Laboratory Technicians. These may now obtain the Membership, Associate¬ship and the Fellowship of the Institute of Medical Laboratory Technology. Nine have obtained the Associateship and ten the Fellowship since 1953.

Hygiene Assistants. A limited number of specially selected hygiene assistants are trained for the qualification of Public Health Inspectors’ Certificate. Two have qualified.

Operating Theatre Technicians. These may obtain the Diploma of the Association of Operating Theatre Technicians. Five have qualified since 1948.

Dispensers. These may obtain the Assistantship of the Society of Apothecaries, and six have qualified since 1948.

Special Treatment Orderlies. These orderlies may become Members or Associates of the Institute of Technicians in Venereology. This is the most recent “recognition.”

It must be remembered that these achievements have been brought about against a background of National Service when the Corps has consisted largely of a floating population of National Service men and conditions for training have been denied the stability of an all-Regular Service.

To ensure that our future training is kept abreast of modern requirements it is the intention to set up a permanent working party, charged with the task of keeping our training needs constantly under review. It may be said with confidence that our present training facilities are better than they have ever been and if we build on the sure foundations which now exist the future not only of the individual other rank but of the Corps itself is assured.

RECENT ADVANCES IN THE TRANSPORT OF CASUALTIES

BY

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The medical services have been quick to exploit the latest developments in air transport for casualty evacuation. The almost daily arrival by air in the United Kingdom of ill and injured soldiers from overseas stations is ample evidence that flying has become a conventional mode of evacuation. However, it is as well to remember that although aircraft can carry patients great distances, quickly and in great comfort, there still remains a journey over the ground at each end of the air lift. This is now carried out by stretcher-jeeps and ambulance cars and may, under active service conditions, be slow, uncomfortable and possibly dangerous to the patient. The development of the helicopter, which needs no elaborate runway for take-off and landing, has offered the possibility of extending the advantages of air evacuation up to the front line.

The helicopter was first used extensively in Korea, where the aim was that every case in the forward area should now be evacuated by this means. Due, however, to their limited numbers their use had to be restricted to specific types
of cases, including those with fractures of a severe nature or with penetrating wounds of the abdomen, head or chest, and those who were too ill to stand conventional methods of evacuation. For the same reason another stipulation was that helicopters should only be used where conventional means failed and that they would not be asked to land unless the area was free from small-arms or mortar fire.

In practice the regimental medical officer would ask his headquarters to call up Brigade headquarters, who in turn contacted Division. There the message was passed to Medical, who relayed it to Corps, and Corps in turn directed a helicopter from their controlled pool to the unit.

It was essential that the helicopter pilot should know the location and map reference of the landing ground, how it was marked, the number and types of casualties, and any special information; for example, local wind, obstacles, etc. As a routine all forward medical officers were provided with means for indicating their position.

Difficulties arose because many cases were evacuated direct to hospitals without passing through a forward medical unit and therefore were not included in returns, and there was a steady loss of blankets and stretchers which were not replaced. The use of helicopters has since been developed in Malaya and culminated in the mass evacuation of allied wounded at the Port Said landing of November, 1956.

The outstanding advantage of evacuation by helicopter is speed, which may be critical for a shocked patient. The dangers of moving patients with abdominal and chest wounds by road have been so great that it has been necessary to recommend that such patients be held in forward units rather than move them. This does not apply to evacuation by helicopter as the vast majority of casualties can be taken quickly and with a minimum of disturbance to a fully equipped resuscitation ward and operating theatre. In this respect the advantages over evacuation by stretcher-jeep are enormous. The smooth vertical take-off and landing is also an improvement on the light plane’s performance. The helicopter can also be used for removal to ships; an aircraft carrier can accommodate the largest helicopters and a landing deck for smaller helicopters can be built on practically any ship; the French at Port Said fitted their hospital ship Marseillaise with such a deck, to take their “Bell” helicopters.

Over great distances helicopters will not replace conventional aircraft, for the latter are much faster and more economical. Today night-flying presents a special problem to helicopters, as the instruments at present available may mislead the pilot as to his position in space; but there is every expectation that with the improvement of their instruments night-flying will soon be mastered.

The vulnerability, as for fixed-wing planes, depends on the size and speed of the target. So a smaller helicopter like the “Sycamore” is about as vulnerable as an “Auster,” but a “Whirlwind” presents a larger target. Helicopters usually fly low and rather slowly, so are vulnerable to small-arms fire; on the other hand, in such circumstances they fly within defended areas. Their vulnerability to fighters is somewhat offset by their capacity to take evasive action; provided the
MODERN METHODS OF CASUALTY EVACUATION
pilot sees the fighter first he has a very reasonable chance of escaping. A helicopter can drop vertically at the rate of 2,000 feet per minute, so a fighter coming in at a high speed must be prepared to dive steeply at a low altitude if he is to press home his attack.

At Port Said the Joint Experimental Helicopter Unit and the Royal Navy provided "Sycamores" and "Whirlwinds" to land Royal Marine Commandos from the aircraft carriers nine miles off-shore. Over 400 officers and men were landed as soon as the assault force landing on the beaches had control of a suitable landing zone near the de Lesseps statue. The first casualty collecting post of 15 Field Ambulance had also landed from assault craft and made its way to the landing zone; by the time the third wave of helicopters arrived casualties were ready for loading for the return flight. Over one hundred casualties were evacuated in this way. The organisation for dealing with evacuation was very simple. A casualty collecting post was set up in the nearest large building, 300 yards inland; with the short journey to the ships and the number of helicopters available it was possible to dispatch casualties from the casualty collecting post as soon as they had received first aid treatment. A naval sick berth attendant supervised the loading; depending on the type of helicopter, either two or four stretcher cases and a "walking wounded" were carried. Some casualties were evacuated directly from regimental aid posts in the earlier stages of the assault; one marine was wounded and returned to the sick bay only nineteen minutes after leaving the carrier. If there had been no helicopter evacuation, many of the seriously wounded would have had to have undergone major operations and subsequently be nursed in a partially demolished building still under fire from snipers.

The one disadvantage of helicopters at the moment is that they are expensive to buy and maintain; this is partly offset by their speed and quick turnround. A single "Whirlwind" can evacuate as many casualties as fifteen or twenty stretcher-jeeps over the same distance, in the same time. There is every hope that when these aircraft become more readily available their use will be extended in both the civilian and military fields.

A new ultra light helicopter is shown in the plate.

HOSPITAL PLANNING
ADVANCES DURING THE LAST 10 YEARS (1948-1958)
BY
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The aim of this paper is to outline recent developments in the evolution of the ward unit in military hospitals and to show what general trends are occurring and how they are being applied for the benefit of our patients. No attempt is made to cover points of detailed planning, nor to review the purely architectural aspects of the subject.