



AIR TRANSPORT

JT9D AIRBORNE

USING a much-modified B-52E leased from the USAF, flight tests by Pratt & Whitney of the 43,500lb-thrust JT9D for the Boeing 747 are now under way from Bradley International Airport, Conn (see picture on this page). The engine is carried in the starboard inner position in place of two P&W J57s normally fitted.

More than four months were spent in modifying the B-52 with reinforcement for the wing, the building of a special nacelle and the installation of test instrumentation. Flights at altitudes up to 45,000ft will be possible, with testing in conditions far beyond any which could be simulated in test cells.

This JT9D is the first flight-test engine and the seventh in the series to be used by P&W for testing. Two ground-test engines were recently shipped to Boeing and late last month another flight-test engine was due to be shipped to Boeing's Everett plant in Washington. Since the prototype engine was run for the first time in December 1966, six test-stand prototype engines have accumulated more than 1,300hr of running. The first of these were manufactured and assembled at P&W's plant at East Hartford, Conn, but production versions of the JT9D will be assembled at the company's Middletown (Conn) plant, where a new 500,000 sq ft addition will soon be completed. This was formerly the site of the Connecticut Advanced Nuclear Engineering Laboratory (CANEL) where P&W was developing a nuclear-powered aircraft engine and an advanced nuclear reactor.

The leased B-52E was flown to Bradley from Dyess AFB, Texas, last December and all modifications were done by P&W, following design work at Boeing's Wichita plant. The weight of the two replaced J57 engines just about equals that of the single JT9D, but together they developed only about two-thirds of the prospective initial thrust of the replacement engine.

BOEING SST BUDGET CUT

LAST week the US House of Representatives Appropriations Committee cancelled, not unexpectedly, the whole of the \$223 million (£93 million) previously allocated for the development of the Boeing SST in the fiscal year 1968 (July 1)-1969. This sum, allocated last autumn as part of the total Federal budget, is no longer required because the SST programme has, since last January, been in a state of flux, with a complete design re-evaluation still in progress.

The allocation was required to cover the start of prototype construction, but the FAA and Boeing decided that there would be no merit in building a prototype on the previously planned lines, which would have produced an overweight aircraft with restricted payload/range performance. Work on a prototype of a revised design will not now start before January 1969. In the meantime the FAA still has about £90 million of unspent appropriations and this is expected to be adequate to cover the present requirements. In short, the financing needs for the SST have simply been kept in line with the technical programme.

A delay of 12-15 months in the American SST programme has long been accepted. Whether this will help or hinder the chances of the BAC/Sud Concorde, which is now also delayed, cannot easily be judged. Airlines may now consider that, because of the widening in-service gap and the fact that the Concorde will thus have a longer working life on the main trunk routes, it will therefore be a better economic proposition. They may, on the other hand, feel that, with the prospect of the American SST being still further delayed, or even cancelled, they can afford to postpone an expensive decision—thus delaying the start of full production on a basis of firm orders. But clearly, if the British and French Governments stay with the Concorde, and BOAC and Air France eventually confirm their orders, other airlines will be forced to follow for obvious competitive reasons.

The Pratt & Whitney JT9D for the Boeing 747 is now flying in a B-52E operated from Bradley International Airport, Conn. The bomber, leased from the USAF, carries the flight-test engine in the starboard inner position, replacing the two J57s. See story on this page

