

Thailand finds aircraft bargains in Germany

THAILAND IS buying 50 Dassault/Dornier Alpha Jets advanced trainers/light strike aircraft from the German air force for the knock-down price of 1 million baht (\$27,000) each.

Although the aircraft are cheap, another 60 million baht will have to be spent on each one to make it air-worthy. The first aircraft could enter service by December.

Thailand, hit hard by the Asian economic crises, requires the aircraft to replace elderly Rockwell OV-10C Broncos, Fairchild AU-23 Peacemakers and Aero L-39 Albatros used in the border surveillance/light strike role. These aircraft are based close to the area where the neighbouring Myanmar army has recently been mounting cross-border raids.

Germany received 175 Alpha Jets between 1979 and 1983, which it used in the light strike role rather than for training until 1995. Most of the aircraft have since been mothballed, although some were supplied to Portugal. □

General Electric pushes on with JSF powerplant development

GUY NORRIS/LOS ANGELES

GENERAL ELECTRIC'S Joint Strike Fighter (JSF) F-120 engine team has signed a \$440 million contract with the JSF programme office covering Phase III of the alternative engine development effort.

The contract, consisting of \$115 million covering the firm requirement for Phase III and an option for \$325 million, covers engine development work from October 2000 to September 2004. It helps keep alive the GE-led team's bid to provide an alternative to Pratt & Whitney's JSF119 powerplant which has been selected as the lead engine for both JSF concept demonstrators. Like the JSF119 engine which is based on the core of the F119 in production for the Lockheed Martin/Boeing F-22 – the JSF-F120 is a derivative

of the YF120 developed for the Advanced Tactical Fighter competition.

The JSF-F120 team, which expanded last month to embrace Philips Machinefabriek (PMF) of the Netherlands, includes Allison Advanced Development (AADC) and Rolls-Royce. PMF will lead a consortium of Netherlands, Danish and Norwegian companies to join in the design, development and manufacture of parts of the propulsion system.

GE is developing a multistage blisk compressor, radial augmentor and dual control system, as well as an advanced exhaust system. R-R is developing a higher flow, three-stage, long chord hollow titanium blisk fan. AADC and GE are jointly developing a coupled turbine system. This consists of an integrated high pressure/low pressure counter-rotating turbine system.

The contract award for Phase III follows the recent successful completion of the JSF programme office's critical design review or the JSF-F120 core and the release of initial components for hardware tests. Major component tests scheduled for this year include the advanced turbine at GE and the combustor at AADC. The contract, which also includes further subsystem and component tests, is expected to lead to full engine tests for the winning JSF airframe contractor in the first half of 2003.

■ Boeing has completed the first test phase on the vehicle management system (VMS) for the X-32 JSF demonstrator aircraft. The VMS operates the flight controls, environmental control system and other subsystems and is being tested on a full-scale test rig similar to that developed for the 777 commercial aircraft programme. □

CONTRACTS

++ Israeli electronic warfare specialist **Elisra** has won a \$6 million order, with a potential \$9 million follow-on, to supply its SPS-65(V2) self-protection system to the **Canadian Forces**, which will retrofit the system to Bell CH-146 Griffon utility helicopters. ++ **Lockheed Martin Information Systems** has won a \$267 million, 10-year contract to operate five **US Air Force** C-130 Hercules aircrew training schools. **Reflectone** will upgrade C-130 operational flight trainers and provide logistics support for the simulators. ++ Czech component manufacturer **Jiklavan** has won a \$150,000 contract to supply airbrake parts for the JAS39 Gripen from **Saab/British Aerospace**. ++ **Raytheon** has won a \$7 million contract to supply five Improved Fresnel Lens Optical Landing Systems (IFOLS) to the **US Navy**. IFOLS is the primary visual landing aid on US Navy carriers.

Indian trainer programme gets go-ahead

INDIA HAS given the go-ahead to the Hindustan Aeronautics (HAL) HJT-36. The aircraft will replace ageing HJT-16 Kiran basic trainers in service with the Indian air force.

HAL chairman Krishnadas Nair says the company has been given the green light and already received Rs1.8 billion (\$42 million) for the production of two prototypes, flight test and certification.

First flight will be by late 2002, with service entry two years later. The Kiran reaches the end of its service career in around 2005. "It will be HAL's fastest development programme," says Nair. A mock-up was displayed at the Aero India 98 show in Bangalore.

More than 200 HJT-36s are required at a fly-away cost of Rs180-190 million per aircraft. Nair says the HJT-36 will be lighter, have fewer components, improved fuel consumption as well as improved reliability and maintainability compared to the Kiran.



India is pressing ahead with development of the HJT-36

HAL has yet to select an engine. The competitors are the 3,970lb-thrust (18kN) Viper 632 and the 4,360lb-thrust Viper 680 from Rolls-Royce, the 3,170lb-thrust Snemca/Turboméca Larzac 04 and the 3,500lb-thrust AlliedSignal TFE731. Vipers are used on Kirans and the air force has an overhaul site at Kanpur. R-R says that while the Viper is a cheaper engine, its higher fuel consumption counts against it.

Competition for other equipment is fierce, with Marconi Avionics from the UK, Israel's Elop and France Sextant Avionique offering systems.

Emmanuel Menanteau, Sextant Avionique India director, says the company is offering its Topflight avionics system including head-up display, multifunction displays, navigation system and air data computer. □