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FIRST SOLO

INSTRUCTIONAL GUIDE

A successful and incident free first solo flight gives the student added confidence which is often apparent as an improvement in overall performance. One of the main problems of basic instruction is the recognition or selection of the right moment at which to carry out this exercise. On the one extreme if a student is sent on their first solo too early a poor flight may cause a loss of confidence. However, if the first solo flight is held back too long by an instructor who demands perfection, the student may feel and demonstrate a sense of frustration.

The main requirement is not for polished flying but general competence and safety and an ability to correct faults. The instructor must be sure that the student can take the appropriate measures in an emergency. If no emergencies have arisen in the course of normal training, the instructor should have simulated them and noted the student's reactions.

The following is a guide to what constitutes an acceptable standard for the first solo flight:

- (i) **Stall and Incipient Spin** The student must be proficient at recognizing the approach of the stall in the take-off, cruise and approach configurations, and shall have demonstrated the ability to recover from a stall and incipient spin.
- (ii) **Take-Off and Climb** The student should be able to maintain a straight path and fly off at a safe speed. Checks must be of a good standard and the student must be able to keep a good lookout whilst performing these checks.
- (iii) **The Circuit** Although the circuit need not be precise in all respects, the student should be consistent in maintaining the approximate length of each leg and a satisfactory heading. Minor variations in altitude are acceptable providing the student is able to detect and correct them and they are not large enough to cause marked difficulty in judging the approach or traffic separation problems.
- (iv) **The Approach** The student should have good control of the speed particularly during the final turn and last stages of the approach and should be able to anticipate the need for power adjustments and the necessity for going around again. These decisions must not be left until the last moment.

- (v) **The Landing** The landings must be safe with no consistent faults such as holding off too high. A series of good landings is not necessarily proof of readiness for solo unless the student has shown that he or she is also able to recognise the need to go around again safely in the event of a mis-landing.
- (vi) **Airmanship** The student must keep a good lookout without constant reminders from the instructor. All flight checks and drills should be faultless. There should be no doubt about the student's ability to avoid other aeroplanes, land on the correct runway and follow ATC instructions (if applicable).
- (vii) **Emergencies** The student must have had practice at handling engine failure after take-off and should have had practice at making glide approaches in the unlikely event of engine failure elsewhere in the circuit. The student is also expected to be proficient in giving a pre take-off safety brief.

Only a short briefing is necessary and this can be given while taxiing to the take-off point. The student should be reminded of any special points such as air traffic requirements, wind conditions, etc. Brief to do only one circuit and landing but not to hesitate to go around again if necessary. If possible the traffic density should be low and ATC informed if in operation.

The student should also be reminded that the aircraft will probably get airborne quicker than expected and float longer on landing due to the lighter weight.

ADDITIONAL GUIDANCE FOR INSTRUCTORS

Instructors without first solo privileges should hand over their student to a senior instructor at least two trips before they think the student will be ready for the first solo flight.

Ideally, a student should be given minimum prior notice of his / her first solo flight. Anticipation of the event can lead to deterioration in performance or disappointment if it does not occur when anticipated.

The instructor should also ensure the seat belt is secure and the door / canopy is locked on vacating the aircraft.