

DESIGNATED PILOT EXAMINER ADVISORY GROUP WP 07

EXAMINER BULLETIN No. 16

September 26, 2006

SUBJECT: DEMONSTRATION STALLS FOR THE CFI-A, G, SPORT PILOT PRACTICAL TESTS

BACKGROUND:

Substandard practical test performance and the tragedy of stall/spin accidents have caused concern in the community regarding the efficacy of current stall/spin training practices. This bulletin includes some thoughts on the cause of the problem and suggests examiner actions to improve the situation.

Per CFR 61 an applicant for a CFI certificate, Airplane, Glider, or Sport Pilot, must have spin training and have an endorsement attesting to the applicant's spin competency and instructional proficiency in stall awareness, spin entry, spins, and spin recovery procedures. In addition, the Flight Instructor PTS requires a spin demonstration during the practical test. There is, however, an exception. The FAA allows an applicant to satisfy this requirement by providing evidence, acceptable to the examiner, of spin training plus an endorsement per CFR 61.183(i)(2) (airplane/glider) & 61.405 (sport pilot). This process is discussed more fully in DPEAG Bulletin #7. The FAA's intention here was good but, as so often happens, there have been unintended consequences. Many applicants now move through the CFI qualification process with minimal spin training. Applicants with little spin training, and no upset/EMT/aerobatic training, qualify as instructors on a regular basis. With minimal stall/spin training & experience many of these instructors are apprehensive about stalls and spins. They don't like to do them and they give their students only the minimum necessary to meet PTS requirements. They often forego exposing their private and commercial trainees to realistic stall/spin scenarios. That means they often forego training their students on stall scenarios and the three CFI demonstration stalls (elevator trim stall, secondary stall, cross control stall). When asked to demonstrate these 3 stalls on the CFI practical test applicants typically exhibit concern. They are apprehensive about "what could happen" and they give poor demonstrations, particularly on the cross control stall. To make matters worse, they often lack a good understanding of spin theory and the effects of gross weight & C.G. on stability, stalls, and spins.

The FAA, quite properly, requires spin knowledge and demonstration of the three most troublesome types of stalls on the initial CFI (fixed wing) practical tests. These three stalls can be catastrophic when they occur unexpectedly at low altitudes. All pilots should be familiar with the theory and scenarios that lead to these stalls, and they must know how to recognize and avoid them.

Barring a change in the regulations, this stall/spin accident trend can only be reversed by examiners who are willing to require a high level of knowledge and skill in this area. Casual acceptance of CFI spin endorsements by DPEs, along with acceptance of weak performance of spins & the demonstration stalls, has contributed to the problem and this is where it must be corrected. We owe it to the flying public. If all CFI examiners adhere to the standards listed below then applicants will have no choice but to train to a higher level of understanding and performance. The entire flying community will benefit because a higher level of proficiency and safety will be achieved.

EXAMINER ACTION:

Examiners should brief CFI applicants (preferably at the time the test appointment is made) that a spin endorsement may be accepted by the examiner but only if:

1. The applicant has logged both ground & flight training on spins which involves various realistic spin scenarios with multiple entries and recoveries. This would include a thorough discussion of FAA AC 61.67C, CFR 61.183(i), and the CFI-ASE, G, & Sport pilot PTS spin task.
2. The applicant can do a good job of describing/teaching the items listed in the CFI PTS regarding stalls and spins.
3. The applicant (ASE, G, Sport pilot) is prepared to do a creditable job on all three demonstration stalls required by the CFI PTS. This would include being able to aggravate the cross control stall enough so that, even with the usual forward C.G. problem, one wing actually stalls and drops suddenly. The idea here is not to fly around in a buffeting, skidding turn. The goal is, after all, to impress students with what a cross-controlled airplane does at the stall and why this is such a dangerous thing to do when down low. The applicant should have no reservations about doing this required demonstration. Additionally, the applicant should be reminded that the PTS requires the applicant to provide an aircraft "capable of performing all appropriate TASKS for the flight instructor rating sought and have no operating limitations which prohibit the performance of those TASKS."

If the applicant has difficulty with any of these three tasks items they should be disqualified and informed that the retest will require them to provide a spin certified airplane to complete the tasks of Area XI, including spins.

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