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WAIVERS

Last Designee Update we stated that starting January 2004 the DPE Recurrent Seminar Program will be consolidated to just 19 seminars per year. Unfortunately when you move the dates and locations around some of the new dates for seminars do not line up with the 2-year training requirement stated in the Pilot Examiner's handbook. If your FSDO falls into this situation please have the person in charge of DPE's send me an email requesting a waiver to the 2-year training requirement. Paul.J.Maenza@faa.gov

SEMINAR SCHEDULE

I keep getting telephone calls on when is the next DPE Seminar being conducted? All Designee Seminars are listed on the AFS-600 website. <<http://afs600.faa.gov>> Look on the right side of the home page under AFS-640. The seminars for FY 2004 are listed. Some of the FY2005 seminars are also listed if you are someone who likes to plan ahead.

INTERESTED IN BECOMING AN NDPER?

Attention: Vintage and Warbird DPEs, PPEs, and CFIs

October 9, 2003 - If you are already an FAA Designated Pilot Examiner (DPE), a Pilot Proficiency Examiner (PPE), or a Certificated Flight Instructor (CFI) in vintage multi-engine aircraft, it would not take much more to become an FAA National Designated Pilot Examiner (NDPER) and/or a National Designated Flight Engineer Examiner (NDFEER).

To do so, you must meet the following minimum requirements:

- Hold a current FAA DPE certificate
- Have been an FAA DPE or an FAA PPE for at least one year
- Hold a current FAA Class II Medical certificate
- Hold a minimum of two type ratings, LOAs and/or authorized experimental ratings in multi-engine vintage aircraft
- Have a proven background involving the operation of multi-engine vintage aircraft
- Hold a current EAA membership
- Be willing to travel

EAA and FAA encourage multi-engine vintage aircraft pilots who do not meet the above minimum requirements to work toward eligibility by becoming either an FAA DPE or a FAA PPE. Appointments for either the DPE or the PPE are handled through your local Flight Standards District Office (FSDO).

To determine the national need for such examiners and/or for help in processing your DPE or PPE application through the FSDO, contact JD Martin, FAA National Program Manager for Vintage and Surplus Military Aircraft, 847/294-7150 or j.d.martin@faa.gov.

For other questions on the NDPER and the NDFEER programs, contact Verne Jobst, EAA NDPER/NDFEER Program Manager, 815/385-7277; JD Martin (see above), or Randy Hansen, EAA NDPER/NDFEER Program Administrator 920/426-6522.

THE DILEMMA

Paul,

In response to your request for input, I would like to throw out some food for thought. One of the biggest problems I see with the current system is that we (inspectors) are finding that many flight instructors are only teaching what is in the practical test standards and no more. Tasks not included under Area of Operations are not taught. As we all know, tests cannot be exhaustive in scope or they become too lengthy and too expensive. Such an approach would serve neither the student/applicant(s) nor their instructor(s) well and would not be practical.

Neither is it productive or prudent in aviation training to exclude anything since we do not know what to exclude. We will never know when our lives and those of our passengers may depend on accomplishing a task we were not taught. The approach of "testing to teach" and "teaching to test" usually raises the standards of poor students/pilots to the average student/pilot but it also serves to "dumb down" the rest.

As things are, a great deal of aviation knowledge and experience may not be passed on and could be lost forever. How many pilots know what a loxodrome or rhumb line is? How many instrument pilots know the elements of required reports when operating in a nonradar environment? How many can remember the difference between initial contact reports for a compulsory and noncompulsory reporting point in nonradar environments? There are still places in the world that do not have radar coverage or where radar may be out of service most of the time. We read the horror stories of many professional pilots who lose situational awareness while operating in third world conditions with poorly trained controllers and no radar. Some subsequently lost their lives because they misunderstood ATC instructions in nonradar environments and recognized their plight too late or not at all. When "free flight" eventually comes about, how many instrument rated pilots will be prepared to exclusively execute published approach and missed approach procedures for multiple approaches without radar vectors? How will they fare if their GPS goes out? How many inexperienced pilots are still having stall/spin accidents while maneuvering in close proximity to the ground.

I believe a step in the right direction would be to look at modeling all the practical test standards after the CFI practical. What we need to do is incorporate as many tasks as possible in the Areas of Operations and require core-selected tasks while giving the inspector/examiner the option of selecting alternatives among numerous other tasks. We also need to include many more emergency and abnormal tasks to select from. This will ensure that all required tasks are tested at a minimum and that the applicant is truly ready and capable of doing all that is expected of him, especially during unexpected situations. It would also prompt instructors to teach more than just the test.

I would be curious to see how many inspectors/examiners would agree with this or a similar approach.

Emil Cirone, ASI
Birmingham FSDO

HELPING THE WINGS PROGRAM

Paul,

I comment on this at each DPE recurrent annual meeting. **DPE's, give the "Wings" program a helping hand.**

As a DPE, you should all be interested in promoting safety. One avenue that you have at your disposal is to promote the safety program. When you conduct a pilot examination and the applicant passes with satisfactory results, reward them with a "Wings" certificate and lapel pin. The procedure for this is to contact your Safety Program Manager (SPM) at your local Flight Standards District Office and have them to send you some Wings applications. During your post flight briefing after you have issued the applicant a temporary pilot certificate, tell them to make a copy of the certificate, fill out the application and send them in care of the SPM at the local FSDO. They will then be issued a certificate and pin of the appropriate phase. Now would be a good time to tell the newly rated pilot how they can satisfy the requirements of a flight review by way of the wings program, which is outlined in AC-61.91H. You should have copies of the AC to pass out to your applicants and tell them to read it when they get over the excitement of passing your check-ride. As a DPE, you should be an Aviation Safety Counselor (ASC), if not, contact your SPM to find out how you can work with them to promote safety in the aviation public. Sometimes, you are the main contact that people see in airport areas who can reflect the safety issues and concerns that the FAA strives to promote in order to maintain a safe environment for general aviation.

Ken Pannell
Aviation Safety Inspector
Memphis FSDO

New and Revised FAA Knowledge Handbooks

The Airman Testing Standards Branch (AFS-630) is finishing the new *Seaplane, Skiplane and Float/Ski Equipped Helicopter Operations Handbook* (FAA-H-8083-23). This handbook incorporates the areas previously covered in chapters 16 and 17 of the *Airplane Flying Handbook* (FAA-H-8083-3), and additional new material from industry. This new handbook should be available through the Government Printing Office (GPO) by July. We are also finishing the new *Pilot and Flight Instructor Risk Management Handbook* (FAA-H-8083-29). This is a joint FAA/industry effort to address risk management with emphasis to include this important subject into flight training and should be available by June.

The *Pilot's Handbook of Aeronautical Knowledge* (FAA-H-8083-25) is totally rewritten and beefed up from the previous advisory circular format. This handbook is now available at the GPO. The *Airplane Flying Handbook* (FAA-H-8083-3A) is in the final stages of revision. It should be available at the GPO by May. The *Helicopter Instructor's Guide* (FAA-H-8083-22), a handbook developed by the National Safety Program office, is now part of the AFS-630 handbook library. It will be edited and coordinated through the FAA offices and available from the GPO in July of this year.

Comments to any AFS-630 product should be sent to AFS630comments@faa.gov. We are trying to make all of our new handbooks available to the public in electronic format on our Web site at <http://afs600.faa.gov>.

PRIVATE PILOT AND COMMERCIAL PILOT (AIRPLANE) PRACTICAL TEST STANDARDS (PTS) CORRECTIONS

The Introduction sections of both the Private Pilot and Commercial Pilot (Airplane) practical test standards (PTS) need an additional sentence added to the first paragraph under **Removal of the "Limited to Center Thrust" Limitation** on page 6. The sentence shall state "An applicant who holds an instrument rating and has not demonstrated instrument privileges in a multiengine airplane with a published V_{MC} shall complete the additional tasks listed under **Removal of the "Airplane Multiengine VFR Only" Limitation** section."

The following corrections need to be made to the AREAS OF OPERATION listed on page 6 under **Removal of the "Limited to Center Thrust" Limitation** in the Introduction of the Commercial Pilot (Airplane) PTS:

- AREA OF OPERATION VIII: EMERGENCY OPERATIONS
- AREA OF OPERATION X: MULTIENGINE OPERATIONS

Any questions related to these changes should be referred to the Airman Testing Standards Branch (AFS-630) at AFS630comments@faa.gov.

Alternative to the above for inclusion at the next revision of these PTS's:

Combine the **Removal of the "Airplane Multiengine VFR Only" Limitation** section on page 5 of the INTRODUCTION with the **Removal of the "Limited to Center Thrust" Limitation** section on page 6 as follows:

Removal of Limitations

The following multiengine limitations may be removed when an applicant satisfactorily performs the appropriate AREAS OF OPERATION and TASKs from the commercial (private) AMEL and AMES PTS. A multiengine airplane that has a manufacturer's published V_{MC} speed must be used in either case.

Limitation to be removed: “Limited to Center Thrust”

- AREA OF OPERATION I: PREFLIGHT PREPARATION
 - TASK H: PRINCIPLES OF FLIGHT-ENGINE INOPERATIVE
- AREA OF OPERATION VIII (X): EMERGENCY OPERATIONS
 - TASK B: ENGINE FAILURE DURING TAKEOFF BEFORE V_{MC} (SIMULATED)
 - TASK C: ENGINE FAILURE AFTER LIFT-OFF (SIMULATED)
 - TASK D: APPROACH AND LANDING WITH AN INOPERATIVE ENGINE (SIMULATED)
- AREA OF OPERATION X (XI): MULTIENGINE OPERATIONS
 - TASK A: MANEUVERING WITH ONE ENGINE INOPERATIVE
 - TASK B: V_{MC} DEMONSTRATION

Limitation to be removed: “Airplane Multiengine VFR Only”

- AREA OF OPERATION X: MULTIENGINE OPERATIONS
 - TASK C: ENGINE FAILURE DURING FLIGHT (By Reference to Instruments)
 - TASK D: INSTRUMENT APPROACH-ONE ENGINE INOPERATIVE (By Reference to Instruments)

LETHAL DISTRACTIONS!

Article by Dave Wiley

The FAA Practical test standards, which set the minimum qualifications for every certified aircraft pilot, contain the following statement.

“Numerous studies indicate that many accidents have occurred when the Pilot has been distracted during critical phases of flight. To evaluate the applicants ability to utilize proper control technique while dividing attention both inside and outside the cockpit the examiner shall cause a realistic distraction during the flight portion of the practical test to evaluate the applicant’s ability to divide attention while maintaining safe flight.”

Outside the aircraft, the closer you are to something the more you will be distracted by it. Inside the aircraft, the more complex or awkward the task is the more it will take away from the task of flying. If a crash occurs when the aircraft is out of control, 85% of crashes of a single engine airplane and/or a glider and 100% of multi engine crashes are fatal. On the other hand in controlled crashes the fatality rate is very low. This is because uncontrolled crashes are nearly always severe while controlled crashes vary in severity from profanity to CFIT. Controlled Flight Into Terrain. Usually IFR conditions.

To lose control of an aircraft you must be ill, disoriented or distracted. All diminish your "Situational Awareness" All accidents have a chain of events. Here is one for a typical low altitude stall spin. First there is a distraction. Then the aircraft acquires a bad attitude. Pitch, yaw or both. If you ignore this, increased drag causes a decrease in airspeed. Things get quiet. Ignore this and the aircraft starts to complain. Things get noisy again like stall warning horn, buffeting and controls get sloppy. Ignore this incoming information and a stall will occur. If the stall occurs in a bad yaw attitude it will be followed by a spin. I doubt anyone can ignore a stall but if it occurs at a low altitude there may be little you can do about it.

Stall recognition and Recoveries, Slowflight and Spin awareness are all part of the Flight test standards. Why? Gliders do slowflight at altitude but power planes have no reason to fly slow, out of Ground Affect. Why would we give up control of an airplane just to prove we can get it back? These tasks are there for the purpose of situational awareness training. It takes a lot of exposure to these events and the symptoms leading to them to acquire good Situational Awareness and stay out of trouble.

Good Judgment comes from Bad Experience

The saying that "Good judgment comes from Bad experience" is only partly true. I prefer "Good judgment comes from Broad experience". In aviation the more unknowns we have to deal with, the greater is our risk. There are always some unknowns or assumptions, therefore there is always some risk. So the more flights you make (exposure) the greater the likelihood of an incident. Logical, Yes, but it doesn't work this way. This straight line equation is curved by many other factors. Some bend it one way, some the other.

To make good decisions you need good information and lots of it. This comes under the title of "Situational Awareness". We are all capable of looking and not seeing or listening and not hearing. More so as we grow older, thus our situational awareness tends to diminish. On the other hand the more different experiences we accumulate the broader the scope of our "Situational Awareness".

It is a fallacy to assume that the number of logged flight hours is a measure of experience. There are many thousand hour pilots with only a hundred hours of experience. Repeating a task is a bell curve. You improve for a while then complacency enters the picture and you become more incident prone. Making the same flight from the same field in the same aircraft day after day does not prepare you for an unusual situation, it makes you complacent. If your "Situational Awareness" doesn't clue you in to an unusual situation an incident will happen.

Most pilots are sensitive when something causes their skills to be questioned. Some have an ego problem but the good ones are just sore from kicking themselves. Following are stories about two pilots that I knew briefly who had a good attitude about flying. They took it seriously and availed themselves of a broad scope of training and experience. They both lost control of their aircraft while trying to perform an awkward cockpit task at low altitude. They both died from an uncontrolled vertical descent. Had they descended under control they would probably have survived.

I met John Denver in Alaska while I was flying for a fishing lodge where he often vacationed. He loved to fish but even more so he loved to fly. We had Beavers, Otters, a Cessna and a Maule, all on floats. Whenever possible he got in the front seat and then talked the pilot into letting him fly. The guests were not supposed to fraternize with the help and vice-versa but John would seek out the pilots and pick their brains on bush flying and other skills whenever he could. I was positively impressed with his aviation knowledge and skills. There was a lot of negative publicity after his demise probably due to his celebrity status and the fact that he had lost his medical due to a DUI. I refuse to believe that he was nonchalant about the experimental plane that he had just bought. The former owner had moved the fuel selector to an awkward position behind his left shoulder. When the engine stopped at low altitude, the plane was observed doing pitch oscillations. PIO? It then stalled and spun into the Bay. It is assumed that he lost it while trying to reach the fuel selector.

I first met Scott Richmond after his first Glider crash. Which was a hard but controlled landing on his second ride in a Glider. Scott was Gung-ho about everything he did. Wind Surfing, Snow-boarding and now soaring. He went on to get his private Glider license and was about to apply for a commercial. He had built up his experience and skills by flying different Gliders in different places. He entered contests, qualified for Badges and took training where ever he could. My last experience with him was doing auto tows at the Alvord Dessert. He flew every day he could but malfunctioning tow planes or lack of tow pilots often kept him on the ground. To solve this problem he bought an experimental Self-Launch Sail Plane. He tried to do it right. He took training in a two place powered sailplane and got the endorsement. He sought advice from everyone he could find who had this type of experience and he went out and practiced.

This Motor Glider had a small single cylinder two cycle engine that was started by a pull cable in the cockpit. He had practiced in-flight starts at a safe altitude. With a two-cycle engine it is one thing to shut it off and start it again and often quite different to get it started after it quits. Like with fuel problems. On his final practice flight the engine apparently quit at about 300 + feet altitude after take off. He turned back toward the airport. The Plane then was observed doing pitch oscillations, PIO? It then stalled and spun into a pear orchard. It is assumed that he lost it while trying to re-start the engine with the cockpit pull cable.

Most power planes cannot make it back to the airport if they have a power failure before they make the first turn. Many pilots try it and lose control of the aircraft during the course reversal. Many Glider instructors are advocates of the 200 foot rule (Knauff) but not the author. That is if the tow breaks above 200 feet you can make it back to the airport. This is based on the assumption that the rate of climb on take-off is more than 200 FPM, the minimum descent rate of most gliders is less than 200FPM and it takes less than one minute to do a 270 deg. turn. In the early days I had the release pulled on me a few times and I always made it. But I didn't believe in it as a standard. When I became an examiner I figured out how to get the instructors to knock off teaching this B.S. During the first take off the candidate would call out "200 feet" I'd ask "What's 200 feet" they'd say "That means I can make it back to the airport" BANG. "Show Me!" After a few land-outs and some hairy returns the word got around. Nobody calls out "200 Feet" anymore.

Scott's self launch engine quit at aprox. 300 + feet AGL. If he had just treated it as a rope break and flown the glider as he was trained to do he likely would have made it back to the airport or to a controlled landing in a soft spot. In both of the above cases engine failure appears to be due to fuel mis-management. The loss of control was likely due to desperately trying to get the engine started again. The fatalities were due to landing out of control.

The lessons to be learned are ---

Don't let anything distract you from flying the aircraft. Like programming your GPS. If a return to earth is inevitable, direct the aircraft to the softest spot you can find. Continue to control the aircraft until it is completely stopped.

Dave Wiley

FAA OVERSIGHT OF DPE'S

I'm sure that some of you may have heard that FAA Regional Offices are conducting internal audits of their designated examiner programs. It's true. This audit is in response to congressional, industry and FAA concerns regarding pilot certification, designated examiner certification, designee oversight, and the recent upward trend in the total number fatal general aviation (GA) accidents. As part of that audit, various FAA regions, and FAA headquarters, have been conducting spot checks on select FSDO designated pilot examiner (DPE) files and DPE surveillance records.

The preliminary findings of this audit have created additional FAA concerns regarding the overall pilot examiner program. That is the point at which we now find ourselves. In response to these concerns, an FAA team has been charged with researching and determining what improvements need to be made to the examiner program and process as a whole. This team is to detail its findings and recommendations in a formal report to FAA senior management by September 2004. From that report, the FAA will determine the future direction of the DPE program.

As a former DPE, an Aviation Safety Inspector (ASI) with DPE oversight responsibilities, and a current member of the National Examiner Board (NEB) and Designee Standardization Team, I believe that a good majority of DPEs are conducting pilot certification in a correct manner (i.e. using the proper PTS, utilizing a plan of action for each practical test given, giving a complete and valid practical test, incorporating the special emphasis items, etc.) For a majority of those DPEs who are not conducting the practical test correctly, it is mostly likely due to an unintentional act of omission, and further training by the Designee Standardization Team or their POI can easily and painlessly remedy that. I also believe that there are pilot examiners taking advantage of their designations. Fortunately, these examiners, which discredit and lend to criticism of the examiner program, are few. However, as the saying goes, it only takes a few "bad apples". The FAA wants to identify those examiners who are not conducting valid practical tests and deal with them appropriately. Therefore, if you are conducting certification practical tests in an appropriate manner, job well done and thank you! If not, you may want to reevaluate your testing activities before the FAA does.

Something else to think about... The practical test is aviation safety's first line of defense. DPEs carry out approximately 95% of all the practical tests conducted for pilot certificates and ratings. Pilot operational errors, due to such things as maneuvering flight, controlled flight into terrain, weather, poor risk management and decision-making, account for approximately 85% of all GA accidents. Those applicants you certify are flying in aircraft with passengers (maybe with someone we know) over your home and mine. Also, since our military is no longer the main supplier of pilots to the airlines, any of your applicants may very well be today's or tomorrow's airline captain.

Kelly D. Sweeten, ASI, Designee Standardization
Team Member, NEB