

Updating the Flight Instructor Renewal Process to Enhance Safety of Flight

Society of Aviation and Flight Educators Response

**THE FOLLOWING REMARKS WERE PRESENTED TO THE FAA ON DECEMBER 6, 2010
BY SAFE CHAIR DOUG STEWART DURING A SPECIAL MEETING HELD IN WASHINGTON, DC**

By way of introduction my name is Doug Stewart. I am the chairman of the Society of Aviation and Flight Educators (SAFE). I am a Master CFI and DPE with my sole source of income coming from those two endeavors. I have provided over 10,000 hours of dual instruction in the 21 years that I have been a flight instructor, and in 2004 was selected as the National Flight Instructor of the Year.

SAFE is a professional organization of not only flight instructors but aviation educators including ground instructors, simulator instructors, professors from academia, maintenance and avionics instructors and others. The vast majority of the National, Regional and District Flight Instructors of the Year for the past 16 years are SAFE members.

Before presenting SAFE responses to the Federal Register announcement, I would like to summarize the general opinion expressed by SAFE members about the necessity and timeliness of this hearing. SAFE members who responded to my request for input are virtually all full time instructors, many are Master CFIs, and several are past National and Regional Flight Instructors of the Year.

First, SAFE would like to know what the apparent urgency is for this meeting. Anyone who is involved with aviation safety is aware of the risk when we rush or are in a hurry to achieve any given task. Even when the flames are leaping at you in the cockpit, a calm reasoned approach is usually the best one. We feel that seven days notice, from publication of the meeting in the Federal Register to the start of the actual meeting is hardly time for anyone to prepare a proper, well thought out, and valid response. It only serves to create anger, distrust and frustration in the flight instructor community, and in some cases has led to responses that are more emotional than rational.

Second, there is a major problem with the goal of the meeting. The stated purpose of this meeting is to "receive industry input as to how to improve the CFI biennial renewal process to enhance the safety of flight in the General Aviation community". It goes on to say: "... there has been little improvement in the accident / incident rate among that community of aviators.

CFIs are responsible for ensuring that pilots are properly educated to operate safely within the National Airspace System. For CFIs to accomplish that mission effectively they must be provided the means and knowledge to do so, and there must be some objective method of measuring that information transfer and knowledge. The FAA has been reviewing indicators that suggest that the processes currently in place may lack sufficient effectiveness in ensuring that CFIs are being provided the best information in the most useful manner. This meeting will elicit input from the community... so that the FAA can better analyze how to improve the process."

However here is a major problem. The FAA is looking for ways to increase a CFI's knowledge through training, and to improve the CFI's retention of that information. However the real problem is not the knowledge and information that might be stored in a CFI's brain, but rather the ability of the CFI to transfer that knowledge to their clients.

There are four FAA defined levels of learning: rote; understanding; application; and correlation. The consensus of SAFE opinion is that the FIRC process addresses rote and understanding very well, and works somewhat at the application level. But the FIRC process falls far short of the mark at the most important correlation level!

Regardless of how knowledgeable a flight instructor might be about the latest and greatest in glass cockpits, or how to navigate the wings program with success, or how to make the IACRA system work flawlessly, or know all the intricacies of the Light Sport regulations even better than most POIs... all this knowledge is worthless if that flight instructor does not have the skills to impart that knowledge to others. It is wonderful if a flight instructor is a vast repository of information, but unless that very same instructor has the skills and communication techniques to pass that information on to others, the information they have is useless except to themselves.

That being said, there was consensus among the SAFE membership that the FIRC is a valuable source of continuing education, which SAFE feels is an integral part of being a flight instructor. Any and every teacher, regardless of the discipline they teach, should engage in continuing education. The FIRC is an excellent way of doing exactly that.

But when an agency seeks the answer to which type of FIRC is better: online; or in-person, I have to wonder what were they thinking? Every individual has a unique way of learning, and in this case more importantly, retaining that which they have learned.

Some learn by reading, others by hearing, some by video and others on their computers. For example, I personally do best by reading the information I wish to retain. But if I am presented that same information on a TV screen via DVD (and please forgive me John and Martha, and my dear friends from Sporty's) I am typically asleep before the opening credits have even finished.

Does that mean that the quality and content of these excellent products is faulty? Far from it! It only means that the medium is not the one that works for me. Thus, the same goes for FIRCs. As a result, the SAFE membership responses to your nine questions, will have conflicting and at times quite divergent answers.

I hope you have all received those responses from the SAFE membership that I forwarded to Mr. French. Please take the time to read them to see how passionate the SAFE membership is regarding the topic of this hearing! I will now present you with the consensus of SAFE opinion to the nine FAA questions.

Question 1: How effective have Flight Instructor Refresher Clinics been in transferring relevant information to flight instructors?

Answers to this ranged from "not at all" to "very effective". But most reflected the fact that what one got out of a FIRC was dependent upon what one brought to it. If an individual, typically an inactive flight instructor, used the FIRC to renew their certificate as quickly and painlessly as possible, the transfer of information was minimal at best. On the other hand, for those instructors who were either full time or at least busy part time instructors who treated their role as aviation educators with integrity and responsibility, the transfer of relevant information had more importance and thus was more effective.

There were also many comments that indicated that the quality of the FIRC was somewhat dependent upon the provider of the clinic, and that the quality of the presentation of the information reflected upon the effectiveness of the transfer of that information.

Question 2: What can be done to improve the effectiveness of flight instructor refresher clinics?

There were two themes in the responses from the SAFE membership on how to improve the effectiveness of FIRC. First there needed to be more emphasis on areas relating to safety of flight, new technologies, changes in regulations, and new ways of teaching old subjects. Much less time needed to be spent on things that haven't changed in years and get repeated over and over at every FIRC. Any active instructor does not need to spend an hour being told how to teach take offs and landings, but could very well use several hours discussing technically advanced aircraft, or the advantages of teaching risk management through scenario based training.

The second theme was that there needed to be much more interaction between attendees and presenters, that there needed to be more opportunities for "hands on" learning, and that there certainly needed to be time spent with attendees having to "teach" a subject. It is obvious that this is almost impossible in the online versions, but in the live clinics, it would be much more effective if each attendee had to demonstrate their ability to teach,

There were suggestions that in modules where technology was used, for example how to use IACRA or the WINGS program, it would be more effective if attendees had the opportunity to actually go through the IACRA or WINGS process at a computer work station, rather than just sitting through a "death by power point" experience.

Question 3: How effective are the written tests provided at the conclusion of flight instructor refresher clinics?

Although there were comments from the SAFE membership supporting the fact that the effectiveness of the written tests at the conclusion of the clinics was in a direct relationship to the quality of the test, and that some respondents felt they were "OK", the consensus was that the written tests had little value other than to establish that the attendee was still conscious at the completion of the clinic.

Many respondents felt that the tests were only testing to the rote level of learning, and thus there was little reason to believe that there would be any significant retention of knowledge.

Question 4: How can the effectiveness of flight instructor knowledge be better assessed?

The consensus of the SAFE membership in answering this question was that the best way to assess the effectiveness of flight instructor knowledge was where the rubber met the runway... in other words during the practical test. Several comments were made suggesting we need more input from the DPEs. Some said this was happening in the CFI / DPE workshops and forums, of which SAFE has been a contributing partner with the FAASTeam.

Question 5: How effective have the online courses been?

In answering this question the opinions were split with perhaps a very slight majority preferring the online FIRC. Those who favored the online courses felt they were effective for the most part because virtually all of the material was available online, and could be accessed well after the

completion of the FIRC. Because of the numerous links typically provided in an online FIRC there was also the opportunity for those so motivated to dig deeper into a subject. It was also mentioned that the online FIRCs invited greater participation by the attendee which typically led to greater retention.

For those who felt the online FIRC inferior to the live clinics, the reasons stated were that the online FIRC did not allow for any interaction between instructors attending the FIRC, nor for interaction between attendees and presenters. For those preferring the live clinics, the discussions among peers was felt to be of great value.

Question 6: How do we effectively measure the success of knowledge transfer in online flight instructor renewal courses?

Several comments suggested that a test taken before the start of the FIRC be compared to the test taken at the end. That would demonstrate whether there had been knowledge transfer. Others felt that the true determinant was found at the success rate of an instructor's recommended applicants for practical tests. But again caution was suggested here, as the more important and critical to flight safety question is whether a flight instructor can transfer the knowledge gained in a FIRC to that own instructor's clients. If they can't, then regardless of how successful the FIRC was has no bearing on the impact of FIRCs to flight safety.

Question 7: Should there be changes to 14 CFR 61.197?

The responses to this question by the SAFE membership were so divergent that it is impossible for me to present a consensus. There were passionate arguments for leaving things alone, for major changes, and for everything in between. I strongly urge you to read all the comments that I submitted to your committee through Mr. French to gain further understanding of the variety of opinions expressed in answering this question.

Question 8: Are those non-FIRC methods of CFI biennial certificate renewal found in 14 CFR 61.197 adequate and effective in ensuring that CFIs possess the most up to date information in terms of both proficiency and knowledge?

Again, in answering this question there was a rather broad dichotomy in the responses from the SAFE membership. Some felt that the mere fact of activity as represented by an 80% pass rate of 5 applicants was sufficient, whereas others were adamant that this provided absolutely no insight into an instructor's knowledge other than the ability to train a client to the minimum standards required by the practical test standards. There were several respondents who were extremely active, and effective flight instructors who have never signed the recommendation on an 8710 who felt that 61.197 did not go far enough in providing means for flight instructor renewal outside of the FIRC process.

There were respondents who felt that the guidance provided through the FSIMS order 8900 was such that there was no consistency from FSDO to FSDO, or for that matter between two different ASIs in the same FSDO.

Thus I would urge you to read the many varying responses to this question that I have submitted to you through Mr. French.

Question 9: What can the community conducting flight instructor recurrent training, the FIRC providers, do to contribute to enhancing safety of flight among the GA community at large?

Perhaps the most salient comment I received was that as long as the FAA mandates FIRC content there is little the FIRC providers can do to contribute to enhanced flight safety. There was a good deal of concurrence in providers putting more emphasis and training on the WINGS program, especially encouraging attendees to attend the CFI/DPE workshops and forums.

The suggestion was also made that there should be greater emphasis on human factors throughout the entire course, rather than just in that one module. It was also felt that an increase in CFI interaction regardless of whether the FIRC was live or online would contribute to flight safety.

In conclusion, the Society of Aviation and Flight Educators agrees that the flight instructor is the most important element in reducing the number of fatal accidents. To achieve this reduction there must be a change in the flight instruction paradigm. To this day, the vast majority of flight instruction is maneuvers based and virtually unchanged since the days of World War II. However we are all aware that the causal factor in almost all the fatal accidents is poor aeronautical decision making, or what the NTSB simply calls "pilot error", which has little to do with stick and rudder skills.

SAFE feels that continuing education for flight instructors is an essential element in improving the quality of flight instruction. Continuing education is one important way that the change in the flight instruction paradigm can be achieved. Further the flight instructor renewal clinic has the potential to be the catalyst in effecting that change.

That being said, the FIRC alone cannot effect the change, for the flight instructor renewal clinic does absolutely nothing to insure that the holder of a flight instructor certificate knows how to teach. It only serves as a means of providing flight instructors with the requisite knowledge.

Is there a need to improve the CFI biennial renewal process with special emphasis on the flight instructor renewal clinic? The consensus of SAFE member opinion indicates that there are areas that could be improved in the FIRC program. But are there specific documented problems in the current renewal process that suggest any urgent need for change? The last thing we need right now in our fragile industry is a new set of hoops to jump through for CFI renewal.

Respectfully submitted,
Doug Stewart
Chairman, The Society of Aviation and Flight Educators