**Design and development**

The development began 1946 and was accomplished by the technical designers Jiři Bouzek, Ondřej Němec and František Vik. The design bears a superficial resemblance, viewed nose-on, to the German [Siebel Si-204](https://en.wikipedia.org/wiki/Siebel_Si-204) which, among other German aircraft like the [Bf 109](https://en.wikipedia.org/wiki/Bf_109), were produced in Czechoslovakia while under German occupation. The prototype (registered OK-BCA) flew for the first time on 21 July 1947, the second, registered OK-CDA, one year later. Flight testing ran without incidents and the type was released for series production in 1948. The model number of "45" was not a continuation of [Aero](https://en.wikipedia.org/wiki/Aero_Vodochody)'s pre-war numeration scheme, but a reference to the 4/5 seats in the aircraft.

**Operational history**

Ae-45 prototypes were widely advertised abroad. In August 1949 [Jan Anderle](https://en.wikipedia.org/w/index.php?title=Jan_Anderle&action=edit&redlink=1) won the Norton Griffiths Race in Great Britain (Ae-45 registration OK-DCL). They also set several international records. As a result, apart from Eastern Bloc countries, the plane was also bought by Italy and Switzerland. On 10–11 August 1958 Dr. Pier Paolo Brielli flew an Italian Ae-45 3000 kilometers from South America to [Dakar](https://en.wikipedia.org/wiki/Dakar) across the southern Atlantic (as the first Czechoslovak-built aircraft). In 1981 Jon Svensen flew Ae-45S from Europe to the USA.[[1]](https://en.wikipedia.org/wiki/Aero_Ae-45#cite_note-nemecek-1)

This type was used in Czechoslovakia and was exported to the People's Republic of China, East Germany, France, Hungary, Italy, Poland, Romania, Soviet Union and Switzerland. Hungary was a major customer, where the aircraft was known as the *Kócsag* ([Hungarian](https://en.wikipedia.org/wiki/Hungarian_language): "[Egret](https://en.wikipedia.org/wiki/Egret)").

**Variants[[edit](https://en.wikipedia.org/w/index.php?title=Aero_Ae-45&action=edit&section=3" \o "Edit section: Variants)]**



1957-built Aero 45S series II registered in Malaya



Let Aero Ae 145

Aero 45

First production version built in Aero factory, 200 built between 1948 and 1951.

Aero 45S "Super Aero"

Improved variant produced by [Let](https://en.wikipedia.org/wiki/Let_Kunovice) in [Kunovice](https://en.wikipedia.org/wiki/Kunovice_%28Uhersk%C3%A9_Hradi%C5%A1t%C4%9B_District%29) factory, among others with better navigational equipment. 228 aircraft built between 1954 and 1959.

Aero 145

Version with engines changed to supercharged Motorlet (Walter) M332, produced later as [Avia M332s](https://en.wikipedia.org/wiki/Avia_M332). This version was developed and built by [Let](https://en.wikipedia.org/wiki/Let_Kunovice), 162 aircraft built between 1959 and 1963.

## Specifications (Aero 145)

### Description[[edit](https://en.wikipedia.org/w/index.php?title=Aero_Ae-45&action=edit&section=8" \o "Edit section: Description)]

The Aero 45 had a sleek, teardrop-shaped [fuselage](https://en.wikipedia.org/wiki/Fuselage), with a rounded, extensively-glazed nose affording excellent visibility. It had a low wing on which the engine [nacelles](https://en.wikipedia.org/wiki/Nacelle) were mounted, and a [conventional tail](https://en.wikipedia.org/wiki/Empennage). The main [undercarriage](https://en.wikipedia.org/wiki/Landing_gear) was retractable but the tailwheel was fixed.

*Data from* Jane's All The World's Aircraft 1961–62[[5]](https://en.wikipedia.org/wiki/Aero_Ae-45#cite_note-jawa61_p37-8-5)

**General characteristics**

* **Crew:** one, pilot
* **Capacity:** three-four passengers
* **Length:** 7.77 m (25 ft 6 in)
* [**Wingspan**](https://en.wikipedia.org/wiki/Wingspan)**:** 12.25 m (46 ft 2​1⁄2 in)
* **Height:** 2.30 m (7 ft 6 in)
* **Wing area:** 17.1 m² (184 ft²)
* [**Airfoil**](https://en.wikipedia.org/wiki/Airfoil)**:** Aero No. 58-64
* [**Empty weight**](https://en.wikipedia.org/wiki/Manufacturer%27s_empty_weight)**:** 960 kg (2,116 lb)
* **Loaded weight:** 1,500 kg (3,306 lb)
* [**Max. takeoff weight**](https://en.wikipedia.org/wiki/Maximum_takeoff_weight)**:** 1,600 kg (3,527 lb)
* [**Powerplant**](https://en.wikipedia.org/wiki/Aircraft_engine)**:** 2 × [Walter M 332](https://en.wikipedia.org/wiki/Avia_M_332)-III air-cooled 4-cylinder inline engine, 104 kW (140 hp) each

**Performance**

* [**Maximum speed**](https://en.wikipedia.org/wiki/V_speeds#Regulatory_V-speeds)**:** 282 km/h (152 knots, 175 mph)
* [**Cruise speed**](https://en.wikipedia.org/wiki/V_speeds#Vc)**:** 250 km/h (135 knots, 155 mph)
* [**Range**](https://en.wikipedia.org/wiki/Range_%28aeronautics%29)**:** 1,700 km (918 nm, 1,055 miles)
* [**Service ceiling**](https://en.wikipedia.org/wiki/Ceiling_%28aeronautics%29)**:** 5,900 m (19,360 ft)
* [**Rate of climb**](https://en.wikipedia.org/wiki/Rate_of_climb)**:** 5.0 m/s (985 ft/min)
* [**Wing loading**](https://en.wikipedia.org/wiki/Wing_loading)**:** 88 kg/m² (18 lb/ft²)
* [**Power/mass**](https://en.wikipedia.org/wiki/Power-to-weight_ratio)**:** 0.08 kW/kg (0.05 hp/lb)

