

THE NEW DE HAVILLAND FIGHTER

110

The new de Havilland fighter, which was not shown at last month's S.B.A.C. Display, made its maiden flight on the afternoon of September 26.

It is the first of a class of jet-propelled day-and-night fighter designed to meet a special need of the Royal Air Force, a class which, replacing interim equipment like the Venom night fighter, now in production, is expected to have a vitally important place in the British and Allied programme of defensive preparedness. With little relish we enter the age of the jet bomber and the atom bomb. As a counter measure the guided missile becomes imperative, but the piloted fighter remains indispensable.

The great advance in speed which jet propulsion has given to the attacking bomber demands a still greater advance in fighter performance because in a given interception time far more country will be covered. The period from radar detection to target arrival is perilously cut.

At the same time the fighter pilot, faced with closing speeds nearing 20 miles a minute, calls for better radar aids than have ever before been needed. While the lightest single-seat formula has its particular advantages for day interception, the comprehensively equipped night fighter with longer endurance is of equal significance and has especial interest. It can perform also a day-time function, particularly when cloud-cover conditions handicap the single-seater.

The designer's task is to endow such an aircraft with the extremely high speed, the unprecedented rate of climb and the all-round performance that the new conditions demand. Tremendous thrust and high compressibility limitation have somehow to be contrived, together with the ability to bring into use the most comprehensive and sensitive detection and radio apparatus.

To fulfil its mission through the covert of the night our creature must possess the stealth, speed, staying power and agility of the vixen.

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The first of a new class of day and night jet fighters, the D.H.110, made its maiden flight on September 26. The aircraft, which was airborne for 46 minutes, was piloted by the de Havilland chief test pilot, Mr. John Cunningham, who was accompanied on the flight by Mr. A.J. Fairbrother of the Flight Test Department. The D.H.110 carries fighter development a step forward by combining very high performance with modern electronic navigation and combat aids. It is fitted with two Rolls-Royce Avon jet engines and combines the well-known de Havilland twin-boom principle with sharply swept-back wings. A flying photograph, taken on the second flight, when it formed in the dusk with a Dove, is our front-cover subject.