

AIMING HIGH

Ghost-Vampire Attains 56,000ft on Development Flight

THE last day of January was a significant one in the development of the de Havilland Ghost turbo jet unit, destined to power the D.H. Comet (Type 106) high-speed airliner. On that date, in the course of development testing undertaken as part of a Ministry of Supply programme, a Vampire, experimentally powered by a Ghost, attained a height of 56,000ft above sea level. This is only 61ft less than the height record for heavier-than-air aircraft, held by Col. Mario Pezzi in a Caproni 161 since October 22nd, 1938. At the controls was the company's chief test pilot, Mr. John Cunningham, now absent on a brief visit to America.

Except for the deletion of armament, the fitting of the non-standard Ghost (the normal power unit of the Vampire is, of course, the smaller Goblin), and a special metal cockpit enclosure, the Vampire was an ordinary fighter as delivered to the R.A.F. and the Canadian, Swedish and Swiss Air Forces. The

their country. The Vampire's characteristics are reported to have proved well suited to the unusual operating and tactical conditions which exist in Switzerland. The moderate wing loading and docility of handling were major factors which enabled the aircraft to be operated satisfactorily from small airfields in mountainous country without sacrifice of performance or warload.

The contract aircraft will be of more recent type than the four originally supplied, the principal difference being in the "long-range" wing, with internal tanks to increase capacity, as in the R.A.F. Vampire Mk. III. There will be provision for four 60-lb high-explosive or armour-piercing rocket projectiles under each wing and, in addition to these, two 500-lb bombs or two 100-gallon drop tanks may be slung beneath the wings. In all operating conditions the four guns will be retained. The Goblin turbo-jets will be of later pattern than the Mk. II.

SIR ARTHUR CONINGHAM

HOPE for the safety of the passengers and crew of the B.S.A.A. Tudor IV *Star Tiger*, lost on a flight between the Azores and Bermuda on January 30th, has now been abandoned. Among the passengers was Air Marshal Sir Arthur Coningham, K.C.B., K.B.E., D.S.O., M.C., D.F.C., A.F.C., an officer with a splendid career in two wars. He will be remembered principally for the brilliant operations conducted under his command in North Africa and for the dashing manner in which he directed the 2nd Tactical Air Force in the European campaign.

Before his retirement from the Royal Air Force in November, 1947, Sir Arthur had held the appointment of Air Officer Commanding-in-Chief, Flying Training Command, for nearly two years, from October, 1945, to August 1947. He was formerly A.O.C.-in-C., 2nd Tactical Air Force, from January, 1944, until the completion of the campaign for the liberation of Europe, and previously commanded the North-West African Tactical Air Force. In July, 1941, he went to the Middle East to command a Group, and three months later became Air Officer Commanding in Libya. The force under his command became known as the Desert Air Force. When, in February, 1943, he was appointed to concert air operations in Tunisia under Sir Arthur Tedder (then C.-in-C., Mediterranean), and became commander of all British and American Air Force Units engaged in tactical operations in North-West Africa, the Desert Air Force became a leading component of the North-West African Tactical Air Force. After the conclusion of the campaign in North Africa Sir Arthur directed the

operations of the force in Sicily and Italy, returning to England to take command of the newly formed and Tactical Air Force early in 1944.

Born at Brisbane, Queensland, Australia, on January 19, 1895, and educated in New Zealand, Sir Arthur enlisted in the Canterbury Mounted Rifles, New Zealand Expeditionary Force two days after the outbreak of the first world war, but in 1916, after service in Egypt, he was invalided out. Recovering his health six months later, he travelled to England at his own expense to join the Royal Flying Corps, with which he served with distinction in France, winning the D.S.O., the M.C., and the D.F.C., and in 1919 he was given a permanent commission in the R.A.F.

In 1925 he commanded three D.H.9A bombers which made the first long-distance flight from Cairo to Kano, in Nigeria, and thus blazed the trail of the air route across Africa.



The first take-off of the experimental Ghost-Vampire in which Mr. John Cunningham has reached 56,000ft. Note that the nacelle is slightly longer in this version.

machine concerned—TG278—has already completed a considerable amount of flying at heights of the order of ten miles, and has demonstrated unusual powers of manoeuvre and easy handling in the rarified atmosphere.

The height of 56,000ft was confirmed by the photographic film of the automatic observer, and was attained in 25 minutes. From ground level the climb was made at a high forward speed and with a vertical ascent rate of about 75 m.p.h. (110 ft/sec) for the first 30,000ft.

Although the Ghost is being developed for use in the Comet, and possibly other aircraft, at a static thrust rating of 5,000 lb, the particular unit installed on this occasion was a development type, having test-bed rating of a mere 4,200 lb.

Swiss Vampires

Excellent news continues to come in of export orders for de Havilland aircraft. The latest announcement concerns a contract for seventy-five Vampire jet fighters, with Goblin turbo-jets, placed by the Swiss Government. This contract is one of the most valuable ever settled by the de Havilland Enterprise and embraces orders for additional turbo-jets and spare parts. It will contribute £2,250,000 to Britain's export total and follows two very large contracts for Vampires received since the war from Sweden, the second of which was the subject of an item in *Flight* of January 22nd.

A year of extensive trials with a flight of Vampires, which were delivered in the summer of 1946, preceded the Swiss decision to adopt the type as the basis of the air defence of



The late Air Marshal Sir Arthur Coningham outside his famous caravan in N. Africa.