

# Pilot Examiner Quarterly

A Quarterly Journal for Designated Pilot Examiners ISSUE 06 SEPTEMBER 2017





# Understanding Airworthiness By Matt Johnson DPE

"If you test it they will teach it" -So goes the mantra heard every two years when Designated Pilot Examiners must attend a mandatory training program in order to maintain their Designated Examiner status. The idea is that if DPEs do a thorough job examining an applicant on a particular task this will in return prompt CFIs to do a better job teaching their students.

One area that I have encountered as a general weakness with applicants at all levels is that of **airworthiness** and understanding exactly what it means. The definition of "airworthy" is an elusive one for those that seek it out. Much of what is known about the subject is passed on in the form of tribal knowledge. The meaning may take on two totally different views depending if the explanation is coming from a mechanic or a pilot. However, at the end of the day defining "airworthy" isn't that difficult and there

is only one true definition.

#### Why is this important?

One of the most important regulations that all pilots must be familiar with is that of 91.7. The title of this regulation is "Civil Aircraft Airworthiness". Unlike most of the regulations we live by, 91.7 is one that is easy to read and comprehend. It has two simple statements, both of which must be taken to heart. The regulation reads as follows:

#### §91.7 Civil Aircraft Airworthiness

- (a) No person may operate a civil aircraft unless it is in an airworthy condition.
- (b) The pilot in command of a civil aircraft is responsible for determining whether that aircraft is in condition for safe flight. The pilot in command shall discontinue the flight when un-airworthy mechanical, electrical, or structural conditions occur.

#### This Issue

Airworthiness P.1 Tech Savvy DPE P.2 Better testing P.3 Straight and Level P.4



#### Mission- Aviation Safety

In an effort to assist DPEs in their daily tasks and keep them up-to-date on the latest developments in pilot certification, we created the Pilot Examiner Quarterly. This publication will address some of the problems and concerns that we have encountered in the field and offer solutions and best practices. We will also discuss recent and upcoming changes affecting the pilot certification process.

#### **WEB Resources**

http://www.faa.gov/about/
office\_org/headquarters\_offices/
agc/pol\_adjudication/agc200/
interpretations/

http://www.faa.gov

https://av-info.faa.gov/DsgReg/ Sections.aspx

http://fsims.faa.gov/

https://www.faa.gov/about/ office org/headquarters offices/ avs/offices/afs/afs600/afs630/

https://www.faa.gov/pilots/ training/airman education/

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Airworthiness continued from page 1

#### Why does this matter?

Note that in paragraph (a) of this regulation it specifically states that we may not operate a civil aircraft unless it is in an <u>airworthy</u> condition. Clear, cut and dry! Right?

While this regulation may read in the simplest of terms we come back to the point of defining "airworthy" and understanding exactly what it means.

So how do we define the definition of airworthy? Where do we find it? Most pilots have some form of the go-to "FAR/AIM" book lying around (hopefully current) or even an app on their mobile device. This is where we go for looking up regulations and just as importantly, where we find "definitions" for terms found within many of the regulations. Most of the (general) definitions we need are found in FAR Part 1.1 but what about "airworthy?" Will you find a definition for this ever so important term in FAR Part 1.1? The answer is NO! What about going to the "index" in the rear of the book? NO! Still no indication of what "airworthy" actually means. All applicants (and experienced pilots) agree that FAR 91.7 is important but when searching for what airworthy actually means they are at a loss. The definition **will not** be found in that standard FAR/AIM book that so many of us rely on.

#### FOUND!

The search is over. The answer for defining "airworthy" is, in fact, actually found within the regulations but in an area that very few pilots and probably even less students have ever reviewed.

If you go to FAR 3.5 paragraph (a) you will find another set of "definitions." First up on this list is "Airworthy." The definition is simple, short and to the point. Essentially the definition gives us a two-pronged test

to define the term airworthy.

The regulation (definition) reads as follows: "Airworthy means: the aircraft conforms to its type design and is in a condition for safe operation."

The second part of this definition is a mixture of common sense and adherence to other regulations by the pilot and is, at times, a judgement call.

"Conforming to its type design" requires a bit more explaining and we will do that next month in Part II of this series of articles on "Understanding Airworthiness." -PEQ



Matt Johnson is a Gold Seal Instructor and a Helicopter DPE in the Indianapolis FSDO District. Private—ATP examines in numerous makes and models EC-145 Air Medical SPIFR.

# Making Your DPE Life Easier

By David St. George DPE, MCFI

Don't you hate it after coordinating a flight test and a good weather day, discovering your applicant is missing an hour of night or the endorsements are missing (or wrong)? Your whole day is blown and everyone is grumpy as you work to salvage that lost time and money. I created a solution for this problem and it will make your life easier (and it's even FREE!) if we can get it out to your CFIs. As a long-time DPE (many "lost" days) I finally took action on this problem and made the whole process easier by writing the CFI Toolkit App. This is free from the IOS and Android market and contains multiple slider tabs with the required experience, endorsements and test codes (as well as great mobile weather and flight tracking) on individual slider tabs. You can preview with an emulator here on line (works best on your mobile device) http://savvvcfi.com or download and try the free APP by searching "SAFE Toolkit."

Please share this with your regular CFIs and at meetings with other DPEs, it will get everyone on the same "regulatory page" and hopefully eliminate those "bad start" test days. Using this App it is easy to correctly prepare and endorse applicants at every level. Each endorsement is from the AC-61.65F with the CFR reference hyperlinked so you can read the actual source document. If you discover any errors or omissions, please write me ASAP and I will update the app immediately





Join Now!

-PEQ

David St. George is a Master CFI, 141 Chief Instructor, FAA DPE, ATP (ME/SE) in Ithaca, NY

How to get a student certificate: TAP HERE

Editor note: The FAA doesn't not endorse any product. Opinions are those of the writers. All designees must assure that all steps are taken to follow FAA policies while performing their duties as DPEs.

# Questions, Answers, and Comments about Designee Policy?

In an effort to make communication easier between designees and the designee policy holder, AFS-650, Delegation Program Branch, an email box has been established for stakeholders to communicate their questions, comments and concerns about designee policy.

9-AMC-Designee-Questions-Comments-Concerns@faa.gov



## Soothing Ruffled Feathers

By Julie Paasch DPE

As I sat across from the Initial CFI applicant, I watched his hands tremble as he stared at and could barely read his lesson plan. As he started to teach, he fumbled through a few words, but was having a hard time forming a coherent sentence. It was the worst case of nerves in a checkride I had ever seen.

The ACS or PTS do not require us as examiners to help the applicant relax, but if we can create an environment where the applicant is comfortable, they will more accurately demonstrate their knowledge and skills. In addition, I have repeat customers, because I have been able to develop a positive reputation of being fair and kind. For this applicant, the end result was not what we had hoped that day but I learned some new techniques to help applicants relax.

First, an applicant needs to know you, the examiner, are a real person. I always start out my checkrides telling them about my background and ask them about what sparked their interest in flying.

Often examiners are viewed by students and applicants as omniscient masters of the air. As much as we would all like to think we walk with the swagger of "Maverick" from Top Gun; able to "communicate" with MIGS at 450 knots while in an inverted dive... if we act that way it just sets the tone for a hostile testing environment. Being ourselves, free of gruffness, ego, and any pretentiousness eases tension in the room and lets the applicant see the examiner as a human being that they can find common ground with.

Second, I tell the applicant I want them to pass. In the pre-test briefing I tell the student that like them, I'm hoping successful outcome. I will be fair. I won't ask trick questions. I will only hold them to the standards prescribed in the ACS / PTS; nothing higher. Applicants sometimes think examiners are out to fail them. I find that reassuring them that nothing could be further from the

truth; gives them more confidence.

Third, if an applicant is starting to flounder in an oral, take a quick break. It is easy to see when the stress level starts to rise and the blood starts draining from there face. This gives them a chance to regain their composure and hopefully come up with the right answer.

Finally, another examiner in our region has the fun reputation of having the applicants bring a "Coke and a Joke" to each checkride. Telling a few jokes (cautioning them clean and nonoffensive) helps ease the tension at the beginning of the checkride. If the applicant doesn't have any jokes he will sometimes tell some fun flying stories.

So put yourself back in the applicant's seat where you were maybe 10, 20, or 30+ years ago, It is important for us to remember what that was like. Try to establish a positive testing environment so they have the best chance of success the first time around. Helping the applicants relax ultimately allows us to see how they will perform when we are not there and at their best potential.



Julie Paasch is a DPE in Salt Lake City, UT; She has a B.S. in Aeronautics from UND and a Masters in Education From Westminster College. She is a master instructor, has been an examiner for 2 1/2 years and has accumulated 4500 hours of which 2700 are dual given.

-PEQ



### **Pilot Examiner Quarterly**

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#### Figures in Aviation History



Dorothy Hester Stenzel became the first woman to perform an outside loop on June 30, 1930. She also set a world record for 56 outside snap-rolls and well as 69 consecutive inside loops, a record that stood until 1989 when Stenzel encouraged Joann Osterud to break the record at the North bend Oregon airshow. Ms. Stenzel passed away in 1991 and was posthumously inducted into the aerobatic hall of fame in 2004 along with woman's aerobatic champion Betty Stewart.

### Keeping our Heads on Straight and Level

By Todd Burk ASI

All of us that work in any profession have those thoughts that bounce around our minds on Sunday evenings before a big work week. As a pilot examiner, I would look through my calendar and would ask myself "How many exams did I have? What types of rides do I have scheduled? What do I need to do to prepare?"

There were some times that I was booked solid for several weeks doing two a day. Sometimes in the summer with 108Fdegree temperatures in the afternoon. I was exhausted by the end of the day and had to get up the next morning at 6am and do it again.

As the work became routine, soon it felt as though I was going through the motions just doing the minimum necessary to work through the day and get the job completed. As a designee it is easy to see ourselves as being independently employed rather than an representative of the administrator. It's tempting to make up the when I knew the first attempt was rules as we go, sometimes unwittingly.

Often times I would find myself rationalizing an applicant's subpar performance. As and example I requested that the applicant make a short field landing and he would end up landing a little long. I

would tell myself ... "Well this guy can't do a proper short field landing but I couldn't either until after I got my commercial certificate. I'll let him squeak by on this one. " What I should have done instead is ask the question "Did that task meet the practical test standards?"

I don't think that any of us can say that we've ever did a perfect practical test. In my own experience there were some that were better than others and there were even a few that I questioned after I issued the certificate. Was I fair? Was I

"By the way, we should all try to avoid the onset of the insidious syndrome we might label "hardening of the ego the main symptom of which is "don't try to teach me anything, I already know it all." An open and inquisitive mind, coupled to a teachable spirit, is still one of the most effective "safety devices" to be found anywhere and should be located in every cockpit."—Harold Holmes CFI

too easy? Did I teach instead of evaluate? Did I allow the applicant to repeat a maneuver under the guise of "collecting more data" unsatisfactory?

I knew that it was important that I took steps to remedy my mistakes. If I make a test too easy I am not helping the applicant. I am allowing them to continue unsatisfactory performance that could result in an accident. We have denied them

the opportunity to retrain and retest and have the skills needed to operate safety.

When I became an inspector I saw that DPEs were making the same mistakes that I had made. I offered suggestions on how they could improve that often fell on deaf ears. In 2004 the FSDO I worked for was required to review plans of actions for all of our DPEs. We found that many did not meet the spirit of the order. Some had plans but did not use them during their tests. Many refused to change because they had been doing their jobs a certain way their whole careers and didn't see any good reason to change the way they did business.

I often talk to inspectors in the field that still observe the same patterns. They pose questions

"How effective is your work when you are doing two practical tests a day, everyday for seven days throughout the year without a break?" "How long did you spend putting a plan of action together? Is it a good one or does it just meet the requirement to have one."

We should always view our careers as examiners as a journey to excellence. We should never assume we know all we are going to know and stop seeking knowledge and most important of all we should never loose sight of our primary mission which is aviation safety -PEQ

### Check your Guidance Library

#### August 25, 2017 the FAA issued AC-61-65G.

This advisory circular (AC) provides guidance for pilot applicants, pilots, flight instructors, ground instructors, and examiners on the certification standards, knowledge test procedures, and other requirements in Title 14 of the Code of Federal Regulations (14 CFR) part 61. The document is available by clicking the link below.

AC 61-65G



Photo: Emelia B. Bernava DPE LTA EA17

# WANTED FROM

#### **DESIGNEES / INSPECTORS INSTRUCTORS** and **PILOT APPLICANTS** Your SUBMISSIONS!!!!

Photographs of new pilot certifications and general aviation pictures

Stories, Articles, Questions, Topics for Discussion, Experience from the Field, and anything that you have learned that you can share with other Examiners?

For December 2017 Issue of Pilot Examiner Quarterly, submissions should be in electronic form and are due by COB Friday, November 24,

Send to: todd.e.burk@faa.gov SUBJECT: Pilot Examiner Quarterly, December 2017 Issue

#### Making a Difference

I want to thank Julie Paasch, Matt Johnson, Emelia Bernava and David St. George for their contributions to this issue of the Pilot Examiner Quarterly. Your efforts are greatly appreciated and essential to enhancing the practical value of this publication to designees. This journal is about sharing valuable information in the pilot examiner community. And to that end, I would like to see every pilot examiner contribute. At least one article a year. The pay is terrible (there is none) but knowledge you share has the power to change lives and make the aviation industry we love that much more safer and enjoyable.

Sincerely,

Todd E. Burk—Editor

#### ACS Focus Team

A reminder that if you about using the ACS or have any suggestions on how they can be improved, you can contact the ACS Focus team using the following

9-AVS-ACS-Focus-Team@faa.gov



## **Upcoming Courses**

### **Initial Designated Pilot Examiner Part 2**

Section 4395	September 25-28, 2017	Oklahoma City, OK	\$400*
Section 4707	January 23-26, 2018	Oklahoma City, OK	\$480*
Section 4708	April 10-13, 2018	Oklahoma City, OK	\$480*
Section 4709	June 26-29, 2018	Oklahoma City, OK	\$480*
Section 4710	September 25-28, 2018	Oklahoma City, OK	\$480*

### **Recurrent Designated Pilot Examiner Courses**

Section 4429	September 14, 2017	Helena, MT	\$240*
Section 4727	November 1, 2017	Wichita, KS	\$240*
Section 4728	January 9, 2018	Lakeland, FL	\$240*
Section 4729	January 10, 2018	Lakeland, FL	\$240*
Section 4730	January 11, 2018	Lakeland, FL	\$240*
Section 4729	January 17, 2018	Oklahoma City, OK	\$240*

\*prices and dates are subject to change. Always check DRS for most up to date Information.

https://av-info.faa.gov/DsgReg/sections.aspx

#### **Professional Development**

Professional development is an important part of any job. Keeping up with the latest technology in aviation; orders and regulatory requirements is a huge challenge.

As always check the Designee Registration System (DRS) for most current schedules. We also use DRS to keep you informed about policy changes and provide training to help you understand the latest changes.

Make sure you keep your profile up to date so you don't miss out on these notifications. Log on to: https://av-info.faa.gov/DsgReg/ sections.aspx

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