

# *Cero* L159 ALCA ADVANCED LIGHT COMBAT AIRCRAFT



 **BOEING**

  
**VODOCHODY**  
CZECH REPUBLIC

# Aero L159 ALCA ADVANCED LIGHT COMBAT AIRCRAFT

## L159A SINGLE-SEAT LIGHT MULTI-ROLE COMBAT AIRCRAFT L159B TWO-SEAT LEAD-IN TRAINER AND LIGHT COMBAT AIRCRAFT

### OPERATIONAL CAPABILITIES:

- Close Air Support
- Tactical Reconnaissance
- Air Defence
- Counter Insurgency
- Border Patrol
- Anti Ship Missions
- Lead-in-Fighter and Weapons Training
- Continuation Training

### MAIN OPERATIONAL BENEFITS OF THE L159 DESIGN:

- Accurate navigation and weapons delivery
- Wide range of stores
- Enhanced survivability
- Tactical mobility including ability to use semi-prepared airstrips
- Avionics integration via MIL-STD-1553-B databus facilitates future growth
- Pilot Vehicle Interface compatible with latest generation high-performance fighters
- Autonomous aircraft operation from remote airfields
- On condition maintenance
- Computer based training aids
- LSA in accordance with MIL-STD-1388-1A-2B
- Low life-cycle costs
- Simulation capabilities for training
- Proven safe and enhanced airframe
- High performance



### COMPATIBILITY WITH WIDE RANGE OF STORES:

- Hamilton Standard Stores Management System
- Seven hardpoints
- MIL-1760 compatibility
- Wide range of NATO standard weapons including air-to-air and air-to-ground missiles
- Provision for future addition of new weapons (including medium range air-to-air missiles) and special pods for ECM, reconnaissance, night navigation and targeting

### POWERPLANT:

Honeywell / ITEC F 124-GA-100  
ADVANCED MILITARY TURBOFAN ENGINE

### ENGINE PERFORMANCE (sealevel, static, 15°C / 59F)

Max. thrust	28.2 kN	6,330 lb
TSFC	79.2 kg/N/hr	0.777 lb/hr/lb
Inlet Airflow	42.7kg/sec	94.1lb/sec
Qualified according to:	MIL-E-87231	MIL-STD-1783
Bypass Ratio	0.456	
Overall Pressure Ratio	19.5	

### BASIC DATA (L159A)

#### EXTERNAL DIMENSIONS:

Wing span	9.54 m	31 ft 3 in
Length, overall	12.72 m	41 ft 8 in
Height, overall	4.77 m	15 ft 12 in

#### WEIGHTS:

Weight empty	4,320 kg	9,524 lb
Max ramp weight	8,000 kg	17,637 lb
Max fuel weight internal	1,596 kg	3,519 lb
- incl. 4 external tanks	2,973 kg	6,554 lb
Max external stores	2,340 kg	5,158 lb

#### PERFORMANCE:

Max level speed at S/L	936 km/h	505 KTAS
Max rate of climb at S/L	62.1 m/s	12,210 ft/min
Service ceiling	13,200 m	43,300 ft
Take off run	470 m	1,541 ft
Max range (internal fuel only, 10% reserve)	1,570 km	850 nm
Max range (internal and external fuel, 10% reserve)	2,530 km	1,370 nm

#### DESIGN LOAD FACTOR:

Max structural limit	+8g, -4g
----------------------	----------

Aero Vodochody • Odolena Voda  
250 70 Czech Republic

  
Aero  
VODOCHODY

tel: +420-2-6880041 fax: +420-2-823172  
email: mr@aero.cz www.aero.cz

# Jack's

## Aerospace History Files



Uwe W. Jack

This is a document from  
Uwe W. Jack's archive.

These documents are intended to  
illustrate aspects of aerospace history.

You are free to share it with friends.  
commercial use is prohibited.

Uwe W. Jack occasionally puts  
new documents on his website.

Please visit:

[www.aerospace-jack.com](http://www.aerospace-jack.com)



### Junkers Ju 287

The most advanced  
Jet-Bomber  
of the Luftwaffe

This is the story of an aircraft that might  
have changed the air-war in 1945/46.  
Lots of photos, drawings, information,  
data and more than 6000 words give  
a detailed insight into the development  
of this unique piece of aviation.

Available as eBook on

**Amazon**

and

**smashwords**