MAAA FLIGHT PROFICIENCY SCHEME

FLIGHT REQUIREMENTS & TEST CHECK SHEET

FIXED WING POWERED – BRONZE WINGS

This Test is to be assessed by an MAAA Fixed Wing (Power) Instructor.

The requirements specified have been determined by the MAAA and are not to be varied.

Bronze Wings (Power) are awarded when a member demonstrates, in the course of one session, that he/she has the skills to perform the manoeuvres listed in the tasks below, in a competent manner and to the required standard.
This is to certify that ……..…… AUS ……..

of …… …… P/Code …….

Club …… **Note address on back of form if wings to be sent to Club**

has demonstrated the degree of proficiency in radio controlled flying of model aircraft to be awarded the MAAA Bronze Wings (Power).

…… ……..…… ……..…… …….

Signature | MAAA Instructor's Name (BLOCK LETTERS) | AUS No. | Date

At the successful completion of the test this form shall be completed by the Instructor and sent to the **State Association**. **Note: Wings will be sent to Pilot unless Club address in noted on back of this sheet.**

1. **DEXTERITY** ☐
   The pilot must be able to locate all the transmitter controls quickly without fumbling.

2. **THEORY** ☐
   The pilot must be able to name all major components of the aircraft and define functions, including effect of controls, and have a thorough knowledge of safety rules and regulations.

3. **AIRFRAME & PRE-FLIGHT CHECK** ☐
   The pilot checks the engine mounting, plumbing (for IC engines), centre of gravity location, security of batteries under-carriage and signs of structural or covering problems that could affect flight eg. Presence of warps which could affect trim. The pilot also performs a safe start up sequence (including arming electric motors if appropriate), checks that controls are neutral and control throws correct, and checks throttle setting, state of battery and performs a range check.

4. **TAKE OFF** ☐
   The pilot demonstrates gradual application of power while keeping the aircraft straight, and using a little elevator to lift off, makes a gentle climb out with wings level until safe altitude is reached.

5. **TRIMMING** ☐
   Pilot shows ability to trim the aircraft in flight. Displacement and re-trimming both the primary roll control and elevator should be demonstrated.

6. **PROCEDURE TURNS** – One in each direction ☐
   The pilot's ability to perform the following steps in the procedure turn will be assessed.
   a. Level flight segments should be straight and level.
   b. Aircraft should pass directly over the landing area.
   c. Turns should be at a constant altitude.
   d. Turns should be completed in order that upwind and downwind tracks are superimposed.

7. **FIGURE EIGHT** ☐
   Pilot to demonstrate either an Inward or Outward Figure Eight, as shown in the diagram in the MAAA Pilot Log Book. This is a flat eight circuit without loss of height and with the change of turn directions directly in front of the pilot.

8. **LANDING CIRCUITS** ☐
   Pilot to demonstrate in both directions, as shown in the diagram in the MAAA Pilot Log Book, with all turns of 90 degrees. With high performance aircraft, the power needs to be reduced much sooner than at the turn onto base leg. The upwind and downwind legs are parallel to the landing strip. The first three legs are maintained at a constant height and a gradual approach angle is started at the beginning of the base leg.

9. **APPROACH & LANDING** ☐
   Pilot demonstrates an engine assisted landing, using a suitable power setting that allows the model to descend, controlling nose attitude with elevators (airspeed), and using the throttle to stabilise the rate of descent. The aircraft should be flown over the threshold at an altitude of about 1.5 metres, the throttle closed gradually, and the round-out or flare initiated. The "hold-off" period is then commenced where the aircraft is gradually allowed to sink and settle on the ground in a slightly nose high attitude.

10. **SIMULATED DEAD STICK LANDING** ☐
    At a safe and high position, the pilot will reduce the throttle to idle and perform a descending circuit to show his/her ability to safely glide the model without engine power to a position where a landing approach can be executed.