



## Enjoy Winter Flying Safely

Winter flying in the Rockies can be some of the best flying around. Aircraft perform much better in the cooler air, and we generally don't get that nasty convective turbulence in the afternoons. However, there are some operational considerations that we need to keep in mind.

FARs and Aspen Flying Club policy require that ALL frost, snow and ice be removed before flight. At temperatures below 25° F (-7° C), aircraft engines MUST be pre-heated. If you plan to fly early in the morning, be prepared to arrive at least an hour early to allow time to de-ice the airplane and/or pre-heat the engine. Consider flying after 9:00am so the sun can de-ice the airplane for you. Better yet, fly in the afternoon and let some other early bird do all that de-ice and pre-heat work for you! (Instructors have this one figured out.)

Don't even consider attempting a take-off if there is **ANY** ice, snow or frost on the airplane. NASA wind tunnel tests showed that frost on an airplane could reduce lift as much as 30% and increase drag by a whopping 40%! Combine these numbers with our high density altitude and you may never even get out of ground effect.

### **DE-ICING/PRE-HEATING**

There is de-icing fluid available for members' use, and it works reasonably well on frost or very thin ice. Again, engine pre-heating must be done any time the temperature falls below 25° F. Ask your friendly counter staff if you need de-icing fluid. The pre-heaters are generally kept out on the flight line in cold weather. Please check with your favorite flight instructor regarding the proper application of de-ice fluid and use of the pre-heater.

**DO NOT SCRAPE OR CHIP** ice, snow or frost off the airplane (no, you cannot use your American Express card!). There are brooms near the oil boxes that may be used to **brush** snow off the airplane. Please use extra care around the aircraft antennas (especially the ELT antennas). **DO NOT** use the broom on the windshields. Aircraft windshields are especially susceptible to damage. Even paper towels scratch the Plexiglas, and de-icing fluid stays on the windshield for a long time, making the window hard to see through. There are soft rags in the oil boxes for use on windshields.

### **STARTING PROCEDURES**

Use of manual priming is generally required in colder weather. Four to five shots of primer are sufficient. Do not over-prime or pump the throttle when cranking the engine; it could lead to an engine fire. Club rules do not permit members to hand-prop aircraft. It can be extremely dangerous.

### **GROUND OPERATIONS**

Beware of icy taxiways, runways and parking areas. Taxi *sloowly* and use extra caution in the aircraft parking areas on the ramp. Use caution when pushing aircraft back; it can be easy to lose your footing on icy surfaces.