

#### ANNUAL GA BBQ

Saturday, October 10<sup>th</sup>, is the date selected for the annual SLCDCA General Aviation Barbeque at South Valley Regional Airport (U42) in West Jordan, UT. Food will be served beginning at 1:00 p.m. in Mark and Terry Losee's Alta Aircraft Maintenance hangar

Fire extinguisher servicing will be available for a reasonable fee starting at 11:00 a.m.

#### TVY RESTROOM FACILITY

The restrooms at Tooele Valley Airport are now equipped with sinks. Please note that the water used in the new sinks is non-potable and not certified for culinary purposes.

#### U42 PLANE WASH

The plane wash at South Valley Regional Airport has been closed for the winter. It will be re-opened in the spring when freezing weather subsides.

#### FACING DOWN FUEL COSTS

By Peter A. Bedell in AOPA Pilot Magazine

Now that aviation fuel costs more than \$4 a gallon in many parts of the country, it has become a more significant expense in the overall operation of an airplane. Unfortunately, many of the habits we formed in operating airplanes when fuel was  $\frac{1}{4}$  or even  $\frac{1}{2}$  of what it costs today are not optimal given the current fuel prices.

The following simple list of some techniques and products will save fuel or reduce fuel costs over the long term.

**Wind awareness.** Winds always significantly impact the efficiency of aircraft. Ride a nice tailwind in an efficient airplane and you can relax knowing that you're getting better gas mileage than in your family car. Conversely, powering into a strong headwind requires lots of time burning lots of fuel to go a short distance. A technique to minimize or maximize the effects of wind is to climb shallowly into a headwind and steeply into a tailwind. When climbing into a tailwind (assuming the tailwind gets stronger as you climb), you can spend more time in the stronger push aloft by climbing at or near your

airplane's best-rate-of-climb speed. The quicker you get to altitude, the quicker your climb fuel burn will reduce to the cruise range. For a headwind, the opposite technique works well in most cases. A flatter, higher-speed climb will allow you to put more miles behind the airplane while in the lighter winds at lower altitude. Typically, leveling off at lowest smooth altitude will be the best trade-off for comfort and efficiency.

**Lean aggressively on the ground.** Although piston-aircraft engines burn comparatively little fuel on the ground, the practice of leaning on the ground has always been good for engine condition. In many cases, the engine simply runs smoother and cleaner since you won't be washing down the cylinders with excess fuel that contaminates your oil besides being wasteful. It also curtails spark-plug fouling. If you're afraid you'll forget and take off with the mixture leaned, lean so aggressively that the engine will starve of fuel at anything higher than your run-up rpm. At the low power settings used during ground operations, you can lean as much as you can without fear of damaging the engine.

**Fly high.** Most non-turbocharged light aircraft are most efficient at altitudes around 6,000 to 11,000 feet msl depending on aircraft type and whether the propeller is fixed or variable pitch. At the higher altitudes there is a trade-off between available engine power and the lower drag of the thinner air. One caveat is the length of the trip to be flown; if it's a short trip, the fuel used to get to altitude will negate the extra true airspeed gained by flying higher. In addition, altitude can really take a toll on the human body because of the lack of oxygen. Bring an oxygen bottle, if necessary.

**Seek out the smooth air.** Flying in turbulence can slow your cruise speed down by 5 knots or more. Besides being a more comfortable ride, the lack of turbulence can save fuel.

**Preheat.** Most pilots are well aware of the importance of preheating aircraft engines in cold weather to minimize engine damage, but preheating also can be used in more balmy temps to minimize engine warm up time, which consumes fuel. It can take 10 minutes or more to warm a 500-pound engine up to operating temperature from a start temperature of 55° F. Plugging in your engine a couple of hours prior can get the engine core temperature up to its operating temperature by the time you are ready to depart.

Then you can taxi right to the runway and take off as soon as you're done with the preflight checks. The cumulative effect of eliminating engine ground run warm-ups will save fuel over time.

**Get your clearance before you start.** Obtain your air traffic control clearance on a handheld radio or on the airplane's radio and load your flight plan prior to starting the engine.

**Don't park your airplane with full fuel tanks.** Even on relatively cool days, it's not recommended to park an airplane in the sun with full tanks. As the fuel heats up, it expands and has nowhere to go, except out the vent and onto the ground. Some Cessna's also are particularly prone to venting fuel if they are parked left-wing low. Tell the fuel handler to stop filling when the level is an inch or two below the cap. This should allow some room for expansion. Just remember that you aren't "topped off." Positioning the fuel selector to the left will mitigate cross feeding between the tanks and additional overflow.

**Carry only the fuel that's required for the trip.** Many pilots habitually "top-off" tanks every time they fuel. Extra fuel is unnecessary weight and may not be necessary for a particular trip. Airlines have always subscribed to this rule of carrying only the fuel that's required for a given trip.

**Auto gas STCs.** For some time auto gas, or "mogas," has been successfully used as an alternative fuel for airplanes powered by low-compression engines via the approval of a supplemental type certificate (STC). Auto gas can be obtained for a fraction of the cost of avgas, but its use is not without controversy. Although the potential to save a lot of money lies in the use of autogas, the downside should be carefully researched.

**Fuel price Web sites.** The best way to save money on fuel is to pay less at the pump. AirNav [www.airnav.com](http://www.airnav.com) and 100LL.com [www.100ll.com](http://www.100ll.com), among others, allow users to scour the Web for the lowest fuel prices in the area that they intend to fly. Be sure to check with the FBO by phone to make sure the price found on the Internet is still good. A new shipment of fuel can make obsolete the price quoted on one of these sites.

**Don't throw out that fuel sample.** After sampling fuel from your aircraft's fuel tank-if you're sure the sample is pure, clean fuel-toss it back in. If in doubt, toss the samples into a tug, nearby lawn mower, or container provided by the airport. It'll go further in an engine than it will if discarded. Just don't pour it into your car or anything else that has catalytic converter in the exhaust system. Despite being referred to as "low lead," avgas has quite a bit of lead in it. A handy gadget is the GATS jar available from pilot supply shops for approximately \$20. This fuel strainer allows you to inspect your fuel sample and pour it back into the tanks.

## HELPFUL POINTS OF CONTACT

**For GA operational, facilities maintenance, aviation newsletter, airfield, and SLC Title 16 questions call:** Steve Jackson, SLCD General Aviation Manager, 801-647-5532 or e-mail at [steve.jackson@slcgov.com](mailto:steve.jackson@slcgov.com).

**For hangar lease and repair questions call:** Mike Rawson, Properties Management Specialist, at 801-575-2894 or e-mail at [mike.rawson@slcgov.com](mailto:mike.rawson@slcgov.com).

**For aviation security questions call:** Connie Proctor at 801-575-2401.

**For gate access problems call:** Airport Control Center at 801-575-2401.

**For emergencies call:** at SLCIA, 801-575-2405  
at TVY or U42, 911 then 801-575-2405



### GATS JAR FUEL SAMPLE TESTER

What distinguishes the GATS Jar from other sample testers/strainers is its ability to separate contaminants from raw fuel to allow one to pour the contents of the jar back into the tank without having to worry about decontaminating your fuel supply.

Always use good judgment and pour back in only the cleanest of fuel samples.

Maintaining fuel awareness and implementing sound fuel conservation measures will safely stretch your available fuel dollars.

### ELECTRONIC GA NEWS

If you would like to receive the Salt Lake City Department of Airports' monthly general aviation newsletter by e-mail, send a request including your e-mail address to: [steve.jackson@slcgov.com](mailto:steve.jackson@slcgov.com).

### UPCOMING EVENTS

**Leading Edge Aviation Logan (LGU) -** Leading Edge Aviation has a free breakfast in their hangar on the 2nd Saturday of each month from 8:00 am to 10:00 am. They'd enjoy seeing you there. For more information about Leading Edge events, visit [www.leaviation.com](http://www.leaviation.com).

**October Local FAA Seminars** The FAA Safety Team is sponsoring local flying seminars. At publishing time the October schedule was not available. Seminar and related information may be found at [www.faasafety.gov](http://www.faasafety.gov) under events/seminars or one may contact Dennis Seals FAA Safety Program Manager, at 801-257-5056.