

FREQUENTLY ASKED QUESTIONS

Model Aircraft Radio Control Operations Utilizing FIRST PERSON VIEW, STABILIZATION, AND AUTOPILOT SYSTEMS

- 1. I thought it was AMA's policy to stay clear of Drone type flying using programmed flight control systems?**

There are distinct differences between R/C FPV autopilot equipped model aircraft flying and Drone flying. Drone flights are mission-oriented, flown beyond VLOS, and computer controlled for nearly their entire flight. AMA members fly R/C FPV autopilot equipped model aircraft as a recreational visual/video experience. The AMA FPV pilot is required to fly within VLOS and manually controls the aircraft via R/C for nearly the entire flight.

- 2. Why has AMA chosen to limit FPV flying to VLOS when it is not currently required in the law?**

Section 4-a of AMA document 550 and 560 states that one of the requirements in Federal Law (Public Law 112-95 Sec 336 (c) (2) February 14, 2012) for model aircraft to be excluded from FAA regulations is that model aircraft be flown within VLOS of the operator. The AMA has chosen the exclusionary path to protect and advocate for the interest of its members rather than be subject to potentially onerous governmental regulations.

- 3. Will AMA pilots flying FPV beyond VLOS be covered by AMA liability insurance?**

Coverage under the policy will be determined by the specific facts and details relating to the claim. As intentionally flying FPV aircraft beyond VLOS of the operator violates AMA Safety Code and documents 550 and 560, the AMA pilot should not rely on AMA insurance for coverage.

- 4. Why were weight and speed limits set at 15lbs and 70mph for FPV flying or when using an autopilot for waypoint flying?**

FPV aircraft speed limits were set lower than other R/C model aircraft to allow for easier visual tracking of model aircraft by the FPV Spotter and to provide extra time for the FPV Pilot to handover a transmitter to the FPV Spotter in the event of an approaching aircraft or incident. Model aircraft weight while flying FPV and/or the use of autopilot systems for waypoint flying was limited to 15lbs to reduce the potential or perception that someone could use these types of aircraft to carry a destructive payload beyond VLOS. Flying model aircraft while using stabilization and/or failsafe systems and/or activating an autopilot system for return to launch does not limit the aircraft to a weight of 15lbs.

- 5. Why did the AMA decide to eliminate the buddy-box requirement for FPV flying?**

The FPV Pilot is often more experienced and able to maneuver his FPV aircraft out of problem status with verbal cues from the FPV Spotter rather than having the FPV Spotter take over control using a buddy-box. The FPV Pilot will know when the video link is lost before the FPV Spotter and will hand over the transmitter to the FPV Spotter. The cost and availability of compatible and programmable

radio transmitters for use as a buddy-box for complex FPV aircraft systems may also preclude the use of a buddy-box. It is also possible that some of the more complex systems might require the buddy box port for flight/camera operations.

6. Does the FPV Spotter need to be an experienced FPV Pilot?

The FPV Spotter is required to be an experienced R/C Pilot but doesn't need to be an experienced FPV Pilot since he will only be required to fly the FPV Aircraft by conventional VLOS in the event of an incident.

7. When will an FPV Novice Pilot assume FPV Pilot status?

When an FPV Novice Pilot is able to consistently maintain control of stability and orientation while flying an FPV aircraft, without losing control or having a collision, he/she may assume FPV Pilot status. The buddy-box is no longer required for FPV Pilots.

8. Will my AMA club have to allow FPV flying at the club's AMA chartered club field?

Each AMA club and/or site owner or property manager decides what can or cannot be flown at a particular flying site.

9. I have heard that FPV flying and the use of complex autopilot systems will create a much greater risk of accidents occurring at my club's flying site. If this is true, shouldn't the AMA exclude FPV and Autopilot flying at all AMA chartered flying sites?

Educating members so they understand the basics of these systems and AMA's requirements for use and implementation should alleviate these erroneous assumptions. The fact is FPV flying and the use of Stabilization and Autopilot systems in model aircraft have the capability to reduce the risk and severity of model aircraft accidents.

10. Was there any consideration given to having a proficiency system for FPV Pilots similar to what jet pilots have to undergo?

When necessary, as with high energy and high risk turbine powered aircraft, pilot testing was implemented into our safety programming to mitigate the risks involved. The committee felt that requiring a Spotter for FPV and providing a transmitter hand-over protocol for FPV Pilots and a buddy-box for novice pilots, would ensure AMA Safety Standards were maintained.

11. Who qualifies AMA FPV Pilots?

Except for AMA members piloting turbine powered model aircraft, the AMA doesn't require pilot proficiency testing. Individual AMA Clubs may establish their own pilot testing requirements for their members which may require the members to demonstrate and be judged on their flying proficiency. The AMA does expect members to use their good judgment to decide for themselves whether or not they can fly a model aircraft safely. With regard to FPV flying this would be when the AMA FPV Novice Pilot was satisfied that he/she was capable of maintaining control of stability and orientation of FPV model aircraft when flown FPV without losing control or having a collision. The FPV novice pilot would now have AMA FPV Pilot status.

12. Will elimination of the buddy-box requirement and hand-over control to the FPV Spotter create a greater risk of accidents?

We discovered in our observations that FPV flying for the most part took place at either higher altitudes or lower “near ground” altitudes than typical model aircraft flying. Hand-over transferring of the transmitter from the FPV Pilot to the Spotter provided sufficient time for recovery at the higher altitudes. Transference via the buddy-box for an out of control FPV aircraft at the lower altitudes didn’t provide a better chance of preventing a crash than handing over control to the spotter. Both methods proved inadequate at these near ground or lower altitudes.

13. Are AMA members covered by AMA insurance when their model aircraft’s FPV flight goes beyond the AMA chartered club’s flying site boundaries?

AMA insurance liability protection is not limited to AMA chartered club flying sites or the flight boundaries of the site. It applies to accidents arising from AMA member modeling activities of model aircraft conducted in accordance with AMA’s National Safety Code. As long as AMA pilots don’t fly at locations where model airplane flying is prohibited and avoid flying directly over unprotected people, vessels, vehicles or structures and avoid endangering life or property, AMA insurance coverage will be extended. This coverage also extends to an accidental model aircraft fly-away beyond the permitted flying site that may cause bodily injury or property damage at any location where the crash occurs.

14. Can FPV model aircraft be flown by AMA members at altitudes above 400’ and is there any chance that we might someday be able to fly beyond VLOS?

In 1981 FAA Advisory Circular AC 91-57 advised that model aircraft not exceed altitudes of 400ft. At this time there is no FAA regulation/rule preventing model aircraft from flying above 400’ AGL. For the past 32 years the AMA applied this FAA advisory only within 3 miles of an airport in the AMA National Safety Code. The AMA will continue to use all its resources to prevent the FAA from making 400’ a regulation/rule for all locations of model aircraft flying. Public Law 112-95 Sec 336 requires model aircraft be flown within VLOS. As you might expect this is acceptable by the majority of AMA members but limiting to FPV activity. We are looking into alternative methods to support FPV activity beyond VLOS as new FPV technology (perhaps sense and avoid) becomes available and risks assessed and mitigated to a safe and acceptable level to perhaps someday fly beyond VLOS.

15. Why were privacy protection requirements included in the revised documents?

*These safeguards were included to provide 4th Amendment rights to privacy protection for individuals and their property from model aircraft equipped with imaging technology **when used for surveillance**. One of the provisions in Federal Law 112-95 Sec 336-2 for model aircraft to be excluded from FAA regulations requires model aircraft are operated within the programming of a nationwide community-based organization (CBO) that has been accepted/approved for CBO status by the FAA. The AMA has chosen this path in order to operate under its accepted Safety Code and Operational Requirements including Privacy Protection Safeguards rather than be subject to potentially onerous governmental regulations with respect to Privacy Protection for those operating model aircraft outside of the CBO default path. We also had a responsibility to provide operational standards that are acceptable and compliant within our insurance programming, requiring members to operate their model aircraft*

without violating existing laws which could include first and fourth amendment rights of citizens to privacy protection in cases where a suit is filed for invasion of privacy as a result of unauthorized aerial surveillance.

16. Does the AMA Privacy Protection Statement essential outlaw aerial photography and videoing?

The AFS committee views the updated AMA Privacy Protection Statement as not at all outlawing aerial photographing or videoing. We believe it's better for us to have written our own Privacy Protection Safeguard then leave it unattended; waiting for what very well may be onerous government privacy regulation. In the US anyone may take photos/videos in public places except when a legal statute or ordinance exist and when individuals are in places where they have a reasonable expectation of privacy such as restrooms, dressing rooms, medical facilities and inside their homes. Property owners may legally prohibit video/photography on their premises but have no right to prohibit others from videoing/photographing their property from other locations (which may include from airspace near their property or 400' above their property without the use of telephoto lenses while not flying directly over people or structures). In most locations you may reasonably assume that taking video/photographs is allowed and that you do not need explicit permission. However, this is a judgment call and you should request permission when the circumstances suggest that the owner is likely to object. Taking aerial photos/videos that include a person's house and property may be fine but doing so in the fenced in pool area when someone is skinny dipping would not be permissible.