

# CC Air Ramstein



Allied Air Component Command Ramstein  
Public Affairs Office



## Fact Sheet

### L-159 ALCA

(Source: <http://www.army.cz/scripts/detail.php?id=6204>)

*This is a light multipurpose single-seat subsonic combat aircraft of Czech manufacturer AERO Vodochody designed primarily for missions of close air support to ground forces, reconnaissance and, to a limited extent, to air combat missions. A double-seat version of the aircraft is designed for flight training. An ALCA prototype took off for the first time on 2 August 1997.*



The aircraft is driven by the AlliedSignal/ITEC F124-GA-100 jet engine having a maximum thrust of 28 kN. Almost 2,000 litres of fuel is stored in eight internal tanks (six in fuselage, two at the tips of wings), while another four fuel tanks (two with 525 litres, and two with 350 litres each) could be hung under the wings. The light-armoured cockpit is equipped with a VS-2B seat capable of catapulting the pilot at a zero flight level and zero speed.

The aircraft's avionics include a satellite navigation system GPS, and flight data are displayed both at the FV-3000 Head-up Display and a twin-screen of liquid crystals. Communications are provided by a pair of Collins ARC-182 trans-receivers. Self-protection of the ALCA is ensured by the Sky Guardian 200 radar receiver and the Vinten Vicon passive jammer. The Italian FIAR Grifo L multipurpose impulse Doppler radar completes the major electronics of the aircraft.

All armaments of the ALCA are located in an under-fuselage suspension and in six under-wing mountings. The aircraft can be equipped with a variety of weapons ranging from classic bombs and rocket launchers to air-to-ground and air-to-air guided missiles. For other missions, the aircraft can be equipped with special devices to conduct air reconnaissance and/or electronic warfare.

### Basic Tactical-technical Data

Maximum cruise speed: 936 km per hour  
Maximum climbing: 48 metres per second  
Flight ceiling: 13,200 metres  
Operation range without additional fuel tanks: 1,570 km  
Operation range with additional fuel tanks: 2,530 km  
Length of runway necessary for take-off (at weight of 5,500 kg): 440 metres  
Length of runway necessary for landing (at weight of 5,500 kg): 725 metres  
Engine unit: AlliedSignal F124-GA-100  
Maximum thrust of engine: 28 kN  
Wingspan: 9.54 metres  
Length: 12.73 metres  
Height: 4.77 metres  
Weight of empty aircraft: 4,360 kg  
Maximum take-off weight: 8,000 kg  
Payload: 2,340 kg

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