The Society of Aviation and Flight Educators (SAFE) submits the following comments on Docket No. FAA–2008–0938, "Pilot in Command Proficiency Check and Other Changes to the Pilot and Pilot School Certification Rules".



SAFE is a member-centric, professional organization for aviation educators.

SAFE facilitates the professional development of aviation educators, seeks improved learning materials for all aviation students, and seeks a safer aviation environment. This is a compilation of comments from SAFE members.

Proposal 1 to redefine complex aircraft and move the definition to 61.1

- 1. Concur with moving definition of complex aircraft to § 61.1.
- 2. If the FADEC is added to the definition of complex, it needs to be clear that this is an alternative to a controllable pitch propeller not a replacement. Recommend the definition read "an airplane that has a) a retractable landing gear, flaps, and either a controllable pitch propeller or a FADEC system; or, in the case of a seaplane, flaps and either a controllable pitch propeller or a FADEC system.
- 3. Recommendation: Add a grandfather clause to the proposed regulation. Perhaps allow pilots to continue flying aircraft designated as complex because of the FADEC if the pilot has already logged, say, 10 hours in a newly defined "complex" aircraft. As soon as we expand the definition of complex airplane, pilots of the airplanes newly identified as complex will have to be endorsed for complex aircraft operation under 14CFR61.31e. For example, today I can fly my aircraft with retractable gear and flaps and a FADEC system with no complex endorsement. The day the proposed regulation becomes effective, I can't fly my airplane until I find an instructor, receive training, and receive the complex aircraft endorsement. I may have flown that aircraft for hundreds of hours, but tomorrow with the regulation change I can't fly it.
- 4. Recommend that the definition of complex include two definitions: a mechanically complex aircraft and an electronically complex aircraft. The definition of complex aircraft should encompass more than a mechanically complex aircraft as perceived in the 1940's. Today, technically advanced aircraft are, in many ways, more complex than a mechanically complex aircraft. The definition of a mechanically complex aircraft would define the triad of gear, flaps and prop controls as a mechanically complex aircraft. The definition of an electronically complex aircraft would define the aircraft to include a

Primary Flight Display, Multifunction Display, Autopilot, and an Integrated Navigation System. Requirements regarding complex aircraft could refer to mechanically or electronically complex aircraft.

Definition of Advanced Instrument Training

Problem: "Advanced Instrument Training" is not well defined. References to "approaches, arrivals, departures, holds" do not go far enough in explaining "advanced". A list of instrument procedures is not advanced training. The definition says nothing about the capability of the aircraft avionics. As currently defined, it appears that an aircraft with only dual VHF transceivers and a glideslope could be used to meet the advanced instrument training requirement.

Recommendation: Create a definition of Advanced Instrument Training in 61.1 that defines Advanced Instrument Training as being accomplished in an electronically complex aircraft and is scenario-based. The scenarios will be realistic of commercial operations, with non-normal and emergency procedures and that exercise the full capability of the advanced avionics.

Proposals 5 and 10, 12, 14 to replace 10 hours of complex training with 10 hours of advanced instrument training for Commercial Pilot Airplane Single Engine Land.

- Recommend that the 10 hours of complex training be retained, but recommend that the complex training be allowed in a flight simulator, flight training device, or aviation training device that replicates a <u>complex</u> single engine airplane rather than in an aircraft. Commercial single-engine pilots need to have some experience with complex aircraft. Allowing the training to be completed in a simulator, FTD or ATD would be a compromise that acknowledges the need for complex training, but also acknowledges that there are fewer complex single engine aircraft and that manufacturers are not building single-engine complex trainers. This would allow flight schools to meet the complex requirement without having an actual complex aircraft.
- Recommend the regulation be changed to require 10 hours in a "mechanically or electronically complex aircraft" (See Proposal 1 regarding defining an electronically complex aircraft.)

- 3. Recommend applicants for the commercial certificate with single engine land rating be able to take the practical test in a plane that is not necessarily complex and demonstrate complex proficiency on the practical test in a simulator, FTD or ATD.
- If this proposal is adopted, there should be a grace period where either 10 hours of complex training or 10 hours of advanced instrument training can meet the aeronautical experience requirements.

Reasons why the complex training requirements should be maintained:

- Complex aircraft training versus advanced-instrument training is mixing apples and oranges. Training in a complex aircraft accomplishes one thing, and advanced instrument training accomplishes something else. Training in a complex aircraft develops proficiency operating a more complex aircraft. Advanced instrument training improves instrument flying skills. Why would we give up one to accomplish the other? Substituting advanced instrument training doesn't result in the same knowledge and outcomes as complex training. Recommendation: retain the 10 hours of training in a complex aircraft.
- 2. It is contradictory that the proposed changes expand the definition of complex airplane, but the requirement to actually train in a complex airplane for a certificate or rating is reduced (see comments on Proposals 5 and 10, 12, 14). If we expand the definition, we should retain the training time in those complex airplanes for commercial pilots. In addition, by removing the requirement for 10 hours of complex aircraft training at the commercial level, we are reducing the amount of training an applicant for a flight instructor will have in a complex aircraft.
- 3. There is already a requirement for 10 hours of instrument training for the commercial certificate. How would the requirements of 61.129(a)(3)(i) differ from the requirements of 61.129(a)(3)(ii)? Would this proposal now require 20 hours of instrument training for the commercial certificate? That is too much for a certificate that is not an instrument rating. Adding advanced instrument training has merit, but it should not replace complex training.
- 4. An applicant for a commercial pilot airplane single engine rating is not required to hold an instrument airplane rating. That applicant's commercial certificate will have the following limitation: 61.133(b)(1), "The carriage of passengers for hire in (airplanes) (powered-lifts) on cross-country flights in excess of 50 nautical miles or at night is prohibited." Since the applicant does not hold an instrument rating, how and why would we do approaches, area departures, area arrivals, missed approaches, etc. with the non-instrument rated applicant? That applicant is not trained in instrument flight rules. We should not be training these

topics with the applicant. You have removed a training requirement that would have been useful and replaced it with a training requirement that will not be useful. Recommendation: retain the 10 hours of training in a complex aircraft.

5. Dropping the complex requirement because of "Complaints from training providers about keeping older airplanes to meet the complex requirement" is ignoring the ultimate safety of flight and ignoring the outcomes required from pilot training. Decisions about flight training should be based on what is required to train safe pilots, not just whether the requirements are economical. Recommendation: retain the 10 hours of training in a complex aircraft.

(Proposal 6, 11, 13, 15) Replacing 10 hours of complex training with ten hours of instrument training for Commercial pilot Airplane Multiengine Land.

- Recommend the 10 hours of complex training be retained. While one can conceivably
 make a case for deleting the requirement for the complex time in a single engine
 commercial certificate, it should not be dropped for the multi-engine commercial
 certificate. Virtually all of the multi-engine aircraft in the aviation fleet today are classified
 as complex. A commercial multiengine certificate should verify that the pilot has some
 experience to meets the requirements to operate the small twin-engine aircraft in the world
 today. The argument of dropping the complex requirement because of "Complaints from
 training providers about keeping older airplanes to meet the complex requirement" does
 not apply to multiengine training. So there is no real justification for changing the current
 regulations.
- 2. There is already a requirement for 10 hours of instrument training, only 5 of which is in a multiengine airplane. How would the requirements of 61.129(b)(3)(i) differ from the requirements of 61.129(b)(3)(ii)? Would this proposal now require 20 hours of instrument training? That is too much for a certificate that is not an instrument rating.
- 3. The FAA states that "this training would be more beneficial if it were devoted the development of proficiency using instruments." This is valid if this is instrument proficiency training in a complex, multiengine airplane.

Impact of Proposed Changes on Flight Instructor Training

Under benefits, the NPRM states there would be a cost savings because operators would not have to keep an inventory of two kinds of airplanes to meet the commercial pilot and flight instructor certification requirements." This NPRM doesn't address the ramifications for flight instruction.

- If the FAA has a definition of a complex aircraft, then there should be somewhere in training where pilots, and especially instructors, should be required to have training in a complex aircraft.
- 2. Recommend an instructor have a minimum of 10 hours of complex experience to receive the commercial and then whatever it takes over that to prepare for the flight instructor certificate.
- 3. Recommend that flight instructors are required to have training in complex aircraft and demonstrate competency teaching in a complex aircraft at their practical exam.

Recommend this competency can be demonstrated in a simulator, FTD, or ATD. Discussion: Removing the complex airplane training requirement will reduce the number of hours an applicant has when applying for a flight instructor certificate. Currently, the applicant must bring a complex aircraft to the flight instructor practical test, but that applicant may only have enough hours to qualify for the complex aircraft endorsement. If the complex requirement is dropped, new CFI's will have little complex experience. Immediately after completing the CFI practical test, that new flight instructor can give instruction in a complex aircraft with very limited complex aircraft hours. While the manufacturing of complex single engine trainers is going away, the need for CFIs to give instruction, flight reviews, and transition training in complex planes is not going away.