

# GENERAL AVIATION WINTER WEATHER FLYING CHECKLIST

This checklist provides a high-level overview of key considerations for winter flying. Pilots should ensure they are thoroughly familiar with their aircraft's specific requirements and local weather conditions before flight.



## PHASE I: PLANNING & PREPARATION

- File** a flight plan and **request** flight following when available.
- Pack** cold weather attire and a survival kit in case of emergency.
- Consult** local operators about the winter environment and area-specific limitations.
- Use** a Flight Risk Assessment Tool (FRAT) to aid in decision-making.



## PHASE II: AIRCRAFT SYSTEMS

- Verify** the use of manufacturer-recommended winter weight oil.
- Inspect** the crankcase breather line for ice or blockages.
- Check** the heater shroud thoroughly for exhaust leaks.
- Test** the carbon monoxide (CO) detector or secure a portable unit.
- Confirm** control cable tension is adjusted for current temperatures with an Aviation Maintenance Technician (AMT).
- Maintain** a full battery charge or remove batteries when parked in cold temperatures.





## PHASE III: PREFLIGHT & START

- Remove** all frost, snow, and ice from all aircraft surfaces.
- Verify** that melted snow has not refrozen into clear ice on warm surfaces.
- Inspect** static wicks for brittleness before removing covers.
- Sump** all fuel tanks and filters to remove condensation.
- Clear** all ice and snow from pitot tubes, intakes, and fuel vents.
- Preheat** the engine and cabin while maintaining constant supervision of heaters.
- Limit** engine priming to prevent fire hazards and cylinder wall damage.
- Inspect** spark plugs for ice if the engine fires briefly and quits.



## PHASE IV: TAXI & TAKEOFF

- Avoid** taxiing through slush to prevent freezing in wheel wells and brakes.
- Test** brakes early and avoid sharp turns or sudden stops.
- Limit** boost on turbocharged engines to account for low density altitude.
- Monitor** Cylinder Head Temperatures (CHT) for overheating during the climb.





## PHASE V: EN ROUTE HAZARDS

### **Carburetor Ice:**

- **Monitor** for warning signs: RPM loss, manifold pressure drops, or engine vibration.
- **Apply** full carburetor heat immediately if icing is suspected or before reducing power.

### **Carbon Monoxide (CO) Poisoning:**

- **Monitor** for warning signs: sluggishness, headaches, or ringing in the ears.
- **Shut off** cabin heat and open fresh air vents immediately if symptoms appear.
- **Land** as soon as possible and seek medical attention.

### **Whiteout**

- **Transition** immediately to instrument flight if ground contrast is lost.
- **Declare** an emergency if not instrument rated.



## PHASE VI: LANDING & POST-FLIGHT

**Circle** the field to **inspect** the runway for snowdrifts and obstacles.

**Verify** the runway surface to avoid landing on snowmobile tracks.

**Refuel** all tanks immediately after landing to prevent condensation.

**Install** engine, pitot, and wing covers to secure the aircraft.



## WINTER SURVIVAL ESSENTIALS

- ❑ **Mindset:** Survival is 80% mental. Do not give up – use your mind to conquer fear!
- ❑ **Immediate Action:**
  1. Take care of injuries first.
  2. Stay away from the aircraft until fumes dissipate, then stay with the aircraft.
  3. Shelter from the cold—body heat escapes 25x faster from wet clothing.
- ❑ **Kit Recommendations:**
  - Metal container (for heating water/signaling).
  - Emergency Rescue Blankets (for body heat retention and signaling).
  - Matches, candles, knife, and high-energy foods.



For more winter weather resources visit  
[www.faa.gov/winter-weather](http://www.faa.gov/winter-weather)



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