical care as provided in Army Regulations, are eligible for treatment in the Out-Patient Clinic. Generally it includes military personnel and their families, resident in Honolulu, regardless of whether or not they are stationed where dispensary facilities are available. Employees of the United States Civil Service Commission and WPA employees injured in the performance of duty, are treated upon request of competent authority. Emergency treatment is afforded any civilian when such treatment is justifiable.

All patients are expected to report to the Out-Patient Clinic for treatment when possible. In case of illness, of military personnel and their dependents, which prevents the patient from presenting himself to the clinic, house calls are made by the Chief of the Out-Patient Service. In his absence, house calls are made by the Alternate Officer of the Day. The number of house calls made are not excessive, in comparison with the number of patients seen in the clinic.

Statistical Data:

PATIENTS TREATED

Military	7,256
Civilian	<u>7,445</u>
Total	14,701

TREATMENTS GIVEN

Military	15,947
Civilian	<u>15,119</u>
Total	30,966

VACCINATIONS AND INOCULATIONS

Smallpox	370
Typhoid, paratyphoid	357
Diphtheria (Schick Test)	68
Diphtheria toxoid	115
Antitetanus Serum	30
Autogenous Vaccines	15
Pituitary Extracts	236
Portusiss	258
Ocular Vaccine	73
Ovarian Extract	95
Theelin	176
Vitamin Extract	50
Liver Extract	15
Adrenalin	4

EXAMINATIONS

Enlistments	17
Prior to discharge	9
West Point Preparatory School	46
Reserve Officers	39
R.O.F.C.	35
Women's Physical (Annual)	144
Food Handlers	386
Extension Tour of Foreign Service	84
Prior to Sailing on Army Transport	262
School Children	34
Post Barbers	23
Civil Service	153
Special Examination of Officers	449
Boy Scouts	4
Sea Scouts	1
National Guard Officers	1

RECRUITED

Enlistments and Recruitments	16
Defections	1

FINGER PRINTS

Finger Prints 750

g. The Laboratory Service. Chief of Service: Colonel F. H. Fowear, Medical Corps, during the entire year.

The clinical laboratory of the Tripler General Hospital, functioning as the Hawaiian Department laboratory, performs major technical work for all posts of the Department. This work includes (a) the examination of water and milk samples, (b) serological examinations, including the Wassermann & Kahn reactions, (c) the examination of food samples for bacterial contaminants, (d) toxicological and histopathological examinations of animal tissues for the veterinary service, (e) the preparation of laboratory supplies such as culture media, colloidal gold solution, etc. In addition, the laboratory performs all histopathological examinations upon biopsy and autopsy material. Frequently the laboratory is called upon on a consulting status to perform histopathological examinations for the Naval Hospital at Pearl Harbor and for the Queen's Hospital (civilian) in Honolulu.

Personnel: The commissioned personnel of the laboratory at present consists of one officer. It is felt that at least two officers are needed in view of the manifest impossibility of one officer supervising all of the technical details entailed.

The enlisted personnel includes one noncommissioned officer and six enlisted men. Considerable difficulty is encountered in keeping adequately trained enlisted personnel. During the months of November and December 1939, four of the highest trained laboratory technicians were lost by transfer to the States upon expiration of their tour of foreign service. The tour of foreign service being only two years, this condition is arising continuously.

In order to fully train a laboratory technician, at least one year is the minimum requisite and usually by that time the trained man is due for return to the mainland. The solution of such a problem, which also applies to technicians of the other professional services, would be more and better ratings.

One student took the three months course for laboratory technicians during the year.

Capacity: The laboratory occupies eight rooms on the second floor of the Administration Building. They are utilized as follows:

- | | |
|-------------------|-----------------------------|
| 1. Hematology | 5. Chemistry |
| 2. Histopathology | 6. Cleaning and Sterilizing |
| 3. Bacteriology | 7. Waiting Room |
| 4. Serology | 8. Office |

There have been no major changes or improvements in the laboratory during the year. Adequate cold storage facilities are urgently required in the hospital morgue, this to replace the extremely primitive method now employed to preserve human cadavers during the time elapsing before permission or refusal of autopsy is obtained, namely, packing of ice around the body. Arrangements were recently made to use the facilities of the Fort Armstrong Quartermaster Depot morgue which is equipped with electrically operated mortuary boxes, until such time as mortuary boxes will be approved and installed in the hospital morgue.

The many demands made upon the laboratory, in the status of a Department Laboratory, for laboratory examinations requiring small animals such as rabbits, guinea pigs and mice, call for enlarged and improved facilities for breeding in the now existing animal house.

Statistical Data:

Clinical Pathology:

Blood:

Erythrocyte counts	3927
Hemoglobin estimations	3938
Leukocyte counts	4527
Differential counts	4537
Malaria examinations	18
Bleeding time	66
Coagulation time	594
Sedimentation rate	296
Routine analysis (Chem. or micro)	7717
Parasites and Ova	250
Smears for Tbc	186
Smears for other organisms	78

Urine:

Feces:

Sputum:

Spinal Fluid:

Smears	15
Differential	43
Cell counts	195
Globulin	195
Colloidal gold	195
Wassermann	195

Venereal Lesions:

Smears for G.C.	1361
Darkfield examinations for T.P.	85

Pathological Anatomy:

Autopsies	15
Gross specimens preserved	42
Gross specimens sent to A.N.M.	68
Histological specimens mounted	1278
Histological specimens sent to A.N.M. ...	393

Bacteriology:

Cultures:

Blood	79
Urine	172
Feces	23
Sputum	49
Spinal fluid	1
Pus, exudates, etc.	112
Milk	352
Water	214
Ice Cream	35

Nasopharyngeal:

N.S.	435
N.L.	435
N.A.	503

Serology:

Miscellaneous agglutinations	44
Blood typed	237
Blood cross typed	50
Wassermanns	5100
Ketins	5108

Chemistry:

Blood:

Calcium	59
Chlorides as NA CL	16
Creatinin	28
Cholesterol	8
Glucose	318
Glucose tolerance	6
Intoxus Index	111
Nonprotein-nitrogen	342
Phosphorous (Inorganic)	1
Van den Bergh	52

Urine:

Albumin	96
Bile	38
Glucose	17
P.S.F.	157

Drugs, etc.:

Drugs, food, beverages, etc.	122
Milk	323
Water	69

Miscellaneous:

Autogenous vaccine	69
Gastric fractional	114
Guinea pig inoculation	29
Rabbit inoculation	67
Procedures not otherwise listed	1174

Total number of procedures 46,626

A. The Dental Service. Chief of Service: Colonel L. B. Knight, Dental Corps, during the entire year.

Personnel: The personnel on duty during the year consisted of four officers, one noncommissioned officer and eight privates. This number has proved to be satisfactory for the proper functioning of the service.

Equipment: All the equipment in use in the Dental Clinic has been satisfactory. Supplies have been adequate as to quantity and quality.

Capacity: The allotment of space has been adequate since the construction of the new room for dental X-ray equipment.

Training: The training of dental officers has been conducted by means of informal conferences in modern professional procedures and improved clinic administration as well as attendance and participation in the weekly medical clinical conferences.

The training of enlisted men has been conducted by means of instruction in their respective duties by the officers under whom assigned for duty. General training in routine procedures common to this clinic conducted by the sergeant in charge. Other military training was received through their Detachment Commander.

The annual dental survey was completed during the month of January 1939 in compliance with Paragraph 3 g, AR 40-510. A schedule could not be maintained to care for all Class I and II cases due to the large number of emergency cases and voluntary applications reporting daily which demanded all operating time.

Statistical Data:

In compliance with Par 5 u (2) (h), AR 40-5, report of time lost by military personnel due to dental conditions is as follows:

Patient days lost, hospitalized	522
Patient days lost, quarters	None
Total	522

In compliance with Par 3 b (7), AR 40-2003, a summary of patients referred for examination for foci of infection follows:

Military	434
Others	96
Total	530

A total of 4140 patients were admitted to this clinic for treatment during the year as follows:

Military	2995
Others	1145
Total	4140

The following is a summary of sittings for the year:

Military	9512
Others	3777
Total	13289

Table of operations performed during the year:

	<u>Military</u>	<u>Others</u>	<u>Total</u>
Fillings (all types)	4732	1074	5806
Crowns and bridges	32	12	44
Dentures (all types)	160	48	208
Dentures rebased	25	11	36
Prostheses repaired	42	25	67
Calculus removed	686	195	881
Orthodontic Appl's Constructed	1	94	95
Fracture, reduction of	8	0	8
Spinals	0	0	0
Teeth extracted	1071	246	1317
X-ray exposures	2302	1488	3790
Other operations	6261	2436	8697

11. EDUCATION AND RECREATION.

There has been little change during the year in these activities. They consist chiefly of athletic sports such as baseball, basketball, soft ball, volley ball and tennis. These sports are participated in by practically all members of the detachment. Teams represent the hospital in tournaments of the various sports which are held in the Honolulu Sector and the showing in each case has been excellent during the year. A new bowling alley with six alleys was opened in September at Fort Shafter which is only a quarter mile away. At present a bowling team is being organized to represent the hospital.

Transportation is furnished the men of the Detachment to the main sports events at Schofield Barracks and in the City of Honolulu. Many of the men take advantage of this accommodation. In addition, numerous other phases of amusement are given the men such as dances, trips around the Island, picnics and beach trips.

The moving picture theater at Fort Shafter, which is directly across the street from the hospital, is well patronized by members of the Detachment and patients. We share to a small extent in the profits of this theater.

A well equipped hospital library is available and, in addition, many magazines and papers are subscribed for and placed in the Detachment day room. The Red Cross library has an excellent selection of books which are available to both patients and the Detachment.

Vocational training and welfare work is very limited. However, it is unnecessary as patients requiring continuous hospitalization are returned to the Mainland as soon as possible. There are cordial relations and co-operation with the American Red Cross who distribute, from time to time, magazines, flowers, gifts, etc., and frequently has programs for the patients.

Several of the men of the Detachment are taking courses at the University of Hawaii and it is understood that one, and possibly two, will receive degrees from that university this Spring. One of our sergeants has completed a course in pre-medical education and intends to enter medical school upon his return to the Mainland next Fall. In this respect the Detachment Commander makes every effort to authorize his men to take various courses at the schools in Honolulu and, whenever possible, to arrange their work so that such courses may be taken in the morning or afternoon in addition to the usual evening hours.

The Kilaeua Military Camp, a rest camp operated by the Hawaiian Department Recreation Officer, is also available as a recreational and educational facility in that it is located on the large Island of Hawaii. Twenty men of this organization have made visits to the Camp during the year.

During the year, the men have appeared to be contented and their efficiency in the performance of their various duties has increased materially.

12. PERSONNEL AND TRAINING.

a. Commissioned: The commissioned personnel has been excellent and well equipped for their duties. Friction between the various officers and services has been nil.

The authorized strength is as follows:

	<u>Authorized</u>	<u>Present</u>
Medical Corps	17	18
Dental Corps	4	4
Medical Administrative Corps	2	2

The number of officers is adequate when all are available for duty. However, with the opening of two new wards in the near future it is felt that the officer strength should be increased by at least two and, in addition, the gradual increase in work being done by the Out-Patient Clinic and Attending Surgeon of this hospital, indicates that, in the near future, an additional medical officer will be required for that department. It is necessary to have available at all times an extra officer in order to avoid shortage when absence for sickness or urgent leave occurs, or to cover unforeseen emergencies.

Another urgent need is provision for another officer in the Laboratory Service. This Service is extremely active and since taking over all of the tissue examinations for Schofield Barracks, in addition to a very active Surgical Service at this hospital, the present medical officer in charge of the laboratory, although working until 4:00 or 5:00 o'clock every afternoon, has been unable to give the clinical pathology adequate supervision and this very important work has, of necessity, been delegated to enlisted technicians. Embarrassing situations can arise at any time where work of such technical nature is performed and interpreted, without supervision, by enlisted technicians. Relative to an additional officer in the Laboratory, arrangements are being made at this time with the Department Surgeon's Office for an additional officer.

Training of commissioned personnel is continuous throughout the year by means of routine conferences by chiefs of services during duty hours, and the medical conferences which are held weekly during the training season.

b. Nurses: The nurses have been very satisfactory and the performance of their duties excellent. The authorized strength is 24. Actually, however, twenty-four have never been available during the year because at all times a number are availing themselves of furl leave or the authorized detached service for two weeks annually, or are sick in quarters, resulting in a

quota available for duty of never over twenty-two and, at one time during the year, as low as nineteen. Under these conditions, there has never been more than three nurses available for duty at night, creating a situation which is potentially dangerous. A night nurse should be present at all times in each of our women's wards. The letter from this office to the Department Surgeon, dated January 3, 1940, defends the necessity for at least a minimum of twenty-seven nurses on duty at this hospital at all times. Since the writing of that letter conditions have developed which would indicate, in the near future, the necessity of a minimum of thirty nurses being authorized for this hospital.

Training of nurses is continuous by officers in charge of wards and departments and by the Chief Nurse, during duty hours. Regular weekly conferences are held under the supervision of the Chief Nurse.

g. Enlisted Men: The noncommissioned officers and enlisted men have been very satisfactory and some are superior. Due to the large turnover of men, the present strength of the detachment of 134 men is not adequate to properly train men as replacements for X-ray, Laboratory, Dental Clinic, Pharmacy and Kitchen. During the year it has been necessary, on several occasions, to place men in the above mentioned departments who had had absolutely no knowledge of the work required of them. During the month of December, four men out of a personnel of eight on duty in the Laboratory, were returned to the Mainland for discharge. They were replaced by men who had had no laboratory experience. To do away with the possibility of such a situation arising in the future, it would be necessary to detail several men in each of the above mentioned departments at least six months prior to the return of men from that department to the Mainland. However, with our present strength, such a procedure is impossible. A detachment strength of 200 is desired to prevent the possibility of such complications in the future.

Professional training of enlisted men is conducted by officers in the various wards and departments and lectures are given in the various required subjects throughout the training period which runs continuously for about five months each year. The emergency men on duty in the Receiving Office are required to apply the Thomas leg splint under the supervision of the Charge of Quarters daily and, in addition, are questioned and given instructions by the Officer of the Day in first aid daily.

h. Civilian personnel: The civilian personnel have been satisfactory, loyal and attentive to their duties. There are twenty paid from M & H D, four paid from C & R of H, and one paid from D & Q Funds.

The necessity of an additional civilian employee (female) to act as a maid in Ward 2 (women's ward) has been indicated during the year. At present there is but one maid on duty at this hospital who is employed in Ward 1, the obstetric ward, who, whenever possible, helps in Ward 2, the women's ward. However, both of these wards have become very active because of the concomitant increase in female population incident to Air Corps expansion.

g. Quartermaster: The Quartermaster situation has been satisfactory throughout the year, however, the present quartermaster is no longer a full time officer, being assigned to the Post of Fort Shafter and handling this hospital as additional duties. This combination of duties has proved to be very unsatisfactory. However, through such hard work and overtime on his part and the availability of an excellent Warrant Officer, the Quartermaster activities at this hospital have functioned properly.

13. MEDICAL SUPPLIES:

a. Suitability, Character, Quality, Sufficiency and Expense: During the Calendar Year 1939, the medical supplies furnished this hospital have been of good quality and satisfactory. The monetary allowance of \$21,000.00 for standard expendable items and \$1,800.00 for nonstandard items for the fiscal year 1940 is expected to be adequate. Excess items have been reported to The Surgeon, Hawaiian Department.

b. Storage conditions: Storage space is adequate and satisfactory.

c. Promptness in filling requisitions: Requisitions to the Hawaiian Medical Depot have been acted upon and promptly filled. However, nonstandard supplies which cannot be locally procured and standard items that must be received from the mainland, are quite often delayed for a period of time, due to inadequacy of transport freight space and change in transport schedules.

d. Property that has become unserviceable or lost is placed on Report of Survey, Inspection and Inventory Report or Statement of Charges. During the Calendar Year 1939 property has been disposed of in the amount of \$15,424.34.

g. Statistical Data:

Cost of expendable supplies issued and dropped as expended:

Calendar Year 1937	\$ 19,926.01
Cost per 100 patient days	27.80
Calendar Year 1938	16,527.29
Cost per 100 patient days	20.30
Calendar Year 1939	15,793.52
Cost per 100 patient days	20.29

Cost of non-expendable items which have become unserviceable through fair wear and tear (I & I):

Calendar Year 1937	\$ 9,969.72
Calendar Year 1938	5,965.92
Calendar Year 1939	15,636.35

Cost of non-expendable items surveyed:

Calendar Year 1937	\$ 255.47
Calendar Year 1938	581.81
Calendar Year 1939	544.59

Cost of repair of typewriters:

Calendar Year 1937	\$ 3.24
Calendar Year 1938	5.53
Calendar Year 1939	0.00

Cost of laundry services:

Calendar Year 1937	\$ 17,432.96
Cost per 100 patient days	23.30
Calendar Year 1938	18,151.44
Cost per 100 patient days	22.10
Calendar Year 1939	16,936.96
Cost per 100 patient days	20.20

Cost of repair of electric refrigerators:

Calendar year 1939	\$ 65.66
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14. HOSPITAL LAUNDRY.

Hospital laundry is done by the Quartermaster Laundry, Fort Armstrong, T. H., in a satisfactory manner.

Total cost for 1939:	\$16,936.96
Total number of pieces:	503,687
Cost per piece:	\$ 0.033801
Cost per patient day:	\$ 0.302

15. POST EXCHANGE.

a. The operating personnel of the Post Exchange consists of one commissioned officer, one noncommissioned officer, two privates, first class or privates, and three civilians (one woman as store clerk, one woman as store and office clerk and one man as restaurant cleanup and handy man). This staff has proved sufficient to handle the volume of business.

b. Gross sales and income from concessions amounted to \$62,442.57 for year of 1939, from which a net profit of \$4,363.98 was realized. Donations to the Recreation Fund amounted to \$4,200.00.

c. During the year a new electric bottle cooler was purchased cost of \$242.78, for use in the Restaurant.

16. TRANSPORTATION.

4 ambulances:

2 Ford ambulances - 3/4 ton.

2 Chevrolet ambulances - 1 ton.

2 passenger cars - Chevrolet.

1 motorcycle with side car.

3 trucks:

1 GMC truck - 1 1/2 ton.

2 Fords - 3/4 ton.

These vehicles made a total of 4,679 separate trips, making 63,565 miles and using 6,119 gallons of gasoline for an average of 10 miles per gallon.

GEO. B. POSTER, JR.,
Colonel, Medical Corps,
Commanding.