

NORTH BERKS RADIO MODEL AIRCRAFT SOCIETY

Affiliated to the British Model Flying Association

MEMBERS HANDBOOK

This Handbook contains the Constitutional Rules and the General Rules of the North Berks Radio Model Aircraft Society and sets out a code of conduct that all Members shall comply with.

The aim of the Society is to promote and encourage the building and flying of model aircraft under radio control.

In all activities undertaken by the Society the paramount consideration is safety. All flying in the UK, including model flying is covered by the Air Navigation Order 2000. Articles 63 and 64, which apply to all model aircraft, state that ‘A person shall not recklessly or negligently cause or permit an aircraft to endanger any person or property’ and ‘A person shall not recklessly or negligently act in a manner likely to endanger an aircraft, or any person therein’ respectively. All flying activities on the Society’s flying field (s) must comply with this order and the code of practice contained in the BMFA Members Handbook.

The Society is affiliated to the British Model Flying Association (BMFA), which is the body delegated by the Royal Aero Club to be responsible for all aspects of model flying in the UK. Membership of the BMFA is a condition for membership of NBRMAS. This handbook should be read in conjunction with the BMFA Members Handbook, which contains comprehensive guidelines for the safe operation and enjoyment of model flying.

MEMBERS NAME:

DATE ISSUED:

SAFETY BRIEFING GIVEN:

An electronic fully updated copy of this handbook maybe obtained via the club website @ www.nbrmas.co.uk



MEMBERS HANDBOOK

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1 INTRODUCTION TO THE SOCIETY

Welcome to the North Berks Radio Model Aircraft Society, NBRMAS, one of the country's oldest established radio controlled model aircraft clubs. The main aims of the Society are to promote all aspects of radio-controlled model flying and to provide members with the essential facilities to enable them to pursue their interest.

The major facilities provided by the Society are the flying field(s) and the equipment required for their upkeep. Members are encouraged to participate in the maintenance of the flying field(s) as required. The Society operates a Basic Flying Training Scheme catering for newcomers to radio control flying.

Meetings are held on the first Thursday of each month, which provide a forum for the discussion of model aviation topics. Guest speakers and trade representatives are often invited to address members on the latest technical advances and subjects of general interest.

Suggestions for improvements to the services and facilities provided to members are always welcomed.

The Society is affiliated to the British Model Flying Association (BMFA), which is the body that looks after the interests of Aeromodellers in Great Britain. **Flying activities within the Society shall conform to the guidelines set out in the BMFA Safety Code.**

Please study this handbook in conjunction with the current BMFA Member's Handbook: the recommendations in these booklets should allow members to safely enjoy their flying, without exposing others to avoidable risks.

2 HISTORY OF THE SOCIETY

The Society was formed in the Wantage area in early 1966 to cater exclusively for radio-controlled model aircraft enthusiasts. Since that time radio-control equipment has been improved dramatically from quite simple single-channel sets, which usually controlled only the aircraft's rudder, to the present-day sophisticated PCM 'computerised' equipment, which allows the simultaneous use of ten or more channels. Members of the Society pioneered the early development of the proportional control equipment, which formed the basis of later commercial designs.

In the early days, many members built their own radio gear as well as their aircraft. Nowadays, with the state-of-the-art 10-plus channel PCM equipment being readily available, very few members build their radio equipment.

At present the 150-plus membership is made up from roughly equal numbers of beginners, intermediate and experienced flyers. The society offers junior membership to people under the age of 18. Social (non-flying) Membership is also available.

The main flying activity takes place at the Society's grass-surfaced flying field at Landmead Farm, near East Hanney. Most types of R/C aircraft are flown from these fields, ranging from highly detailed powered scale models to simple gliders. Facilities are provided on a separate site for Helicopters. Slope-soaring gliders are flown from local hill sites including 'White Horse Hill' at Uffington; the famous White Horse was adopted as the motif for the Society's badge.

In addition to normal sport flying the Society has organised many open competitions catering for gliders, miniature pylon racers and scale models. Numerous members past and present have participated in National and International competitions and many notable successes have been achieved in the fields of pylon racing thermal soaring and slope soaring.

3 SPORTS COUNCIL

Model flying was recognised by the Sports Council as an official sport in 1992.

4 CONSTITUTIONAL RULES

Constitutional rules can only be changed or passed at an AGM or EGM and govern the way the Society is set up. They provide clear limits to the level of responsibility passed to the committee.

4.1 Name

The Society shall be known as the 'North Berks Radio Model Aircraft Society'.

4.2 Objectives

The purpose of the Society is to promote and provide facilities for the amateur sport of radio controlled model aircraft flying in Oxfordshire, Berkshire and surrounding area and community participation in the same.

4.3 The Executive Committee

An Executive Committee consisting of ten members, viz., Chairman, Secretary, Treasurer, Membership Secretary, Competition Secretary, Public Relations Officer, Safety Officer and three ordinary members, shall administer the Society. A member of the Committee shall be appointed by the Committee to act as Vice Chairman.

4.4 Annual General Meeting

The Annual General Meeting shall normally be held in December each year or at such time and place as may be determined by the Committee, provided that the period between two meetings does not exceed fourteen months. The audited accounts shall be presented at the AGM, the Committee will be elected, and two members appointed to act as Auditors.

4.5 Extraordinary General Meeting

An Extraordinary General Meeting of the Society shall only be held by direction of the Committee, or by a written request to the Secretary signed by not less than five members of the Society eligible to vote.

4.6 Notice Convening Annual or Extraordinary General Meeting

The notice convening an AGM or EGM together with the Agenda shall be dispatched to members of the Society at least 14 days before the date of the meeting.

4.7 Quorum

A Quorum for a Committee meeting shall be at least six members, one of whom shall be the Chairman, Vice Chairman or the Secretary.

A Quorum for the AGM or an EGM shall at least be 25% of the membership. If a quorum cannot be formed at the appointed start time, the meeting shall disband for 30 minutes. The meeting shall start after the 30 minutes has elapsed even if a quorum cannot be assembled.

4.8 Membership of the Society

Membership of the Society shall be open to anyone interested in the sport on application regardless of sex, age, disability, ethnicity, nationality, sexual orientation, religion or other beliefs. However, limitation of membership according to available facilities is allowable on a non discriminatory basis. The Society will keep subscriptions at levels that will not pose a significant obstacle to people participating. Society membership will comprise the following classes on a non discriminatory and fair basis.

FLYING MEMBERS: Those under eighteen years of age on the first day of January of each membership year are classified as juniors, all other members are seniors. Junior members shall not vote on policy matters or exceed twenty-five percent of the total membership.

NON-FLYING MEMBERS: Social membership is also available. Social members shall not fly models, hold committee posts or vote on policy matters

4.9 Suspension and Expulsion

The committee is empowered to suspend or expel from the Society any member found guilty of a serious breach of the Society rules or whose actions are in any way detrimental to the interests of the Society.

Members facing such a charge will be called before the committee and asked to provide their version of events. Normally two alternative dates will be offered to allow the member a reasonable opportunity to attend. Failure to attend before the committee will result in suspension until such time as the member attends a committee meeting.

At the meeting the committee will listen to the member's account of the event and the accounts of any witnesses. In the event the committee is persuaded an offence has occurred it will then consider what action it wishes to take. For minor offences a verbal or written warning may be issued but the committee reserves the right for

immediate expulsion or suspension of membership in the event of a serious misdemeanor.

An appeal against suspension or expulsion from the Society can be made under Constitutional Rule 5

4.10 Insurance

All members of the Society shall be adequately insured through the Society's officially recognised insurers.

4.11 Expenditure

The Committee shall be responsible for all expenditure. Any expenditure exceeding £250 shall be a unanimous decision of the whole Committee. In the event of a split decision, the expenditure shall be referred to an EGM or AGM.

4.12 Society Donations

Donations to any cause will be subject to a vote made at an EGM.

4.13 Constitutional Rule Changes

Constitutional rules can only be made or changed at the AGM or EGM. General rules may be changed by a majority of the Committee.

4.14 Indemnity

If a Committee Member of the Society engages or becomes involved in court proceedings, whether criminal or civil, in his representative capacity on behalf of the Society, as opposed to in his capacity as a private individual, notwithstanding that he is taking part in Society activities but in circumstances where it would be unreasonable for the Society as a whole to ratify his actions then in the former instance, i.e. in his representative capacity, the Society shall indemnify the Committee Member in respect of any fines or damages or costs awarded against the Committee Member. In the event of a Committee Member being awarded damages or costs in the course of proceedings taken by him in representative capacity such damages or costs shall belong to the Society and not the Committee Member personally and forthwith upon receipt by the Committee Member that Committee Member shall pay them to the Society Treasurer.

4.15 Property and Funds

The property and funds of the Society cannot be used for the direct or indirect private benefit of members other than as reasonably allowed by the Rules and all surplus income or profits are reinvested in the Society.

The Society may provide sporting and related social facilities, sporting equipment, coaching, courses, insurance cover, medical treatment and other ordinary benefits of Community Amateur Sports Clubs as provided for in the Finance Act 2002.

The Society may also in connection with the sports purposes of the Society sell and supply food, drink.

The Committee will have due regard to the law on disability discrimination and child protection.

4.16 Disbanding

The Members may vote to wind up the Society if not less than three quarters of those present and voting support that proposal at a properly convened AGM or EGM.

The Committee will then be responsible for the orderly winding up of the Society's affairs.

After settling all liabilities of the Society, the Committee shall dispose of the net assets remaining to one or more of the following:-

- a) To another club or society with similar sports purposes which is a registered charity and/or
- b) To another club or society with similar sports purposes which is a registered CASC and/or
- c) To the Society's governing body for use by them for related community sports and/or
- d) A national charity as nominated by the members at an AGM or EGM.

4.16 Priority

Where there is any conflict between any of the above Rules ('Key Rules') and any other rule or rules the key Rule(s) will take priority. Interpretation of all the Rules must be consistent with the statutory requirements for CASCs (which means Community Amateur Sports Clubs as first provided by the Finance Act 2002).

5 GENERAL RULES

General rules govern the way the society operates on a day to day basis and are passed or changed on behalf of the society by the elected committee. Rules only come into force when a written notification is mailed to the whole membership.

5.1 Subscriptions and membership

- 5.1.1.1 The subscription year runs from 1st January to 31st December and the rate of subscription shall be determined by an AGM or EGM. New senior members shall be required to pay an enrolment fee.
- 5.1.1.2 Senior memberships shall be limited to 150 per year; however the committee may allow this number to be exceeded if they judge it appropriate to grant additional memberships in the best interest of the Society. Junior memberships shall be unlimited. Junior status shall be determined in accordance with the BMFA rule, which is to be under 18 years of age on January 1st of the subscription year.
- 5.1.1.3 Members can only join by submitting a completed membership application form to the membership secretary. New members shall attend a safety and operational briefing, given by a committee member before they fly models on the society's flying fields.
- 5.1.1.4 The committee may authorise an unlimited number of temporary memberships (one day duration) for the purposes of events and competitions.
- 5.1.1.5 Members shall clearly display a valid NBRMAS vehicle disc on their vehicle at if they visit any NBRMAS flying site.

5.2 Restrictions applied to Members & Visitors

- 5.2.1.1 Junior members below the age of fourteen years shall only fly radio-controlled aircraft when supervised by a competent adult unless they have obtained the BMFA 'B' level achievement certificate.
- 5.2.1.2 Models to be flown by junior and inexperienced members (i.e. those members not holders of the BMFA 'A') shall be submitted for approval for suitability and airworthiness by an approved Society Training Instructor or the Safety Officer before such models shall be flown.
- 5.2.1.3 With effect from 1st May 2006 for all fixed wing aircraft and 1st August 2006 for helicopters, Members and visitors wishing to fly solo at any

NBRMAS site must hold the appropriate BMFA certificate as listed here¹.

- Powered aircraft **Fixed Wing**- BMFA 'A' certificate, or higher, for fixed wing power aircraft
- Powered aircraft **Helicopter**- BMFA 'A' certificate, or higher, for helicopters
- **Gliders, thermal or electric** BMFA Silent flight 'A' certificate, or BMFA 'A', or higher, for power aircraft
- **Electric models** - BMFA Silent flight Electric 'A' certificate or BMFA A for power aircraft

Anyone not holding the appropriate certificate may still fly provided they are **directly supervised** on the flightline by a member holding the appropriate certificate. It is strongly advised in the early stages of learning to fly that a buddy box system is employed.

¹ Equivalent schemes-The SAA Bronze Certificate is accepted as equivalent to the BMFA 'A' Certificate, Fixed Wing. The SAA Silver Certificate is accepted as equivalent to the BMFA 'B' Certificate, Fixed Wing. Any holder of a BMFA or BARCS Silent Flight Thermal Gold, Diamond or Diamond Star will be assumed to hold a 'B' Certificate, Silent Flight Thermal. Any holder of a BMFA or BARCS Silent Flight Slope Gold or Diamond will be assumed to hold a 'B' Certificate, Silent Flight Slope.

- 5.2.1.4 **Flying on Society Flying Fields without officially recognised insurance is prohibited.** Insurance cover becomes effective upon receipt of the annual subscription by the Membership Secretary. When using Society Flying Fields, proof of membership shall be furnished when requested by any member of the society.
- 5.2.1.5 Visitor's Insurance: Proof of officially recognised insurance cover is to be shown to a committee member before a visitor may fly from a Society field. Short term insurance cover is available through the Membership Secretary.
- 5.2.1.6 Neither members nor visitors shall be permitted to fly any model or one that weighs 7 kilograms or over, dry weight, unless that person holds a relevant BMFA 'B' certificate. Visitors must show proof of holding a 'B' certificate to a committee Member or the Safety Officer before assembling any model described above.
- 5.2.1.7 Members and visitors without a suitable BMFA "A" certificate are restricted to flying recognised trainer models which should remain configured as such (i.e. training aids should not be removed, and for helicopters the rotor head must be set up in the manufacturer's suggested training configuration). Fixed wing models are restricted to a maximum engine/motor capacity of a 0.46 Cu In ("forty six") size 2 stroke, 0.53 Cu In ("fifty three") 4 stroke or electric power train of no more than 500W max output. For helicopters these are restricted to a maximum engine/motor capacity of a 0.50 Cu In ("fifty") size 2 stroke, electric powered models can be no more than 500 sized, i.e. with a maximum rotor diameter of 1metre. New members without their "A" certificate wishing to fly an existing model outside of these specifications may be granted a waiver from the Safety Officer, or his delegated representative. This waiver will be time bound to a maximum of 6 months, will be specific to the member / model combination and shall include a test flight to demonstrate the pilots ability to fly it safely. The waiver will still require compliance with rule 5.2.1.3 (i.e. they must be accompanied on the flight-line at all times).
- 5.2.1.8 Visiting guests must be accompanied at all times by a 'sponsor' who is a current club member.
- 5.2.1.9 Pilots must hold an NBRMAS gas turbine waiver to fly any turbine model at NBRMAS sites. *A prerequisite of this is to hold a B certificate. Applications for the waiver to be via the Membership Secretary.*
- 5.2.1.10 All gas turbine models **must** be flown in accordance with the supplementary rule book which accompanies the gas turbine waiver

- 5.2.1.11 At certain times of the year the committee may impose a temporary suspension of turbine flying at NBRMAS sites by posting a notice at the peg board. For example during extremely dry periods or close to harvesting.

5.3 General Operational Conduct

- 5.3.1.1 All model flying shall be governed by Air Navigation Order 2000 or subsequent revisions (see Introduction)

No member shall fly in a dangerous manner.

- 5.3.1.2 Every member shall be responsible for maintaining discipline.
- 5.3.1.3 All engines shall be fitted with an adequate silencer (see 5.7).
- 5.3.1.4 No member shall behave in such a way as to prejudice relationships with the owner(s) of the flying field(s) or their representatives.
- 5.3.1.5 All litter shall be cleared from the flying site at the end of a flying session.
- 5.3.1.6 All members shall park their cars in such a way that does not obstruct farm traffic.
- 5.3.1.7 All members shall abide by the 20mph speed limit which is in force on all farm property. It is particularly important to be careful when passing the barns and any field junctions. Remember it is a farm and workers are always going about their business.
- 5.3.1.8 **Mobile phones shall not be taken onto any NBRMAS patch.** Note: Notwithstanding this, owners of these devices are encouraged to bring them to the field but to leave them, **switched off**, in the car park for use in an emergency.

- 5.3.1.9 The consumption of alcohol or the taking of any other judgment impairing substances is strictly prohibited at society sites.
- 5.3.1.10 When flying on NBRMAS sites members shall follow the site specific rules.

5.4 Frequency Control

- 5.4.1.1 The Committee shall stipulate how the available frequency bands shall be utilised.
- 5.4.1.2 NBRMAS operates a peg off frequency control system. The pegboard system shall be used at all times by anyone operating radio-control equipment.
- 5.4.1.3 Transmitters shall only be switched on when the appropriate peg is in position on the transmitter. If the peg you need is on the pegboard, remove it and attach it to your transmitter before switching your transmitter on. Leave it attached to your transmitter unless other pilots wish to use it as described in Peg Sharing below. If you are not sharing with any other pilots then you need only return it to the pegboard before you leave the patch.
- 5.4.1.4 If the peg you need is not on the pegboard it is most likely on another pilot's transmitter. Locate the peg, if it is not in use inform the owner of the transmitter that has the peg attached, that you wish to use that channel. Do not remove a peg from any transmitter until you have spoken to the owner of the transmitter that has the peg on it. Once you have the peg attach it to your transmitter before switching on.
- 5.4.1.5 The correct frequency pennants (of internationally recognised size and colour) shall be displayed at all times on transmitters. For 35 MHZ these are an orange pennant approximately 2 inches square with the channel number in black or white letter 1 inch high. For 2.4GHz this is a black ribbon.
- 5.4.1.6 NBRMAS may operate more than one site and each site will have a different frequency allocation. **IT IS IMPERATIVE THAT YOU USE THE CORRECT FREQUENCY FOR THE SITE YOU ARE ON.**
- 5.4.1.7 A transmitter frequency checking service is available to members via the Safety Officer. Frequency checking is a mandatory requirement for competitions and fly-ins.

5.5 SYNTHESISED FREQUENCY EQUIPMENT

- 5.5.1.1 Any synthesised transmitter used at NBRMAS sites must have a two stage switch-on process to alter the frequency. The first stage must NOT transmit but must give a clear indication of the frequency that will eventually be transmitted. This is to enable you to select frequencies safely and, more importantly, to obtain clearance from the site frequency control system. Only after you have done this should you activate the second, "switch-on", stage which enables transmission.
- 5.5.1.2 Operating procedure for synthesised transmitters -
- Obtain frequency peg
 - Attach correct frequency pennant to your transmitter.
 - If frequency is not already selected on your transmitter select it. (If possible get independent verification that you have selected the correct frequency)
 - If you altered your transmitter frequency than check that you have the right crystal in the receiver.
 - When ready to prepare your model for flying switch on, with the aerial retracted, and check that your model is responding properly.
 - You must take extra care when using the frequency control system as your opportunities to transmit on the wrong frequency will be much greater.
- 5.5.1.3 Note: synthesised sets still use a fixed crystal in the transmitter module and that any crystal can drift over time. You will still need to have your radio equipment checked occasionally as a master crystal drifting will affect all the other frequencies synthesised from it.
- 5.5.1.4 For 2.4GHz systems NBRMAS still requires a 'Peg off' system to be used as an indicator to other people that you have not simply forgotten to take a peg and also to keep the frequency control system the same for all frequency bands. There is a separate 2.4GHz peg board coloured black, take any one of the pegs from this board and place it on your transmitter. Return the peg to the board after you have completed your flying session.

The following rule applies specifically to Futaba 2.4GHz FASST radios fitted with an integral 2.4GHz FASST RF system or converted using Futabas own brand FASST module (ie this doesn't apply to Futaba radios converted to 2.4GHz using Spektrum or similar aftermarket modules). If in doubt seek clarification from a committee member.

- 5.5.1.5 All FASST sets must be approved for use by a NBRMAS committee member before use within the club, and issued with a sticker to show

that they can safely operate with other FASST sets. This applies to the RF part of sets, so must be applied to the RF module where this is a user removable item. Where the RF part is integral it should be applied to the set near to the antenna. In either case it should be positioned where it is clearly visible on inspection of the transmitter without requiring removal of the module.

Most sets will be able to have a sticker issued immediately on inspection by a committee member, but in a small number of cases the serial number will need to be referred to the UK distributors for confirmation that it is safe. In an even smaller number of cases the set may need returning for rectification.

See Appendix 3 for details on the procedure for checking Futaba modules and sets.

The following rule applies to any 35 MHz radio converted to operate on 2.4 GHz.

- 5.5.1.6 When converting 35MHz radio to 2.4GHZ operation only type approved equipment is allowed. Additional modification such as relocating wiring to route coaxial leads internally is prohibited unless this modification is specifically approved by the manufacturer the module and/or the original radio.

5.6 Other Radio Related Considerations

- 5.6.1.1 Pilots of powered models using computer radio equipment with 'Fail Safe' provision shall set the throttle to 'tick-over' ('off' in the case of electric powered models) regardless of the other control operations governed by the 'Fail Safe'. **Correct operation of 'Fail Safe' equipment shall be checked before every flight.** This requirement also applies to 'add-on' devices used with non-computer radio equipment.
- 5.6.1.2 Base loaded, helically wound and other non collapsible aerials, other than for 2.4GHz systems, are not permitted on NBRMAS sites as they radiate full power at switch on.

5.7 Noise

- 5.7.1.1 No model that has a noise level that exceeds 88dbs (as measured at a distance of 7 metres with the model approx. 1 metre above the ground) shall be flown from any Society field.

5.8 Accident

- 5.8.1.1 Members who witness or are involved in an incident which results, or could possibly have resulted, in injury shall record it in the Incident Book to be found in the First Aid Box and report it to the Safety Officer as soon as possible using the reporting forms provided.

5.9 NBRMAS flying events

- 5.9.1.1 All NBRMAS flying events will be run according to the procedures laid out in Section 8

5.10 Child and Vulnerable Adults Policy

- 5.10.1.1 Those members aged eighteen or under on the first day of January of each membership year are classified as "Juniors". Where appropriate, junior members are to be accompanied by a parent or guardian (or other adult nominated by parent or guardian) and not left unattended at club meetings or at club flying sites.
- 5.10.2.1 All junior members shall be supervised in a manner commensurate with their age and experience, EG. (a married seventeen year old who has driven to the patch having left his wife and child at home should not be deemed at risk in the same way as an unattended nine year old).
- 5.10.3.1 Any club member or serving officer who supervises, has responsibilities for, or works with Children/vulnerable adults, is required to have a check by the Criminal Records Bureau (CRB).
- 5.10.4.1 The club Welfare Officer is to be the central contact for all issues concerning "Child/Vulnerable Adults"; he must also have CRB clearance.

6 LANDMEAD SITE RULES

Landmead Flying Field is adjacent to an operational landing strip used by privately owned light aircraft. These aircraft may occasionally enter the airspace normally used by model aircraft. The position of the landing strip, relative to the Society Field, is indicated in Figure 1. Members must be vigilant at all times and ensure that all those present are made aware of the presence of full-size aircraft in the vicinity.

Full-size Aircraft Shall Be Accorded Absolute Priority at All Times.

A rectangular area one mile by one mile, with its southeast corner located at the northwest corner of the mown operating area is a permanent **No Fly Area** for flying from the Landmead site.

This no fly area, which includes the car park and the transit path from the car park to the mown area and the adjacent farm buildings, shall not be deliberately flown in or through at any height.

Safety note: Due to the number of low flying aircraft operating in the vicinity the committee strongly discourage “lone flying” and recommend that a spotter be used when flying model aircraft at Landmead.

Full size aircraft will indicate their intention to land by over flying the barns from the north at approximately 1000 ft altitude. They will fly south and turn either left or right depending on the prevailing wind conditions. Model pilots should be aware that this is a guide only and that the full size may enter the landing approach without using this “warning” approach.

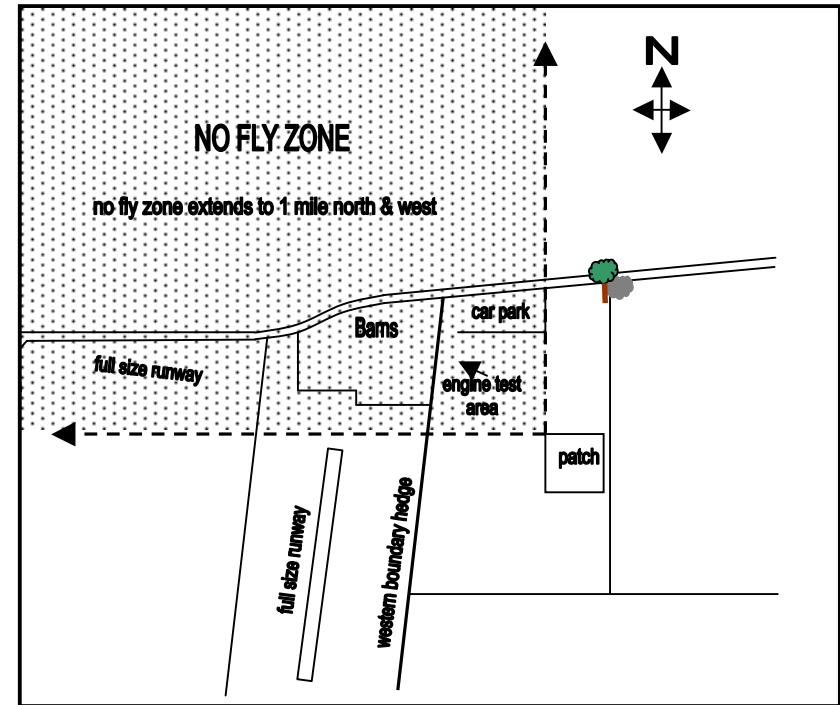


Figure 1 Landmead Flying Field Layout

6.1 Radio frequency allocations for Landmead site

6.1.1.1 The Committee has allocated the following Radio Frequencies for Landmead Flying Field:

- **35MHz Band: Odd and Even number channels (excluding 56, 58, 60, 62 & 64) may be used on Landmead site.**
- **2.4GHz Band** may be used on the Landmead site.
- **27MHz Band** may also be used.

6.1.1.2 The committee may make alternative frequency allocations to cover special events.

6.1.1.3 35 MHz band use on Landmead site:

- Power models preference channels 65-89 inclusive (odd and even frequencies).
- Glider and electric glider preference channels 55, 57, 59, 61 and 63.
- Note that pilots of powered models may use the glider preference channels when they are not in use but must be prepared to surrender them to glider pilots' wishing to use these channels for thermal duration flying. Likewise Glider pilots may use any of the power frequencies not in use but shall give up the frequency to any member wishing to fly a power aircraft on that frequency.
- **Note :** Frequencies 56, 58, 60, 62 & 64 are reserved for Helicopters using the Helicopter site only, see section 7.

6.1.1.4 27 MHz band use on Landmead site

- Power models - a 50 kHz separation between adjacent channels is mandatory. Note the 27MHz band is not recommended for powered aircraft due to possible interaction from CB radios.
- Gliders - a 25 KHz separation between adjacent channels is permitted.
- Further frequency details for the various channels are listed in Appendix 1.

6.2 Landmead Site flightline layout

6.2.1.1 The Society operates a system on the Landmead site whereby only two alternative flightline positions are permitted. This is intended to prevent spectators or pilots from crossing the landing/take off area as they transit to and from the car park. Depending on wind direction, pits are set up as shown in Figure 2.

Notes:

- Use the Wind Direction/Pit Position Indicator to ascertain the appropriate pit for the given wind direction. Written guidelines are attached to the indicator. The arrow on the indicator points to the correct Pit, the 'Aeroplane' indicates the take-off direction.
- Take-off and landing in the direction of the car park is prohibited:
- For direction 8; use Pit 7 or Pit 1,
- For direction 4, use Pit 5 or Pit 3
- In variable wind conditions, the Pit indicator should be locked to the chosen Pit area.
- If the wind direction changes significantly during the flying session the pit area shall be moved accordingly.

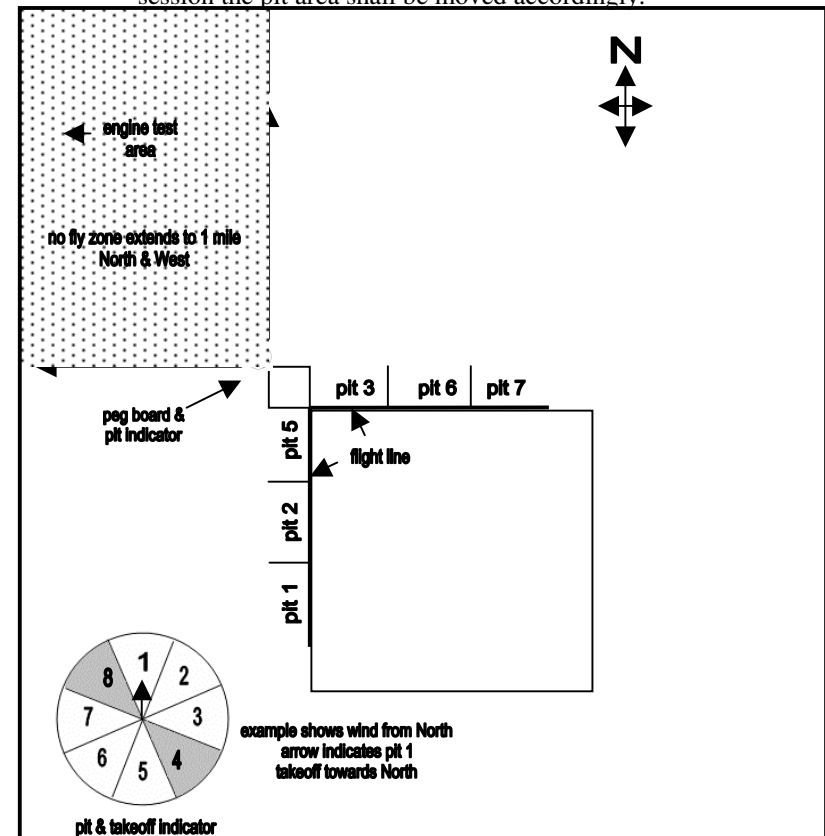


Figure 2 Pits Positions for various take off directions

6.3 Flying at Landmead site (general)

- 6.3.1.1 Models shall not be flown beyond the western boundary of the field when any full-sized aircraft are visible on the ground outside the hangars (barns).
- 6.3.1.2 When light aircraft are observed in the immediate vicinity of the flying field, powered models shall be directed to airspace away from the approaching aircraft. Model gliders at high altitude shall be directed to airspace away from the approaching aircraft. Models at low altitude shall land if this is practicable without endangering the full size. Generally, light aircraft intending to land will over-fly the area at a safe height to indicate their intention. However, it must be appreciated that visiting light aircraft intending to use the airstrip may not be aware of model aircraft in the vicinity and may not follow the expected procedure
- 6.3.1.3 Ensure that all transmitters in the pits area or in a designated engine test area have their aerials retracted whether they are switched on or off. Transmitter aerials must be kept retracted until moving out of the pits area to fly and must be retracted when returning the transmitter to the pits area after landing and stopping the engine.
- 6.3.1.4 Unrestrained taxiing of models within the pit area is prohibited.
- 6.3.1.5 Take-off shall not begin within 20 metres of the flight line.
- 6.3.1.6 Hand-launched models shall be released more than 20m from the flight line, beyond the up-wind end of the pit area in use.
- 6.3.1.7 Models shall not be flown at low level towards the pits, spectators or, in particular, close to horses and riders in the lane.
- 6.3.1.8 Models shall not be flown closer than 20m to the flight line.
- 6.3.1.9 After take-off pilots shall take up a position in a group adjacent to the flight line at the front of the appropriate pits.
- 6.3.1.10 A verbal warning shall be given to ensure that other pilots are aware of impending take off or landing.
- 6.3.1.11 Following a landing taxiing towards the flight line is prohibited.
- 6.3.1.12 After landing engines shall be stopped as soon as possible
- 6.3.1.13 Following a landing on the patch or the approach to the patch, the model shall be removed as quickly as possible to the pits.

- 6.3.1.14 Following a landing pilots shall call a warning “on the Patch” to inform other pilots that they are collecting their model, this should be done as soon as possible.
- 6.3.1.15 Transmitters are only allowed on the patch with aerials extended only in the following circumstances: -
- Hand launching models.
 - Taking off from behind the model².
 - During the recovery of live electric powered models.
 - During the recovery of powered models where the engine has not been able to be stopped by control from the transmitter.
 - Transmitters shall not otherwise be taken onto the patch.
- 6.3.1.16 When recovering models remote from the patch, transmitters shall be left in the pit area.
- 6.3.1.17 Glider flyers may elect to use a remote location (but within the Landmead field) for bungee flying only, provided the field conditions allow this. The glider pilots must inform power flyers they are doing so and provided the condition of the field allows them to do so without infringing the no-fly zone etc. In these circumstances **the gliders must be operated using the glider preference channels only**. If electric glider fliers wish to operate ‘off patch’ with glider fliers, they must be operated on one of the glider preference channels. **Electric gliders may only be operated “off patch” if there is a glider bungee being operated at the same time.**
- 6.3.1.18 Pilots must not over fly the patch when people are on it.
- 6.3.1.19 The deliberate dropping of removable parts of any model is prohibited.

² It is imperative the pilot returns to the flightline as quickly as possible once takeoff has been completed.

- 6.3.1.20 All powered models must be safely and securely restrained in the pits in such a fashion that they cannot move forward or sideways until released by the pilot or helper for flight. The level of restraint used must be suitable for the model being started. *The chosen method of restraint must ensure that the person starting the engine is not the only method relied upon. As a guiding principle the method of restraint must be sufficient to prevent the model from moving forward or sideways, without the pilot touching the model, at full throttle. It is preferable to have a competent helper or helpers to hold/restrain the model. In such a case adequate instruction must be given to ensure that the helpers know what is required of them.* Electric models capable of moving when throttle is operated must either be deactivated when not in use or must be restrained. It is not good practice to leave electric models "armed" on the flight line. A competent helper or helpers must safely and securely restrain gas turbine powered models.

6.4 Aerotowing

- 6.4.1.1 Towlines shall be readily visible
- 6.4.1.2 The tug-aircraft and glider shall be able to release the towline independently.
- 6.4.1.3 The tug-aircraft shall commence its take-off run more than 20m from the flightline. When feasible, the take-off run shall be angled away from the flightline. Before take-off, the glider shall be positioned close to the down-wind boundary of the patch and 20m from the flightline (this applies to both rise-off-the-ground and hand-launching). However, if circumstances necessitate it, the glider start position may be less than 20m from the flightline
- 6.4.1.4 Clear verbal warning of intended take-off shall be given
- 6.4.1.5 Where there is significant risk of the towline snagging on the landing approach, the towline should be dropped in a safe position before the tug aircraft is landed
- 6.4.1.6 Tug pilots are reminded that all models weighing more than 7 Kg are restricted to a maximum height of 400 feet.

6.5 Helicopters

- 6.5.1.1 Helicopters must comply with all operational requirements at Landmead. Helicopters may only be flown if all fixed wing pilots agree to remain grounded for the duration of the flight.

6.6 SAFETY NOTES (Landmead)

The Safety Code for general flying (radio control) section in the BMFA handbook should be referred to and used in conjunction with these notes.

If possible, park in the car park. If you park in the lane or near farm buildings, ensure that farm traffic can pass easily.

Walking to and from strip:

- Look out for models taking off or landing.

On Strip - Flying/Preparing Model:

- Members are strongly advised not to fly powered models without another Society member or adult person present on the site (accidents can happen).

Running-in or prolonged setting up of engines shall only take place in the designated area (see Figure 1). Loud engine noise can be very annoying and/or distracting for pilots when they are flying and may also effectively prevent essential communication between pilots.

The use of wooden or glass filled nylon propellers is strongly recommended for safety and noise abatement reasons.

Electric flight propellers must not be used on I.C engines

Before starting engines, ensure the area immediately in front of the propeller/air intake is clear of loose debris and loose parts of clothing are properly secured.

For scale or semi-scale models, the use of locking prop nuts is recommended, especially for 4 stroke engines. Where the use of locking prop nuts AND a domed nut are not practicable for engines not fitted with a spinner, the locking prop nuts should be used in preference to the domed nut. Domed nuts shall not have a radius of less than 7.2mm. Spinner and glider nose radii shall conform to the current BMFA rule.

If necessary the model should be ditched to avoid a collision with any full size aircraft.

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7 NBRMAS HELICOPTER SITE RULES

The NBRMAS helicopter flying field is adjacent to an operational landing strip used by privately owned light aircraft. These aircraft may occasionally enter the airspace normally used by model aircraft. The position of the landing strip, relative to the Society Field, is approximately 50 metres south of the lane indicated in Figure 3.

Members must be vigilant at all times and ensure that all those present are made aware of the presence of full-size aircraft in the vicinity.

Full-size Aircraft Shall Be Accorded Absolute Priority at All Times.

There are two designated flight zones each with its associated take off and landing box. Pilots may elect to use either for any flight depending on weather conditions. Flights must start and finish in one box and remain within the associated flight zone for the complete flight. It is not permissible to use one box and fly into the other flight zone.

Safety note: Due to the number of low flying aircraft operating in the vicinity the committee strongly discourage “lone flying” and recommend that a spotter be used when flying on the helicopter flying site.

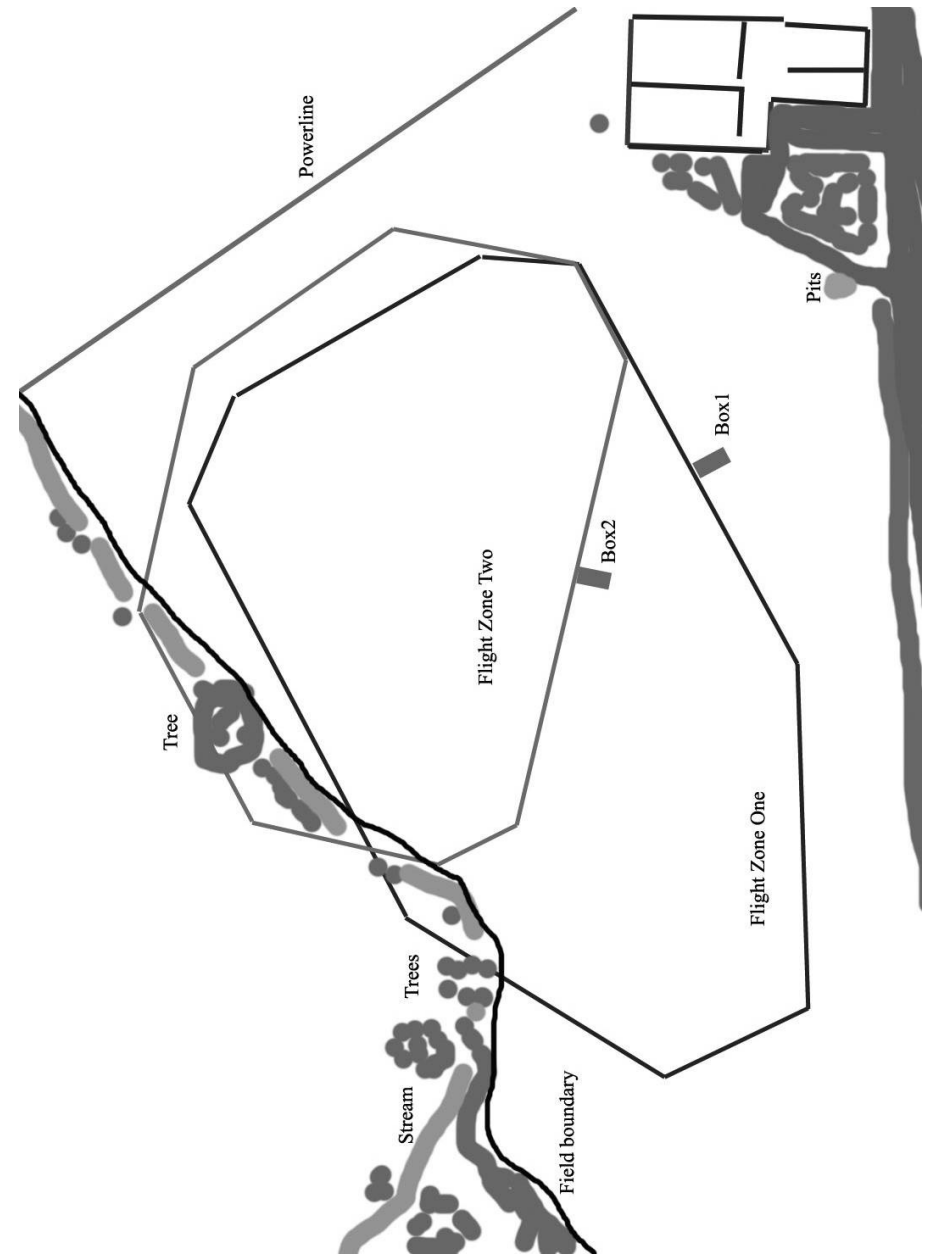


Figure 3 Helicopter field layout

7.1 Radio frequency allocations for helicopter flying field

- 7.1.1.1* The Committee has allocated the following Radio Frequencies for the helicopter flying Field:
- **The 2.4GHz Band only** is permitted on the helicopter site. All radio equipment must comply with the rules detailed elsewhere in this handbook. The normal club peg system applies.
 - **Any and all other bands and systems are not permitted on the helicopter field.**

7.2 Helicopter site general flying rules

- 7.2.1.1* **Models must only be flown within the designated fly zone (see Figure 3).** Models shall not be flown towards or over, the pits, spectators, horses and their riders, the lane or the barns.
- 7.2.1.2* There are two designated flight zones each with its associated take off and landing box. Pilots may elect to use either for any flight depending on weather conditions. Flights must start and finish in one box and remain within the associated flight zone for the complete flight. It is not permissible to use one box and fly into the other flight zone.
- 7.2.1.3* The designated flight zones are intended as absolute limits, not the start of a safety zone. Flights should be made allowing a reasonable safety margin within the designated areas.
- 7.2.1.4* The flight zones are laid out in such a way that at no time should the model be between the pilot, and the barn or the pits.
- 7.2.1.5* Pilots must remain on the pilots spot, and must not walk away in any direction while the aircraft is in the air.
- 7.2.1.6* Only one aircraft may be airborne at any one time, and in the event of a forced landing the aircraft must be retrieved and removed from the flight zone before another may fly.
- 7.2.1.7* While one aircraft is flying another pilot may prepare their model and start the engine in the pits area, but must not carry it out until the pilot flying has landed and has clearly finished their flight. It is not permissible to “queue” with a live aircraft behind a flying pilot.
- 7.2.1.8* Unless an individual pilot has given specific agreement, observers or spectators, including other pilots, must stay off the field, other than the

pits area. Where agreement has been given then an observer should stay close, but behind the pilot. Only one observer is permitted.

- 7.2.1.9 When the pilot has no A certificate and is therefore being supervised, the supervising/training pilot **must** accompany the trainee out to the take off point, and may position himself anywhere suitable and safe. The mown pilot's box has sufficient room for two people to stand side by side, when a buddy box is in use.
- 7.2.1.10 Electric models must not be made live until they are on the take-off patch. If the motor is completely disconnected then they may be powered to allow setting up.
- 7.2.1.11 Walk directly to and from the take off point, it is important to minimize trampling of the grass during the growing season. The further box is accessed via the nearer one.
- 7.2.1.12 The deliberate dropping of removable parts of any model is prohibited.
- 7.2.1.13 Society Helicopter pilots shall also comply with the BMFA Flying Code as detailed in the Helicopter section of the BMFA Handbook. In particular, **Pilots shall:**
- Observe the circumstances under which model helicopters must never be flown or run up, in accordance with the BMFA handbook.
 - Conduct appropriate checks before a daily flying session, in accordance with the BMFA handbook.
 - Conduct appropriate checks before each flight, in accordance with the BMFA handbook.
 - Pay particular attention to Helicopter Rotor Blade Safety.

7.3 SAFETY NOTES (helicopter site)

The Safety Code for general flying (radio control) section in the BMFA handbook should be referred to and used in conjunction with these notes.

- If you park in the lane or near farm buildings, ensure that farm traffic can pass easily. Be prepared to move your vehicle immediately on request.
- The rotors should be restrained at all times after starting the engine, until the aircraft is placed on the take-off point.
- Members are strongly advised not to fly helicopters without another Society member or adult person present on the site (accidents can happen).
- Litter is unsightly and can be dangerous to farm animals. Ensure that all rubbish, e.g. crash debris, is collected and taken away.

8 NBRMAS MODEL FLYING EVENTS

8.1 Introduction

This Code has been introduced to help the society meet its direct responsibility for the safety of spectators and nearby persons and property. The code only applies to closed to club events where spectators (typically family and friends) are expected to attend or a large number of models are expected to be flown. If the wider general public is invited then ALL pilots must hold the B certificate. This code specifically relates to Landmead site.

8.2 ORGANISATION

The committee shall appoint a **FLYING EVENT DIRECTOR** who has overall responsibility for the event; they will make arrangements for: (a) Site preparation (b) Spectator control (c) Verification of flyers' competence. The Flying Event Director will assume overall responsibility for the planning, organization and subsequent running of the event.

The committee shall appoint a **FLIGHT LINE DIRECTOR who will assist in the planning of the flying and who will take control of the model flying schedule** (in modelling terms, a Contest Director or CD). The Flying Event Director and Flight Line Director's posts can be held the same person.

The Flying Event Director and Flight Line Director will appointment a **FLIGHT LINE MARSHAL** who will directly control the active model flying. **The Flight Line Marshal must be a separate post.** The Flight Line Marshall will conduct the pilots' briefings.

The Flight Line Marshal must exercise authority over all flying matters as they are directly responsible for the flying safety of the event. They must not hesitate to discipline pilots if necessary and it cannot be stressed too strongly that **theirs is the final say on all matters on the airside of the flightline**. This places a great deal of responsibility on the Flight Line Marshal and it almost defines their job. The flight line marshal will normally appoint a number of deputies to assist in the running of the flight line. In general flight line marshals shall be rested every two hours and a deputy shall assume control for at least half an hour..

8.3 SITE ARRANGEMENT

To the upwind and downwind sides of this area there should be no spectators, parked or moving vehicles, or other obstructions within a minimum 100 metres of the boundaries of the take-off and landing area. Flying shall take place without car parks and spectator areas being overflown. If full size aircraft are in evidence over the western boundary no flying will take place over the western boundary.

Any model that cannot comply with this shall not be flown while the full size aircraft are present.

8.4 CONTROL AND SITING OF SPECTATOR AND CAR PARKING AREAS

Spectators should be behind a stout rope or other barrier located parallel to the take-off and landing direction. They should thus be on only one side of the flying area for radio-controlled aircraft. This rope barrier shall be 50 meters from the flight line if large models (<7 Kg) or jets are expected otherwise it may be set at 30 metres. In NO circumstances should take-off or landing be performed towards or over spectator or car park areas. Sufficient marshals should be appointed to ensure that spectators are appropriately controlled and supervised.

8.5 PLANNING AND CONDUCT OF MODEL FLYING

The **Flight Line Marshall** should preferably be an experienced flyer of the type(s) of model aircraft being used at the event, but in any case must be thoroughly familiar with the operating characteristics of the aircraft taking part. They are responsible for the postponing or canceling of all or part of the event in case of adverse circumstances likely to cause a hazard to safety. It is also his responsibility to ensure that minimum nuisance is caused, and that no unauthorised flying takes place. All flyers should have had experience with the aircraft they are to fly and the types of manoeuvres to be performed. In the case of radio-controlled flying;

(a) All flyers should be BMFA 'A' or 'B' Certificate holders. For closed to society events only, flyers lacking this qualification may be allowed to fly under supervision subject to the discretion of the flying event director.

(b) All helpers should be familiar with the BMFA Safety Codes and shall be under the direct control of the Flight Line Marshal.

8.6 FLYING REQUIREMENTS

All flyers should hold the BMFA 'A' or 'B' Certificate or its equivalent. The pilot may only fly the type of model which he is certificated for. For closed to society events only, flyers lacking this qualification may be allowed to fly under supervision subject to the discretion of the flying event director

The Flight Line Marshal must position the pilots so that they are between the spectators and the flying models.

The society will operate a frequency monitor throughout the event.

If any radio interference is suspected during flying all models shall be landed immediately and no further flying may take place until the interference source is identified and eliminated.

A transmitter pound, together with a pegboard frequency control system, will be operated and all transmitters will be checked with a frequency checker

27 MHz radio control equipment must not be used

The pilot is expected to make all the usual BMFA safety checks before attempting to fly. The pilot shall also observe the NBRMAS handbook operating procedures. No flying will take place if the surface wind speed exceeds 25 knots, or if the visibility is less than 500 metres.

No turn should terminate with the aircraft on a heading towards the spectator enclosure.

No aircraft may be flown within 50 metres of spectators and for models over 7 kg and all gas turbine powered models this distance should be 70 metres. This may be reduced to 30 metres for take off and landing only. The organisers, especially the Flight Line Marshal, should also consider the need to add additional separation distance for models of exceptional dimensions, weight or performance.

Car parks and spectator areas must not be overflowed.

If full size aircraft are in evidence over the western boundary no flying will take place over the western boundary. Any model that cannot comply with this will not be flown while the full size aircraft are present.

Note that the distance of 30 metres shown must be 50 metres when models over 7 kg or gas turbine powered models are flown.

8.7 GENERAL

It is important that a description of arrangements for the model flying programme be circulated in advance to all people participating in the event. This can be by an oral briefing on the day.

The committee must ensure that the full size pilots are notified of any event in advance.

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APPENDIX 2 – MEDICAL EMERGENCY

Location of first aid box:

A small first aid kit suitable for minor injuries can be found in the green portacabin on the wall by the windows. Alternatively the casualty can be taken to;

Minor injuries unit

There is a minor injuries unit at Abingdon Hospital which is open between 10.00 am and 10.30pm everyday. The phone number is 01235 208730. See Figure 5 below.

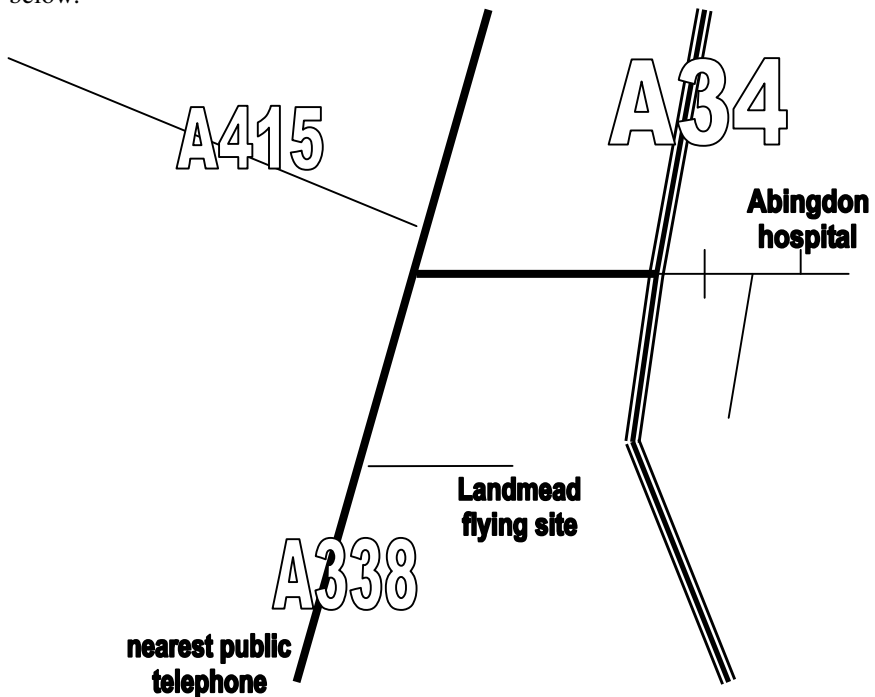


Figure 5 Location of Abingdon hospital & nearest public telephone

Nearest 24 hr Casualty Department:

The John Radcliffe Hospital
 Headington
 Oxford.

Serious injuries

In the case of more serious injuries it may be necessary to summon emergency services. The address of the site is Landmead Farm, which is situated on a farm track off the A338 [Oxford to Wantage road] between Venn Mill and East Hanney

Directions:

Heading south on the A338 towards Wantage, turn left down farm track 200 metres after Venn Mill. Follow track, passing farm buildings on left. Continue down track, passing farm buildings on right. The flying site is the first gate on the right after these buildings.

Nearest Public telephone:

East Hanney village Directions; Go to main road (A338), Turn left towards Wantage. Continue on this road for approximately 1 mile. Turn right at the first crossroads. The public telephone is on the left.

APPENDIX 3 – Procedure for identifying 'safe' Futaba 2.4GHz FASST modules

1. For sets with integral RF other than 6EX: issue NBRMAS sticker.
2. For modules that are not TM7: issue NBRMAS sticker.
3. For TM7 modules with an "I" sticker: issue NBRMAS sticker.
4. For TM7 modules without "I" sticker: Owner must refer to Ripmax for rectification then resubmit for an NBRMAS sticker.
5. For 6EX sets with "I" sticker: issue NBRMAS sticker.
6. For 6EX sets with serial number starting A8: issue NBRMAS sticker.
7. For 6EX sets without "I" sticker starting A7: Owner to contact Ripmax with serial number. There are two possible scenarios:
 - Ripmax confirm the set is ok.
Owner then submits Futaba and Ripmax serial numbers to a committee member for independent verification, upon which an NBRMAS sticker will be issued.
 - Ripmax confirm the set needs to be returned to them for modification.
Once returned from Ripmax with an "I" sticker, resubmit the set to a committee member who will issue an NBRMAS sticker.

Note : Until a FASST set or module has an NBRMAS sticker confirming it is safe, it cannot be used on any NBRMAS site.