



Finnish Air Force Aircraft Fact Sheet



Valmet L-70 Vinka

The Valmet L-70 Vinka is a three-seat piston-engined aircraft of Finnish design and manufacture. The Vinka is used by the Finnish Air Force in a primary training role to teach basic flying skills to military pilots. The aircraft carries the military designation VN.

Flight training begins with an elementary syllabus designated VN 1. At this screening phase, students are conscripts selected for service with a reserve pilot officer course in the Air Force Academy in Tikkakoski. Next in sequence is a primary flight training syllabus (VN 2) for students who have started their studies with a pilot track in the National Defense University. On completion of Vinka training, cadets convert to the Hawk for fast jet training. The Air Force has outsourced Vinka flight training and aircraft maintenance Patria.

At the controls of the Vinka students go solo, get an aircraft type rating, and conduct cross-country navigation training sorties. The Vinka is also used for training students in night flying, poor visibility instrument flying, and aerobatics.

Due to its long service life the Vinka has undergone several minor structural reinforcements and other modifications. The aircraft were fitted with a modern Garmin GNS 430 avionics installation in 2002.



Finnish Air Force Aircraft Fact Sheet

History and development

The Vinka was designed and built in the 1970s to replace the Swedish Saab Safir that had soldiered on in the training role since 1958. The prototype, designated the Leko-70, made its maiden flight in 1975. The Vinka entered service with the Air Force Academy at Kauhava in 1980.

Upon the withdrawal of the last Safirs in 1982, Vinka became the linchpin of primary flight training in the Air Force, and since then practically all fixed-wing and rotary-wing pilots of the Defence Forces and Border Guard have gotten their first taste of flight in the aircraft. In 2005, all Vinkas were transferred from Kauhava to Tikkakoski, and concurrently with this pilot reserve officer training was also relocated.

Twenty-six of the original 30 Vinkas remain in service with the Air Force. The Vinka was initially designed for the installation of target towing and medical evacuation kits and provisions were made for replacing the wheels with floats or skis, but these projects were soon abandoned. One aircraft was, however, fitted with a ski landing gear in around 2005 for instructional purposes in conjunction with an Air Force test pilot course.

The Vinka is set to be replaced in the primary and basic training role by the German Grob G 115E. The Ministry of Defence authorized the purchase of 28 pre-owned Grobs from Britain in October 2016.

Technical Data

Wing span: 9.36 m

Length: 7.50 m

Height: 2.80 m

Empty weight: 792 kg

Maximum operating weight: 1,250 kg

Structure: All-metal

Power plant: Four-cylinder Lycoming AEIO-360-A1B6 piston engine rated at 200 hp (149 kW)

Cruising speed: 200 km/h at 75 % power at 1,500 m altitude

Ceiling: 3,000 m

Systems and equipment: Basic instrument flying panel with Garmin GNS 430 GPS/COMM/VOR/ILS installation for navigation and communication

In service with the Finnish Air Force: 26

Updated: DEC 2017