

**GROUND MAINTENANCE**  
(Continued)

**FOR THE NEXT DOG-FIGHT :** Wing gun batteries are attended to simultaneously to save time.

the guns are fired. Meanwhile, another member of the crew searches the aircraft for bullet holes, and the electrician goes over the wiring, and the wireless mechanic tests the radio set. Every little part of the aircraft is O.K. before the machine is pronounced serviceable again. All this process should take no more than five minutes, but we allow seven minutes for the whole job. As I said a moment ago, we once serviced a squadron which came back more or less together in 8½ minutes.

"If a Hurricane comes down with a few bullet holes it is my job to see if the injuries are superficial or not. If there are holes through the fabric we quickly patch them up. If there is a bullet through the main spar, then it is a case of a new wing. Should I find a machine to be unserviceable, a spare aircraft is brought for the use of the pilot until his own machine is ready. So the day goes on, this routine happening perhaps two, three or four times a day. Finally, at nightfall, we make the daily inspection. The armourers clean the guns, the fitter checks the engine over, the rigger checks round the fuselage and cleans it, and the wireless man checks the radio set. The instruments man checks the instruments. When everything is O.K. and the necessary papers signed, the machine can be put to bed. The sleeves are put on the wings, the cover is put over the cockpit, the pickets are pegged into the ground and the machine left, heading into the wind, until dawn.

"It sometimes happens that an aircraft needs perhaps a new undercarriage. That means working far into the night until the aircraft is ready to fly again. I remember working with other members of the crew fitting a new undercarriage to a Hurricane which had been damaged on landing. We started at 4 o'clock in the afternoon, and we didn't finish until 4 o'clock the next morning. But when that aircraft came back the next day with a few Huns to its bag it made all our labour well worth while. Like the pilots, we eat our food when we can. If the squadron is sent off at, say, 11 o'clock in the morning,



machine was ready for the air again, each aircraft having been filled up with petrol and ammunition for another battle.

"We work long hours, but we don't mind. Our day starts before dawn. The first task is to take the sleeves off the main planes and the canvas covers off the cockpit hoods. Then the screw pickets which have tied the aircraft down all night are taken up. The fitter gets into the cockpit and the rigger stands by the starting motor. The engine is started up and run until warm. Then, should there be an alarm, there will be no trouble about starting the aircraft or getting it off the ground quickly.

**When the Alarm is Sounded**

"Suppose there is an alarm. The message comes through by telephone, and immediately I dash out and shout the signal for every crew to go to their own particular aircraft and start up. At the same time, the pilots come from their crew room and scramble into their aircraft. Sometimes the pilot arrives at the same time as the crew, but as often as not the engine is started when he races up. If it takes longer than I think it should from the warning to the time all the aircraft are in the air, well, there is usually an inquest at which I am the coroner. If there has been any delay, I want to know why, because every second is precious, and might mean the difference between ten Huns or no Huns at all.

"Well, eventually, the fighters come back. Perhaps they have been in action. As soon as the first one lands, it taxis towards the waiting ground crew. A tanker goes alongside to fill up the petrol tanks. At the same time, the armourers rearm the eight Browning guns. The rigger changes the oxygen bottles and fits the starting motor to the aircraft so that it is ready for the next take-off. Then the rigger takes some strips of fabric which he has brought with him from the crew room and places them over the gun holes. It helps to keep the guns clean and also helps to keep the aircraft 100 per cent. efficient in the air until



**FOR HIGH FLYERS :** Changing the oxygen bottles on a Hurricane.

**A LITTLE TINKERING :** (Left) Engine fitters giving a Merlin a modicum of titivation. Note the fabric covering over the gun ports.

