

CAA APPROVED

J. O. Gure
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APPROVAL BASIS CAR 5

FEBRUARY 14, 1958

NORMAL CATEGORY

1950 POUNDS GROSS WEIGHT

PIPER PA-20 "150"

C.A.A. Identification No. 6950K

AIRPLANE FLIGHT MANUAL

1. Limitations

The following limitations must be observed in the operation of this airplane:

Engine	Lycoming O-320 150 HP
Engine Limits	For all operations 2700 RPM
Fuel	80/87 Octane Minimum Aviation Gasoline
Propellers	Sensenich W74DM, Fixed Pitch Metal
	74.0" Maximum Diameter
	72.6" Minimum Diameter
	Static Limits: Maximum 2450 RPM
	Minimum 2290 RPM

Power Instruments	Oil Temperature—Unsafe if indicator exceeds Red Line (245 degrees F)
	Yellow Arc: Caution (40 degrees to 120 degrees F.)
	Green Arc: Normal Operating Range (120 degrees F. to 245 degrees F.)
	<u>Tachometer</u> - Red Line: Rated Engine Speed
	Green Arc: 500 RPM to 2700 RPM
	Normal Operating Range
	Oil Pressure—Unsafe if indicator exceeds Red line (100 lbs.) or is below the Red line (25 lbs. minimum)
	Yellow Arc: Caution (85 lbs. to 100 lbs.) and (25 lbs. to 85 lbs.)
	Green Arc: Normal Operating Range (85 lbs. to 85 lbs.)
	Take-Off 0 Degrees Landing 40 Degrees

Flt. Position
Airspeed Limits
(True Ind. Airspeed)
Maneuvering
Max. Cruising Speed
Never Exceed
Flaps Extended
Flight Load Factors
Max. Positive
Max. Negative

Normal Category
108 MPH 53 knots
126 MPH 100.4 knots
158 MPH 137.2 knots
30 MPH 69.4 knots

3:2
No Inverted Maneuvers Approved

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C.G. Range**

Max. Wt. (Take-Off and Landing) 1950 lbs.
 Fwd. Limits: 11.5" Up to 1240 lbs. straight
 line to
 12.0" at 1490 lbs. straight
 line to
 17.5" at 1850 lbs.
 Rwd. Limit 24.0" at 1850 lbs.

Maximum Baggage Allowed 50 lbs.

Note: It is the responsibility of the airplane owner and the pilot to insure that the airplane is properly loaded. (See weight and balance.)

(a) On the instrument panel in full view of the pilot:

(1) "Operate in Normal Category in compliance with the Approved Flight Manual. Aerobatics (including spins) prohibited."

(b) On the Baggage Compartment:

(1) "Maximum Baggage 50 Pounds."

Maneuvers:

a. No acrobatic maneuvers approved for Normal Category Operation.

**Airspeed
Instrument
Markings
And Their
Significance**

(a) Redial Red line marks the never exceed speed which is the maximum safe airspeed 158 MPH. 137.2 Knots.

(b) Yellow Arc on indicator denotes range of speed in which operations should be conducted with caution and only in smooth air 126 to 158 MPH (109.4 to 137.2 Knots).

(c) Green Arc denotes normal operating speed range 52 to 126 MPH (45.1 to 109.4 Knots)

(d) White Arc denotes normal operating speed range with flaps extended 48 to 80 MPH (41.7 to 69.4 Knots)

II. Procedures

(a) All operating procedures for this airplane are conventional.

III. Performance Information

(a) Loss of altitude during stall recovery with flaps extended 40° is 120 ft. Other stall configurations result in less altitude loss than that shown above.