



SAFETY REQUIREMENTS FOR FELBRIDGE FLYERS

INTRODUCTION

The aim of these safety requirements is not to make the modeller feel inhibited but to put him at ease knowing that should disaster overtake his model while airborne he has minimised the risk to others and himself (bodies and property). The safety requirements try to recognise the position of natural hazards. Additional constraints imposed by the landowners are also acknowledged where these have a bearing on safety. **Don't forget that personal safety is YOUR responsibility, not someone else's. You must act responsibly and not put others at risk by your actions.**

The requirements contain mandatory rules and advice. The mandatory rules should be adhered to even on solo visits. Following the advice should make your own flying more enjoyable and also ensure that the enjoyment of others is not spoiled.

For clarity mandatory rules are in **BOLD CAPITAL LETTERS**. Please note that flying only is covered, not preparation.

These notes are **IN ADDITION TO THE CLUB RULES** and does not replace them. For example you have to have passed a noise test before even contemplating any flying.

GENERAL SAFETY POINTS

1. Potential Hazardous Situations With Full Size Aircraft

Our field is within the Gatwick Control Special Rules Zone (SRZ) which extends from ground level to 2500ft. During the course of 1990 six incidents involving model aircraft caused full size aircraft pilots to file air miss reports in terminal zones around UK airfields. A serious incident, reported widely in the national media, involved a DC10 on final approach to Gatwick in December 1990. The aircraft was approaching from the West at about 1500 feet when the pilot saw a model executing a wing over **ABOVE HIM ON HIS FLIGHT PATH**. Needless to say it was not a model flown from our field as ours is to the east of Gatwick.

A number of flights have been made from our Newchapel field with a small recording altimeter on board. Preliminary results suggest that normal operation is carried out below a height of 400 feet. During these tests a 1.8m span soarer was flown to 550 feet at which point it was difficult to determine the flight attitude and a 4m span scale glider to around 1000 feet with the same difficulty of orientation. **It should be noted that aircraft landing at Gatwick could be as low as 1200 feet as they pass abeam of our Newchapel field and also be directly overhead at that height if cutting the corner on a right hand approach.**

With the above comments in mind most models will be operated safely below any full size aircraft transiting to or from Gatwick. These should not pose any significant problems if models are flown with common sense. However large span soarers (9 feet or larger) could cause a potential air miss situation. **It is strongly recommended that these only be flown with a second person acting as observer**, this person will be able to advise the pilot of appropriate action to maintain visual separation.

To avoid any problems **ALWAYS** keep visual separation and fly away from any full size aircraft approaching the model operating area.

2. Operation of Models

All transmitters on 35Mhz to have a recognised **frequency pennant** displaying your operating frequency (i.e. channel number). 2.4 Ghz sets do not need to carry a pennant but can be recognised by their short aerials, there will be no frequency conflict on this band due to the nature of how the sets operate. If on 35Mhz **before switching on place your peg (with name and channel numbers) on the peg board.** All flying at Club sites to be on **ODD 35 MHZ FREQUENCIES, 27 MHZ SPOTS, 2.4 Ghz OR UHF.** Flying on non approved frequencies, that is for example on 40 Mhz or 72 MHZ is illegal and **NOT ALLOWED.** 35 Mhz equipment must have the appropriate CE marking and 2.4 Ghz equipment must be EU standard (United States sourced equipment has a higher radiated power than allowed in the EU so no "grey" imports to be used)

IF YOUR FREQUENCY IS CLEAR CHECK THE OPERATION OF YOUR RADIO GEAR, include a positive check of control surface movement in the correct direction particularly if you use one transmitter for several models. If you have a new model it is advisable to do a range check with the engine running at full power. To avoid disturbing others do this as far from the pilot areas as possible. With 2.4Ghz sets don't forget to operate the transmitter at reduced output when doing this check.

Start your engine on idle **WITH SOME FORM OF RESTRAINT PREVENTING THE MODEL FROM MOVING FORWARD.** Carry out all engine adjustments from **behind** the propeller. Do also ensure **THAT NO ONE IS STANDING DIRECTLY IN FRONT OR TO THE SIDE OF THE RUNNING ENGINE,** a prop blade can be shed or the model run forward. Starting should be done **ONLY IN THE PIT AREA.** Apart from a brief full power check top end engine **RUN UP SHOULD BE DONE ON THE WALKWAY** leading to the strip so as to ensure people in the pits area are aware of happenings around them. For example they will be able to hear any shouted warnings of an out of control aircraft.

With electric models always point your model away from the pit area when connecting your drive battery. Ensure you have a firm hold of the model or it is restrained by some physical means on the assembly table making sure you are fully clear of the prop arc. When the battery is connected always treat the prop as live assuming it could start at any time. If you place a "live" model on the ground ensure it is facing away from the pits with the nose pointing toward the strip and close to the long grass, it is all too easy to just nudge the throttle stick which will start the motor. When carrying out Tx adjustments have a helper firmly hold the model pointing away from the pits as a channel reverse can instantly give full power. When carrying your model in the pit area with the battery connected always point the nose toward the strip. Helicopter batteries should be connected at the take off point. The area between the pits and the hedge is people circulation space, no "live" models should be in this area.

Check the take off direction in use and **OPERATE IN THE SAME DIRECTION.**

Check with other pilots for models which are about to land **THESE HAVE PRIORITY.** If clear move onto the runway and take off (or hand launch); you can take off either standing behind your model or from the pilot box. **AIRCRAFT MUST TAKE OFF ONLY FROM THE STRIP AREA.** Before taking off ensure there is no one on the strip or on the runway side of the safety line. Once airborne, if not already in the pilot box, move to the pilot area standing as far away from the strip as possible. Helicopters **MUST NOT BE HOVER TAXIED AT ANY TIME** they must be carried to the strip for take off. Helicopters and fixed wing aircraft **SHOULD NOT BE FLOWN AT THE SAME TIME,** if both are at the same session agree between yourselves when each will fly. **Fixed wing to always have priority.**

Main circuit and landing circuit direction **TO BE AGREED BY THOSE PRESENT AND USED BY ALL.** Everyone must be able to fly right and left hand approaches to land as **IT IS NOT PERMITTED TO CROSS THE STRIP AND LAND YOUR MODEL, YOU MUST REMAIN ON THE SAME SIDE. ALL PILOTS TO STAND TOGETHER AT THE TOUCHDOWN END OF THE STRIP.** A pilot landing his model must **PLACE HIMSELF BETWEEN HIS MODEL AND OTHER PILOTS** by walking to the edge of the runway.

DO NOT FLY DIRECTLY OVER THE PITS OR PILOT AREA unless you are unable to avoid doing so due to some technical problem. You should shout a warning to alert others present if inadvertently flying toward the pits area.

WHEN READY TO LAND ADVISE OTHER PILOTS THAT YOU WISH TO MAKE A LANDING ATTEMPT. If your motor cuts at any time advise others that you are "dead stick" to obtain priority for landing.

After landing **CLEAR THE STRIP AS SOON AS YOU CAN** and announce that the strip is **clear**.

NO NEW MEMBER CAN FLY SOLO UNTIL THEY HAVE PASSED THE BMFA A TEST AND BEEN CLEARED BY THE COMMITTEE. Trainees under instructor supervision may be allowed to fly without the instructor present in the pilot box but the Instructor must remain on site and supervise. This exemption has to be renewed at every session.

ONLY 3 AIRCRAFT ARE ALLOWED TO FLY AT THE SAME TIME, unless one is soarer when a total of 4 are allowed.

MODELS EXCEEDING 7KG IN WEIGHT MUST NOT BE OPERATED NOR ANY GAS TURBINE POWERED MODELS.

3. Flying Alone

Should you be considering a Solo trip to the flying field you should first consider what might happen if you are unfortunate enough to suffer personal injury from your model! The nearest help is more than 300 metres away assuming you are well enough to flag down a car. You are strongly advised (but it is only advice) to be accompanied by a third party, not necessarily a model flyer who would be able to help with first aid for minor injuries or help in summoning aid if required. A mobile 'phone is no substitute; in a state of shock (with perhaps some badly cut fingers) the 'phone may be difficult to use!!!!!!!

4. Mobile telephones

Mobile telephones have been found to interact with synthesised RC equipment and have the possibility to affect other RC equipment. **No mobile telephones should be taken to or used on the flight line** and ideally should be left in your car or the pits area.

5. Vertical flight

As in fixed wing flying at the Club the intention is to promote a consistent and safe flying standard for solo flight and pilots should be aiming towards their "A" test in helicopters or Multi Rotor flight. However given the mix of different sizes and the fact that indoor models can be flown outdoors the following **mandatory** requirements should be followed:

a. Only electric powered Rotorcraft will be allowed.

b, Pilots of helicopters (single main rotor shaft with single blade disc) without a Helicopter "A" certificate must fly under the supervision of a Helicopter Instructor. As long as the pilot has a F/W "A" and is flying a model deemed by a member of the Committee as an indoor Helicopter in respect of cell count and weight then they may fly solo. If you are not sure if your model complies then ask first.

c, Pilots of Multi Rotor Craft (Drones, Quads, VTOL) that hold at least a F/W "A" certificate can fly Multi Rotor craft, with the **exception of Quadcopters***, solo but will be required to progress to the BPC(MR) as a minimum in due course. Quadcopter pilots who do not possess a helicopter or BPC(MR) "A" certificate must be under the direct supervision of a Helicopter instructor until this qualification is achieved. If the helicopter instructor and a Committee member agree, this supervision does not need to be in the pilot box providing the instructor is present at the field to ensure safe operation. *If in doubt about your craft seek a Committee view

6. First Person View (FPV)

FPV flight is allowed subject to the following **additional** conditions to accord with Civil Aviation Authority (CAA) legislation:

All flying to be undertaken with a Master/secondary Tx system. The master to be used by the person in charge of the flight. This person must maintain **unaided visual contact** with the Small Unmanned Aircraft (SUA) and be in control of the switch to, and from, the pilot flying the model by way of the camera image transmitted from the SUA.

7. Personal safety

Take care when using Club provided equipment to ensure it is sound **and you feel capable to use it** safely. Some equipment needs extra care when used as follows:

Ladder – Only use the ladder with 2 or more people and ensure the base is held firm, ensure the top is supported properly and can't slip, don't over reach as this unbalances the ladder. If in doubt about your ability to retrieve your model contact our tree surgeon to get it back.

Inflatable dinghy – only use this if 2 or more people are present, use the buoyancy aid and ensure the bow rope is firmly held by another person on the bank. It may be better to wait for the model to drift ashore.



Always ensure the **GATE TO THE ROAD IS CLOSED** when you have come in or gone out. **ALWAYS RELOCK THE GATE AND "SCRAMBLE" THE COMBINATION** The padlock combination will be changed a number of times during the year and notified in the newsletter

Cars should be parked as indicated on the map at figure 3, if you feel that the ground is too wet do not even try to drive across but park on the area marked on the map, this has hard standing and matting under the grass. If you do not wish to drive into the field **DO NOT PARK IN THE GATEWAY**, unload by all means but park in the lay-by 300 yards to the south on the A22. **DO NOT REVERSE OUT ONTO THE A22, IT IS VERY DANGEROUS**

When driving out onto the A22, be VERY careful, the cars can be travelling fast (despite the 50mph limit) and are difficult to see until the last moment, give a brief "toot" on the horn as you pull out to alert drivers. It is safest to turn right as you can check if there is traffic to the left as the sight line is good, if clear, check right and move smartly across and turn right; this exposes you to minimum risk.

The map at figure 3 gives the areas to fly in and also those NOT TO FLY IN. No I/C flying before 10am or electric before 9am. It is important to observe these restrictions so we can live in harmony with our neighbours. the majority of flying should be to the east and south.

SAFETY PRINCIPLES FOR FLYING

MODELS AND EQUIPMENT ARE TO BE LOCATED IN THE PIT AREA, see the diagram at figure 4. Be alert for shouts from the pilot box for any models heading for the pits area.

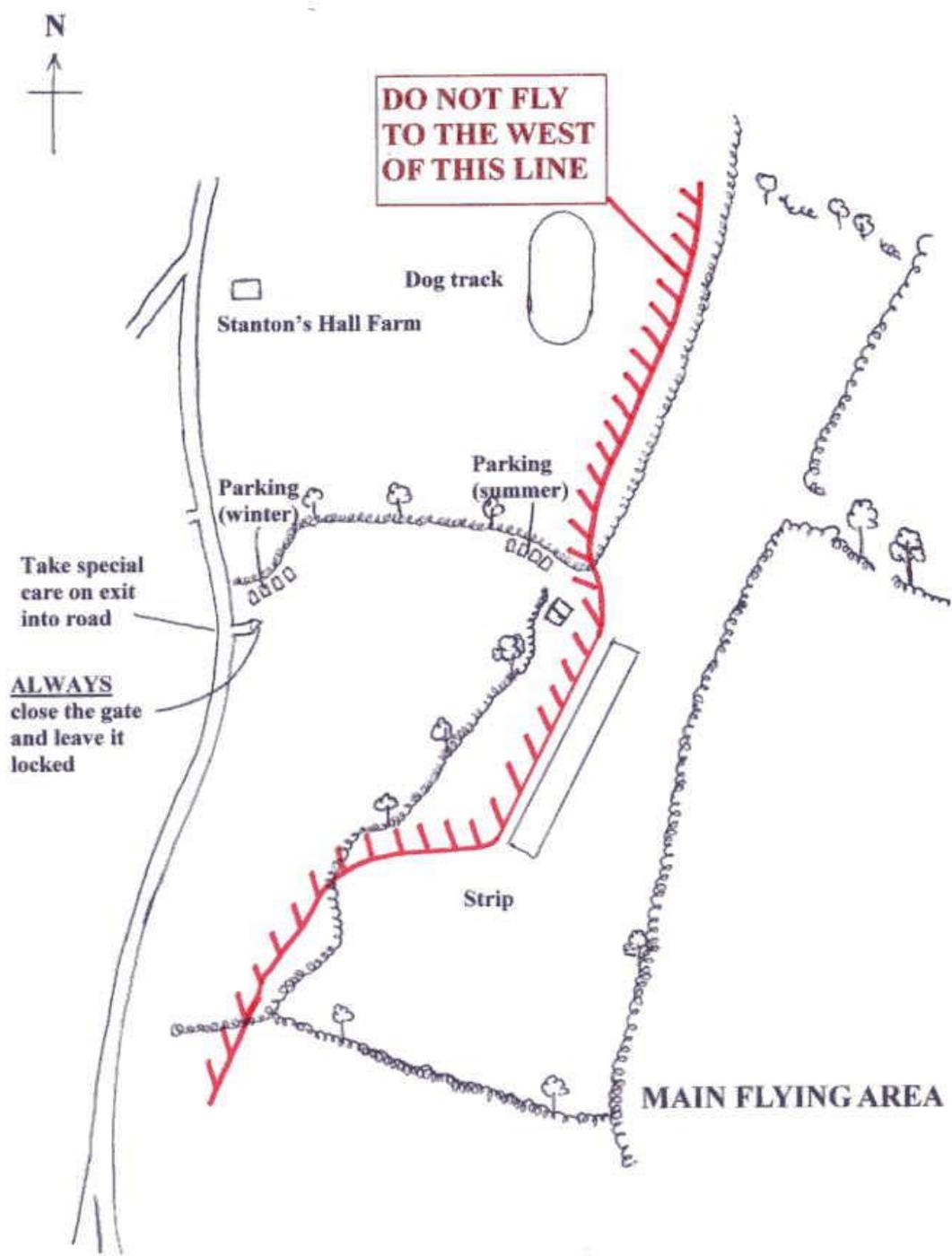
The take off area has a safety line with a low barrier, **ONLY THOSE ACTUALLY FLYING**, or directly helping, are allowed on the runway side of the safety line.

When wishing to take off you should walk with your model along the safety line, **THROUGH THE PILOT AREA TO ASK IF IT IS OK FOR YOU TO TAKE OFF**. Once the OK has been given take off or hand launch from the strip always assuming there is no one on the strip (see General section).

Once you have landed you can taxi back **ONLY TO THE SAFETY LINE KEEPING YOURSELF BETWEEN MODEL AND OTHER PILOTS. DO NOT TAXI BACK TO THE PITS.**

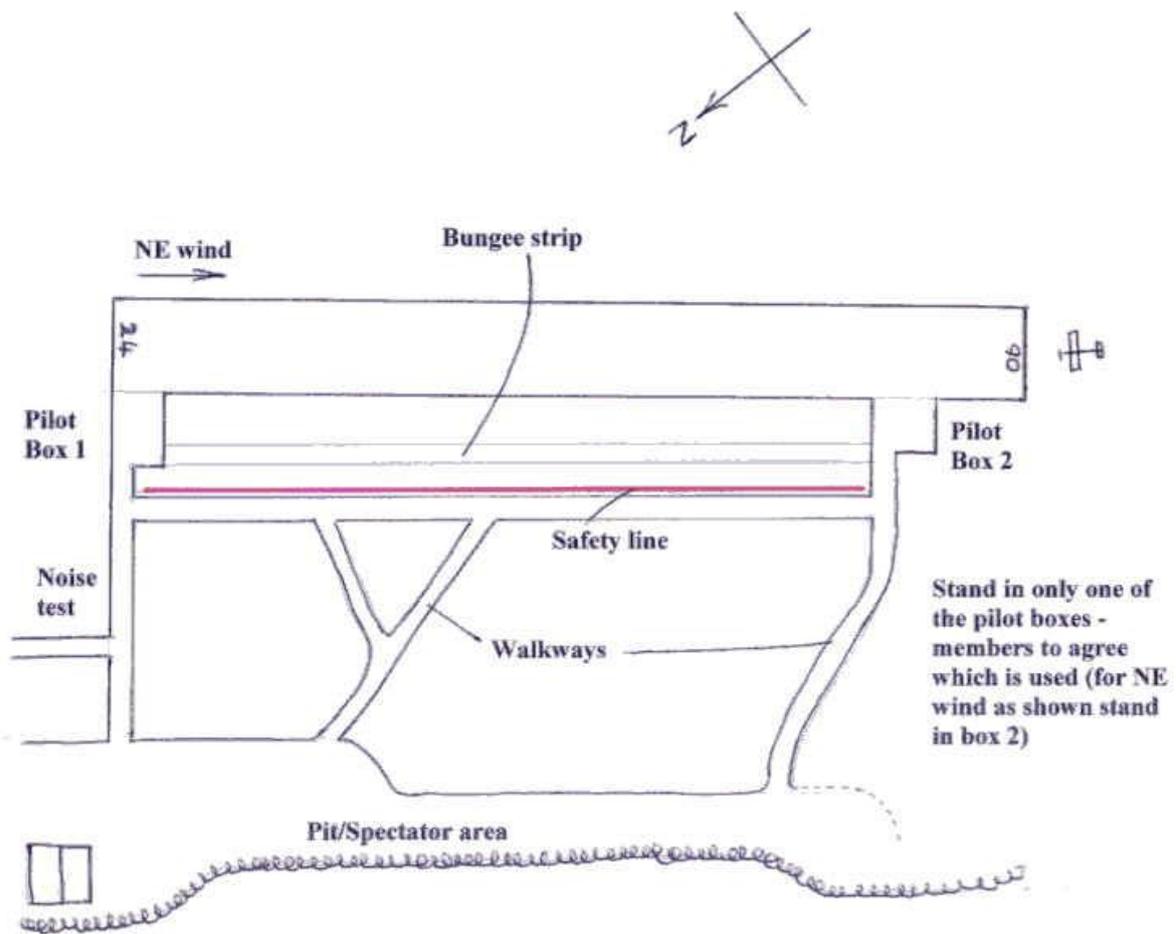
Once you are back in the pit area turn off your Rx and Tx.

Winch or bungee launch models can be operated from this site with care. **OTHER FLYING SHOULD BE SUSPENDED WHILST LAUNCHING IS IN PROGRESS** to avoid problems with tow lines. See also the general guidance concerning Gatwick control zone..



NEWCHAPEL SITE

FIG 3



FIELD OPERATIONS (NEWCHAPEL)

FIG 4