Directory: military aircraft

KAWASAKI HEAVY INDUSTRIES	
Aircraft	**T-4**
Mission	**Advanced trainer**
Powerplant	2 x IHI F3-30
Max thrust (lb)	3,680
Wing span (m)	9.9
Wing area (m^2)	21
Length (m)	13
OEW (kg)	3,700
MTOW (kg)	7,500
Max load (kg)	-
Range (km)	1,667
Endurance (h)	-
Hardpoints	5
Cruise (kt)	560
M_{MO}	M0.91
Ceiling (ft)	50,000
Crew	2
Internal fuel	2,240 litre
Fuel, opt ext (litre)	908
Air refuel?	No

Boeing), Dassault Mirage and various Soviet-built fighters. It has proposed replacing the Mirage III/V/50's Snecma Atar engine with a GE F404.

KAWASAKI HEAVY INDUSTRIES

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T-4

Kawasaki developed the T-4 advanced jet trainer to replace Lockheed T-33s operated by the JASDF. The shoulder-wing, twin-engined trainer first flew in July 1985. The JASDF took delivery of 212 of the tandem-seat aircraft and production is now complete. Work is under way to "inspect and repair" the fleet to maintain its operational effectiveness, as well as design work on a glass cockpit upgrade.

C-X/P-X

The Japan Defence Agency (JDA) selected Kawasaki to lead development of the C-X transport and P-X maritime patrol aircraft in late 2001 and earlier this year budgeted $800 million in 2004 to begin work on initial prototypes. The C-X aircraft are intended to replace Kawasaki C-1s and 44 aircraft expected to be acquired. Around 80 P-X aircraft are to replace Japan's Lockheed Martin P-3Cs.

The two aircraft are required to have commonality, although the the C-X will be twin-engined and the P-X equipped with four turbofans. The aircraft will have different fuselage cross-sections. The JDA wants common structures and systems, where possible, to cut costs. Areas of commonality are likely to include cockpit avionics, empennage and the outer wing. The prototypes are expected to fly in 2007.

KOREA AEROSPACE INDUSTRIES (KAI)

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KOREA AEROSPACE INDUSTRIES	
Aircraft	**KT-1**
Mission	**Basic trainer**
Powerplant	1 x P&WC PT6A-62
Max power (shp)	550
Wing span (m)	10.1
Wing area (m^2)	15.5
Length (m)	10.3
OEW (kg)	1,430
MTOW (kg)	2,480
Max load (kg)	520
Range (km)	1,700
Endurance	2h 30min
Hardpoints	4
Cruise (kt)	360
M_{MO}	M0.74
Ceiling (ft)	38,000
Crew	2
Internal fuel (kg)	449
Fuel, opt ext (litre)	-
Air refuel?	No

KT-1 Woong Bee

Design of the KTX-1 turboprop trainer began in 1988. Daewoo (now KAI) received an order in August 1999 for 85 KT-1 production aircraft and it is now in operational service with the South Korean air force.

Daewoo modified the design because of handling shortfalls with the first prototypes. The KT-1 is bigger, heavier, the tail surfaces are relocated and it has a more powerful P&WC PT6A-62. The aircraft can be equipped with rockets and gun pods for weapons training.

Initial export aircraft, sold to Indonesia, are KT-1Bs, while a deal in early 2003 saw KAI link with Canada's CMC Electronics to develop an enhanced avionics suite for a counter-insurgency and armed training export version, the KT-1C. KAI and CMC's Flight Visions subsidiary will build an avionics integration laboratory for the KT-1C ready for flight testing by late 2004.

KAI is also developing the XKO-1 forward air controller variant in partnership with South Korea's agency for defence development, for the South Korean air force. The XKO-1 will have a HUD, MFD and a GPS/INS. It has four wing hardpoints for unguided rockets and external fuel tanks. The forward air control variant was due to fly in 2003. Development will begin with modification of the fifth KTX-1 prototype.

KOREAN AEROSPACE INDUSTRIES/ LOCKHEED MARTIN	
Aircraft	**T/A-50**
Mission	**Adv trainer/light attack**
Powerplant	1 x GE F404-402
Max thrust dry/wet (lb)	11,925/17,775
Wing span (m)	9.1
Wing area (m^2)	-
Length (m)	12.8
OEW (kg)	6,260
MTOW (kg)	8,600
Max load (kg)	-
Range (km)	1,850
Endurance (h)	-
Hardpoints	7
Cruise (kt)	-
Mmo	M1.4
Ceiling (ft)	45,000
Crew	2
Internal fuel (kg)	-
Fuel, opt ext (litre)	-
Air refuel?	No

KAI/LOCKHEED MARTIN

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T-50/A-50 Golden Eagle

The first prototype of South Korea's T/A-50 flew on 20 August 2002. Six prototypes have been built: two for ground testing; two flying prototypes configured as advanced trainers; and two as fighter lead-in trainers, which have Lockheed Martin APG-67(V)4 multimode radars and 20mm cannons. Prototypes achieved supersonic flight for the first time in February 2003.

The South Korean air force requires 94 T-50s and has options for 100 light combat A-50s. A production contract for the first 25 T-50s was signed in December 2003 and deliveries to the air force are scheduled for around October 2005. Israel and the UAE have been invited to test fly the aircraft as part of KAI and Lockheed Martin's effort to promote it as a lead in trainer.

The T/A-50 began life as the KTX-2. Samsung (now KAI) and Lockheed Martin completed the preliminary design review in July 1999. Lockheed Martin is responsible for the FBW flight control system, avionics integration, wing design and supply of the APG-67 radar. GE supplies the F404 engines.

LOCKHEED MARTIN

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A-10 Thunderbolt II

In February 2001, Lockheed Martin's Owego division was awarded the A-10 precision engagement upgrade programme, potentially worth $226 million, to keep the USA's primary close air support aircraft operational until 2028. The aircraft are receiving a digital stores management system, situational awareness datalink and 1760 weapons databus as well as a DC generator upgrade, JDAM and WCMD integration, Litening II/AT and Sniper XR targeting pod compatibility. A $90 million engineering and manufacturing development effort is ongoing, with flight testing due to begin in 2005 after the first installation kits were delivery in April 2004. Litening pods were employed on a number of A-10As during the Iraq war as a temporary upgrade in advance of the precision engagement pro-