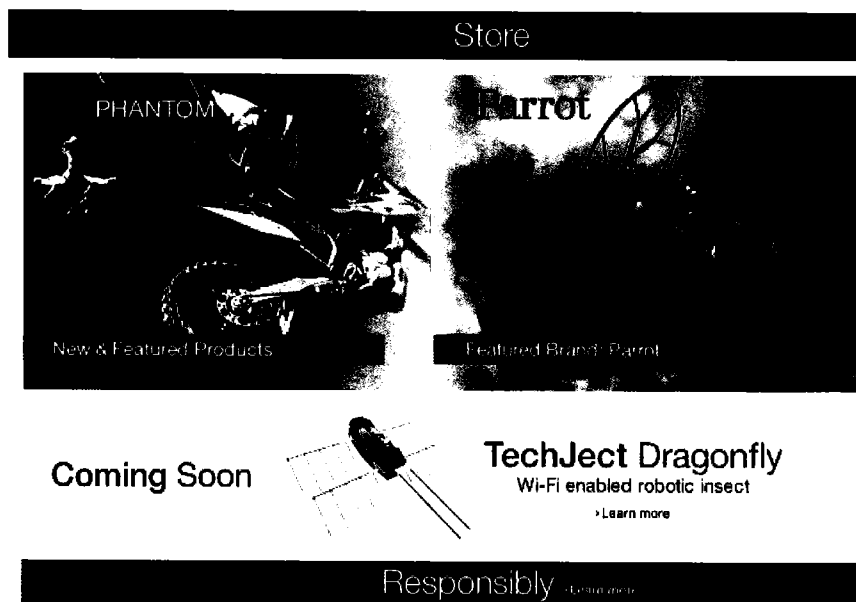
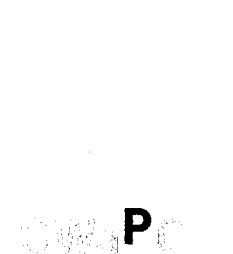


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## Amazon.com Unveils 'Drone Store'

Amazon isn't just interested in making its own drones to deliver items — now the company has opened up an online storefront for people interested in buying UAVs, too. Amazon has unveiled the "Drone Store," which features a handful of robotic vehicles and related accessories available to purchase. There's also "Buying Guide" page and a "Fly Responsibly" section that includes links to the Association for Unmanned Vehicle Systems International and the Academy of Model Aeronautics.

Amazon announced its foray into drone delivery, named Prime Air, late last year. The company has recently petitioned the U.S. Federal Aviation Administration to allow it to test its package-delivering robots at an airfield near Seattle, and said it's testing its 8th and 9th generation of aircraft.

Source: Geek Store



Posted in Business News, Non-Military & Commercial UAS on September 10, 2014 by The Editor.  
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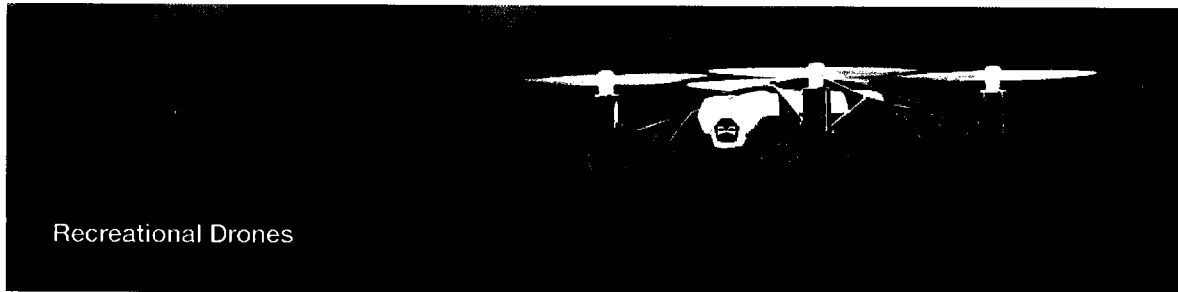
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## Fly Responsibly

Before you take off, learn how to fly responsibly.

Operators can learn more from two of the world's largest model aviation and unmanned systems organizations: the Academy of Model Aeronautics and the Association for Unmanned Vehicle Systems International.



Read the Academy of Model Aeronautics National Model Aircraft Safety Code [Learn more](#)



Visit the Association for Unmanned Vehicle Systems International web page with information on responsible flying [Learn more](#)

To learn more about operating UAVs in the United States, visit the Federal Aviation Administration's UAS website, including frequently asked questions. Remember that rules vary by location. Amazon provides these links for informational purposes only [Learn more](#)

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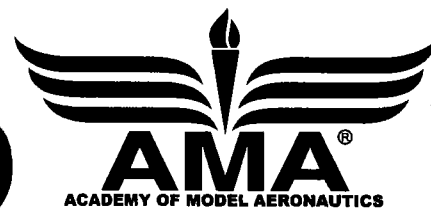


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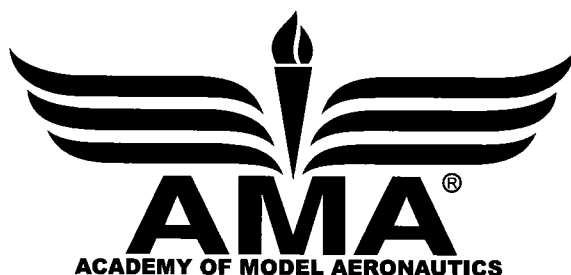
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## sUAS Flight Safety Guide

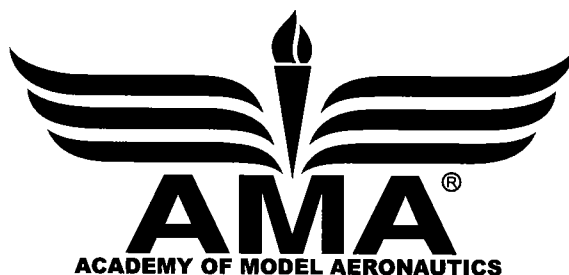
Guidance for safe,  
responsible flying

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## Foreward

If this is your first purchase of a recreational small Unmanned Aircraft System (drone) or the first time you've ventured into the world of model aviation, welcome! Welcome to the stimulating and enjoyable world of model aviation and a community of thousands of aeromodeling enthusiasts who for more than 100 years have enjoyed the fascination and allure of virtual flight through model aircraft.

Model aircraft have operated in the National Airspace System (NAS) for decades and have done so safely and responsibly. The aeromodeling activity conducted within the safety guidelines of the Academy of Model Aeronautics has achieved an excellent safety record, a record that surpasses most other forms of aviation. The success of this community was recently recognized by Congress in the FAA Modernization and Reform Act of 2012 with the addition of the Special Rule for Model Aircraft, now Public Law 112-95, Sec. 336.

The establishment of this Special Rule reflects Congress' recognition of community-based programming as an effective and sensible means of managing the recreational small unmanned aircraft activity, and it was Congress' intent to protect this community from onerous and unnecessary federal regulation.

The key to the success of the community and the longevity of the aeromodeling activity is the individual commitment to operating their aircraft in a safe and responsible manner and in accordance with a community-based set of standards.

sUAS are defined as being less than 55 pounds; however, the majority of the platforms in use today are less than 20 pounds, and most are less than 10 pounds. This safety guide is intended to help the sUAS operator to fly his or her aircraft in a safe and responsible manner.

Flying sUAS in a safe and responsible manner certainly means doing so in way that does not endanger persons or property. But, it also means operating your device in a manner that is respectful of community standards, the concerns of others, property and privacy rights, and flying in a community friendly manner. As a general rule:

- Don't operate on or fly over private property without first obtaining permission from the property owner and/or the property tenant.
- Don't fly where the operation of radio control aircraft is prohibited.
- Don't fly near open assemblies of people without first obtaining permission or otherwise making prior arrangements to do so.
- Don't fly near or over sensitive infrastructure or property such as power stations, water treatment facilities, correctional facilities, heavily traveled roadways, government facilities, etc. without making prior arrangements to do so.

Fly friendly, fly safely, and enjoy the hobby!



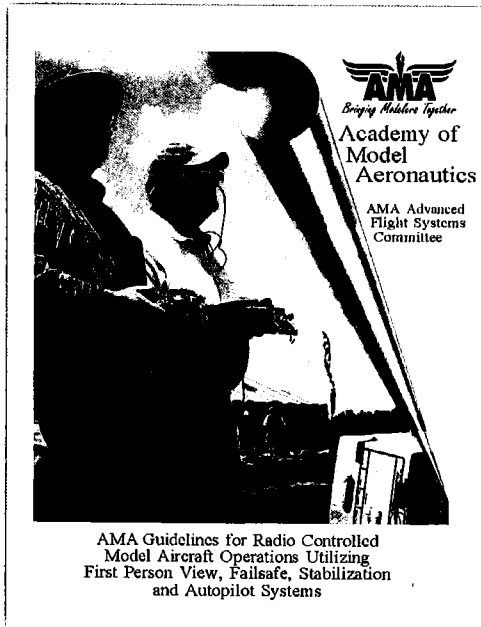
## Academy of Model Aeronautics

### **Basic sUAS Safety Principles**

- Do not interfere with manned aircraft operations.
- Yield right of way to manned aircraft. See and avoid other aircraft at all times (AMA Doc #540-D).
- Do not endanger persons or property. No intentional overflight of moving vehicles or unprotected persons. Fly no closer than 25 feet.
- Fly no higher than necessary (less than 400 feet). Remain below surrounding obstacles when possible.
- Avoid operations in close proximity to airports. When within 5 miles of an airport, contact the airport/Air Traffic Control (ATC).
- Ensure pilot competency/proficiency and the safe operation of the aircraft.
- Remain within visual line of sight (VLOS). Use a spotter when necessary/appropriate.



## Academy of Model Aeronautics



### AMA's Privacy Policy

"The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data or information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers."



## **“SEE AND AVOID” GUIDANCE**

### **A. General:**

1. The primary means to avoid collisions between all aircraft flying within our National Airspace System (NAS) is “See and Avoid.”
2. Vigilance must be maintained by each person operating an aircraft (whether model or manned) so as to “see and avoid” other aircraft.
3. Model aircraft must avoid manned aircraft. Our privilege to fly model aircraft in the NAS depends on our commitment to remain “well clear” of manned aircraft.
4. Simply avoiding an actual collision is not enough. A “near miss” is not acceptable.
5. Unless flying at a mixed-use site where manned and model aircraft routinely share airspace through their own site-specific rules, model aircraft must fly sufficiently far away from manned aircraft so as not to create a collision hazard.
6. Model aircraft flying must not only be safe, it must be perceived to be safe by the greater manned aviation community. Modelers must continually demonstrate their respect for the safety of manned aircraft by remaining vigilant and well clear.
7. Whenever a potential conflict arises between model aircraft and manned aircraft, the pilot of the model aircraft must always give way to the manned aircraft.
8. The pilot of a model aircraft must never assume the pilot of a manned aircraft can see the model or will perform any maneuver to avoid the model’s flight path.
9. Visual Line of Sight is required by the Safety Code. It means that visual contact with the aircraft must be maintained without enhancement other than by corrective lenses prescribed for the model aircraft pilot. All RC flying must remain clear of clouds smoke or any other obstruction to the line of sight.
10. “Blue Sky” is a term used to explain the method used to increase separation between a model and a manned aircraft in the same vicinity. The modeler should maneuver the aircraft in such a way as to increase the amount of *blue sky* perceived between the model and the manned aircraft. By increasing the blue sky separation, the question about depth perception is taken out of the equation and the modeler need not worry whether the model is closer to him than the manned aircraft or further away. Increasing the blue sky between the model and the manned aircraft automatically increases separation between them.
11. A modeler should never place any consideration for the well-being of the model aircraft above the safety of manned aircraft. Maneuvering to avoid the conflict may require that the model aircraft be sacrificed.
12. Free flight models should not be launched with relatively low altitude manned aircraft in sight and downwind or headed downwind from the launch site.

B. Spotters:

1. Before a flight, the pilot must insure that the spotter understands his/her duties and expectations.
2. A spotter should be used to assist in monitoring the surrounding airspace for manned aircraft whenever a flight is expected to exceed 400 feet above the ground and that operation is expected to be in proximity to known manned aircraft traffic such as at a mixed-use facility or within three miles of an airport. The spotter must have sufficient visual acuity and be mature enough to take this responsibility very seriously.
3. A spotter should also be prepared to assist his/her pilot in the event that another model aircraft or spectators become endangered or in turn are perceived to be a danger to the pilot or the pilot's model aircraft.
4. If a model aircraft pilot experiences what he or she considers a near miss with a manned aircraft, that model aircraft pilot should notify AMA Headquarters with a written report of the incident, including action taken by the model aircraft pilot to avoid the manned aircraft. This report is intended to help the modeler, the club, and the AMA capture as much detail as possible so that it may be used to assist all parties in recalling the particulars of the incident at a later time. Call 1-800-435-9262 (1-800-IFLYAMA) extension 230 or 251 for assistance with this report.



## **Radio Controlled Model Aircraft Operation** **Utilizing "First Person View" Systems**

### **1. DEFINITION OF TERMS:**

Please refer to Page 5 section 7 which contains an alphabetical listing of the definitions of the terms in *italics* that are used in this document.

### **2. GENERAL:**

*FPV* flying of radio control model aircraft by AMA members is allowed only for noncommercial purposes as a hobby/recreational and/or competition activity and must be conducted in accordance with AMA's current National Model Aircraft Safety Code and any additional rules specific to a flying site/location.

### **3. OPERATIONS – REQUIREMENTS – LIMITATIONS:**

- a) *FPV novice pilots* undergoing training at low altitude must use a buddy-box system with an *FPV spotter*, or must go to a safer altitude if no buddy-box system is used.
- b) All *FPV* flights require an AMA *FPV pilot* to have an AMA *FPV spotter* next to him/her maintaining *VLOS* with the *FPV aircraft* throughout its flight.
- c) The *FPV pilot* must brief the *FPV spotter* on the *FPV spotter's* duties, communications and hand-over control procedures before *FPV flight*.
- d) The AMA *FPV spotter* must communicate with the *FPV pilot* to ensure the *FPV aircraft* remains within *VLOS*, warning the *FPV pilot* of approaching aircraft, and when avoidance techniques are necessary.
- e) During an *FPV* flight, the *FPV spotter* must be prepared to acquire the transmitter/control from the *FPV pilot* and assume *VLOS* control of the model aircraft at any time safe operation of the flight is in question.
- f) If an *FPV pilot* experiences a safety issue that does not appear to be a brief glitch, they must abandon *FPV* mode and fly *VLOS*.
- g) Before the initial *FPV* flight of an *FPV model aircraft* and/or after any changes or repairs to *essential flight systems*, the *FPV model aircraft* must have an *R/C test flight* by conventional *VLOS*.
- h) *FPV model aircraft* must use frequencies approved by the FCC for both the RC system and the wireless video system. Pilots must meet applicable FCC licensing requirements if they choose to operate the RC flight control system or the wireless video system on Amateur Band frequencies.
- i) AMA *FPV pilots* must first be capable of flying their *FPV* model aircraft manually before utilizing *FPV* flight.

#### **4. RANGE – ALTITUDE – WEIGHT – SPEED:**

- a) 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 must be flown within VLOS of the operator.
- b) Model aircraft flown using *FPV* must remain at or below 400 feet AGL when within 3 miles of an airport as specified in the AMA Safety Code.
- c) Model aircraft flown *FPV* are limited to a weight (including fuel, batteries, and onboard *FPV* equipment) of 15lbs. and a speed of 70mph.

#### **5. RECOMMENDATIONS & INFORMATION:**

- a) AMA *FPV novice pilots* should consider using a cockpit view flight simulator to become accustomed to *FPV* flight.
- b) AMA *FPV pilots* should consider using a programmable *autopilot* (AMA Document #560) with a failsafe “return to launch” (RTL) feature that will maintain control of the aircraft in the event of signal loss.
- c) When purchasing *FPV* operational systems, always try to select quality equipment, verify its compatibility, install components for interference rejection, and determine that signal range is adequate for maximum VLOS range.

#### **6. PRIVACY PROTECTION SAFEGUARDS:**

The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers.

#### **7. DEFINITIONS OF TERMS:**

**AMA *FPV Pilot*** is an AMA member who is capable of maintaining stable flight of a model aircraft within its intended flight envelope when flown *FPV* without losing control or having a collision.

***Buddy-Box System*** is a system that has one transmitter operating as the master controller, while a second transmitter is linked/slaved to it allowing dual control of an aircraft. The operator of the master transmitter allows one or the other transmitter to control the aircraft through the use of a spring-loaded switch. The switch provides instantaneous transfer of control from one transmitter to the other. The buddy-box system is an efficient and effective means of achieving a position transfer of control from one pilot to another.

Although this system is commonly used for training novice fliers, it is also useful in situations where an experienced pilot may have an increased likelihood of needing a second pilot's assistance in maintaining control of the aircraft. The use of the buddy-box may be helpful in assisting pilots with physical limitations, flying in congested environments, during times of reduced visibility, or anytime during FPV when a timely transfer of control may be beneficial.

**Essential Flight Systems** are any systems or components necessary to maintain stable flight within a model aircraft's flight envelope. (This includes primary radio control systems and any stabilization or gyros required to maintain stability and heading in certain types of model aircraft that would be uncontrollable/unstable without their use).

**First Person View (FPV)** refers to the operation of a radio controlled (R/C) model aircraft using an onboard camera's cockpit view to orient and control the aircraft.

**Flight Envelope** is defined as the range of airspeeds, attitudes, and flight maneuvers which a model aircraft can safely perform/operate for its intended use.

**FPV Aircraft** is an RC model aircraft equipped with a video transmitter to send real-time video images from an onboard camera to a ground based receiver for display on a pilot's video monitor/goggles. (*FPV model aircraft* types include: Fixed Wing, Rotary Wing, and Multi-Rotor Platforms).

**FPV Novice Pilot** is an AMA member learning to fly FPV utilizing a buddy-box system with an experienced AMA RC pilot operating the master transmitter and serving as the FPV spotter.

**FPV Spotter** is an experienced AMA RC pilot who has been briefed by the FPV pilot on the tasks, responsibilities and procedures involved in being a spotter; is capable and mature enough to perform the duties and is able to assume conventional VLOS control of the aircraft.

**Non-Essential Flight Systems** are any systems or components that are not necessary to maintain stable flight within the model aircraft's flight envelope. (This includes *autopilot* or *stabilization systems* that can be activated and deactivated in flight by the pilot without affecting stable flight).

**R/C Test Flight** requires an AMA Pilot to manually operate an R/C transmitter to control a model aircraft's flight path and determine if the aircraft is capable of maintaining stable flight within its flight envelope.

**Visual Line Of Sight (VLOS)** is the distance at which the pilot is able to maintain visual contact with the aircraft and determine its orientation without enhancements other than corrective lenses.



## Academy of Model Aeronautics

AMA Advanced Flight Systems Committee  
[amaflightsystems@gmail.com](mailto:amaflightsystems@gmail.com)

AMA Document # 560

### Radio Controlled Model Aircraft Operation Utilizing Failsafe, Stabilization and Autopilot Systems

#### 1. DEFINITION OF TERMS:

Please refer to Page 3, section 7 which contains an alphabetical listing of the definitions of the terms in italics that are used in this document.

#### 2. GENERAL:

All model aircraft flights utilizing *stabilization* and *autopilot* control systems must be conducted in accordance with AMA's current National Model Aircraft Safety Code and any additional rules specific to a flying site/location.

#### 3. OPERATIONS – REQUIREMENTS – LIMITATIONS:

- a) AMA members flying radio controlled model aircraft equipped with flight *stabilization* and *autopilot* systems must maintain VLOS with the aircraft at all times including programmed autopilot waypoint flight.
- b) *AMA Pilots* must be able to instantaneously deactivate programmed flight of *autopilot systems* at any time during flight and resume manual control of the model aircraft.
- c) *AMA Pilots* must perform an *R/C Test Flight* of a model aircraft before activating a newly installed *autopilot* or *stabilization system* and/or after any repairs or replacement of model aircraft *essential flight systems*.
- d) Model aircraft exceeding 15lbs and/or 70mph may only use an *autopilot* for a programmed "return to launch" (RTL) flight and not for programmed waypoint flying of a predetermined course.

#### e) **STABILIZATION & AUTOPILOT SYSTEMS MAY BE USED FOR/TO:**

- Stabilization/automatically stabilize aircraft to level flight when control sticks are centered.
- Recovery/activate TRX switch to recover an out of control aircraft to level flight.
- Heading/activate TRX switch to hold a model aircraft's heading for precision flight path.
- Altitude/activate TRX switch to maintain fixed aircraft altitude while allowing directional control.
- Return GPS/activate TRX switch to return aircraft via GPS to launch point.
- Return FSS/failsafe activated from radio signal loss to return aircraft via GPS to launch point.
- Fixed circle/activate TRX switch to circle aircraft at point of activation at fixed altitude.
- Waypoint/activate TRX switch to initiate an autopilot programmed flight path via waypoints.
- Fencing/autopilot programed to display site unique boundaries on video monitor/goggles.

#### **4. RANGE – ALTITUDE – WEIGHT – SPEED:**

- a) 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.
- b) Model aircraft must be flown at or below 400 feet AGL when within 3 miles of an airport as stated in the AMA Safety Code.
- c) Model aircraft utilizing an *autopilot* for waypoint flying are limited to a maximum weight (including fuel, batteries, and onboard *autopilot systems*) of 15lbs and a speed of 70mph.

#### **5. RECOMMENDATIONS & INFORMATION:**

- a) If your radio system lacks *failsafe* capability, consider using programmable digital servos or auxiliary *failsafe* modules. In the event of a radio signal failure these components will activate desired safe servo settings or an *autopilot* for return to base/launch (RTL).
- b) When using an *autopilot system* the “return to launch” (RTL) feature should be programmed to return the aircraft to a safe location and safely terminate the flight should manual control of the aircraft be lost. When using RTL, pay particular attention to the manufacturer’s throttle recommendations to prevent stalling.
- c) The use of *stabilization systems* is recommended when flying FPV to improve flight stability and video quality.
- d) Pilots usually choose to incorporate *stabilization* and *autopilot systems* for model aircraft flying to enhance flight performance, correct bad tendencies of the model aircraft, maintain stability in windy weather, establish precision heading holds for takeoffs/landings, flight training for novice pilots, create a steady flight platform for cameras, and generally just to make an airplane easier and safer to fly.
- e) When purchasing *stabilization* and *autopilot systems*, always try to select quality equipment from reputable dealers, ensure for compatibility with other onboard systems, and install components according to manufacturers’ instructions.

#### **6. PRIVACY PROTECTION SAFEGUARDS:**

The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data or information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers.

## **7. DEFINITIONS OF TERMS:**

**AMA Pilot** is an AMA member who is capable of manually operating an R/C transmitter to control a model aircraft's flight path within its safe intended *flight envelope* without losing control or having a collision.

**Autopilot Systems** incorporate programmable flight *stabilization* with an altitude sensor and a GPS receiver for accurate positioning and to navigate/control a radio controlled model aircraft's flight path. Advanced systems offer software for entering navigable waypoints. The flight data waypoints may be saved to autopilot's/GPS memory for programmed flight.

**Essential Flight Systems** are any systems or components necessary to maintain stable flight within a model aircraft's *flight envelope*. (This includes primary R/C systems and any *stabilization* or gyros required to maintain stability and heading in certain types of model aircraft that would be uncontrollable/unstable without their use).

**Failsafe Systems** are designed to minimize or prevent damage and safely terminate a flight when a radio controlled model aircraft loses radio signal. Modern radio systems can be programmed to position servos to a desired control setting in the event of radio signal failure.

**First Person View (FPV)** refers to the operation of a radio controlled (R/C) model aircraft using an onboard camera's cockpit view to orient and control the aircraft. (AMA Document #550).

**Flight Envelope** is defined as the range of airspeeds, attitudes and flight maneuvers which a model aircraft can safely perform/operate for its intended use.

**Non-Essential Flight Systems** are any systems or components that are not necessary to maintain stable flight within the model aircraft's intended flight envelope. (This includes *autopilot* or *stabilization systems* that can be activated and deactivated in flight by the pilot without affecting manually controlled stable flight).

**R/C Test Flight** requires an AMA Pilot to manually operate an R/C transmitter to control a model aircraft's flight path and determine if the aircraft is capable of maintaining stable flight within its safe intended *flight envelope*.

**Stabilization Systems** are designed to maintain intended model aircraft flight attitudes. The pilot can install, program and/or activate a system to stabilize yaw, pitch, or roll or any one attitude or combination of attitudes. Systems are often based on rate/heading hold gyros or inertial motion sensors utilizing multi-axis gyros and accelerometers for attitude stabilization.

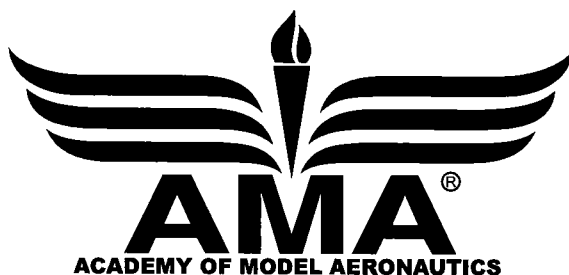
**Visual Line of Sight (VLOS)** is the distance at which the pilot is able to maintain visual contact with the aircraft and determine its orientation and attitude without enhancements other than corrective lenses.



# Academy of Model Aeronautics National Model Aircraft Safety Code

Effective January 1, 2014

- A. **GENERAL:** A model aircraft is a non-human-carrying aircraft capable of sustained flight in the atmosphere. It may not exceed limitations of this code and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this safety code and any additional rules specific to the flying site.
- Model aircraft will not be flown:
    - In a careless or reckless manner.
    - At a location where model aircraft activities are prohibited.
  - Model aircraft pilots will:
    - Yield the right of way to all human-carrying aircraft.
    - See and avoid all aircraft and a spotter must be used when appropriate. (AMA Document #540-D.)
    - Not fly higher than approximately 400 feet above ground level within three (3) miles of an airport without notifying the airport operator.
    - Not interfere with operations and traffic patterns at any airport, heliport or seaplane base except where there is a mixed use agreement.
    - Not exceed a takeoff weight, including fuel, of 55 pounds unless in compliance with the AMA Large Model Airplane program. (AMA Document 520-A.)
    - Ensure the aircraft is identified with the name and address or AMA number of the owner on the inside or affixed to the outside of the model aircraft. (This does not apply to model aircraft flown indoors.)
    - Not operate aircraft with metal-blade propellers or with gaseous boosts except for helicopters operated under the provisions of AMA Document #555.
    - Not operate model aircraft while under the influence of alcohol or while using any drug that could adversely affect the pilot's ability to safely control the model.
    - Not operate model aircraft carrying pyrotechnic devices that explode or burn, or any device which propels a projectile or drops any object that creates a hazard to persons or property.  
Exceptions:
      - Free Flight fuses or devices that burn producing smoke and are securely attached to the model aircraft during flight.
      - Rocket motors (using solid propellant) up to a G-series size may be used provided they remain attached to the model during flight. Model rockets may be flown in accordance with the National Model Rocketry Safety Code but may not be launched from model aircraft.
      - Officially designated AMA Air Show Teams (AST) are authorized to use devices and practices as defined within the Team AMA Program Document. (AMA Document #718.)
    - Not operate a turbine-powered aircraft, unless in compliance with the AMA turbine regulations. (AMA Document #510-A.)
  - Model aircraft will not be flown in AMA sanctioned events, air shows or model demonstrations unless:
    - The aircraft, control system and pilot skills have successfully demonstrated all maneuvers intended or anticipated prior to the specific event.
    - An inexperienced pilot is assisted by an experienced pilot.
  - When and where required by rule, helmets must be properly worn and fastened. They must be OSHA, DOT, ANSI, SNELL or NOCSAE approved or comply with comparable standards.
- B. **RADIO CONTROL (RC)**
- All pilots shall avoid flying directly over unprotected people, vessels, vehicles or structures and shall avoid endangerment of life and property of others.
  - A successful radio equipment ground-range check in accordance with manufacturer's recommendations will be completed before the first flight of a new or repaired model aircraft.
  - At all flying sites a safety line(s) must be established in front of which all flying takes place. (AMA Document #706.)
    - Only personnel associated with flying the model aircraft are allowed at or in front of the safety line.
    - At air shows or demonstrations, a straight safety line must be established.
    - An area away from the safety line must be maintained for spectators.
    - Intentional flying behind the safety line is prohibited.
  - RC model aircraft must use the radio-control frequencies currently allowed by the Federal Communications Commission (FCC). Only individuals properly licensed by the FCC are authorized to operate equipment on Amateur Band frequencies.
  - RC model aircraft will not knowingly operate within three (3) miles of any pre-existing flying site without a frequency-management agreement. (AMA Documents #922 and #923.)
  - With the exception of events flown under official AMA Competition Regulations, excluding takeoff and landing, no powered model may be flown outdoors closer than 25 feet to any individual, except for the pilot and the pilot's helper(s) located at the flightline.
  - Under no circumstances may a pilot or other person touch an outdoor model aircraft in flight while it is still under power, except to divert it from striking an individual.
  - RC night flying requires a lighting system providing the pilot with a clear view of the model's attitude and orientation at all times. Hand-held illumination systems are inadequate for night flying operations.
  - The pilot of an RC model aircraft shall:
    - Maintain control during the entire flight, maintaining visual contact without enhancement other than by corrective lenses prescribed for the pilot.
    - Fly using the assistance of a camera or First-Person View (FPV) only in accordance with the procedures outlined in AMA Document #550.
    - Fly using the assistance of autopilot or stabilization system only in accordance with the procedures outlined in AMA Document #560.
- C. **FREE FLIGHT**
- Must be at least 100 feet downwind of spectators and automobile parking when the model aircraft is launched.
  - Launch area must be clear of all individuals except mechanics, officials, and other fliers.
  - An effective device will be used to extinguish any fuse on the model aircraft after the fuse has completed its function.
- D. **CONTROL LINE**
- The complete control system (including the safety thong where applicable) must have an inspection and pull test prior to flying.
  - The pull test will be in accordance with the current Competition Regulations for the applicable model aircraft category.
  - Model aircraft not fitting a specific category shall use those pull-test requirements as indicated for Control Line Precision Aerobatics.
  - The flying area must be clear of all utility wires or poles and a model aircraft will not be flown closer than 50 feet to any above-ground electric utility lines.
  - The flying area must be clear of all nonessential participants and spectators before the engine is started.



## About AMA

We stand on our own for our members and for the future of aeromodeling.

The Academy of Model Aeronautics is the world's largest model aviation association. It is the official sanctioning body for model aviation in the United States, representing the interests of aeromodeling across the United States and around the world. As a self-supporting, nonprofit organization, its purpose is to promote the development of model aviation as a recognized hobby, sport, and family recreational activity that is both fun and educational.

Founded in 1936, the Academy of Model Aeronautics was charged with promoting the popularity of aeromodeling and associated contests, which coincided with the development and advancement of commercial and military aircraft design, engineering, and manufacturing. Today, the AMA still fosters the innovation born from competition on an international scale through the sanctioning of more than 2,000 aeromodeling competitions each year.

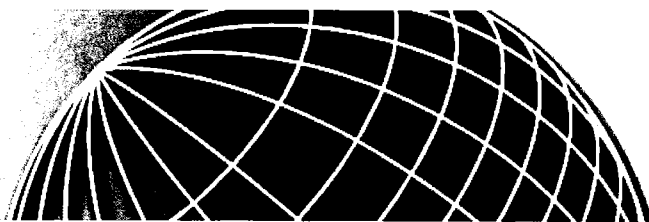
## Government relations

The AMA has a long and successful history of advocating for the flying privileges of the aeromodeling community. As the liaison with the Federal Aviation Administration, Federal Communications Commission, Environmental Protection Agency, and other governmental entities, AMA works diligently with some of the most respected organizations in aviation and government to protect modelers' right to fly in the national airspace while providing an exceptional safety program.

## Educational outreach

Our active educational outreach program assists teachers who utilize aviation activities in support of science, technology, engineering, and math curricula. Additionally, AMA has awarded more than \$800,000 dollars in scholarships to hundreds of students in pursuit of study in the fields of aerospace design and engineering along with other aviation-related fields.

To learn more about the Academy of Model Aeronautics, or to become a member, visit **[www.modelaircraft.org](http://www.modelaircraft.org)** or call **1-800-I-FLY-AMA**.



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## LET'S TALK PRIVACY.

*Open discussion of privacy concerns and regulations.*



### DO'S AND DONT'S

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Stay up-to-date with the latest operations limits.

### PRIVACY STATEMENT

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AUVSI supports the expanded use of unmanned aircraft systems (UAS) and encourages open discussion of privacy concerns and proposed changes to existing rules, regulations and laws.

### AUVSI CODE OF CONDUCT

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This code is intended to provide those who design, test, and operate UAS for public and civil use, a set of guidelines and recommendations for safe, non-intrusive operations.

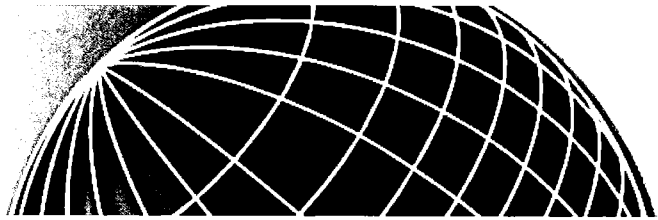
### FAA UAS WEBSITE

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The Federal Aviation Administration is the national aviation authority of the United States. The use of unmanned aircraft systems (UAS) in civil airspace raises many technical, policy and procedure questions. Visit the FAA website to better understand how unmanned aircraft can be integrated into the National Airspace System.

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## Who will be flying the UAS?

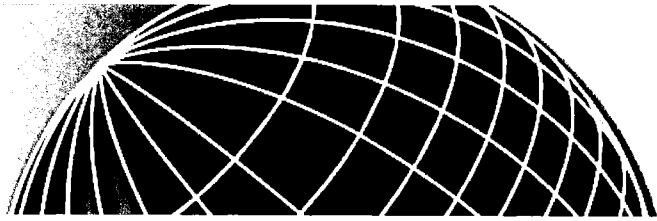
A business (e.g. photography, filmmaking, agriculture), recreational user (e.g. hobbyists, modelers) or a public agency/university (e.g. first responders, university researchers)?

A Business

Recreational User

Public Agency or  
University

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## A Business

You must check with the FAA to obtain approval to fly. It's possible you may qualify for either a special airworthiness certificate or a commercial exemption.

The FAA grants two types of special airworthiness certificates: special flight permits and experimental certificates. Special flight permits are issued for production flight testing new production aircraft. Experimental certificates are issued only for the purposes of research and development, crew training and market surveys.

In addition, in May 2014, the FAA announced that it would consider granting exemptions for certain low-risk commercial applications such as precision agriculture, power line inspections, and movie production.

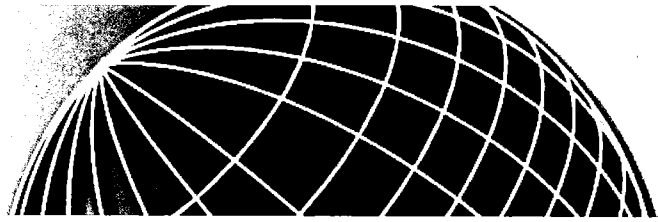
If you receive any of the above certifications or exemptions, you may fly.

To learn more about requesting a special airworthiness certificate from the FAA, click [here](#).

To learn more about requesting a commercial exemption from the FAA, click [here](#).

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## Recreational User

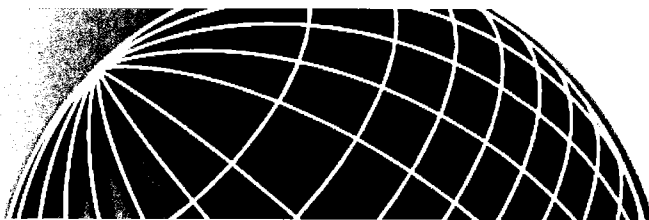
Hobby or recreational flying (not for hire or as part of business) can be done without FAA approval, but operators should check local or state laws for usage restrictions and/or privacy rules and must follow safety guidelines including:

- Follow community-based safety guidelines
- Fly under 400 feet and within line of sight of the operator
- Not fly near manned aircraft
- Contacting the airport or control tower before flying within five miles of an airport

To learn more about these safety guidelines from the FAA, click [here](#).

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## Public Agency or University

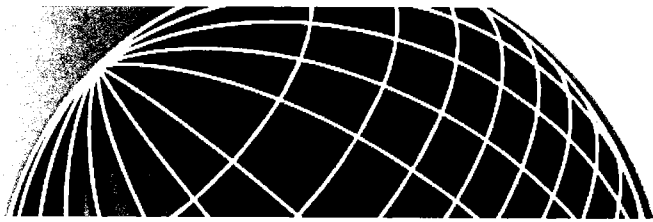
If you are a public agency or university, you must apply for a Certificate of Waiver or Authorization (COA) from the FAA. COAs allow use of UAS in a defined block of airspace and include special provisions unique to the proposed operation.

If you receive the above certifications or exemptions, you may fly.

To learn more about applying for a COA from the FAA, click [here](#).

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## PRIVACY STATEMENT

### I. EXECUTIVE SUMMARY

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The Association for Unmanned Vehicle Systems International (AUVSI)<sup>1</sup> supports the expanded use of unmanned aircraft systems (UAS) and encourages open discussion of privacy concerns and proposed changes to existing rules, regulations, and laws. These discussions should occur concurrently with the integration of UAS into the National Airspace System (NAS)<sup>2</sup> in order to fully realize the benefits of rapidly advancing UAS technology and so that a greater understanding of UAS technology's potential can be achieved. Enactment of legislation now – before sufficient experience with integration of UAS into the NAS exists – is premature, and will hinder the creation and development of this new industry. Barring unnecessary delays, AUVSI estimates that this new industry is poised to create over 70,000 new jobs and \$13.6 billion in economic impact within the first three years of integration alone.<sup>3</sup>

New legislation at the federal or state level that is not technology neutral or that is inconsistent with existing privacy rules, regulations, and laws would stifle innovation and cause delay, and may prevent or discourage the use of UAS by public safety agencies and other potential users. Fourth Amendment jurisprudence, existing federal and state privacy laws, and comprehensive Federal Aviation Administration (FAA) regulations already provide extensive guidance that would allow for initial integration of UAS operations. The FAA, for example, has taken steps to address privacy concerns relating to the use of UAS at test sites, which will help gather knowledge and best practices about UAS operations. If the FAA completes its required and pending rulemaking activities for UAS integration, there will be ample opportunities for multi-stakeholder input.

### II. EXISTING FOURTH AMENDMENT PROTECTIONS

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The Fourth Amendment and related case law already governs UAS operations by government users, ensures accountability, and guides the use of aircraft in which the cockpit and pilot are on the ground. Federal, state, and local government agents must obtain search warrants when their use of any technology, including UAS, may violate an individual's reasonable expectation of privacy protected by the Fourth Amendment.<sup>4</sup> These protections are well-established and address many different privacy concerns relating to government adoption and use of advancing technologies, such as UAS. For more than 220 years, the Fourth Amendment has been applied to new technologies used in warrantless observations – including several Supreme Court decisions on aerial observations<sup>5</sup> and, more recently, thermal imaging<sup>6</sup> and GPS technologies<sup>7</sup> – and it will continue to be applied to UAS and other future technologies that have not yet been invented. The Court, in a 2013 decision, held that law enforcement use of a highly-trained drug sniffing dog, roaming outside a home, was "an unlicensed physical intrusion" distinguishable from "Girl Scouts and trick-or-treaters," and was thus an unreasonable search.<sup>8</sup> UAS technology is not so distinct from other advanced technologies as to require supplemental legislation.<sup>9</sup> On the contrary, UAS-specific legislation and laws may have unintended effects, including confusing and complicating the application of existing search warrant requirements<sup>10</sup> that have been carefully developed over two centuries.

AUVSI strongly supports the International Association of Chiefs of Police (IACP) recommended guidelines for UAS operations and associated data collection,<sup>11</sup> which the Airborne Law Enforcement Association (ALEA)<sup>12</sup> and others have adopted and even the American Civil Liberties Union (ACLU) has praised.<sup>13</sup> Like IACP, AUVSI recognizes the "proven effectiveness" of UAS and that the "potential benefits [to public safety] are irrefutable."<sup>14</sup> AUVSI opposes any legislation that hamstrings first-responders.

### III. FAA'S APPROACH TO PRIVACY AND RULEMAKING

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The Congressionally-mandated FAA rulemaking processes for the integration of small UAS (sUAS) will provide ample opportunities for the public to comment on privacy issues relating to UAS operations.<sup>15</sup> Unlike government operators, who are permitted to operate UAS, albeit through a cumbersome process,<sup>16</sup> civilian operators have no practical, legal means of doing so until the FAA completes its legally required, and long-delayed, rulemakings.<sup>17</sup> Recognizing the importance of addressing privacy concerns, the FAA has taken extraordinary measures to permit public participation in determining the privacy policies that will govern UAS test sites – the agency's first major step toward integration.<sup>18</sup> Indeed, FAA "aim[ed] to assure maximum transparency of privacy policies associated with UAS test site operations in order to engage all stakeholders in discussion about which privacy issues are raised by UAS



operations and how law, public policy, and operators should respond to those issues in the long run.”<sup>19</sup> Rather than passing uninformed<sup>20</sup> and potentially unenforceable<sup>21</sup> legislation now, Congress and state lawmakers should wait for the FAA to complete its rulemaking processes.

The FAA's primary mission is, and must remain, aviation safety. Still, insofar as privacy issues are inextricably linked to the agency's creation of a regulatory framework for the integration and operation of UAS, the FAA rulemaking process is the appropriate forum to address privacy concerns. The FAA has properly recognized the role that federal and state law enforcement agencies play in enforcing laws regarding the protection of an individual's right to privacy, as well as its complementary authority to revoke or suspend a UAS operator's license. Like the Fourth Amendment jurisprudence applicable to public UAS operators, analogous state laws relevant to civil operators that “address trespass, invasion of privacy, harassment, and stalking [are] well established.”<sup>22</sup> AUVSI supports the FAA's position that Fair Information Practice Principles (FIPPs) should inform UAS privacy policies on the collection, storage, and use of data.<sup>23</sup> Clearly, the registration of certain UAS and pilots with the FAA, the equipage of UAS with identification/position broadcast capability, and the guidelines set forth in AUVSI's UAS Operations Code of Conduct<sup>24</sup> could all contribute to the creation of an overall approach to managing privacy concerns. FAA rulemaking proceedings are the proper forum to address all of these important considerations.

## CONCLUSION

AUVSI supports the integration of UAS into the NAS in a safe and responsible manner, while safeguarding the existing right to privacy and ensuring transparency and accountability. Existing federal and state privacy protections should extend to the operations of UAS, just as they do to the operations of any other advanced technology. But before consideration of any supplemental technology neutral privacy legislation, the FAA should be allowed to gain experience through the UAS test site program and to then complete the well-established regulatory processes for UAS integration that Congress has already mandated. Fourth Amendment jurisprudence, federal and state privacy protections, and other existing laws and regulations are sufficiently robust to guide this effort.

<sup>1</sup> AUVSI – the world's largest non-profit organization dedicated to the advancement of unmanned systems – represents more than 7,000 members from 55 allied countries and 2,500 organizations involved in fields of government, industry and academia.

<sup>2</sup> The FAA Modernization and Reform Act of 2012 requires FAA to safely integrate UAS into the NAS by September 2015, and mandates, among other things, the creation of UAS test sites and rulemaking proceedings addressing the integration of civil UAS operations. P.L. 112-95, §§ 331-334, 126 Stat. 11, 72-77 (2012).

<sup>3</sup> AUVSI, *The Economic Impact of Unmanned Aircraft Systems Integration in the United States* (Mar. 2013), at 2, <http://www.auvsi.org/econreport>.

<sup>4</sup> See *Katz v. United States*, 389 U.S. 347 (1967).

<sup>5</sup> See *Florida v. Riley*, 488 U.S. 445 (1989) (naked-eye observations through greenhouse roof from helicopter at 400 feet not an unreasonable search); *Dow Chemical Co. v. United States*, 476 U.S. 227 (1986) (precision aerial photographs of industrial complex from 1,200-12,000 feet not a prohibited search); *California v. Graafland*, 476 U.S. 207 (1986) (no reasonable expectation of privacy from naked-eye observations of yard from fixed-wing aircraft flying at 1,000 feet).

<sup>6</sup> See *Kyllo v. United States*, 533 U.S. 27 (2001) (warrantless use of thermal imaging device to see heat emanating from inside home deemed an unreasonable search). <sup>7</sup> See *United States v. Jones*, 132 S. Ct. 945 (2012) (month-long tracking with GPS required a warrant).

<sup>8</sup> *Florida v. Jardines*, 133 S.Ct. 1409, 1415 (2013).

<sup>9</sup> “In combination, however, [the *Graafland*, *Riley*, *Dow Chemical*, *Kyllo* and *Jones*] rulings indicate that the Fourth Amendment is likely to provide significantly more protection from government UAS observations than is commonly assumed.” John Villasenor, *Observations from Above: Unmanned Aircraft Systems and Privacy*, 36 HARV. J.L. & PUB. POL’Y 457, 516 (2013). <sup>10</sup> See Richard M. Thompson II, CONG. RESEARCH SERV., R42701, *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Legislative Responses* (Apr. 3, 2013), at 18-21 (reviewing several bills that “establish arguably greater constraints on [UAS] usage than the Fourth Amendment requires.” Id. at 18).

<sup>11</sup> IACP, *Recommended Guidelines for the Use of Unmanned Aircraft* (Aug. 2012) (“IACP Guidelines”).

<sup>12</sup> ALEA, *Resolution in Support of the International Association of Chiefs of Police Aviation Committee's Recommended Guidelines for the Use of Unmanned Aircraft* (Aug. 29, 2012), <http://www.alea.org/assets/cms/files/Resolutions/In%20Support%20of%20UAS%20Guidelines.pdf>

<sup>13</sup> See Jay Stanley, *Police Chiefs Issue Recommendations on Drones: A Look at How they Measure Up*, ACLU (Aug. 17, 2012, 9:39 AM), <http://www.aclu.org/blog/technology-and-liberty/police-chiefs-issue-recommendations-drones-look-how-they-measure>.

<sup>14</sup> IACP Guidelines, at 1. What appears to be the first documented instance of a human life being saved with a UAS occurred in Canada earlier this year. See *Single Vehicle Rollover - Saskatoon RCMP Search for Injured Driver with Unmanned Aerial Vehicle*, ROYAL CANADIAN MOUNTED POLICE (May 9, 2013), <http://www.rcmp-grc.gc.ca/sk/news-nouvelle/video-gallery/video-pages/search-rescue-eng.htm>. It will certainly not be the last.

<sup>15</sup> P.L. 112-95, § 332 (requiring the sUAS and integration final rules by August 14, 2014 and December 14, 2015, respectively).

<sup>16</sup> FAA, *Unmanned Aircraft Systems (UAS): Certifications and Authorizations*, <http://www.faa.gov/about/initiatives/uas/cert/>; see also Felicity Barringer, *FAA's Concerns Hold Up Use of Wildfire Drones*, N.Y. TIMES (May 21, 2013), [http://www.nytimes.com/2013/05/22/us/faas-concerns-hold-up-use-of-wildfire-drones.html?\\_r=0](http://www.nytimes.com/2013/05/22/us/faas-concerns-hold-up-use-of-wildfire-drones.html?_r=0).

<sup>17</sup> See Alissa M. Dolan and Richard M. Thompson II, CONG. RESEARCH SERV., R42940, *Integration of Drones into Domestic Airspace: Selected Legal Issues* (Apr. 4, 2013), at 4 (internal citations omitted). Indeed, the FAA's sUAS notice of proposed rulemaking has already been delayed more than two years beyond the agency's initially projected publication date of March 10, 2011. DEPT. TRANSP., *Report on DOT Significant Rulemakings* (May 10, 2013), at 13.

<sup>18</sup> See Unmanned Aircraft Test Site Program, 78 Fed. Reg. 12,259 (Feb. 22, 2013); see also FAA, *Transcript of Online Session on UAS Test Site Privacy Policy* (Apr. 3, 2013), <http://www.faa.gov/about/initiatives/uas/media/UAStranscription.pdf>.

<sup>19</sup> 78 Fed. Reg. at 12,260.

<sup>20</sup> See *supra* note 9, at 517 (contrasting UAS with other emerging technologies in that the focus on privacy concerns has come before the benefits are widely recognized).

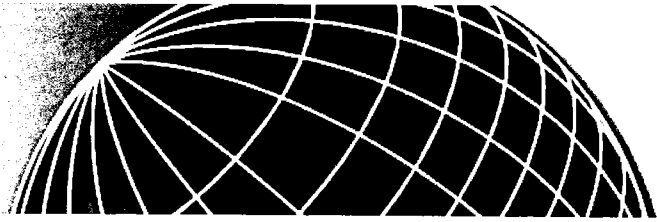
<sup>21</sup> See *supra* note 17, at 27-29 (noting that state and local regulation of UAS may be subject to challenge on federal preemption grounds).

<sup>22</sup> See *supra* note 9, at 514.

<sup>23</sup> 78 Fed. Reg. at 12,260.

<sup>24</sup> <http://www.auvsi.org/conduct>.

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## UNMANNED AIRCRAFT SYSTEM OPERATIONS INDUSTRY "CODE OF CONDUCT"

The emergence of unmanned aircraft systems (UAS) as a resource for a wide variety of public and private applications quite possibly represents one of the most significant advancements to aviation, the scientific community, and public service since the beginning of flight. Rapid advancements in the technology have presented unique challenges and opportunities to the growing UAS industry and to those who support it. The nature of UAS and the environments which they operate, when not managed properly, can and will create issues that need to be addressed. The future of UAS will be linked to the responsible and safe use of these systems. Our industry has an obligation to conduct our operations in a safe manner that minimizes risk and instills confidence in our systems.

For this reason, the Association for Unmanned Vehicle Systems International (AUVSI), offers this Code of Conduct on behalf of the UAS industry for UAS operation. This code is intended to provide our members, and those who design, test, and operate UAS for public and civil use, a set of guidelines and recommendations for safe, non-intrusive operations. Acceptance and adherence to this code will contribute to safety and professionalism and will accelerate public confidence in these systems.

The code is built on three specific themes: Safety, Professionalism, and Respect. Each theme and its associated recommendations represent a "common sense" approach to UAS operations and address many of the concerns expressed by the public and regulators. This code is meant to provide UAS industry manufacturers and users a convenient checklist for operations and a means to demonstrate their obligation to supporting the growth of our industry in a safe and responsible manner. By adopting this Code, UAS industry manufacturers and users commit to the following:

### SAFETY

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- We will not operate UAS in a manner that presents undue risk to persons or property on the surface or in the air.
- We will ensure UAS will be piloted by individuals who are properly trained and competent to operate the vehicle or its systems.
- We will ensure UAS flights will be conducted only after a thorough assessment of risks associated with the activity. This risks assessment will include, but is not limited to:
  - Weather conditions relative to the performance capability of the system
  - Identification of normally anticipated failure modes (lost link, power plant failures, loss of control, etc.) and consequences of the failures
  - Crew fitness for flight operations
  - Overlying airspace, compliance with aviation regulations as appropriate to the operation, and off-normal procedures
  - Communication, command, control, and payload frequency spectrum requirements
  - Reliability, performance, and airworthiness to established standards

### PROFESSIONALISM

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- We will comply with all federal, state, and local laws, ordinances, covenants, and restrictions as they relate to UAS operations.
- We will operate our systems as responsible members of the aviation community.
- We will be responsive to the needs of the public.
- We will cooperate fully with federal, state, and local authorities in response to emergency deployments, mishap investigations, and media relations.
- We will establish contingency plans for all anticipated off-nominal events and share them openly with all appropriate authorities.

### RESPECT

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- We will respect the rights of other users in the airspace.
- We will respect the privacy of individuals.

- We will respect the concerns of the public as they relate to unmanned aircraft operations.
- We will support improving public awareness and education of the operation of UAS.

As an industry, it is incumbent upon us to hold ourselves and each other to a high professional and ethical standard. As with any revolutionary technology, there will be mishaps and abuses; however, in order to operate safely and gain public acceptance and trust, we should all act in accordance with these guiding themes and do so in an open and transparent manner. We hope the entire UAS industry will join AUVSI in adopting this industry Code of Conduct.

AUVSI.org Increasing Human Potential FAA Request Information



**Federal Aviation  
Administration**

## Unmanned Aircraft Systems

([http://www.faa.gov/news/press\\_releases/news\\_story.cfm?newsId=16875](http://www.faa.gov/news/press_releases/news_story.cfm?newsId=16875))

### **FAA Announces Virginia Tech UAS Test Site Now Operational**

([http://www.faa.gov/news/press\\_release\\_newsId=16875](http://www.faa.gov/news/press_release_newsId=16875))

Research in Virginia, New Jersey and Maryland to benefit technology development. Photo: VA Tech



Safety is the FAA's top mission, and the agency maintains the world's safest aviation system. The FAA first authorized use of unmanned aircraft in the National Airspace System (NAS) in 1990.

Today, unmanned aircraft are flying in the NAS under very controlled conditions, performing border and port surveillance by the Department of Homeland Security, helping with scientific research and environmental monitoring by NASA and NOAA, supporting public safety by law enforcement agencies, helping state universities conduct research, and supporting various other missions for public (government) entities. Operations range from ground level to above 50,000 feet, depending on the specific type of aircraft. However, UAS operations are currently not authorized in Class B airspace ([http://www.faa.gov/regulations\\_policies/handbooks\\_manuals/aviation/pilot\\_handbook/media/PHAK%20-%20Chapter%2014.pdf](http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/pilot_handbook/media/PHAK%20-%20Chapter%2014.pdf)) (PDF), which exists over major urban areas and contains the highest density of manned aircraft in the National Airspace System.

## What are the different types of UAS operations?

There are three types of unmanned aircraft system operations: Civil, Public and Model Aircraft.

### • Civil UAS

Obtaining a Special Airworthiness Certificate

([http://www.faa.gov/aircraft/air\\_cert/airworthiness\\_certification/sp\\_awcert/experiment/sac/](http://www.faa.gov/aircraft/air_cert/airworthiness_certification/sp_awcert/experiment/sac/)) in the experimental category for a particular UAS is currently the only way civil operators of unmanned aircraft are accessing the NAS. Experimental certificate regulations preclude carrying people or property for compensation or hire, but do allow operations for research and development, flight and sales demonstrations and crew training. The FAA is working with civilian operators to collect technical and operational data that will help refine the UAS airworthiness certification process. The agency is currently developing a future path for safe integration of civil UAS into the NAS as part of NextGen implementation. Read more about Civil Operations ([civil\\_operations/](#)).

The FAA has been working for several months to implement the provisions of Section 333 ([legislative\\_programs/section\\_333/](#)) of the FAA Modernization and Reform Act of 2012, "Special Rules for Certain Unmanned Aircraft Systems," which will allow for commercial operations in low-risk, controlled environments. Read more about Section 333 ([legislative\\_programs/section\\_333/](#)).

- **Public UAS**

COAs

([http://www.faa.gov/about/office\\_org/headquarters\\_offices/ato/service\\_units/systemops/aaim/organizations/uas/coa/](http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/)) are available to public entities that want to fly a UAS in civil airspace. Common uses today include law enforcement, firefighting, border patrol, disaster relief, search and rescue, military training, and other government operational missions. Applicants make their request through an online process ([http://www.faa.gov/about/office\\_org/headquarters\\_offices/ato/service\\_units/systemops/aaim/organizations/uas/coa/](http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa/)) and the FAA evaluates the proposed operation to see if it can be conducted safely. Read more about Public Operations ([public\\_operations/](#)).

- **Model Aircraft**

Recreational use of airspace by model aircraft is covered by FAA Advisory Circular 91-57 ([http://www.faa.gov/documentLibrary/media/Advisory\\_Circular/91-57.pdf](http://www.faa.gov/documentLibrary/media/Advisory_Circular/91-57.pdf)) (PDF), which generally limits operations for hobby and recreation to below 400 feet, away from airports and air traffic, and within sight of the operator. In June 2014, the FAA published a Federal Register notice ([media/model\\_aircraft\\_spec\\_rule.pdf](#)) (PDF) on its interpretation of the statutory special rules for model aircraft in the FAA Modernization and Reform Act of 2012. The law is clear that the FAA may take enforcement action against model aircraft operators who operate their aircraft in a manner that endangers the safety of the national airspace system. In the notice, the FAA explains that this enforcement authority is designed to protect users of the airspace as well as people and property on the ground. Read the full press release ([http://www.faa.gov/news/press\\_releases/news\\_story.cfm?newsId=16474](http://www.faa.gov/news/press_releases/news_story.cfm?newsId=16474)). Read more about Model Aircraft Operations ([publications/model\\_aircraft\\_operators/](#)).

## **What can I do with my model aircraft?**

Having fun means flying safely! Hobby or recreational flying doesn't require FAA approval but you must follow safety guidelines. Any other use requires FAA authorization. Here is a list of Do's and Don'ts for flying model aircraft ([publications/model\\_aircraft\\_operators/](#)).

## **Contact Us (contacts/)**

The agency wants the public to know how and when to contact the FAA regarding safety concerns with UAS operations. You can visit the Agency's Aviation Safety Hotline website ([http://www.faa.gov/contact/safety\\_hotline/](http://www.faa.gov/contact/safety_hotline/)) or call 1-866-835-5322, Option 4.

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## Federal Aviation Administration

# What Can I Do With My Model Aircraft? Hobby/Recreational Flying

Having fun means flying safely! Hobby or recreational flying doesn't require FAA approval but you must follow safety guidelines. Any other use requires FAA authorization.

Avoid doing anything hazardous to other airplanes or people and property on the ground.

### "Dos"

- **Do** fly a model aircraft/UAS at the local model aircraft club
- **Do** take lessons and learn to fly safely
- **Do** contact the airport or control tower when flying within 5 miles of the airport
- **Do** fly a model aircraft for personal enjoyment

### "Don'ts"

- **Don't** fly near manned aircraft
- **Don't** fly beyond line of sight of the operator
- **Don't** fly an aircraft weighing more than 55 lbs unless it's certified by an aeromodeling community-based organization
- **Don't** fly contrary to your aeromodeling community-based safety guidelines
- **Don't** fly model aircraft for payment or commercial purposes

## Model Aircraft Operations Limits

According to the FAA Modernization and Reform Act of 2012 as (1) the aircraft is flown strictly for hobby or recreational use; (2) the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization; (3) the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization; (4) the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; (5) when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower...with prior notice of the operation; and (6) the aircraft is flown within visual line sight of the operator.

- [More information about safety and training guidelines](#)

The FAA welcomes comments from the public on its Interpretation of the Special Rule for Model Aircraft, which may help further inform its interpretation of the statutory language in Section 336 of the FAA Modernization and Reform Act of 2012 regarding Model Aircraft operations. Please visit the [Federal Rulemaking Portal](#) (<http://www.regulations.gov/#!submitComment;D=FAA-2014-0396-0781>) and follow the instructions for sending your comments electronically.

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