



DES MOINES FSDO SAFETY TEAM

Wingtips, Volume 1, Issue 4

Winter 2014

HAPPY HOLIDAYS FROM THE DSM FSDO

Not only does FAASafety.Gov contain the Pilot Proficiency Program (WINGS) but also a plethora of aviation information. This includes the Wright Brother Master Pilot and Charles Taylor Master Mechanic Award application forms. FAASafety.Gov is host to the Roll of Honor for Master Pilot and Master Mechanic Honorees. To be eligible for either award, the applicant must be actively involved in their aviation specialty for 50 consecutive years.

Please send your application package to the Des Moines FAASafetyTeam!

New Face at the FSDO

The Des Moines FSDO would like to introduce Michael Newhall as the newest Aviation Safety Inspector (Airworthiness). Mike joined the Des Moines FSDO in October 2014. He brings with him 25 years of experience in general and corporate aviation. Mike is an Iowa native living mostly in northeast and central Iowa. In his free time, he enjoys working around his acreage, traveling, camping, hiking,

horseback riding, and being with family and friends.



Mike says he is looking forward to meeting new people and continuing to work with the aviation community in Iowa.

Mike Newhall is the latest addition to the Des Moines FSDO personnel.

Rulemaking Adjusts Training Device Credit for Pilot Certification

On Wednesday, December 3, 2014, the FAA issued a [direct to final rule](#) that relieves burdens on pilots seeking to obtain aeronautical experience, training, and certification by increasing the allowed use of aviation training devices (ATDs) for instrument training. The rule will increase the allowances under 14 CFR section 61.65(i) to 20 hours for credit in an ATD and allows flight schools operating under part 141 Appendix C to have a 40 percent training credit in an

ATD for the instrument rating. Previous allowances for ATD use were capped at 10 hours under part 61 and 10 percent under 141. Due to the sophistication and visual configuration capabilities of ATDs, the rule also removes the requirement to use a view-limiting device. The comment period for the direct final rule will close Friday, January 2, 2015. The rule will become effective Tuesday, January 20, 2015, if no adverse comments are received.

In concert with this rule, [Advisory Circular 61-136A, FAA Approval of Aviation Training Devices and Their Use for Training and Experience](#), has been revised to improve guidance for the application and approval of these training devices. The AC also provides additional guidance on ATD use for training and how to properly log the time.

“the rule also removes the requirement to use a view limiting device”

FSDO NEWS

New NOTAM Search Features Now Available



The DSM FSDO is located at the Ankeny Regional Airport.

To help pilots streamline their search for Notices to Airmen (NOTAMs) during flight planning, the FAA rolled out some new search features now available at this website:

<http://notams.aim.faa.gov/notamSearch/>.

Among the new features is a "search by flight path" capability that allows pilots to see NOTAMS that apply only to the route they custom select using airports, navigational aids, named fixes, and/or route/airway designators to define a flight path. That flight path

width can also be adjusted from one to 125 nautical miles on each side and NOTAMs for up to five alternate airports can also be included. The "search by free text" feature allows you to search for NOTAMs based on a keyword, airport designator, NOTAM number or scenario. Search results can also be custom sorted by location, number, class, start and end dates, and condition. Users can also export search results to a Microsoft Excel or Adobe PDF document.

Additional enhancements to the search capability are expected in the near future.

For more on how to use the search function, click the "help" button at the top right of the NOTAM Search Home Page to access a user's guide.

Feedback is also encouraged to help make improvements. Next to the help link is a feedback button where you can submit comments.

AMATEUR-BUILT AIRCRAFT



Monthly safety topics will be introduced in the FSDO Newsletter.

For those of you considering building an airplane from plans or from a kit, we encourage you to do a little homework before you begin.

There are resources out there to help you answer technical questions such as: What skills do I need? What type of tooling will I need? Where can I get piece parts and hardware? And so on. A call to the Experimental Aircraft Association (EAA), for example, would be worth your time.

For the paperwork and regulatory questions, we

encourage you to call your local FAA office before you begin. Upon request, we will send you a package of information. The package includes the forms you will need - starting with requesting your N number and registration to submitting the application for your airworthiness certificate when your airplane is complete.

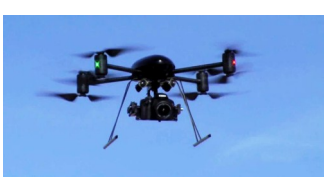
Please call the Des Moines FSDO at 1-800-728-7250 or 515-289-3840 with any questions as well as to request a copy of the "Amateur-Built Paperwork Package".

Are You Ready for Winter?

As we wing our way through December, and creep ever closer to the official start of winter, be sure to take a peek at the latest FAA Safety Briefing. The November/December issue offers some very timely information on winter operations for the general aviation community.

This issue includes features on flying with skis, how cold affects the body, and anti-ice and deice systems for GA.

For more information on these topics and more, please visit: http://www.faa.gov/news/safety_briefing/



FSDO NEWS

So you want to fly a UAS?

Unmanned Aircraft System (UAS) is the term FAA uses to describe what many refer to as “drones.” The National Transportation Safety Board ruled that UAS and model aircraft meet the legal definition of “aircraft.” Thus, UAS’s are subject to all Federal Aviation Regulations (FARs) pertaining to aircraft and operation in the National Airspace System (NAS).

So before you open the box, pull out your new toy, and launch into the wild blue yonder, there are some things you need to know. There are three types of unmanned aircraft system operations: Civil, Public and Model Aircraft.

•Civil UAS

Obtaining a Special Airworthiness Certificate in the experimental category for a particular UAS is currently the only way civil operators of unmanned aircraft are accessing the NAS. Experimental certificate regulations preclude carrying people or property for compensation or hire, but do allow operations for research and development, flight and sales demonstrations, and crew training. The FAA is working with civilian operators to collect technical and operational data that will help refine the UAS Airworthiness Certification Process. The agency is currently developing a future path for safe integration of civil UAS into the NAS as part of NextGen implementation. We should see a draft rule for small UAS (under 55lbs) come out for comment before the end of 2014, with a mandate by Congress to have a rule in place by September 2015.

In the meantime, the FAA has been working for several months to implement the provisions of Section 333 of the FAA Modernization and Reform Act of 2012 “Special Rules for Certain Unmanned Aircraft Systems,” which will allow for commercial operations in low-risk, controlled environments. An exemption issued under Section 333 is currently the only way to operate a UAS legally for compensation or hire. For more information on how to apply go to <https://www.faa.gov/uas/>.

•Public UAS

COAs are available to public entities that want to fly an UAS in civil airspace. Common uses today include law enforcement, firefighting, border patrol, disaster relief, search and rescue, military training, and other government operational missions. Applicants make their request through an online process and the FAA evaluates the proposed operation to see if it can be conducted safely.

•Model Aircraft

Recreational use of airspace by model aircraft/UAS is covered by FAA Advisory Circular 91-57, which generally limits operations for hobby and recreation to below 400 feet, away from airports and air traffic, and within sight of the operator. In June 2014, the FAA published a Federal Register Notice on its interpretation of the statutory special rules for model aircraft in the FAA Modernization and Reform Act of 2012. The law is clear that the FAA may take enforcement action against model aircraft operators who operate their aircraft in a manner that endangers the safety of the national airspace system. In the Notice, the FAA explains that this enforcement authority is designed to protect users of the airspace as well as people and property on the ground.

Safety is the FAA's top mission, and the agency maintains the world's safest aviation system. The FAA first authorized use of unmanned aircraft in the National Airspace System (NAS) in 1990. Today, unmanned aircraft are flying in the NAS under very controlled conditions, performing border and port surveillance by the Department of Homeland Security, helping with scientific research and environmental monitoring by NASA and NOAA, supporting public safety by law enforcement agencies, helping state universities conduct research, and supporting various other missions for public (government) entities. Operations range from ground level to above 50,000 feet, depending on the specific type of aircraft. Search and rescue missions, agricultural field surveillance, delivering packages, film and photography; the applications of this rapidly growing industry are limited only by the imagination. As the FAA Administrator Michael Huerta recently put it, “We want to take advantage of the technology, but it has to be safe”. Right now the FAA is working with the model aircraft industry and other groups to educate the public on UAS operations. Call the Des Moines FSDO to help answer questions on this subject.



FSDO NEWS



Joe Quiring is the new addition to the FAAS Team on the Airworthiness side.

FAA Safety Team Expansion

Joe Quiring of the Des Moines FSDO has accepted the position of FAAS Team Program Manager (FPM) for the Airworthiness portion of the team beginning January 12, 2015. Joe has been a Principal Maintenance Inspector and Safety Program Manager at the FSDO since 1995. We welcome Joe to the new position which will expand safety promotion and outreach to repair stations and maintenance personnel throughout the state and beyond. Joe will also provide aviation insight to pilots from a maintenance point of view. Joe can be reached via email at jo-seph.quiring@faa.gov.

FAA Video Highlights Winter Operations

<http://www.faa.gov/tv/?mediaId=969>

The FAA's new Winter Operational Safety Video (<http://www.faa.gov/tv/?mediaId=969>) Series on Advisory Circular "AC 150-5200-30C" (pertaining to airport snow operations) was released last week to airport operators. The series also provides a valuable tool for pilot training. The first video covers pre-season planning, best practices and lessons learned, including the need to review an airport's current snow- and ice-removal plans. The goal is to keep the highest-traffic runways clear of snow and ice as much as practical with available equipment and personnel. The video reminds operators that "nil" braking reports always mean the runway should be closed until the surface has been treated. The FAA is also assessing new ways of expressing runway conditions focused around the new contaminant list in Joint Order JO 7930.2. The agency plans to soon release a new Runway Condition Assessment Matrix (RCAM) that brings together runway contaminants, braking action and aircraft performance data. The digital Notam System, slated to be updated by 2016, will replace traditional runway friction measurements with RCAM numbers, essentially a shorthand for runway conditions.

Thank you to Mike Massell for submitting this article.

GAJSC Outreach Topic of the Month

The General Aviation Joint Steering Committee (GAJSC) was launched in 1997 as part of the industry-government Safer Skies Initiative to improve aviation safety. The program, which was revitalized in 2011, works to improve general aviation safety through data-driven risk reduction efforts that focus on education, training, and enabling new equipment in general aviation aircraft.

GAJSC participants include the Federal Aviation Administration and industry stakeholders including pilot organizations, instructors, mechanics, builders and manufacturers.

A list of Safety Enhancement (SE) projects have been accepted by the GAJSC for implementation as part of the GA Safety Plan. These Safety Enhancements include approved outreach called SE Topic of the Month and are highlighted each month by the FAAS Team and involved industry groups. Along with talking about the topics at safety meetings, the monthly topics will be introduced in the FSDO Newsletter.

The FAA maintains a complete list of the "Safety Enhancement Topic" of the month on the website that also hosts the agency's Safety Briefing Magazine.

GAJSC Topic of the Month

Outreach Month: December 2014

Topic: Spatial Disorientation

Background:

NTSB accident data suggest that spatial disorientation may be a precursor to many general aviation accidents – particularly in night or limited visibility weather conditions.

Instrument and VFR pilots are subject to spatial disorientation and optical illusions that may cause loss of aircraft control.

We request that you consider the following points:

- * The physiology and limitations of human sight and balance mechanisms
- * Responses to typical disorientation and illusion events
- * Best practices for preventing Spatial Disorientation

This outreach consists of two videos produced by the Civil Aeromedical Institute. The first deals with human physiology and spatial orientation. The second addresses common visual illusions. Both offer suggestions for managing disorientation. Spatial Disorientation Part 1 - <http://www.faa.gov/tv/?mediaid=462> / Spatial Disorientation Part 2 - <http://www.faa.gov/tv/?mediaid=463>

Outreach Month: January 2015

Topic: Fly the Aircraft First

Background:

NTSB accident data suggest that pilots, while distracted by less essential tasking, have lost control of their aircraft and crashed. In light of this, pilots are reminded to maintain aircraft control at all times. This may mean delay in responding to ATC communications and passenger requests or not responding at all unless positive aircraft control can be maintained throughout. In other words, ***Fly the Aircraft First!***

References:

GAJSC Loss of Control Work Group Report

http://www.gama.aero/files/ral_Aviation_Joint_Steering_Committee_DLV_v7.pdf

Eastern Airlines Flight 402 Accident Report

http://www.nts.gov/aviationquery/brief.aspx?ev_id=66756&key=0

http://en.wikipedia.org/wiki/Eastern_Air_Lines_Flight_401

Airplane Flying Handbook Chapter 16 Emergency Procedures

http://www.faa.gov/regulations_policies/handbooks_manuals/aircraft/airplane_handbook/

Risk Management Handbook Chapter 16 Single-Pilot Resource Management

http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/risk_management_handbook/

GAJSC Topic of the Month (continued)

Outreach Month: February 2015

Topic: Personal Minimums

Background:

NTSB accident data suggest that pilot capability is not simply a matter of certification level and experience but rather that a wide variety of conditions and circumstances can influence pilot performance from day to day. That variability in performance supports the argument that pilots should develop personal minimums for their flying and that those minimums should be reviewed and adjusted with respect to existing conditions and circumstances.

References:

Risk Management Handbook Chapter 8 Risk Management Training

http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/risk_management_handbook/

Outreach Month: March 2015

Topic: Single-Pilot Crew Resource Management

The FAA and industry will conduct a public education campaign emphasizing the best practices regarding single-pilot CRM operational techniques.

Background:

The Private Pilot PTS defines Single-Pilot CRM as, “the art and science of managing all the resources (both onboard the aircraft and outside sources) available to a single-pilot (prior to and during flight)”. That sweeping statement is further defined with respect to 6 SRM Components:

Aeronautical Decision Making (ADM)

Acquiring relevant data and making decisions based on that data

Risk Management

Hazard identification, risk assessment, and mitigation

Task Management

Managing pre and in flight tasks

Situational Awareness (SA)

Controlled Flight into Terrain Awareness (CFIT-A)

Automation Management

Familiarity with equipment

Over reliance on automation

The GAJSC recommends that pilots practice CRM to reduce mishap risk.

References:

Single-Pilot CRM Power Point

Aviation Risk Management Handbook (FAA-H-8083-2) – Chapter Six

www.faa.gov/regulations_policies/handbooks_manuals/aviation/risk_management_handbook/FAA-H-8083-2.pdf

Article – *Managing Yourself* – Flight Training Magazine December 2000

http://flighttraining.aopa.org/magazine/2000/December/200012_Features_Managing_Yourself.html

2015 Seminar/Expo To Be Held February 6-7

The Midwest Regional Aircraft Maintenance Seminar and Industry Expo will be held at the Holiday Inn Conference Center near the Des Moines International Airport on February 6-7, 2015. The event is sponsored by the Iowa DOT Office of Aviation and the Des Moines Flight Standards District Office in conjunction with the Iowa Aviation Association (formerly PAMA). *Note the earlier date in February.*

As most of you are aware even though renewal of your IA is every odd year, you must meet the renewal requirements every year. How does this affect you? Put in its simplest terms, you must have met the requirements of at least one element of 65.93(a) by March 31, 2014 in order to exercise the privileges of your Inspection Authorization from April 1, 2014 until March 31, 2015. When you apply for renewal of your IA in March 2015, you need to provide evidence of meeting the renewal requirements for both years of your current authorization. We ask that you send your current IA card with your application data this year. The card will be signed and returned to you upon approval of your renewal data. Note: This is a new process this year.

Plan to attend the seminars for updated information and certification toward your IA renewal and the FAA Awards Program. Register early! Contact Randy Simpson with questions at randy@iaaviation.com.

Upcoming Events

Register on FAASafety.gov to receive the most current Safety Seminar information.

- February 6-7, 2015 IA Meeting, Des Moines, Iowa
- March 9, 2015 AOPA Cedar Rapids, Iowa
- March 10, 2015 AOPA Des Moines, Iowa
- March 24, 2015 Carroll Area Pilots Association Meeting

If your aviation group would like to host a Safety Meeting, contact the FAASTeam Program Manager (FPM) or any inspector at the Des Moines FSDO and we'll get something on the schedule, budget permitting. In case you don't know, Chris Manthe is the FPM for the Operations portion of the team in Iowa and can be reached via email at Chris.Manthe@faa.gov.



DES MOINES FLIGHT STANDARDS DISTRICT OFFICE

3753 SE CONVENIENCE BLVD.

ANKENY, IA 50021

DSM FSDO Website

(515) 289-3840 (800) 728-7250

(515) 289-3855 FAX

MONDAY THROUGH FRIDAY

7:45 a.m. – 4:15 p.m.

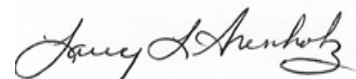
Visitors are requested to make appointments.

The DSM FSDO will be closed on the following dates in observance of a national holiday:

December 25, 2014 Christmas Day
December 26, 2014 Presidential Holiday
January 1, 2015 New Year's Day
January 19, 2015 Martin Luther King Day
February 16, 2015 President's Day

If you or someone you know would like to receive this newsletter via email, please contact Barb Fransen at 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