

# Cold Weather Operational Guidelines & Tips

The following is guidance for rental pilots and students in regards to flying in cold weather at Executive Flyers. Decisions on whether flight operations will be suspended, or whether specific aircraft may or may not fly, will be made by Ed Keins or Michael Goulian, and any questions will be referred to them.

1. To avoid frostbite, flight operations will be suspended if wind chills reach  $-35^{\circ}$  F or lower. (This occurs at approximately  $-5^{\circ}$  F with 25 knots; a wind chill chart is at the dispatch desk).
2. Pilots and passengers should dress for the outside environment, and even consider carrying survival equipment in case of an off-airport landing. Planning for night cross country flights should use airports where services are available if fueling, external power, or minor maintenance are required.
3. Pre heat will be used (when available) for starting whenever temps are below  $32^{\circ}$  F.
4. Pre heat must be used (EFA a/c will not be started) whenever temps are below  $20^{\circ}$  F. Renter pilots must assure that preheat services will be available at destination airports, and are responsible for all fees involved. Aircraft will not be dispatched for flights that cannot meet these criteria, and dispatchers will assure that renters are aware of these absolute limits, and of their responsibilities.
5. EFA aircraft will not be started (with or without preheat) when surface temperatures are below  $-10^{\circ}$  F.
6. Aircraft without winterization kits (cowl baffles) will not be used for training maneuvers (rpm cycled below the green arc) at OATs below  $+5^{\circ}$  F.
7. Aircraft with cold weather kits may be flown for training maneuvers at OATs to  $-10^{\circ}$  F.
8. In any case, once the engine is running, oil temperature becomes the gating factor; this is especially important in the C152s, which cool quickly. Do not take off until the oil temperature is in the green, and avoid maneuvering with low power settings that allow the engine to cool. Both shock cooling (sudden power changes) and low oil temperatures (continual low power operations) should be avoided. Pattern work (approaches) should use higher flap extensions and flatter profiles requiring power, rather than power off segments.
9. Because of the problems with paint cracking on the fabric covering, the Decathlon will not be used for any aerobatic maneuvers with OATs below  $20^{\circ}$  F, or for any flight below  $+5^{\circ}$  F.
10. Operations to/from Hangar 24 will be conducted only for storm (snow/ice) protection, not for normal cold weather operations. West Ramp tie downs and preheat operations are adequate.

**Note:** Aircraft that have been stored in a heated hangar, or have been flown within the previous 30 to 60 minutes, will not require preheating unless they have cooled below the required starting temperatures.

