PROFILE: Aero Vodochody L-39 Albatros

(Variants/Other Names: See History below)

HISTORY:

The Czechoslovakian L-39 was built as the successor to their earlier trainer, the <u>L-29 Delfin</u>. Design work began in 1966, and the first prototype made its initial flight on 4 November 1968. The idea of the design was to marry an efficient, powerful turbofan engine to a sleek, streamlined fuselage, resulting in a strong, economical performer which would become the next standard jet trainer for the Warsaw Pact. Full-scale production was delayed until late 1972 due to apparent problems with the design of the air intakes, but these difficulties were overcome and the type went on to be a great success with the Soviet, Czech and East German air forces, among others.

Three main variants were produced. The *L-39C* was built as a pure trainer and was used by numerous air forces throughout Eastern Europe beginning in 1974 and continuing through today. The armed weapons-trainer variant is called the *L-39ZA*, and a close-support and ground-attack version is called the *L-39ZO*. In addition to those mentioned above, the L-39 has been exported to numerous countries, including Afghanistan, Bulgaria, Hungary, Romania, Iraq, Libya, Estonia, and Kyrghyzstan. A modernized derivative of the Albatros, the L-59, is still being built in the Czech Republic. Another modernized, but very different version, the L-39MS, actually has much more in common with the L-59 than the L-39, despite its designation.

As of this writing, the L-39 is the most popular jet warbird in the world, with over 300 believed to be actively flying in the USA alone.

NICKNAMES: "L-ka" (Russian nickname)

SPECIFICATIONS:

Engine: One 3,792-lb thrust Walter Titan turbofan (Ivchenko AI-25-TL built under Czech license by Motorlet).

Weight: Empty 7,340 lbs., Max Takeoff 11,618 lbs. (L-39ZO with four rocket pods)

Wing Span: 31ft. 0.5in. Length: 40ft. 5in. Height: 15ft. 5.5in. Performance:

Maximum Speed at 19,600 ft: 485 mph (Trainer version, clean)

Maximum Speed at Sea Level: 435 mph Ceiling: 37,730 ft. (Trainer, clean)

Range: 528 miles with internal fuel; 995 miles with external tanks.

Armament (L-39ZO): Up to 2,425 pounds of weapons on four underwing hardpoints, including bombs, 57- or 130-mm rocket pods, gun pods, a five-camera reconnaissance pod, or two fuel drop-tanks. Centerline point carried a pod-mounted 23-mm twin-barrel GSh-23 cannon with 180 rounds.

NUMBER BUILT: 2800+

NUMBER STILL AIRWORTHY: Unknown number in military service. At least 300 flying in private ownership.