# -EAA CHAPTER 32 NEWS-

Jim Bower, Editor

#### August, 2004

Sigh...another Air Venture come and gone, and all we have to show for it is this picture! Next year, will somebody remind your friendly editor to remove his hat?



Don't miss the upcoming August meeting, when we resume our monthly meetings. We've had a great AirVenture...now it's time to have more fun together. See you on August 22nd at 1:00 for food, and 2:00 for the meeting!

## INFORMATION HOTLINE 314-286-9932

CALL THIS NUMBER FOR INFORMATION ABOUT UPCOMING EVENTS

## **Sport Pilot is Here!**

#### The Sport Pilot Rule

- Creates a new sport pilot certificate for operating any aircraft that meets the definition of a light sport-aircraft (LSA).
- o Creates a new sport pilot instructor certificate.
- o Requires FAA knowledge and practical (flight) tests.
- o Credits ultralight training and experience toward a sport pilot certificate.
- o Credits sport pilot flight time toward advanced pilot ratings.
- Requires an FAA third-class medical certificate or a current and valid U.S. driver's license (provided the individual doesn't have an official medical denial or revocation on file with FAA).
- Does not allow carrying passengers for compensation or hire.
- o Allows sharing ("pro-rata") operating expenses with another pilot.
- o Allows day VFR flight only.
- Allow sport pilots to fly production aircraft (standard airworthiness certificate) that meet the definition of a light sport aircraft.

#### **Light Sport Aircraft**

- Maximum gross takeoff weight: 1,320 pounds (599 kg.) or 1,430 pounds if float equipped.
- o Lighter-than-air LSA maximum gross weight: 660 pounds (300 kg.)
- Maximum stall speed: 45 knots (52 mph) Maximum speed in level flight with maximum continuous power: 120 knots (138 mph) Two-place maximum (pilot and one passenger).
- Day VFR operation only (unless the aircraft is equipped per FAR 91.209 for night flight and the pilot holds at least a private pilot certificate).
- Single, reciprocating engine only.
- o Fixed or ground adjustable propeller Unpressurized cabin.
- Fixed landing gear.
- o Movable landing gear for seaplanes to allow amphibious operation.
- Can be manufactured and sold ready-to-fly under special-LSA certification without FAR Part 23 compliance. Aircraft must meet ASTM International consensus standards. Aircraft under this certification may be used for sport and recreation, flight training, and aircraft rental.
- o Kit and plans-built aircraft can be registered as experimental-LSA. These aircraft may be used only for recreation and flight instruction for the owner.
- Kit or plans-built craft operating as an ultralight trainer can be registered as an experimental-LSA until August 31, 2007.
- o Will have FAA registration, N-number.
- LSA category and class include: Airplane (Land/Sea), Powered Parachute, Weight-Shift-Control (Trike Land/Sea), Glider, Gyroplane, and Lighter-Than-Air (Airship and Balloon).
- U.S. or foreign manufacture of light sport aircraft is authorized.

#### **Sport Pilot Certificate**

- o To earn a sport pilot certificate, you must:
- o Be at least 17 years old (16 for glider or balloon)
- Hold a current FAA third-class medical certificate or
- state driver's license.
- Successfully pass an FAA sport pilot knowledge test
- Successfully pass a FAA sport pilot practical (flight) test The minimum required training time for the different light sport aircraft categories are: 11 Airplane: 20 hours
- Powered Parachute: 12 hours
- Weight-Shift-Controlled (Trikes): 20 hours
- o Glider: 10 hours
- o Rotorcraft (gyroplane only): 20 hours
- o Lighter-Than-Air: 20 hours (airship) or 7 hours (balloon)

#### **Sport Pilot Instructors**

- New sport pilot flight and ground instructor certificates. Allows instructors to use FAA ultralight training exemption experience.
- Allows conversion to sport pilot instructor status for ultralight instructors who were properly registered on or before September 1, 2004. Allows current CFIs to train sport pilots.

#### Repairmen Certificates

- The new FAA repairmen certificate ratings are Maintenance, which allows their holders to maintain and inspect LSA, and Inspection, which authorizes LSA owners to perform the annual condition inspection on their light sport aircraft. To earn these ratings:
- Inspection-complete a 16-hour course on the inspection requirements of the particular class of light sport aircraft,
- Maintenance-complete a course on the maintenance requirements: airplanes, 120 hours; weight shift and powered parachute, 104 hours; glider and lighter-than-air, 80 hours.

#### **LSA Maintenance Options**

#### Special-LSA maintenance and all inspections can be completed by:

- An FAA airframe and powerplant mechanics (A&P)
- o An FAA authorized repair station
- o A repairman (light-sport aircraft) with a maintenance rating
- o A certificated pilot may perform preventative maintenance.
- Experimental-LSA can be maintained by anyone, but annual condition inspections must be performed by: A repairman with a (LSA) maintenance or inspection rating
- o An A&P
- o An FAA authorized repair station

## FAA SPORT PILOT MEDICAL FAOS

From the FAA Website

1. What if I meet the requirements set forth in the rule that allow me to medically qualify using my current and valid U.S. driver's license? When may I use my current and valid U.S. driver's license as medical qualification?

Answer: Provided you meet the requirements and you are qualified to exercise sport pilot privileges using a current and valid U.S. driver's license, you may do so on September 1, 2004, the effective date of the rule.

2. What if I already hold a pilot certificate and a valid airman medical certificate? Do I have to maintain my airman medical certificate if I will only be exercising sport pilot privileges or may I use my current and valid U.S. driver's license as medical qualification?

Answer: You may use your current and valid U.S. driver's license to exercise sport pilot privileges; however, you must hold the required, valid FAA airman medical certificate if you wish to exercise private pilot (or higher) privileges.

3. What if I know (or suspect) that I have a significant medical condition and I hold (and have been able to maintain) a current and valid U.S. driver's license? Am I authorized to exercise sport pilot privileges provided I otherwise qualify?

Answer: Long-standing FAA regulation, § 61.53, prohibits all pilots—those who are required to hold airman medical certificates and those who are not—from exercising privileges during periods of medical deficiency. The FAA revised § 61.53 to include under this prohibition sport pilots who use a current and valid U.S. driver's license as medical qualification. The prohibition is also added under §§ 61.23 (c) (2) (iv) and 61.303 (b) (2) (4) for sport pilot operations.

You should consult your private physician to determine whether you have a medical deficiency that would interfere with the safe performance of sport piloting duties. Certain medical information that may be helpful for pilots is posted on the FAA website at http://www.cami.jccbi.gov/aam-400A/400brochure.html.

4. What if I have a life-long, chronic medical condition (e.g., diabetes mellitus) and I have never applied for or held an FAA airman medical certificate and my medical condition has never precluded me from being able to renew my U.S. driver's license? Am I authorized to exercise sport pilot privileges provided I otherwise qualify?

Answer: You should consult your private physician to determine whether you have a medical deficiency that would interfere with the safe performance of sport piloting duties. You may exercise sport pilot privileges provided you are in good health, your medical condition is under control, you adhere to your physician's recommended treatment, and you feel satisfied that you are able to conduct safe flight operations.

5. Why does the FAA specify conditions for using a current and valid U.S. driver's license only for persons whose most recent application for an airman medical certificate has been denied; whose most recently held airman medical certificate was rescinded or revoked; or whose most recent Special Issuance has been withdrawn?

To clarify that, if your most recent records on file with the FAA indicate that you were found ineligible to exercise airman privileges for medical reasons then, in the interest of public safety, you shouldn't go out right away and use your driver's license as medical qualification.

We understand that these conditions may not have been expected and may disappoint some people. That was not our intent, nor is it our intent that affected persons would have to maintain an airman medical certificate if they would rather use their current and valid U.S. driver's license to medically qualify as a sport pilot.

We ultimately concluded that, in those cases where the FAA has existing knowledge of medical ineligibility, we need the affected person to address it and, hopefully have it resolved. To meet the intent of the rule, the affected person should apply for reconsideration of their eligibility. In some denial cases, applicants simply may not have provided enough information to the FAA or may not have supplied information that the FAA may have requested. In certain other denial cases, applicants may not have exercised their appeal rights which may have led to certification in some cases.

The FAA wants to see as many pilots as possible take advantage of this exciting new rule and looks forward to working with individuals seeking to exercise sport pilot privileges. We also intend to work with EAA, AOPA, and other industry groups toward that end.

6. What if I resubmit my application and, ultimately, I am certified? Must I continue to renew my medical or may I use my current and valid U.S. driver's license as evidence of medical qualification?

If you are ultimately certified then you are no longer on record with the FAA as having had your most recent application denied or your most recently held FAA airman medical certificate suspended or revoked, etc. Therefore, it is not necessary to maintain airman medical certification thereafter to exercise sport pilot privileges provided you hold a current and valid U.S. driver's license and provided you otherwise qualify.

## 7. What if I hold a Special Issuance? Is that considered denial of an application for an airman medical certificate?

Answer: No. Special Issuance is not considered the denial of an FAA airman medical certificate.

## 8. Approximately how many applicants for third-class airman medical certificates are denied?

Over the past 3 years, the number of denials of third-class airman medical certificates has ranged from approximately 2000 to 2500 per year based on approximately 135,000 to 140,000 applications for third-class airman medical certification per year. Most of these denials resulted because of a failure of the applicants to provide sufficient information for the FAA to make a favorable decision.

## **June Meeting Notes**

Jim Bower, Secretary

President Laura Million brought the meeting to order with the Pledge of Allegiance at 2:18 pm.

She reported there was good feedback from the airport open house, despite our receiving NO press coverage!

The next Young Eagle event will be on September 11, 2004.

Doug Killebrew is still looking for somebody to take over the chapter's organizational duties of the St. Louis Fair and Airshow. However, he stated this may be the last year for the event due to FBOs requiring more space. He is asking for volunteers for this year's show. He needs homebuilt aircraft for display, speakers, and workers. The Fair and Airshow is on September 4, 5, and 6.

Laura announced the chapter picture at Oshkosh will be taken a little late (11:30 am) in order to allow folks to attend a Burt Rutan seminar.

Doug Killebrew asked anyone who has a working refrigerator they wish to donate please contact him. We need another one to hold all our food!

Chapter merchandise is on sale (still). T-shirts are \$9.00; chapter patches are \$4.00.

Remember that all Saturdays are work days at the ARC.

Don't forget the Bob Nuckolls Aeroelectric Connection seminar on October 2 & 3.

The meeting adjourned to allow our special guests, Ken and Dot Kotik to talk about their beautiful Piper L-4. It was a great presentation, and their airplane is a real showpiece.

Newsletter Deadline: The deadline for submitting articles, pictures, wantads, etc. is two weeks prior to our regular general meeting. Please submit these items to the newsletter editor via e-mail (jimbower@hotmail.com), snail-mail (10350 Toelle Ln. St. Louis, MO 63137), or phone (314-869-8971).

## **Muffler Mishap**

A "There I Was" Tale by Rick Galati

Recently, I departed Bowling Green, Mo. in my trusty old 1966 C-150, N3107X for the 30-something mile return flight to home base at Greensfield (M71). In addition to topped off fuel tanks, three 5 five gallon jerry cans filled with 100 L.L. were on board. After rotation, I detected a brief and faint whiff of smoke, though none accumulated in the cockpit. I immediately decided to continue the climb out to 3000' MSL just in case. Earlier, I had added a quart of oil and thought maybe a drop or two spilled onto a hot engine part......or possibly flew over an undetected burn on the ground, maybe a bird or wasp started to set up

house somewhere in the unseen lower cowl regions, or the smell I detected was just my overactive imagination, or......... In any event, the odor dissipated but when at altitude and leveled off, I routinely retarded the throttle. The engine immediately shuddered and

...never again take it as an article of faith that just because an aircraft has been signed off as airworthy after an annual, that it is indeed, truly airworthy.

obviously wanted to quit. After fiddling with the throttle, mixture, mags, and carb heat in no particular order, I realized the power setting options were quickly reduced to either full throttle which now was producing only 2200-2300 RPM and shaky at that, or the engine simply would not run. In addition, the engine was now sounding very unusual...and much louder than normal. At least the oil pressure seemed to remain steady in the middle of the green. All the while, my thoughts were that if things deteriorated, I \*could\* land at Silex, then a few more minutes south I \*could\* land at

Troy Air Park, and so forth. The GPS calculated ETA to M71 seemed to pass by excrutiatingly slowly. When I finally arrived overhead at Greensfield (whew!) and was reasonably assured of making the runway, I circled, always remaining within gliding distance and got down from 3000' MSL as best I could using the only power setting available.



Goodness knows, like most private pilots, I've practiced engine out procedures and dead stick landings more than once but when it's for real and you have the option of using power or not, trust me, you'll likely be reluctant to back off the throttle if you think the engine will quit. But this decision also committed me to crossing the threshold of runway Niner at something close to 100 mph. This speed isn't too much of a problem with a C-150 and 3200' of runway albeit with no significant headwind and a considerable downhill grade. When I did retard the throttle, the engine and propeller immediately stopped. With some firm braking, Xray rolled to a silent and uneventful stop near the far end of the runway. After a moment of thankful silence, I collected my thoughts and attempted an engine restart. After several tries, I was only able to get a rough restart on a now reluctant and wheezing engine by constantly squirting primer into the cylinders....just enough to do a quick U-turn and get back to the hangar at a high taxi speed. This may not have been the smartest thing to do given what was

about to unfold. When I got out of the plane, I was shocked to see a sizable burn pattern on the lower front cowl. The aluminum was stripped bare in the center of the burn and the white paint was scorched and blackened around the pattern's perimeter. I wasted little time removing the cowls. The source of the problem was quickly determined. The entire front cap on the right side muffler suffered a catastrophic failure and blew completely out. Among



other things, the ensuing hot gases spewing from the rupture melted and severed the 2 rubber couplings splicing the manifold pipe directly above it, effectively starving the #3 cylinder of its vital fuel air mixture. The scat tubing immediately in front of the muffler was seriously damaged. Within an hour, and with the eager help of fellow fliers who seemed to appear out of nowhere, the muffler was removed and the baffling partially disassembled. You see, our sage A&P in residence, Tom Lansden, holder of the coveted Charles Taylor Award for 50 years of incident free mechanical excellence examined and insisted the #3 cylinder be removed for some machining around a leaky gasket area. The surface was seriously pitted. Seems some person had taken a dubious short cut and stacked two exhaust gaskets instead of one in a superficial attempt to stop exhaust gas blow by. While not related the muffler failure, the cylinder was removed and loaded it into a plastic bucket for transport and by day's end, my friend Charlie had already completed precision resurfacing of the exhaust port, installed two new exhaust studs for good measure and the cylinder was ready for reinstallation.

A few days later, a new \$300 muffler arrived and was bolted into place. In addition to all new scat hoses and various hardware items, I also replaced the 8 spark plugs for good measure. Typically, the bottom plugs consistently showed more wear than the top plugs. All my work was legally signed off by Tom who supervised every detail of my efforts. Tom also initiated a 337 document for inclusion into my airplane records since technically; the replacement muffler was not fabricated by the original aircraft manufacturer. N3107X is now running just fine.

What did I learn? I did a simple Google search and discovered that to varying degrees, exhaust system failures in Cessna 150s are certainly not unheard of. Well, my eyes are opened a bit wider now. My airmanship can be debated; some may assert I should have landed immediately at the first hint of trouble. But after owning and flying X-ray for over 16 years, this was not the most dramatic incident I've ever had and I felt no sense that I was on the verge of losing control. The greater lesson to me is thus. You see, since the Cessna is certificated, I have been historically reluctant to do anything but the most superficial of maintenance believing such things are better left to "qualified" mechanics. This fact of certificated aircraft ownership was a major reason I originally decided to build an RV. My Cessna had after all, flown less than 10 hours after its annual inspection, how could I reasonably anticipate an exhaust system failure? Even if I knew what to look for, (which I didn't) how many people routinely pull both cowls off for an average preflight? Some say the muffler failure didn't just happen out of the blue and the inspecting mechanic should have detected its impending failure at annual but I tend to dismiss that argument as academic at best. Some people may be moan the more than half century old technology of a Continental or Lycoming engine, but there truly is something to be said for design simplicity. That little 0-200 engine valiantly continued to run despite being severely handicapped. Years ago, that same engine continued to run albeit horribly with a snapped off exhaust valve, but that's another story. In the end, I'm grateful that everything worked out and I learned many things, but will never again take it as an article of faith that just because an aircraft has been signed off as airworthy after an annual, that it is indeed, truly airworthy. It goes without saying I have developed a new found respect for all things related to the often overlooked and under appreciated exhaust system.

### August Program Speaker??

I have asked the "Soar with the Eagles" glider guy out of Muni to come and talk but no response yet. Some day the L-19 award winning guys will be flying up from lower Missouri to show off their planes. They have not called yet either. Hope all is going well. I am back to flying this Saturday as my ear is better. Take care ya'll, *mr.bill* 

## LEARNING AS WE GO mr. bill

Well, the unpacking is complete after another trip to the aviation "Mecca"- OSHKOSH - and we were well entertained. This year's theme was definitely about EXPERIMENTAL aircraft review. Everyday various types of experimental aircraft were in the flyby showcase. From the "low and slow" Breezy to the SX-300's with their super duper (technical talk) engines to those Kerosene Kids with their turbine propped Lancairs that go fast for a short distance. Kerosene burning jets were even in one seat Mini-500 helicopters.

With last year sporting a record number 2,960 show aircraft (up 217 aircraft from 2002) the area for aircraft parking was expanded by 10 rows to make 159 rows. Though this year the last airplanes only filled up row 146. As I walked back from taking a picture of the last row marker looking north one of those Deer John gators came out to see if I had "sometimers" disease or was legally blind because I was walking where there were no airplanes. I quickly received a ride back to the rows that had airplanes. The gator driver informed me he had just bought a Tri-Pacer he found in a barn. I quickly dispelled the "sometimers" notion as I answered his questions with my Short Wing Piper knowledge about the major problem areas for corrosion and rust and where to put the rotating beacon. He then let me continue my stumbling around after his remaining questions were answered.

The "blast from the past" was the Prescott Pusher that flew in. Only one seen before this was on the EAA museum grounds. The "rare bird" was a Curtis "Jenny" that flew in from the left coast. There was even a crowd around it at 8:00 p.m. at night. The "what were they thinking" aircraft was a Cessna 340 twin engine that had each of its engines that are normally mounted on each wing removed and instead had a Pratt & Whitney PT6A Turboprop engine in the nose of the beast. The "you kept the box and threw away the airplane" entry was a fixed gear, square box fuselage, high winged turboprop called a CASA 212. (This is a production aircraft that is so ugly it only came out at night to haul boxes of freight.) The military brought in a C-5, a C-141, and a C-130 with the new 5 bladed propellers which made it look like it was flying as it sat parked on the ramp.

Beautiful weather until Thursday at noon when a 1 hour heavy rainfall was ordered up to keep the dust down. Another was ordered Sunday morning at 0400 until 0600. This one slowed the process of leaving due to the high amount of rain.

Well, as we all have heard (but trust me you really do NOT understand it yet) that the Light Sport Pilot/Light Sport Aircraft (LSP/LSA) initiative will become effective September 01, 2004. There is an FAA SAFETY SEMINAR, at Spirit of St. Louis Airport, at Wings of Hope, on Wednesday, August 18, 2004. First piece of information: This is a FREE event. Secondly, there will be a FREE cookout with soft drinks that starts at 5:00 p.m. Thirdly, at 6:30 p.m. the FREE seminar will start. (If you have never been to Wings-of-Hope check them out.

They occasionally have aircraft that can be obtained for a donation. They are located on the West side of Spirit Airport. Take 94 South to 40/64 East over the Boone Bridge. Turn on to Chesterfield Airport Road. Turn right at the main entrance road to Spirit Airport. Turn right (west) at the stop sign and take it to the end of the road. Wings of Hope is on the left. (www.wings-of-hope.org) I would advise all to come and hear the FAA tell you the details because "just because you have a drivers license you still may not be eligible if you have been DENIED!!!"

The FAA is very pleased with the Homebuilding community. Why? We are leading the way in SAFETY!!! The general aviation aircraft production rate has leveled off in but the accident rate still is high. The Homebuilt segment has increased in production AND the accident rate has dropped 34%. We are doing things right. HOW??? By using Technical Counselors and Flight Advisors for the aircraft being built and flown is making the Homebuilt community safer. The FAA is very happy with us and the EAA is very happy. More about this later.

Please if you have ANY interest in the SPORT PILOT initiative please attend the Wings of Hope meeting so you get all the facts and all your questions answered from the FAA and not the guy down the street.

CONGRATULATIONS!!! To old chapter 32 member Chuck Coleman for designing the fuel system for the GLOBALFLYER. This is the single jet engine Voyager looking airship that will be flown around the world! I also hear that Captain Coleman was calling out the altitudes to touchdown for the SPACESHIP1 as it returned to earth.

CONGRATULATIONS!!! To young Ken Blackburn and his recent retirement to central Florida, I think? Now I hear that Ken is coming out of retirement to work for another top secret place in the pan handle of Florida. Whatever you are doing Ken we all want to thank you for your help in so many ways for this chapter and its members. You will be missed. Enjoy the warm weather! Send an address so we can write.

WHAT IS THE TOTAL WEIGHT OF THE PAINT REQUIRED TO COVER THE LOCKHEED C5A?...

2,300 pounds. Also the max weight of a Cessna C-172 Skyhawk.

### Calendar of Events

Sunday, August 22<sup>nd</sup>, Pot-luck BBQ 1pm; General Meeting 2pm.

Saturday September, 4th, Sunday, September 5th, and Monday, September 6th – St. Louis Fair and Air Show: EAA Chapter 32 Aviation Theater.

**Saturday, September 11<sup>th</sup>**, Young Eagles – Ozark Airlines Silver Swallows Reunion 8:30am – Pilot and Crew briefing, 9am-2pm Flights for kids.

## Officers and Committees

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