



FIRST PERSON R/C

What is first person R/C?

First person R/C is a relatively new aspect of model flying activity. It is a system whereby a radio control model aircraft is piloted, not through direct line of sight, but by using a live video downlink from an onboard camera allowing the pilot to experience a “cockpit view” and to control the aircraft from the visual perspective of an on board camera.

The latest generation of lightweight camera equipment combined with developments in data transmission have enabled this type of flying to be carried out cost effectively and with small lightweight airframes.

Equipment is now becoming commercially available which allows the onboard camera to be gimbal mounted and driven by servo motors which are in turn linked to a gyro controlled headset worn by the operator. This allows the pilot to point the camera mounted on the aircraft in almost any direction by moving his head.

Safety concerns

The equipment described potentially presents the pilot with opportunity to fly the aircraft out of normal unaided visual range by utilising the “cockpit view”.

Where an aircraft is being flown either using a headset or a monitor screen there is cause for concern in any emergency situation, either due to pilot error (disorientation, or unsure of position) or systems failure (loss of data link), as the pilot may not be able to re-acquire the aircraft visually with sufficient speed to prevent a crash.

This problem may be compounded due to lack of spatial and positional awareness as well as lack of information on other external factors (such as the location of other model aircraft and persons).

Control measures

A mechanism to address the above concerns is already in place within radio control flying. This is the Buddy Box system which is regularly employed to train ab-initio pilots in radio control flying.

This is a system of electronically linking two transmitters in a master and slave configuration, whereby a switch on the master provides the facility to instantly transfer control of the aircraft to either transmitter.

After Consultations with the Civil Aviation Authority and our insurers, BMFA is happy to confirm that First Person R/C will be a legal and recognised aspect of model flying and as such covered by the BMFA Insurance policy but ONLY where the following conditions are applied:

- The activity is solely for 'sport and recreation' purposes.
- Two pilots must take part
- A buddy Box system must be employed
- The pilot in charge must operate the master transmitter
- The pilot in charge must not wear the headset or view a screen
- The aircraft remains within the natural unaided visual range of the pilot in charge
- Reliable operation of the Buddy Box is established
- A clear handover protocol is established
- The pilot in charge is solely responsible for the safety of the flight

These operating conditions very clearly place the legal responsibility for the safety of the flight on the pilot in charge.

Only by compliance with the above procedures can First Person RC take place as a lawful and insurable aspect of model flying activity.

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