

TRAINING DEVICE



Czech Aviation Training Centre - A Unique New FFS

Re-Styled L410 Cockpit.

Image credit: Czech Aviation Training Centre (CATC).

So, with those and other mandated tasks essential for approvals, it was recognised that the training package also needed to be updated to reflect present and future demand.

The challenge to build a L410 FFS was taken up by CAE. Unlike recently-designed aircraft, where a complete data package can be bought directly from the OEM, albeit at considerable expense, such data for the L410 did not exist. It had to be built up from a huge number of test parameters flown by Aircraft Industries test pilots, using an intensely-calibrated aircraft. Not only were all the measurements for operational flight to be taken, but - within the bounds of safety - abnormal situations had to be measured, and even data for UPRT had to be collected.

As result, a CAE Series 7000XR FFS, with a CAE Tropos™ 6000XR Series and a CAE Motion 600 Series has now received EASA and FAA Level D (ICAO Type V11) approval, and was inaugurated at the CATC facility at Prague airport, Czech Republic on 31st March 2017. This device can now also be used for UPRT, when even rolls and loops can be flown, and the deep stall, complete with vigorous buffet and rapid and significant wing rock/drop, can create demanding scenarios.

The historic market place for the earlier L410 ranged from Russia - supplying remote sites in Siberia - through operation in the Himalayas, to Indonesia and South America and many other regions. There is already an experienced cadre of L410 pilots, but they will need to be transitioned to the new cockpit and equipment as the new aircraft are introduced. As a generation, this group is largely unfamiliar with EFIS, TCAS and EGPWS. The immediate priority for the CATC is to design conversion training for those pilots. In due course a new generation will also need to be trained, but there the emphasis will be more focussed on the basic operating and handling skills. CATC is developing a procedures trainer and a CBT course by way of lead in training to the FFS, both of which are due mid-year 2017. **cat**

A new version of the L410 has been introduced to the market, and Chris Long reports on the updated training device that has been launched.

Most headlines in aviation feature the arrival of bright new aircraft and technologies. The reality for most people involved in civil aviation is however, that their day-to-day job is operating with the reliable workhorses which have been around for some years. Sometimes the real value of such systems is recognised, and they get a well-deserved update.

A case in point is that of the Czech-built Let L410 high-wing twin turboprop aircraft. Some 1200 have been built, with some 350 still in operation, and have served around the world in both civil and military roles, usually in austere environments where a rugged airframe has meant that operation from rough airstrips remote from sophisticated support have not presented a challenge.

The prototype first flew in 1969, but so enduring has this design proved to be that another version, the L410 UVP-E20, has been launched. This version is powered by GE H80-200 engines and features a cockpit transformed with

the installation of Universal Avionics, Garmin and Honeywell instrumentation.

Marek Jechumtal, business development director at the Czech Aviation Training Centre (CATC), predicts a flourishing future for this reborn aircraft manufactured at the Aircraft Industries site in Kunovice, Czech Republic. An annual production rate of 30 units is forecast. Certificated under both EASA and FAA regulations, this multi-role aircraft, which seats up to 19 passengers in its primary role, requires training which recognises present and future regulatory approval.

Training

For this earlier generation of aircraft asymmetric training resulted in far too many accidents, so the currently favoured platform is a Level D full flight simulator. Requirements to carry out Upset Prevention and Recovery Training (UPRT) also demand a sophisticated platform with appropriate software installed.