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INSTRUCTOR LEVELS & GUIDELINES

MOP NUMBER 35

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PURPOSE
To ensure that all instructors are fully informed and aware of the instructor levels and guidelines.

RESPONSIBILITY
It is the responsibility of the Chief Flying Instructor the committee, ensure that these guidelines are applied.

CONTENTS

1. INSTRUCTOR LEVELS

There are 3 Instructor levels at the NMAS Club, being

a) MAAA Instructors Level

b) NMAS Club Instructor Level

c) NMAS Assistant Instructor Level

2. MAAA INSTRUCTOR LEVEL

MAAA Instructors are tested and certified by the State CFI in accordance with MAAA requirements. To be nominated for a MAAA Instructor position you must have held Gold Wings status for a minimum of 12 months. The Club Committee (at your request) will notify the State CFI that you wish to carry out an MAAA Instructors test. The State CFI will then provide you with an Instructors Manual and related documentation in order to prepare you for the test (by arrangement). Please discuss with the Club CFI if you have any queries.

3. NMAS CLUB INSTRUCTOR LEVEL

NMAS Club Instructors are approved by the NMAS Committee in accordance with the Club Rules. To be nominated for a Club Instructor position you must have held Gold Wings status for a minimum of 12 months. Please discuss with the Club CFI if you have any queries.

4. NMAS ASSISTANT INSTRUCTOR LEVEL

NMAS Club Assistant Instructors are approved by the NMAS Committee to carry out a limited instruction role in accordance with the Club Rules. To be nominated for an Assistant Club Instructor position it is preferred that you have Gold Wings status. Please discuss with the Club CFI if you have any queries.

5. NMAS INSTRUCTORS GUIDELINES

a) ASSISTANT INSTRUCTOR'S GUIDELINES

Work with students in the pit area - with motor starts, tuning and any other problems they might have that you are competent in fixing. Try to ensure a student is ready for the next available instructor. If you are required to ''fly' a student, pick one that can fly the basic manoeuvres ie. rectangular circuit, including figure eights, loops and stalls. Give them flying time three mistakes high. As an assistant instructor, you must do the take offs and landings for the student.

b) ALL INSTRUCTOR'S GUIDELINES

BEFORE The first flight of a new student ••• Make sure their plane is airworthy. ***

i) Check - Balance

ii) Check - Correct control surface responses i.e.. ailerons not reversed.

iii) Check - range. With Transmitter antenna down, ensure model responds correctly from at least 20m.

iv) Check- Motor response. Hold the plane at the angle of take-off (nose high), increase power to max. for the approximate time required to affect a take-off. Listen for any change of motor performance, especially a tendency to run lean. If a problem exists, FIX IT and redo motor response check. If any doubt remains, be very cautious of flying the model, it is unlikely to run well in the air if it won't run properly on the ground

6. FLIGHT CHECK ON THE FLIGHT LINE

a) Extend the transmitter antenna - (or you will probably be out of range before the first comer)

b) Check the control throws, explain the aileron movement and how they make the plane tum.

c) Check wind direction.

d) Call - "On the field"

7. FIRST FLIGHT ON A SINGLE TRANSMITTER

Teach the student one stick at a time, to get the feel for the model to respond gently. Several short flights may be needed to achieve this. Explain the procedure for a turn - you want to just see the top of the wing during the tum (no knife edge turns). At the first sight of the top of the wing return the aileron stick to neutral and feed in enough elevator for the duration of the turn to overcome the tendency for the nose to drop. Complete the tum, release the elevator and apply opposite aileron to level the plane.

8. BUDDY BOX SET-UP

Fly the model using the master TX and adjust trims for level flight at half throttle and land. Connect the student's TX and check that when control is passed to him/her, the control surfaces shouldn't change position. Adjust the trims on the student's TX until this is achieved. Check that the student's TX is not too bot ie. set half rates etc. as. necessary.

9. USING THE BUDDY BOX

The buddy box system will assist in the training of rectangular circuit, figure eights, loops and stalls and remove the need to grab the transmitter from the student. Explain to the student - handing over and taking over - and that you can correct any impending doom ~ the flick of a switch. Teach the rectangular circuit to prevent tight turns in corners and to locate the four corners of the field. All manoeuvres should be done over the centre of the strip.

10. FLIGHT OF A REGULAR STUDENT

a) Check the model and ask student if anything has been changed (other than recharging the batteries) since the plane was last flown.

b) Ask student what stage of flying they are at.

c) Student to do pre-flight check and taxi the plane ready for take-off. (Remember 1-2-3~

11. INSTRUCTOR MUST DO FIRST FLIGHT TAKE-OFF

Hand over to student and check their ability to fly the basic manoeuvres - rectangular circuit, figure eight, loop and stall. If the student is having a bad day, keep him/her away from the ground (lest their day becomes worse). If the student flies O.K. and the wind conditions are suitable re-fuel and proceed with take-offs, landings, approaches etc.

12. * WHEN DO YOU CUT THE BUDDY BOX CORD? ***

When the student can do the basic manoeuvres without needing the instructor to save the model. On the next flight go three mistakes high and use one transmitter. Do not just hand over the master TX as it is usually set up with more throws than the student's. Change the crystal to the student's TX and do a flight check. A few flights will build the student's confidence and they should soon be ready to return to the buddy box for take-offs and landings.

13. STUDENTS FIRST TAKE-OFF

The first take-off should be done standing directly behind the model at the end of the strip. When the student can keep the model straight down the strip during a take-off work your way back to the flight line in stages. The outermost blocks will give the student the best view of the field. Use the entire length of the strip for a take-off: all the runway behind the plane is of no use if the motor dead-sticks.

14. STUDENTS FIRST LANDING

Landings are taught in stages. No two students are the same, watch for signs of burn out, brain fade, overconfidence etc. It is unwise to introduce landings at the end of a long training day. Try to determine where in the circuit, the motor should be cut to idle. Height, wind, the glide rate of the model, all influence this point. Remember, the model must be able to make the end of the strip, even if the motor cuts out. Explain to the student that on a buddy box system he can fly the first stage from motor cut to the end of: final approach and you will do the fly-out. When the student is competent let, them do the fly-out. The fly-out is a repeat of the take-off procedure. Avoid rapid throttle control, a student under pressure may confuse the sticks and push down elevator instead. If on base leg, the student allows the plane to drop excessively, and you are on the buddy box, take over and tum onto the field early. Explain to the student the perils of a dead stick in this situation. Adjust height, point of motor cut, and glide angle until correct. If you are not on a buddy box, do the approach at a safe height appropriate for the student and conditions. Remember - a dead stick can occur unexpectedly at any stage of take-off: climb-out or for the duration of the flight, always fly accordingly to ensure that the plane can return safely to the field.

15. STUDENT PROGRESS CHECK-LIST

In addition to completing the "MAAA Trainee Pilot Logbook" as the student progresses, the following check-list is provided as a guide for Instructors to check/map student progress during training:

a) Rules, regulations and Flight Areas
b) Frequency Board
c) Tx - How it operates the plane – Ailerons, Elevator, Rudder etc.
d) Pre-flight Procedure 1, 2, 3, 4.
e) Single stick to Dual Stick transition.
f) Co-ordinated Turns.
g) Rectangular Approach Circuits
h) Figure eights outward and inward
i) Taxi out.
j) Loops.
k) Stall and recover.
l) Taxi in.
m) Procedure turns.
n) Off Buddy Box and practice all of the above, 3 mistakes high.
o) Back on buddy box (re-trim aircraft).
p) Take offs and abort take offs
q) Landings.
r) Simulated dead stick landing

16. NMAS / MAAA WINGS AWARD PROCESS

The Wings Award Process is identified in the following steps:

a) The student must satisfactorily complete the training schedule as given in the MAAA Trainee Logbook (including NMAS Extras) before being tested. Two Instructors can then test the student as per the NMAS/MAAA Bronze, Silver or Gold Wings test format and agree the student's competence (or not). NMAS requires 2 instructors present for Bronze, Silver or Gold wings tests. The Instructor will then fill in the NMAS "wings awarded log book".

b) The MAAA test form will then need to be completed by the test Instructor(s) and given to the CFI,

c) This MAAA test form will then be issued to the NMAS Secretary for submission to the MAAA - the official issue of the "wings licence" to the student will follow.

d) The NMAS certificate and MAAA wings can then be presented to the Student by either the Instructor or the CFI or the President.