DURING the recent Anglo-French operations in Egypt, the author was one of the
public health officers of the British Civil Affairs Unit which ran the administra-
tion of Port Said for six weeks. The unit landed on 10th November, three
days after fighting had ceased. Before its arrival, Lieut.-Colonel F. J. Hooper,
R.A.M.C., controlled public health activities, on instructions of D.D.M.S.,
2 (Br.) Corps. He gave us a “flying start” with a comprehensive appreciation of
the situation, and introductions to the appropriate Egyptian officials. It was
planned that Public Health, Civil Affairs, would be responsible for running all
civilian medical services including hospitals. As more territory came under
British administration, so the staff would be increased. At first this consisted of
one army health specialist and a chief clerk (Staff-Sergeant, R.A.M.C.). A
week later another army health specialist and a R.A.M.C. administrative officer
for medical store duties were added.

The limited area and the very early evacuation made even this staff more
than adequate. The administrative officer, for example, had little to do with
stores, as no Civil Affairs medical store depots were landed. Throughout, a very
close working relationship was maintained with D.D.M.S., 2 (Br.) Corps, with
mutual advantage.

British Civil Affairs controlled the town of Port Said and the west bank of the
Suez Canal for twenty-five miles to El Cap. The French equivalent, the Cin-
quîème Bureau, administered Port Fuad and the east bank. British Public
Health ruled indirectly, using the existing Egyptian Public Health and Medical
Authorities. This system worked well in spite of a tendency on the part of the
Egyptians to “go slow.” This was due to fear of appearing too co-operative with
us. For political reasons they were loath to accept material help from us direct
(except in dire emergency), but took it willingly if passed through a neutral third
party such as the International Red Cross.

Situation on arrival, 10th November

Apart from the activities of a few snipers, all fighting had ceased and the
process of clearing up had started. The population had been slightly reduced
to about 150,000, as many better-class people and much of the unskilled labour
force had left.

Material damage was slight except where the Egyptian Army had put up
determined resistance, such as at the Governor’s Palace and the former British
Navy House. A small part of the Arab quarter had been destroyed by fire,
rendering a number of people homeless. Water mains, power lines, and sewers
had suffered severely, though luckily both waterworks and power station were
intact. Even so, at this early stage the Royal Engineers had succeeded in providing water for six hours a day. Most of the dead had been removed to the cemetery where burial was in progress. A large number of dead animals remained untouched on the outskirts of the town. In the streets lay large piles of uncleared refuse which were breeding millions of flies. No epidemics had been reported, though it was known that dysentery and enteric were endemic; in addition, thirty cases of enteric had fled from the fever hospital during hostilities and had disappeared. No cases of the International Convention diseases such as plague or smallpox were known to exist. Hostilities stopped all hospital and out-patient services except the treatment of casualties and surgical emergencies.

The specialist hospitals for fevers, tuberculosis, and ophthalmology were all in the path of the fighting and had been precipitately evacuated by staff and patients with great loss of movable stores such as bedding. Except for the fever hospital (mortared by the Egyptians), buildings were intact. Casualty treatment centred on two general hospitals, both of which were undamaged. Their capacity had been expanded for the emergency from 350 to 600 beds, with small additions of staff. In spite of this, one hospital was nearly overwhelmed by a combination of casualties and interruption of essential services and food. With few exceptions such as morphine, blood, plaster of Paris, and dressings (all supplied by us), medical supplies were adequate for immediate needs. Food distribution had broken down; this, with withdrawal of the police force, had led to looting which was now under control. Remaining stocks of food in the town were adequate though the importing of fresh meat and vegetables from the Nile Delta and sea fishing had ceased.

**Action taken to safeguard the health of the population**

Priority was given to five main problems. These were:

1. Restoration of public utilities.
2. Removal of street refuse.
3. Essential services and supplies for hospitals treating casualties.
4. Care of the homeless and destitute.
5. Disposal of the dead.

Next in order of importance came:

7. Provision of medical supplies.
8. Importation of fresh food.

The handing over to the United Nations’ Expeditionary Force (U.N.E.F.) precluded further development of civilian health services. British Civil Affairs then arranged the evacuation of British and foreign nationals, and dealt with problems associated with the British withdrawal.

In the restoration of public utilities, Public Health’s main problem was to
achieve a safe water supply. This was done by raising the chlorine dosage at the waterworks until free chlorine could be regularly demonstrated at all distribution points. This required a dosage of 2.5 parts per million, a high dose for a modern plant. Two factors which affected the quantity of water available are of interest. Port Said's water supply comes from the Nile via the Sweetwater Canal which terminates in the waterworks just south of the town. Early on it was observed that the water level in the canal was abnormally low for the time of year. Investigation showed this to be due to two causes. Reeds in the canal (normally cleared every autumn) were impeding the flow of water, and there was an artificial breach in the canal near Egyptian-held Kantara. The latter was probably made accidentally when the Egyptian Army cratered the Suez Canal road running between the Sweetwater Canal and the Suez Canal, thus allowing fresh water to leak into the Suez Canal. It was soon repaired on representations being made to Cairo through the United Nations. Restoration of Port Said's system of sewers was difficult owing to their archaic design, but the service was almost back to normal in six weeks. The billeting of relatively large numbers of soldiers in civilian houses caused difficulties over latrine facilities, especially as the obvious alternative of deep trench latrines was impracticable because of high subsoil water. Bucket latrines emptied direct into the sewage works were used.

In the streets piles of uncleared domestic refuse which were breeding flies provided one of the major menaces to health. As a preliminary measure the streets were dusted with 5 per cent Gammexane powder and then gradually cleared. Some delay in clearance was experienced as labour was afraid to work at first and all refuse lorries had disappeared, either captured by us or leaving with the retreating Egyptian Army. A scratch fleet of refuse lorries and other captured transport was therefore assembled and released to the town authorities. Military refuse created no difficulty because units used the controlled tip which was well outside the town, except during the withdrawal when it was dumped at sea.

The major needs of hospitals treating casualties were restoration of all public services (water, sewage, electric light) and resumption of regular food supplies. They were given priority for these services which were soon functioning normally. In addition an emergency electric generator was installed in the largest hospital. On 12th November the number of patients was reduced by about one-third, 190 Egyptian service wounded being evacuated by ambulance train to Cairo under arrangements made by the D.D.M.S., 2 (Br.) Corps. This enabled the hospitals to reorganise rapidly before reopening for normal admissions. These and out-patient clinics started twelve days after the cease-fire, the only limitation being fifty beds reserved for emergency purposes. Out-patient clinics for tuberculosis and ophthalmology were started as a preliminary to the reopening of their specialist hospitals, though lack of equipment delayed this until after the Anglo-French withdrawal.

There was no major shortage of medical stores. At first essential items such as morphine, blood, plaster of Paris, and dressings were obtained from British medical units. Later, supplies were sent up from Cairo through the International...
Red Cross. Civil Affairs was provided with a medical store depot, but this was not landed as it arrived too late. Apart from this, we made available large quantities of T.A.B.T. vaccine and dried calf lymph for the civilian population. Civil Affairs supplies of insecticides and sprayers also arrived too late. Luckily Port Said is the main insecticide depot for the whole Suez Canal Governorate, stores including over 20 tons of 5 per cent Gammexane in talc (used as an all-purpose insecticide dispersed either by Dobbin duster or hand). In addition, Civil Affairs was able to obtain small quantities of insecticides and sprayers from commercial houses for army use until army supplies were landed.

British regimental medical officers and 15 Field Ambulance, R.A.M.C., answered numerous sick calls from the civil population, especially after curfew at night when civilian doctors and ambulances would not go out. This service was much appreciated by the local population.

Two types of case caused major administrative problems. These were mental cases and persons requiring anti-rabic treatment, both of which were normally treated in Cairo. This procedure was continued, though requiring lengthy negotiations through United Nations.

Care for the destitute fell into two categories. Firstly there was the foreigner resident in Port Said out of work through the Canal being closed, or unable to draw money from the banks as accounts were frozen. He required food and this was provided by the churches and foreign consuls working with Civil Affairs and the Egyptian controller of food supplies. The Egyptian problem was greater as many needed both accommodation and food, and were generally the poorer class of people. Relief work was initiated by a committee of notables of Port Said who soon handed over to the International Red Cross, Civil Affairs, and the Egyptian Ministry of Social Affairs. 2,400 were accommodated in schools and empty houses, and 6,000 were given two meals daily. Public Health kept a careful watch on health; T.A.B. inoculation, anti-typhus dusting, and daily health checks were carried out. Some attempt was made to provide a hygienic environment, with latrines, water points, insecticide spraying and refuse collection, but this was not entirely successful in view of the low standards of hygiene of many of these people. It was interesting to note that on the average each family had seven children.

Burial of the dead was almost complete when Civil Affairs arrived, though much reburial from shallow graves and the Suez Canal had to be done. This was carried out by the Egyptian Public Health Department. Registration of the dead broke down early in hostilities. This permitted Cairo Radio to make extravagant propaganda claims as to the thousands of Egyptian killed and wounded. No fewer than four high-level inquiries were made as to the number of casualties, the last being that of Sir Edwin Herbert, President of the Law Society. This was, of course, followed by Dr. Summerskill's visit after we had left Port Said. The moral would seem to be to register the dead at the time. Disposal of dead animals was much more difficult. Carcases were grouped together and burnt, close supervision being required to ensure complete combustion.

Epidemics were the next consideration. Enteric and dysentery were thought
to be the most likely dangers as both were endemic. Normally enteric becomes epidemic in Port Said during the summer months, up to 200 cases a month being notified, though the true incidence is thought to be higher, many cases being treated privately at home. The predominant organism varies from year to year, that of 1956 being \textit{Salm. paratyphi} B. A campaign for T.A.B. inoculation of the civilian population was therefore initiated, concentrating first on those such as the destitute who were thought to run the greatest risk. Anti-typhus dusting of the population in the Arab quarter was also carried out. A smallpox vaccination programme was planned but not commenced before the Anglo-French withdrawal. The appearance of dead rats in the streets prompted examinations for plague which proved negative.

Two wooden huts holding fourteen beds were set aside as a temporary fever hospital. Two schools and the new jail (empty but capable of taking 500) were also surveyed for emergency use. A small tented hospital on the site of the former fever hospital was planned for highly infectious cases such as smallpox. As it turned out, these preparations were unnecessary as no epidemics occurred. Only two cases were admitted to the fever hospital, a severe case of measles and a suspected enteric which later proved negative.

Because Port Said produced no food of its own, ensuring adequate food supplies was a major part of Civil Affairs responsibility. A food ship lay off Port Said to land supplies immediately local stocks were exhausted. These reserves were adequate and lasted throughout the occupation. Sea fishing and the importing of fresh meat and vegetables from the Nile Delta were permitted in spite of the serious risks to our security. Shortage of kerosene (the only fuel used in Port Said) caused some anxiety, but sufficient supplies were always maintained.

\textit{Hand over to U.N.E.F. and withdrawal}

The announcement that the British and French were to evacuate Port Said was greeted with great enthusiasm by the local population. The Egyptian underground army began a campaign of grenade throwing and sniping. Egyptian public health officials became full of energy and required little if any help from us. British Civil Affairs handed over responsibility for public health to U.N.E.F. on 13th December. It then concentrated on the evacuation of British and Italian nationals (about 700 of each) with their not inconsiderable baggage. Each group had a small number of sick and infirm requiring special care in embarkation. 15 Field Ambulance vaccinated over 400 British nationals. The British Army's evacuation was conducted by phases, by withdrawing inside smaller and smaller barbed wire perimeters. U.N.E.F. took over the evacuated areas and acted as a cushion between ourselves and the Egyptians. Arrangements were made for civilian doctors inside the perimeter to be available during the day, whilst 15 Field Ambulance and a surgical team were on call at night. Egyptian civilian ambulances were given free access to remove cases to hospital (all civilian hospitals were soon outside our perimeter) but would only do so after considerable pressure from U.N.E.F. Similarly, in spite of promises to U.N.E.F.,
Egyptian street-cleaning squads would not work in British-controlled areas. This led to some accumulation of refuse in the streets before the evacuation was complete.

Conclusions

In some respects the work of Public Health, Civil Affairs, could have been made more effective. The public health section should, I think, have landed earlier and commenced work immediately the fighting had ceased. When the taking over of a dirty town (as was Port Said) is envisaged the early employment of a Field Hygiène Section is essential. This section should work in close cooperation with Civil Affairs. The earlier employment of such a section in Port Said would have reduced the fly menace and the dysentery problem amongst troops. The medical stores needed for Civil Affairs differ from their military counterpart in that more antibiotics and vaccines are required. It is suggested that the problem merits further detailed study. Both medical and sanitary stores should be landed earlier, part to come in with the Advance Party and the remainder within fourteen days. The establishment of Public Health, Civil Affairs, omits sanitary inspectors. The Port Said operations showed this to be a serious defect. They would prove invaluable in clearing up a disorganised town. The representative of the International Red Cross originally came to watch over the interests of Egyptian prisoners of war in our hands. He did much more than this, co-ordinating welfare and relief measures and acting as a very able intermediary between us and the Egyptians. His presence was a decided asset; the International Red Cross should be invited to send such a representative under similar circumstances in the future. In view of the trouble in Port Said, some attempt should be made to register the dead. This should be part of normal Civil Affairs duties and not a medical preserve.

British Civil Affairs finally closed down on 19th December, embarking for home the same day, after six weeks' work. By this time there had been no epidemics, the health of the population had been maintained at a high level, food was adequate, the destitute were housed and fed, general hospital and public health services were re-established, a start had been made on the more specialised medical services such as tuberculosis, the water supply was safe and adequate, refuse collection and street cleaning were satisfactory, and sewage disposal almost normal. No mean achievement!