Arizona Pilots Association

http://www.azpilots.org

APA NEWSLETTER

2013 July

Asa Dean, Editor

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President's Report

Tommy Thomason, APA President

Density altitude, density altitude, density altitude. We hear it all the time but, do we really understand what it means? Every year in Arizona, we seem to have what I call “flat-landers” coming through our beautiful state enroute to other cooler places. They stop for fuel at an airport along the way with a field elevation of 6,000 feet or more on a hot day where the density altitude is typically over 10, 000 feet, top off and attempt to continue their flight. Unfortunately, more than one of these attempts has ended in tragedy.

A couple of weeks ago, I witnessed a fellow pilot load his plane with suitcases (big ones), a large dog, spouse, and full fuel and attempt to take off at about 9am on a 2% up hill runway, a slight quartering tail wind, and rising terrain on the departure end.

The density altitude had been increasing quite quickly since shortly after the sun came up. About a third of the way into his takeoff roll, I heard the pilot pull his power back to idle and continue to the uphill end of the runway.

I called him on the radio to see if everything was OK. He said he wasn’t able to get any airspeed and decided to takeoff down hill with the headwind. He was off the ground on this downhill attempt at about a third of the runway and climbed out without any other concerns.

The initial decision to take off uphill was questionable but the decision to abort the takeoff demonstrated good pilot decision making. As a general rule, if you don’t have 70% of your rotation speed at 50% of the runway, ABORT. What does this mean? If you typically rotate at 55 to 60 indicated airspeed, you need 38 to 42 indicated by the time you get halfway to the other end of the runway. This will get you off the ground and into ground effect but can you climb over that hill or rising terrain just past the end of the runway?

Many of us look at how much runway we need to get off the ground or even to clear a 50 foot obstacle but neglect to consider our climb performance after we get airborne. You are going to read more about density altitude in this month's newsletter and I don’t want to bore you to death so, let’s pass the word to those who may not be as experienced or have the performance needed to be safe on a hot summer day here in Arizona.

Have Fun and Fly Safe...

Airplane Camping, What to Bring

Tommy Thomason, APA President

Airplane Camping is a step function above backpacking. You can carry enough equipment to be more comfortable but, you still have to be aware of potential overloading, gross weight, and density altitudes, especially in the warmer seasons that the Southwest has to offer. The following is a list of equipment to consider for your next camping adventure. You don't have to have the best and most expensive products out there on the market but, you do need something that will last several seasons and provide the comfort you deserve when out in the boonies.

- Sleeping Bag
- Shelter (tent)
- Mattress & inflator
- Ground cover (plastic tarp)
- Chair, folding
- Cooler, collapsible
- Cookware (coffee pot, pan, plates, utensils)
- Camp stove (single or double)
- Lighting (flashlights, lantern)
- Matches, lighter, etc
- Table (optional)
- Portable toilet
- Water, water, water
- Food

Other items you may want to consider having in your airplane are:

- Tie downs
- Tool kit
- Survival Kit
- Tire repair / air pump

Depending on the situation, I may pack very light or, if my wife is coming along, I take the back seat out of my 182 and pack just about everything short of the kitchen sink. Surprising enough, it's not so much the weight as the space I need to carry enough to make for a comfortable weekend. As I weighed everything I had piled on the hangar floor, there was much less than 200lbs of stuff but, could barely get it all in the plane. This included a 12' tent, two thick sleeping bags, a queen size cot and air mattress, folding chairs, and a honey pot (toilet).

Executive Director's Report, Jul, 2013

Jim Timm, Executive Director

Well, summer is here and fun flying is grinding to a halt. Somehow it seems a bit strange because just as the folks in the northern part of the country are getting their airplanes out for the start of the flying season we are going into a summer hibernation of sorts. Anyway, when heading for the north country, please be sure to check the density altitude and fly safe and have fun.

There has been a continuing concern about the "aging pilot" issue and it seems very few young people are getting into aviation and becoming pilots. The EAA is trying to reverse the trend with their "Young Eagles" program where they introduce young people under the age of 18 to the thrill of flying by giving them a free airplane ride. Hoping the experience will spark an interest and encourage them to want to learn to fly.

Once this interest is sparked, learning to fly can also be a daunting financial experience for a young person. That is where, on a local level, APA is trying to step in and assist future pilots by making some scholarships available to young deserving student pilots. The last couple of years APA has made scholarships available to East Valley Institute of Technology (EVIT) flight students. The EVIT's aviation program is based out of the school's east campus near ASU Polytechnic at Phoenix-Mesa Gateway Airport.

The EVIT program gives high school students a look at different aviation careers, from pilots and mechanics to air traffic controllers and flight attendants. For those who choose, it provides a way to gain both a pilot's license and college credit. Most EVIT students start the school's career and technical classes during their high school junior or senior years, spending part of their day in classes at their high school and part of the day in EVIT classes or flight training.

With EVIT's partner program, a student can transfer to the University of North Dakota to complete their college degree. In presenting these scholarships, it's great to see the tremendous enthusiasm and intense interest some of these young students have for flying.

If you would like to help provide additional support for these scholarships, please send donations to: APA Flight Scholarships, Arizona Pilots Association, P.O. Box 61242, Phoenix, AZ 85082-1242. Remember, APA is a 501-c3 nonprofit organization and the donations are tax deductible. Your additional support would be greatly appreciated and a young future pilot would also thank you!

When the government sequestering issue first started, the military demonstration teams canceled their airshow schedule, stating a loss of funding, and I noted at the time, an FAA comment about also cutting back on some of their involvement in airshows. I'm sure almost everyone has heard that because of the sequestering cutbacks the FAA charged Sun and Fun for providing air traffic controllers for their event, and Sun and Fun paid the bill. As you may know, in spite of all the protests, they are pressing the EAA to pay for the controllers at this summer's AirVenture and it appears that the EAA will be paying the bill, but again, under protest. The precedent has been established I fear. From comments being made, apparently the FAA will not be providing air traffic controllers for the COPPERSTATE Fly-In this fall unless they are paid for it. It appears that the way is being paved for user fees. If the Obama administration gets their way and places fees on the business aircraft operations, we will also be facing operational fees much sooner than we would like to think. For the COPPERSTATE Fly-In this fall, they will be moving on as planned without the benefit of controllers. They believe that, like the Cactus Fly In, they are small enough and not having an air show requiring airspace restrictions, that they can safely operate with a carefully planned arrival NOTAM as they have in years past.

MISCELLANEOUS ITEMS

AOPA is seeking sport pilot data for their third class medical petition. AOPA is trying to gain a better understanding of the number of pilots exercising sport pilot privileges, and an approximate number of hours this group flies each year. This information will be used in support of the AOPA/EAA third class medical exemption request made to the FAA. Currently, the FAA and the general aviation industry have no way to quantify the amount of time flown by those pilots holding private pilot certificates or higher who choose to allow their medical to lapse and exercise sport pilot privileges. No personally identifiable information will be gathered. Take the survey.

From a meeting to discuss the Williams Gateway Airport (IWA) airspace issues, it appears that the voluntary measures that were published in a letter to airmen have been sufficiently effective in reducing the number of TCAS alerts that the air carriers had been getting that operate out of IWA. Based on comments from FAA representatives, it is hoped that the recommendations will remain effective enough to avoid consideration of a regulatory airspace change for the time being. It is possible that

implementation of Class C airspace over IWA may be pushed by the airport management. It should be noted that the airport would qualify for Class C airspace based on available inplanement numbers.

I hope APA pilots are taking advantage of the Luke AFB Aux. Field 1 ILS for practice instrument approaches. The latest word from the Luke AFB TRACON is that, from their perspective, it is working well. The approach plate is available from our web site or the the LAFB website. We are waiting on a determination from the Scottsdale FSDO if the Luke ILS can be used for an airman check ride ILS approach that would not require a landing.

Aviation safety needs to be a concern for all of us. From the National Transportation Safety Board (NTSB) records, there were ten accidents in the last reporting period with one of the accidents involving two aircraft. Unfortunately, we had far too many fatalities happening this past reporting period. Of the reported accidents, two resulted in fatalities, one accident resulted in a serious injury, the remaining accidents resulted in no injuries. I wish we could identify a definite trend in these accidents and initiate a corrective action program to reduce the accident rate. See my July Aviation Accident Report for details.

A significant number of airports around the state are having runway repair/upgrade projects scheduled for this summer, so be sure to check for NOTAMS before you depart. You don't need to have a surprise when you arrive at your destination and discover something like the runway is closed for resurfacing. We will advise you when we receive specific notices of projects being started.

We are continuing to work with airports around the state providing a general aviation user perspective in the process of updating their Airport Master Plans. We are presently working on the updating of both the Gila Bend Municipal Airport and the Nogales International Airport Master plans and an update of the Phoenix Sky Harbor FAA Part 150 Noise Study.

Things To Do - Places To Go For Breakfast:

- The fly in breakfast at Coolidge Airport (P08) has been halted until fall.
- The last Saturday of the month there is still a Fly in breakfast at Casa Grande Airport (CGZ) Time: 7:00 to 10:00 am.
- The Casa Grande breakfast will continue through the summer as it is held in the air conditioned airport terminal.
  (Both of these fly in breakfasts are put on by a service group in their respective communities to raise funds for community service projects.)
- The third Saturday of the month there is a fly in breakfast at Benson (E95) @ Southwest Aviation
  (Rumor has it that there may be special fuel prices for breakfast attendees.)
- Check with the APA Getaway Flights program for weekend places to fly.

July Aviation Accident Summary

Jim Timm

In this regular reporting of aviation accidents that have occurred in Arizona, I hope we can learn from the mistakes being made and take the necessary action to prevent similar accidents from occurring.

During this last reporting period, the National Transportation Safety Board (NTSB) records indicate there were ten accidents that had occurred, with one of the accidents involving two aircraft. The number of accidents reported this past period was very high and unfortunately and we also had a significant number of fatalities this past reporting period.

Of the accidents reported, one was not a general aviation accident. It's rare that an air carrier accident report shows up and in this case it was included to show that, yes, on occasion they do have an incident that could have been avoided. Looking at the report I think there is a lesson that we can take from it. When you are moving your airplane, either by hand or taxiing, be observant and careful of possible obstructions. Last reporting period a student did significant damage taxiing too close to a ground structure. In the present reported case, ground crews did it, not the pilot. In any case, use caution, the results could be costly. Especially in the latter case, a lot of upset people and relatively expensive damage.

Seven of the accidents did not result in injuries, one resulted in a serious injury and two accidents resulted in six fatalities. One of the fatal accidents resulted from impacting terrain shortly after takeoff and the other was the result of a mid-air collision between two aircraft. Once again, there is a report of a gear up landing accident. Develop a good routine and use a checklist! We need to identify a trend in these accidents to develop safety programs to help prevent them from reoccurring.

Additional aircraft accidents may have occurred in the reporting period that had not been recorded and reported by the NTSB, however, they will be available and covered in the next report.

The number of accidents reported were rather high. Fortunately, several of the accidents this period did not result in injuries. Lets try to do what we can to keep the numbers down and the damage minor in nature.

In most cases the following information was taken from the preliminary reports that had been issued by the NTSB and contain only the initial information available and are subject to change and may contain errors. Any errors in the preliminary NTSB reports will be corrected when the more detailed final report is completed, which in some cases may be a year or more later.

Accident Date; Friday April 19, 2013 Reported June 6, 2013
Title 14 CFR Part 91 Operation
Location; Mesa
Aircraft; CubCrafters Inc. CC11-160
Injuries; 2 Uninjured Final Report

The pilot reported that during an instructional flight in the tailwheel equipped airplane, upon touchdown, his application of right rudder control was too aggressive and the airplane subsequently ground looped. The airplane sustained substantial damage to the left wing, aileron, and elevator. The pilot reported no pre-impact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

No pilot information was made available.

Accident Date; Tuesday April 23, 2013 Reported June 14, 2013
Title 14 CFR Part 91 Operation
Location; Grand Canyon
Aircraft; Bell Helicopter Textron 206L-1
Injuries; 2 Uninjured Final Report

The flight instructor reported that during an instructional flight, she and her student pilot were practicing autorotations. During a right turn 180- degree autorotation, the flight instructor announced that the throttle was coming on and the student then started to level the helicopter. As the wind had shifted during the maneuver, the student was forced to flare harder and utilize increased cyclic control. The flight instructor subsequently took control of the helicopter in order to prevent an engine over-torque and landed the helicopter. During the landing, the tail boom was substantially damaged. The flight instructor reported no pre-impact mechanical malfunctions or failures with the airframe or engine that would have precluded normal operation.

No pilot information was made available.

Accident Date; Saturday, May 4, 2013
Title 14 CFR Part 137 Operation (Agricultural Operation)
Location; Somerton
Aircraft; Arrow Falcon Exporters Inc. OH-58A
Injuries; 1 Uninjured

The Aero Falcon Exporters OH-58A helicopter collided with terrain during crop dusting operations near Somerton. The commercial helicopter pilot was not injured. The helicopter came to rest on its side resulting in substantial damage.

The pilot stated that he was applying product to a field and was completing his 15th load of the evening. The helicopter was in a left turn, and the pilot continued to apply left cyclic until it hit the stop. The helicopter continued to drift right towards some power lines. The pilot applied up collective and left pedal to maneuver over the power lines when the helicopter started to rotate to the right in an un-commanded fashion. The helicopter collided with terrain as the pilot attempted to regain directional control. The pilot stated that the helicopter and engine had no mechanical failures or malfunctions during the flight.

Accident Date; Monday, May 6, 2013 Reported June 14, 2013
Title 14 CFR Part 91 Operation
Location; Cottonwood
Aircraft; Piper PA28
Injuries; 1 Serious Final Report

The student pilot reported that he was flying the airplane from Oklahoma to California in pursuit of employment opportunities. During that trip, he was attempting a night landing for a fuel stop at an unattended airport, and was unable to activate the runway lights via radio. He made one approach to runway 32, executed a missed approach, and then initiated an approach to the opposite end, runway 14. He conducted that approach based on "two lights that he thought were the runway" lights. When the airplane was very close to the ground, the pilot realized that the lights were security lights on a building, and initiated a go-around. However, the airplane struck an airport boundary fence to the northeast of the runway, and came to rest on a street outside airport property. The wings and fuselage were substantially damaged by the impact with the fence. Post accident examination revealed that the number one communications radio in the airplane was set to the proper frequency to activate the runway lights, but that the radio selector switch was set to the number two communications radio, which was set to a different frequency. When power was applied to the airplane and the radio selector switch was set to the number one radio, the runway lights were successfully activated. The pilot reported no pre-impact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Accident Date; Friday, May 10, 2013
Title 14 CFR Part 121 Operation
Location; Phoenix (PHX)
Aircraft; Boeing B737-7H4
Injuries; 59 Uninjured

At about 0900 MST, a Boeing 737-7H4 collided with a parked, unoccupied Boeing 737-7H4, at Sky Harbor International Airport. The airplane was being pushed back for its flight by a pushback tug. The scheduled Southwest Airlines passenger flight had a planned destination of Reno International Airport, Reno, Nevada.

The push back tug operator and wing walker stated that during the push back, they had to slow down the tug's speed to avoid carts located near the right engine. Their attention was focused on clearing the engine from the nearby carts. Subsequently, the airplane's right winglet struck the parked, unoccupied airplane's left horizontal stabilizer.

Examination of both airplanes by National Transportation Safety Board investigators revealed that the push-back airplane sustained minor damage to right winglet. The parked airplane sustained substantial damage to its left horizontal stabilizer and elevator.

Visual meteorological conditions prevailed and an instrument flight rules flight plan was filed.

Accident Date; Sunday, May 19, 2013 Reported June 12, 2013
Title 14 CFR Part 91 Operation
Location; Tucson
Aircraft; Globe Swift GC-1B
Injuries; 1 Uninjured Final Report

The pilot reported that during the third approach practicing touch-and-go landings, he felt and heard the propeller hit the ground and realized that he had forgotten to lower the landing gear. The airplane touched down on the runway, and skidded to a stop in about 600 feet substantially damaging the lower fuselage. The pilot reported no pre-impact mechanical malfunctions or failures with the airframe or engine that would have precluded normal operation.

No detailed pilot information was made available.

Accident Date; Sunday, May 19, 2013
Title 14 CFR Part 91 Operation
Location; Chandler
Aircraft; Piper PA-32-301T
Injuries; 4 Uninjured

About 1330 MST a Piper PA32R-301T experienced a landing gear collapse while landing at Stellar Airpark, Chandler. The pilot/owner and three passengers were not injured, however, the airplane sustained substantial damage. The cross-country personal flight departed Brown, Field, San Diego, California, with a planned destination of Williams Gateway Airport, Mesa, Arizona.

The pilot reported that the airplane experienced alternator and battery problems during the flight. The radios were garbled, so he diverted from Williams Gateway, which had an air traffic control tower, to uncontrolled Stellar Airpark. During the landing roll at Stellar, the landing gear collapsed and the right wing leading edge and aileron sustained damage.

Visual meteorological conditions prevailed. No flight plan had been filed.

Accident Date; Tuesday, May 28, 2013
Title 14 CFR Part 91 Operation
Location; Mountainaire
Aircraft; Raytheon Aircraft (Beech) A36
Injuries; 2 Fatalities

About 1143 MST a Beechcraft A36 was destroyed when it impacted trees and terrain in the Coconino National Forest adjacent to Mountainaire shortly after takeoff from Flagstaff Pulliam airport (FLG). A large post-impact fire ensued immediately. The owner/private pilot and the one passenger received fatal injuries. No persons on the ground were injured or killed.

According to relatives of the pilot, he based the airplane at McClellan Airfield (MCC) Sacramento, California. The pilot and passenger departed MCC on the morning of May 25, 2013, and arrived at FLG that same day. According to personnel and information from Wiseman Aviation, a fixed base operator (FBO) at FLG, the couple rented a car that day, and returned the car to the FBO about 1100 on May 28. The pilot requested that 20 gallons of fuel be loaded into each of the main tanks, and then queried the FBO owner for about 15 minutes about flight route and other considerations for a flight to Bryce Canyon Airport (BCE). The airplane was refueled, and the pilot and his wife loaded the airplane.

The airplane took off from runway 21, and was observed to be climbing very slowly by a pilot in a Cessna 172, which departed just after the Beechcraft. The Cessna pilot eventually queried the ATCT controller about the Beechcraft's intentions, and the Beechcraft pilot then radioed that he was climbing very slowly. The Cessna pilot watched the Beechcraft maneuver slightly. He subsequently watched the Beechcraft strike trees, and then explode; he reported this to the ATCT, and then orbited the accident site until ground help arrived.

FAA information indicated that FLG runway 21 measured 8,800 feet, and the airport elevation was listed as 7,140 feet MSL. The 1157 FLG automated weather observation included wind from 210 degrees at 17 knots, gusting to 26 knots; visibility 10 miles; clear skies; temperature 64.4 degrees F; dew point minus 24.8 degrees F; and an altimeter setting of 29.95 inches of mercury.

Visual meteorological conditions prevailed. No flight plan had been filed.

Accident Date; Friday, May 31, 2013
Title 14 CFR Part 91 Operation
Location; Anthem
Aircraft; Piper PA-28-181
Injuries; 4 Fatal

On May 31, 2013, at 1003 MST, a Piper PA-28-181 while airborne at 900 feet above ground level (agl) collided with a Cessna 172S that was also operating at 900 feet agl, 3 miles west of Anthem. Both certified flight instructors (CFI's) occupying the Piper were fatally injured, the CFI and student pilot occupying the Cessna were also fatally injured. Both airplanes impacted desert terrain in the vicinity of the collision and were destroyed. The Piper was operated by TransPac Academy, the Cessna was registered to Westwind and operated as a rental airplane. Both airplanes were operated as instructional flights. The Cessna departed Deer Valley Airport at 0917 and the Piper departed the same airport at 0930.

Radar data shows two targets operating VFR about 1 mile apart. The western target was operating at 2,500 msl and 106 knots ground speed, as recorded by the radar playback. The eastern target was operating at 2,600 feet msl and 92 knots as recorded by the radar playback. The western target was on a northerly heading and made a 180 degree right turn to a southerly heading. The eastern target was also

on a northerly heading and made a left turn to a southwesterly heading. Both airplanes executed their turn simultaneously. Shortly after each target completed its turn the paths of both targets intersected.

The wreckages of both airplanes were in the immediate vicinity of the radar depicted target intersection. The Piper had impacted the flat desert terrain in a flat and upright attitude. All essential components of the airplane were at the accident site. The Cessna wreckage was located 468 feet southwest of the Piper wreckage. The Cessna impacted the desert terrain vertically, imbedding the engine and propeller into the ground and the wings were crushed accordion style from the leading edges aft. The entire Cessna wreckage was consumed by a post impact fire. The vertical stabilizer and left elevator of the Cessna was located 1,152 feet north of the wreckage.

Visual meteorological conditions prevailed, and both aircraft had company flight plans.

Accident Date; Friday, May 31, 2013
Title 14 CFR Part 91 Operation
Location; Anthem
Aircraft; Cessna 172S
Injuries; 4 Fatal

This accident was a midair collision with the the Piper aircraft in the preceding report. There were two people killed in each aircraft. See the above report for the accident details.

Accident Date; Saturday, June 8, 2013
Title 14 CFR Part 91 Operation
Location; Grand Canyon
Aircraft; Eurocopter EC 130B4
Injuries; 2 Uninjured

About 0935 MST, a Eurocopter EC130 experienced an engine control malfunction while performing practice autorotation maneuvers near Grand Canyon, Arizona. The certified flight instructor (CFI) and pilot undergoing instruction (PUI) were not injured; the helicopter sustained substantial damage. The Papillion Grand Canyon Helicopters training flight departed Grand Canyon National Park Airport about 0815 with a planned destination of Valle Airport, Grand Canyon.

The purpose of the flight was for the CFI to provide instruction to the PUI, who had recently been hired by the operator. After performing numerous maneuvers, the CFI was conducting a simulated engine failure, which he intended to terminate with a power recovery. During the maneuver the CFI configured the helicopter for an appropriate airspeed and while descending through 200 feet above ground level (agl), he began to roll the throttle in an attempt to increase engine power. The throttle grip was seized and he could not manipulate the control to increase the power.

The CFI performed a full down autorotation and the helicopter touched down on the dirt terrain. The helicopter’s nose tipped downward and then it rocked back on the skids, resulting in the main rotor blades severing the tail boom. The helicopter came to rest about 3 nautical miles northeast of the Valle Airport.

Visual meteorological conditions prevailed and no flight plan had been filed.

From the Flight Deck - June

Roy Evans II

I've always been fascinated by the Piper Cub, just like any other aviation geek out there. It's bright yellow paint job, the doors that can stay open in flight, and it's simplicity, bring you back to an earlier time of aviation where your eyes dared to look inside at the five instruments that most likely didn't function properly. However, only in models and in flight simulators had I ever experienced the Cub. Not that I didn't have the opportunity. In fact, I remember it clearly. After getting my private pilots license on my 17th birthday, my dad talked about me flying the Super Cubs across the field and getting my tailwheel endorsement. After he asked my instructor about it, my instructor, an airline captain, said to my dad "How many 737s have tailwheels?" After that, it was a hard sell.

Sixty-four years ago, a man in a small town of Iowa, for what the Civil Aeronautics Board knew to be '$1.00 and other considerations', purchased a brand-new Piper PA-11 Cub Special from the Piper factory in Lock Haven, PA. From then until around the late 80's, this Cub Special spent her days spraying various crops throughout the Great Plains, hopping around from one owner to another, with a few years under the banner of what came to be one of the leading agricultural aircraft equipment manufacturers around. After that, she had some casual owners, working her way from the Dakotas, through Wyoming, and into Colorado, where she resided until moving out to Utah.

We found 37H by a matter of happenstance, as her last owner passed away in what appeared to be in the beginning stages of her restoration. Complete with new leading edges, struts, and a fuselage outfitted with a new tail post, 37H was as complete as a project as we could find, so it wasn't hard to say yes. And, having a father-in-law who recently built an experimental Super Cub (and has completed a handful of restoration projects), we figured it wouldn't be too tough of a challenge for us to take on.

It appeared as 37H was destined to be the newest addition to our family. Since she resided in Utah, and was most likely going to be there until she was ready to move in with us in Prescott, I'd have to take some of my days off at home and spend them out at the hangar. Thankfully, even an 18 month old can be taught the difference between Philips and standard.

As of a few days ago, 37H sits on her gear with her wings back on for the first time in what we think is at least 30 years, maybe less. About 10 months have passed since we've adopted 37H, and we've been learning a lot about William Piper and his Cubs along the way. It's been an amazing adventure restoring her back to factory condition, and I can't wait for her to head back to the skies she once roamed many years ago.

GAARMS REPORT: 2013 June

Fred Gibbs

For those of you that rarely fly up to the north country – that being Flagstaff, not Alaska or the North Pole – here is something to think about.

Last week, as I taxied out to runway 21 in my trusty 'ol flight school 160HP C172 to go do some air work with a student, the ATIS broadcast said the surface temperature was **30 degrees centigrade**! **30 degrees centigrade**! In **Flagstaff?** That's right, 29 degrees above standard, and the tower added the comment – "Check Density Altitude". (You do know how to figure out standard temperature and Density Altitude for your airport, right?) A quick calculation estimated the density altitude to be **above 10,000 feet!**

In the run-up area the Flagstaff airport has direct-readout LED signs showing you the density altitude – it read 10,300 feet. That, my friends, is higher than Leadville, CO! And just so you know, you can always ask Ground to tell you what the density altitude is right now – they have a continuous direct readout from the ASOS, and will be glad to give you the specific readout at the moment. And, by the way, the temperature is taken at the ASOS, over in the grass along side the runway, where it is cooler than the air over the very hot concrete runway!

We had already leaned the engine before ever leaving the ramp. We don't want the plugs to foul or load up while taxiing at low RPMs, and in the run up area, while doing the before-takeoff checklist, we did a full power leaning procedure – again! We want to make darn sure we are developing full power for takeoff and the mixture is set correctly. A quick review of the takeoff performance chart shows that there is NO performance information for the 172 at this density altitude.

We estimate our 172 will need almost 3000 feet of runway just to get airborne at 65KTS. Fortunately, we have 8,800 feet of runway. (My Bellanca Super Viking, with 300HP, and a bit heavier than the 172, will need 4000 feet to get airborne.) Once we get takeoff clearance, we line up on centerline, lock the brakes, and power up to full throttle. We check the RPM – if it is not reading at least 2200RPM, we **do not go** - period!

We also check oil pressure and oil temperature as part of the GO/NO-GO decision process. If all is normal, we are good to go. The 172 climb rate – at best-rate-of-climb – is anemic. We climb out on the departure leg to 600 feet above the ground before turning crosswind. If we turn too early, we will never get to pattern altitude by mid-field downwind! Think about it – at pattern altitude, 8000 feet indicated, the 172 thinks it is at 11,300 feet, only about 1800 feet from it's service ceiling of 13,100 feet. Just how much performance do you think is left in the old girl?

When you learn to fly up in Flagstaff, you definitely learn all about energy management and density altitude – if you learned to fly down close to sea level, and plan to come to Flagstaff, you best read up on density altitude, understand density altitude, and maybe even go get some formal training on density altitude operations specific to your aircraft. You probably learned early on to never lean for takeoff or climb out - mixture full rich all the time. Well, that doesn't work up here in Flagstaff. If your aircraft uses a carburetor, you need to really understand fuel-air ratios and mixture control.

This month we had a fatal accident here in Flagstaff. A BE-36 on departure, with just a pilot and his wife on board – certainly not over gross or out of balance – never got above 200 -300 feet and went down just 4 miles away from the airport. I believe (My opinion only) that mixture was the culprit: The aircraft

engine was equipped with an altitude compensating pressure carburetor, and leaning could have been the issue, either pilot induced or a mechanical failure within the carburetor itself. Hopefully, the NTSB report will give us the answer.

As of the day I wrote this, Monday, June 17th, there have been six fatal accidents so far this year here in Arizona. Two of those occurred this month, the one up here in Flagstaff and one down just north of Deer Valley.

The Deer Valley accident is a classic sad story – a mid-air involving a high wing and a low wing aircraft, apparently both in a turn with each other in each others blind spots. Two instructors in the low wing aircraft and an instructor and a student pilot in the high wing aircraft all perished. A terrible loss...

The other 4 were:

- A crash at Casa Grande involved a KingAire BE-90 practicing takeoffs and landings.
- At Ryan Field, a C150 had a stall/spin loss-of-control during the base-to-final turn.
- Out by Wikieup, an off-airport emergency landing after an engine failure in a Mooney resulted in one fatality, the passenger in the right seat.
- At Bullhead City, a pilot committed suicide during the approach to the airport.

When the Aircraft Accident Review Group (The AZ AARG), looked at the accidents with an eye towards "What could have been done to prevent these accidents?", we determined that two of these accidents were loss-of-control accidents, which go back to basic flying skills, although the KingAire accident was a much more "advanced" loss-of-control issue.

The Mooney off-airport emergency landing – a story all to itself – was/is an equipment issue: **no shoulder harnesses** installed in the airplane - which I believe could have prevented the fatal injury. The fourth accident, the suicide, was most likely (My opinion only) **not** something we as a safety-oriented organization could have done anything to prevent.

In our continuing effort to improve the safety culture and further educate the pilot community up here in Flagstaff, we have implemented a few efforts on our own. We have posted **density altitude alert** signs at the fueling counter, at the front desk and in the pilot briefing room. We have coordinated with the tower to put more emphasis on density altitude, and some of the controllers make an extra effort to tell you/alert you to the actual density altitude. Airport management has ensured the density altitude read-out LED signs are operational, and, of course, as you read this, you too, are now more knowledgeable about density altitude. And please remember density altitude in **not** just a flagstaff issue. At any airport above 4000ft elevation, you need to consider the temperature and calculate the density altitude: Show Low, St. Johns, Prescott, Payson, Grand Canyon, (and the list goes on) are all impacted by density altitude, so please don't get complacent!

Another recommendation to our members – if you do not have shoulder harnesses, you really need to think about spending a few bucks and have them installed. You and every one else in your aircraft deserve them. They can be the difference between life and death. The Mooney fatality is a very sad story. How often do we criticize some one for allowing some one in a car to not wear their seatbelt/shoulder harness and be killed in a senseless auto accident – impact trauma or thrown from the car because they were NOT wearing their seat belt! A simple installation of/or omission of shoulder harnesses can alter your life forever. Aren't you or your loved ones worth it?

APA, working with, and under, the FAA's FAAST team umbrella, continues to provide our safety seminars all across the state, with many more coming up through the rest of the year. Watch your email for FAASAFETY.GOV announcements of upcoming seminars and/or go to the APA website. Proposed locations and dates are as follows:

Month	Day	Where
July	TBD	Payson
July	27th	INW
August	TBD	Cottonwood
September	TBD	FLG
September	21st	SEZ
September	TBD	Prescott
October	TBD	Tucson
November	TBD	Lake Havasu

Should you desire a safety program at your local airport, simply contact APA via our website. You can connect with me through the Safety Program Director or you can contact me, Fred Gibbs, at 410-206-3753 or email at fredgibbs@npgcable.com. The Arizona Pilots Association provides the safety programs at no charge. We will most certainly help you organize a program of your choice, and we can recommend programs that your pilot community might really like.

WINGMAN Program –

Don't come to a safety program by yourself. But don't just bring your old buddy who always comes with you. Bring someone new, and get your BFF to also bring someone new.

We need you to help us expand our audience, to expand our reach, and to expand our ocean of faces.

Statistics show that the folks having accidents are the ones who don't participate in the WINGS or safety programs, so help us reach out to those folks and pull them in.

I never complain when a program runs out of chairs!!!


EVERY MAN NEEDS A
WINGMAN
NEVER COME ALONE TO A
WINGS SAFETY PROGRAM
HELP SPREAD THE SAFETY CULTURE!
An Arizona Pilots Association Safety Initiative
ARIZONA
Pilots Association

Et Cetera

Barbara Harper, ATP CFII MEI LRJet

Where has all the common sense gone? The May accidents in Arizona all involved some element of judgment. Perhaps we instructors have become tardy in teaching and evaluating this necessary ingredient of flying. What additional information and instruction could we teach?

Judgment is a particular branch of knowledge, just like the physical skills of learning to fly. Both are influenced and taught by the instructor. The pilot has to amply demonstrate judgment which is later called experience.

In the origin of teaching flying, judgment is a very important attribute. Sometimes we like to inject gallantry and comedy in flying.

Runway incursions come to mind. Why are there so many in Arizona? Is it because we cannot read or see the communication of the approaching double lines? Do the brakes work, the radio, or is it just not sinking in about the impending barrier coming up quickly even though we acknowledged? Should the controller give you a last minute alert? Should they?

Airports try their best to follow standard paint and signage to identify hold lines according to ICAO (International Civil Aviation Organization) and the FAA. It doesn't work in the Southwest environment.

Why does the Safety Management System of the skies not analyze previous incidents and accidents? If they did, the concluding comprehensive analysis of this data would tell them the present system has failed in the Southwest, and perhaps elsewhere.

They, the FAA, could improve this system but have not. However, the FAA does give many educational seminars on runway incursions and the pilots who should attend do not. I think the instructor should give a color test and have the pilot before flight draw on a piece of paper what a hold line looks like and fill it in with the proper color.

At airports that solicit air carriers, there is a requirement that the runways and taxiways be inspected periodically. This is FAR 139. This inspection is either done by a car or small truck. Their primary purpose is to see if they are safe to use. How many of these vehicles have propellers connected to their car hoods? How can they safely say that the areas are clear and safe? How many cars have you seen takeoff on the runways, except of course for the flying cars? So, why not inspect them with the vehicle that uses the runway and taxiway, an aircraft? After all, the purpose is also to see if the paint and signage is readable.

Bada boom!

If the hold lines are not visible or other signage to show that a runway is slowly encroaching, should the pilot be violated? Depends. Did the pilot have an airport schematic to geographically show him or her the proper placement of the lines or not? The angle of degrees from which the pilot sees from his seat can also determine if the lines are in sight. Plus, of course, the color of the paint, was it readable and were the signage on the right or left?

We need to develop a different hold line system using the color red. My theory is the innate color perceptions from driving a car for many years are transferred to the operation of an aircraft. For instance, the color yellow in driving represents caution and of course red means stop. Perhaps the hold lines should be red along with the runway sign. Or, a uniformed policeman or facsimile could pop up and raise his arm to stop when reaching a certain spot on the taxiway.

The safety fathers, ICAO, have developed a runway incursion severity classification (RISC) calculator. It is a tool to help identify and assess the severity of runway incursion events. This tool measures the event from A to D, A being the most severe.

I see incursions for Arizona with no future provisions to ensure consistency of safe operations in the maneuvering areas of a runway. To this end, the airport, the FAA and ICAO should improve and implement a change of the physical characteristics of the hold lines.

Bada bing!

Elephant Snot - A Remedy For An Old Problem

Barbara Harper, ATP CFII MEI LRJet

That title got your attention? Elephant Snot is the name of a product that is used to remove spray painted markings of graffiti on cactus. Sounds gross, but it works.

Why can't we as aviators find something that works to eliminate accidents through our culture of safety? Safety culture is a term used to describe the way in which safety is managed, and often reflects the attitudes, beliefs, perceptions and values that people share in relation to safety. The trend around safety culture originated after the Chernobyl disaster brought attention to the importance of safety culture and the impact of managerial and human factors on the outcome of safety performance.

The concept of safety culture was introduced to explain how the lack of knowledge and understanding of risk and safety by the employees and organization contributed to the disaster. For this purpose, it is important to identify the perception of aviation safety culture as it represents a critical factor influencing aspects of flying.

Some of the important factors of aviation are feedback and listening. They are an integral part of the verbal exchange in aviation communication. In fact, listening is the most powerful tool in communication today. Why? After all, it takes practice and hard work to make communication effective. Ask any pachyderm, they are superb at communicating.

Connecting pilots with safety material and knowledge is a difficult job. The pilots that should get safety guidance do not attend the many seminars offered for free. Have these pilots stopped learning? Do they want to remain ignorant of the current safety culture? What kind of revolution does it take to get the 11,000 pilots in Arizona to a free safety seminar? Do they need poetry, romance or a war to light the fire beneath them?

There Ought To Be A Law!

Howard Deevers

How many times have you heard that, or even said it yourself? "There ought to be a law" is something we say when things are not going our way at some moment. Usually, we don't really mean it.

There probably already is a law that pertains to what ever it is that you think "there ought to be a law" about. Actually, there are so many laws that if I started to read every law in the State of Arizona, and all of the Federal Laws, I would never finish before the end of my life. And I am not a slow reader.

And, Congress is passing new laws constantly. Some of these laws are thousands of pages long, not just one sentence long starting with "thou shalt not."

That two pound book that we as pilots are expected to know is called The FAR/AIM. The first part, the FAR, is law. The second part, the AIM, is good stuff to know, but not necessarily law. However, in a court of law, the AIM could be interpreted as law.

An instructor and a student were in the traffic pattern at Marana and were not announcing their positions and turns. Another pilot asked if they were going to announce their turns. The instructor on board answered: "that is not a regulation, only a courtesy." Technically he may be correct. However, if you read in the AIM you will find suggestions for announcing your position in a traffic pattern at a non towered airport.

If a conflict occurs, and the case ends up in court, and a lawyer reads that passage to the judge it will be interpreted as law.

In defense of the instructor, I can say that it is sometimes very difficult to be giving instructions to a student, scan for other traffic, and make announcements all at the same time. But that is what we are expected to do. So, Mr. Instructor: Buck up and do your job. At some of these airports there can be three or four airplanes in the pattern at one time. One airplane not making announcements "as a courtesy" can be a hazard to the other planes.

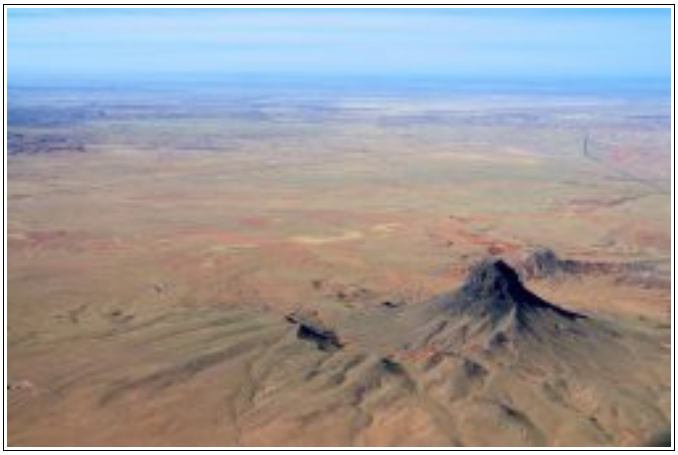
Even on IFR flights if you are in VFR conditions, it is still our responsibility to see and avoid other traffic, and that **is** in the FAR's. Do you think that the NextGen air traffic control and ADS-B will change that? Don't count on it. We keep adding new technology all the time, but the bottom line is that safety is still the responsibility of the pilot in command.

Be a safer pilot. Come to the next Arizona Pilots Association safety seminar. Your APA does one of these at least every month somewhere in Arizona. Check the website for subjects and locations. We don't need another law. We just need safer pilots. And, don't come alone. Bring your Wingman

Weekend Getaway Debriefing - Canyon de Chelly, AZ

Craig Albright, Cirrus N857CD @ KCHD, CFI/II

On Saturday, May 25th, three aircraft carrying eight adventurers flew northeast out of the Valley heading for Chinle, AZ. What's in Chinle (E91) besides high winds and a paved strip without fuel or services? Well, for one thing, it's adjacent to the Canyon de Chelly National Monument, an area rich in Native American history dating back to the "ancient ones", the Anasazi. And, although the canyon has been home to the Hopi and well as the Navajo, the ancient ones had a pueblo culture in the canyon many thousands of years earlier. It was the pueblo ruins that we flew over to see!



Along the way, we got to see the desolate majesty that's so much a part of the southwest.

After landing and securing the planes against a rather stiff wind, we were picked up by the Best Western courtesy van, taken to our hotel for check-in and a quick lunch. After lunch, our Canyon de Chelly Jeep Tours guides picked us up at the hotel and we headed to Canyon de Chelly!

Attempting to chronicle the event, Rick Koril catches daughter Lindsey and her husband Brandt mugging for the camera.

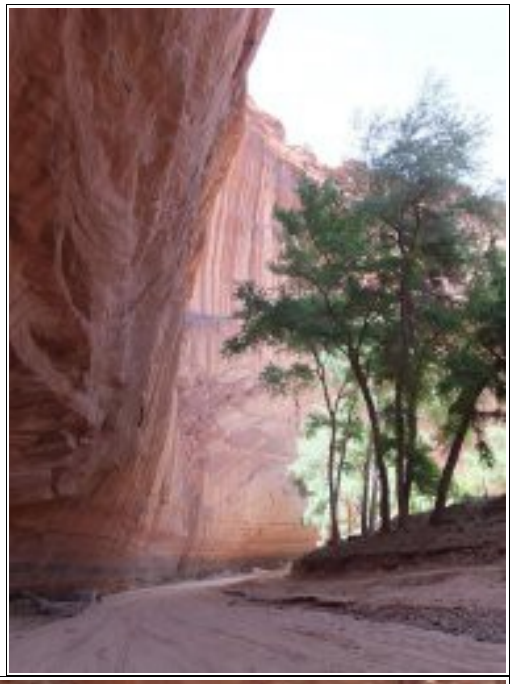
After our guides checked into the Visitor Center and filled out the necessary paperwork, we piled into two 4-wheel drive vehicles and headed into the canyon.

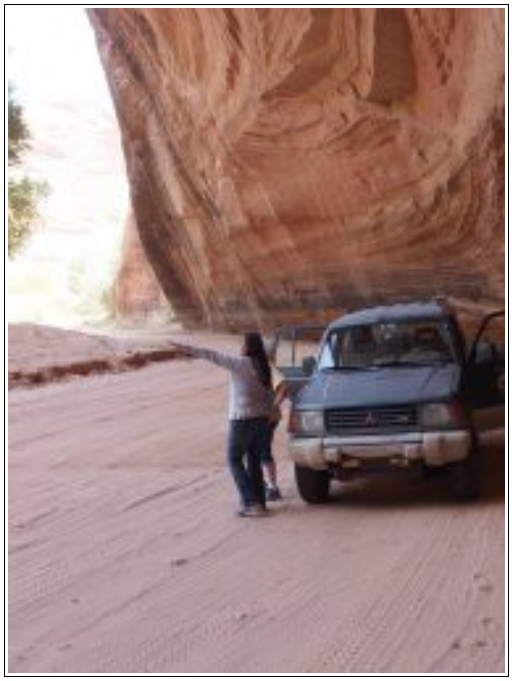
Our first stop was to see some petroglyphs carved into the rock by the canyon's long-ago inhabitants. Later, the sandstone changed color as the walls rose and became much steeper. Some of the tree structures were actually quite lush despite the canyon's receding water table.

Of course, it was the well-preserved cliff dwellings that we were anxious to see, and our guides certainly did not disappoint us. They were extremely well-acquainted with the area and its history, offering a perspective unavailable anywhere else.

Compared to most of our other Arizona sites, these were incredible.

At the completion of our 3-hour tour on Saturday, we headed back to the motel, had dinner at their on-site restaurant, and spent the evening relaxing. On the spur of the moment, we decided to have Sunday brunch at La Posada in Winslow, AZ. Of course, if you are a fan of the Eagles band, it's almost a requirement to visit "the corner". We did. And there she was, a girl in a flat-bed Ford…





If you haven’t visited Canyon de Chelly, be sure and put it on your list of places to see!

Weekend Getaway Flights: Summertime Absence!

Craig Albright, Cirrus N857CD @ KCHD, CFI/II

As the headline implies, I'll be traveling a bit this summer, creating a gap in our Weekend Getaway flight schedule. I'm afraid it will be August before I have an opportunity to lead any more flights. However, if you just can't wait that long for the next Getaway, how about organizing one yourself? Although my wife and I will be out-of-town, send me an email, and I'd be happy to provide advice. It's simple. It's fun. And, you get to enjoy the company of friends you have yet to meet…

New Board Member

Tyrel Greenwade

Hello everyone! My name is Tyrel Greenwade, I grew up in the little known metropolis of Concho, Arizona. For those who have never been there, Concho is a small gem in Northeastern Arizona between Show Low and St. Johns.

In 2001 I enrolled in the Aviation Program at Arizona State University. While at ASU I received most of my ratings flying out of Mesa Gateway. In 2005 I was hired at Mesa Airlines where I am still employed today. During my time at Mesa I've flown the Dash-8 as well as the CRJ. [ED: added pics.]

During my time on the Dash at Mesa, I grew to love the mountain flying that we did while serving most of the high altitude "commercially served" airports in the Western U.S. out of Denver and Phoenix. Some of my favorites were Jackson and Cody Wyoming, Telluride, Aspen, Gunnison, Eagle and Durango in Colorado. Durango was probably my favorite because that is where I met my wife Victoria (Tori).

I joined the APA in early 2012 with hopes of volunteering with the backcountry group on the Double Circle Project. Since then I have met this interesting group of people who go camping out of their air planes. So when I'm not hunting, fishing, flying for a living or chipping away at the "honey do" list (in that order) I hope to be bumming around the APA group helping out whenever possible.

Support APA with Stylish Merchandise

APA Merchandise is available at the APA Web Store. You may also contact any APA board member if you have questions or need additional information.

APA Website

Stefanie Spencer

Please visit our website for the latest information. Leave email for Stefanie: Webmaster@AZPilots.org.

Newsletter Authors

Monthly Deadlines

To dispel confusion, this is a list of deadlines not a schedule. We might achieve these goals early, but we will strive to publish on time.

- 14th Editor reminds "The Team" to submit articles
- 19th Authors submit articles and advertisements
- 22nd Editor submits preliminary draft to President
- 25th President returns corrected draft to editor
- 27th Editor submits final draft and layout to President
- 28th President gives final approval for mass mailing

Contact the editor, Asa Dean:
Newsletter_Editor@AZPilots.org

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