Club Rules 2022

Version April 2022

1. General Membership Rules.

1.1. All members shall undertake to abide by the Club Constitution and Flying Rules.

1.2. The Club Committee reserve the right to withdraw membership from any member who has not complied with the Club Constitution and/or Club Rules; has exhibited unreasonable standards of behaviour or has brought the Club into disrepute. The Club operates a BMFA approved disciplinary procedure.

1.3. It is the duty of every member to point out to any other member where they think they are in breach of the Club Constitution or Rules. Failure to comply with the Club Constitution or Rules must be reported to a Committee member.

1.4. The details of the Flying Rules for Queens Field have been based on a best practice assessment of risk, to members and to the public, associated with the actual model flying conditions at the site. These Rules establish how the guidelines and recommendations within the BMFA handbook and rules in BMFA Article 16 Authorisation are applied. The Club **has** adopted the BMFA and Article 16 recommendations and guidelines as essential best practice to establish as risk free flying activity as practicable for members and the public at large.

1.5. Members must familiarise themselves with the BMFA guidelines and at least understand the provisions of article 16, remember it is the pilot who is legally responsible for ensuring the safety of his/her own model flying.

1.6. The Club operates a BMFA approved Welfare policy for under 18's and vulnerable adults; Club Instructors must ensure that instruction of under 18's or vulnerable Adults can only take place whilst the parent or guardian of that individual is present at the flying field.

1.7. Members must hold a BMFA 'B' certificate to fly **any** model over 7Kg in un-laden weight (15.43 lbs.).

1.8. Members must hold a NWMAC 'Turbine Permit' certificate (in addition to a BMFA B certificate) to fly any model powered by a gas turbine or gas turbine-based engine(s), unless under instruction. Club Instructors and 'type experienced' flyers will assist members (wherever possible) to achieve these standards if required.

1.9. **New members** whether they hold BMFA certificates or not, will be assessed for flying competence by a nominated committee member or club instructor, prior to final acceptance of membership. New members will be briefed, by either a committee member

or, at the discretion of the committee, another club member, on flying procedures before the new member is permitted to fly. The nominated committee member / instructor will be decided at the committee meeting where the application is considered.

1.10. All accidents/incidents involving injury or damage to property must be reported to a Committee member as soon as possible. Members should also report potential safety or risk issues to the committee. If the accident/incidence/occurrence falls within the requirements of mandatory occurrence reporting, due process must be observed.

1.11. "Near misses" and un-acceptable conduct must be brought to the attention of a committee member.

1.12. All members are 'safety officers'. Everyone is responsible for ensuring safe flying and conformance to the Club Rules at each site.

1.13. The committee can review safety, risk issues and the Club Rules at every committee meeting.

2. Gas Turbine – General.

2.1. All Gas Turbine flyers (both current and future) should read the BMFA Code of Practice for operation of Gas Turbine Powered Model Aircraft, prepared by the GTBA&JMA.*(This is available from NWMAC secretary or the BMFA website. (GTBA=Gas Turbine Builders Association; JMA=Jet Modellers' Association)).*

2.2. Potential new members who have experience in flying Gas Turbine (GT) models, whether they have a BMFA 'B' certificate or not, and whom wish to do so within the club **must** inform the committee upon application for membership.

2.3. An introductory flying session for each new GT pilot will be held to cover the code of practice. At this session, the Club gas turbine committee member will perform the GT model assessment(s) and GT flying assessment (Turbine Permit).(It may be necessary to perform these steps over more than one day / session to allow for weather conditions etc.).

2.4. The 'Turbine Permit' (TP) assessment will be undertaken according to a set of guidelines and requirements, which can be provided by NWMAC. (Some questions are based on the content of the GTBA & JMA Code (2.01)).

2.5. **Existing members** converting to Gas Turbine **will** be required to undertake a minimum of two introductory sessions, with provision of a buddy box, if necessary, with the Club's gas turbine committee member (or a designated GT member), with the aim of covering specific Gas Turbine model practices together with a pilot and model assessment. Providing that the member demonstrates adequate knowledge and flying skill 'turbine permit' certificate will be awarded. This process must be adhered to before an existing member can fly a gas turbine model without the instruction or guidance of a Club approved Instructor, or a member who holds a BMFA 'B' Certificate and Turbine Permit. The member must hold a BMFA 'B' certificate to be able to take a turbine permit assessment.

2.6. All Gas Turbine models regardless of all up weight will require a safety assessment to be carried out by a nominated committee member, prior to its first flight on a Club site. Details of the model and its turbine will be recorded on the individuals 'Turbine Permit' certificate and signed off as "deemed to be assembled to an acceptable standard". This

does **not replace** the BMFA large model requirements, which are applicable to any GT model weighing 20kg or more without fuel.

2.7. Any significant modifications or repair to an approved (assessed) model will necessitate re-approval / re-assessment. ***(See the Appendix for definitions of significant modifications).***

2.8. It is the owners / modellers responsibility to maintain an appropriate standard of on-going maintenance to ensure the models airworthiness. ***(See the Appendix for guidelines).***

3. Members Identity

3.1. Members must carry their North Wilts MAC Membership Card, Turbine Permit if applicable, and their BMFA Card when they visit the flying sites, and produce them when requested.

4. Frequency Allocation

4.1. 35MHz transmitters must use ODD number frequency channels only.

4.2. The reverse peg system is used. The system uses a pegboard marked with groups of frequency channel numbers. Members must carry their own pegs clearly marked with both the frequency channel number and the member's name.

4.3. **Only when a channel number is free can a member subsequently place their peg on the board and switch on their transmitter**.

4.4. Upon completion of flying or use of the transmitter, the transmitter must be switched off and the peg retrieved from the pegboard, (or moved to the queuing area) indicating that the channel is available to another member.

4.5. Where members share a similar channel, due consideration should be given to one another to ensure equity of flying time.

4.6. Members using 2.4GHz band are not required to use the pegboard.

5. Noise

5.1. . Noise is the highest risk of complaint to and about the Club, by people living nearest the flying site. It is the responsibility of every member to ensure that both they and others do not exceed the noise limit.

5.2. All piston powered model aircraft must not exceed a maximum noise limit of 82 decibels at a distance of 7 metres. BMFA guidelines with regard the to subjective testing and common sense for gas turbine and high speed electric models must be carried out with the approval of the committee.

5.3. Only 'silent' fight of 62 decibels or less is permitted on Sunday afternoons after 1400hrs at Queens Field.

5.4. If there are any doubts, the model must be checked in accordance with BMFA procedures using the Clubs' sound meter (located in the mower shed, with instructions, at Queens Field) before being flown.

5.5. **If there is an apparent noisy model being flown, the member should be asked to stop flying and have the aircraft checked for noise level. If there is any uncertainty, the matter must be resolved by a committee member. Such events must be subsequently reported to the committee.**

6. Flying

6.1. Only members who have passed the BMFA 'A' Certificate may fly any electric or IC powered model **under** 7KG in weight (without fuel).

6.2. Only members who have passed the BMFA 'B' Certificate (or higher qualification) may fly any electric and IC powered model **over** 7kg in weight (without fuel).

6.3. Members who **do not hold** an appropriate qualification (reference 6.01 and 6.02) for a specific type of model, must only fly such a model under the **instruction** of a Club approved Instructor, or a member who holds a BMFA 'B' Certificate (with that model type experience).

6.4. The Instructor, or 'B' certificate member providing instruction, is responsible for safety and must assure that the model is safe to fly, and be totally confident of their ability to take over control and fly the model safely at all times. The student must follow instructions at all times.

6.5. Pilots must fly circuits in the same direction.

6.6. Landing aircraft have right of way over aircraft taking off.

6.7. Take offs from the pilot's feet, near the pilot's box or across the width of the runway are not permitted.

6.8. Aircraft must not be flown pointed directly at the pilot's box or pits area.

6.9. **Calls for**…… 'take off'…… 'landing'……' low pass'……. 'dead stick'…….. etc must be said loud and clear.

6.10. Each flight shall not exceed 20 minutes duration.

6.11. Pilots new to gas turbines, **(**either existing or new members)**,** who have a BMFA 'A/B' certificates **must** undergo a training session(s)with the clubs experienced gas turbine personnel. Successful completion of the NWMAC "turbine permit" assessment, under instruction of the NWMAC designated members, will be required **before an existing or new member,** may fly a Gas Turbine model without the instruction or guidance of a club approved Instructor, or a member who holds a BMFA "B" certificate & turbine permit.

6.12. **NO LITTER or other debris is to be left on any club-flying site. (Even if it is Bio-degradable!) Please ensure that you remove your own litter. The last member to leave the site must ensure that all litter has been collected.**

6.13. Pilots of both Gas Turbine, and petrol models over 7KG in weight, must have a **CO2 fire extinguisher** present at the pits.

6.14. Gas Turbine, and other models over 7KG in weight, must use a 'caller' to watch out for other airfield users, and low flying full size aircraft.

6.15. ALL Individuals should serve as 'fire beaters' in case of model fire. Act calmly, do not position yourself downwind of the fire or try to beat large flames. **(Fire damaged materials can be very harmful).**

6.16. **It is imperative that FPV flying is conducted according to the full BMFA guidelines, which includes having a spotter / safety man for each flight.**

7 Model specific items.

7.1 ALL projections ahead of the propeller (or forward-most point on any model) must not have a radius smaller than 5.5mm.

7.2 Two stroke IC and Electric models of 'tractor propeller' configuration must have a domed prop nut or spinner fitted. An exposed propeller boss/washer with multiple bolts is acceptable (maybe for scale appearance)'

7.3 **Four-stroke** i.c engines must be fitted with a prop washer / **nut and locking nut combination** or multiple bolt retaining hub. An exposed **crankshaft thread** at the front of the model is un-acceptable for flight.

7.4 ALL powered models and gliders must have a **functioning fail-safe** operating on, as a minimum, throttle to idle.(An electric speed controller may provide this function as a minimum). A throttle to idle or motor "off" test **must** be performed as part of the normal range checking procedures. The failsafe maybe built-into the radio (i.e. with 2.4GHz and 35MHz PCM) or installed as an add-on between a servo and receiver. Deployment of flaps and the changing of trim conditions for example should be considered to prevent a fly-away situation. A failsafe is not intended to save the model.

7.5 All models over 7 KG un-laden weight must have a twin radio battery and dual receiver systems fitted. (The dual receiver could be a 2-in1 device).

8. Engine Running

8.1. Prolonged engine running on the ground at Queens Field is not permitted, that includes tank draining!

9. Guests and newcomers.

9.1. NWMAC members may introduce newcomers to the sport to fly at Queens Field under instruction. A newcomer may attend on THREE occasions in a calendar year, after which they will be invited to apply for membership or join the waiting list to apply for membership of the club. The Instructors BMFA Insurance will cover the newcomer for these three occasions.

9.2. NWMAC members may only take a 'guest' to fly at Queens Field, with the prior permission of the Club's secretary / committee member (Please read the provision of 9.03). Permission is required to establish the 'guest' as a temporary club member for that visit only. Permission will be given after the sponsoring member provides a copy of their guests current BMFA Membership, and making a payment of £5.00for ordinary / propeller models per visit at Queens Field. Guest payments should be provided to the Club Secretary or Treasurer, to establish the guest as a temporary member of NWMAC for one day. Only one guest per day per member is permitted.

9.3. All guests (temporary members) must be accompanied by the sponsoring full member of the club at all times who will be responsible for ensuring that the visitor complies with all the Club Rules and pays the appropriate fee. Members will have priority over Guests for determining flight order, particularly on weekends

10. Rules Specific to Queens Field.

10.1**.** Members may fly at Queens Field on their own. The Committee advise that flying alone should be avoided if at all possible; if a member does fly on their own, they should take a **mobile phone** with them to summon help if an accident should occur.

10.2. <u>Permitted Flying times.</u>

Monday to Saturday	09:30 hours until sunset
Sunday	10:00 hours to 14:00 hours (power models)
Sunday	14:00 hours until sunset -Silent flight only, not to exceed 62 decibels

No flying must take place during times of National Remembrance (e.g. 1 &2 minute silences). Flying maybe prohibited at certain times on Christmas Day and Easter Sunday.

10.3. <u>Permitted Flying Area</u>.

10.3.1. Models must be flown within the Permitted Flying Area, to avoid complaints regarding noise and property being over-flown. For the avoidance of doubt the area outside the Permitted Flying Area is a NO-FLY ZONE!

10.3.2. Ensure you are fully aware of the Permitted Flying Area before flying. Positively no flying in the vicinity of houses (See Annex A below).

10.3.3. The Permitted Flying Area may be described as the area in front and to the right hand side of the runway, when standing in front of the "Pilots Box" facing the runway. When flying stay in the pilot's box, do not wander about on the runway.

10.3.4. On weekday's no more than **three** I/C aircraft plus **one** trainer to be flown at the same time. Additional 'silent' models can be flown if mutually agreed with all pilots.

10.3.5. Sundays and Bank Holidays **two** aircraft plus **one** Trainer maximum at any time. Additional 'silent' models can be added if mutually agreed with all pilots.

10.3.6. Warning Signs should be placed at the entrance to the car park and pits (from the south end) to warn pedestrians

11. Flying Standards and conduct specific to Queens Field.

11.1. Pilots are not to wander about in the pilot's box; observers and callers must stand behind the pilots.

11.2. Only novice pilots under instruction and 'A' certificate holders are permitted to stand behind the model when taking off. The pilot (and instructor) must be prepared to spend the minimum amount of time on the runway. Great care must be taken to ensure that all pilots currently flying endorse the "standing on the runway" take off. The pilot MUST return to the pilot's box without delay and without disturbing other pilots. Instruction can be provided to enable pilots to take off and land straight down the runway centreline whether there is a crosswind or not.

11.3. Helicopters undertaking hovering practice must fly on the runway and take turns on the peg like everyone else.

11.4. Gliders will fly in circuit and take turns on the peg as everyone else.

11.5. Gas Turbine models should fly without other types of models in the air, providing no more than two Gas Turbine model flight slots to follow one after the other.

11.6. Gas Turbine powered models cannot fly during any period of a hosepipe ban or official dry weather period, with standing crops.

11.7. Aerobatics are only permitted using an aerobatic line no closer than over the long grass on the opposite side of the runway to the pilot's box.

11.8. A first aid kit and fire extinguisher (maintained by the grounds-man) will be located in the mower shed, members must open the mower shed at the commencement of flying to enable access to them, and the last member flying must close the mower shed, and lock the gate on the way out. Take care not to lock in the farmer!

11.9. Take care that fuel is not spilt, ensure our environmental impact is minimal and that ground pollution and or watercourse contamination does not occur as a result of model flying.

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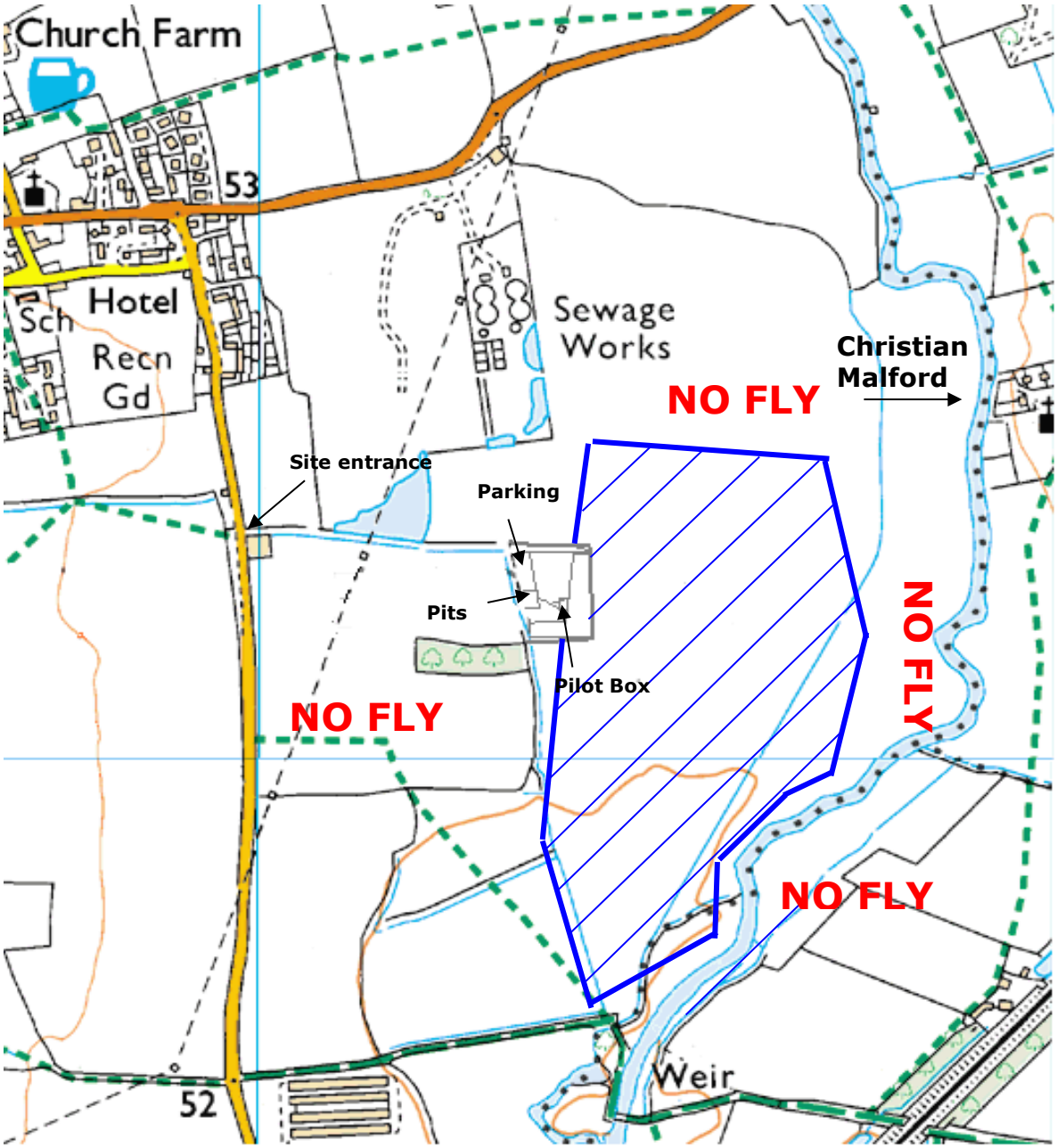
12. Designated Queens Field Layout.

The plan of the designated layout and permitted flying area for Queens Field is at Annex A.

NWMAC Queens Field Permitted Flying Area

Permitted Flying Area shown below thus:-



Map by kind permission of Ordnance Survey

CHANGE CONTROL

Date	Page/Section	Change and Reason
8th July 2014	7.04	Removal of 0.5kg lower limit
8th July 2014	New para in section 11.	Reference to Hullavington Operating Procedure (OP)
8th July 2014	11.1	Several changes to reflect new OP
8th July 2014	9.02	Changes to guest policy
11th May 2015	New section 11.4	Second flight line
11th May 2015	11.1.4	Addition – air horn.
12th May 2015	6.1.6	FPV flying – both sites
9th June 2015	8.01 & 8.02	Revision to ground running
23 April 2022	All	Reference to Hullavington removed.
23 April 2022	1.5	Reference to CAP 658 replaced with reference to article 16
23 April 2022	5.2	Reference to BMFA guidelines to noise testing updated with regard to electric and GT.
23 April 2022	10.	Reference to Queens dog leg removed
23 April 2022	10.	Reference to warning signs added

APPENDIX TO NWMAC CLUB RULES.

The following information is provided for guidance and completeness. However, this is not intended to be comprehensive or exhaustive.

Significant modifications:

Changes to the battery system and means of power distribution to the servos in a model.
Changes to the aerodynamic configuration of a model.
Reduction in the power output of any of the servos.
Significant increases in the weight of a model due to additional payload.
Changes to the radio receivers or model radio set-up does not necessitate re-approval, however if the owner desires a second opinion this is no problem.
Engine changes or ECU parameter changes which result in an increase in thrust output.

Appropriate standards of maintenance:

A visual check on all the surfaces / visible components of the model for signs of problems.
Does the model smell of fuel more than normal? Might indicate a hidden leak.
Periodic inspection of parts that cannot be normally be visually inspected.
Undercarriages are the most problematic area on jets, therefore visual checks for alignment, clearances, bolts (movement due to ground vibration) should be performed after each session.
A record of the number of flights should be kept. After a large number of flights, highly loaded servos (those that operate near to their max. rated torque) should be replaced.
Running time of the turbine should be monitored to enable servicing of the turbine bearings etc at the appropriate time.
Excessively degraded or worn parts should be replaced.
Visual checks on wiring to ensure no heat damage, corrosion, pinching etc, particularly at servo connections.
Integrity of the turbine exhaust ducting. Look for heat damage and stress cracking.

Models built to an appropriate standard:

What is expected?.....

A level of tidiness in the position of the systems and wiring.
Wiring routed in a manner where the cables are not taught, will not be subjected to heat damage and no chaffing can occur with ground vibrations.
The airframe is of suitable construction.
Servos are selected along the guidelines provided by the manufacturer and are appropriate for the size of the aerodynamic surface.
Control linkages are of suitable construction and have correct geometry. Fixtures to prevent lateral movement are in place (‘clevis keepers’).
Control surfaces are hinged by appropriate methods.
Undercarriages have correct alignment and clearances.
Fuel and pneumatic systems are assembled using appropriate materials / parts.
Turbine / ECU electrical components are kept separated from the radio system components as much as possible.

Application for Fixed Wing / Rotary Wing- Turbine Permit

I _____, state as follows:
Name of Applicant

1. I am currently a member of the North Wiltshire Model Flying Club.
2. I have successfully completed the qualification test flight for turbine-powered model aircraft under the supervision of two experienced turbine pilots. One of whom is the North Wilts GT committee member.
3. I have successfully completed the requirements listed on page two* of this document as proof ofcompliance with the turbine-powered model aircraft pilot requirements.

_____ _____ _____
Signature, BMFA Number, Date

Current turbine permit holder:

I, _____, am currently an experienced turbine-powered model aircraft pilot and have a turbine permit on file with the North Wiltshire Model Aircraft Club.
I hereby confirm that _____ has successfully performed the turbine qualification flight outlined on page two of this document and demonstrated safe turbine operating practices & knowledge.

_____ _____ _____
Signature, BMFA Number, Date

Current turbine permit holder with committee status
I, _____, am currently a NWMAC Committee member and also an experienced turbinepowered model aircraft pilot and have a turbine permit on file with the North Wiltshire Model Aircraft Club.
I hereby confirm that _____ has successfully performed the turbine qualification flight outlined on page two of this document and demonstrated safe turbine operating practices & knowledge.

_____ _____ _____
Signature, BMFA Number, Date

***a set of Rotary wing requirements can be provided as an additional supplement.**

Turbine Applicant Flight Assessment – Fixed Wing.

Objective: The purpose of the flight assessment / test is for the turbine applicant to demonstrate their skills, knowledge, and understanding of how to safely operate and fly a turbine powdered fixed wing model aircraft.

Key Elements: The following elements are to be demonstrated through action along with verbal discussion of each element where appropriate.

1. Demonstration of proper turbine ground operations.

a. Discuss the need to keep the tailpipe area clear of people and flammable items during start, shutdown, and all ground operations.
b. Explain a plan of action for dealing with an aircraft fire similar to one resulting from a hot start. *Fire extinguisher to be present and safety pin removed.*
c. Explain the potential for a post-crash fire and the response plan to deal with the situation.
d. Explain and demonstrate typical turbine start-up and shutdown procedures.

2. Flight Skills

The applicant shall provide a sufficiently detailed verbal briefing to a selected non-jet flyer in-order for that person to serve as the pilot's caller / observer for the subsequent flight. In the absence of a suitable person, someone shall "role-play" to achieve this aim.

a. Take-off, to be held within 10 feet either direction of centre-line, with smooth, controlled corrections as necessary.
b. Two Horizontal Figure 8's. First figure 8 with entry into wind, second figure 8 with entry from downwind leg nearest the pilot in both cases. Pilot to hold altitude to within +/- 50 feet during the Figure 8. *This demonstrates skills at both left and right hand patterns and the ability to control the models flight path.*
c. Perform three aerobatic manoeuvres with combined looping and rolling elements to be selected by the turbine applicant. Examples include Cuban 8, Half Cuban 8, half reverse Cuban 8, Humpty Bump with ½ roll, or similar manoeuvres. *This demonstrates the general flying skills of the modeller and proficiency in turning round the model within a vertical plane-of-flight with a safe high flight speed and the ability to control airspeed.*
d. High Speed Circuit of the field performed at a safe high flight speed. *This demonstrates the ability to control a model aircraft at speed within the horizontal flight plane.*
e. Oval-race-track Traffic Pattern including a missed approach go-around. This manoeuvre to be in the opposite direction of the take-off and landing if wind conditions allow. *This demonstrates the ability to control a model aircraft in the landing approach mode.*
f. Landing to a complete stop. Again, smooth, controlled corrections to the aircraft's path after touchdown are required. The landing must be completed on the runway.

At no time during the flight shall the aircraft pass behind the designated safety lines and the pilot shall demonstrate good command of the secondary functions (rate switches, flaps, retractable U/C) fitted to the model.

Turbine Applicant Flight Assessment - Rotary wing.

Objective: The purpose of the flight assessment / test is for the turbine applicant to demonstrate their skills, knowledge, and understanding of how to safely operate and fly a turbine powered rotary wing model aircraft.

Key Elements: The following elements are to be demonstrated through action along with verbal discussion of each element where appropriate.

1. Demonstration of proper turbine ground operations.

a. Discuss the need to keep the tailpipe area clear of people and flammable items during start, shutdown, and all ground operations.
b. Explain a plan of action for dealing with an aircraft fire similar to one resulting from a hot start. *Fire extinguisher to be present and safety pin removed.*
c. Explain the potential for a post-crash fire and the response plan to deal with the situation.
d. Explain and demonstrate typical turbine start-up and shutdown procedures.

2. Flight Skills

The applicant shall provide a sufficiently detailed verbal briefing to a selected non-jet flyer in-order for that person to serve as the pilot's caller / observer for the subsequent flight. In the absence of a suitable person, someone shall "role-play" to achieve this aim.

a. Take-off, and hover at chest height for 30seconds. The model should rise smoothly and not deviate significantly from the lift off position.
b. At a suitable distance and height the model should execute a smooth 4 point pirouette at constant height.
c. Lift and accelerate the model to circuit height and fly a smooth circuit to overfly the lift off area.
d. Fly Two Horizontal (circuit) Figure 8's. First figure 8 with entry into wind, second figure 8 with entry from downwind leg nearest the pilot in both cases. Pilot to hold altitude to within +/- 50 feet during the Figure 8. *This demonstrates skills at both left and right hand patterns and the ability to control the models flight path.*
e. Fly an oval race-track circuit pattern in the opposite direction to the normal circuit direction at a suitable height and speed.
f. Perform a 45 degree approach to hover and land following a normal circuit.
f. Shut-down and retrieve the model.

All of the above is intended to be flown in a scale-like manner with smooth, controlled changes of attitude. The landing must be completed on the runway and not into long grass.

At no time during the flight shall the aircraft pass behind the designated safety lines and the pilot shall demonstrate good command of the secondary functions (rate switches, lights, retractable U/C) fitted to the model.