

Instructional sequence©

My instruction is done with the assistance of a tape recorder. All the ground work relating to preflight, checklists, radio procedures and practice, and the flight maneuvers of the lesson are reviewed and discussed using the tape recorder. The actual flight and the post flight time is, likewise, recorded. a student's use of the tape in playing back the lessons can greatly reduce the actual cost of learning to fly. I have had students fail to make use of the tapes. It shows.

The more frequent the flight lessons in coordination with the ground study, the better. Once a week lessons allow far too much time to forget and regress. Twice a week is a minimum in the beginning and should increase to three about the time of solo. After solo twice a week will work until the proficiency phase before the flight test.

By the second flight the student should have previewed the aircraft manual. The manual checklist material must be completely incorporated into that of the student. The next flight's preflight will use the scratch checklist with the instructor reading the items while the student does the checking. The student will make another revision from this tape and use it on the next preflight under the instructor's supervision. On all future flights the student will have the plane preflighted and ready at the appointed time. Fuel, oil, and weather status are confirmed to the instructor as well.

The first three flight lessons are designed to acquire competence in the four basic maneuvers, climbs, level, descent, power changes, trim, flaps, stall recognition, and associated turns. I make it a point to combine the basics with radio procedures, area familiarization, knowledge of aerodynamics, emergency procedures, and safety. The next two or three lessons uses ground reference flying to develop those skills required to fly airport patterns according to wind conditions.

With these lessons as the basis we now apply them to takeoff and landings. These are initially practiced as a unified series of maneuvers, including downwind, base, final, go-around, climb, and crosswind. Patterns are practiced with power, airspeeds, trim, and flaps to both the left and right. This is done initially at altitude to remove the inhibitions caused by ground proximity. Then it is practiced at a neighboring tower airport with the go-around occurring progressively closer to the ground.

The next four or five flights are planned as landing practice at nearby airports in different directions from the home field. These flights include the procedures of departure, arrival, radio, checkpoint selection, as well as the actual takeoff/landing procedure. During the actual closed pattern the instructor takes all responsibility for communications and traffic watch. This reduction of burden is important to the success of the student.

The landing lessons are then concentrated at the home field. The landing lesson just prior to solo consists of an airport exercise utilizing all runways and common pattern maneuvers. Normally two or perhaps three supervised solo flight follow at the home field. The instructor next flies with the student to and from one of the local fields that have been used previously for landing instruction. On return, the student is allowed to immediately duplicate the

flight. This is repeated three or four times to all the local fields with the variety of radio procedures required. The student now has a circular region of 40-50 mile radius in which he would be knowledgeable of the area, airports and appropriate procedures.

About this time there will be a change in the instructional approach. Initially, the instructor will become more strident and demanding in all parameters. Airspeed is now expected to be within 2 knots, altitude within 25 feet, headings within 5 degrees, power settings right on, trim for hands off, ball centered and banks at 30 degrees. Aircraft control, situational awareness and assertive communications are now the goal of every lesson.

Suddenly, there is silence. The instructor just sits there and watches or at most, only points. The student is expected to note and correct mistakes without intervention by the instructor. It is best when the student talks to himself so that the recorder notes what is transpiring. If deemed necessary, I will take over control, and speak briefly to make a point before again relinquishing control again.

The next two or three flights, other than local student solo training flights, cover proficiency in different types of landings. The first cross country training flight is an instructor/student prepared, planned, and flown flight. Everything works perfectly. The next flight is prepared, planned, and flown by the student with the instructor. Creative instruction presents realistic problems where they naturally occur and otherwise. Subsequent to these training flights the student prepared, plans and flies a minimum of ten hours of cross country with one extended flight. About this time the studying required to take the written examination should be completed and the test taken and passed. There are advantages to making the written test and the flight test close together.

When the cross country requirements have been flown, the proficiency phase begins. All flight maneuvers are reviewed and practiced in dual and solo flights to meet the Practical Test Standard requirements. Preparation is for the oral part of the PTS. This includes knowledge of weather, sectional, aircraft, manual, computer, FARs, navigation, radio, and airspace. The skillful pilot is smooth. Aircraft control is done in anticipation and not reaction. You should know ahead of time what to expect of the airplane, the atmosphere, and yourself.

One aspect of preparation that I very much recommend is having the student take a phase check from another local instructor. This check should include parts of the oral as well as the flying. This is the student's first experience with another pilot in the cockpit and will be stressful but not nearly as much as the flight test.

If the instruction has been as it should be, the actual flight test is anti-climatic. Everything on the test is published as to what is expected in performance parameters. You are expected to have and use a checklist for almost everything you do. The oral part can be more or less difficult, depending on your background and preparation. Any test is easy when you know the answers. Don't try to fake your way through a response. Offer to find the answer by indicating what source you would use to get it.