

REPUBLIC AVIATION CORPORATION FARMINGDALE, LONG ISLAND, NEW YORK SERVICE DEPARTMENT

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SUBJECT: EMERGENCY KEEL LANDING

TIGHT SPOT?....Too dark to make a safe wheel landing?....Forced landing in a short field?....Then leave your wheels up and come in for a normal keel landing.

Through a year of flight testing, we have learned that an emergency keel landing apparently is a safe landing. In no case has damage been sustained by the hull and in no case has anyone ever been hurt. Recently a Sea Bee had the misfortune to run out of gas just short of the runway. The landing gear was already extended when the engine cut (quit). Being too low, there was no time to retract the gear. Therefore, the ship landed in a rough cornfield, rolled through a fence and uprooted a 6' tree. The forward end of the hull was damaged and the right wing was well beyond repair. Several non-structural pieces were damaged, but the cabin remained entirely intact and the occupants were neither bruised nor shaken. Rugged and safe as the airplane is, it still means a repair job. You can save work if there is time to retract the landing gear and make a normal keel landing.

At Farmingdale, we have accomplished keel landings on hard surfaced runways, on "sand beaches", and on turf. Other than polishing some paint off the keel, no damage has ever been sustained by the airplane. The most successful landing is on turf where grass lubricates the slide to a smooth stop in a short distance.

We hope it may never be necessary, but should you be in a tight spot retract your gear, then move the landing gear selector handle back into "landing gear up" position and start pumping. The first few strokes will unlock the gear and move it sufficiently aft to permit it

to swing on landing. The extent of damage in this case will be limited to breakage of the locking yode or the actuating cylinder rod end but this is slight when compared with the repairs mentioned above. In case of an emergency, a keel landing is the best way out and should bring you to a smooth stop.