

ADVANCED LIGHT FIGHTER



Performance & Specifications

FLYAWAY COST: \$19 Million Typical Flyaway

AVAILABILITY: TBD

1.246 nm

1,939 nm

341 nm

955 ft

1,625 ft

1,529 ft

2,264 ft

TYPE

Light Fighter (LF), Air Defense Fighter (ADF) and Armed Reconnaissance (AR) Aircraft

ACCOMMODATION

Flight Crew of One Seated on a Martin Baker MK16E or MK 18 Zero-Zero Ejection Seat

POWERPLANT

One (1) Honeywell F125XX Afterburning Turbofan delivering 16,000 lbs st with Afterburner and 11,500 lbs st at Military Power. The powerplant is fitted with variable geometry, thrust vectoring and reversing 2D nozzle.

STRUCTURE

Semi-monocoque aluminum lithium and aluminum honeycomb sandwich construction throughout. Titanium used in high fatigue areas and high temperature regions. Extensive use of Laser and Friction Stir Welding in all assemblies.

ARMAMENT

Fixed: One fuselage mounted M61A2 20mm gatling cannon with 500 rds Expendable: Internal Weapons Bay and six external wing hardpoints for up to 7,000 lbs of external stores

0.80 Mach

0.80 Mach

177 Ktas

124 Ktas

104 Ktas

60,000 ft

DIMENSIONS

Wingspan 24 ft 0 in Wing Area	176 sq ft
Length Overall 41 ft 8 in Wheelbase	15 ft 8 in
Height Overall 9 ft 0 in Wheeltrack	10 ft 8 in
WEIGHTS & CAPACITIES LOADINGS	
Empty Weight 8,600 lbs Wing Loading @ MMW (lbs/sq ft)	64.4
Max Internal Fuel 3,800 lbs Thrust-to-Weight @ MMW	1.41
Max Payload 7,600 lbs Wing Loading @ MTOW (lbs/sq ft)	113.6
Mid-Mission Weight (MMW) 11,336 lbs Thrust-to-Weight @ MTOW	0.80
Max Take-Off Weight (MTOW) 20,000 lbs Positive Load Limit @ MTOW	9.0
PERFORMANCE	
Max Level Speed @ SL 1.23 Mach Max Climb Rate @ SL; MTOW	32,359 ft/min
Max Level Speed @ FL350 2.19 Mach Max Climb Rate @ SL; MMW	57,839 ft/min
Max Cruise Speed @ SL 0.90 Mach Dash Range @ 2.19 Mach	137 nm
Max Cruise Speed @ FL350 0.90 Mach Dash Radius @ 2.19 Mach	60 nm

Cruise Range @ 0.90 Mach

Cruise Radius @ 0.90 Mach

161 Ktas Takeoff, Ground Roll @ SL-TTW

Takeoff, BFL @ SL-TTW

Landing, BFL @ SL-TLW

Ferry Range with External Tanks

Landing, Ground Roll @ SL-TLW







Typical Cruise Speed @ SL

Typical Cruise Speed @ FL350

Approach Speed; Landing Weight @ SL

Stall Speed; Landing Weight @ SL

Takeoff Speed; MTOW @ SL

Stall Speed; MTOW @ SL

Service Ceiling Exceeds