

Training Notes

Objective: To learn to fly safely and achieve solo flight and with the aim to obtain BMFA 'A' certificate. The flying elements involve being able to: Take off, land, complete a dead stick landing, rectangular circuits in both directions, figure of eight.

1. Legal requirements –Flying
 - a. As a BMFA affiliated club we fly under Article 16 which confers certain advantages and relaxation of limitations. For models less than 7.5kg (those likely to be flown at our club) we can fly up to 1500 ft with fixed wing aircraft. Multirotor models are still limited to 400ft. Article 16 should be read and understood. (The completion of the BMFA Registration.Competency Certificate (RCC) or the CAA DMARES test supports this)
 - b. If flying on sites other than those affiliated to BMFA (or others with Article 16 dispensation) then ALL models are limited to 400ft and you should study the legal requirements for flying in the Open Category and read CAP722
 - c. Essentially, for all flights wherever undertaken,
 - i. A person should never fly in a manner likely to endanger an aircraft or any person in an aircraft or cause or permit an aircraft to endanger any person or property
 - ii. The person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made
 - iii. The aircraft (>250g) must not fly within 30 metres of any person and models over 7.5kg this is increased to 50m (except at takeoff / landing when this can be reduced to 30m, or 15m where a risk assessment has been made)
2. Legal requirements - Documentation
 - a. Operator ID – All models **MUST** display an Operator ID on every model you own and fly. Annual fee, currently £11.79 (Jan, 2026). Must be placed on planes where it can easily be viewed without use of special tools and be in block capitals >= 3mm high. Can only be held by adults (>18) and are responsible for who flies model. Obtained from CAA or through BMFA
 - b. Flyer ID – **MUST** be held before flying. Can be obtained by taking either CAA DMARES test or the [BMFA RCC](https://rcc.bmfa.uk/rcc) .(both online tests) <https://rcc.bmfa.uk/rcc> . The BMFA route is recommended as it confers advantages to the individual when taking the 'A' certificate

Note: If the model <250g and doesn't have a camera fitted then some of these regulations are relaxed. Visit the CAA web site for more details
3. [BMFA handbook](http://handbook.bmfa.org/external-pdf) <http://handbook.bmfa.org/external-pdf>
4. [BMFA "A flying Start"](http://www.bmfa.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=1106&language=en-GB&PortalId=0&TabId=220)
http://www.bmfa.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=1106&language=en-GB&PortalId=0&TabId=220
5. Club Safety Rules, particularly
 - a. No Fly zones
 - b. NEVER fly over the pits
 - c. Don't fly above or behind yourself
 - d. Communication with other pilots
6. [BMFA test questions](https://achievements.bmfa.uk/mandatory-questions) <https://achievements.bmfa.uk/mandatory-questions>
7. Understand your Tx:
 - a. Pitch, Yaw, roll, throttle
 - b. Dual Rates + Expo

- c. Timers
 - d. Throttle cut – setting, purpose and ergonomics
 - e. Call outs
 - f. Telemetry
 - g. Range check – importance and method
 - h. Failsafe – setting and purpose
8. Radio equipment setup (Spektrum orientated)
- a. Registration
 - b. Airware + voice updates
 - c. Tx configuration
 - d. Rx aerial positioning
 - e. Wireless Buddy box set up
9. Methods of powering the Rx - strengths and weaknesses
- a. Receiver battery
 - b. BECs in ESCs
 - c. Linear and switching BECs - differences
10. Range check
- a. How to perform and purpose (including ensuring that Tx is in low power mode)
11. Failsafe
- a. Understand the legal requirements for use
 - b. Understand purpose, how to set and test
 - c. How to confirm operational
12. C of G – Check this is within the specified range (Start at the front end of the range)
13. Safety
- a. Always treat electric planes with flight batteries connected as potentially dangerous
 - b. Danger of prop. Keep fingers and loose items away. Stay out of prop plane (including adjacent pilots) and in front
 - c. Tethering
 - d. Position in pits for starting
 - e. No Taxiing in pits
 - f. 35MHz or 2.4GHz? Is pegboard required?
14. Pre flight checks (Separate list available)
- a. Transport damage
 - b. Hinge security
 - c. Undercarriage secure and tracking correctly. Wheels rotate freely
 - d. Engine / motor secure. Secure Prop, undamaged and clean
 - e. Wings secure
 - f. Servo and linkages secure
 - g. Receiver battery charged
 - h. Flight battery charged or model fuelled
 - i. C of G
 - j. Correct plane selected on Tx
 - k. Correct surface movements
 - l. Tx battery volts OK, correct rates selected
 - m. Tx on before Rx
 - n. Failsafe working correctly
 - o. SWEETS (Sun, Wind, Eventualities, Emergencies, Transmitter control, Site rules)

- p. SMART (Switch on, Model correctly selected, meter in green(voltage OK), Aerial correctly orientated, Rates correct, Trims correct)
- q. Starting: Correctly positioned, Tethered, Prop plane clear

15. Dangers

- a. Site specific
- b. Footpaths/public
- c. Animals
- d. Large trees & hedges
- e. Fence posts
- f. Turbulance
- g. Sun - Sunglasses, peaked cap

16. Tx management when taking plane to runway/collecting from runway

17. Pilot positioning and stance

18. Maximum number of planes in air at once – Site rule

19. Communication with fellow pilots

- a. Request to access runway
- b. Request to take off
- c. Deadstick
- d. Low pass
- e. Reverse circuit
- f. Figure 8
- g. Aerobatic manoeuvres
- h. Anything out of the ordinary, especially mindful of types of other planes flying and those flying them
- i. Landing
- j. Permission to collect from strip
- k. Confirm clear of strip having retrieved plane

20. What to do with Tx while taking plane to runway/collecting from runway

- a. Why are these different for 3MHz and 2.4GHz

21. Priorities

- a. Deadstick – highest
- b. Landing –next highest
- c. Take off – lowest

22. Flying

- a. Circuits
- b. Figure 8
- c. Taxi
- d. Take off
- e. Landing
- f. Dead stick
- g. (Loop – for fun!)

23. Post flight checks (See separate sheet for greater detail)

- a. Disconnect/remove flight battery
- b. Rx off before Tx
- c. Clean aircraft down

- d. Clear frequency (35MHz)
- e. Check for damage – post flight checks

24. Provide feedback to the trainee and ask trainee if they have any questions