

GENERAL DESCRIPTION

The CHAMPION is a two place, tandem, high wing monoplane. Basic fuselage construction is welded tubing with fabric covering. The wings are composed of two wooden spars with aluminum alloy ribs and fabric covering. The wing leading edges are covered with aluminum sheet to provide a more efficient airfoil.

Power is supplied by a 95 H.P. engine and fixed pitch propeller. Engine vibrations are dampened by rubber mount bushings.

Unrestricted vision is attained through the use of a one piece windshield plus large door and rear seat windows. The 7FC model provides greater forward visibility by employing the tricycle gear arrangement.

Basically the CHAMPION is a conventional three-control aircraft. The dual control system provides smooth and non-fatiguing control. Brake pedals are provided for both front and rear occupants. A trim tab on the left elevator compensates for load differences and provides for hands off flight. The trim tab control is conveniently located above and between the front and rear seats. Engine controls are readily accessible from both the front and rear seat. Concealment of cabin control cables provides greater cabin comfort. A large baggage compartment is located behind the rear seat to accommodate luggage and other items.

The "No Bounce" oleo landing gear system is provided in both 7EC and 7FC models. Ease of ground handling is assured by a steerable leaf spring tail wheel on the 7EC model, and a steerable nose wheel on the 7FC model. The 7FC model is equipped with hydraulic brakes which are also offered as optional equipment on the 7EC. Tie down rings are incorporated at the wing strut attachment point for securing to the ground.

The 7EC and 7FC models are the latest versions of the reliable 7 series CHAMPIONS. These models include increased gross weight, higher H.P., improved landing gear, and the addition of an electrical system. The 7FC model offers the added versatility of tricycle gear construction. Ski and float installations are available and adaptable to both Models.

SPECIFICATIONS AND PERFORMANCE DATA

ATC 759

AIRPLANE DIMENSIONS:

	<u>7EC</u>	<u>7FC</u>
LENGTH	21' 8"	21' 8"
HEIGHT, OVERALL (three point)	7'	8' 8"
HEIGHT, LEVEL	8' 8"	8' 8"
WING SPAN	35' 2"	35' 2"
ASPECT RATIO	7.25	7.25
WING CHORD	60"	60"
STABILIZER SPAN	10' 2"	10' 2"
WHEEL TREAD (STATIC)	70"	70"
WHEEL BASE (STATIC LEVEL)	16'	56.5"
STABILIZER INCIDENCE	-5 Deg.	-5 Deg.
WING DIHEDRAL	2 Deg.	2 Deg.
WING INCIDENCE	1 Deg.	1 Deg.
FIN OFFSET	1" left of C.L.	1" left of C.L.

WEIGHTS:

EMPTY WEIGHT (With electrical system)	880 lbs.	970 lbs.
GROSS WEIGHT	1450 lbs.	1450 lbs.
USEFUL LOAD	630 lbs.	540 lbs.
WING LOADING	8.5 p.s.f.	8.5 p.s.f.
POWER LOADING	16.1 lbs./HP	16.1 lbs./HP
BAGGAGE	50 lbs.	50 lbs.

PERFORMANCE:

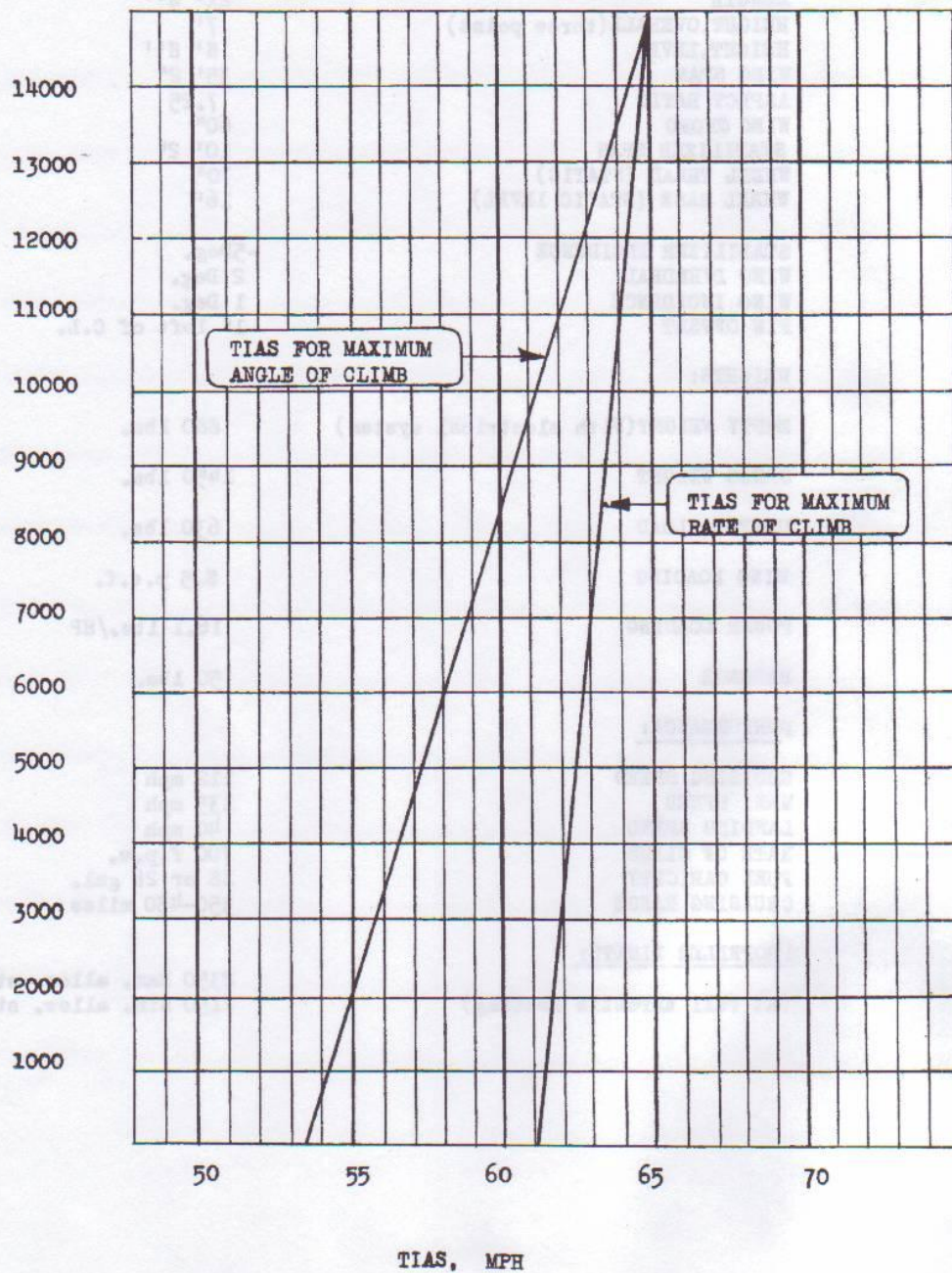
CRUISING SPEED	112 mph	108 mph
MAX. SPEED	135 mph	135 mph
LANDING SPEED	40 mph	40 mph
RATE OF CLIMB	700 f.p.m.	700 f.p.m.
FUEL CAPACITY	18 or 26 gal.	26 gal.
CRUISING RANGE	350-450 miles	450 miles

PROPELLER LIMITS:

(At full throttle setting)	2350 Max. allow. static rpm
	2150 Min. allow. static rpm

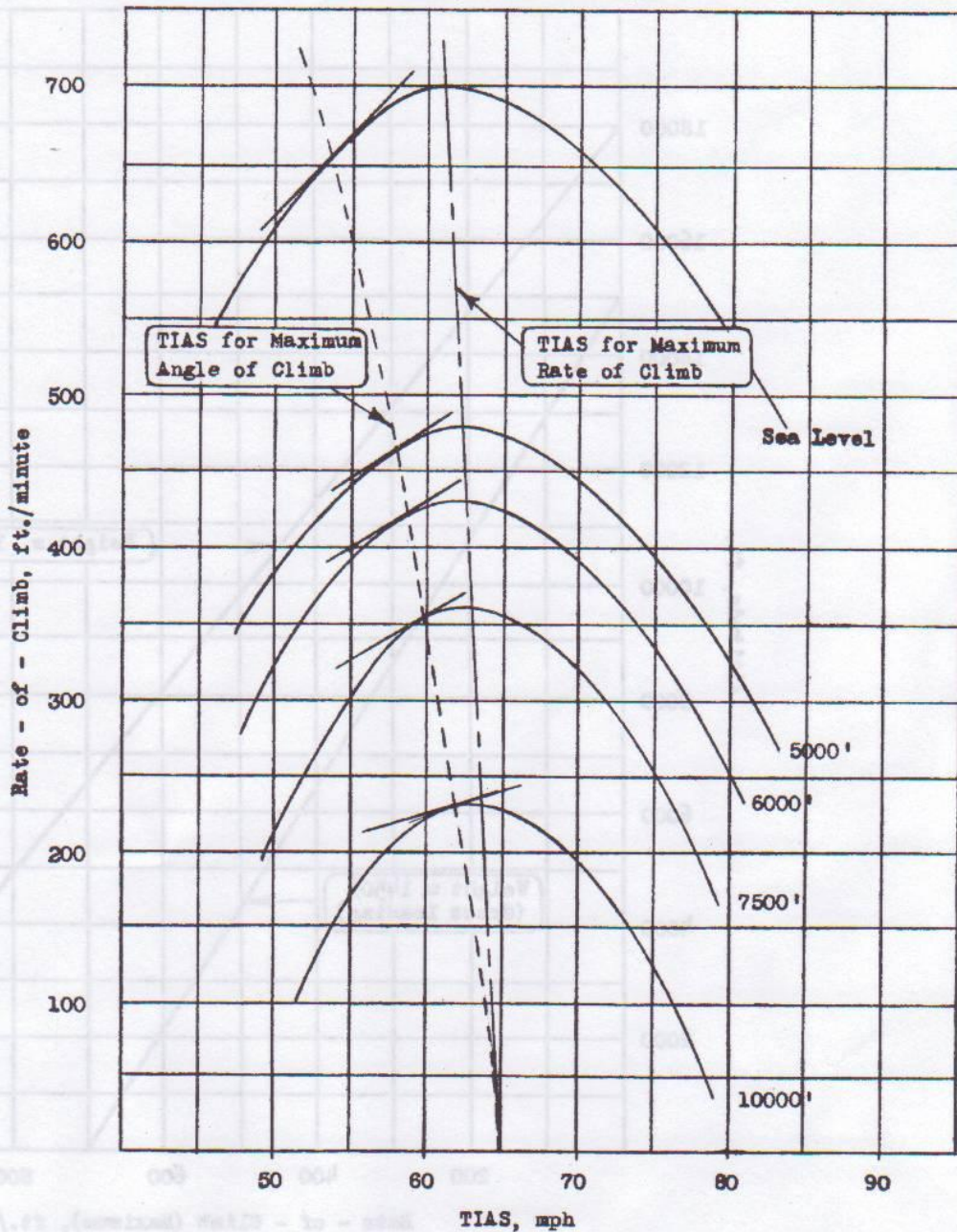
BEST AIRSPEED FOR CLIMB

Approximate 7EC and 7FC Performance at 1450 lbs. (Full Throttle)



RATE - OF - CLIMB VS AIRSPEED AND ALTITUDE

Approximate γ_{EC} and γ_{FC} Performance with
McCauley 1B90-CM7343 Propeller, at 1450# load.
(Full Throttle)



CLIMB VS ALTITUDE

Approximate 7EC and 7FC Performance with
McCauley 1B90-CM7343 Propeller, at 1450# load.
(Full Throttle)

