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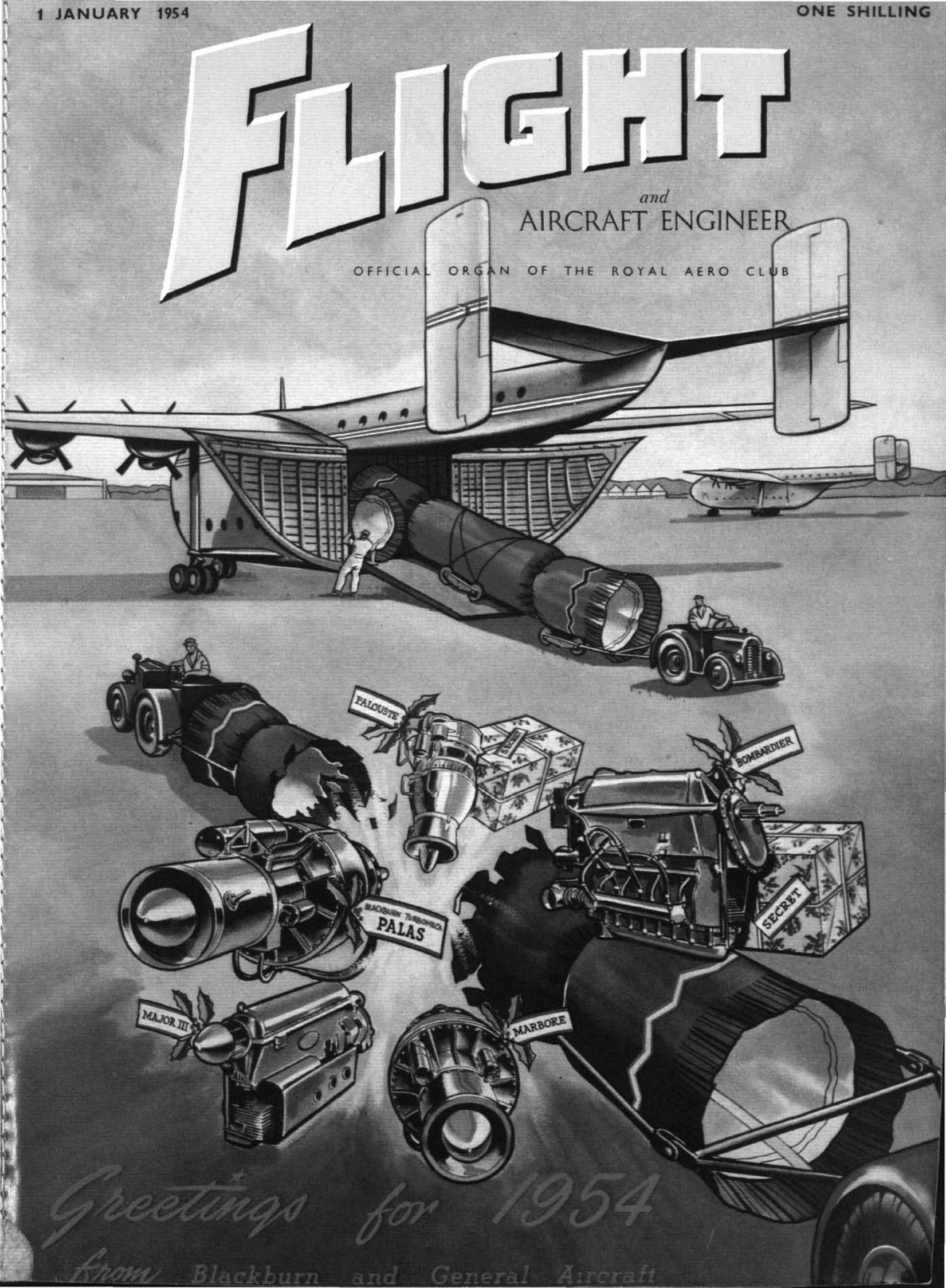

GROUND-ATTACK MARKSMANSHIP

Light Aircraft Wage War on Wolves in Arctic Alaska

By FRANK ILLINGWORTH

AMERICAN pilots in Arctic Alaska are engaged on a spectacular operation: hunting wolves in light aircraft whose only "armament" is a weapon normally used against rabbits—the 12-bore shotgun. The aircraft of what might be called the "Wolf Wing" comprise the Piper Cubs, Cessnas, Bellancas, Stinsons and Aeroncas that at other seasons are engaged in carrying mail and freight to remote settlements. The pilots are all civilian bush-flyers; but the wolf sweeps are planned with the precision of military operations.

The caribou and reindeer herds of Alaska are of great economic importance to the Territory, providing a local supply of meat to Eskimos, Indians and the growing number of prospectors, miners, surveyors and settlers, and the men of the chain of U.S. military outposts in Alaska. Wild-life authorities estimate that one wolf kills up to 75 reindeer and caribou annually. It followed that the wolf packs must be reduced.

Hence the formation of a "Wolf Wing" in 1949. Operating in the Nelchina area of south-west Alaska, it accounted for only 23 wolves in its first year. By 1952 the Wing was using three new 125 h.p. Piper Super Cubs and a Piper J-5C and, operating across almost unexplored polar desolation from the airstrip at Umiat (barely 150 miles from the most northerly point of Alaska) it accounted for nearly 200 wolves. More were shot from the air last year, and future sweeps may well bring the annual "bag" up to between 300 and 400 animals. The last wolf-sweep based on Umiat started as early as October, fuel, spare parts, food, clothing, sleeping-bags, tents, shotguns and boxes of 12-bore cartridges being flown to the airstrip there from Fairbanks, the largest air base in Arctic America.

The Americans are drilling for oil in the neighbourhood of Umiat, no doubt with a view to building a refinery for the benefit of U.S. Forces in Arctic Alaska. It is undeniable that an Alaskan parallel to the war-time Canol Project (the construction of the refinery in sub-Arctic Canada, from which fuel was piped to the Alaska Highway and the string of airfields handling Lease-Lend aircraft bound for Siberia) would be of great strategical advantage to U.S. air bases in Alaska, and particularly to the strategically important base hard-by the most northerly point of Alaska, Point Barrow. Meanwhile, Umiat airstrip serves not only the oil camp but Alaska's airborne wolf-hunters.

That light aircraft and 12-bore shotguns are an ideal combination against the wolf is confirmed by the "bags" of individual gunners. For example, one marksman (who on one occasion shot a blade-tip from his Piper's airscrew) has accounted for more than 50 animals in one year. Another, named Cliff Hudson, killed a pack of six wolves in ten shots. Frank Glazer, a small man with many years of bush-flying experience, told me of shooting ten out of a pack of fourteen. "All the wolf can do is keep on running," he said, "And all you have to do is run it down."

But hunting of this kind calls for special experience both in piloting and in navigation. Much of the territory over which the aircraft operate is uninhabited, unknown, viciously broken and subject to violent storms and to temperatures of "60 below." The pilot must be capable of turning suddenly when flying along a narrow valley, and coming in over a running wolf at exactly the right height and angle—"a little to one side and no more than 30ft above your target"—to allow the gunner to bowl it over. The spread effect of a shotgun offers a better chance of scoring a hit than would a bullet from a rifle. But the range of a 12-bore is limited, and it takes not only a sure touch but a modicum of nerve to come down low enough to bring the target within the gunner's range, especially in "grey weather" when the white of the sky and of the snow-clad tundra merge; and judging the distance between one's skis and the ground is a matter of guesswork.

Typical of the conditions which sometimes face the wolf-hunters—one of whom is seen carrying his shotgun—is this photograph taken in early March during a thaw sandwiched between two "40 below" spells. The aircraft are a Cessna 170 and a Norseman of Wien Alaska Airlines.

Aircrew must also be of ready imagination, as indeed they are—witness the report filed at Umiat by the previously mentioned gunner, Maurice ("Prop-Shot") Kelly, and told to me in the Eskimo settlement of Kotzebue. Firing at a pure white wolf, Kelly shot four inches off the end of the airscrew. The Piper was flying in extremely broken country. But the pilot, bush-flyer Buck Harris (with a Van Dyke beard and a stop-at-nothing reputation) brought his machine down, carved four inches off the undamaged blade, took off again and made a supply dump some 200 miles to the west, where the spares available included an airscrew.

The standard drill is to reconnoitre for wolf trails at from 500 to 1,000ft, the exact height depending on visibility and the country being swept. On spotting a trail the pilot descends to 50ft or so (again, depending on the terrain). Often it is only a few minutes before the gunner is firing out of his window; and where the target proves to be a pack the pilot turns and repeats his run as often as necessary.

There is a ready market for wolf skins and, where possible, the pilot puts down near a dead animal. To land even a light aircraft on snow-clad tundra, or in broken country, calls for delicate handling, quick thinking and an ability to "read" snow surfaces—that is, to judge distances and heights and correctly interpret shadows caused by rock outcrops, mushy ice and other hazards. But there are pitfalls against which there is no safeguard—such, for example, as that which caused the previously named Frank Glazer an anxious moment.

He and his pilot had turned for base, after killing a pack

(Left) Death in the snow: The Piper Cub has just put down alongside a dual kill; one wolf's trail, made before he was stopped in his tracks, can be seen leading from the vegetation in the background. (Right) Pilot Harris beside his Piper with a shot wolf; the skins are worth money, so the animals are retrieved whenever it is possible for the aircraft to alight.

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of nine wolves in nine runs, when Glazer saw a black wolf running along a mountain ledge. The pelt of a black wolf can be worth £15 and more. It was therefore understandable that the pilot, after bringing his Piper round in a tight turn so that Glazer could kill the animal, should repeat the turn, land on the ledge and taxi up to the carcase. "The snow looked O.K. from the air," Glazer told me. "But it had been weakened by the trampling of caribou and it collapsed under the Piper's weight." The aircraft ran forward in an involuntary take-off just as Glazer was about to clamber aboard again. This left him the alternative of dodging the tailplane or of diving into the passenger seat head-first. He accepted the latter, and in the process of disentangling himself from a nine-foot wolf skin he lost one glove and suffered a frostbitten hand.

Temperatures in the neighbourhood of Umiat were around minus 30 deg F last March, and forty below the previous March. But the 1952 wolf sweep from this airstrip coincided with a cold spell. The mercury fell to sixty-two below (F). Pilots and gunners wore heavy U.S.A.F. parkas over several layers of wool, down-filled outer-trousers over wool, knee-length fur boots with several pairs of stockings, and three pairs of gloves. Even so, there were several cases of frostbite, and others of engines freezing-up and rubber splitting.

Extreme cold is often accompanied by frost haze, and the area of Umiat is also liable to fog and sudden and violent blizzards. But in spite of such difficulties and hazards seven wolves were killed on the first day of the last wolf sweep; and at the end of three weeks the figure stood at 161. After that the daily bag fell off. The wolves, becoming shy of aircraft, were taking to the mountains, where flying conditions were even worse than in the flat, barren tundras.

And the debit side? One Piper Cub written off in an emergency landing and two aircraft damaged and repaired "in the field."

Wolves have been hunted from the air in Norway, Sweden, Finland, the Soviet Union, the Balkans and Turkey. Some time ago the Canadians mounted a major campaign against the wolf, from the ground and the air (after wolves had killed so many caribou that the R.C.A.F. had to fly food to some Eskimo settlements); and there is no safety in Alaska for wolves that cross the border from Arctic Canada.

A NEW LONG-DISTANCE TRANSMITTER

DESCRIBED as the first unit-built ("channelized") transmitter of such power to be built by a British firm, new 1kW equipment for long-distance ground-to-air communication is announced by Mullard, Ltd., Century House, Shaftesbury Avenue, London, W.C.2.

Known as the GFT.60, the equipment operates on fixed frequencies in the range 1.5 to 30 mc/s. Multi-frequency working is readily achieved by using combinations of three basic units, the r.f., modulator and power-supply cabinets. Any r.f. unit may be instantly brought into circuit, thus making for rapid and reliable channel switching.

The GFT.560, which is fully tropicalized, is designed to run unattended if so required, and additional units are available which permit remote control of all functions, including channel switching, *via* a two-wire telephone circuit; circuit adjustments are signalled to the transmitter on the ordinary telephone dial.

The unit construction permits subsequent expansion of a basic installation by the addition of r.f. units, modulators, and perhaps power units, one of which can supply two r.f. units for simultaneous cw operation.

In addition to its use for H.F. *en route* ground-to-air R/T. the CFT.560 may be employed in point-to-point circuits in R/T.; here its ability to handle single-sideband and independent-sideband signals is of importance.

BIG ORDER FOR AIRFIELD TRACTORS

A CONTRACT worth some £250,000 has been awarded by the Ministry of Supply to David Brown Tractors (Engineering), Ltd., of Meltham, Yorkshire, for the supply of tractors and spares to the Royal Air Force. Delivery of the vehicles has already begun.

The contract covers two standard types of David Brown tractor, the 30 1C and the VIG/1C, both of which will be used for aircraft towing and general airfield duties.

Both machines are powered by a four-cylinder David Brown petrol engine of 3⅜in bore and 4in stroke, with ratings of 26.5 drawbar h.p. and 30.6 belt h.p. (both at 1,600 r.p.m.), with 41 brake h.p. at 2,300 r.p.m. Drawbar pull of the 30 1C, which can be increased by 20 per cent by the addition of ballast and a change in the final drive ratio, is 3,700 lb in first gear; for the VIG/1C the figure is 7,000 lb, making the vehicle capable of handling the largest aircraft now in service.

Both tractors, state the makers, are already in extensive use for military, naval and civil aircraft duties in many parts of the world. In addition to its R.A.F. rôle the 30 1C is in service with the Fleet Air Arm, the R.C.A.F., and the Danish and Belgian Air Forces. It is also in use by several well-known airlines, including B.O.A.C. The VIG/1C is operating with the R.A.A.F., R.C.A.F., R.N.Z.A.F., and on commercial airfields with B.O.A.C., the Kuwait Oil Company, and Shell Petroleum.