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DSM FSDO, FAASTeam, FAA Newsletter

Spring 2018

# 2018 National GA Award Honorees Named



Every year for more than 50 years, the General Aviation Awards program and the Federal Aviation Administration (FAA) have recognized aviation professionals for their contributions to general aviation in the fields of flight instruction, aviation maintenance/avionics, and safety.

### Recipients of the 2018 National General Aviation Awards are:

**Daniel Peter Christman**  
Las Vegas, Nevada

2018 Certificated Flight Instructor of the Year

**C. William Pancake, Jr.**  
Keyser, West Virginia

2018 Aviation Technician of the Year

**Catherine Elizabeth Cavagnaro**  
Sewanee, Tennessee

2018 FAA Safety Team Representative of the Year

The FAA will present individual awards to each National Honoree in July during EAA AirVenture 2018 in Oshkosh, Wisconsin, and their names will be added to the large

perpetual plaque located in the lobby of the EAA AirVenture Museum. Also included in the prize packages for each National Honoree is an all-expenses-paid trip to Oshkosh to attend the awards presentation and other special GA Awards activities.

*Awards for National Flight Instructor, Aviation Technician, and FAASTeam Representative of the year to be presented by the FAA at AirVenture.*

*"I am very excited to announce the selection of the National Honorees for the 2018 General Aviation Awards," said GA Awards board chairman Arlynn McMahon. "These awards highlight the important role played by these individuals in promoting aviation education and flight safety," she added. "The awards program sponsors are pleased that these outstanding aviation professionals will receive the recognition they so richly deserve before their peers in Oshkosh."*

### Public ADS B Performance Reports

## PAPR Chase

Pilots accustomed to receiving live ADS-B traffic updates from FAA radar through the Traffic Information Service-Broadcast will feel blind – and less safe – if that service gets shut off. But that is exactly what might happen if their ADS-B equipment is transmitting hazardous information or performing incorrectly during a given number of flights. Under a change to the ADS-B ground infrastructure software made in mid-December, aircraft flagged by the Federal Aviation Administration's ADS-B performance monitoring system as not complying with the criteria spelled out in the ADS-B rule could be placed on a No Services Aircraft List, or NSAL. Once on the list, the aircraft will no longer receive traffic from FAA radar through the TIS-B uplink, and the aircraft's ADS-B information will not be displayed on controllers' screens.

*(continued next page)*

While the onboard ADS-B equipment itself does not alert pilots to such errors, the FAA's Public ADS-B Performance Report, or PAPR (pronounced "paper"), does. The agency is asking equipped pilots to check their systems regularly using the PAPR, a free check completed online at <https://adsbperformance.faa.gov/PAPRRequest.aspx> after a flight in airspace with ADS-B coverage. Pilots receive the analysis, which rates the actual performance compared to ADS-B specifications, through email shortly after submitting the request.

"Understanding the issues we're seeing with ADSB avionics over the past three years, I recommend that pilots who are flying every weekend check their ADSB performance every fourth or fifth flight," said James Marks, the FAA's ADS-B Focus Team lead. Typical issues include aircraft transmitting the wrong ICAO codes (a fixed number set during aircraft registration), wrong flight identification (tail number), incorrect air-ground registration (the ADS-B unit reporting that the aircraft is in the air when it is on the ground, and vice versa) and position errors. Marks notes that an ADS-B system is more complex than a transponder, and its performance is dependent not only on the properly functioning and configured avionics but also dependent on the availability of GPS/

WAAS services, the FAA's ADS-B ground infrastructure and its available coverage, terrain and other factors. "Just because your ADS-B passed the initial test after installation doesn't necessarily mean your system will comply with the rule afterward," Marks said. Marks has a

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team of nine avionics inspectors and three analysts working full time to identify and analyze errant ADS-B outputs, and when avionics problems are confirmed, they notify the aircraft owner. Marks and his team have shifted their ADS-B compliance machinery into high gear as equipment nears 50,000 aircraft and the 2020 mandate looms less than 22 months away. Under the changes made in December, an aircraft can be placed on the NSAL if the ADS-B-equipped aircraft is emitting "erroneous or hazardously misleading" information. "Over the past three years, (FAA monitoring) has identified some ADS-B Out aircraft with non-performing equipment transmitting data used by ATC and ADS-B Inequipped aircraft that present a safety hazard to the National

Airspace System," according to an FAA notification of NSAL to the public on Dec. 20, 2017. NSAL aircraft, those with persistent or more serious problems, are a subset of the so-called non-performing equipment aircraft, the latter of which number in the thousands. Marks' team is trying to reach owners of all NPE aircraft through a mass mailing of notification letters, hoping to correct the issues before having to place the aircraft on the NSAL. As of mid-January, more than 400 aircraft were on the list, mostly foreign-registered airliners with a common ADS-B Out issue for which a fix has been developed. Marks expected the number of general aviation aircraft on the list to increase over time, but said "Our goal will always be to resolve avionics issues first when possible to avoid the need to put an aircraft on the NSAL." For pilots, the FAA's actions highlight the importance of regularly requesting a PAPR, not the least of which is that the cover page will tell you in red if you are on the NSAL. Specific issues with the unit also are highlighted in red, and anything red means the aircraft has NPE. "A lot of pilots install the ADS-B equipment and assume everything is fine," Marks said. "If it's not, a member of my team will contact them at some point."

# Best Glide Speed and Distance

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## What is Best Glide Speed?

Is it the speed that will get you the greatest distance? Or is it the speed that gets you the longest time in the air? Or are these two the same — the longer you fly, the further you go? Well, as so often is the case, best glide speed depends on what you're trying to do.

## Going the Distance

If it's distance you want, than you'll need to use the speed and configuration that will get you the most distance forward for each increment of altitude lost. This is often referred to as best glide speed and, on most airplanes, it will be roughly halfway between  $V_x$  (best angle of climb speed) and  $V_y$  (best rate of climb speed). Keep in mind that this speed will increase with weight so most manufacturers will establish the best glide speed at gross weight for the aircraft. That means your best glide speed will be a little lower for lower aircraft weights.

## Need More Time?

If you're more interested in staying in the air as long as possible to either fix the problem or to communicate your intentions and prepare for a forced landing, then minimum sink speed is what you'll need. This speed is rarely found in Pilot Operating Handbooks, but it will be a little slower than maximum glide range speed.

## What About My Airplane?

If you're wondering about the airplane you fly, you can do some experiments on a dual flight with your flight instructor. Start at  $V_y$  or the manufacturer's recommended best glide speed with power off — you did remember the carb heat, didn't you? — and note speed vs. sink rate as you adjust pitch to reduce air-speed. For the most useful results, you should do this as close to typical mission weight as possible. To identify minimum sink speed, look for the highest speed forward that will give you the lowest rate of descent. Knowing these speeds will give you a couple important numbers to have in the back of your mind should a situation ever warrant their use.

## How Far Can I Glide?

How many miles you can glide per 1,000 feet of altitude is another very useful thing to know. A rule of thumb for Cessna 152s and 172s is 1.5 nautical miles per 1,000 feet of altitude above ground level. Consider experimenting to see how far your aircraft can glide.

## Forced Landing Tips

A good way to prepare for a forced landing is to practice power off approaches and landings at typical mission weights. This will keep your skills from getting rusty. Some pilots will choose a spot between the 1st and 2nd third of the available landing area for an initial aim point. As they see they can make that initial spot, they'll add flaps and perhaps slip the airplane to move the aiming spot to the 1st third of the landing area. This is done to reduce the chance of landing short or a final approach stall while trying to stretch the glide to the runway.

## Position is Key

For any type of gliding approach, you'll want to reach a key position on base from which you'll know you can make a successful landing. Until the key position is reached, keep the airplane configured for best glide. After you pass the key position, add flaps and gear to configure the airplane for landing and fly the final approach at 1.3 times the stalling speed in landing configuration ( $1.3 V_{so}$ ). The FAA's Airplane Flying Handbook contains several helpful diagrams for different power-off landing scenarios and corresponding key points.

## Resources

**FAA Airplane Flying Handbook — Approaches and Landings (Chap 8):**

<http://go.usa.gov/cKaUJ>

**FAA Safety Team (FAASteam) WINGS Pilot Proficiency Program:** [www.FAASafety.gov/wings](http://www.FAASafety.gov/wings)

## Flight Service Transitions to Leidos Pilot Web Portal

### Notice Number: NOTC7670

The FAA will discontinue the Direct User Access Terminal Service (DUATS II) Program, effective May 16, 2018. Internet services, including access to weather and aeronautical information, flight plan filing and automated services, will remain available at no charge to pilots at:

[www.1800wxbrief.com](http://www.1800wxbrief.com)

*To continue to receive free services, users are encouraged to register with [www.1800wxbrief.com](http://www.1800wxbrief.com)*

Over the next 60 days, the FAA will work with current DUATS II providers on transition activities, including conducting pilot outreach, establishing commercial interfaces, and providing user migration assistance.

Please contact FAA Flight Service at our customer feedback website if you have any questions:

[https://www.faa.gov/about/office\\_org/headquarters\\_offices/ato/service\\_units/systemops/fs/contact\\_us/](https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/fs/contact_us/)

**Invite a fellow  
Pilot to the next  
WINGS  
Safety Seminar  
in your area!**

## Special Airworthiness Information Bulletin (SAIB) Issued for Kidde Fire Extinguishers

Last week the FAA issued a Special Airworthiness Information Bulletin (SAIB CE-18-05) for certain recalled Kidde fire extinguishers with plastic handles. These extinguishers, which may be found in GA aircraft, can become clogged or require excessive force to operate and can fail to operate during an emergency. The plastic handle fire extinguishers involve 134 models manufactured between January 1, 1973, and August 15, 2017. The FAA recommends you check your aircraft for any of the recalled Kidde extinguishers and replace it with one that is airworthy and not affected by the recall. For more details and a list of all Kidde models that are affected, go to:

<https://go.usa.gov/xn8ZK>

## Pilots and Medication

Impairment from medication, particularly over the counter (OTC) medication, has been cited in a number of accidents in general aviation. In a 2011 study from the FAA's CAMI Toxicology Lab, drugs/medications were found in 570 pilots (42%) from 1,353 total fatal pilots tested. Most of the pilots with positive drug results, 511 (90%), were flying under CFR Part 91.



## General Aviation Safety By the Numbers

**Partnering with industry and the general aviation community, the FAA set an ambitious goal in 2009 to reduce GA fatal accidents by 10 percent in 10 years. A one percent decline per year put the 2017 estimate at 1.01 fatal GA accidents per 100,000 flight hours. The actual total showed even more progress: .84 per 100,000 hours. The FAA is on track to beat the 10 year goal of 1 accident per 100,000 hours. Specific areas that have likely influenced the GA fatal accident rate, in addition to the many efforts of the FAA Lines of Business, are: the General Aviation Joint Steering Committee (GAJSC), outreach activities coordinated across the GA community and the FAA, recent developments in technology, and changes to the certification and installation rules for certain types of those technologies.**



**General Aviation Fatal Accident Rates**

**Aviation Safety**

## General Aviation Joint Steering Committee

This outreach guidance is provided to all FAA and aviation industry groups that are participating in outreach efforts sponsored by the General Aviation Joint Steering Committee (GAJSC). It is important that all outreach on a given topic is coordinated and is free of conflicts. Therefore, all outreach products should be in alignment with the outline and concepts listed below for this topic.

### SMART COCKPIT TECHNOLOGY

**Outreach Month:** April 2018

**Topic:** *Smart Cockpit Technology*

The FAA and industry will conduct a public education campaign on the benefits associated with Scenario-based Emergency Procedures Training.

**Background:**

The GAJSC has determined that *Smart Cockpit Technology* in the form of automated checklists for

normal and emergency operations, predictive aircraft performance, and performance monitoring might reduce the number of system/component failure general aviation accidents. This presentation discusses currently available and future technologies that provide information to pilots.

**Teaching Points:**

- Discuss the safety benefits of smart cockpit technology.

- Make pilots aware that ADS-B is the first step to smart cockpit technology.
- Make a case for equipping with ADS-B In and Out to take advantage of data link information streams and collision avoidance information.

### Best Glide Speed and Distance

**Outreach Month:** May 2018

**Topic:** *Best Glide Speed and Distance*

The FAA and industry will conduct a public education campaign on the benefits of knowledge and training in determining and applying best glide speed in forced landings.

**Background:**

The GAJSC has number of general aviation fatalities could be avoided if pilots were better informed determined that a significant and trained in determining best glide speed for their aircraft and flying at that speed while maneuvering to

complete a forced landing.

**Teaching Points:**

- Discuss the scope and safety benefits of flying the airplane at best glide speed while maneuvering to a forced landing runway or off airport landing area.
- Acquaint pilots with available resources.
- Encourage pilots to maintain proficiency through frequent forced landing practice.
- Encourage pilots to participate in the WINGS Pilot Proficiency Program.

gram.

**References:**

- ***A-H-8083-3B Airplane Flying Handbook Chapter 3 (glides) Chapter 16 (Emergency Procedures)***
- ***FAA Safety Briefing Magazine Fact Sheets***  
[http://www.faa.gov/news/fact\\_sheets/](http://www.faa.gov/news/fact_sheets/)
- ***WINGS Pilot Proficiency Program***  
<http://www.FAASafety.gov/>

# Transition Training

**Outreach Month:** June 2018

**Topic:** Transition Training

The FAA and industry will conduct a public education campaign emphasizing the benefits of transition training.

**Background:**

NTSB accident data suggest that pilots with low time in type are more likely to crash. Although some transition training such as high performance, high altitude, complex airplane and tail wheel instruction and endorsement is required by regulation, the case can be made for other types and variations of aircraft as well.

**Teaching Points:**

- Discuss the benefits of transition training.
- Note the higher rate of fatal accidents in amateur-built and light sport aircraft .

- Emphasize that pilots need transition when transitioning from low to high & high to low performance aircraft.
- Not only for stick & rudder skill development but also for systems knowledge.
- Misunderstanding of fuel systems has led to many fuel starvation accidents.
- Provide information on getting the most benefit from transition training.

**References:**

**GAJSC Loss of Control Work Group Report**

- [http://www.gama.aero/files/General\\_Aviation\\_Joint\\_Steering\\_Committee\\_DLX\\_v7.pdf](http://www.gama.aero/files/General_Aviation_Joint_Steering_Committee_DLX_v7.pdf)
- **Airplane Flying Handbook Chapters 11- 15 Transition Training**
- [http://www.faa.gov/regulations\\_policies/handbooks\\_manuals/aviation/airplane\\_handbook/media/airplane\\_flying\\_handbook.pdf](http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/airplane_handbook/media/airplane_flying_handbook.pdf)

## 2019 Aircraft Maintenance Symposium January 30-31

The 2019 Symposium and Trade Show will be held at the Holiday Inn Conference Center near the Des Moines International Airport. Please note: The event will be held during the week again next year. Thus, plan accordingly to attend. Room reservations can be made using the booking code of “iaa” via their telephone at 800-248-4013 or at their web site: [www.holidayinn.com/dsm-airport](http://www.holidayinn.com/dsm-airport)

The Iowa Aviation Association, in conjunction with the Iowa DOT Office of Aviation, will sponsor the 28th Annual Symposium and Trade Show in cooperation with the FAA Des Moines FSDO. For more information or to register, go to the Iowa Aviation Association web site at [www.iaaviation.com](http://www.iaaviation.com) contact Randy Simpson at [simpson8128@msn.com](mailto:simpson8128@msn.com) or call Phil Conn at 319-389-3943.

*The Symposium will be held on a Wednesday and Thursday, January 30 31, 2019*

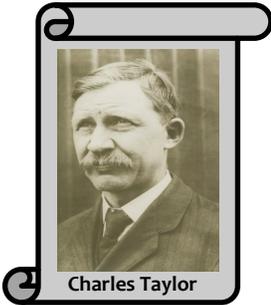
### **INSPECTION AUTHORIZATION - (IA) PLEASE NOTE**

**This is a reminder that IA renewals need to be submitted to the DSM FSDO from February 1—March 31, 2019 (An Uneven Year).  
Renewal forms/information will be mailed/emailed to you by mid-December 2018.  
Questions? Please call the DSM FSDO at 515-289-3840 or 800-728-7250.**



# FAA Safety Team | Safer Skies Through Education

FAASafetyTeam



Charles Taylor

Recent  
Charles Taylor Master  
Mechanic Honoree:

**Gary Bohlken**

**CONGRATULATIONS!**

### Upcoming Events

- April 9, 2018 – AOPA Pilot Meeting, West Des Moines
- April 10, 2018 – AOPA Pilot Meeting, Cedar Rapids
- April 18, 2018 – CFI/DPE Open Forum, Council Bluffs
- April 23, 2018 – UAS Pilot’s Safety Meeting, Des Moines
- May 1, 2018– ATC Pilot Safety Meeting, Waterloo
- June 19, 2018 – ATC Runway Safety Meeting, Sioux City

Contact the Des Moines FAASafetyTeam to get a meeting scheduled at your location. Meetings are being created all the time; sometimes on short notice. For meeting details, visit [FAASafety.Gov](http://FAASafety.Gov).

To be informed of Safety Meetings of interest to you, be sure to create an account on [FAASafety.Gov](http://FAASafety.Gov). All you need is an email address and you will be electronically notified of meetings in your area of interest.

Contact FAASafetyTeam Program Manager Chris Manthe if you have questions or need guidance in setting up your account.

### Looking for a New Career?

**Have you considered working for the FAA?**

The aviation industry is fast-paced and always changing. The FAA is currently seeking qualified individuals to join the Inspector Workforce .

If you are interested, please visit [www.usajobs.gov](http://www.usajobs.gov)

#### DES MOINES FLIGHT STANDARDS DISTRICT OFFICE

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(515) 289-3855 FAX

MONDAY THROUGH FRIDAY

7:45 a.m. – 4:15 p.m.

*Visitors are requested to make appointments.*

**The DSM FSDO will be closed  
in observance of a National Holiday:**

May 28, 2018– Memorial Day



**FAASafetyTeam Program Manager**

**Joseph Quiring**

**has retired after more than 22  
years of service with the FAA!**

**Joe served as a Principal Maintenance  
Inspector before transitioning to the  
Safety Team.**

To receive this newsletter via email, please contact Barb Fransen at [Barbara.Fransen@faa.gov](mailto:Barbara.Fransen@faa.gov) or 515-289-4818 with your information.

Until next time! Have a safe flight!

Larry L. Arenholz  
Des Moines FSDO Manager