AERIAL WAR OF THE FUTURE.

ENGLAND'S NEEDS.

THE NECESSARY AIR SERVICE.

GERMANY'S PROGRESS.

(By Our Military Correspondent.)

The lecture delivered by Major F. H. Sykes, the commandant of the military section of the Royal Flying Corps, at the United Service Institution on Wednesday last ought to be read by every Englishman. In the first place because it contains facts about the preponderating role that aeronautics will play in modern warfare, vital facts which must be forced upon the attention of the public, so that through the pressure of public opinion the Government shall be compelled to complete the equipment of the country for aerial warfare. Repeating words used by General Grierson, the lecturer said:—

"War is impossible without command of the air."

That is a simple statement of fact which ought to set people thinking hard; that is, if English people are still willing to give any thought to so small a subject as the security of their hearths and homes. "War is impossible without command of the air" therefore, if war came now we should be at the mercy of our enemies, for we have scarcely begun to lay the foundations of air power.

According to Major Sykes our air service is in immediate need of the following types of vessels, all of which are obtainable:—

A single-seater scout, speed 90 and 45, radius 300 miles.

A two-seater armed cruiser, speed 80 and 40, radius 200.

A two-seater destroyer, armoured, speed 70 and 40, radius 200.

A semi-rigid airship, 250,000 cubic feet capacity, speed 55, able to keep the air for six hours, equipped with light gun, wireless and searchlights, crew of eight.

Major Sykes is extremely modest in his demands in respect of the airship. The Germans are making Zeppelins three times as big as the vessel he asks for, and with an enormously greater radius of action. And yet he is fully alive to the value of the German ships and the airship generally; he describes them as a most formidable weapon, and deplores the fact that we have attached too little importance to them.

DREAM OF THE FUTURE.

The present dealt with, Major Sykes allowed himself to dream of the future. He dreamt of cruisers flying at 120 miles an hour, of destroyers doing 100, and of big craft for transporting whole army corps—men, guns, and stores. And a constructor who was present promised him that his dream would be realised within two short years. They are moving fast in the science of aeronautics—that is another fact which the British public should bear in mind.

Very little imagination is required to construct a picture of what an aerial combat will be like when squadrons of destroyers go out against an equally well-equipped enemy. It will be a battle of titanic birds—circling, swooping, under the very vault of heaven, spitting fire, crashing together to utter mutual destruction, careless if the end be accomplished and the enemy destroyed. Losses in life and material will be appalling, and the strain upon the men will be almost more than human nature can bear. Even under favourable conditions, and for mere observation work, no man, Major Sykes says, ought to be employed for more than three hours a day, and only the most thoroughly trained men should be employed at all.

Nerve, grit, eagerness to take any risk, however desperate, consummate skill, and a moral which shall remain unshaken by the horrorinspiring nature of the combats that will be waged—these are the qualities that are needed in military airmen, and the side that possesses those qualities in the greatest degree will win command of the air. We have the men for such a task, but no instruments for their use.

in military airmen, and the side that possesses those qualities in the greatest degree will win command of the air. We have the men for such a task, but no instruments for their use. Speculating on the possibilities of aerial warfare that are opened out by Major Sykes's lecture, one sees how closely it will resemble the strife of birds. Victory will be to the swift, the unflinchingly determined, and the greatly daring. The bird of prey shoots up on powerful wing high above its victim; then swoops down upon it, swift as lightning and sure as death. So will the aeroplane destroyer. Bulk counts for little in the bird combats; it is the fighting, conquering instinct and equipment for war that prevail. The heron is helpless against the attack of the hawk, and the great airship will be helpless, too, against the fast destroyer, that will be evolved, whenever the two meet in the daylight.

A TERRIBLE PICTURE.

Swift as an eagle, keeping well out of the way of the giant's guns, the aeroplane will shoot up in vast circles into the sky, and once it gets above the huge envelope of the dirigible the latter is doomed. It is a mark that cannot be missed; a puff of smoke, a blast of flame, a rending, crashing explosion, which may hurl the destroyer itself to its fate, then a few tons of tortured metalwork and mutilated human remains will go hurtling down to earth to tell the story of the catastrophe.

No wonder Major Sykes lays stress on the necessity for military airmen to have nerves of steel. "I think," he said, "that a little fighting in the air will have a far-reaching deterrent effect on the moral of the aerial forces of the losing side." Initial success will mean an enormous advantage, and, other things being equal, that initial success will go to the side that is "imbued with greater staying powers, greater determination to fight"

That side must be ours. But at present, though the men are waiting, there are no weapons for them to use.