SOME "B.A.T." AEROPLANES

THE accompanying illustrations show five types of machines, designed by Mr. Frederick Koolhoven, manufactured by the British Aerial Transport Co., Ltd. These five machines include a diminutive single-seater monoplane, a medium-powered school machine, a small single-seater speed machine, a slightly larger sporting two-seater biplane and a large commercial passenger or cargo-carrying biplane. The latter machine was fully described in our issue for April 17, 1919, and it only remains to say here that since that time this machine has already made a name for itself. It has made numerous successful journeys from England to various parts of France, Belgium and Holland, and proved itself extremely useful during the recent railway strike in carrying mails.

The sporting machine, F.K. 27, will, no doubt, be remembered by some of our readers by the good show it put up on the occasion of the last "Aerial Derby." For a two-seater machine it is certainly on the small side—being, in fact, only slightly larger than the famous B.A.T. "Bantam"—the span being only 26 ft. A special feature of this machine, from the social point of view at any rate, is that the seats are arranged side by side, in spite of which the cockpit is exceptionally roomy and comfortable. In construction it follows usual B.A.T. practice, which has been found so satisfactory in previous models, the main feature of which consists of three-ply wood construction of the *fuselage*. The engine fitted, a 200 h.p. A.B.C. "Wasp II," gives the machine a high performance, the maximum speed being 140 m.p.h., whilst the machine is, at the same time, very easy and safe to fly.

The "Basilisk," F.K. 25, is designed primarily as a single-seater fighting biplane, and is noteworthy on account of its remarkably high speed, which comes out at over 160 m.p.h., with a 320 h.p. A.B.C. "Dragonfly" engine. This machine, again, is on the same principle as the "Bantam." One o these machines climbed to 21,000 ft. in 14 mins.

The school machine, F.K. 24, known as the "Baboon," is a dual control tractor biplane, fitted with a 170 h.p. A.B.C "Wasp I." It embodies most of the constructional features of the other models, and is, we understand, a particularly easy machine to fly. The exceptionally wide wheel base of the undercarriage, common to all B.A.T. machines, is an important feature from the point of view of a training machine. Another noteworthy feature with the "Baboon" is that all the control surfaces, the *ailerons*, elevators and rudder, are interchangeable—quite a point of high import where the question of saving time in replacements is concerned.

In size, one of the smallest aeroplanes in the world, in construction, the simplest ever designed, the "Crow," F.K. 28, stands in a class entirely by itself. The main idea in the production of this little machine has been to provide the flying public with an aerial equivalent of the motor cycle. The overall span of the "Crow" is 15 ft., and the overall length 14 ft., but if even *this* should prove to be too large for storage purposes, it is an exceedingly easy matter, with the aid of a spanner and a pair of pliers, to dismantle the machine completely in a few minutes—there are no bracing wires to worry about, and the unscrewing of 12 nuts removes the main plane, which is in one piece. The pilot is seated in a small *nacelle* mounted on a large central skid between the wheels. The engine, a 40 h.p. A.B.C. "Gnat," is mounted on the front of the plane, and forms an easily detached unit complete with mounting, petrol and oil tank. The petrol and oil tanks contain sufficient for a two-hour flight, or 150-mile journey. The weight of the machine is only 220 lbs.

The B.A.T. "Crow" (F.K. 28), the "motor-cycle of the air." It has a span of only 15 ft., and is fitted with [a 40 h.p. "A.B.C. Gnat"

The following is a comparative table of the characteristics of the aforementioned machines:—

Type.	Span.	Chord.	Gap.	Area main planes.	O.A. length.	Weight (fully) loaded).	Useful load.	Speed range.	Climb (mins.) (*a*) 5,000 ft. (*b*) 15,000ft.
	ft. ins.	ft. ins.	ft. ins.	sq. ft.	ft. ins.	lbs.	lbs.	m.p.h.	
F.K. 24 "Baboon" ..	25 0	5 7	4 8½	259	22 8	1,350	400	40–90	(*a*) 5
F.K. 25 "Basilisk" ..	25 4	4 6½	—	212	20 5	2,028	370	52–162	(*a*) 2 (*b*) 9½
F.K. 26 Commercial ..	46 0	6 6	6 6	580	34 8	4,500	1,000	50–128	(*a*) 4 (*b*) 19
F.K. 27 Sporting ...	26 0 22 10	5 7 3 0	3 11	200	20 7	1,475	400	50–135	(*a*) 3 (*b*) 15

◈ ◈ ◈ ◈

New Secretary of the R.Ae.S.

IT is announced by the Royal Aeronautical Society that Lieut.-Col. W. Lockwood Marsh has been appointed Secretary of the Society, and that he takes up the duties from today (January 1). Congratulations to the Society and to Col. Lockwood Marsh.

Morocco to the Canaries

THE French naval Lieutenant Lefranc, who left St. Raphael some time ago for a tour over the French West African colonies, on December 24 flew from Agadir to Las Palmas, one of the Canary Islands, a distance of about 400 miles, over the Atlantic.