**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)]**

[](https://en.wikipedia.org/wiki/File:Aero_45_Srs_II_9M-AOF_BAG_22.05.71_edited-3.jpg)

1957-built Aero 45S series II registered in Malaya

[](https://en.wikipedia.org/wiki/File:Let_Aero_Ae-145_Super_Aero_v.jpg)

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_(Uhersk%C3%A9_Hradi%C5%A1t%C4%9B_District)) 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_(aeronautics))**:** 1,700 km (918 nm, 1,055 miles)
* [**Service ceiling**](https://en.wikipedia.org/wiki/Ceiling_(aeronautics))**:** 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)

