

SCHLEICHER ASK-21 (USAF TG 9; RAF Vanguard T. Mk. 1)

Specifications

Span	55.77 ft./17.0 m.
Area	193.21 sq.ft./17.95 sq.m.
Aspect ratio	16.1
Airfoil	Wortmann FX-SO2-196, root; FX 60-126, tip
Empty weight	794 lb./360 kg.
Payload	529 lb./240 kg.
Gross weight	1,323 lb/600 kg.
Wing loading	6.84 lb./sq. ft./33.4 kg./sq.m.
Structure:	fiberglass and foam wing, fiberglass honeycomb sandwich fuselage and tail.

Performance

L/D max.	35 @ 46 kt/53 mph/85 kph
Min. sink	2.13 fps/1.26 kt/0.65 m/s @ 36 kt/42 mph/67 kph

Other

Country of origin	Germany
Designer	Rudolf Kaiser
No. of seats	2
No. in the U.S.	35
References:	7-85, p. 16



Schleicher's entry to the composite two-seat sailplane market, the ASK-21 first flew in 1979 and is approved for a number of aerobatic maneuvers. Schempp-Hirth type airbrakes (upper surface only), ailerons and elevators are operated by pushrods in ball bearings; the rudder is cable-operated. Wings attach with a tongue-and-fork connection and two pins. The fixed main wheel is aft of the center of gravity, with a nosewheel; a tailwheel is available as an option instead of a skid. A flight test evaluation by Dick Johnson demonstrated a best L/D of 31:7, but this could likely be increased by installation of wing root and other seals. The United States Air Force Academy operates 4 ASK-21's as the TG-9. The Royal Air Force purchased 10 (known as the Vanguard T. Mk. 1) for its Air Cadet training program. ATC.