

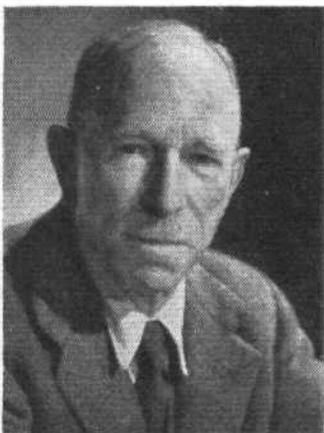
C-130 Innovations

THE executive vice-president of the Lockheed Aircraft Corporation, Mr. Courtland D. Gross, has disclosed that the C-130 Hercules transport (*Flight*, December 10th, 1954) will have a "new-type pylon tank with external self-sealing provisions." No such development has previously been reported.

Mr. Gross mentioned, among other features, a "satisfactory engine decoupler and a satisfactory torque-meter drive shaft; a new system to bleed hot air from the gas turbine engine with new-type ducts capable of withstanding high pressures and temperatures; and design of a new actuating system to vertically lower and raise the unusual tandem landing gear." He felt sure that the C-130 would become "a key part of the new airlift economy that is rapidly developing all over the world."

C. C. Walker Retires from D.H. Board

THE de Havilland Aircraft Co., Ltd., announced last Monday that Mr. C. C. Walker, C.B.E., A.M.I.C.E., Hon. F.R.Ac.S., Hon. F.I.A.S., has retired from the company's Board as from the close of 1954. "His decision to do so," it is stated, "is in no way



Mr. Walker.

influenced by lack of good health, but he feels that he should shed some of the executive responsibility which he has carried for so long, having been a director of the company since its formation in 1920. He will continue in his day-by-day service so that his exceptional judgment and fund of knowledge will be drawn upon as in the past and his invaluable influence will continue to be enjoyed."

After training as a civil engineer, he joined Capt. Geoffrey de Havilland at the Aircraft Manufacturing Co., Ltd., at Hendon early in 1915, when the D.H.1 and 1A two-seater fighters were being developed, and ever since then his influence has been seen in de Havilland designs. He

was a founder director of the de Havilland company when it was formed in 1920 and from then up to the present day he has headed the aerodynamic side of the organization.

One of the best-known members of the industry, Mr. Walker has served for many years on the councils and committees of the R.Ae.S., A.R.B., S.B.A.C. and other bodies. He was awarded the R.Ae.S. Silver Medal in 1935, in recognition of his work in civil aircraft design and in 1938 he was made a Fellow of University College. He was appointed C.B.E. in the Birthday Honours of 1948. His work is equally well known in America, where, in 1952, he was elected an Honorary Fellow of the Institute of the Aeronautical Sciences.

A KNIGHTHOOD is announced in the New Year Honours List for Rear-Admiral M. S. Slattery, chairman and managing director of Short Bros. and Harland, Ltd. Names of aviation personalities in the list appear on page 30.



STAPP STRAPPED: Lt.-Col. John P. Stapp is harnessed into the seat of the Northrop rocket-propelled sled at Holloman Air Development Centre before his amazing 632 m.p.h. dash (see news item below).

One-man Open Sleigh

A STATEMENT issued by the U.S.A.F. says that Lt.-Col. Stapp, who recently made a 632 m.p.h. dash aboard a 2,000 lb rocket-propelled rail sled at Alamogordo, New Mexico, suffered no lasting ill-effects from the subsequent one-and-a-half-second full stop; he did, however, receive a few blood-blisters from dust particles in the air, and two black eyes, the latter caused when his eyeballs were thrown forward into his eyelids during deceleration. He was subjected to 35 g, which brought his effective weight up to the three-ton mark.

Lt.-Col. Stapp, who is 44 years old, has made many of the runs and sudden stops on the sled (built by Northrop) since the test programme started some time ago. Even higher speeds are to be attempted, the object being to assess the reaction of the human body to high deceleration and exposure to air blast during escape from aircraft. Previously, hydraulic friction-brakes were used for deceleration, but the latest test was made with a water brake.

Although Col. Stapp had blacked-out from acceleration by the time he reached the brake, he did see part of the splash before "redding-out" fairly violently while stopping.

But he did not lose consciousness and was able to remember his sensations. Although initially blind after the run, he soon recovered his sight and was able to take sustenance. His only protective equipment, apart from special harness, was a plastic helmet with jaw-guard and transparent visor.

Saving the World's Food

A CHANGE of name coincides with the celebration of the tenth year of agricultural operations by Pest Control, Ltd. Work started in 1945 with a Sikorsky R-4, and three years later an S-51 was delivered; by this time Pest Control was established at Bourne, Cambridge, and was preparing in addition to its normal work to pioneer both aerial spraying by night and to take out the first helicopter ever to fly in Africa.

In a recent report on activities, the first to be issued since the company changed its name—to Fisons Pest Control, Ltd.—on December 31st, reference is made to early and continuing research. Behind the design of the helicopter spray-bars and nozzles, for example, lay much study of the formation and behaviour of spray droplets. In a different field are the activities of a team of entomologists and biologists at Chesterford in Essex, who are working on the destruction of weeds and insect pests. It is mentioned, in this connection, that a single acre of land may contain 160 million weed seeds and that insect pests in the world every year destroy enough food for 200 million people. At Harston, Cambridge, what is believed to be the largest installation in the world for the manufacture of hormone weed killers was erected last year for the production of Phenoxyline Plus.

The danger last year to Forestry Commission pines attacked by the pine looper moth will be recalled. The areas concerned were Cannock Chase, Staffordshire, and Culbin Sands on the Moray Firth. Aerial spraying saved 6,000 acres of pines in these two areas. Overseas work has continued and expanded in Egypt and the Sudan, in Rhodesia, Kenya, the Gold Coast, Ceylon and elsewhere, including, nearer home, Normandy where Colorado beetles are the pest. Subsidiary companies operate in Africa and Pest Control (Ireland), Ltd., has now been established in Dublin.

Negotiations whereby Fisons, the well-known fertilizer manufacturers, would take over Pest Control, Ltd., were first reported in January of last year; Mr. A. Wormald, commercial director of Fisons, became managing director of Pest Control in April.