

P&WC makes plans to offer growth variant of Cessna VII

GUY NORRIS/LOS ANGELES

PRAIT & WHITNEY Canada is studying a new growth variant of its PW500 engine family, aimed at the Cessna Citation VII and potential business aircraft in planning or under study.

The engine maker is helping to unseat the AlliedSignal TFE731 on the Citation VII with a new engine combining elements of the 13kN (3,000lb)-thrust PW530A being developed for the Citation Bravo, and the more powerful 20kN PW545A, planned to power the Citation Excel.

P&WC chairman and chief executive David Caplan confirms that "...we are also looking at the PW500 for other variants".

Engineers plan to test-run a PW500 core at higher speed, to produce the extra power needed to drive the engine up to 22kN. The study is expected to recommend an additional low-pressure compressor stage and an increase in fan diameter, which will boost mass flow.



P&WC has its eye on the Citation VII, which is powered by AlliedSignal's TFE731

The company's immediate priority, however, is certification of the PW530A, which is "on course" for approval in December. Eight development engines have amassed more than 4,000h, of which 230h have been carried out on the company's Boeing 720 testbed. Around 170h have also been built up on Cessna's Citation Bravo prototype, which was first flown on 19 April,

in addition to around 100h on Cessna's T-47 testbed.

Five development engines are now being run in the PW545A programme, which is aimed at certification for the Excel in December 1996. The PW545A is fitted with a single-channel full-authority digital engine-control system, but will be operable when manual control only is available. □

FlightSafety boosts business training

FLIGHTSAFETY International (FSI) is to build and operate 14 additional business-aircraft flight simulators in a major initiative to expand and upgrade its fleet. Rival SimuFlite Training International is also acquiring additional business-aircraft simulators.

FSI cites the number of new business-aircraft programmes, coupled with advances in simulation technology, as reasons for its decision to upgrade existing simulators and build additional devices. Corporate-aviation customers are demanding the level of technology already available to airlines.

Most new FSI simulators will be built to the Level D training standard, the highest recognised. The new devices will cover virtually the complete range of new business jets, including the Cessna Citation Bravo/Ultra and Citation X, Dassault Falcon 2000 and 900EX, Gulfstream V, Learjet 45, and Raytheon Premier I and Hawker 800XP.

Most are being built under exclusive training agreements which require the simulator to be available when the aircraft enters service.

Also under construction are additional simulators for the Challenger 601-3R, Gulfstream III and Raytheon Beech King Air 200 — all Level D — plus a Level C simulator for the Cessna Caravan I.

The Gulfstream V is a lead aircraft for development of FSI's advanced qualification programme, a proficiency-based training system, and for the company's new computer-based classroom training.

SimuFlite, meanwhile, has acquired a Reflectone-built Hawker 800/1000 simulator from British Aerospace. Based at the Reflectone Training Center-Dulles, it will be Dallas/Fort Worth, Texas-based SimuFlite's seventeenth business-jet device.

The company has teamed with Bombardier to offer Challenger training at Dallas/Fort Worth and Montreal, where CAE Electronics-built simulators for the 601-3A/3R and new 604, respectively, will enter service in 1996. SimuFlite is also upgrading to computer-based training. □

NEWS IN BRIEF

MAINTENANCE SOLUTION
Business JetSolutions, the Bombardier/AMR Combs joint venture, has selected Chicago, Illinois-based Jet Support Systems to provide engine maintenance for corporate aircraft in its FlexJet fractional-ownership and Alliance charter-management programmes.

CHALLENGER SATCOM
KC Aviation is to install a Collins SAT-906 six-channel satellite-communications (satcom) system in a Canadair Challenger 601-3R owned by US agricultural-equipment manufacturer Deere, with multiple cabin-telephone handsets, a dedicated facsimile line and personal-computer dataports.

Lord quietens Cessna and Beech

LORD, THE Pennsylvania-based noise-control specialists has confirmed major contracts received from Cessna for its Citation X, and from Stevens Aviation, which will act as US distributor for its NVX active noise system, on the Raytheon Beech King Air 200 and 300.

Lord has worked with Cessna for some time to develop a hybrid noise-control system for the Citation X, and recently announced a contract for 106 shipsets of its active isolation-control equipment.

The system introduces electro-mechanical actuators between the engine mounts and the airframe, helping to cut noise introduced into the fuselage through vibration. At the same time, some of the vibration will be absorbed through the company's more traditional passive dampers. Lord

says that the reduced vibration in the airframe will help cut the Citation X's interior noise level by up to 86%.

The second major contract is from Stevens Aviation, a multi-site US fixed-base operator with its headquarters in Arkansas. Stevens was granted a supplemental type certificate for the NVX modification on the King Air 200/300 series in the middle of September.

NVX cuts cabin noise by recording and analysing noise before outputting an equal and opposite noise through speakers mounted throughout the cabin.

During flight tests on King Air 200s, the NVX system has produced interior-noise reductions of up to 70% (10dB) and noise at blade passage frequencies (by the plane of the propeller) by as much as 90% (20dB). □