

The Next War in the Air

By M. W. ROYSE

1. The Road to Universal Slaughter

MORE than a year has passed since the Powers at the Washington Conference agreed to limit battleship tonnage, yet in spite of that, and in spite of Europe's threatening economic collapse, competition for naval strength has never ceased for a moment. There has been merely a shifting of interest to the more modern systems of naval warfare—to the auxiliary craft, including the light cruiser, the submarine, and aircraft. The militant atti-



The Angel of Death

tude of France at the Washington Conference toward submarine restrictions, and the rather passive acceptance by most of the European states of the new prohibition on poison-gas warfare, are a fair indication of the general feeling in Europe. European states will not readily give up their twentieth-century weapons, and as long as they see in aircraft a war machine of unlimited possibilities they are not likely to accept any limitation on "tonnage" or numbers of aircraft.

The airplane is the outstanding weapon of today. Its military potentialities are beyond calculation. No one dares prophesy the limitations or capacities of a 1943-model airplane. Limited by neither land nor sea, the present-day airplane is an amphibious weapon of war—bombing battleships at sea or towns a thousand miles inland, attacking troops in the field or concentration camps five hundred miles behind the front-line trenches, raiding supply ships and supply trains, and generally demoralizing action on both sea and land.

Furthermore, the present-day airplane is not a commercial machine. Cost of operation, equipment, and maintenance are still far too high for commercial use. No airplane transportation company not subsidized by its government has ever been able to produce figures showing a net profit. And that is the reason for the complete absence today in the United States of any regularly scheduled airplane service. Rather than a commercial machine today the airplane is a war machine, recognized by all states as a vital part of their military establishments, and assisted, as such—even under the guise of commerce—in every conceivable way.

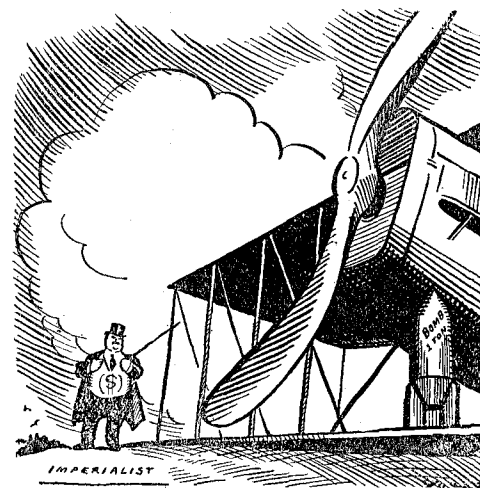
The supreme importance of aircraft in warfare can be

somewhat appreciated from the gigantic bombing operations put into force toward the close of the late war. The American slogan of 1917—"Ten-thousand planes bombing Germany off the face of the earth"—was partly realized by the British in the fall of 1918. Official figures show what England was about to let loose upon Germany had the war lasted another six months. General Haig's plans were just nearing completion, increasing the British air forces from eighty-six squadrons, with only ten long-distance bombing squadrons, to 179 squadrons with sixty-six long-distance bombing squadrons. This change of air tactics, from short-distance front-line work to long-distance bombing, was put into practice only at the very end of the war, but today it forms the chief element in air operations against an enemy. Long-distance raids into the very heart of the enemy country, extending five hundred miles or more beyond the actual battlefields, will be carried out ostensibly against military establishments, but actually will spread destruction everywhere. Berlin, Liverpool, Lyons, Vienna, Rome, and hundreds of other cities heretofore considered immune from attack, will become objects of more attacks than will front-line centers. By 1918 bombing had become so established a part of warfare that England formed its Independent Air Force, specializing in long-distance raids against centers of supply for the German armies. An official British statement runs as follows:

This program (for 1918) provided for a total of 240 squadrons all told. The coming of the armistice interrupted the fulfilment of these large plans, and saved the world from a carnival of destruction.

The development of aeronautics since the war has been even greater than during the four years of the

war itself. The destructive power of aircraft has increased until today airplanes can carry tons of bombs for hundreds of miles. Admiral Sims in a recent speech said that our Ordnance Department is now constructing a ten-ton bomb, which is over twice as large as the huge bomb experimented with last year, and ten times as large as the largest bomb used in the war. Speed and range of aircraft have nearly doubled in the last five years. Last September an American military aviator made a one-stop flight from Jacksonville, Florida, to San Diego, California, a distance of 2,275 miles in twenty-one hours, and following this two Americans made a non-stop flight of over two thousand miles. This latter flight was the equivalent of a thousand-mile non-stop bombing trip. An altitude of approximately 40,000 feet has been reached. An American military aviator has



His New Toy

flown 243 miles an hour, while another American has flown over a short course at the rate of 248 miles an hour. During the war 140 miles an hour was top speed; today many makes of airplanes can average 200 miles an hour. Endurance has developed to a degree where two Americans recently spent over thirty-six hours in the air before landing. Size and weight-carrying capacities have greatly increased, France leading in huge multi-motored air-liners which can be quickly rebuilt into bombing planes. Altogether the airplane of today is a vastly better fighting machine than the war plane of 1918, far greater in speed, endurance, carrying capacity, climbing capacity, and with more positive-acting motors. And this progress has been eagerly sought and keenly appreciated by the Powers. The moving forces in this tremendous development have been the various governments; some states having continued to support a huge air program in spite of empty treasuries and depreciated currencies.

France, with long coast lines on three seas and with huge colonies in Africa and Asia, has nevertheless scrapped her pre-war battleship program. Instead she is concentrating her efforts on auxiliary craft, particularly aircraft. With her coasts protected by mine fields and patrolled by swift light cruisers, destroyers, and submarines, France can defy any fleet of any size. Supported by squadrons of aircraft her coasts become impregnable, and equipped with its full quota of airplane carriers and long-range submarines, France could carry war out over the high seas. Many high-ranking naval officials assert that blockades will be made impossible through the use of submarines and aircraft. France holds an air strength greater than that of all Europe combined. The strength of her 140 active-service squadrons, totaling 1,160 machines, is nearly four times that of the total British air strength. With her powerful military reserve of 2,800 machines and her civil reserve of 1,100 machines, France increases her actual air strength to eight times that of Great Britain. The French Air Service in 1922 contained a little over 3,000 flying men, and could call twice that number to the colors. Her aircraft industry is the largest and most active in the world. American airplane manufacturers are said to have turned out 300 machines last year compared with 3,300 machines turned out in the first eleven months of last year by French companies. Should war ever come, France would be instantly prepared for a huge air offensive, and no one knows this better than France.

Perhaps the most important of France's aerial activities is the radial system of commercial air lines built up during the last four years through governmental aid. Paris today is connected by air line with all the strategic points on her borders. Commercial lines in operation run from France to England, Belgium, Holland, and the Scandinavian countries. Other lines run west to Cherbourg, Havre, Nantes, Bordeaux, Barcelona (Spain), and on to Casablanca on the western coast of Africa. The third trunk line runs south to Marseilles and the Mediterranean, and her eastern lines run to Strasbourg, Prague, Warsaw, Vienna, and on to Constantinople. Germany's wrecked ambition for through transit to the Dardanelles has thus been achieved by France via the air. Air lines bring France into close touch with her allies in Central Europe. Prague is only six hours away from Paris by air line, Warsaw only nine—and regardless of costs these lines are operated on regular schedules. France is strong enough today to resist

successfully all of Europe, not excluding England. Her air forces on twenty-four hours' notice could be bombing English and German cities with hundreds of aircraft, destroying arsenals and ammunition plants, smashing up mobilization centers, sinking commerce, and generally demoralizing the economic structure of her enemies. And France knows this.

But France also knows that Germany is not very far behind. Curiously enough, in the face of all her alleged financial troubles, Germany has somehow managed to build up a system of air lines second only to that of France. German air power is likely to pass unnoticed until one travels about Germany via air. Berlin, like Paris, has a system of radiating lines to all important points on her borders, together with coast lines connecting the large ports on the North Sea and Baltic. The various companies, assisted by government subsidies, are associated in two large groups, each group working in cooperation with the great German shipping companies, the Hamburg-American Line and the North German Lloyd. Lines, in daily operation, run from Berlin to Bremen and Hamburg and on to London, Belgium, Holland, and the Scandinavian countries. Others run south to Dresden, Leipzig, and Munich; and east to Danzig, the Baltic States, and on to Moscow. Berlin is connected with all points on her borders, including the Russian border, without crossing Polish territory. The French answer to this development has been a series of treaties intended to hem Germany in. The *Matin* (Paris) reports the existence of an amazing clause in the recent aviation convention signed by France and Czecho-Slovakia which reserves to airmen of the signatory countries the right to instal calling stations in Czecho-Slovakia, or even to fly over that country.

At present, however, the amount of Germany's air traffic is astonishingly large, considering the cost. Who pays the bill? The German Government subsidizes these lines at a rate said to be eight cents per airplane mile (in other words, the companies receive eight cents for every mile flown regardless of the number of passengers and freight carried). Four thousand miles of German air lines are flown over every day, and at impossible rates for passengers and freight of less than two cents a mile. The fare last summer for the six-hundred kilometer voyage from Berlin to Königsberg, including automobile to and from the hotel, amounted to four American dollars. The same trip in America would cost \$300, basing the estimate on the rates of the only commercial aerial transportation company in this country. The fare for the two-hundred mile trip from Berlin to Hamburg was only \$3.50. The American company, which charges \$75 for the hundred miles between Key West and Havana, would charge close to \$150 for the Berlin-Hamburg run. No privately operated air line in America approaches even distantly the efficient, express-train schedule of the German air lines.

The British Government, judging from the discussions on last year's Air Service Appropriation Bill, realized clearly the unintentional benefit bestowed upon Germany by confiscation of old arms and aircraft material. Great Britain, moreover, is far from enthusiastic over the great air strength of the French, and in 1922 started active work toward a larger air force. After a systematic propaganda campaign last summer, the British Government was induced to appropriate eleven million pounds for the purpose of meeting the French challenge. But France is far beyond

reach. The present air strength of Great Britain totals but thirty-eight squadrons, and the completion of the 1925 program will increase that to only forty-seven squadrons. The French program calls for 220 military squadrons with a grand total of 2,000 machines. On the other hand England is just commencing to fortify her "royal route to India" by building up squadrons for Egypt, Anatolia, Mesopotamia, and India. In Constantinople, during the arrival last September of British troops, every other British officer was an Air Service man. In October, after the Mudania armistice, they melted away, going not back to England, but to various points throughout the empire.

Italy, with a powerful post-war airplane and airship industry, has lately had a complete reorganization of its air service. Premier Mussolini, in order personally to supervise this work, has assumed the direction of the recently created Bureau of Aeronautics with the title of High Commissioner of Aeronautics. This is the first time in history that a Prime Minister has taken the portfolio of minister of aviation, and the act indicates the importance that Italy attaches to her air strength. With a natural mountain barrier on the north, and with two long coasts protected by adequate auxiliary armaments, Italians believe they will be immune from attack by sea or land. In rehabilitating her huge 1918 air strength, Italy has provided for a 1923 expenditure of 280 million lire. Seventy squadrons are to be built up.

Poland and Czecho-Slovakia, under French tutelage, each with twenty-seven squadrons, are rapidly developing a powerful air force as an offset to the Russian armies. But Russia is not neglecting her air service. Early last summer a shipment of fifty latest-type Fokker war planes arrived in Moscow, together with a complement of Dutch and German pilots and mechanics. How many such shipments had preceded this one was not disclosed, but it is known that cadre and depot organizations exist for seventy active-service squadrons.

Japan, of course, profits most from the use of auxiliary arms. Both military and naval men point out that a large program of auxiliary armaments makes her master of the Orient, and Japan, fully appreciating her position, has adopted these auxiliary arms on a tremendous scale. Japan is said to have under construction more light cruisers than there are in all the countries of the world. She is also rapidly turning out submarines of short and long range. With the French building up her army aviation (which already includes thirty-four squadrons) and the British her naval aviation, and with the establishment of aircraft factories in different parts of the country, Japan has advanced more rapidly than any other country in aeronautics. A year ago our Aeronautical Chamber of Commerce announced that aircraft manufacturers in this country were having difficulties in obtaining spruce for aircraft because Japan had bought up the year's available supply. Last year's naval aviation appropriations alone approximate \$20,000,000.

Nor has the United States neglected her air forces. With very little publicity, the United States air services have built up an active military air force of fifty-three squadrons, which places the United States second in military air strength, and nearly 40 per cent stronger than Great Britain.

[The second section of The Next War in the Air will appear in next week's issue of The Nation.]

The Hosts of Black Labor

By W. E. BURGHARDT DU BOIS

AMERICAN industry is slowly beginning to awake to the fact that there is in this country a great reservoir of labor which has been only partially tapped. The South has nine million black folk of whom five million are productive workers. As a mass they are ignorant and unskilled, but they are ambitious, willing to learn, and for the most part at present wretchedly underpaid. Lynching, lawlessness, lack of schools, and disfranchisement have slowly but surely made them ripe for change.

What is America doing with these black laborers? We may envisage four hosts who must deal with them—the planter, the manufacturer, the union laborer, and the Northern Negro. The planter inherits a tradition from which he seldom escapes. This tradition regards the Negro laborer as a serf, without a vote, with little education, low wages, and medieval conditions of work. The manufacturer, North and South, has as his ideal a surplus of common labor, whether black or white, which will keep wages low by severe competition and periodic unemployment. The union laborer proposes so to restrict and monopolize skilled labor as to compel the employer to grant a living wage. These three hosts are pretty well known; but there is a fourth who is not so often thought of. He is the Northern Negro, the representative of the 1,725,141 Negroes established in the North either a generation or more ago or by more recent migration, who have, except in the case of the newest comers, found an industrial place and a racial philosophy and who are the first to be affected by a widespread migration from the South.

These, then, are the four hosts waiting to welcome or repel the Southern black laborer. What has been the result of their and his interactions? We can perhaps best trace it by noticing the gyrations of a little black dot on the map of the United States. This little black dot represents the center of gravity of the Negro population in the United States. This little dot was near Petersburg, Virginia, in 1790. It moved south and then west until 1910, when suddenly and for the first time in American history it struck eastward, and in 1920 was nine and one half miles farther east and nineteen and one half miles farther north than ten years before.

What does this mean? It means that between 1870 and 1910 the Negroes sought economic salvation in the free land of the West and Southwest and that the migration in this direction offset the considerable migration north and east; but that with the beginning of the World War there occurred the greatest revolution in migration which the Negro has known for a century; and that by actual census figures, the net gain of the North and West and loss of the South between 1910 and 1920 was 334,526 black folk.

This northward movement of the Negro population was renewed in the fall of 1922. The great Northern industrial plants sent out a call for semi-skilled and unskilled labor. Just as the cutting down of immigration during the war made a scarcity of common labor, so the new immigration laws together with expanding business are having the same effect at present. The result can be felt all through the South; not as a sudden movement, but as a gradual and expanding tremor.

It is emphasized by the attitude of the white South.