

Suggested Boomerangs Fixed Wing Student Training Syllabus

It is intended that all instructors work with this syllabus in sequence when training any student. This will ensure that no vital steps are missed, and that the student's rate of learning is optimised without causing overload. Should another instructor take over tuition, the transition will be much easier for everyone.

This syllabus is intended to be used in conjunction with the MAAA Flight Instructors manual which contains a wealth of valuable information.

Before teaching new items at the beginning of each day's training, it is good practice to have a short revision session, performing such things as figure of eights, procedure turns and approaches.

Training Sequence

3.1 Explain to the student the mandatory safety rules. Explain that it is necessary to put lives first and ditch the plane rather than careering out of control towards pilots, the pits or the public. Explain no go areas, training/display areas and circuit direction.

Explain to the student the Silvertone frequency board, its function, and to store their transmitter in the pound when not in use. Never switch on without their own tag inserted. Also it is helpful to explain etiquette such as queuing for a radio channel, etc

Introduce the student to principles of flight and what makes the aircraft fly.

3.2 Demonstrate how to set up the aircraft, CofG, receiver, battery pack and fuel tank placement, aerial routing, control rod stop, pinning of hinges, securing of clevis's, cheap carburettor air filters, how to secure exhaust deflectors, use of rubber bands (for wings and undercarriages). Look for any unsafe items. Discuss propeller safety.

Stress that the student checks transmitter trim positions and full movement and correct direction *before* starting the engine – every time. This ensures that the receiver is switched on before startup and controls have not been bumped

Flying Sequences:

3.4 Initially, the Instructor will perform takeoffs and landings. Demonstrate calling, and the procedure to follow before entering the runway.

3.4.2 Climb to a safe height. Get the student to fly straight lines (left & right) parallel to the runway in the display (training) area. Explain aileron use and how the elevator needs to be introduced in turns.

Introduce rectangular circuits, at a safe height. Reinforce circuit direction as the upwind leg will be over the runway.

Introduce circles. First one way, then the other. Demonstrate that the amount of elevator required increases as speed decreases and the angle of bank increases

3.5 When the student appears ready, move on to figure of eights. Be aware, the student is no longer required to demonstrate a figure of eight for the Bronze Wings test. For most training purposes, a well executed figure of eight of any sort is acceptable, but the student should know of the two different types. Start with outward eights, then inward eights. According to the MAAA Instructors manual, the student should be able perform these entering from either the left or the right, but remember that this is an advanced Gold Wings test requirement.

3.6 & 3.7 Introduce the student to take-offs. Reinforce the need for accurate rudder control. At this point the student is also encouraged to do their own calling.

3.8 Procedure Turns - from both directions. Remember to call as these are against circuit direction.

3.9.1 Introduce basic aerobatics such as a single Loop and a Roll. Demonstrate Inverted Flight, Cuban eight and Immelman Turn & Spins (see also 4.3)

3.9.2 Introduce correcting Out-Of-Trim situations

3.9.3 At a safe height, demonstrate the model's low speed characteristics. This is necessary as the student needs to be shown that the model will not fall out of the air during landing sequences if airspeed is sufficient. Also it is required to demonstrate how much elevator is needed for flare. Show the student how at low speeds the rudder is necessary to yaw/turn and that ailerons only level wings. As an exercise, get the student to try a circuit, perhaps a figure eight using elevator and rudder only.

3.10 Introduce landing circuits. Reinforce that the field should always be within gliding distance in the event of a deadstick.

3.11 Introduce landing approaches. Throttle control by the student is commenced. Reinforce calling by the student.

3.13 to 3.17 Introduce landings.

When the student is able to perform touch & goes competently, then introduce dead stick training.

At this point the student should be "weaned off" the buddy box. Explain that while you are plugged in, you do not expect to have to take over. After several flights like this, then discard the buddy box altogether.

A few flights more going over all the Bronze Wings test items and then on to the actual test!!

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