

MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA



GUIDELINES FOR THE AWARD OF MAAA WINGS

MOP027

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This Policy and/or Procedure forms part of the MAAA Manual of Procedures. This entire document is for the use of all classes of members of the MAAA in the conduct of activities associated with the MAAA and is not be used for any other purpose, in whole or in part, without the written approval of the MAAA Executive.

Shading of text identifies changes to the previous version.

GUIDELINES FOR THE AWARD OF MAAA WINGS

1. PURPOSE

- 1.1 The purpose of this publication is to provide all affiliated members of the MAAA a documented standard and process for the award of MAAA Flight Proficiency Scheme Wings.

2. RESPONSIBILITIES

- 2.1 The MAAA has a duty of care to Affiliate Members and clubs to specify conditions and regulations under which models are flown, so that a level of safety, that could reasonably be expected, is achieved.
- 2.2 The State Association is responsible for maintaining records of proficiency ratings of their Affiliate Members for Bronze Wings, Gold Wings, MAAA Instructor and MAAA Rocketry Instructor ratings.
- 2.3 The State Association is responsible for advising the MAAA Secretary of any new proficiency ratings of their Affiliate Members on a regular basis.
- 2.4 The State Senior Flight Instructor is responsible for advising the State Association of the names of those Affiliate Members who attain the Gold Wings and/or Instructor ratings.
- 2.5 The MAAA Secretary is responsible for advising the Affiliate Member's State Association of the Rocketry Instructor rating.
- 2.6 Clubs and/or Instructors shall advise the State Association the names of Affiliate Members who attain the Bronze Wings rating.
- 2.7 The State Association is responsible for the distribution of the necessary forms and documents for the MAAA Flight Proficiency Scheme.

3. DEFINITIONS

Affiliate Member	A person properly affiliated with a Club that is properly affiliated to an MAAA Ordinary Member.
Instructor	An Affiliate Member who has been appointed or recognised by his/her Club and/or State Association to be competent to instruct Club members. See also the MAAA Instructor definition.
MAAA	Model Aeronautical Association of Australia Inc.
MAAA Ordinary Member	A State Association properly affiliated with the MAAA Inc.
MAAA Instructor	An Affiliate Member who has successfully completed an MAAA Instructor training course.
Model Aircraft	See Dictionary

- Ordinary Member** See MAAA Ordinary Member
- Radio Controlled Model Aircraft** A non-man-carrying remote controlled device capable of sustained flight in the atmosphere not exceeding the weight limitations established in the MAAA Manual of Procedures. The operators of such devices shall maintain control without the assistance of onboard autopilots or navigation systems that would allow for autonomous flight. The operators of Radio Control devices shall maintain visual contact with the device during the entire flight operation.
- Rocketry Instructor** A person who is authorised by the MAAA Executive to test Affiliate Members for Rocketry Wings.
- State Association** See MAAA Ordinary Member
- State Senior Flight Instructor** An Affiliate Member who has been appointed as the Senior Flight Instructor for that Ordinary Member. His title in the Ordinary Member's structure may vary from this title. It is normal for the appointee to be the Ordinary Member's representative on the MAAA Training Subcommittee.

4. TYPE OF MAAA WINGS/RATINGS

4.1 Fixed Wing Powered Aircraft

MAAA Bronze and Gold Wings are awarded for demonstrated proficiency to specified levels in flying radio controlled fixed wing aircraft.

4.1.1 Bronze Wings is a standard that the MAAA regards as being suitable for flying solo.

4.1.2 Gold Wings is the standard that the MAAA regards as being suitable for flying at a public display.

4.2 Fixed Wing Glider Aircraft

MAAA Bronze and Gold Wings are awarded for demonstrated proficiency to specified levels in flying radio controlled fixed wing glider aircraft.

4.2.1 Bronze Wings is a standard that the MAAA regards as being suitable for flying solo.

4.2.2 Gold Wings is the standard that the MAAA regards as being suitable for flying at a public display.

4.3 Helicopters

MAAA Bronze and Gold Wings are awarded for demonstrated proficiency to specified levels in flying radio controlled helicopters.

4.4 Rocketry

MAAA Bronze and Gold Wings are awarded for demonstrated proficiency to specified levels in preparation, launching and recovery of model rockets.

4.5 MAAA Instructor

The MAAA Instructor's rating is awarded for demonstrated proficiency to Gold Wings standard, proven knowledge in instructional training as specified in the MAAA Instructor's Manual and knowledge of Rules and Regulations relating to the flying of model aircraft.

In the case of Helicopter Instructor rating, the person must (a) successfully complete an MAAA Instructor's course including the additional flight-test or (b) complete the flight test if he/she originally undertook the course as a Fixed Wing Pilot.

4.6 Rocketry Instructor

The MAAA Rocketry Instructor's rating is awarded for proven knowledge and experience of rocketry and knowledge of Rules and Regulations relating to model rockets. This position is conferred by the MAAA Executive on the recommendation of the MAAA Rocketry Subcommittee.

5. BASIS OF DETERMINATION OF PROFICIENCY

5.1 Fixed Wing Powered Aircraft

Proficiency in flying of radio controlled fixed wing powered aircraft is determined by an MAAA Fixed Wing (Power) Instructor or a State Senior Flight Instructor assessing the way the pilot executes the procedures/manoeuvres listed on the "Flight Requirements & Test Check Sheet - Fixed Wing Powered Bronze Wings", MAAA Form No. MAAA016, and "Flight Requirements & Test Check Sheet - Fixed Wing Powered Gold Wings", MAAA Form No. MAAA017. See Annexes A1 and A2.

5.2 Glider Aircraft

Proficiency in flying of radio controlled glider aircraft is determined by an MAAA Fixed Wing Glider Instructor or a State Senior Flight Instructor assessing the way the pilot executes the procedures/manoeuvres listed on the "Flight Requirements & Test Check Sheets - Glider Bronze Wings", MAAA Form No. MAAA018, and "Flight Requirements & Test Check Sheet - Glider Gold Wings", MAAA Form No. MAAA019. See Annexes B1 and B2.

5.3 Helicopters

Proficiency in flying radio-controlled helicopters is determined by an MAAA Helicopter Instructor or a State Senior Flight Instructor assessing the way the pilot executes the procedures/manoeuvres listed on the "Flight Requirements & Test Check Sheet - Helicopter Bronze Wings", MAAA Form No. MAAA020; "Flight Requirements & Test Check Sheet - Helicopter Gold Wings", MAAA Form No. MAAA021; and "Flight Requirements & Test Check Sheet - Helicopter Instructor Rating", MAAA Form No. MAAA022. See Annexes C1, C2 and C3.

5.4 Rocketry

Proficiency in preparation, launching and recovery of model rockets is determined by an MAAA Rocketry Instructor assessing the way the Affiliate Member executes the procedures/manoeuvres listed on the "Flight Requirements & Test Check Sheet - Rocketry Bronze Wings", MAAA Form No. MAAA034; and "Flight Requirements & Test Check Sheet - Rocketry Gold Wings", MAAA Form No. MAAA035. See Annexes D1 and D2.

6. ASSESSMENT OF PROFICIENCY

6.1 Fixed and/ rotary wing aircraft

The testing of the proficiency of an Affiliate Member for the award of either Gold or Bronze Wings must be carried out by at least one MAAA Instructor of the type of aircraft being assessed or a State Senior Flight Instructor.

The Senior Flight Instructor of each State/Territory Association controls the awarding of the MAAA Instructor proficiency rating.

6.2 Rockets

The testing of the proficiency of an Affiliate Member for the award of either Rocketry Gold or Bronze Wings must be carried out by at least one MAAA Rocketry Instructor. See 4.6.

7. AWARD OF WINGS

Note: The “one week between tests” does not apply if a session is interrupted or ended by weather or other circumstances beyond the candidate's control.

7.1 General

Following the successful completion of the test the examining Instructor shall ensure that the appropriate “Flight Requirements & Test Check Sheet” form or the form provided in the Trainee Pilot Logbook is completed, signed and sent to the State/Territory Association to enable the maintenance of records and distribution of the Wings.

7.2 Bronze Wings

7.2.1 Fixed Wing Powered Aircraft

Bronze Wings are awarded by an MAAA Fixed Wing (Power) Aircraft Instructor or a State Senior Flight Instructor when the Affiliate Member demonstrates in the course of one session, which shall include the theory and flight requirements, that he/she has the skills to perform in a competent manner and to the required standard, the manoeuvres listed in the “Flight Requirements & Test Check Sheet - Fixed Wing Powered Bronze Wings”, MAAA Form No. MAAA016. See Annex A1.

At least one week must elapse between consecutive tests of a candidate for Bronze Wings.

7.2.2 Glider Aircraft

Bronze Wings are awarded by an MAAA Fixed Wing Glider Instructor or a State Senior Flight Instructor when the Affiliate Member demonstrates in the course of one session, which shall include the theory and flight requirements, that he/she has the skills to perform in a competent manner and to the required standard, the manoeuvres listed in the “Flight Requirements & Test Check Sheet - Glider Bronze Wings”, MAAA Form No. MAAA018. See Annex B1.

7.2.3 Helicopters

Bronze Wings are awarded by an MAAA Helicopter Instructor or a State Senior Flight Instructor when the Affiliate Member demonstrates in the course of one session, which shall include the theory and flight requirements, that he/she has the skills to perform in a competent manner and to the required standard, the manoeuvres listed in the “Flight

Requirements & Test Check Sheet - Helicopter Bronze Wings", MAAA Form No. MAAA020. See Annex C1.

7.2.4 Rockets

Bronze Wings are awarded by an MAAA Rocketry Instructor when the Affiliate Member demonstrates in the course of one session, which shall include the theory, launch and flight requirements, that he/she has the skills and knowledge to perform in a competent manner and to the required standard, to satisfy the requirements listed in the "Flight Requirements & Test Check Sheet - Rocketry Bronze Wings", MAAA Form No. MAAA034. See Annex D1.

At least one week must elapse between consecutive tests of a candidate for Bronze Wings.

7.3 Gold Wings

7.3.1 Fixed Wing Powered Aircraft.

Gold Wings are awarded by an MAAA Fixed Wing (Power) Aircraft Instructor or a State Senior Flight Instructor when the Affiliate Member demonstrates that he/she has the skills to perform in a competent manner and to the required standard, the manoeuvres listed in the "Flight Requirements & Test Check Sheet - Fixed Wing Powered Gold Wings", MAAA Form No. MAAA017. See Annex A2.

Procedures and manoeuvres common to all flights shall be assessed on every flight to confirm consistency of standard. (One good landing out of four would not be acceptable).

At least one week must elapse between testing sessions of a candidate.

7.3.2 Glider Aircraft

Gold Wings are awarded by an MAAA Fixed Wing Glider Instructor or a State Senior Flight Instructor when the Affiliate Member demonstrates, in the course of one flying session comprising of up to four flights, that he/she has the skills to perform in a competent manner and to the required standard, the manoeuvres listed in the "Flight Requirements & Test Check Sheets - Glider Gold Wings", MAAA Form No. MAAA019. See Annex B2.

7.3.3 Helicopter

Gold Wings are awarded by an MAAA Helicopter Instructor or a State Senior Flight Instructor when the Affiliate Member demonstrates, in the course of one flying session comprising of up to four flights, that he/she has the skills to perform in a competent manner and to the required standard, the manoeuvres listed in the "Flight Requirements & Test Check Sheets - Helicopter Gold Wings", MAAA Form No. MAAA021. See Annex C2.

7.3.4 Rockets

Gold Wings are awarded by an MAAA Rocketry Instructor when the Affiliate Member demonstrates that he/she has the skills and knowledge to perform in a competent manner and to the required standard, to satisfy the requirements listed in the "Flight Requirements & Test Check Sheet - Rocketry Gold Wings", MAAA Form No. MAAA035. See Annex D2.

At least one week must elapse between testing sessions of a candidate.

7.4 MAAA Instructor Rating

- 7.4.1 The certification and testing of the MAAA Instructor Rating is supervised and controlled by the State Association's Senior Flight Instructor.
- 7.4.2 It is preferable that Instructor trainees shall have some previous instructional experience and be nominated by their club to attend the appropriate training.
- 7.4.3 Trainee Instructors will attend and successfully complete an MAAA Instructor's course that will culminate in a written text based on Rules and Regulations and the MAAA Instructor's Manual.
- 7.4.4 To be eligible to be considered for an MAAA Instructor rating the Trainee shall be of Gold Wings flight proficiency. State Associations' Senior Flight Instructors need to be mindful of the fact that some pilots with Gold Wings may not have the necessary experience for an Instructor rating. It is necessary for Instructors to have a high standard of proficiency with the types of model on which members normally start their training.
- 7.4.5 To qualify for the MAAA Helicopter Instructor rating the member must successfully complete an MAAA Instructor's course and then also demonstrate that he/she has the skills to perform in a competent manner, the manoeuvres listed in "Flight Requirements & Test Check Sheet - Helicopter Instructor Rating", to the required standard. MAAA Form No. MAAA022. See Annex C3.

7.5 Rocketry Instructor Rating

- 7.5.1 The recommendation of candidates for MAAA Rocketry Instructor is the responsibility of the State Association of the Affiliate Member.
- 7.5.2 The State Association shall submit the name of a candidate for Rocketry Instructor to the MAAA Rocketry Subcommittee for their consideration.
- 7.5.3 To be eligible to be considered for an MAAA Rocketry Instructor rating the candidate shall hold Rocketry Gold Wings unless authorised/allowed by the Rocketry Subcommittee Chairman.
- 7.5.4 The Chairman of the MAAA Rocketry Subcommittee shall, with the assistance his Subcommittee, consider the nomination. If the Subcommittee considers the nominee has the required skills and knowledge, the Chairman shall send the Subcommittee's recommendation for the conferring of Rocketry Instructor rating to the MAAA Secretary.
- 7.5.5 The MAAA Secretary shall place the recommendation on the agenda of the next MAAA Executive meeting. The Executive shall consider the recommendation and if the Executive agrees, they shall confer the rating of MAAA Rocketry Instructor on the nominee.
- 7.5.6 The MAAA Secretary shall then advise the Chairman of the Rocketry Subcommittee and the State Association of the Executive's decision.

8. SUPPLY OF WINGS

The MAAA Secretary retains stocks of wings for State Associations to access.

8.1 Bronze Wings

Bronze Wings may be supplied by the MAAA through the State Association to a club for distribution to their members, or directly by the State Association, at a cost determined by the MAAA Council. A levy may not be charged for testing for Bronze Wings proficiency, nor are wings to be sold.

A cost may be imposed for the supply of a replacement set of Bronze Wings.

8.2 Gold Wings

Gold Wings are distributed by the State Senior Flying Instructor. Gold Wings shall be supplied to the State Associations at a cost determined by the Executive. The wings may not be sold.

A cost may be imposed for the supply of a replacement set of Gold Wings.

Metal and cloth badges are available for Gold Wings rating.

8.3 MAAA Instructor Wings

MAAA Instructor Wings are distributed by the State/Territory Senior Flying Instructor. MAAA Instructor Wings shall be supplied to the State Associations at a cost determined by the Executive. The wings may not be sold.

A cost may be imposed for the supply of a replacement set of Instructor Wings.

8.4 MAAA Rocketry Instructor Wings

MAAA Rocketry Instructor Wings are distributed by the MAAA Secretary. The wings may not be sold.

A cost may be imposed for the supply of a replacement set of Instructor Wings.



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 or State Senior 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 is noted on back of the sheet.

1. **DEXTERITY**
The pilot must be able to locate all the transmitter controls quickly and accurately.
2. **THEORY**
The pilot must be able to name all major controls on a radio controlled aircraft and their specific functions, including effect of controls, and have a thorough knowledge of safe flying procedures.
3. **AIRFRAME & PRE-FLIGHT CHECK**
The pilot checks the engine motor, fueling, centre of gravity location, security of under-carriage and signs of structural damage. The pilot also checks for items which could affect flight eg. presence of warps which could affect trim. The pilot also checks that the 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. **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.
8. **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.
9. **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.

ANNEX A1 – Fixed Wing Powered - Bronze Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME
FLIGHT REQUIREMENTS & TEST CHECK SHEET
FIXED WING POWERED – GOLD WINGS

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

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

Gold Wings (Power) are awarded when a member demonstrates, in the course of one session of not more than 4 consecutive flights, that he/she has the skills to perform the manoeuvres listed 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 Gold 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 MAAA instructor and sent to the State Association.

Note: Wings will be sent to Pilot unless the Club address is indicated on back of this form.

This flying proficiency examination must be completed in not more than four flights. The flights may be undertaken on two separate days. The conditions (wind direction) and type of aircraft (Trainer, Sports or Aerobatic) must be ascertained for.

		Flight 1	Flight 2	Flight 3	Flight 4
1	Pre-flight - Dexterity of equipment - Theoretical knowledge - Pre-flight checks				
2	Start-up, taxi and positioning for take-off				
3	Take-off				
4a	Outward Figure of Eight, left to right.				
4b	Outward Figure of Eight, right to left.				
5a	Inward Figure of Eight, left to right.				
5b	Inward Figure of Eight, right to left.				
6a	Procedure Turn, 90° to 270°, left to right.				
6b	Procedure Turn, 90° to 270°, right to left.				
7a	Immelman Turn, left to right.				
7b	Immelman Turn, right to left.				
8a	Three Inside Loops, left to right.				
8b	Three Inside Loops, right to left.				
9a	Cuban Eight, left to right.				
9b	Cuban Eight, right to left.				
10	Spin, three turns.				
11a	Inverted Flight, five seconds, left to right.				
11b	Inverted Flight, five seconds, right to left.				
12a	Three Horizontal Rolls, left to right.				
12b	Three Horizontal Rolls, right to left.				
13a	Landing Circuit, left to right.				
13b	Landing Circuit, right to left.				
14	Landing, roll-out and stop.				

ANNEX A2 – Fixed Wing Powered - Gold Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME
FLIGHT REQUIREMENTS & TEST CHECK SHEET

GLIDER – BRONZE WINGS

This Test is to be assessed by an MAAA Fixed Wing Glider Instructor or State Senior Instructor.

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

Bronze Wings (Glider) 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 below 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 (Glider).

Signature MAAA Instructor's Name (BLOCK LETTERS) Date

At the successful completion of the test, this certificate will be completed by the MAAA Instructor and sent to the State Association.

Note: Wings will be sent to the Pilot unless otherwise specified as noted below.

Bronze Wings - ... state twice with reverse direction of landing pattern.

	Manoeuvres	Test
1	Dexterity Pilot must be able to locate all the transmitter controls quickly without fumbling.	
2	Theory 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 Check centre of gravity location and signs of structural or covering problems that could affect flight eg. presence of warps which could affect trim. Check controls neutral and control throws correct, state of battery and range check.	
4	Launch	
5	Straight flight from low release for 30 seconds into wind.	
6	180 degree turn overhead to perform a figure eight.	
7	Rectangular approach pattern and a good landing with FAI landing circle. (15 metre circle)	

At least one week must elapse between testing sessions of a candidate.

Wings to be sent to Pilot? YES / NO (If NO, note address below)
Strike out as applicable

.....
.....
..... Post Code:

ANNEX B1 – Fixed Wing Glider - Bronze Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME
FLIGHT REQUIREMENTS & TEST CHECK SHEET

GLIDER – GOLD WINGS

This Test is to be assessed by an MAAA Fixed Wing Glider Instructor or State Senior Instructor.

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

Gold Wings (Glider) are awarded when a member demonstrates, in the course of one session per task below, that he/she has the skills to perform the manoeuvres listed below, in a competent manner and to the required standard.

This is to certify that AUS

of P/Code

Club **Note address below 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 Gold Wings (Glider).

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

At the successful completion of the test this form shall be completed by the MAAA instructor and sent to the State Association.

Note: Wings will be sent to Pilot unless the Club address is stated below.

Task One		Flight 1	Flight 2	Flight 3	Flight 4
1	Rise off Ground				
2	5 seconds inverted flight				
3	2 consecutive inside loops				
4a	2 tied 360 degrees (in each direction immediately following each other)				
4b	2 tied 360 degrees – reverse				
5	Rectangular approach pattern, a good landing within 3 metres of a nominated spot				

Task Two – Slope

Manoeuvres		Flight 1	Flight 2	Flight 3	Flight 4
1	Launch				
2	Fly model to approximately 500 feet				
3	10 seconds inverted flight				
4	2 consecutive inside loops				
5	1 outside loop				
6	Flight time must exceed 10 minutes				
7	Model must be landed within 30 metres of launching point				

At least one week must elapse between testing sessions of a candidate.

Wings to be sent to Pilot? YES / NO (If NO, note address below)
Strike out as applicable

.....

..... Post Code:

ANNEX B2 – Fixed Wing Glider - Gold Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME
FLIGHT REQUIREMENTS & TEST CHECK SHEET

HELICOPTER – BRONZE WINGS

This Test is to be assessed by an MAAA Helicopter Instructor or State Senior Instructor.

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

Bronze Wings (Helicopter) 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 below 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 (Helicopter).

..... 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 is specified.

	Manoeuvres	Flight
1	Pre-flight Training (must be completed prior to testing) Dexterity of hand with the controls Theoretical knowledge Pre-flight checks including engine checks	
2	Lift off to eye level height, hover for ten seconds and land.	
3	Lift off to skid eye-level height, brief hover followed by a straight outward flight of ten metres into wind, brief hover then return tail first in straight flight and land.	
4	Lift off to skid eye-level height and fly sideways (right or left) for ten metres, then sideways in the opposite direction for twenty metres then return to start point and land.	
5	Lift off, briefly hover then fly a horizontal figure eight with nose into wind throughout the flight and land.	
6	Lift off to skid eye-level height and fly a 360-degree tail-in circle.	
7	Execute a 45-degree landing pattern from ten metres height and ten metres out.	

At least one week must elapse between testing sessions of a candidate.

Wings to be sent to Pilot? YES / NO (If NO, note address below)
Strike out as applicable

..... Post Code:

ANNEX C1 – Helicopter - Bronze Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME

FLIGHT REQUIREMENTS & TEST CHECK SHEET

HELICOPTER - GOLD WINGS

This Test is to be assessed by an MAAA Helicopter Instructor or State Senior Instructor.

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

Gold Wings (Helicopter) are awarded when a member demonstrates, in the course of one session of no more than 4 consecutive flights, that he/she has the skills to perform the manoeuvres listed 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 Gold Wings (Helicopter).

..... Signature MAAA Instructor's Name (BLOCK LETTERS) Date

At the successful completion of the test this form shall be completed by the MAAA Instructor and sent to the State Association.

Note: Wings will be sent to Pilot unless Club address is noted below.

Gold Wings Test (Minimum 4 flights for Gold Wings Test)

Procedures and manoeuvres common to all flights shall be assessed on every flight to confirm consistency of standard. (One good landing out of four would not be acceptable). At least one week must elapse between testing sessions of a candidate.

	Manoeuvres	Test 1	Test 2	Test 3	Test 4
1 to 7	Bronze Wings Test				
8	Take off and complete the Hovering M manoeuvre.				
9	Demonstrate Pirouette clockwise and counter-clockwise.				
10	Demonstrate a Top Hat from right to left and from left to right from the one standing position.				
11	Demonstrate one 180 degree Stall Turn.				
12	Demonstrate one loop.				
13	Fly a rectangular circuit prior to landing.				
14	Complete an emergency landing when called by the Instructor.				

At least one week must elapse between testing sessions of a candidate.

Wings to be sent to Pilot? YES / NO (If NO, note address below)

Strike out as applicable

.....

..... Post Code:

ANNEX C2 – Helicopter - Gold Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME
FLIGHT REQUIREMENTS & TEST CHECK SHEET

HELICOPTER – INSTRUCTOR RATING FLIGHT TEST

This Test is to be assessed by an MAAA Helicopter Instructor or State Senior Instructor.

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

This flying test can only be undertaken as part of an MAAA instructor course, or subsequent to the successful completion of an MAAA instructor course, in order to add a helicopter rating to an existing instructor rating.

Instructor Rating (Helicopter) is awarded when a member:

- (i) has successfully completed the MAAA Instructors' Course, and
- (ii) in the course of one session of no more than 4 consecutive flights, demonstrates that he/she has the skills to perform the manoeuvres as set out in the tasks listed below, in a competent manner and to the required standard. The test shall done with the next manoeuvre immediately following the previous one.

This is to certify that AUS

of de

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

has successfully completed the flying requirements that are necessary for the award of MAAA Instructor (Helicopter) rating.

Note: The successful completion of the MAAA Instructors' Course is also required in order to be awarded the MAAA Instructor (Helicopter) rating.

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

Flying Requirements Test for the award of Instructor Rating (Helicopter) (additional to Gold Wings Test).

	Manoeuvres	Test 1	Test 2	Test 3	Test 4
1 to 14	Gold Wings Test				
15	After take-off demonstrate a nose-in circle both clockwise and counter clockwise.				
16	Demonstrate a 540 degree Stall Turn.				
17	Demonstrate one roll from the right and from the left.				
18	Demonstrate a Horizontal Figure Eight in front of the pilot at cruise speed from the right and from the left.				
19	Full auto rotate landing, engine off at call.				

At least one week must elapse between testing sessions of a candidate.

This is to certify that the candidate has successfully completed the MAAA Instructors' Course.

Signed: Position: Date:

Note: This statement can only be signed off by either State Secretary or State Senior Instructor.

ANNEX C3 – Helicopter - Instructor Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME
FLIGHT REQUIREMENTS & TEST CHECK SHEET
ROCKETRY – BRONZE WINGS

This Test is to be assessed by an MAAA Rocketry Instructor.

The requirements specified have been determined by the MAAA and are not to be varied. Bronze Wings (Rocketry) are awarded when a member demonstrates in the course of one session that he/she shows competence in the tasks listed below.

At the successful completion of the tests on three separate rockets, this form shall be completed by the Rocketry Instructor, or member authorised under the Award of Wings MOP027, and sent to the State Association.

This is to certify that AUS

of P/Code

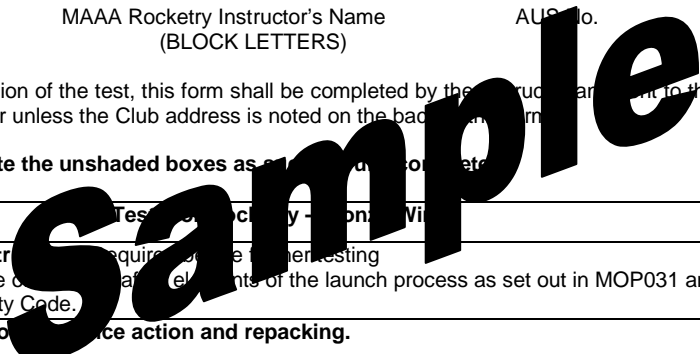
Club **Note: Write Club address on back of form if wings to be sent to Club**

has demonstrated the degree of proficiency in preparation, launch, and recovery of rockets to be awarded the MAAA Bronze Rocketry Certificate.

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

At the successful completion of the test, this form shall be completed by the instructor and sent to the State Association. Wings will be sent to the member unless the Club address is noted on the back of the form.

Instructor to initial & date the unshaded boxes as per the following table.



Item	Test	Test 1	Test 2	Test 3
1	Discuss with instructor the requirements for the interesting Display knowledge of the various elements of the launch process as set out in MOP031 and the Rocketry Safety Code.			
2	Demonstrate recovery action and repacking. Show: <ul style="list-style-type: none"> • knowledge of the function of the ejection charge • the function of critical parts ie. thrust ring, motor retainer and shock cord • strength of fins and airframe • knowledge of the method of packing wadding and parachute or streamer 			
3	Discuss with instructor the expected stages of the rocket's flight. Describe the entire flight sequence, from launch to recovery. Verbal and/or written explanations are acceptable.			
4	Appropriate selection of motor and igniter. Show the ability to select an appropriate motor (impulse and type) based on standard motor markings. (Must be A/2, A, B, C but not greater than C size motor.) The size, weight and drag of the model rocket has a bearing on this selection. Refer MOP031 – Appendix 5.			
5	Correct selection and assembly of igniter to motor. Demonstrate correct installation of igniter to the motor and insertion in the rocket.			
6	Demonstrate fixing rocket to the launch rod or rail, and connection of ignition device. Demonstrate that the launch equipment is sturdy, the ignition device is disarmed and that the appropriate clearance is maintained from personnel.			
7	Successful countdown and launch. Demonstrate the aerodynamic stability of the rocket under powered flight (slight deviation from straight trajectory is permissible).			
8	Successful recovery. The rocket must successfully deploy the recovery device.			
9	Demonstrate action taken in the event of misfires. After this step is demonstrated, 2 further flights should be undertaken, successfully completing elements 4 to 8.			

ANNEX D1 – Rocketry - Bronze Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.



MAAA FLIGHT PROFICIENCY SCHEME

FLIGHT REQUIREMENTS & TEST CHECK SHEET

ROCKETRY – GOLD WINGS

This Test is to be assessed by an MAAA Rocketry Instructor or State Senior Instructor.

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

Gold Wings (Rocketry) are awarded when a member demonstrates in the course of one session that he/she shows competence in the tasks listed below.

This is to certify that AUS

of P/Code

Club **Note: Write Club address on back of form if wings to be sent to Club.**

has demonstrated the degree of proficiency in preparation, launch, and recovery of rockets to be awarded the **MAAA Gold Wings (Rocketry)**.

.....
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. Wings will be sent to the member unless the Club address is noted on the back of this form.

At least one week must elapse between testing sessions of a candidate.

Gold Wings – Rocketry

Item	First Rocket: (Description)	Initial of Instructor
	Gross Weight: Thrust (total)	
1	Holder of Rocketry Bronze Wings. It is a requirement to have held Rocketry Bronze Wings for at least 12 months. (Note: Recognition of prior learning may waive this requirement.)	
2	Has the required knowledge of the MAAA Rocketry Safety Code. Demonstrate verbally a thorough understanding of MOP031 and the Rocketry Safety Code.	
3	Evidence of skill used in construction of first rocket presented. Demonstrate verbally a thorough understanding of model rocket motor operation, model rocket assembly and preparation for launch.	
4	Demonstrate recovery device action and repacking. Demonstrate knowledge of the second stage (if present) ignition method, and timing of the ejection charge. Demonstrate the function of critical parts, strength of fins and airframe, position of CG and CP of all stages of the rocket.	
5	Discuss with instructor the expected stages of the rocket's flight. Fully describe the entire flight sequence, from launch to recovery.	
6	Appropriate selection of motor and igniter. Show an ability to select the appropriate motor, for Newtons or pounds thrust, burn rate and desired delay. (Motor size must be no less than D size and up to G size). The gross weight to thrust ratio must be considered satisfactory.	
7	Correct selection and assembly of igniter to motor. Demonstrate correct installation of igniter to the motor and insertion in the rocket.	
8	Demonstrate fixing rocket to the launch rod or rail, and connection of ignition device. Show that the launch equipment is sturdy and the ignition device is disarmed, and that the appropriate clearance is maintained from personnel.	
9	Successful countdown and launch. Demonstrate the aerodynamic stability of the rocket under powered flight (slight deviation from straight trajectory is permissible).	
10	Successful recovery. The rocket shall successfully deploy the recovery device. The Rocketeer shall demonstrate knowledge of a method of altitude calculation based on: (a) one observer's sighting. (b) triangulation from two observers' sightings.	
11	Demonstrate correct action taken in the event of a misfire.	

ANNEX D2 – Rocketry - Gold Wings Form

Note: Do not copy the above form; use the original which is available on the MAAA web site.