

CIVIL AVIATION NEWS

better safety in civil air transport a network of radar stations is envisaged to cover the U.S.

This proposal has been put forward by the head of the Radio Laboratories of the U.S. Office of Scientific Research and Development, Dr. L. A. Du Bridge, who considers that the radar network, which would constantly show an aircraft in its relationship to other aircraft in any given area as well as all flight obstacles in bad weather, is the only means of insuring speedy and efficient control. The expenditure to develop such a system would be, of course, very considerable, but it is thought that it would be justified by resulting improvements of efficiency and safety in air transportation.

NO FORCED LANDING

B.O.A.C. state that the report from Lisbon issued by a news agency there and recorded in *Flight* of August 30th, to the effect that a B.O.A.C. airliner returning from South Africa forced landed at Lisbon, necessitating the use of a Dutch aircraft to enable the passengers to continue the journey was inaccurate.

What actually happened was that the aircraft was delayed for some hours at Lisbon with engine trouble, but there was no question of a forced landing and the passengers continued their journey in the same aircraft.

AZORES DEAL?

THE future of the Santa Maria Airport in the Azores, built by the Americans during the Allied occupation of the island, is still unknown.

During the war the airport, which is on Portuguese terri-

R.A.F. PAGEANT AT THE ALBERT HALL

ON two evenings last week an R.A.F. pageant, organised by the *Daily Telegraph*, was given at the Royal Albert Hall. It had been written by two Squadron Leaders. The outstanding feature of it was provided by No. 1 Apprentices School, Halton. Its band played as well as ever, and the 16 pipers filled the great hall with Highland music. No. 1 Apprentices Wing marched and drilled with a smartness and precision worthy of a Guards battalion, and the team of athletes who gave a display of P.T. and gymnastics was really first-class.

For the rest, narrators at the microphones outlined the history of flying from the days of the Wright brothers and of the R.F.C. and R.A.F., while crowds and parties on the floor of the hall endeavoured to make the history live again. It brought back old times to many to hear Miss Violet Lorraine sing once more "If you were the only girl in the world" as enjoyably as in the days of "The Bing Boys." A choir of W.A.A.F. girls very tunefully helped out the choruses. The hall was crowded, and the audience evidently enjoyed the show to judge by the enthusiastic applause.

ANOTHER WAR SECRET DISCLOSED

THE secret of the key weapon which increased the effectiveness of our A.A. fire to nearly 100 per cent. in the battle against the V1 flying bombs has now been revealed, not by the British War Office but by the U.S. Navy which used the same device with considerable success against the Japanese suicide planes and piloted Baka flying bombs in the Pacific.

It is the vital item which Gen. Sir Frederick Pile, as C-in-C. Anti-Aircraft Command in Great Britain, was never allowed to mention, and it is, in effect, a miniature radar set no bigger than a milk bottle which is fitted in the nose of the A.A. shell and explodes it as soon as the projectile gets within 70ft. of its target—near enough to inflict damage.

Known as the "radio proximity fuse," it consists of a five-valve radio transmitter sending out electro-magnetic impulses at the speed of light—186,000 miles per second. These impulses are reflected back to the set by any target giving radio deflection (such as metal objects, water, or earth) and when the shell passes within 70ft. of its target the reflected impulses act on a fuse which touches off an electrical detonator, thus firing the main charge in the normal way. Obviously the mechanism would have to include a safety device in case the projectile missed the target by more than 70ft., so that it could not be exploded by a return to earth. But no details of this part of the proximity fuse are actually given. It may well

tory, formed an important base for the Allied air control of the Atlantic, and has become a familiar sight to thousands of American soldiers who were transported home by air from Europe.

The airport is now nominally Portuguese property, but unconfirmed reports say that it will be returned to the U.S. on a 99 years' lease in return for various transport equipment needed by the Portuguese army.

AFRICAN MEETING

THE Southern Africa Air Transport Council will meet for the first time in Pretoria on September 25th and 26th.

The council will probably decide on arrangements for a London-Johannesburg airline, discuss regional services covering the whole of Southern Africa and the co-ordination of services with neighbouring territories and generally implement the decisions of the Cape Town Air Conference.

The temporary airport for international traffic at Palmietfontein is practically ready and work on the Salisbury airdrome is also making good progress.

ELUDING THE ENEMY

IN spite of constant attacks by German fighter aircraft operating from Norway and Denmark a total of 6,000 passengers and 500,000 tons of freight were transported over the dangerous courier route between Stockholm and Great Britain during the war, Mr. D. Grey, chief of the B.O.A.C. Stockholm office, stated at a Press conference in Oslo.

The aircraft which had to fly over German-occupied Norway carried ball-bearings, machine parts and manganese, besides great quantities of courier mail.

After 1942 they were piloted exclusively by Norwegian personnel, who did remarkable work with the minimum of accidents, Mr. Grey added.

have taken the form of an additional time fuse which would explode the projectile at the top of its trajectory if the proximity fuse had not been called into operation.

IMPROVED ROCKET LAUNCHING

YET another little war secret now also released for publication is the "zero-length projector" which does away with the long rails, or in the case of American types, long tubes from which rocket-firing aircraft launch their projectiles. The fitting releases the rocket after only one inch of forward movement. Greater accuracy as well as less bulk is claimed for this development in rocket-firing from aircraft.

DEATH OF JACK SAVAGE

WE regret to announce the death of Major J. C. Savage, M.B.E., late R.A.F., which took place on Monday, September 17th. Jack Savage, born in 1891, was a flying pioneer, being apprenticed to Graham White in 1909 and later becoming manager for B. C. Hucks, the first Englishman to loop. As a member of the staff of *Flight* he wrote technical notes under the *nom de plume* of "Oiseau Bleu."

After distinguished service in the R.N.A.S. and R.A.F., 1914-1918, he invented sky-writing, and for some years owned and operated the largest British civil air fleet in sky-writing campaigns throughout the Americas, India, Australia and Europe. Later he invented and built searchlights, using a revolutionary reflecting principle for projecting slogans on night clouds. Though Air Ministry intervention, later relaxed, strangled the development of sky projection in England, he sold the invention abroad, and used its basic principles in developing military searchlights. In the period between these major inventions he pioneered crop-spraying from aircraft and sponsored the Savage-Bramson anti-stall gear.

As war approached he founded Savage and Parsons, Ltd., at Watford, and directed his brilliance and inventive mind to the design and manufacture of searchlights, sound locators, electric and remote control gear and other highly technical apparatus for the armed forces.

Perhaps the work of which he was most proud was his development, and his firm's production, of Wing Commander Leigh's idea of combating the U-boat menace at night—the phenomenally successful Leigh light.

Jack Savage was mentally and physically big, but the biggest part of him was his heart. What a host of friends will mourn his passing and sympathise with his widow and family.

G. A. L.