

## BEFORE LANDING.

In view of the relatively low drag of the extended landing gear and the high allowable gear-down speed (140 MPH), the landing gear should be extended before entering the traffic pattern.

This practice will allow more time to confirm that the landing gear is down and locked. As a further precaution, leave the landing gear extended in go-around procedures or traffic patterns for touch-and-go landing.

Landing gear extension can be detected by illumination of the gear down indicator light (green), absence of a gear warning horn with either throttle retarded below 12 inches of manifold pressure and visual inspection of the main gear position. Should the gear indicator light fail to illuminate, the light should be checked for a burned-out bulb by pushing to test. A burned-out bulb can be replaced in flight with the bulb from the compass light or the landing gear up (amber) indicator light.

## LANDINGS.

Landings are usually made on the main wheels first to reduce the landing speed and subsequent need for braking in the landing roll. The nose wheel is lowered to the runway after the speed has diminished to avoid unnecessary nose gear load. This procedure is especially important in rough field landings.

For short field landings, make a power-off approach at <sup>76 KTS</sup> 87 MPH with full flaps and land on main wheels first. Immediately after touchdown, lower the nose gear and apply heavy braking as required. For maximum brake effectiveness after all three wheels are on the ground, retract the flaps, hold full nose up elevator and apply maximum possible brake pressure without sliding the tires.

At light operating weights, during ground roll with full flaps, hold the control wheel full back to insure maximum weight on the main wheels for braking. Under these conditions, full down elevator (control wheel full forward) could raise the main wheels off the ground.

## COLD WEATHER OPERATION.

The starting procedure is normal; the front engine should be started

first since it is closer to the battery. Starting can be expedited by switching the auxiliary fuel pumps to "HI" position and advancing the throttle for a fuel flow of 8 to 10 gph for 3 to 6 seconds.

The use of an external pre-heater and an external power source is recommended whenever possible to reduce wear and abuse to the engines and the electrical system. Pre-heat will thaw the oil trapped in the oil coolers, which may be partially congealed prior to starting in extremely cold temperatures. When using an external power source, the position of the master switch is important. Refer to Section VII, paragraph GROUND SERVICE PLUG RECEPTACLE, for operating details.

For quick, smooth engine starts in zero degree temperatures, use six strokes of the manual primers before cranking, with an additional one or two strokes as the engines start. In colder temperatures, use additional priming before cranking.

In very cold weather, no oil temperature indication need be apparent before take-off. After a suitable warm-up period (2 to 5 minutes at 1000 RPM), with cylinder head temperatures showing above 200°F, the engines are ready for take-off if they accelerate smoothly and the oil pressure is normal and steady.

During let-down, observe engine temperatures closely and carry sufficient power to maintain them in the recommended operating range.