

B.E.A., 41 (240,000 hr); Aer Lingus, 2 (28,000 hr); T.A.A., 31 (75,000 hr); T.C.A., 37 (155,000 hr); Hunting-Clan, 2 (4,000 hr); Airwork, 12 (9,000 hr); Capital, 32 (292,000 hr); C.A.A., 1 (16,000 hr); Hong Kong Airways, 9 (3,700 hr); Indian Airlines Corporation, 31 (4,700 hr); Philippine Airlines, 14 (1,600 hr); Alitalia-L.A.I., 5 (7,600 hr); K.L.M., 3 (4,500 hr); Transair, 1 (1,700 hr); N.Z.N.A.C., 1 (450 hr).

Of particular interest is a breakdown of questions which can fairly be laid at the door of the constructors of the airframe, engines and propellers, as compared with the number for which ancillary suppliers are responsible. Obviously, a prime constructor is always answerable for the ancillaries which he chooses to install: the fact that 36 per cent of all the queries listed in this document is the responsibility of suppliers is of academic interest to the operators. The breakdown appears to be roughly as follows: Aircraft constructor, 83 queries; engine constructor, 22; propellers constructor, 4; ancillary constructors, 61.

**NORTHEAST'S BRITANNIAS**

**P**UBLICATION of Northeast Airlines' annual report has evoked a flood of speculation on that carrier's re-equipment intentions. Sentences from one particular section of the report have been so widely taken out of context that it is appropriate to quote the relevant paragraphs in full:—

"Your management still thinks well of the turboprop Britannia, its passenger appeal and performance characteristics. These planes are ideally suited for first-class service in the Florida market and would complement our ten DC-6B Sunliners now operating in coach service. Accordingly, Northeast's present contract with Bristol Aircraft, Limited, has been modified and extended to cover delivery of the planes in the fall of 1958.

"Among the terms agreed upon, the manufacturer has until May 1, 1958, to obtain an American certificate, and, if certification is completed prior to that time, your company has 60 days in which to arrange the necessary financing and secure the consent of its lending banks to the purchase."

The present position is that a firm order has been placed for five Britannia 305s, valued at \$17.5m, to include engines and spares. Advance payments of \$456,501 had been made by last December, of which \$357,000 could be recovered, were the contract cancelled. Certification was obtained on April 10.

The hesitations arise from the fact that any financing agreements concerning the Britannias must be consented to by Northeast's major creditors (the banks responsible for financing the purchase of DC-6Bs in 1955. Unfortunately for the airline (again quoting the annual report), by the end of last year, "the company was in default under provisions of the [DC-6B] credit agreement requiring the maintenance of minimum amounts of net worth and or working capital and, as a result, the banks may accelerate the due dates."

*Aviation Daily*, discussing Northeast's Britannia order, says "prevailing opinion is that Northeast will not be able to make it." This comment must be assessed in the light of the foregoing facts. Certainly a glance at Northeast's balance sheet indicates that, though the airline's financial position is not critical, its resources are strained to the limit.

**BREVITIES**

**T**O investigate the possibilities for the AW.650 Freightercoach and its variants in South America, a sales team led by Mr. C. S. Emery, Armstrong Whitworth's sales director, left Britain on June 1. He was accompanied by Mr. D. L. Raffle, chief performance engineer, and Mr. M. E. L. Spanyol, assistant to the civil aircraft designer.

Mr. C. R. Smith, president of American Airlines, said last week that his company expects to complete arrangements for the purchase of medium jets during 1958.

The Tu-114D, a modified version of the Tu-114, recently completed a non-stop 5,280 st. mile flight from Moscow to Irkutsk and back at a claimed average speed of 497 m.p.h., and at altitudes

*The new runway-lighting system at Washington National Airport is dramatically depicted in this view of a Convair 240 on the point of touchdown. The lighting system comprises 272 fluorescent lamps installed in reflectors along each side of the runway.*



between 33,000 and 40,000ft. The return flight encountered headwinds of up to 125 m.p.h., but sufficient fuel remained on landing for the aircraft to fly a further 930 to 1,240 miles. The pilot was Viktor Ivanov.

Costa Rica has now become a member state of I.C.A.O. Total membership is now 73.

G.E.C. have secured a £25,000 order from S.A.S. for 100 air-circulation catering ovens.

From May 31 a Saturday return service between Newcastle and London has been operated by B.K.S.

An Avro York of the British independent airline Dan-Air crashed near Gurgaon, 25 miles from New Delhi, on May 25. Of the crew of five, only the radio officer survived.

G.A.P.A.N. announce that as from July 1, 1958, fees for instructor's certificates will be as follows: initial application, £4 4s; re-test, £3 3s; renewal, full instructor, 15s; and renewal, assistant instructor, £1 1s.

**GATWICK (continued from page 774)**

the aerodrome control room (surrounded by sloping triple glazing) is built on two levels; the lower level will only come into full play when daylight viewing radar is installed. At the moment there is one radar set used only to feed aircraft into the traffic pattern controlled by the Southern Air Traffic Control Centre at London Airport. Approach control is situated in a room under aerodrome control. Emphasis has been laid upon clear radar presentation of aircraft position and the operational rôle has been planned around the dual displays of the Cossor ACR 6 10cm and Marconi S232 50cm radars. Both are equipped with Moving Target Indication and rain removal aid, and the wavelength variation of the two sets provides definition irrespective of the weather. An additional facility is video mapping, which can be superimposed on the radar screen to assist in position identification. The approach control room operates in semi-darkness, but special artificial lighting is provided to illuminate the control desks carrying the flight progress strips. The desks are of M.T.C.A. design and embody the results of many years of practical operating experience. It is intended to make extensive use of radar sequencing at Gatwick, even in V.M.C., since it has been found that the landing rate can thus be appreciably increased. Just what level this may reach must remain a matter for conjecture until the system is in full-scale use; air traffic control are not willing to hazard a guess until the system has been tried.

In the approach control room space has been left clear to add to the installations precision approach G.C.A. radar. At present this is contained within a truck at the edge of the runway, but later a landline will be adopted that ties the display to a remote-mounted aerial head.

Communications systems at Gatwick include radio and navigational aids to aircraft, radio communication facilities and fixed services—among them a semi-automatic signals centre and telephone facilities and the STRAD (Signal Transmitting Receiving and Distribution system) fully electronic teleprinter exchange. The system will handle 3,000 messages daily. The radio communication facilities follow the pattern at L.A.P. Central. Aeronautical V.H.F. speech channels are duplicated to provide main and standby services and special precautions have been taken against failures due to interruptions.

Gatwick is also the first airport to use a multi-channel tape recording system (manufactured by the British Communications Corporation) with which M.T.C.A. are replacing the single channel embossed film type of recorder. The equipment will record seven communications channels on a single tape and an extension to fifteen channels is possible.

Among the more important fixed installations is the Esso and Shell-Mex and B.P. fuel farm on the north side of the apron. Fixed hydrants have been abandoned in favour of mobile fuellers carrying the four grades of aviation fuel—100/130, 108/135 and 115/145 octane and DERD 2482 turbine fuel—that are available. The Esso installation contains 12 fuel tanks each holding 12,000 Imp. gal and the Shell-Mex and B.P. installation has a similar fuel capacity. Provision is being made for dispensing aviation lubricants and water methanol.

The first commercial service into Gatwick has already become Transair history; B.E.A.'s inaugural flight, on June 9, is to be a charter to Surrey County Council, who have arranged for a DC-3 to fly a V.I.P. party and a message of goodwill to the States of Jersey and Guernsey. Subsequently there will be 162 departures and 163 arrivals a week by B.E.A. DC-3s and Viscount 802s to and from the Channel Islands and a few additional DC-3 flights to Salzburg.

A. T. P. and J. C. S.