PIPER

Super Cub

PA-18

150 HP
For 1974 and Later

CRUISING

The cruising speed of the Super Cub at 75% of rated engine power, at gross load under standard sea level conditions, is approximately 115 MPH. Cruising airspeed and engine RPM will depend on the propeller installed on the airplane.

Normally the Super Cub should cruise at 2400 to 2450 RPM, but the 75% of power RPM (low altitudes) can be determined as follows:

1. Fly the aircraft as near sea level as practicable at full throttle until maximum speed is reached. Note RPM at top speed, level flight.
2. Reduce the maximum RPM by 10% and cruise at 90% of full RPM. The correct cruising RPM will result in a cruising airspeed of 115 MPH with a fuel consumption of approximately 9 gallons per hour. If the airplane is slowed down to about 100 MPH, approximately 5 gallons per hour will be used. See fuel consumption chart.

The metal propeller with which the Super Cub 150 is equipped as standard equipment is, unless specified otherwise, a 56 inch pitch propeller that favors takeoff and climb rather than cruising speed. For training and other purposes which do not require use of full power settings to obtain satisfactory performance, this propeller may be operated, during takeoff, climb, and cruise, at 2200 RPM or less. This will still provide more performance than was formerly available in 65 HP trainers, and will reduce fuel consumption and engine wear very appreciably.

The fuel consumption chart should be consulted to determine most economical cruising RPM for specific requirements.

To lean the mixture, pull the mixture control until the engine becomes rough, indicating that the lean mixture limit has been reached in the leaner cylinders. Then enrich the mixture by pushing the control toward the instrument panel until engine operation becomes smooth. The mixture should be leaned when 75% power or less is being used. If any doubt exists as to the amount of power being used, the mixture should be in the FULL RICH position for all operations. Always enrich the mixture before increasing power settings. Use of the mixture control in cruising flight reduces fuel consumption significantly, especially at higher altitudes, and reduces lead deposits when the alternate fuels are used.

Unless icing conditions in the carburetor are severe, do not cruise with the carburetor heat on. Apply full carburetor heat only for a few seconds at intervals determined by icing severity.

APPROACH AND LANDING

During the approach, trim the plane with the stabilizer adjustment until no force is required on the stick to maintain a gliding speed of 70 MPH. Lower the flaps at an airspeed not to exceed 85 MPH. The mixture should be full rich, fuel valve on correct tank. The carburetor heat need not be used unless icing conditions prevail, but the engine should be cleared frequently by opening the throttle.

During the landing roll the steerable tail wheel should be used for directional control, and brakes should be used as little as possible to avoid excessive brake and tire wear.

Before shutting down the engine, set throttle to idle and turn the magneto switches off momentarily to check magneto grounding.

To stop the engine, after landing and when clear of the runway, pull the mixture control full out to idle cut-off. When using alternate fuels, the engine should be run up to 1200 RPM for one minute prior to shutdown to clean out any unburned fuel. After the engine stops, turn the ignition and master switch (if any) off, and retract the flaps.

WEIGHT AND BALANCE

For weight and balance data, see the weight and balance sheet that gives the exact weight of the airplane and permissible center of gravity conditions. When a heavy load, either passengers or cargo, is to be carried, the pilot is responsible for computing gross weight and center of gravity location.

EMERGENCY LOCATOR TRANSMITTER

The Emergency Locator Transmitter (ELT), when installed, is located in the fuselage just aft of the battery and is accessible through a removable plate on the upper right side of the fuselage. The ELT