UDF cleared for flight

PEEBLES

Having completed 100hr of ground tests, General Electric's unducted fan (UDF) engine is on its way to Mojave where later this month it should begin 75hr of flight tests on a Boeing 727, reports Julian Moxon.

Ground tests showed UDF specific fuel consumption to be at least 20 per cent better than that of modern turbofans, says UDF programme manager Bruce Gordon. On a purpose-designed 150-seater aircraft, with production engines, Gordon reckons the eventual figure will be closer to 30 per cent.

Outdoor tests also demonstrated that the UDF can be controlled like a turbofan, a single lever controlling propulsor and blade pitch. "We want airframe manufacturers and airlines alike to treat the engine like a normal turbofan," says Gordon.

Noise absorption material required on production aircraft will weigh between 400lb and 600lb, Gordon reckons, but will be more than offset by the 1,000lb reduction in engine weight since UDF has neither thrust reversers nor a cowling.