

Lesson 19. Navigation systems and radar services

Ground 0.75 hr | Dual 0 hr | ACS AI.II.H

CFI CANDIDATE

DATE

SUPERVISING INSTRUCTOR

AIRCRAFT

N41459 Warrior

Ground only

FLIGHT TIME

GROUND TIME

OBJECTIVE

The candidate teaches the navigation equipment in the airplane they will instruct in, and teaches a student to use ATC radar services rather than to avoid them.

LESSON STEPS: THE ELEMENTS, IN TEACHING ORDER

Check each element as it is taught. Leave anything not done blank. Sign once at the bottom.

1. The navigation equipment actually installed in the training aircraft
AI.II.H the airplane's approved material
2. GPS and satellite navigation, including its failure modes and RAIM style integrity concepts
AI.II.H
3. VOR: how it works, how it is checked, and its limitations
AI.II.H 91.171 where IFR
4. Electronic flight bags: usefulness, and the failure the student must plan for
AI.II.H ACS Appendix 3
5. Radar services: flight following, traffic advisories, and what ATC is and is not doing for you
AI.II.H AIM
6. Transponder operation and codes
91.215
7. Teaching a student to ask for services, which most are reluctant to do
8. Candidate teaches an assigned element to the Simulated Student
US-4.1

COMPLETION STANDARDS

1. The candidate teaches an assigned element for about eight minutes, referring to the equipment actually installed in the training aircraft.
2. The candidate states what flight following does and does not provide, correctly, including that it does not relieve the pilot of seeing and avoiding.
3. The candidate names one GPS failure mode and what the student would do about it.
4. The candidate gets the reluctant student to make the radio call, by addressing the reluctance rather than by instructing them to.
5. The candidate states what a student does when the electronic flight bag fails, in terms of what they must have aboard.
6. The candidate delivers a self-critique before hearing the instructor's.

DEBRIEF AND SIGN-OFF

Critique: the error, its probable cause, and the correction. Candidate self-critique first.

Sign once for the whole lesson. Elements left unchecked above were not taught this session.

SUPERVISING INSTRUCTOR SIGNATURE / INITIALS

DATE