

THE MEDICAL ASPECTS OF AEROPLANE ACCIDENTS.

The January issue of the *Journal of the Royal Naval Medical Service* publishes an interesting article on the above subject by Mr. H. Graeme Anderson, M.B., Ch.B., F.R.C.S., Temp. Surgeon R.N., attached Royal Naval Air Service. The appended notes on first aid at an Air Station are from an abstract of the article in the *British Medical Journal*:—

SCHEME FOR FIRST AID AT AN AIR STATION.

The sick-bay or dressing station should be in full view of the aerodrome, with a look-out man supplied with field glasses always on duty during flying hours. Should the dressing station not be situated on the aerodrome, the former should be connected by telephone to the look-out man, whose position commands a good view of the flying area. Immediately a crash or false landing occurs, the look-out man telephones to the sick-bay notifying the steward the exact site of its occurrence. A map of the aerodrome, numbered in quadrants, can be conveniently arranged in the sick-bay. The look-out man then leaves his post and proceeds to the scene of accident, taking the wheeled hand stretcher, on which is carried a first-aid dressing bag and an emergency tool kit case. The latter consists of an oblong box containing the following:—

1. Two crowbars.
2. Two strong wire cutters.
3. Saw.
4. A long stout knife.
5. A hammer.
6. Strong cloth-cutting scissors.
7. A fire extinguisher.

The above set of implements is very necessary, as in some crashes where the pilot is pinned under the wreckage it may be difficult to reach him. An injured aviator should never be dragged out of a crash unless in the case of fire, but rather the wrecked machine should be cut away from him. In many cases this prevents simple fractures from being converted into compound ones. The steward on being notified of an accident dispatches the ambulance, which stands always in readiness by the sick-bay, to the scene of the accident. The ambulance should be provided with twin wheels aft in order to facilitate movements on soft earth, &c. Two sick berth attendants go with the ambulance, and with them is a bag containing the following articles:—

1. Morphine solution and two Wildey's hypodermic syringes.
2. A bottle of chloroform and face mask.
3. Brandy.
4. A bottle of sterilized water.
5. Six first-aid field dressings and slings.
6. Picric acid dressings.
7. A tourniquet, cloth-cutting scissors, and a knife.

These articles can easily be packed into a small bag 10 in. by 8 in. by 3 in. The surgeon on duty is on the aerodrome during flying hours, and proceeds to the scene of the accident by car or foot. If the accident is at a distance, a mile or more, it is better to go by aeroplane. I have now gone by air to over thirty forced landings and accidents at a distance, and am convinced of the utility of this method in arriving quickly and not otherwise tired and out of breath after a long run. In discovering the site of forced landings and accidents at a distance from the aerodrome, much depends on the condition of the country around. Should this be flat country, these accidents are fairly easily discovered, but in some flying schools the surrounding land may be uneven, intersected with dykes and high-hedged roads. Thus it may be extremely difficult for the search party to find the wreck. Officers and flight mechanics sent to the scene of accident should be trained in first aid with special reference to aeroplane accidents. Flying pupils should not be allowed to come near or help, except in exceptional circumstances.

Often the crash is so severe that the wreckage has to be cut away from the injured aviator. In other cases the machine is upside down, with the pilot held head downwards by his safety belt. The latter must be cut and the pilot slid gently out. The emergency tools are used to cut wires, remove wreckage, and lever away the heavy parts—for example, the engine—and thus easily to reach the injured person. The aeroplane seat cushion is taken from the machine and placed under the injured pilot's head, while his body rests on a flying coat spread out on the ground. A rapid examination is carried out to determine the injuries received. If the injured person is conscious and in much pain, morphine should be injected and he should be conveyed quickly to the dressing station, where clothes can be cut away, injuries examined, and treated accordingly. If unconscious, some cutting away of clothing can be done on the field, injuries examined, and perhaps a dislocation reduced or a fracture accurately diagnosed during the unconscious period. In cases of fire, unless the pilot is

[previous page](#)

[next page](#)