The Eyes in the Air

All aboard for a reconnaissance flight over the German lines

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In the British Flying Corps there are two kinds of air reconnaissance work—Corps and Army. Corps reconnaissance is carried out by a single airplane and army reconnaissance by squadrons of machines numbering not less than five and as many as thirty. To understand just what a Corps reconnaissance flight means it will be necessary for me to transport you to an active section of the Westtern battlefront during the summer.

A two-gun, two-seater Sopwith fighter is trundled out of a hangar. While the pilot is inspecting the map of the territory

over which he is to fly, the observer receives his orders to get information on the movement of enemy troops, motor transports, trains and the direction in which they are going, over an area of not more than ten thousand yards in front of the allied position. A duplicate of the pilot's map and writing ma-

terials are ready in the observer's seat.

As the final order is given, the plane ascends and wings its way over the lines towards the enemy. The pilot climbs rapidly, keeping a wary eye open for enemy air-raiding squadrons. The usual height at which he operates is from six thousand to ten thousand feet.

Nearing the German lines the observer eagerly scans the ground below through powerful glasses. If you were to look through these same glasses you would see mile after mile of shell-marked earth—every mile seemingly the same as the next. But to the observer every foot of that ground holds information worth noting, information which he is willing to give his life to get. The pilot doesn't linger over the battlelines. His work is still to be done back of the enemy's trenches.

Far below the plane is a thin wisp of white smoke. To the uninitiated it

means nothing; but the men in the plane know that it is a train winding towards the front. Its position is quickly marked on the map.

What's That Cloud of Dust?

A white road next occupies their attention. The pilot drops the plane a little—utterly oblivious to the anti-aircraft shells bursting around him. One part of the road is obscured by a black smudge and a cloud of dust. A regiment of infantry is on the march. Why infantry and not cavalry? The dust cloud tells.

It would hang in the rear of cavalry and the men and horses would look like black specks. It is such deductive reasoning as this that an observer has to be trained to make.

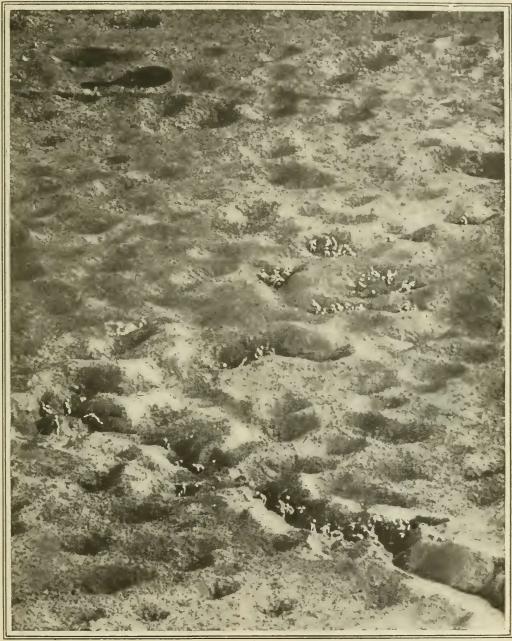
The observer estimates the number of troops by figuring what space they occupy. A little further on, three block spaces move rape

black specks move rapidly down the road. Motor trucks in a hurry. All this is recorded by the watchful observer who becomes more keen as

the minutes pass. The plane is over a railroad station now. Are there any parked motors? How many cars are on the rails? Several working parties below run for cover when the plane hovers over them. Evidently this is an important depot as seven "archies" hurl shells skyward in an effort to scare the aerial visitor away. A shell bursts near by. The plane rocks from the explosion. Then, as the pilot shuts off the motor, the machine dashes earthward in a nosedive. No! he is not hit. The observer just wants a closer view of the depot. Nearer and nearer the plane swoops, with machine-guns from the ground adding to the din from the antiaircraft guns. Five hundred feet from his objective he flattens out, opens up the



When the observer returns from his trip over the enemy lines he fills out a report on a blank like this and turns it in to general headquarters



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Soldiers in One of the Winding Trenches of a Shell-Pitted Battlefield

Military information of the kind which this picture contains is carefully noted by the observer who engages in Corps reconnaissance. Considerable deductive power is necessary

motor, and is off again—homeward bound.

Again the battlelines come into view below, and the observer looks out for new trenches. Sure enough he sees several, and marks their position carefully on the map; also whether they are traverse or communication trenches. The condition of the barbed wire entanglements next engages his attention. Where they are



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Army reconnaissance observers study enemy airdromes, make a note of the number of hangars and planes on the ground and watch the movements in towns and large encampments

broken by shell fire he sees smudges and spots, all of which are faithfully recorded.

Camouflage or a Battery—Which?

The shells come thick and fast, but the pilot is an old hand at the game; he'll stick till the work is done. Cleverly hidden on the ground, the observer sees some small narrow-gage tracks, terminat-

ing in several pits. Has he discovered a new enemy battery, or is it camouflage? He must see the gun flashes before being sure. There they are! One! Two! Three! Four! Five! He also sees the blast marks in front of the battery. Now he is satisfied. Signalling the pilot he focusses his glasses again—this time in the direction of home.

A few minutes later, watchers at the R. F. C. airdrome see the reconnaissance plane winging its way back home, and shortly it settles safely to earth outside the hangar.

The observer fills out his report on a blank similar to the specimen shown on page 508 and turns it in to G. H. Q. (General Headquarters). The filing of this report marks the conclusion of the

Corps reconnaissance.

Army reconnaissance squadrons carry cameras and take photographs at many different points. One of these squadrons will often fly several hundred miles into enemy territory in order to gain desired information. Instead of writing down single items as in Corps work, the observers report the general impression gained from the entire trip. The reason for this is that there are sure to be many movements which are not important, when a large territory is covered. Army reconnaissance observers study enemy airdromes, make a note of the number of hangars and planes on the ground and watch the movements in towns and large encampments. Rivers and canals are also looked for, particularly if there are any ships on them. The size and type of boat must be reported; also to which side it is nearer.

What the Observer Looks For in Army Reconnaissance

The railroads, highways, woods and towns are studied as in Corps reconnaissance, except that an especial look-out is kept for hostile kite-balloons, "blimps, and aircraft. Each squadron is escorted by scout machines whose duty it is to keep off attacking planes. The pilot of an Army reconnaissance plane must not give offensive battle to the enemy. The scouts are there for that. Should an enemy plane get through the formation, however, it is the observer's duty to see the enemy first and open fire. doesn't it probably means that his plane will "crash," and not only will he and his mate go down to death, but the records for which they risked so much will be destroyed.

Army reconnaissances are carried out at from one to twelve thousand feet, and strict orders are issued that there be no straggling. A favorite pastime of the Germans is to send three or more machines into the air to look for our stragglers. Perched high in the sky, generally about eighteen thousand feet, these hawks watch and wait. Suppose a fighting scout has motor trouble or wants to look around a little. He swings out of line and the others close in. Soon the squadron is almost out of sight, homeward bound with the precious reports. The scout flies along at about fourteen thousand feet. Then down from their perch swoop the Germans. The rat-tattat of their machine-guns warns the allied pilot of his peril. He may down one or possibly two of his antagonists, but in the end he crashes to earth the loser in an unequal fight. That is why R. F. C. orders read "Do not straggle; to do so means the loss of pilot and plane.'

In Corps reconnaissance the pilot does not run such a risk, as he flies over a comparatively small territory and can generally dash for home if attacked. Of course he has to contend with anti-aircraft shells and the possibility of a surprise attack from the air; but for all that his lot is easier than that of other pilots who venture far into enemy territory.

You will be astonished to learn that the average age of R. F. C. pilots doing reconnaissance work is twenty and of observers twenty-two. It requires young blood and muscle to stand the strain, risk and excitement of this branch of the air service. That results so far have more than justified expectations, is a tribute to the skill and bravery of these youngsters.

Food Animals Killed on One Railroad in a Year Would Feed 70,000 Soldiers

A PLACARD posted on the premises of a certain railroad which runs through the Cotton Belt states that during the twelve months ending June, 1917, 2,792 head of cattle, horses and sheep were killed by the trains. This is the equivalent of one million pounds of food, and would be sufficient to feed seventy thousand soldiers for thirty days. This line operates only 1,809 miles of track, and that lies in the cotton country, where food animals are not produced to any large extent. What the returns would be for such states as Missouri, Iowa, Illinois, or Kansas one can only surmise.