

Bend Aero Modelers



Flight Report

February, 2016

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Next Meeting



February 24, 2016
6:30pm At Black Bear Diner
Food Available
Come early to visit and eat!



Message from the President

Dear Members & Interested Readers:



As we move into 2016, our fight for the right of flight continues. As most of you are aware, the DOT, FAA and AMA continue to discuss the impact of the FAA's recent "Pilot Registration" announcement on our hobby. The AMA continues its fight to protect our right to fly our model aircraft without a lot of needless regulation. The latest news is actually good news. On Thursday, February 11th, the Transportation and Infrastructure Committee in the House of Representatives passed the Aviation Innovation, Reform and Reauthorization (AIRR Act). The AIRR Act is supposed to preserve and strengthen the Special Rule for Model Aircraft. "By

strengthening the Special Rule for Model Aircraft, this bill will enhance safety across the recreational community and allow our members, who for decades have flown safely and responsibly

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within AMA's community-based safety program, to continue enjoying our hobby without new burdensome regulations" - AMA Government Affairs. The bill now goes to the full House of Rep-

representatives for a vote. The Senate also needs to work on their version of the bill. Even though we are a ways off from full Congressional approval, it seems that we are finally on the right track to protect our model aviation hobby.

On another positive note, unless you have locked yourself in a closet, the winter weather has provided us with some awesome flying opportunities here in Central Oregon. I took this picture last Sunday (Feb 7th). As you can see, we had sunny skies with pilots on the ground and planes in the air at Popp's Field. This "El Nino" year has given us a lot of snow, rain and wind. It has also given us some very sunny, calm and warm days. It was 63 degrees at Popp's Field on Sunday (7th). We continue to look for those "special days" at Popp's Field. Get those planes ready and join us for some fun and warm winter flying!



Flying activity at Popp's Field on February

I look forward to a great flying season here in Central Oregon in 2016.

Greg McNutt

By Bob Ingram

Now that January is out of the way

We all wonder what happened ... the month of January went by so fast we aren't sure we were part of it. Trust me 2016 will be just as fast so ENJOY.

Continue to feel free to submit pictures and stories during 2016. Without your contributions the BAM Newsletter would not exist at the level you expect it.

So do not be shy, lets see those pictures and stories.

Remember the Editor can't be everywhere but someone is usually there to report that CRASH (take pictures, and tell who made it happen) or some other event.

A neat thing happened in January (actually it happened at the meeting and after ... most people did not know it even happened. Dave Reiss had learned that a young boy by the name of Judd who is 3 years old (Mark Benavente's son) missed out on a 'wood' plane at the last field event in 2015. So he made one for Judd and gave it to Mark to give to his son Judd. We are all one happy family and look after each other.





A Quick Look at FAA's B4UFLY App

You may or may not have heard about it yet, but the FAA has released a useful app called **B4UFLY**. This handy app provides access to upcoming requirements and restrictions in areas of the National Airspace System (NAS) so pilots of unmanned aircraft systems (UASs) can determine whether it is safe or even possible to operate their UAS at their current location or any other location that they are considering.

This new app has been in a beta testing phase since May 2015 for both the Android and the iOS platforms. The official iOS-compatible version (v1.2) for Apple smartphones and tablets was officially released on January 6, 2016. The official Android version is completing its beta testing (current status as of this writing) and will be released soon. However, Android users can download the current beta version if they want to take a peek and evaluate the app.

To get the app for your specific operating system, simply go to the respective download application for your smartphone/tablet (Apple's App Store for iOS-based products and Google's download area for Android-based products).

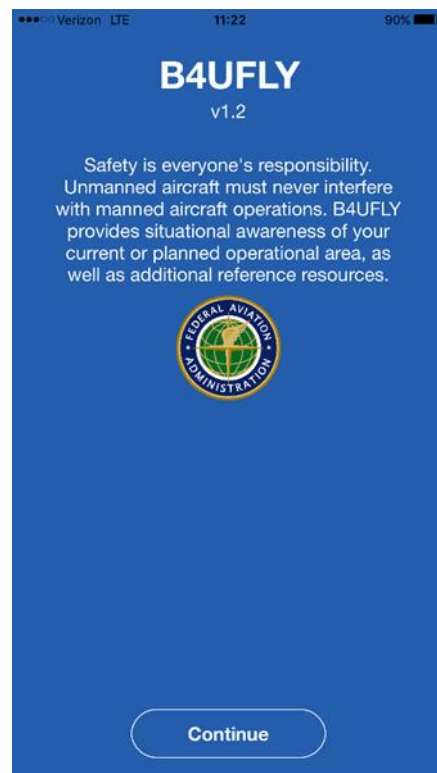
For more info about the app, please refer to:

<https://www.faa.gov/uas/b4ufly/>

When you first install the app and launch it, you will see the welcome page that shows a boilerplate disclaimer (see right image). The depicted screenshot is from an iPhone. In order for the app to supply you with the relevant airspace information, you will need to enable location services on your phone so the right information is provided for your current location or any location of your choice.

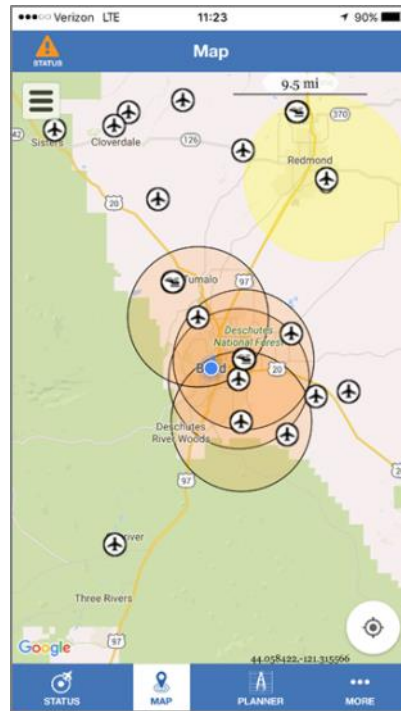
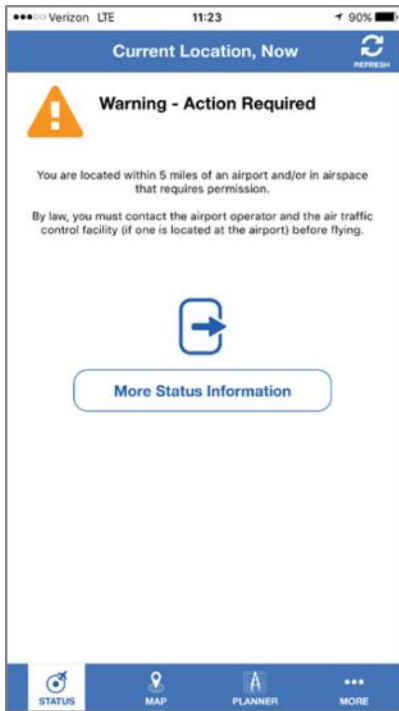
Now, some of you might say that this ability also provides the FAA with information about you since your location is revealed in order to transmit the correct airspace data. Well, you can decide for yourself. If this is something that you have issues with, then you will likely not use this application at all.

However, if you are not going to do anything illegal, it's actually a good app that can help you make an educated decision before you get into trouble and fly in airspace that has permanent or temporary restrictions. If you decide to use it, you can do more with it than just view the data for your current location. For example, you can access the "**Planning Mode**" and specify a particular location and date/time to see if there are any existing *Temporary Flight Restrictions* (TFRs) or *Notices to Airmen* (NOTAMs).



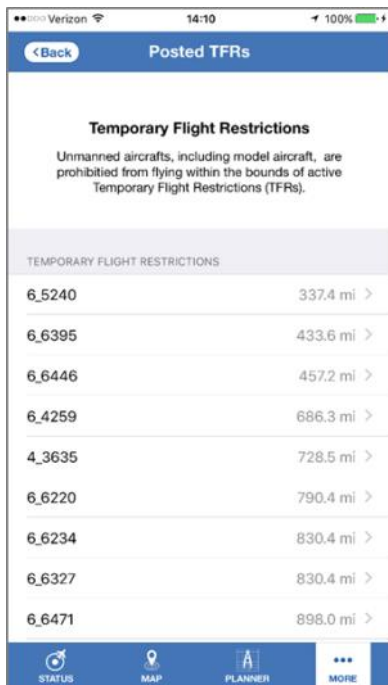
Or you can click “**More**” in the main menu and see a list of current TFRs across the US. Overall, I find it quite handy and useful because it gives you peace of mind that you are not accidentally flying in or near restricted airspace. If you travel a lot and like to take your model aircraft/drone with you, this could be a great piece of information to have beforehand. Obviously this app is more relevant when flying at an unfamiliar location where you may not know the layout of the geography and airspace.

Following are several sample screenshots of the different menus and options:



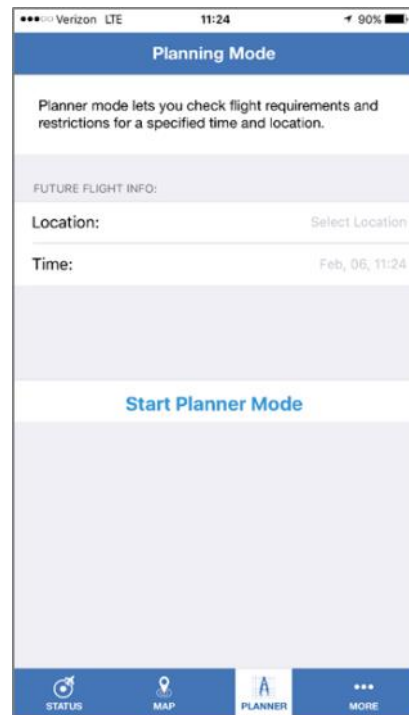
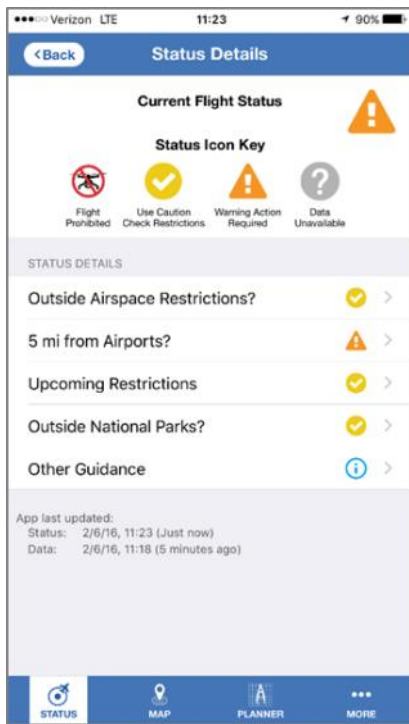
Sample warning message for airspace

Sample map of airfield locations

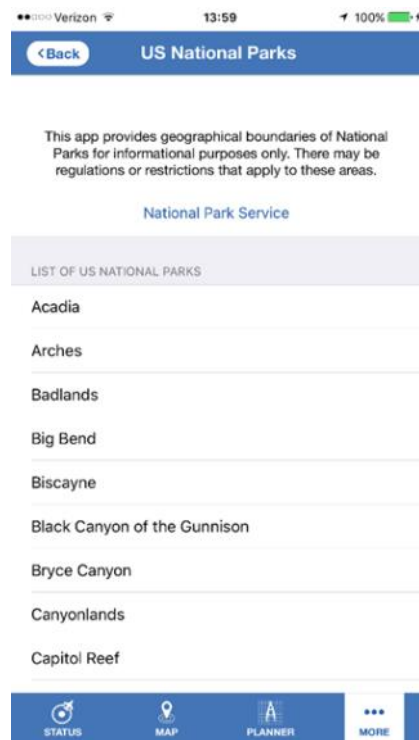
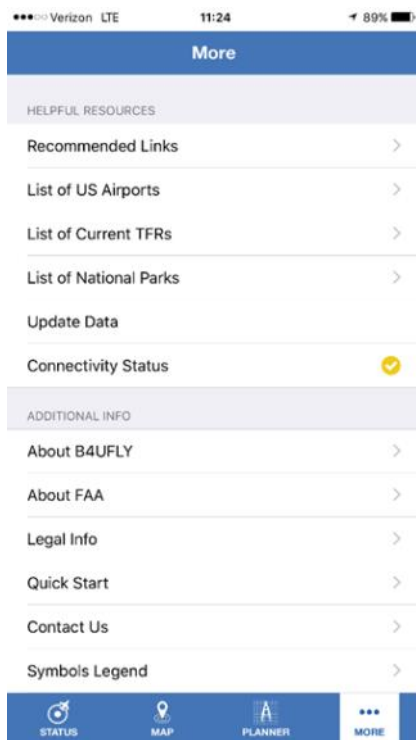


Sample list of current TFRs

Sample details for a current TFR



Symbols and their definitions Sample **Planner Mode** screen



Available options in the **More** menu Sample list of National parks

This app provides a lot of information that was not easily available before now through one single tool. Give it a try and see for yourself if this app is for you.

See you at the field,

Waldemar Frank

New Members

During the month of January, BAM received 2 new members.

Jack Newman (AMA 1084966) is new to the hobby and has interest in electric scale airplanes. He purchased an electric T-28 from Andy. Born and raised in Oregon. Spent 3 years in the US Army. Although he is 'new' to the hobby he has been around airplanes most of his life as his father was in the US Air Force during WWII / Korea and has done some line control flying (many years ago), has built many models and has 1,000+ hrs in full scale. He is the brother of Joseph Newman who also recently joined. Jack is still working, however he is able to work from home as a data base administrator.



Terry McDaniel (AMA # 1070141) started 2 years ago with little helicopters in the house ... then he went outside with bigger helicopters ... then he got a drone. Just a year ago he start flying fixed wing planes and has 2 Super Cubs (a small one and a bigger one). Mike Wissing came out to his house and said Terry needs more space to fly. Mike hooked him up on the buddy box and Terry was able to got more air

time. Terry joined to improve his fixed wing flying abilities and looks forward to meeting the guys and learning more about flying. Terry was in the Oregon National Guard many years ago. Was born in North Dakota and moved here when he was 10 years old and owned a business in Bend for 17 years which he sold and retired.

A BIG BAM WELCOME to both of the new members that joined in February 2016.

What else is happening

There was a very good turnout for the first meeting of 2016 ... and most everyone came early enough to get a dinner and visit (and yes exchange stories).—27 members were present (our club roster shows 68 members. And it looks like we could be running out of room soon too ... or at least a place to put our show and tell ... Hope to see more members plus more show and tell next time.



Show & Tell

For the February 2016 BAM club meeting ... Tom Schramm, Roger Bladholm, Robert Breitbarth and Bill Hand had nice airplanes for show and tell.

Roger Bladholm brought in a very nice DC3 that he purchased for \$169 receiver ready through Hobby King. The plane has flaps and lighting. Roger plans to use a single 4S 4000maH Lipo battery to spin those two props. Roger chose the Empire design and added some of his own touches for visibility.



Robert Breitbarth brought in his E-Flight Debanair ARF (Beechcraft Bonanza) which was only offered from 2009-2013. The plane was beautifully covered but comes with NOTHING. Rob had to purchase and install the 950kVA motor, servos, ESC and receiver. The plane has internal linkages for the flaps for a really clean appearance. He plans to use a 3S 2800MaH Lipo to spin the prop.

Tom Schramm brought in his latest project work of art a boned up Grumman Goose built from Model Aviation Plans. Tom has about 2 months in this aircraft so far and he expressed his frustration in building the plans as the stringers are so fragile just handling the craft can damage them. Tom added the aluminum push rod tubes to the two dummy radial engines which really improved the scale look of the plane. Tom plans to power the two motors and two ESC's from one 3S 2200Mah Lipo battery. UltraCote ParkLite coverings is planned for covering this aircraft.



Bill Hand brought in two aircraft to share this month. The first was a glider, a traditional pylon "free slight" style plane of the 1950's. The 'Ghost' that Bill built up (scratch-built fuselage and tail) using a wing given to him by Steve Younger via Tom Schramm. The custom glider looks a lot like an Old Timer and utilizes just elevator, rudder and throttle control. Bill has installed a color coordinated motor and plans to use a 3S 1100 MaH LiPo to power the plane. Bill also brought in a potential less cost pylon racing (or just a bit faster) airplane, known as the Weekender Zipper from Hightec RC. It cost Bill \$39 complete and comes unpainted which is nice for custom color schemes.



NICE SHOW and TELL from everyone.

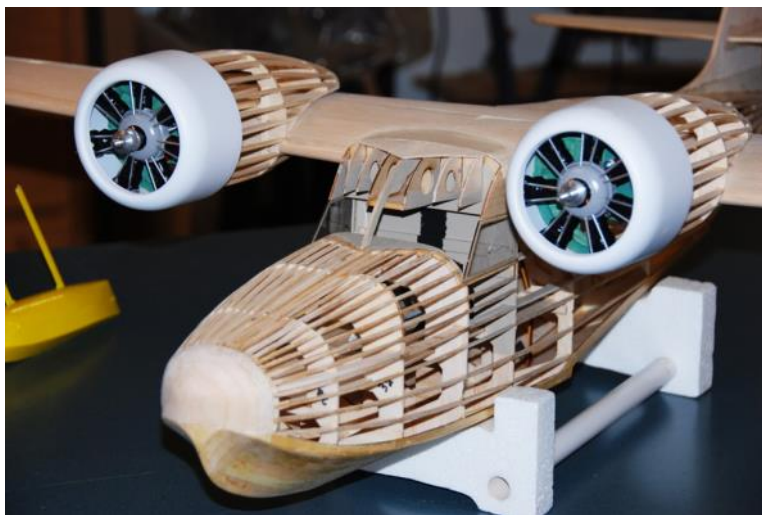
In addition to - Show and Tell at the Club Meeting - Tom Schramm offered the following additional information ...

Seeing the Grumman Goose construction article in the May 2012 issue of Model Aviation brought back memories of the Cleveland Models and the Comet stick and tissue kits I built in my younger years, thusly inspiring me to build the Goose.



Plans were ordered and a laser cut 'short kit' was purchased from Manzano Laser Works. Parts fit were excellent although the contest grade sheet balsa parts required gentle handling as they would easily break under pressure. The required stringers (1/16" x 3/32") were cut from sheet balsa, soaked in hot water, and glued in place. Again, handling resulted in snapping many stringers which resulted in their removal. New stringers were cut 3/32" x 1/8" and installed after enlarging the stringer slots in the formers. I had to remember "GENTLE HANDLING".

Plastic cowls and front half of a 7 cylinder radial engine were purchased from Park Flyer Plastics. The engines were painted black and grey and 1/16" aluminum tubing added to represent push rod tubes.



Super Tiger 370 outrunner motor was installed in each nacelle and fits nicely behind the radial. Two 20 Amp ESC's and a 3S- 2200 mAh Lipo will provide juice to the outrunners. Guidance is by Futaba 2.4 with 3 servos for aileron, elevator and rudder control. Ailerons are actuated by torque rods resulting in no external linkage.

Covering will be Ultracoat Park Light Yellow with trim color to be determined. Fuselage bottom was planked with 1/16" balsa and covered in 3/4 oz. fiberglass for greater strength. Bottom will be painted 'urchin anti-fouling' black.

So far, I have 2 months in construction of this model and have enjoyed the challenge.



BAM Field Safety Guidelines

GENERAL

- All pilots shall be current members of AMA. Proof of current AMA membership is required prior to flying at BAM.
- Visiting AMA pilots and new members of BAM shall receive a safety orientation by one of BAM's Safety Committee members prior to their first flight.
- Pilots shall ensure flight operations in accordance with AMA's Safety Code and these Field Safety Guidelines at all times.
- Pilots shall ensure proper operation of their aircraft and associated equipment prior to use.
- Pilots shall show courtesy towards others and apply common sense when flying at BAM.
- Pilots are encouraged to verbally enforce safe flying practices as appropriate.
- All guests, spectators, children, and pets shall be supervised by a BAM member at all times while inside the flying field and are encouraged to remain behind the pit tables.
- When working on armed aircraft in the pit area, pilots shall always secure/restrain the aircraft from moving on the ground or rolling off a work bench/pit table.
- R/C cars and other surface vehicles are prohibited anywhere inside the flying field.
- Smoking is prohibited anywhere inside the flying field and shall be carried out in a safe and respectful manner in the parking lot.
- The consumption of alcoholic beverages before or during flight is prohibited.

PRE-FLIGHT OPERATION

- Pilots that use AM/FM radio equipment (50 MHz, 53 MHz, and 72 MHz) shall attach the appropriate frequency pin visibly to their transmitter's antenna whenever it is in use.
- Pilots shall place their AMA card on the respective channel pin on the frequency board.
- Pilots shall restrain their aircraft during the start-up (combustion engines) or arming process (electric motors).
- Pilots shall use one of the designated run-up stands for the start-up and arming process as appropriate for

Pilots shall use one of the designated run-up stands for the start-up and arming process as appropriate for the type and size of aircraft.

For larger or electric-powered aircraft, pilots may use the taxiway instead to start up or arm their aircraft while keeping it restrained with the help of another pilot, helper, or tethered to the ground or safety fence.

For extended engine tuning and troubleshooting procedures (e.g., more than usually needed to start the engine), pilots shall use one of the run-up stands designated (marked) for tune-ups, break-in and troubleshooting.

Pilots shall never leave their aircraft unattended while the aircraft is running or armed even if it is secured and restrained.

FLIGHT OPERATION

Pilots shall only taxi aircraft on the taxiways and runway. No taxiing is permitted in the pit area.

While flying, pilots must remain behind the safety fence and never block the taxiways.

Pilots shall verbally communicate their intentions during takeoffs, landings, and emergencies.

Pilots shall always fly their aircraft north of the centerline of the runway and remain within the approved fly zones (see fly zone map for details).

Only pilots and a supervised helper are permitted beyond the safety fence (e.g., to retrieve an aircraft).

Landing aircraft have the right of way. Dead-stick landings shall be called as such and given immediate right of way.

Pilots shall announce low passes, touch-and-gos, and hovering directly near or above the runway.

Pilots shall not take off from or land on the taxiways. This applies to all aircraft types, including rotary-wing and micro aircraft.

No more than five (5) aircraft shall be in the air at one time. This includes rotary-wing and micro aircraft.

Pilots shall call all maiden flights prior to flight. All other aircraft shall be grounded until the maiden flight has been completed.

All hand launches shall be called to alert other pilots. Hand launches shall be performed either from the runway or the area between the runway edge and the safety fence.

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.
1. Model aircraft will not be flown:
 - (a) In a careless or reckless manner.
 - (b) At a location where model aircraft activities are prohibited.
 2. Model aircraft pilots will:
 - (a) Yield the right of way to all human-carrying aircraft.
 - (b) See and avoid all aircraft and a spotter must be used when appropriate. (AMA Document #540-D.)
 - (c) Not fly higher than approximately 400 feet above ground level within three (3) miles of an airport without notifying the airport operator.
 - (d) Not interfere with operations and traffic patterns at any airport, heliport or seaplane base except where there is a mixed use agreement.
 - (e) Not exceed a takeoff weight, including fuel, of 55 pounds unless in compliance with the AMA Large Model Airplane program. (AMA Document 520-A.)
 - (f) 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.)
 - (g) Not operate aircraft with metal-blade propellers or with gaseous boosts except for helicopters operated under the provisions of AMA Document #555.
 - (h) 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.
 - (i) 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.)
 - (j) Not operate a turbine-powered aircraft, unless in compliance with the AMA turbine regulations. (AMA Document #510-A.)
 3. Model aircraft will not be flown in AMA sanctioned events, air shows or model demonstrations unless:
 - (a) The aircraft, control system and pilot skills have successfully demonstrated all maneuvers intended or anticipated prior to the specific event.
 - (b) An inexperienced pilot is assisted by an experienced pilot.
 4. 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)**
1. All pilots shall avoid flying directly over unprotected people, vessels, vehicles or structures and shall avoid endangerment of life and property of others.
 2. 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.
 3. At all flying sites a safety line(s) must be established in front of which all flying takes place. (AMA Document #706.)
 - (a) Only personnel associated with flying the model aircraft are allowed at or in front of the safety line.
 - (b) At air shows or demonstrations, a straight safety line must be established.
 - (c) An area away from the safety line must be maintained for spectators.
 - (d) Intentional flying behind the safety line is prohibited.
 4. 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.
 5. 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.)
 6. 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.
 7. 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.
 8. 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.
 9. The pilot of an RC model aircraft shall:
 - (a) Maintain control during the entire flight, maintaining visual contact without enhancement other than by corrective lenses prescribed for the pilot.
 - (b) Fly using the assistance of a camera or First-Person View (FPV) only in accordance with the procedures outlined in AMA Document #550.
 - (c) Fly using the assistance of autopilot or stabilization system only in accordance with the procedures outlined in AMA Document #560.
- C. **FREE FLIGHT**
1. Must be at least 100 feet downwind of spectators and automobile parking when the model aircraft is launched.
 2. Launch area must be clear of all individuals except mechanics, officials, and other fliers.
 3. An effective device will be used to extinguish any fuse on the model aircraft after the fuse has completed its function.
- D. **CONTROL LINE**
1. The complete control system (including the safety thong where applicable) must have an inspection and pull test prior to flying.
 2. The pull test will be in accordance with the current Competition Regulations for the applicable model aircraft category.
 3. Model aircraft not fitting a specific category shall use those pull-test requirements as indicated for Control Line Precision Aerobatics.
 4. 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.
 5. The flying area must be clear of all nonessential participants and spectators before the engine is started.