
The Sport Flyer

The Official Newsletter of the Georgia Sport Flyers Association, Inc.

August 2007



July GSFA Meeting & Presentation

- **Our Next Meeting is August 11th at Etowah Bend 10:30 am for flight talk, 11:00 meeting starts.**

Fuel and fuel Additives

Some Good , Some Bad and Some Ugly(er)

From The Safety Officer: Michael “Budman” Prosser

In previous “Back to Basics” articles, I mentioned was the use of the correct fuel/octane for your engine, systematic replacement of fuel line and fuel filters, etc. Concerning fuel, use a good name brand that you trust and choose the right “OCTANE”. Fuel is perishable – discard old fuel.

Please refer to your engine manufacturers recommendations and look for these numbers (#):

MON: motor octane #

RON: research octane #

AKI: anti-knock index #

It's simple math. Add the MON & RON #'s together and divide by two. This equals the AKI or anti-knock index number of the fuel that you should be using. EXAMPLE: a MON of 83 plus a RON of 91 equals 174: divided by (2) = 87 octane (AKI#).

The long term use of a higher than recommended octane fuel may not be the best choice; besides, it's more expensive. Short term, higher-octane fuel usage is not considered to be a concern. The short-term decision to use an available higher-octane fuel is still the preferred choice over the use of a “lower” octane fuel, anytime! Since we fly very often from airport to airport and they may not have MOGAS (automobile unleaded gasoline-regular or premium), the short-term use of 100LL AVGAS (low lead, aviation gasoline) is considered safe. You will just have to clean or change your spark plugs more often than usual. Further, a higher-octane fuel burns slower and therefore, quite possibly, may burn incompletely. Lead is another of those undesirable additives for long-term use in UL or two-cycle engines. These unburned combustion by-products may build-up inside the combustion chamber (spark plug, cylinder head, piston, ring landing/gaps) and lead to fowled spark plugs, stuck piston rings and worse woes.

Do you know what those fuel additives are that boost octane? Alcohol compounds like **Methanol or Ethanol** are examples of those bad additives – they absorb water, sometimes a lot of water from any source that it can find it: in the air, condensation or just container contamination or transport. In your fuel tank, it may separate (come out of solution) – drain that fuel sump! Also, it is corrosive and may lead to/cause rust deposits inside your engine; bearings are especially susceptible. Methanol is corrosive and can destroy rubber, fiberglass and metal (including aluminum) ...bummer!!! Ethanol is especially bad for use in two-cycle engines - it's a solvent!!! Therefore, it washes away the oil that is intended to lubricate your engine!!! Can you say engine failure????

The law requires that additive warnings must be posted on the pump where fuel contains 10% Alcohol and 3% Methanol. However, you the “user” should be wary of each batch and check it for alcohol and/or water contamination. You should consider the installation of a low point fuel drain sump, so that you can (and should) check for water contamination before each first flight of the day and/or after refueling. A “Mr. Funnel” fuel filter is reputed to be another method for removing unwanted water & debris (but not alcohol). The EAA sells an ethanol test kit for about \$15 or so. **The Rotax Service Information bulletin (2 KUL 94) for 2-cycle engines, states that alcohol additives are to be avoided and does not recommend that any volume more than 5% alcohol be avoided in 2-cycle aircraft engines.**

A test can be done for ethanol - it works like this:

Use a simple graduated cylindrical container – you can buy one or make one from a water bottle. Fill it about ¼ full with water. Now, mark the water line with a thin line, so that you know exactly where the “original” water line is. Now, fill the rest of the container with fuel & shake it very vigorously. Place the container on a flat

(level) surface and wait for the fuel & water mixture to separate. The water will absorb any alcohol in the fuel. If there is an increase in the vertical height of the water column (when compared to the pre-marked "original" water line) then the fuel contains alcohol/ethanol. Note: if the fuel will not separate, then the fuel is bad anyway. Typically, the percentage of alcohol in the fuel will be equal to the change in the height of the fuel column compared to the "original" height of the water column.

What does all of this mean? Times change; a fuel retailer may have fuel that has different additives based on the time of year, to reduce smog/emissions. Fuel goes bad with time; don't use fuel if it is over two months old. Your fuel line won't last forever; it may be incompatible with the type of fuel or additives that may be in your fuel. Replace fuel line often whenever it becomes discolored or crazed. Is there or has there been any significant fuel line "shrinkage" ??? Has it become hard or brittle? Do the research necessary; don't just install what somebody else uses. He or she may not know "jack..." All tubing is not the same. Check with reputable retailers in the business like "Aircraft Spruce", "LOCKWOOD Aviation" or "LEAF" or "CPS. Fuel line does not have to be transparent/translucent, unless it's part of your fuel gauge system. Why not consider automotive or aviation fuel line, verses those commonly used in ultralight applications?

Trust your engine manufacturer, they know your engine better than we ever could.
Be safe out there,

Michael "Budman" Prosser

"When in Doubt - Don't" Technically Speaking

July Issue Correction By Wayne Evans

Well, I know at least One more Person, besides my wife and I, read our July issue article.

As you might remember, this installment dealt with the safety need to disconnect your aircraft's battery before working on, or even just near, your electrical system – especially Starter Relays.

Charles Spegele sent me a fine e-mail in response.

Since Charles explains a Very Important additional safety issue so Very Well, I have taken the liberty of repeating his e-mail directly.

Wayne:

"You need to correct a bit of information in the newsletter.

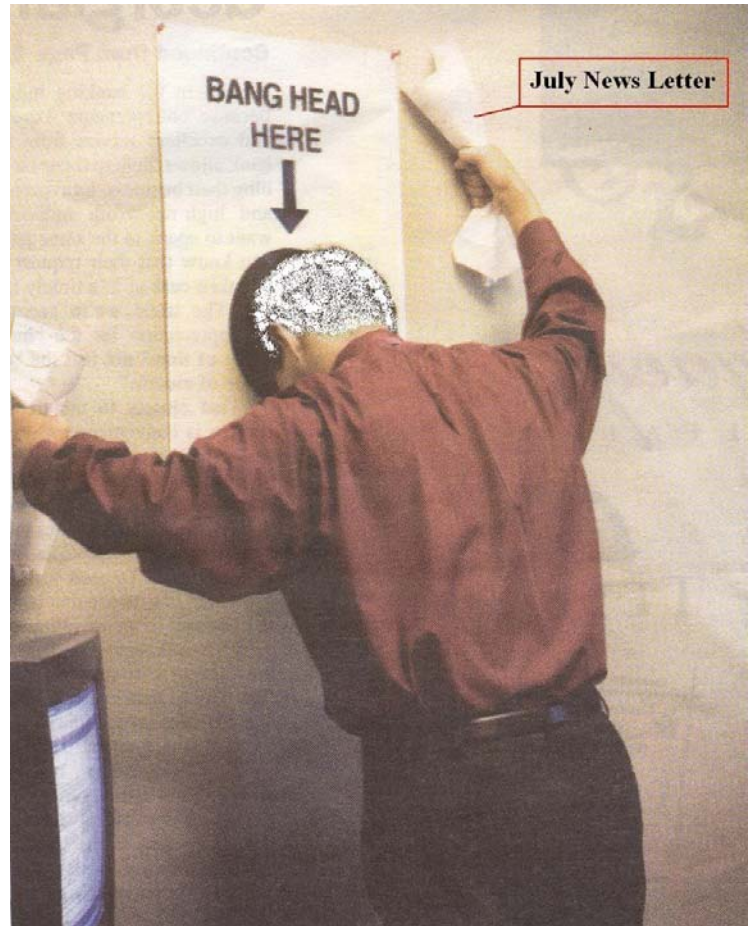
The Negative cable is all that is necessary to remove to make the electrical system safe to work on. The reason for this is, that if you elect to work on the Positive cable first and your wrench touches any bare metal =ZZZZZZTTTTTTT instant short and a shower of sparks. Hydrogen gas is generated in a wet cell battery. As you know, sparks and hydrogen = Explosion of battery. See you Sat. Chas.S."

Thanks for your correction, Charles and for Richard Johnston's additional input.

As you probably already know from Your own experience, one of the major advantages of being a member our Georgia Sport Flyers club is how we try to keep each other from making Too Many aircraft and flying mistakes – especially those that could have Disastrous Results.

Even though we all wish we were always perfect all of the time, we live in the Real World. But If we learn from our mistakes and try not to repeat them, then maybe that's just one more step Forward in life instead of Back.

Thanks again Charles, Richard and all the rest of you Hanger Bums for being a important Flying Family



August Safety Topic

At What Price Quality & Safety

For years my hanger has been a focal point for a lot of UL & pilot interest, because it faces highway 61 at a convenient gate entrance at VPC. Often, people have said that they were just driving by and saw my UL or Hummel Bird and wanted to see more and/or learn more about it, so they pulled in to ask questions and scope out these pretty “little airplanes”. I always enjoy spreading the word about flying for fun and GSFA. Invariably, this usually leads to instructors and who or where to receive flight instruction. I wish that I had a dollar for each of the referrals that I’ve given (smile).

Many of the individuals that come by are inactive pilots that would like to get back into aviation...wow; this could be affordable after all. Others can’t believe that people would risk their lives in these “death traps”. How many times have I heard that! Grown-ups bring their children by, who are so fascinated with airplanes “just their size”. It is a very heart warming thing to see a young persons face light up as they smile...and I can see the wonder in their eyes.

Often, individuals come by asking about parts & pieces that they need to find; usually something rare or out of production these days. Have you ever heard of this part or that company? Are they still in business, they ask? The disappointment is when they don’t want to accept sound advice. Others won’t pay today’s prices because they are “stuck” in yesteryears costs. I don’t like the word “CHEAP”. I much prefer the word inexpensive. Obsolete is obsolete...it will always be obsolete in the practical sense. Nostalgia is great; I have some of that locked deep inside of me also. “Vintage” aircraft are wonderful and I can appreciate mall of that. This discussion is not about antiques or vintage aircraft. Those who restore or fly those vehicles understand the limitations and risks associated with their use.

However, safety dictates that because we maintain our vehicles in a very airworthy condition. The use of obsolete parts, just because they’re a bargain and you are CHEAP is a recipe for disaster. You want to “... get by for cheap”, just because, is unacceptable to me. These parts are obsolete for a reason!!! Sometimes, it’s especially sad because I know that many of those individuals really can afford current products and the associated expense. Morry Hummel once told me regarding safety and my purpose to build my HummelBird ... “in aviation, the best that you can buy is barely good enough!”

The situation is different in sports or occupations that may render you helpless when you are on your own far, far away (or in flying: high, high & away). Would astronauts use obsolete equipment when they blast off into space? I hope not. Would you go to sea in a vessel compromised with obsolete parts or pieces? I don’t think so. Would you climb a mountain without the proper equipment or training? I don’t think so. It should make a significant impact on your thinking when your very life and those of a passenger weigh in the balance.

That has always stuck with me and has carried much weight in my pursuit of building & maintaining UL’s and airplanes. Another senior pilot friend of mine also had something profound to say during a conversation with a prospective “newby”. The “newby” stated that he couldn’t afford this or that. My friend stated, “well friend let me give you some sound advice; if you can’t afford the price you’re in the wrong sport”.

What’s safety worth; what is your tail worth? Quite a lot, I believe. It’s not the \$\$\$\$ (monetary cost), it’s the justification of the quality engineering, technical function & reliability that warrants today’s price. Think about it.

Be safe out there.

Michael “Budman” Prosser

3rd Quarterly Airport Authority Meeting Report: July 2007

Submitted by Michael W. Prosser – GSFA Safety Officer

The July 17th, 2007 Cartersville-Bartow County Airport Authority meeting topics & issues were as follows:

Issues:

- Mr. Bob Hite mentioned to me, prior to the meeting, that UL's were not adhering to the "middle third" of the runway for take-offs & landings. He was especially concerned with take-offs from the very end of the runway (threshold), as opposed to using the "other" taxiway intersections. This is an old issue that continues to trouble Mr. Hite. He also stated that A Georgia DOT Rep that flew with him also commented on UL's taking so long to fly the runway length after takeoff. We discussed the new "experimental LSA" "N" numbered aircraft status verses the typical UL airport runway usage, as well that these were training aircraft and therefore students were being trained and required these safety measures (hot day-summer & high density altitude, gross weight, etc.). I encourage you all to utilize usage of the taxiway #2 and /or #3 intersections for takeoff whenever possible. Intersection takeoffs are legal and are encouraged to facilitate and enhance airport capacities, reduce taxiing distances, minimize departure delays and provide for more efficient movement of air traffic. Also, landing in the "middle third" zone usually gives you a smoother takeoff or landing because you are well past the approach or departure ends where turbulence (dragon) is known to occur. When two-place training aircraft are not being flown during training and are therefore well below gross weight, then these aircraft can easily & safely perform intersection takeoffs as well. Another item that was mention was that UL's are, as an example, after takeoff on 19, UL's are turning westbound prior to crossing "Old Alabama Road". Please wait to turn westbound until after crossing "Old Alabama Road".

Please review the Cartersville (VPC) Airport Pattern and Procedure document from time-to-time, as a refresher – especially those who are still flying "fat ultralights" that have not been "N" numbered yet. Please comply and continue to fly safely & to be a good neighbor, whether you fly as a certificated pilot or UL pilot. Also, please help to promote a harmonious relationship with all of our pilot friends and airport users where ever your home base is.

Projects: Old Business:

- **"T" Hanger construction is moving forward!!!! By the time that you red this, the order should be placed for the steel hangers. The vendor is "ERECT-A-TUBE". The ETA (best guess) for delivery of the steel hangers is 14 – 16 weeks, hopefully sooner.**

The hangers should be erected in 30 –45 days after that. Hopefully, the hangers should be available by Christmas. The hangers will be equipped with ridge vents. No additional restroom facilities will be included. The Hanger rental (\$\$\$/month) has not been determined at this time.

- Hanger funding is available from the Bartow County Bank and an application has been submitted to "One Georgia Authority" for a \$500,000.00 grant for airport capital

improvements. These funds are not dependent upon any other source such as the State or Federal government, FAA or other agency.

Note: It appears that due to the amount of extra earthwork performed, it has effectively increased the available surface area for hanger construction. Therefore, it appears that 2 additional hangers will be constructed, depending on the actual cost of the hangers & erection. The new hangers will be on the northwest end of the field. The initial plan is to build a total of 32 new T-hangers: (22) in one cluster, with a 34' depth (for large or twin engine aircraft, multiple UL's, etc). Another cluster of (10) T- hangers will be built with a 24' depth (small or single engine aircraft, UL's, etc). Discussion indicated that both hanger clusters would have a 40' wingspan capability.

Two additional (smaller UL hangers) will be built approximately one year after the original hangers to allow for ground settling, so that these hangers can be built on the extreme outside ends of the foundation. This will total 34 hangers on the north end, west side.

- Work continues on all sides of the airport property has been underway to clear trees & brush from the safety zones around the runway and at each approach end, to satisfy the FAA and Georgia DOT. The Airport Authority has existing easements with the property owners adjacent to the airport, including the Dillinger property on the south end.
- No progress on the issue of additional signage for naming (lettering) additional taxiway intersections, as of yet. Currently only taxiway intersections marked "T" (Tango) are named. It is a known item, but does not have any urgency, due to the other more demanding capital improvements. This was not previously included in the capital request/contract for airport signage.
- The road-widening project continues for Highway 113 and negotiations continues with the Ga. Dept. of Transportation (DOT) and the FAA. The contract was awarded to NW Ga. Paving Co. Expect much construction in the future to this area as it will affect the approach end of runway 19. There will be some type of embankment built at the roadway there. This may affect flight operations at the airport if the FAA determines that the runway threshold must be displaced, due to the adjacent highway. **The FAA has indicated that this "issue" may require that the threshold be displaced 1000 feet!!!!** Needless to say the Airport Authority is not pleased and they will be meeting with the FAA to hammer this out. Due to this disagreement, between the FAA and the Airport Authority, the FAA has held up all federal funds – there is no resolution at this time. Further, shortening the runway effective length could very seriously affect Phoenix Air's flight operations, as well as other commercial jet or turbo-prop commuter/air-taxi operations and therefore, "revenue" at the airport. Roadwork may affect vehicular highway traffic, as well. The Airport Authority has signed three easements for Ga. Power to make the necessary changes along the roadway of services/utilities. Please be alert for heavy equipment and pedestrians at work. Expect delays if traveling toward downtown Cartersville, especially during peak travel periods.

New Business:

- New chain link fencing will continue to be erected around the airport property, as funding becomes available. New gates/entries also will be installed, as fencing extends toward highway 113, along highway 61 adjacent to/past the large hangers on the north end.
- The Airport Authority is to pave the gravel driveway at the entry gate near Southland Aviation & mid-field blue hangers (off Hwy. 61), as soon as practicable. This project is estimated to cost \$2,700.00.
- No re-zoning projects are expected along the south end, across Old Alabama Road and adjacent to Hwy. 61, until at least the Fall of '07. The FAA is very sensitive to this project, due to the restrictions/limitations around the Safety Zone at the approach end of 01. The Airport Authority is monitoring this very closely.
- Mr. Henry Rogers, Mr. Stile's Son-In-law, is the "Executer" of Mr. Stile's estate. He is responsible to the Airport Authority for hanger rent, the business assets there, which would include the selling of Mr. Stiles hanger. He has liquidated most of the assets in & around the hanger itself. The hanger has not been sold to any interested party yet; he is still open to offers. The hanger payment is current and efforts continue sell the facility; Phoenix Air expressed interest in acquiring this hanger facility.
There will be an auction on August 4th to sell the aircraft and equipment in the hanger.
- The Airport Authority has begun and a capital improvement project at the airport, to install city sewer connection. Currently, the entire airport sewer needs are handled by septic tanks and require pumping at least every two weeks - this is very expensive and leads to potential overflow/ground surface backups. It appears that the airport sewer demands exceed its capabilities at peak demand times. The cost of this capital improvement project is expected to be \$400,000.00. The Airport Authority approved a motion to offset some of the expense of sewer pumping by paying for one septic tank pumping per month, until the new city sewer connection is completed.
- Expect repair/maintenance work to be performed on the pavement on the south hanger areas, where the asphalt is cracking. Cracks will be filled with new asphalt/tar to improve the hanger or taxiway surfaces. As you may have noticed, the Phoenix South hangers have been freshly painted.
- The Civil Air Patrol (CAP) asked the Airport Authority to allow it to upgrade its facilities with a more permanent facility (verses trailers). The Airport Authority is well pleased with CAPs presence at VPC and will entertain this request in the future, when the plan for development of the south end of the airport property is better defined.

Michael "Budman" Prosser

Plane Humor

Submitted by: Phil Jouanet

"Squawks" are problem listings that pilots generally leave for maintenance crews to fix before the next flight. Here are some squawks submitted by US Air Force pilots and the replies from the maintenance crews.

(P)=PROBLEM (S)=SOLUTION

(P) Left inside main tire almost needs replacement

(S) Almost replaced left inside main tire

(P) Test flight OK, except autoland very rough

(S) Autoland not installed on this aircraft

(P) #2 Propeller seeping prop fluid

(S) #2 Propeller seepage normal - #1 #3 and #4 propellers lack normal seepage

(P) Something loose in cockpit

(S) Something tightened in cockpit

(P) Evidence of leak on right main landing gear

(S) Evidence removed

(P) DME volume unbelievably loud

(S) Volume set to more believable level

(P) Dead bugs on windshield

(S) Live bugs on order

(P) Autopilot in altitude hold mode produces a 200 fpm descent

(S) Cannot reproduce problem on ground

(P) IFF inoperative

(S) IFF always inoperative in OFF mode

(IFF-Identification Friend or Foe)

(P) Friction locks cause throttle levers to stick

(S) That's what they're there for

(P) Number three engine missing

(S) Engine found on right wing after brief search

(P) Aircraft handles funny

(S) Aircraft warned to straighten up, "fly right" and be serious!

(P) Target Radar hums

(S) Reprogrammed Target Radar with the lyrics

August Quote

This month's quote (not so funny), but it's so often too true. Experience is a good thing, isn't it? Except that.....

“Good judgment comes from experience. Unfortunately, the experience usually comes from bad judgment”.

(Author Unknown)

Bummer!!!!!!

Be safe out there.

Michael “Budman” Prosser

Safety Tip for the Month

Buy & use products that you can trust. Support our Sponsor(s).

Buy Pennzoil Products

Submitted by Michael “Budman” Prosser



Your Flight Instructors:

Ben Methvin - BFI, AFI,
BFI-SP, DPE (770) 509-6753
Training Field - Cartersville (KVPC)

Brad Methvin - BFI (678) 461-4463
Training Field - Cartersville (KVPC)

Kim Arrowood – BFI, CFI (770) 547-3622
Training Field - Cartersville (KVPC)

Bob Smedberg - BFI (706) 235-2147
Training Field - Cartersville (KVPC)

Richard Johnston - BFI
Home: (404) 921-1853, Cell: (678) 687-9564
Training Field - Cherokee Co. (47A)

Tony Castillo - BFI pws (Power weight shift)
(404)561-7632
Training Field - Jackson Co. (19A)

Gleim Sport Pilot Starter Kits available from Kim Arrowood (770) 547-3622

Another New Sport Pilot FAQ site: <http://www.all-about-sport-pilot.com/faq.htm>
You might want to Check It Out.

Super Training Tips: Worth Repeating

AOPA Cross Country Introduction.

http://flightraining.aopa.org/members/get_help/articles/3535.cfm

Sport Pilot Check Ride Guide: (courtesy of AOPA) Worth Repeating

One of the key elements that FAA Inspectors and Designated Pilot Examiners (DPE), such as Ben Methvin, uses for Sport Pilot flight Instruction and Practical Test is the FAA Practical Test Standards (PTS) FAA -S-8081-29 effective December 2004.

This PTS can be downloaded from the FAA web site:

http://www.faa.gov/licenses_certificates/airmen_certification/sport_pilot/

After taking many inputs from its members and others, the AOPA has also created a 31-page document covering the PTS in a more straightforward form called the "Sport Pilot Checkride Guide". This guide can be downloaded from the following AOPA web site link:

http://www.aopa.org/asf/publications/sport_pilot_check.html

Good Luck with your Flight Test Preparation- Ed

Any Accidental Oversights

Anything you Don't Like

Anything you would like more of

Suggestions for Improvements

Email to mailto:ra_johnston@yahoo.com

Use "Club Member Feedback" on the Title Line

Hot Web Links:

Georgia Sport Flyers: www.georgiasportflyers.com

Atlanta Ultralights - <http://atlantaultralights.com/>

USUA - <http://usua.org/>

EAA - <http://eaa.org/>

AOPA - <http://aopa.org/>

AOPA Flight Training - <http://flighttraining.aopa.org/>

FAA Written Test Questions: http://www.faa.gov/education_research/

FAA Test Question Answers from Ed. Send Request to mailto:ra_johnston@yahoo.com

See Preceding "Note from Wayne Evans" or [Adobe Reader Download - All versions](#)

More Hot Web Links From Our Members:

Airport Information and Maps -

<http://www.ultraflightradio.com ./>

<http://www.mapmuse.com/>

<http://www.airnav.com/>

Title 14: Aeronautics and Space -

PART 61—CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS, AND GROUND INSTRUCTORS:

<http://www.aopa.org/members/files/fars/far-61.html> - 14:2.0.1.1.2.3.1.4 (Tons of Info)

*****FAA NOTAMS - http://www.faa.gov/pilots/flt_plan/notams/ (Read, Read, Read)