

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

1A12
Revision 2
GOODYEAR
GA-22A

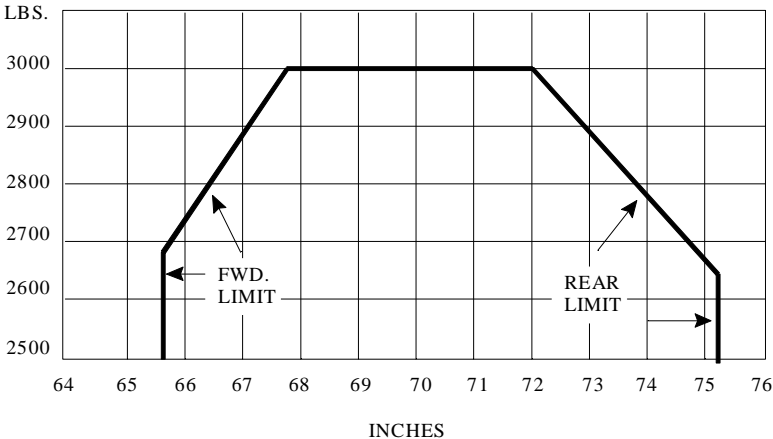
September 16, 1955

AIRCRAFT SPECIFICATION NO. 1A12

Manufacturer Goodyear Aircraft Corporation
Akron, Ohio

I - Model GA-22A, 4 PCAmM (Normal Category), Approved July 28, 1954

Engine	Continental E-225-8
Fuel	80 min. octane aviation gasoline
Engine limits	For all operations, 2600 rpm (225 hp)
Airspeed limits	Maneuvering 119 mph (104 knots) True Ind. Max. structural cruising 134 mph (117 knots) True Ind. Never exceed 169 mph (147 knots) True Ind. Flaps extended 100 mph (87 knots) True Ind. Landing gear extended 113 mph (98 knots) True Ind.
C.G. range	(+67.7) to (+72.1) at 3000 lbs. (+65.7) to (+74.8) at 2676 lbs. (+65.7) to (+75.1) at 2635 lbs. or less (Straight line variation between points given) Moment change due to retraction of gear is negligible.



Empty weight C.G. range	None
Datum	Aft face of the forward door post frame
Leveling means	Keel - 20 in. aft of datum
Maximum weight	3000 lbs.
No. of seats	4 (2 at +24.5, 2 at +50.5)
Maximum baggage	200 lbs. (+84.5)
Fuel capacity	60.5 gals. (+83.5) (includes unusable fuel of 12.0 gals.)
Oil capacity	3.5 gals. (+75.5)
Control surface movements	Elevator Up 30° Down 20° Ailerons Up 25° Down 15° Rudder Right 25° Left 25° Flaps Down 20°

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Serial Nos. eligible	4040 and up
Required equipment	In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed: Items 1, 2, 101, 102, 103, 104, 105, 201, 202, 205, 301, 302, 401, and 601.

SPECIFICATIONS PERTINENT TO ALL MODELS

Certification basis	Type Certificate No. 1A12 (CAR 3, Nov. 1, 1949 and Amendments 3-1 to 3-6, Normal Category)
Production basis	None. Prior to original certification of each aircraft a CAA agent must perform a detailed inspection for workmanship, materials and conformity with the approved technical data, and a check of flight characteristics.
Export eligibility	Eligible for export to all countries subject to the provisions of MOP 2-4.

Equipment: A Plus (+) or minus (-) sign preceding the weight of an item of equipment indicates net weight change when that item is installed.

Propellers and Propeller Accessories

- | | | |
|----|---|------------------|
| 1. | Propeller - Hartzell, hub HC-12x20-5E, blades L8833
Diameter: Not over 88 in., not under 86.5 in.
Pitch setting at 30 in. sta.:
Normal operation 20° to 12.5° (High pitch stop)
Reverse thrust operation -9° to -10° (Low pitch stop) | 66 lbs. (+105.5) |
| 2. | Propeller spinner, Goodyear Dwg. 22A640-1 | 2 lbs. (+107.5) |

Engine and Engine Accessories - Fuel and Oil System

- | | | |
|------|---|-----------------|
| 101. | Starter, Eclipse, Beech No. 35-3690051 | 9 lbs. (+64.5) |
| 102. | Fuel pump, engine-driven, Thompson TF-1100-2 | 1 lbs. (+66.5) |
| 103. | Fuel pump, electric-driven, Adel 20653 | 4 lbs. (+86.5) |
| 104. | Oil cooler, Heat Exchangers, Inc., Goodyear Dwg. 22A670-3 | 10 lbs. (+68.0) |
| 105. | Engine cooling fan, Goodyear Dwg. 22A660-1 | 7 lbs. (+102.5) |

Landing Gear

- | | | |
|------|--|-----------------|
| 201. | Two main wheel-brake assemblies, 6.50-8, Type III
(a) Goodyear Model CL8HBM
Wheel-brake Assembly 280AX51 | 38 lbs. (+56.5) |
| 202. | (a) Two main wheel 4-ply rating tires, 7.00-8, Type III
with regular tubes | 29 lbs. (+56.5) |
| 205. | Tail wheel assembly
(a) Goodyear Dwg. 22A420-1,
Goodyear Wheel Model 510622M,
Goodyear Tire 800, Smooth Contour | 17 lbs. (+274) |

Electrical Equipment

- | | | |
|------|-------------------------------|-----------------|
| 301. | Battery, Reading R-33L, 12V2 | 8 lbs. (+47.5) |
| 302. | Generator, Delco-Remy 1656-35 | 19 lbs. (+64.5) |

Interior Equipment

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| 401. | CAA Approved Airplane Flight Manual dated July 28, 1954. |
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Miscellaneous (Not listed above)

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|------|-------------------------|-----------------------|
| 601. | Stall warning indicator | Neglect weight change |
|------|-------------------------|-----------------------|

NOTE 1. Current weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system).

- NOTE 2. The following placards must be displayed on the instrument panel in full view of the pilot:
- (a) "This airplane must be operated as a normal category airplane in compliance with the approved airplane 'Flight Manual'."
 - (b) "No acrobatic maneuvers, including spins, approved."
 - (c) "Do not extend landing gear above 113 MPH."
 - (d) "Avoid Continuous Operation

1400 to 1700 RPM (Ground)
1900 to 2100 RPM (Ground)
2450 to 2550 RPM (Ground and Flight)."

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