

Monthly Safety Briefing

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"The majority of aircraft accidents are due to some type of error of the pilot. This fact has been true in the past and, unfortunately, most probably will be true in the future."

— Hugh Harrison Hurt, Jr., in the preface of his book *Aerodynamics For Naval Aviators*, NAVWEPS 00-80T-80, August 1959.



Tonight's Safety Topic

- Hot Weather Operations
 - Aircraft Performance
 - Engine Limitations
 - On the Ramp
 - Survival Tips

**111° forecast
for Friday!**

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Tonight's Safety Topic

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- Quick Aside

- EAA Webinar Tomorrow 1700-1830

- Amateur-Built Condition Inspections**

- Check EAA website for further info

- <https://www.eaa.org/eaanews-and-publications/eaawebinars>

Hot Weather Operations

- Aircraft Performance

- Density Altitude will regularly exceed 4000' at Falcon in the summer (temp >92°F) and **can exceed 5000'** (>110°F).
- Remember, it's runway temperature that counts, not the reported shade temp!
- DA at FLG can easily exceed the service ceiling of some aircraft. 80°F @FLG = 10000' DA. 85°F @PAN = 8300' DA.
- Remember that POH charts are very optimistic. For an older airplane & engine, you might 2X the distances. **Remember to LEAN!**

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Hot Weather Operations

- Engine Limitations

- Air-cooled engines depend on the ΔT between the cylinders and oil cooler, and the outside air.
- Watch for CHT and oil temperature limits. Also, watch for low oil pressures at idle.
- Climb at higher airspeeds, with reduced throttle and richer-than-normal mixtures. High CHTs reduced detonation margins.
- Avoid long delays on the ground. Especially **avoid medium length (~1 hour) ground stops**, as this is the time for peak engine temps.

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- On the Ramp

- Ramp temperatures can easily exceed shade temps by **25°F** or more.
- Pre-flight in the shade!
- Stay well hydrated!
- Always wear a light-colored hat.
- Damp clothing (including cooling towels) and damp head gear can really help cool you off (but won't do anything for the engine!).

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- Quickie Summer Survival Tips

- WATER is the primary concern in the desert. Carry water in the plane. 1 Gal = 8#. Sun-screen and a wide brimmed hat are great.
- Use ADS-B and maybe a satellite tracker like SPOT. There are lots of areas in Arizona without cell phone coverage.
- Stay near your plane, but in a shaded area, unless you know where you are and know you can get safely to civilization. Searchers will be looking for your plane, not you!
- Avoid low areas that could be subject to flash flooding during the monsoon.