

APPI PPG

LECTURE 6: FURTHER AIR LAW (UK)



Introduction

The Further Air Law lecture covers in more detail Air Law that FLM pilots have to adhere to in the UK. It is very important that you have a good understanding of the rules and regulations that govern the sport, therefore please record the following information as you will not be able to retain all of it.

Airspace and Airmaps

- It is very important that you understand which airspace you can and cannot fly in. In order to do this we need to understand how to use an Airmap.
- Is a legal responsibility for all Pilots to carry an up to date Airmap when flying. Airmaps are available from the CAA and come in 2 main formats; a 1:500,000 Airmap shows all airspace up to FL245 (24,500ft) of a particular Flight Information Region, for example the London FIR. It is the equivalent of 8 miles to 1 inch. A 1:250,000 Airmap does not show airspace over 5,500ft and covers a localised area. It is the equivalent of 4 miles to 1 inch.

Typical Airspace Divisions (See an Airmap)

- Altitude is the vertical measurement of a point above the average sea level and is know as AMSL – Above Mean Sea Level.
- A Flight Level is measured according to a constant atmospheric pressure reading; 1013.2mb.
- FL180 is a Flight Level of 18,000ft. They can fluctuate due to the daily change of pressure, which decreases with height at a rate of 1 mb every 30ft.
- There are two distinct categories of airspace; controlled and uncontrolled. Within these two categories are various ‘classes’ of airspace as allocated by the International Civil Aviation Organisation (ICAO). Within these classes are defined zones.
- Airways are Class A except those that pass through a Terminal Manoeuvring Area (TMA), Control Area (CTA) and Control Zone (CTR). They are corridors of airspace used by Airlines and other Instrument Flight Rules (IFR) air traffic. They extend from one Flight Level to another Flight Level and have an identification code.

- A Control Area (CTA) extends from a base altitude to a Flight Level and is run by Air Traffic Control. The busy ones are class A and the less busy ones are Class D. Cotswold, Daventry and Worthing CTA's are very busy and classified as Class A.
- A Control Zone (CTR) extends from Ground Level to a specified upper limit and is also run by Air Traffic Control. A CTR is controlled airspace found around large aerodromes. The busy ones are class A and the less busy ones are Class D.
- Air Traffic Zones (ATZ) are found around runways and extend from the ground level to 2,000ft and have a maximum radius of no more than 2.5 nautical miles from the centre point of a runway.
- Terminal Manoeuvring Areas (TMA) are control areas in the vicinity of one or more major aerodromes where air traffic overlaps.
- Areas of Intense Aerial Activity (AIAA) are areas of intense Military Aerial activity. They can extend from the ground to 2,000ft but most commonly are between 2,500ft and 5,000ft.
- A Military Air Traffic Zone (MATZ) is a zone surrounding Military Aerodromes. They extend from the surface up to 3,000ft above ground level (agl) with a radius of 5nm. It also contains a standard ATZ.
- The MATZ also has a Stub in line with the longest runway which is 5nm long, 4nm wide and between 1,000ft and 3,000ft above aerodrome level (aal).
- High Intensity Radio Transmission Areas (HIRTA) are areas which may lead to radio interference during flight and should be avoided.
- Mandatory Radio Reporting Areas (MRRRA) are areas where aircraft must be under radio communication with Air Traffic Control.
- Temporary Controlled Airspace, previously known as Purple Airspace, are granted to Royal and Political Flights. During the flight and for half an hour afterwards the airspace is temporarily classified as class A. This information is found through NOTAMS. It is our duty to check NOTAMS before each flight.
- In controlled airspace Air Traffic Control is provided to all flights and Paramotors are strictly forbidden to enter them.
- Uncontrolled airspace includes advisory routes and Open FIR (Flight Information Region). Advisory routes are allocated class F and depicted as centrelines on a 1:500,000 air map by blue dashed lines.
- Open FIR is allocated as Class G airspace and covers over 50% of all UK airspace. A Flight Information Service (FIS) is available to Pilots in Class G.
- Paramotor pilots can only fly in Classes F and G and have to adhere to Visual Meteorological Conditions (VMC) and Visual Flight Rules (VFR) as described in the previous Basic Air Law lecture.
- A Prohibited area is airspace in which flight is prohibited. It is defined on an Airmap as a red shaded area with the letter P. For example; P611/2.2 means that flight is prohibited from the surface up to 2,200ft.
- A Danger area is airspace in which flight is dangerous and should be avoided. It is defined on an Airmap as a red shaded area with the letter D. For example; D044/3.2. Certain Danger areas are sometimes known as Weapon Range Danger Areas (WRDA).

Further Air Law Information

- Due to fluctuating air pressure there are 3 Altimeter settings; the standard pressure setting of 1013.2mb, QNH which is Nautical Height or the Aerodromo's height above sea level and QFE, Field Elevation or the height above the airfield.
- When Paramotoring we use a Variometer which has two altimeter settings, one for QFE and the other for QNH. Remember that the Variometer can read certain errors due to fluctuating pressure. It is therefore important to keep a good look out and not to completely rely upon your Variometer.
- If you take off from the same location more than 28 times a year then legally you must apply for planning permission.
- An FLM should not fly near Hang Gliding or Paragliding sites unless invited.
- An FLM should not fly in close proximity to Livestock areas and Bird sanctuaries.
- Always obtain permission from the land owner before flying.
- If there spectators make sure that they are correctly marshalled and that any animals are kept secure and under control.
- Remember not to fly any closer than 500ft to any person, vessel, structure, or object.
- Pilots should report any accidents or incidents to the CAA and to APPI PPG.
- Remember that a Paramotor creates a potential Noise Hazard so be sure not to fly in areas where complaints are likely.
- CAA approved Airband Radios are only legal if you hold the appropriate RT operator's license and radio station license. Within certain frequencies pilots may use a licensed radio without an operator's license provided it is not possible to change the frequency.
- The minimum age limit for an FLM Pilot in the UK is 16.
- Remember to check NOTAMS or the AIS website before each flight!

Conclusion

- In order to fly safely and legally you need to have a good understanding of the information you have just been given. It is now down to you to make sure that you clearly understand where you can and can not fly; particularly in your local area. If FLM pilots continuously break the rules that govern the sport then it will become more regulated and eventually banned. Remember, you are an ambassador for our sport and should therefore act in a responsible manner!

ANY QUESTIONS?

END OF LECTURE 6