

FIRST PICTURE of the Douglas DC-8 interior mock-up shows a spacious cabin. Passengers' service facilities have been positioned to give a clean roof line; reading lights are incorporated in the seats.

the establishment of IRBM bases in the NATO countries have only just been held, it is difficult to see how this schedule can be adhered to. The SM-75 Thor can be fired only from a fixed installation, of considerable size and complexity, which could scarcely be made operational within a year of breaking ground. At the time of going to press no confirmation was forthcoming of the American newspaper story that Britain will meet the cost of establishing the bases (estimated at between \$80m and \$90m). The same report stated that the provision of the weapons would be the responsibility of the U.S.A.F., the cost of one squadron being reckoned at between \$120m and \$160m.

At the moment both Thor and the rival Jupiter (product of the U.S. Army's Redstone arsenal) are being continued and are scheduled to be built in quantity. It was stated last month that failure to eliminate one of these weapons may add \$200m to the overall programme cost. The ICBM programme likewise comprises two weapons, the SM-65 Atlas and the SM-68 Titan. At its third test-firing last month Atlas achieved a successful programmed flight (as reported in our issue of December 27), and a fourth Atlas is now ready for firing. Convair were last month given verbal instructions to accelerate the whole programme. Gen. Thomas D. White, U.S.A.F. Chief of Staff, told the Senate he wanted the SM-68 programme to be accelerated. In view of the increasing importance of the ballistic weapons, and severe budgetary limitations, it was decided to halve the current year's appropriation for the SM-62 Snark winged bombardment weapon. Gen. White agreed that Snark "could shave manpower losses" and could "be programmed for low-level attack," and Senator Symington was severely critical of the cutback, particularly since Snark is the only near-operational missile with intercontinental range.

Capt. Lewin Joins Blackburn

NOW on the Board of the Blackburn and General Aircraft, Ltd., is Captain E. D. G. Lewin, C.B.E., D.S.O., D.S.C. and Bar, R.N. Capt. Lewin, who leaves his post as Director of Plans at the Admiralty to take up his new position, won the D.S.C. when serving in H.M.S. *Ajax* at the Battle of the River Plate and the D.S.O. when in H.M.S. *Ark Royal* in 1941.



Captain E. D. G. Lewin.

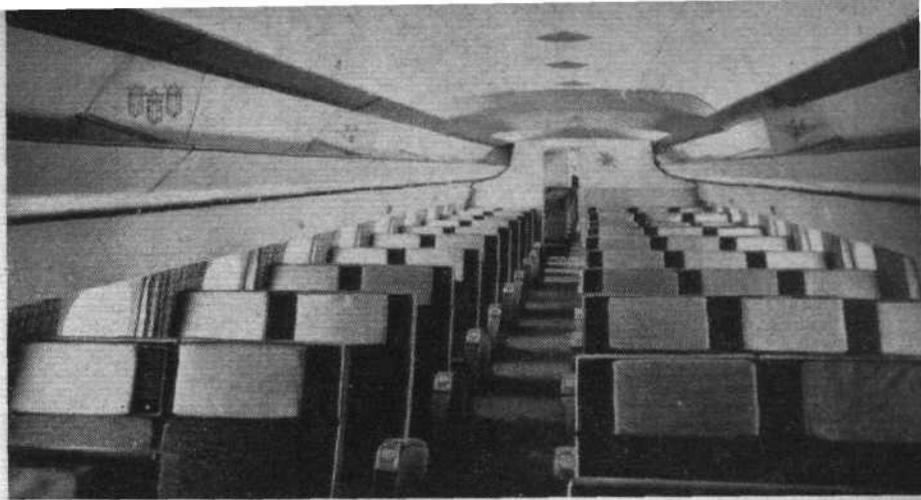
Entering the Royal Naval College in 1926 as a cadet, Capt. Lewin became a Naval pilot in 1935. He did test flying, which included the first successful flight of the Blackburn Roc on floats, and in 1942 became chief instructor at the R.N. Flying School at Yeovilton. After specializing in fighter direction he held the post of staff direction officer to the group of aircraft carriers which supported the Sicily and Salerno landings in 1943, and was later transferred to the staff of Admiral Vian, who commanded the carriers in the British Pacific fleet. For his part in the Pacific operations he gained a Bar to his D.S.C. In 1953 he joined the Admiralty as Director, Air Warfare Division, and was subsequently appointed to the command of H.M.S. *Eagle*. He returned to the Admiralty, as Director of Plans, in 1956.

Russian Aircraft and Engines

LAST week it was reported in Moscow that a Soviet heavy jet bomber had "without landing or refuelling in flight covered a greater distance than any aircraft of this type in the world today." The test pilot Ponomarev said that this was "not an isolated flight"; another heavy bomber had covered a still greater distance. "Even people accustomed to new strides in our aviation," the report continued, "were struck by the perfect shape and giant dimensions of this aircraft." No information was given on the type of aircraft used, although unofficial reports have spoken of a development of the Bison heavy bomber with a pair of engines superimposed at each wing root.

On December 14 an announcement was made of a new type of fighter with a speed reported as 2,000 km/hr (1,242 m.p.h.). The aircraft, which was described as having sharply swept-back wings, was flown by Lt-Col. Nikolai I. Korovushkin; a photograph of this officer shows him wearing what appears to be an American helmet and visor.

On December 27 the newspaper *Red Star* reported that Squadron Leader Mikhailik of the Soviet Air Force had taken off conventionally in a new fighter and had then climbed "almost vertically" to a height of 19,000 metres (62,336ft). The report stated



that the aircraft "flew through the sound barrier with great ease and was fully manoeuvrable in the rarefied air." Even at 19,000 metres, Mikhailik "found that his aircraft had not reached its limit" and he continued the climb.

The following day a Soviet journal described a fully mobile catapult system capable of launching jet fighters. The device can be operated from all types of terrain and it accelerates the aircraft from a zero-length mounting (apparently with the aid of a solid charge). A test pilot, Col. Vassili Ivanov, described his sensations during one such take-off, and several other test pilots said that the system was "within the capabilities of any average pilot." (The U.S.A.F. conducted zero-length firings with F-84Gs several years ago.)

On December 26 Moscow Radio stated that a turbojet currently under test was intended for VTO applications. Test pilot Turi Garnayev stated that the unit was a joint design of Rafalyantsev, Kvashnin, Lapshin and Matveyev. He said: "Devices already fitted to bombers and fighters to shorten take-off and landing runs are only an imperfect answer," adding "the turbo aircraft I tested has no wings or tail assembly and in no way resembles the orthodox aircraft." This device is similar in principle to the Rolls-Royce TMR "Bedstead," and is named the Turbolyet.

On the same day the designer, S. Balandin, wrote that high hopes were entertained for a family of high-speed piston engines, with double-ended cylinders and twin pistons, driving through a "linkless" gear (presumably of the swash-plate type). The engines were described as being more efficient and much lighter in weight than conventional piston engines, with "several times more power per litre and a time-lapse of 1½ to 2 sec between half power and full power." The largest in the series was stated to be rated at 10,000 h.p.

WS-110A for N.A.A.

FOR more than a year the keenest prototype-contract competition in America has been that between North American Aviation and the Boeing Airplane Company for the supersonic-cruise CPB (chemically powered bomber) for the U.S. Air Force. On December 23 North American were given the order. The CPB was described in October as "the Air Force's No. 1 priority manned-aircraft weapon system," and it is known as Weapon System 110A.

A. J. Rowledge

IT is our sad duty to record the death of Mr. A. J. Rowledge, M.B.E., F.R.S., M.I.A.E., on December 11. He was aged 81 years of age.

Mr. Rowledge joined Rolls-Royce, Ltd., in 1921 as chief aero engine design engineer and was responsible for the Condor III, the Kestrel, the "R" engines for the Supermarine Schneider Trophy seaplanes, and then the Merlin. He was also responsible for the experimental Exe and Pennine air-cooled engines.

For his work on the Napier Lion during the First World War he was appointed M.B.E.; in 1931 he was awarded the Gold Medal of the Institute of Automobile Engineers for his contribution to the Schneider Trophy aircraft; and he was elected a Fellow of the Royal Society in 1941. In 1945, at the age of 70, he finally retired from Rolls-Royce, Ltd.

THE EDITORSHIP OF "FLIGHT"

H. F. King, M.B.E., has been appointed Editor of *Flight* as from January 1. During the last two years he has carried a large share of the responsibility and undertaken the day-to-day work involved in the editing of the journal. He joined the staff in 1930 and has been Associate Editor since April 1955.

Editor of the journal since 1949, W/C. Maurice A. Smith, D.F.C. and Bar, now becomes Editor-in-Chief, in which position he will retain a close interest in editorial matters, and be responsible for policy under A. B. Bourne, C.I.Mech.E., Editorial Director. Maurice Smith will also continue as Editor of *Flight's* sister journal *The Autocar*, a position which he has held for the past two-and-a-half years.