

FALL GENERAL AVIATION BBQ

The Salt Lake City Department of Airports (SLCDA) will host the tenth Annual General Aviation (GA) Barbecue at South Valley Regional Airport (U42) in West Jordan, UT on Saturday, September 21st from 1:00 until 3:00 p.m. in the Leading Edge Aviation FBO hangar.

All Star Fire Protection has agreed to inspect and service fire extinguishers for a \$15.00 fee between 11:00 a.m. - 2:30 p.m. on the FBO apron south of the venue hangar. SLCDA will provide food and entertainment for GA tenants and family members.

UAOA FALL CONFERENCE SCHEDULED

The Utah Airport Operators Association (UAOA) 2013 Fall Conference is scheduled for September 5th - 6th, at the Riverwoods Hotel and Conference Center in Logan, UT. For more information visit the UAOA website at www.uaoa.org.

UTARNG PREPARES AIRPORT SITE FOR HANGAR

The Utah Army National Guard (UTARNG) Army Aviation Support Facility (AASF) is expanding at South Valley Regional Airport in West Jordan.

The large dirt berm on the corner of 7800 South and Airport Road is being removed. The soil is being relocated to fill a depression on the airport's northeast corner at 6200 South and Center Park Drive and to accommodate construction of the first of two 70' by 400' unheated aircraft storage hangars is scheduled for construction this fall.

CALCULATING DENSITY ALTITUDE

How does one calculate density altitude? Just two pieces of information are needed for a rough approximation... pressure altitude and temperature. Where is this information found? For temperature, you look at the outside air temperature (OAT) gauge in the airplane. For pressure altitude, set the window in your altimeter to 29.92. Whatever value it reads is pressure altitude.

Here's the formula to determine density altitude: density altitude (DA) = pressure altitude (PA) + [120 x OAT]

Really, it's a simple formula: with the value for pressure altitude from the last calculation; OAT is degrees Celsius read off our OAT (say it's 35 °C today).

So, in the example above: DA = 5,470 + [120 x 35]. Working out the math, our density altitude is 9,070 feet.

It's a rough estimate, but quite close to the actual value.

Read more at <http://www.flyingmag.com/technique/tip-week/calculating-density-altitude-pencil#JSDzdTbdyfVkuFVC.99>

AIRCRAFT ELT FACTS AND INFORMATION

Emergency locator transmitters (ELTs) are specifically designed for use on aircraft. They are designed to activate automatically under the force of an impact such as a crash, or can be activated manually by someone aboard. Currently, ELTs available to aircraft owners operate on two different frequencies for satellite alerting: 406 MHz digital emergency beacons and 121.5/243 MHz analog emergency beacons. The Federal Aviation Administration (FAA) mandated ELT installation in all aircraft operating in American airspace in 1974.

ELTs are required for most general aviation aircraft. They operate on a primary frequency of 121.5 MHz, 243 MHz, or 406 MHz, and help search crews locate downed aircraft and rescue survivors.

When activated, ELTs emit a signal that is detected by the international satellite system for search and rescue, COSPAS-SARSAT. Position information is calculated and relayed to the appropriate Joint Rescue Coordination Center (JRCC) for action.

The 121.5 MHz signal common to all ELTs also produces a distinctive siren-like tone that can be heard on a radio receiver tuned to this frequency. This signal helps incoming search and rescue (SAR) responders pinpoint an aircraft's position. During routine operations, hearing a 121.5 MHz signal also alerts pilots to the inadvertent activation of their ELT. The frequency should therefore be monitored briefly after each flight.

Properly maintained ELTs with serviceable batteries should provide continuous operation for a minimum of 24 hours at a wide range of temperatures. Batteries that remain in service beyond their recommended life may not provide sufficient power to produce a usable signal. ELTs that contain outdated batteries are not considered to be serviceable.

Since February 1st, 2009, only ELTs operating on 406 MHz can be detected by COSPAS-SARSAT satellites (the international satellite system for search and rescue) and only they will ensure the COSPAS-SARSAT system is automatically notified in the event of an aircraft crash.

The basic purpose of a distress radio beacon (ELT) is to help rescuers find survivors within the so-called "golden day" (the first 24 hours following a traumatic event) during which the majority of survivors can usually be located and saved.

Since the inception of COSPAS-SARSAT in 1982, distress radio beacons have assisted in the rescue of over 28,000 people in more than 7,000 distress situations. In 2010 alone, the System provided information which was used to rescue 2,388 persons in 641 distress situations.

Most beacons are brightly colored and waterproof. The units have a useful life of about 10 years, operate across a range of conditions (-40°C/°F to +40°C/+104°F), and transmit for 24 to 48

hours before the battery depletes. A simple analog siren tone is transmitted continuously until the battery dies.

In the case of 121.5 MHz beacons, the frequency is monitored by most commercial airliners, military aircraft, and most general aviation pilots. Military aircraft normally monitor 243.0 MHz UHF frequency for emergency signals.

To make sure that the ELT is operating it will need to be tested operationally and maintained according to regulations.

Tests should be conducted only in the first five (5) minutes of any hour and then only for a maximum of three audio sweeps of the transmitter. A VHF receiver tuned to 121.5 MHz should be used to monitor the test. The 406 MHz data message will be transmitted after fifty (50) seconds of the ELT being activated.

The ELT system should be tested in accordance with the manufacturer's instructions for a new installation. This testing is conducted to verify the code and will usually require the use of a system tester. The remote control should be switched through each mode of operation according to instructions to determine that the equipment is operating correctly

Aviation rules require an operational check of the ELT in accordance with Maintenance Part 43 at intervals not exceeding 12 months or 100 flight hours, whichever comes first. Some transport aircraft are exempt from that rule.

The inspection of the aircraft prior to the release back into service should include the following inspections:

ELT, antenna, antenna cable and remote switch installation for condition, security and being free of corrosion, placard for legibility, system self test should be carried out in accordance with the manufacturer's instructions

Usually, routine maintenance will not render an ELT unserviceable.

The rules also require an inspection of the battery condition and expiration date. This must be recorded in the aircraft maintenance logbook. If the remote control/indicator has a battery fitted, the expiration date of this battery must also be recorded in the maintenance logbook.

Batteries are required to be changed on or before the expiration date; or when the transmitter has been in use for more than a cumulative hour. If the battery is replaced, the ELT must be tested for serviceability according to the manufacturer's instructions.

There is no requirement in the United States to replace the first and second generation 121.5-MHz ELTs with 406 MHz ELTs. However, 121.5/243-MHz distress signals transmitted from ELTs operating on the lower frequency will only be detected by ground-based receivers such as local airport facilities and air traffic control facilities or by overflying aircraft. It is important to note that since 2009, existing 121.5-MHz ELTs, although still legal from the FAA's perspective, will provide extremely limited assistance if an aircraft crashes, especially in a remote location.

The cost of radio beacons varies according to performance and specifications. The new 406 MHz ELT transmits a more accurate and near-instantaneous emergency signal by utilizing digital technology and it activates 81-83 percent of the time. This results in enabling the search and rescue personnel

HELPFUL POINTS OF CONTACT

For General Aviation operations, facilities maintenance, aviation newsletter, airfield, and SLC Title 16 questions contact: Steve Jackson, SLCDA General Aviation Manager, (801) 647-5532 or e-mail at steve.jackson@slcgov.com.

For hangar lease and repair questions: Matt Jensen, Airport Properties Specialist at (801) 575-2957 or e-mail him at matthew.jensen@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) 575-2911
at TVY or U42, 911 then (801) 575-2911

For other GA information call the GA Hotline: (801) 575-2443

to have critical information on an aircraft in a timely manner.

ELT's are mandatory for most aircraft, but "upgrading" to the advanced 406 MHz beacons is strictly a personal choice.

SLCDA GA NEWS ELECTRONIC OPTION

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 current e-mail address to: steve.jackson@slcgov.com.

UPCOMING EVENTS AND NEWS

Leading Edge Aviation (LEA) at South Valley Regional Airport (U42), West Jordan, UT and at Logan – Cache Airport (LGU) hosts multiple events each month including breakfast fly-ins, dinners, and informative classes.

For more information about Leading Edge events, visit: www.leaviation.com.

EAA 23, the Utah Chapter of the **Experimental Aircraft Association** will hold its monthly meeting and a catered dinner in the FBO hangar at Skypark Airport (KBTF) on Friday, August 16th at 6:30 p.m. The keynote speaker will be Gayle Winterose, a former USAF B-25, B-36, and KC-97 pilot. Mike Guarino will also speak about his experience with the atomic bomb carried on the B-36. Contact Shawn_Crosgrove@msn.com at (801) 568-2571, or visit their website at <http://www.eaa23.org/> for more information.

An EAA sponsored Young Eagles Rally will be held at the Nephi, UT Municipal Airport (U14) on Saturday, August 24th from 8:00 a.m. – 11:00 a.m. to introduce young people to general aviation. Contact Shawn_Crosgrove@msn.com at (801) 568-2571, or visit their website at <http://www.eaa23.org/> for more information.

Wendover Airshow Cancelled

The 2013 Historic Wendover Airfield Air Show (ENV) scheduled for September 21 has been cancelled.

AUGUST FAA PILOT SEMINARS

Upcoming activity and seminar information is available at: www.faasafety.gov under the "Activities, Courses & Seminars" tab or contact Rick Stednitz, FAA Safety Program Manager at (801) 257- 5073.



Fair summer breezes and blue skies!