

Directory: military aircraft

LOCKHEED MARTIN								
Aircraft	C-5B	C-130J-30	C-130H Hercules	F-16C Fighting Falcon	F-117A Nighthawk	P-3C Orion	S-3B Viking	U-2S
Mission	Transport	Transport	Transport	Fighter/attack	Attack	Maritime patrol	Maritime patrol	
Reconnaissance								
Powerplant	4 x GE TF-39-1C	4 x R-R AE2100D3	4 x R-R T56-15	1 x P&W F100-220 or 1 x GE F110-129	2 x GE F404-F1D2	4 x R-R T56-14	2 x GE TF-34	1 x GE F118-101
Max power (shp)/thrust dry (lb)/thrust reheat (lb)	43,000	4,600	4,510	14,600/23,790	10,575	4,910	9,275	19,000
Wing span (m)	67.91	40.41	40.41	10	13.2	30.37	20.93	31.39
Wing area (m ²)	575.98	162.12	162.12	27.9	105	120.77	55.56	92.9
Length (m)	75.54	34.35	29.8	15	19.43	35.61	16.26	19.2
OEW (kg)	169,643	35,965	34,702	8,430	13,393	27,890	12,088	6,487
MTOW (kg)	379,657	79,380	79,380	19,187	23,800	64,410	19,278	18,144
Max load (kg)	118,387	17,263	19,340	7,000	2,270	9,070	3,175	1,360
Range (km)	10,411	5,500	-	3,700	-	8,335	5,588	12,260
Endurance	-	14h	-	-	-	14h 30min	7h 30min	12h
Hardpoints	-	-	-	11	0	10	2	-
Cruise (kt)	460	348	335	-	562	350*	370	373
M _{mo}	-	-	-	M2.05	-	-	-	M0.8
Ceiling (ft)	35,750	30,560	24,000	59,055	-	34,400	40,000	85,000
Crew/passengers	5/363	3/128	4/92	1	1	10/13	4	1
Internal fuel (kg)	150,815	20,819	35,961 litre	3,248	-	34,826 litre	5,753	3,470
Fuel, opt ext (litre)	-	10,440	10,440	5,677	-	-	2,272	-
Air refuel?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Comments				F110 thrust is 17,000lb dry and 31,600lb augmented. Block 60 MTOW 22,680kg				

two for ground testing; two flying prototypes configured as advanced trainers; and two as fighter lead-in trainers.

Two T-50s are now flying, with two pre-series aircraft to be added in August 2003. The first aircraft reached Mach 1.05 on its 60th flight.

Series production is to start in August 2003, with roll-out of the first T-50 supersonic trainer in October 2005. The South Korean air force requires 94 T-50s and has options for 100 light combat A-50s.

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 engine.

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C-5 Galaxy

The USAF awarded Lockheed Martin and Honeywell an initial \$451 million contract early in 1999 to upgrade and modernise the cockpit of 126 C-5A/Bs to keep them in service until 2040. As a first step, all C-5s were equipped with TCAS by October 2002. The C-5 Avionics Modernisation Programme (AMP) includes a digital FCS and updates the cockpit with six LCDs. The communication/navigation suite includes GPS, satcom and VHF datalink for GATM. The first flight of an AMP-fitted C-5B was on 21 December 2002.

C-130 Hercules

The first C-130Js were handed over to the UK Royal Air Force, Royal Australian Air Force and USAF Reserve in 1999. The UK purchased 25 C-130Js, while the RAAF ordered 12 stretched C-130J-30s. Other customers include Italy, the US Air National Guard (command-post EC-130Js and weather reconnaissance WC-130Js) and the USMC, which is receiving KC-130J aerial-refuelling tankers. The USAF requires 168 C-130Js and signed a multi-year deal for 40 stretched CC-130Js in March 2003.

The C-130J is a major upgrade of the Hercules, with four R-R AE2100 turboprops and a two-crew cockpit. The 100th example was rolled out in February 2003.

In mid-2001, Lockheed Martin began installing Block 5.3 software in C-130Js, proving full operational functionality. Block 5.4 is in

development, to be introduced into production in the first half of the multi-year programme. It is an enhancement to communications, navigation and identification functionality and includes a new APX-119 IFF transponder, 8.33kHz VHF radios an integrated self-defence system. Block 6.0 is under discussion and will be divided into phases tied to implementation of GATM architecture. USAF plans call for funding of Block 6.0 in 2003, Block 7.0 in 2005 and Block 9.0 in 2007. Blocks 6-8 will be primarily focused on GATM.

In June 2001, the USAF selected Boeing as prime contractor for the \$4 billion C-130 Avionics Modernisation Programme to standardise 519 earlier-standard Hercules with a common cockpit and engine.

The AMP cockpit draws on Boeing's Next Generation 737 flightdeck and features six Honeywell LCDs and a Smiths Aerospace flight management system. Other equipment includes Honeywell autopilots, Smiths core processor, Flight Dynamics HUDs, Northrop Grumman APN-241 weather radar and Rockwell Collins radios. TRW will supply software and Israel Aircraft Industries the wiring harnesses.

The development programme covers 44 different C-130 versions and will stretch to 2007. The first aircraft to be modified will be a C-130H2, due to fly in 2004.

Numerous C-130 upgrades are offered by others, including Derco, Lockheed Martin, Marshall Aerospace, Sabca and L-3 Spar.

F-16 Fighting Falcon

Development of the F-16 continues with the advanced Block 60 for the United Arab Emirates, which ordered 80 aircraft in 2000 for