

"Aviation Professionals Dedicated to Excellence in Flight Instruction"

The GSLFIA January 2021 FIRC was a Great Success

The 51st GSLFIA FIRC was a great success. A total of 16 Instructors were present to complete the renewal of their Flight Instructor Certificate along with two additional who audited the program. Those in attendance were qualifed and also received FAA Wings Credit for the FIRC as well. We want to sincerely thank Randy Ottinger from the STL Flight Standards District Office for his support answering questions and providing representation for the FAA Wings Program.

The 2021 FIRC was again supported by Aviation Seminars. Tom Edwards reviewed the curriculum. Tom has been a long term instructor for Aviation Seminars and also an Aviation Professor at Northern Kentucky University.

We also want to sincerly thank the Wings of Hope organization for their continuing support for providing an excellent facility for the FIRC. We were very fortunate in having plenty of space to accommodate the Social Distancing requirements. We want to sincerely thank Elite Aviation. Elite provided a complimentary continental breakfast for both days. John Tipton stopped during the lunch break and spoke about the current training progam at Elite to bring everyone up-to-date on thier facilities and operation. The GSLFIA provided the complimentary lunch. The STL FIRC agenda receives many compliments providing GSLFIA members and the aviation community the best possible enviroment and FIRC agenda in the STL area.

Initial plans for the 2022 FIRC are forming. Watch the GSLFIA website and newsletters for continuing information. Hope to see you at the 2022 FIRC on January 15th and 16th.

Coalition for Aviation Safety Education

C.A.S.E. or the Coalation for Aviation Safety Education is new! C.A.S.E. was recently formed as a TEAM Effort organization that consists of the Wings of Hope, Women with Wings, The Greater St. Louis Flight Instructor Association and the Greater St. Louis Business Aviation Association organization. C.A.S.E. promotes Aviation Safety through Education.



C.A.S.E. presented its first hour-long webinar on the subject of Non-Towered Airport Operations on February 23rd at 7:00 p.m. The webinar is a two part series that will continue with part two on March 23rd again at 7:00 p.m. Although the first segment has aired it will continue to be available. Both parts of the webinar are available for the FAA Pilot Proficiency Program WINGS

Coalition for Aviation Safety Education (Continued)

Credit. After completion of both segments of the webinar's quiz, you will eligible to receive the FAA Pilot Proficiency Program WINGS credit.

Part 1www.caselive.org/1.htmlPart 2www.caselive.org/2.html

C.A.S.E. has developed this course as a guide to help outline best practices during a simulator corporate flight from the St. Louis Downtown Airport to Montrose Regional Airport in Colorado after the towers at those airports have closed. To date, almost 4,000 participants have viewed this presentation.

The goal of C.A.S.E. is to support safety, training, STEM programs and education.

The C.A.S.E. program development staff experience represents:

309 years of flight with an average of 44 years each.

100,500 cumulative hours of flight time that totals an average of 14,357 hours for each member.

30,700 hours of dual instruction given for an average of 4,385 hours for each member.

If you see an item of subject matter that you feel needs to be addressed, please contact the GSLFIA.

Education and Safety is our product!!

Another TRIVIA Night Coming!!

Watch for another **AVIATION** Trivia Night. The last Trivia Night was a great success. We have received many favorable comments so we are planning another event. Watch GSLFIA News and event posters for additional information!!

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More On C.A.S.E.

Coalition for Aviation Safety Education

"CASE Presentation Part 1"

It seems like the old, in person presentations that we all grew up with are becoming harder and harder to find and Webinars via ZOOM are becoming the norm today. Being somewhat of a Luddite, I have to admit that I was a bit skeptical of this "new normal". I really enjoy getting together with friends and discussing flying and also the immediate feedback that one gets when putting on an in person seminar. But, after being told that I have to move into the 21st century (and after long discussions with John Teipen about the advantages of the webinar being able to reach thousands rather than just a few - thanks for your patience John!). I think that I'm sold on the new way of doing things. So, your GSLFIA has joined forces with Wings of Hope (WOH), the Greater St. Louis Business Aircraft Association (GSLBAA) and Women in Aviation (WIA) to form a group that we're calling the Coalition for Aviation Safety Education or CASE for short (aviators do love their acronyms).

The first project that CASE has developed is a Webinar on "Non-Towered Airport Operations". The course was written by Keith Mueller, Elisa D'Antonio (who also did the slides and script), Dick Horowitz, Greg Pochapsky, Jim Pavlisin, Jeff Rapp, Dave Pogorzelski and Craig O'Mara, with FAA support from Randy Ottinger. John Teipen, the "Wizard of U City" produced the webinar with his equipment that reminds me of NASA's Mission Control! The course involved a scenario of a corporate aircraft operating from St. Louis Downtown Airport (CPS) to Montrose Regional airport in Colorado (MTJ). We timed the scenario so that the departure was after the tower had closed at CPS, so we could discuss how to depart from a non-towered airport. This first presentation was aired on 23 February and, the last time I looked, had almost 4,000 views in 59 countries - not bad for our first ever attempt at developing a webinar! Part 2, which will cover the arrival phase of flight into MTJ, is being developed and will be presented on 23 March. If you missed them, both of these course are on <u>FAASafety.gov</u> and qualify for WINGS credit, so I hope that everyone watches the course (no laughing at the presenters - OK!).

I also have another favor to ask. After you've watched them, may I ask for your feedback, so that we know how we can improve our product? We would like to make these presentations a regular thing and the only way that we're going to get better is some critique from the audience. Being CFI's, one of the things that you do with every student is to tell them how they're doing, so I'd like to ask you to do the same with us! And I'd also like to ask for ideas of what you would like to see or what would be worthwhile to present in a webinar. And lastly, if you'd like to help put on the webinars, please let me know and we'll put you to work! I look forward to hearing from all of you!

Craig O'Mara Director, GSLFIA craig.omara747@gmail.com

Icing!

What happens when we get airframe icing and what should you do?

If you continue to fly in all weather conditions, it is a good bet that eventually you will have to make a radio call like this one:

"Center, aircraft 12345. Picking up ice"

SO, Okay "This is not the end of your world, if the aircraft you are flying is fully equipped for deicing or certified for "flight into known ice (FIKI)". If so, this is probably a manageable situation. There are however, actions that must be taken immediately.

EQUIPMENT:

Anti-Icing and De-Icing

Anti-Icing equipment prevents the **Accretion** or buildup of ice on the airframe.

De-Icing equipment aids in removing ice that has formed on aircraft surfaces.

A "fully de-iced aircraft" will have the following equipment:

1. Wing and horizontal leading edge deicing equipment.

2. Heated propeller blades.

3. Pitot heaters, possibly stall vane heaters, fuel vent heaters, static- port heaters.

4. Windscreen deicing system.

An aircraft certified for flight into **"known icing conditions" (FIKI)** will be equipped with the following equipment.

1. Wing, horizontal stabilizer and vertical fin deicing. (Pneumatic boots or other equipment)

2. Electric Propeller boots or other deicing equipment.

3. Heated windshield or additional hot plate over a portion of the windscreen.

4. Heated fuel vents, heated static ports and heated stall vanes.

5. Heated engine air inlet ducts (usually found on turbo-prop aircraft).

6. Instructions in the POH describing the operation of the de-icing equipment.

- 7. Cockpit Indicator lights.
- 8. Multiple vacuum sources including standby.

Certification for flight into known icing conditions is part of the original aircraft certification process. Many times, aircraft are only certified for known ice operation by serial number sequence. Cessna light twin engine aircraft is one example of this process. In today's aircraft world, deicing equipment may be pneumatically, electrically or hot air operated. Anti-icing equipment may also be chemical fluids carried onboard the aircraft. This chemical coating process must be initiated prior to the accretion of ice on an aircraft airframe.

"No matter what you are told, you can't add all of the known ice equipment to an older aircraft and make it a known ice aircraft" Why is flight into icing a problem?

When ice accretes or accumulates on an airfoil, it alters the shape and therefore significantly lowers the lift. Ice also adds weight to the airframe. Either of these items can lead to a loss of airspeed and eventually render the airframe unable to hold altitude. As an airfoil becomes less efficient and weight increases, the stall speed of an aircraft is also greatly increased. Even trace amounts of ice on the horizontal stabilizer can drastically alter the stability characteristics of the airfoil.



What is "flight into known ice conditions"? Anytime you file a flight plan and the temperature is at or below +10 degrees Celsius, or the ram air temperature is at or below +10 degrees Celsius and visible

Icing!

(Continued)

moisture is present in any form along your route of flight, you have filed a flight plan into **"Known Icing Conditions".** Filing a flight plan with these conditions is prohibited by the FARs. You must be operating an aircraft certified for flight into known icing conditions before intentionally penetrating these conditions or areas reported in weather reports or by PIREPS.

Icing Conditions Defined

TRACE: Ice becomes visible. Rate of accretion is slightly greater than sublimation. Anti-icing equipment must be turned on but may or may not require activation.

LIGHT: Rate of accumulation may create a problem if flight is prolonged for one hour or more. Use of de-icing equipment is periodic.

MODERATE: When the rate of ice accumulation requires frequent activation of de-icing equipment, a diversion of the flight path is required.

SEVERE: Accretion of ice on the airframe is at a rate that the de-icing equipment fails to reduce the hazard. Immediate diversion is necessary.

There are no definitive rules regarding encounters with icing.

The number one rule is "avoidance".

The second rule after an icing encounter is "change altitude". Going to warmer air aloft is many times the best option. Ice was liquid somewhere above you. Find the warmer air. Climb slowly and don't allow the ice to accumulate on the underside of the aircraft.

The third rule is to "reverse course"

When ice is encountered complete the following:

1. Turn on aircraft pitot heat, propeller heaters, and other heaters.

2. Monitor electrical load.

3. Increase power to maintain speed and altitude.

4. Turn on cabin heat and defrosters

5. Change engine rpm to minimize ice buildup on propeller blades.

Last but not least!!!!!!!!!

NEVER FLY INTO FREEZING RAIN! NEVER FLY INTO FREEZING RAIN! NEVER FLY INTO FREEZING RAIN!

> Gateway Flight Training LLC 10934 Pem Road St. Louis, Missouri 63146

Safety in Aviation Through Education



Editors note!!

Some days it's just better to stay on the ground!!!

Tech Talk

From our friends in the TRACON

1) It has become popular with GA in our area to squawk an assigned code by ATC, and then Ident as well, when not specifically asked to. The ident feature only has meaning if the controller instructs a pilot ident, and then observes it. For pilots to just arbitrarily ident is meaningless, and accomplishes nothing.

2) Please also remind pilots that phrases like "got him on the box" and "got him on TCAS/ADSB" are also meaningless. When traffic is issued, the only thing that matters to ATC is "searching" or "traffic in sight".

If one were to think about it, there's likely no time a controller has ever asked a pilot if he had traffic on their TCAS or ADSB. The reason is that there's nothing ATC can do with that information. TCAS and ADSB are only as good as the other transponder. Traffic must be seen visually to no longer be an issue.

GSLFIA Note: Tech Talk provides a method of communication and information to/from pilots. Please visit the GSLFIA website to ask questions and review communication regarding aircraft operations. Inquiries can be made to <u>stlouisflightinstructors@gmail.com</u> We will provide every effort to answer your question.

<u>Mentoring Our Youth – Intro to</u>

Aviation Education

What did you do, since January 1st? I've been flying, but mostly dual-training. Why? Because I was working on Phase Two for my WINGS profile. With 40+ years of active & inactive months, I worked with a young CFI. Flying is different now, than when I earned my PPL in 1979. I'm amazed at the increased preflight planning expected, when navigating with respect to the St Louis Class B and D airspaces. It's also important to fly VMC with precision & safety, even if you're not flying IFR. So, how can you do that, while waiting for good weather? Engage in "Chair-Flying" by attending EAA & FAA webinars – these are FREE. One was by EAA on January 13th, titled "Surviving Carbon Monoxide" is applicable to winter flying. Another was by ASI (AOPA's Aviation Safety Institute) on January 14th, titled "Wait! Are we in balance?" How many pilots simply jump into the plane, without considering these?

So, ... COVID altered our education opportunities for high school students. "Soar into STEM" (SIS), the weekend program at WOH, will be "virtual" in late Spring, including these six school districts -Ferguson-Florissant, Kirkwood, Jennings, Lindbergh, Rockwood, & University City. Lindbergh plans to offer AOPA's "High School Initiative" or "You Can Fly" program.

WOW! How many remember July 30th, when "Perseverance" launched to Mars? Though COVID prevented the "SciFest" at the SLSC then, and again on February 18th, we still celebrated the landing of the rover & its helicopter, "Ingenuity".



Do you read the FAA "Safety Briefing" magazines? They celebrated 60 years of aviation safety outreach. The Jan/Feb issue, had articles on SOP (Standard Operating Procedures) and focus on IMSAFE. Plus, they now provide easy access to these magazines, for WINGS and AMT courses via: https://www.faasafetybriefing.com/cours es/

Mentoring Our Youth Continued

Finally, remember the FAA's newest groundinstruction - "Runway Safety Flight Simulator". Access

https://www.runwaysafetysimulator.com/ for details. Also, for "From the Flight Deck", access https://www.faa.gov/airports/runway_safety/v ideos/

For students, apply for AOPA's AV8RS membership, FREE for students Plus, visit these (www.AOPA.org/AV8RS). websites for details AOPA (www.AOPA.org/Scholarships). AWAM (www.AWAM.org), EAA (www.eaa.org/eaa/youth/Aviation-Scholarships), & Women in Aviation (www.WAI.org).

The GSLFIA invites you to help educate future pilots & Flight Instructors of tomorrow. My inspiration was "Sky King! Use our redesigned website (GSLFIA.com) - join or renew your membership! We've made it easy for you & them – see related article.

Jeff Rapp GSLFIA Ambassador to Education

GSLFIA Website Enhancements

The GSLFIA website is your source for aviation Q&A, plus connectivity to specific aviation resources!

We've already had many CFI's and pilots use it, to register for the FIRC, renew their Membership, and others who've become New Members. Below, you'll learn about the enhancements we made, provide extra clarification. So, let's walk-thru the easy steps.

No more paper – the website will be our standard. Use the "Contact" drop-down, with questions.

To make a donation or support scholarships via GSLFIA, access via the "Scholarships/Donations" tab. Choose the "DONATE" button (bottom of webpage).

How can you help our future pilots, use the "Donation Form" webpage by:

(1) Completing all required fields, then

(2) Complete the credit-card information (card number, exp date, CVC-code, cardholder name)

(3) Then, scroll to bottom, and **SUBMIT**.

(4) **Successful** completion of your transaction, <u>re-directs</u> to a new webpage, <u>and</u> sends a reply to the <u>email [you</u> entered].

(5) **That's a record,** for your taxes.

(6) Return to main-page, by clicking on the GSLFIA logo (the "Home" icon).

For Member Renewals, access via the "Membership" tab. Choose the "Membership Renewal" drop-down.

Hints to renew your GSLFIA membership:

(1) Follow "How to Sign Up″ direction (right-side). (2) When positioned the on choose "Membership form, Renewal". (3) If you want to renew, click the "Membership Renewal" button. (4) Select one of three options. (5) Then, complete all required fields, and update your profile (only changes you But first, follow request). (Bold type) & the directions click the word HERE.

GSLFIA Website Enhancements

That will open a new browser-tab, "Find a CFI". Using the filters, search for yourself. When found, keep that tab "open" displaying your current profile [per the Member database].

(6) Complete the credit-card information (card number, exp date, CVC-code, cardholder name)

(7) Then, scroll to bottom, and SUBMIT.

(8) **Successful** completion of your transaction, <u>re-directs</u> to a new webpage, <u>and</u> sends a reply to the <u>email [you entered]</u>.

(9) **That's your record.** The Member database will reflect any changes you requested, when the website is updated (asynchronously - probably 1-2 weeks).

(10) Then, <u>close</u> the new browser-tab (Find a CFI).

(11) Return to main-page, by clicking on the GSLFIA logo (the "Home" icon).

The GSLFIA invites your support to help educate future pilots & Flight Instructors of tomorrow. Your opinions are key to GSLFIA's success! Contact a board member, if you'd like to help.

Dick Horowitz Vice President Jeff Rapp Ambassador to Education

Future Events

Although COVID is still controlling many of the items that the GSLFIA is planning, we have a number of events on the agenda that we continue to maintain a focus.

Annual Aviation Awards Banquet

The 100th Birthday Celebration of Lambert International Airport that will be part of the GSLFIA Annual Aviation Awards Banquet. Although we are unsure of when we will be able to conduct this event we feel that it will receive major recognition in the aviation community. Many area organizations have inquired about this event and when it may be held. The awards banquet agenda remains a priority to insure that we properly recognize our area instructors, those who have done so much for aviation and the 100th anniversary of Lambert Intl Airport.



Date Io Be Determined St. Louis Lambert Airport, Terminal 1, B Concourse

Featuring presentations by author Daniel Rust, PhD. & Rhonda Hamm-Niehruegge, Director of Lambert Airport Tickets may be purchased for \$40.00 each online at gSlfila.rsvplify.com. DON'T MISS OUTI Sease are limited and this even vill sell out fast For more information or to purchase paper tickets, contact Dick Horowitz at rjh700@gmail.com or 314-610155, or Keith Mueller at kvmueller1991@chartenet or 618-514-2677. Celebrating Of Years of Lambert Airport & 5 (Years of GSLFIA

Annual Trivia Event. The prior 2020 virtual event was a major success. Plans are being finalized for the 2021 Trivia Night which is currently being planned as a virtual event.

Bi-monthly GSLFIA instructor seminars.