rev. NR 11/17/08

# Flight Planning

It gets dark early; the boonies are empty; it gets mighty cold. Just in going from here to there, you may be flying tougher than intended. Stay near civilization. Be sure the destination is still there. Even in good wx, there may be blowing snow, plows on the runway, snowbanks, glare ice, sun right down the runway. Take your toothbrush vs. possible need to RON somewhere. You might have to abandon plane, use other transportation, pick plane up or arrange to ferry later. Ice is Not Good! It won't hurt to go have a look, but have some gold-plated outs. Snow can develop fast over a wide area. (It's VFR between the snowflakes, but!)

## Preflight at Hangar

Watch your footing. It's easy to slip on the snow and ice when pulling plane out. On the Pine Hill ramp, the little blobs under light snow are apt to be turkey-shit! Frozen tank drains ground the airplane. Get a mechanic to check. Water in fuel may freeze at altitude, cause fuel starvation. Dead battery — get it recharged. If frozen — remove from plane. Caution, loss of tire pressure in extreme cold. If a thaw and re-freeze: check freedom of controls, including trim and throttle. Take extension cord. Destination may have 120 V outlet for block heater.

# Away from the Hangar

Frost and ice off surfaces. Ice out of flap gaps and tracks.

Don't scrape plexi, paint, or hammer on aluminum. Auto windshield anti-frz OK Static source and lines free of ice (or water), esp. after wind-driven freezing rain. Preheat (or warm in heated hangar) at +20°F or lower – API picks up bill. Conserve battery power, keep battery charged. Use cold start procedure in POH. Don't over-prime. Wait for fuel to vaporize. Have fire extinguisher handy. Tricks not necessary to get started. (Starting-fluid, unlit propane, other stunts not authorized!) Caution; hot mag possibility; always observe full prop discipline! Use preheat to thaw switches or relays that stick (but don't set plane on fire). Use heat to free a stuck starter pinion. Don't let idiots hammer on it.

## **Taxiing**

Defroster on. Avoid especially night t.o. with pax breath condensing on windows. Close cowl flaps, use carb heat to help engine warm up. (Open, remove ht for t.o.) Check gyros while taxiing; check gyro bearings not ominously noisy. Don't bob into ruts, hit snowbanks, skid on glare ice. (Swing into wind if req'd). Don't taxi over grates; don't splash through puddles (risk of subsequent freeze). Watch wind when taxiing. In Cessnas, you're flying until you're tied down!

## Runup

Oil temp approaching bottom of green before t.o. Prop must cycle OK and return to flat pitch.

#### Takeoff

After waiting in raw weather, check for 182 carb ice immediately before takeoff. Snow, slush, or mud will increase the takeoff roll.

Be prepared to go on instruments instantly, esp. for night "black-hole" departure. If A/S or altimeter quit or give wild readings, get alt air; use GPS altitude. Use GPS compass if DG quits. Be able to fly and land "no-panel" in emergency.

#### Cruise

Be sure alternator remains on line (especially after a hard start in the winter). In-flight icing – check wings with flashlight at night. Exercise prop if it ices up. Begin right away to work your way out of icing conditions!

Oil may overheat in extremely low OAT's. Close cowl flaps (but watch cyl head temps); land, have mechanic check for oil congealing in cooler.

## Landing

Carb ice in the 182 – get heat on before closing throttle. Too late may be too late. Gusts, wind-shear – be ready to get nose down, add power, etc.

Use little or no flaps, use engine power and wing-down to land in heavy x-wind. Go somewhere else if x-wind or runway conditions are too hairy.

If iced-up, stall speed (and risk of tailplane stall) will have increased. Don't use flaps; avoid maneuvering. Pick a long runway; land faster than normal.

In snow, gravel, mud, use soft-field technique where needed; keep prop up and out of harm's way.

## Taxi

Get help to walk the wings if winds are bad. Don't fall down on the glare ice and break your head when you deplane.

#### Shutdown

Re-engage starter pinion if plane will be left out in the cold.

Position prop to avoid ice collecting in spinner.

At tiedown, don't leave ropes and knots in puddles where they will freeze up. At Pine Hill, gates could fail on a bitterly-cold evening, leaving you trapped between them. (Have cellphone, auto-horn, lights, warmth, etc.)

On return or ASAP thereafter: take care of schedule update, notifications, etc. even if hour is late or wx is rotten. Others may be making plans.