

Schweizer SGM 2-37 Motorglider

USAF Designation: TG-7A

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The TG-7A was designed by the Schweizer Aircraft Company specifically for the U.S. Air Force Academy. The design borrows parts from a number of different aircraft with the nose cowling coming from the Piper Tomahawk, the wings were modified from the Schweizer 1-36 Sprite (with extensions and cuffs to enhance stall characteristics) and the tail was originally used on the Schweizer 2-32. The TG-7A was used in the Academy's "Soar-For-All" program to simulate the flight

characteristics of the TG-4A which is more familiarly known to most of us as the 1-26. By the use of a motorglider, the number of sorties needed to practice landings and approaches was reduced and overall safety improved.

The TG-7A was replaced as the Academy's primary motorglider trainer by the TG-14A (Grupo Aeromot Aircraft Corporation of Brazil AMT-200S Super Ximango) in the Fall of 2002. The TG-7A was last flown by the U.S. Air Force

Academy in April, 2003. Nine examples of the TG-7A were acquired by the U.S. Air Force Academy.

The example covered in this set of walkaround photos is now owned by the Tuskegee Airmen National Historical Museum, Inc. of Detroit, Michigan <<http://tuskegeeairmen.org>>, and was photographed at the Selfridge ANGB 2005 Airshow, May 21-22, 2005.

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Span	18.14 m	59.5 ft.	Wing loading	41.64 kg./sq.m	8.99 lb./sq.ft.
Area	18.18 sq. m..	195.7 sq. ft.	Engine	83 kW/ 112 bhp Lycoming O-235-L2C, 4 cyl.	
Aspect ratio	17.9		Performance	L/D - max. 28, Min. sink - 0.96 m/sec., 3.16 fps, 1.87 kt.	
Airfoil	Wortmann FX 61-163		No. of seats	2	
Empty weight	544 kg.	1200 lb.	No. built	12 total, 9 in the United States	
Payload	213 kg.	470 lb.	Designer	Leslie Schweizer	
Gross weight	757 kg.	1670 lb.	Serial Numbers (known)	81-0886, 81-0887, 81-0890, 82-0039, 82-0041 (N27AF), 82-0043 (shown), 87-0761 (N765AF) 87-0782 (N762AF)	
Engine	83 kW/ 112 bhp Lycoming O-235-L2C, 4 cyl.				

More info on the U.S. Air Force Academy "Soar-For-All" program and the aircraft used can be found at <<http://atlas.usafa.af.mil/wing/34og/94fts/>>.













