AFS-600
Regulatory Support Division

Vol. 17, No. 2 **APRIL 2005**

A quarterly publication designed to serve the Examiner, Designee, and Instructor Community

IN THIS UPDATE

THE ONLINE REGISTRATION SYSTEM

Have you tried it? You are **requested to register** for all Designee Seminars with the AFS-600 online registration system. The first step is to go to the AFS-600 website at http://afs600.faa.gov. Look on the right side of the home page and you will see Designee Seminars (FY2005) under the AFS-640 area. There are two topics to select from, for those who already know which seminar they want there is ***"Schedules For All Available Designee Seminars"*** and for the computer novice you can take the easy path and use the ***"Guided Designee Seminar Enrollment".*** It is easy and will help keep costs for the seminars down. Your online registration will only be confirmed when you have called and paid your seminar fee. **405-954-0138**

RESPONSE TO AOPA ARTICLE FEATURED IN THE JANUARY 2005 UPDATE

Your article was well received by this FAA Inspector who would like to offer another take on how CFI's can train and DPE's can evaluate the Private Pilot ASE PTS Area of Operation X, *EMERGENCY OPERATIONS*, Task A, *Emergency Approach and Landing (Simulated)*.

One of the seven (7) Objectives listed under Task A is very significant. Objective #5 requires that the applicant "*Plans and follows a flight pattern to the selected landing area...*" This means that the DPE should question the applicant to determine if he/she (Objective #1) "*Exhibits knowledge of the elements related to*" the Task and evaluates the applicant in flight to determine if he/she can demonstrate a "*plan and follow a flight pattern*" to a survivable landing.

After 35 years of instructing and examining, it becomes apparent to me that allowing a simulated emergency approach and landing to continue below 1000' AGL over a field in the practice area offers no merits and can lead to what you describe in your article. Additionally, if the applicant is convinced that he/she could have "made" the field when the DPE has decided that it wasn't possible, there is a conflict that has no solution.

One of the references used to describe the task (and used as the standard for teaching and evaluating) is the Airplane Flying Handbook (FAA-H-8083-3). Page 12-7 describes a procedure (plan) and maneuver (flight pattern) and advises on page 12-6 "Utilizing any combination of normal gliding maneuvers, from wings level to spirals, the pilot should eventually arrive at the normal key (downwind) position at a normal traffic pattern altitude for the selected landing area. From this point on, the approach will be as nearly as possible a normal power-off approach."

When a CFI can achieve having the student use the plan and flight pattern described in the reference to consistently glide the aircraft to that "key downwind position", never allowing the glide to continue below 1000' AGL and using the safety of altitude to recover and return to powered flight, that part of the lesson or evaluation is finished. Next, the CFI can return to an airport to train the student to consistently "make" the field with a 180-degree power-off approach (FAA-H-8083-3, page 7-18) to a landing. There will be no arguments over whether or not the approach was successful. If the rubber meets the pavement, it worked. If an undershoot or overshoot resulted, it was not successful and more practice is necessary.

When an actual engine-out approach is required, the pilot can apply the plan and flight pattern from any altitude by combining the two-step process of focusing on arriving at the key downwind position at 1000' AGL and executing the familiar 180^0 power-off approach.

Using this procedure will eliminate those training and evaluation tasks from becoming actual emergencies. I have instructed all of our DPE's and Part 141 schools to follow this procedure and some schools, in light of escalating insurance rates, have restricted their CFI's and students from descending below 1000' AGL except at an approved airport.

Incidentally, public complaints about low-flying aircraft have been eliminated.

Clyde B. O'Neill
Safety Program Manager
BTR FSDO

QRS 11 QUARTZ AUGULAR RATE SENSORS INSTALLED IN AIRCRAFT, MAY RAISE CONCERNS FOR DESIGNEES

It has come to the attention of AFS-640 instructors during various conversations with designees at seminars and on the telephone that a major dilemma has arisen concerning export of certain electronic devices that may be installed on aircraft being presented for export.

The QRS 11 Quartz Angular Rate Sensor is an electro-mechanical sensor gyro that is fabricated from crystalline quartz into a monolithic Coriolis-based angular rate sensor. The entire family of quartz angular rate sensors has significant military applicability according to a letter from the United States Department of State, Bureau of Political-Military Affairs and the Directorate of Defense Trade Controls. This letter is addressed to Mr. Bradley A. Smith, at Systron Donner Inertial Division in Concord, Ca. The letter is in response to a request for a "Commodity Jurisdiction Determination" from the Department of Commerce and Defense. After extensive review and analysis, the Department of State determined that the QRS 11 family of quartz angular rate sensors remain subject to the export-licensing jurisdiction of the Department of State in accordance with the International Traffic in Arms Regulations. These gyros are designated as defense articles under Category XII (d) of the United States Munitions List (USML). Certain QRS 11 quartz angular rate sensors are subject to the licensing jurisdiction of the Department of State when such items are integrated into and included as an integral part of a commercial standby instrument system for use on civil aircraft or exported solely for integration into a commercial standby instrument system. New aircraft being produced today, with what is commonly referred to as "glass cockpits", may contain instruments with QRS 11 angular rate sensors as a subcomponent. Without the appropriate authorization, **aircraft and components which contain these sensors are not eligible for export.** The dilemma arises when aircraft are presented for export and neither the exporter nor the FAA/Designee is aware that a subcomponent of a navigation or gyro system contains the QRS 11 sensor.

Review of Federal Register, Vol. 69, No. 26, dated Feb 9, 2004/Rules and Regulations, for the Department of Commerce, Bureau of Industry and Security, addresses "Licensing Jurisdiction for QRS 11 Micromachined Angular Rate Sensors" and provided the following information. The "Background" section clearly stated that these sensors "are subject to the licensing jurisdiction of the Department of Commerce or if used in aircraft systems are subject to the licensing jurisdiction of the Department of State, Directorate of Defense Trade Controls.

Designees and FAA inspectors that may be exporting aircraft could jeopardize their livelihoods and careers, in the opinion of this author, due to a lack of knowledge concerning these sensors. I spoke with representatives of two large and well-known aircraft electronic manufacturers and they were not aware that these sensors were installed in some of their systems. I was informed that the sensors may have been provided by a supplier and installed as a subcomponent. Employees of these and other corporations involved in the production, sale, and export of components containing the QRS 11 sensor are in some cases not aware of its existence. The engineering staff and designers probably are aware of the use of the component but may not be aware of the limitations placed on the sensors with regards to export. In addition, production personnel and designees do not usually associate with the engineering staff on a level of design detail knowledge and as such the QRS 11 components remain esoteric.

I believe that it is of the utmost importance that the FAA identify and publicize the importance of this issue. Manufacturers, working with their suppliers using the QRS 11 sensors, should provide a list of components in which the sensors are installed to enable the FAA and designees to properly evaluate aircraft and appliances presented for export. There is no current FAA policy available to refer a designee or an inspector to the Office of Foreign Assets Control nor the Bureau of Industry and Security web sites to research this problem or any other problem concerning export of products that may be considered defense articles. The web sites for the above mentioned government agencies have been provided in the Combined Recurrent Standardization Seminar for at least four (4) years. We have encouraged Designees and Inspectors to review these sites frequently when involved in export of aeronautical products. Embargoed countries and a "Denied Persons List " are two very important bits of information that may be gleaned from the aforementioned web sites. With the state of world affairs today, our concern is that export of products and components containing these sensors could possibly lead to arrest and prosecution of Designees and Inspectors based on the International Traffic in Arms Regulations of the Department of State.

There is some knowledge in the field of the existence of the QRS 11 and that the microprocessors could be used in missile guidance systems, but the aircraft and instrument systems in which these sensors could be installed is virtually unknown.

My intention is to inform designees and inspectors at all future meetings of this situation as a precautionary measure until guidance is provided. Hopefully, policy will be forthcoming identifying components that contain QRS 11 Sensors and an explanation of its significance and possible repercussions that may result if these components are exported.
AFS-640 has forwarded these concerns to FAA Headquarters in Washington and is awaiting a response.

Brad Outlaw
Combined Recurrent Standardization Seminar
Program Manager
AFS-640

THE NEW AND IMPROVED INSTRUMENT PRACTICAL TEST STANDARD

The most recent Instrument Practical Test Standard went into effect April 2004. The **primary purpose** of this revision was to **update** it to current equipment in use. Aircraft are being equipped with the newest in avionics and instrument technology. The previous PTS had fallen behind.

Round gauges are giving way to picture tubes and left-right needles are giving way to moving map displays. However, we had to provide a document that covered all instrumentation from needle ball (you remember, that's the one that was someday going to save your life because it was on a different power source) to PFD's and MFD's. The instrument PTS had to be all-inclusive and that's what made it so difficult to produce and has led to some misunderstandings of its content.

Also to be considered was the emphasis on **scenario based testing** and giving more flexibility to examiners to cope with the changing equipment. Realistic scenarios must be utilized to make the test more realistic. Examiners must be given the flexibility to adjust the test for normal, abnormal, and

emergency procedures to coincide with the equipment presented for the test. We can no longer consider needle, ball, and airspeed to be our backup instruments because they are being replaced. We also have to be prepared for equipment changes that are going to occur before the next revision of the PTS.

In producing the PTS, comments received on the previous model were considered, research was done on the modern equipment being produced, manufacturers of new technology were consulted, and input was solicited from industry and FAA sources. (I know what you're going to say. "Nobody asked me.") If you responded to the address on the first page of the introduction to the PTS, your input was considered. After all this was said and done there is still one major "oops" that I'm not proud of and a few minor misunderstandings. Through this article I hope to clarify these discrepancies so we can operate safely until the next revision.

Ok, let's take care of my "oops" first so I can clear my mind and get on to the important stuff. On page 14 of the introduction there is a paragraph that starts with "**AREA OF OPERATION IV**……." That paragraph was written before we took all of the pertinent tasks out of AO IV so it now doesn't make cense. So disregard that paragraph after you read this explanation.

The tasks for the primary flight maneuvers, straight and level flight, change of airspeed, constant airspeed climbs and descents, and timed turns to magnetic compass headings, **were eliminated**. These are basic flight maneuvers necessary in primary instrument training and they build the skills needed to perform under instrument conditions. They are present in the rest of the tasks of the PTS and need not be tested separately. **Steep turns were eliminated,** for the check ride, because nobody in their right mind would attempt a steep turn under instrument conditions. These maneuvers, tested separately, also did not lend to scenario based testing. Make sense? I don't know. (See page 1 of the PTS introduction to see how your comments could become part of the considerations for the next revision.)

Unusual attitudes need not be tested partial panel. But, you **can** test recovery from unusual attitudes partial panel, if appropriate. In the old days you had an attitude indicator and directional gyro that operated on air. You probably had a needle-ball indicator operated by electrons for safety. If you had an air problem the air instruments had a tendency to tumble slowly, leading to an unusual attitude. You had to be able to recover with the electric turn needle and the airspeed indicator. Thus, the reason for partial panel unusual attitude recoveries. However, now we have different types of equipment presented and the most likely reason for an unusual attitude could be the autopilot. The examiner must have the flexibility to adjust the test for the equipment presented. The only task that requires partial panel skills is Area of Operation VII, TASK D, Approach with loss of primary flight instrument indicators. The rest of the test is fair game but please use your best judgment when using your partial panel authority. For instance, do you think ATC would assign or would you accept a **holding pattern** when you had an emergency because of the loss of flight instruments?

Oh my! Did I say autopilot? Yes, **we test the use of the autopilot** especially if it is part of the emergency or abnormal procedures during instrumentation failure. And if it is and you are in AO VII TASK D, **then you may introduce an autopilot failure** to complete the task. (Be careful though; don't let them deploy the parachute.)

Yes you gotta have a medical for the test. CFR 61.39 (a)(4) says so. The PTS does not (oops).

"**If the practical test is conducted in the aircraft, and the aircraft has an operable and properly installed GPS, the applicant must demonstrate GPS approach proficiency** when asked." Now

scratch out “when asked” and see if it makes sense to you. If the applicant shows up with a GPS equipped aircraft the applicant must be tested on a GPS approach. However, there are some exceptions. We can’t condone using equipment in flight on an instrument test that does not meet the requirements for instrument flight. This would not affect oral testing though.

If the applicant has contracted for training in an approved course but does not take training in their GPS equipment it would not be right to test in it. This would probably happen when the applicant has a personal aircraft that has a different system than the flight school offered or when the Simulator or FTD had a different system than the aircraft used. There are so many different systems that a negative transfer of learning could lead to confusion. The intent is that an applicant will be tested on GPS equipment that the applicant would possibly be taking aloft on that instrument flight once rated. As stated in AO VI TASK A: nonprecision approach, “The examiner will select nonprecision approaches that are representative of the type that the applicant is likely to use.” This ideal is going to have to transfer to GPS equipment too. It is going to have to be an examiner call, which could include not administering the test.

As shown on the RATING TASK TABLE on page 16 of the introduction circling approaches and landings are required on the **Instrument Proficiency Check**. This has not changed but seems to be generating a lot of comment. The only Simulators normally approved for landings are the Level C and D simulators. No Flight Training Devices that I know of are approved for landings or circling approaches.

The thing that has changed on page 16 is the paragraph on the bottom. On page 9 we discuss flight instructor responsibilities. This discussion does not apply to an instructor giving an Instrument Proficiency Check. **On an instrument proficiency check the instructor is considered on the same level as an examiner or any other person authorized to administer this check.** This paragraph on page 16 was added because of a misunderstanding that an instructor was not required to use the PTS but could just train a pilot on a representative number of tasks that the instructor chose. **All instrument Proficiency checks must be given in accordance with the Instrument PTS.**

We are in a time of transition from ground-based navigation to satellite navigation and from analog to digital to computer screen. (And we thought going from tubes to transistors was remarkable.) If you were shooting an NDB approach in the mountains, would you back it up with the GPS and moving map display? You would if you could. But on the check ride we’ve got to **keep our navigation systems separated**. We’ve got to realize that this applicant will be flying more than one aircraft or system and has to be able to fly without the moving map display. Building an arc on a moving map display is not the same as navigating a DME arc with a VOR indicator and a DME. Building an NDB approach on a display does not take as much skill as flying the needle. One day the VOR and NDB will go the way of the Radio Range and the Fan Marker but right now we have to assure the applicant is able to understand them.

“The ground portion of the practical test shall be accomplished before the flight portion.” This is not a new policy. It has always been this way for logical as well as safety reasons. This statement is being put into every PTS as it is revised to emphasis that fact.

Bob Hlubin
Aviation Safety Inspector, AFS-630

EMERGENCY APPROACH AND LANDING (SIMULATED)

The Private Pilot Airplane Single Engine Practical Test Standard (PTS), Area of Operation X, *EMERGENCY OPERATIONS*, Task A, *Emergency Approach and Landing (Simulated)* should be used as the standard for teaching a student pilot how to manage an engine-out emergency.

One of the seven (7) Objectives listed under Task A is very significant. Objective #5 requires that the applicant "*Plans and follows a flight pattern to the selected landing area...*" This means that the DPE should question the applicant to determine if he/she "*Exhibits knowledge of the elements related to . . .*" (Objective #1) the Task and evaluates the applicant in flight to determine if he/she can demonstrate a "*plan and follow a flight pattern*" to a survivable landing.

After 35 years of instructing and examining, it becomes apparent to me that allowing a simulated emergency approach and landing to continue below 1000' AGL over a field in the practice area offers no merits and can lead to what is described in recent AOPA article ***(Your Airplane*?** http://www.aopa.org/asf/publications/inst_reports2.cfm?article=5153) Additionally, if the applicant is convinced that he/she could have "made" the field after the examiner has decided that it wasn't possible, a conflict arises that has no solution for the applicant.

One of the references used to describe the task (and used as the standard for teaching and evaluating) is the Airplane Flying Handbook (FAA-H-8083-3A). Chapter 8, Approaches and Landings, contains a section on page 8-25, Emergency Approached and Landings (Simulated), that describes a procedure (plan) and maneuver (flight pattern) and advises "*Utilizing any combination of normal gliding maneuvers, from wings level to spirals, the pilot should eventually arrive at the normal key (downwind) position at a normal traffic pattern altitude for the selected landing area. From this point on, the approach will be as nearly as possible a normal power-off approach.*"

All the CFI needs to do can be achieved by separating the maneuver into two independent tasks.

First, train the student to use the plan and flight pattern described in the reference and to consistently be able to glide the aircraft to that "normal key downwind position" without allowing the glide to continue below 1000' AGL. That altitude provides the safety margin to recover from the power-off glide and return to straight and level flight and proceed to an airport.

Second, train the student to consistently "make" the field using the 180^0 degree power-off approach described on page 8-23 of the Airplane Flying Handbook. There will be no disagreements over whether or not the approach was successful. If the rubber meets the pavement, it worked. If an undershoot or overshoot resulted, it was not successful and more practice is necessary.

When an actual engine-out approach is required, the pilot can apply the “plan and flight pattern” from any altitude by combining the two-part process of focusing on first arriving at the key downwind position at 1000’ AGL followed by executing the familiar 180^0 power-off approach.

Using this procedure will eliminate those training and evaluation tasks from becoming actual emergencies. DPE’s and CFI’s in the Baton Rouge District are encouraged to follow this procedure and some schools, in light of escalating insurance rates, have restricted their CFI's and students from descending below 1000' AGL except at an approved airport.

Incidentally, public complaints about low-flying aircraft near the schools have been either reduced or eliminated.

Clyde B. O'Neill
Baton Rouge FSDO

QUALITY OF FLIGHT INSTRUCTION

Paul:

I have read with great interest the varied articles concerning the level of students being tested today. The problem that I have come across is simply that many new instructors take CFI jobs to only build time. And in many cases, these instructors don't really know the subject themselves. Then when you do inform the applicant that he is disapproved, the crying and gnashing of teeth is that you, the examiner are being unfair and expecting too much.

I actually had a candidate come to me to reinstate his expired CFI. Upon questioning about various subjects he informed me that he "Did not Recommend that many students for their Practical Test". OK, so we continued a little further when he informed me that "I only instructed to build time for a REAL job!" At that point I asked why he wanted to reinstate his CFI. "I want to keep my hand in flying until I get a REAL job, and flying is very expensive!" At that point I filled out a Notice of Disapproval, and thanked him for the fee. And NO, I did not make this up!

Admittedly, this is an extreme case. However, it does point to the crux of the problem. In any vocational training, a person must have at least 20 years experience to be considered for an instructor position. That goes for hairdresser to electrician to plumber etc. Only aviation has this upside down. In addition to this, the aviation hiring market over the last 15 years is pulling instructors out of flight schools long before they become knowledgeable and effective.

As examiners, we are in the delicate position of making the practical test a positive experience for the applicant (whether they pass or fail), provide constructive criticism to the CFI, and some how deal with the CFI that only goes along for airplane rides on the students check book. Flight school operators are caught finding enough CFI's to adequately service their student load and usually are not receptive to hearing that one of their instructors is not up to par.

I wish I had a good answer to this, but as you probably know I don't. All I can do is keep plugging away with the instructors and schools that do try to do a decent job, and avoid the ones that don't seem to care.

Thank you for letting me have my 2 cents worth.

Bill Nelson
17-EA-57

HOW TO STOP AN AIRCRAFT ENGINE

There are good ways and bad ways. Then there are really bad ways like walking into a prop. Let's talk about the bad ways in common practice.

The most harmful way engines get shut down is during simulated engine failures. The intent is to shock the pilot and see how he reacts. The result is a shock to the engine and it may react in an undesirable manor. The bad way is to rapidly close the throttle. The alternate way is to shut off the fuel at the tank selector valve or with the mixture control. To shut off the fuel at low altitude is considered to be exercising a death wish since power recovery may take longer than you have. This is usually done because it simulates running out of fuel, which is the most common way engines quit.

It is hard to get rid of the old ways of training. Many of them were OK in their time, but times change. The big radial piston engines with their short crankshafts could tolerate the abrupt throttle closure. However flat opposed engines have long crankshafts with attached counterweights. To snap the throttle closed at take-off or climb power will de-tune the weights and your simulated failure will become real. In the real world sudden engine stoppage like when the pistons change holes is extremely rare. Most failures are gradual or partial power losses.

If sudden engine failure is simulated by moving the mixture control to idle cut off the engine will be converted to an air compressor. This will cushion the deceleration sufficiently to prevent the de-tuning of the crankshaft. This is the recommended procedure published by Lycoming. They then suggest that the throttle be set to aprox 12 inches MP for zero thrust (simulated feather) and the mixture returned to the appropriate setting for altitude. When I say recommended it is their second choice. First choice is the slow retardation of the throttle to zero thrust. This is the method recommended by the NTSB as It will protect the engine and at the same time provide for instant power if needed.

TAXIING AND SHUT DOWN;

The typical engine has the idle mixture set rich so it will run when cold. To prevent carbon and lead fouling when warm you can lean during taxi after landing. Use your density altitude setting if taxiing to take off. Leaner could be meaner if you forget to re set. If the weather is hot and you are going to be starting again within the hour pick a parking place facing the wind and open your cowl flaps. This will reduce heat soak which is a problem with fuel injection.

Many engine installations such as helicopters recommend that engines be run for a half minute or more at the RPM used for run up before shutting down. This cool down time clears up any accumulations from taxiing. It is a good idea to do your regular run up check items during this cool down. It's a lot better to find problems now than just before you expect to leave on your next flight.
Close the throttle and while the engine is idling check the OFF position on your mag. switch. You don't want to do this at high RPM but you do want to know that it will actually kill the engine. Catch it before it dies. Think about it the next time you move a prop on preflight. How does having the key in your pocket or on the dash guarantee that the ignition is turned off??? It works on your car but you kill the airplane engine with the mixture control. (So check it). If you have a pressure carburetor, push the mixture control back in at least half way after the engine stops. This will relieve the internal diaphragms, which are expensive to replace when they take a set. If you don't expect to fly for several weeks shut your engine down by shutting off the fuel at the shut off valve. Time it. You will be surprised at how long it takes at low RPM. (See "Hand Propping")

When gasoline burns it creates carbon di-oxide and water vapor. These get into the crankcase and with the oil form acids and other bad stuff, If your bird is going to be idle for a while get them out of there by changing your oil. Synthetic oils may not be as good as mineral oil for storage. They are too slippery and leave a much thinner film of protection on metal parts. Water vapor is a catalyst for corrosion (rust). From the standpoint of moisture condensation a metal T hangar is not much drier than outside. Keep in mind that when you move the propeller you are giving the cylinders a fresh dose of moisture-laden air.

This is another hangover from the round engine/mineral oil days. Don't pull thru an engine in storage. Cylinder walls and camshaft lobes are splash lubricated. If you pull your engine thru without running it you are removing the protective coating of oil. If you do run it you should fly it or at least run it till the oil is hot enough to drive out all the moisture.

A lot has been written about the power reduction that occurs when a Glider tug goes from climb power to something considerably less during the decent after tow release. Many articles have been written on how to avoid "Shock Cooling". and give a formula with numbers and times that works for them. What you need to know is that the successful methods consist of two things. Gradual reduction of power (RPM) with the throttle and keep the airspeed as low as possible. The cylinders of aircraft engines are air-cooled. The rest is oil cooled. So avoiding airspeed is the key factor in avoiding cracked cylinders. (Hard to do when descending with power) So take a minute to slow down/cool down your engine before you go down.

Points to remember;

1. Avoid abrupt throttle closures.
2. Cool down before shut down.
3. Check the magneto OFF position.
4. Return mixture to rich on a pressure carburetor.
5. Avoid high-speed low power descents.
6. Do not pull thru a stored engine.

Dave Wiley, DPE from O'Regon The flying no spin zone

DPE'S SEEKING SPORT PILOT EXAMINER PRIVILEGES

Over the last couple of months, for obvious reasons, the Light Sport Aviation Branch (AFS-610) has received numerous inquires from Flight Standard District Offices (FSDO) and designated pilot examiners (DPE) seeking information on how to obtain sport pilot examiner privileges. This guidance is located in paragraph 2-2g of the Sport Pilot Examiner Handbook (FAA Order 8710.7). The guidance states that the DPE contacts their designating FSDO asking to have sport pilot examiner (SPE) and sport pilot flight instructor (SFIE) privileges added to their existing Certificate of Authority (FAA Form 8430-9). If the designating FSDO concurs then the following information is sent to AFS-610: DPE's name, address, phone number, DPE certificate number, type of designation, category and class authorized, primary area the DPE will administer practical test(s) and any additional areas the DPE can provide service.

After the designating FSDO determines that it will support the DPE's request and notifies AFS-610 the principle operations inspector (POI) responsible for the DPE should ensure that the DPE is very familiar with the duties and responsibilities of a SPE/SFIE. This training must include verifying the DPE's knowledge of the changes to 14 CFR part 61, especially Subparts J and K. The DPE must obtain a copy of the Sport Pilot Examiner Handbook and become familiar with the certification requirements for sport pilot applicants. The POI should ensure that the DPE is knowledgeable on how to properly fill out the Airman Certificate and/or Rating Application – Sport Pilot (FAA Form 8710-11). Finally the DPE must have copies of and knowledge on how to use the current Sport Pilot Practical Test Standards appropriate to the category and class of aircraft they will be authorized to perform SPE/SFIE duties. The designating FSDO reissues the Certificate of Authority with SPE/SFIE authority.

The designating FSDO retains supervisory responsibilities for the DPE. AFS-610 monitors the certification activities electronically and provides feedback to the FSDO when problems or concerns surface. AFS-610 provides technical support to the FSDO in sport pilot certification to include DPE annual evaluations when necessary through the Flight Standards Inspector Resource Program. The DPE submits airman applications through their normal process.

We are hoping that a number of current DPEs will request to add the additional privileges to their examining authority. The SPE/SFIE initial training program in progress but will not be able to keep up with the sport pilot program needs until we are able to designate a significant amount of SPE/SFIEs. We anticipate having about 90 SPE/SFIEs designated by October of this year. With the help from the DPE community we can well exceed doubling this number which will definitely provide support in certificating new sport pilot applicants.

Marty Weaver
Light Sport Aviation
Branch Manager, AFS-610

FLI GHT I NSTRUCTOR RESPONSI BI LI TI ES FOR A SPORT PI LOT PROFI CI ENCY CHECK

FAA Flight Instructors certified under 14 CFR Part 61 subpart H or K now have an added privilege to perform a Proficiency Check for an additional category or class privilege at the sport pilot level. A Proficiency Check may also be accomplished for a flight instructor to provide training at the sport pilot level. The proficiency check can only be preformed FAA certificated flight instructor, this is not a designed pilot examiner function.

When would I need a proficiency check? If I already hold a pilot certificate (other than a student pilot certificate) and want to add privileges to fly another category or class of aircraft. If I hold a flight instructor certificate and want to provide training in a different category or class of aircraft.

What does a Proficiency Check consist of for a sport pilot? I must take a proficiency check from an authorized instructor other than the instructor that provided the training. This check covers the applicable aeronautical knowledge areas in section 61.309 and the areas of operation in section

61.311. The instructor conducting the proficiency check must use the guidance in the appropriate practical test standard to determine satisfactory performance.

What does a Proficiency Check consist of for a flight instructor? I must take a proficiency check from an authorized instructor other than the instructor that trained me. This check covers section 61.409 flight proficiency. The instructor conducting the proficiency check must use the guidance in the appropriate practical test standard to determine satisfactory performance

As a flight instructor how do I accomplish this? The Proficiency Check is outlined in the introduction of each Sport Pilot Practical Test Standard (PTS).

What do I have to do to pass the Proficiency Check? Satisfactory performance of TASKs to add category/class privileges is based on the applicant's ability to safely:

1. perform the TASKs specified in the AREAS OF OPERATION for the certificate or privileges sought within the approved standards;
2. demonstrate mastery of the aircraft with the successful outcome of each TASK performed never seriously in doubt;
3. demonstrate satisfactory proficiency and competency within the approved standards;
4. demonstrate sound judgment in aeronautical decision making/risk management; and
5. demonstrate single-pilot competence.

Will I get a new certificate after passing the Proficiency Check? No, however when you satisfactorily complete the proficiency check, your instructor will endorse your logbook indicating that you are qualified to operate the additional category/class of light sport aircraft.

As the instructor that performs the Proficiency Check, what are my responsibilities after I provide the endorsement? As the instructor performing the proficiency check you will ensure the FAA Form 8710-11 is filled out correctly on the front side of the form and is signed by the applicant. You will also ensure that the recommending instructor signs and prints their name on the backside of the form.

Then on the backside of the form there is a "Proficiency Check – Instructors Record" block. You must check both blocks one stating *"I have personally reviewed this applicants pilot logbook and/or training record and certify the individual meets the pertinent requirements of 14 CFR (Subparts K {61.419} or J {61.321}) for the proficiency check sought."* and *"I have personally tested this applicant in accordance with the pertinent procedures and standards of 14 CFR {Subparts K or J}, and find the applicant proficient in _____ and _____ light sport aircraft."* The blank spaces are to include the category/class and make/model of aircraft.

Mark the "Satisfactory " block then print and sign your name, certificate number / expiration date and date of the proficiency check. **You will then forward the form to Airman Registry within 10 days.** The address is FAA Airmen Certification Branch, AFS-760 PO Box 25082 Oklahoma City, Ok 73125-0082. This is the responsibility of the instructor that provides the

endorsement, if the 8710.11 is not mailed in there will be no FAA record that the proficiency check was done.

What is required if I do not pass the Proficiency Check?

When your performance does not meet the standards in the PTS, the instructor performing the proficiency check shall annotate the unsatisfactory performance on the FAA Form 8710-11 and forward it to Airman Registry within 10 days. You should be provided with a list of the AREAS OF OPERATION and the specific TASKs not meeting the standard, so that you may receive additional training.

When you receive the additional training in the AREAS OF OPERATION and the specific TASK(s) found deficient during the proficiency check, the recommending instructor shall endorse your logbook indicating that you have received additional instruction and have been found competent to pass the proficiency check. You will then complete a new FAA Form 8710-11, and the recommending instructor shall endorse your application. The authorized instructor, other than the one who provided the additional training, shall evaluate you. When you successfully accomplish a complete proficiency check, the authorized instructor, shall forward the FAA Form 8710-11 to Airman Registry within 10 days and endorse your logbook indicating your additional category/class privileges.

All flight instructors should take the responsibility of performing Proficiency Checks very seriously. By performing this check you are stating that the applicant is safe to fly a different category of aircraft. This was normally a process that only a FAA Designated Pilot Examiner or FAA inspector could perform. If as an instructor you have any questions about this process you should contact your Safety Program Manager in the local FSDO office or a Designated Pilot Examiner in your area.

Larry Clymer, ASI
Light Sport Aviation Branch, AFS-610