

depleted of fuel be prepared to wait a while for the engine to start after changing to a fuel cell with fuel in it. If it is necessary to use all the fuel in a fuel cell, carefully monitor the fuel flow meter and quickly change the fuel valve position at the first indication of a decrease in fuel flow. This will enable you to keep the engine operating while using all of the fuel in the fuel cell.

CAUTION

If tip tanks are installed on the airplane and if the tip tanks have been run completely dry in flight, air may be trapped in the line from tip tank to solenoid valve when tip tanks are subsequently filled. The air pocket in the line may prevent immediate feeding of fuel from tip tanks. To avoid this condition, purge air from lines prior to starting of aircraft.

1. Turn fuel selector valve to "AUX" position.
2. Turn on aircraft master switch and place tip tank fuel selector switch to tip tank position. Ascertain that tip tank solenoid switch, under fuel console, is operating by listening for a slight click when switch is operated.
3. Lift up appropriate fuel drain valve and allow fuel to drain. Observe for flow in clear plastic tube, followed by interrupted flow of no fuel for a few seconds, further followed by a bubbling flow then full flow. Total drain time should not be less than 30 seconds.
4. Procedure shall be accomplished for each tip tank separately.
5. In addition to above procedure operate the power plant from each wing tip separately until steady fuel flow is assured during ground runup prior to flight.

If not properly inspected and maintained, the bladder-like fuel cells of the airplane could partially collapse, causing the fuel gauging system to be inaccurate. The tanks and gauging system, therefore, should be inspected in accordance with Piper service instructions and kept in good condition.

During flight, keep account of time and fuel used in connection with power settings to determine how the fuel flow and fuel quantity gauging systems are operating. If the fuel flow indication is considerably higher than the fuel actually being consumed or an asymmetric flow gauge indication is observed, you may have a clogged fuel nozzle which should be cleaned.

APPROACH AND LANDING

Prior to extending the landing gear for landing, retard both throttle controls to check that the landing gear warning horn is operating. Flying the airplane with the horn inoperative is not permitted. It can lead to a gear up landing as it is easy to forget the landing gear when approaching for a single engine landing when other equipment is inoperative or when attention is drawn to events outside of the cockpit. Therefore it is especially important to check that the landing gear is down when there is any distraction in the landing situation.

Lower the gear at speeds below 150 miles per hour and the flaps at speeds below 125 an hour.

CAUTION

Maintain sufficient speed during turns in the traffic pattern. It is a good practice to trim the aircraft to establish a speed of at least 115 miles per hour on the downwind leg and 110 miles an hour on the base leg. Hold 110 miles per hour until the turn

onto final approach has been completed. Then reduce to a final approach speed at 100 miles per hour.

Set the propeller at a high cruising RPM of at least 2400 RPM for ample power if a go-around is necessary. Mixture control should be in the full rich position unless density altitude or conditions of high temperature and humidity dictate otherwise.

Avoid steep turns at low airspeeds or at low altitudes, particularly during the turn from base leg to final approach.

Ascertain the landing gear is down and locked on base leg or final approach, by checking the green indicator light on the instrument panel.

The degree of wing flap extension and touch down speed vary with conditions, but under normal conditions full wing flaps (27 degrees) should be used during the final approach and landing to reduce stall speed and to permit contact with the runway at a slower speed.

Contact the ground at the minimum speed consistent with landing conditions.

For short, slow landings under normal conditions use full wing flaps, partial power, and hold the nose up as long as possible before and after contacting the ground with the main wheels.

In high winds and crosswinds, it is desirable to approach a landing at higher than normal speeds with half or no wing flaps. If a go-around is necessary apply full throttle, retract the landing gear, and slowly retract the wing flaps.

During a crosswind approach hold a crabbed angle into the wind until ready to flare out for the landing. Then lower the wing that is into the wind, reduce crabbed angle, and keep the wheels aligned to the runway using rudder.

NOTE

Landings with a crosswind component greater than 20 miles per hour should be avoided.

When extending or retracting wing flaps, do so a few degrees at a time to avoid an asymmetrical flight condition which would result if one wing flap should stick.

Do not side slip with wing flaps extended.

Avoid prolonged side slip with a fuel selector set to a fuel cell with low fuel indication.

Prior to landing and early in the roll out the brakes should be checked for operation. After landing, maximum braking is achieved by retracting wing flaps and pulling back on the control wheel as wheel brakes are applied.

CAUTION

It is possible for a pilot to inadvertently reach for the landing gear selector switch instead of the wing flap switch while there is still enough lift on the wings to keep full weight of the airplane off the wheels and thus prevent the actuation of the landing gear safety mechanism, causing retraction during the landing roll. If additional braking is not needed, the wing flaps should be retracted after the airplane has been maneuvered to a stop off the runway. If a landing must be made without wheel brakes the airplane should be flown to contact the ground at a slower speed and landed short on the longest available runway.

The procedure for manually lowering the landing gear should be memorized and understood completely so that it can be accomplished quickly in an emergency situation, such as a single engine landing. (Refer to Emergency Procedures, in this section for manually lowering the landing gear.)