



Founded in 1936, the Academy of Model Aeronautics (AMA) is the world's largest model aviation organization, representing a membership of more than 180,000. The purpose of AMA is the promotion, development, education, advancement, and safeguarding of modeling activities.

Over the years AMA has established and evolved a safety program which guides modeling activities through education and voluntary compliance. As technology advances and the model community continues its growth, disciplines and interests continue to increase. Creating a safe environment to protect the airspace, bystanders, other model pilots, as well as surrounding property, is crucial and the responsibility of every individual participating in modeling activities. AMA highlights the most important safety aspects through its Safety Code, but the safety program encompasses many more facets. This safety guide is a compilation of AMA documents and programs as they pertain to safe model operations and has been developed and reviewed by our internal safety committee. It is intended to provide a centralized location to find all pertinent safety information and is a valuable tool for club officers, contest directors, event managers, and others.

All members must actively participate in the AMA Safety Program by:

1. Explicitly affirming that they have read, understand, and intend to operate within AMA's safety guidelines as a condition of membership.
2. Maintaining an appropriate level of financial responsibility to afford third party restitution in the event of injury or property damage. (AMA membership benefits provide up to \$2,500,000 in liability coverage for each member. This coverage is excess to any other applicable liability coverage such as a homeowner's policy.)
3. Providing personal contact information through which the AMA can distribute relevant safety information such as FAA TFR notices, and by which members can provide input and feedback to the AMA on safety related issues.

Because AMA has set the model aviation safety standard so high, we ask the FAA to do the same. It is imperative that community-based organizations meet all the requirements outlined in U.S.C. 44809 subpart (h), including having in place a set of proven and comprehensive safety guidelines for all aspects of model aviation. Please see AMA's specific AC 91-57C comments in the following document.

Respectfully,

A handwritten signature in cursive script, appearing to read 'Tyler Dobbs'.

Tyler Dobbs  
Government Affairs Director  
Academy of Model Aeronautics

**Clearance Record  
DOCUMENT COMMENT LOG**

<b>Originating Office:</b> AFS-800/AFS-810	<b>Document Description: Draft AC</b> AC 91-57C, Exception for Limited Recreational Operations of Unmanned Aircraft	<b>Project Lead:</b> Alvin Brunner, 405-666-1024, Alvin.A.Brunner@faa.gov	<b>Reviewing Office:</b> Public Comment Site	<b>Review Deadline Date:</b> 8/9/21
---	--	---	---	--

<b>Company &amp; Group</b>	<b>Page &amp; Para</b>	<b>Reviewer's Comment</b>	<b>Reviewer's Rationale for Comment</b>	<b>Reviewer's Recommendation</b>	<b>OPR Accept (A) Reject (R)</b>	<b>OPR Disposition</b>
Academy of Model Aeronautics (AMA)	Page 2-1/2-2  Para 2.2.2	<p>Paragraph 2.2.2 states: "...an operator does not need to be a member of a CBO to fly under its safety guidelines."</p> <p>Membership requirements should be left to the individual CBO, not be mandated by the FAA.</p> <p>All AMA members must actively participate in the AMA Safety Program to satisfy our CBO safety guidelines by:</p> <ol style="list-style-type: none"> <li>1. Explicitly affirming that they have read, understand, and intend to operate within AMA's safety guidelines as a condition of membership.</li> <li>2. Maintain an appropriate level of financial responsibility to afford third party restitution in the event of</li> </ol>	<p>U.S.C. 44809 (a)(2) requires that "The aircraft is operated with or within the programming of a community-based organization's set of safety guidelines that are developed in coordination with the Federal Aviation Administration."</p> <p>This congressional mandate assumes two-way input regarding safety related guidelines. Forcing future CBOs to change safety protocols without justification could compromise the safety of the NAS, such as uninformed individuals operating within a TFR.</p> <p>Congress's intent in regard to CBO membership is shown in U.S.C. 44809 (d)-(2)(B) which requires that</p>	<p>The FAA should allow community-based organizations the ability to set their own programming and safety parameters, including insurance and membership requirements. These safety parameters would need to meet all requirements outlined in U.S.C. 44809 (a) (1-8) Specifically, we recommend the FAA remain silent on the topic of membership by deleting the sentence: "However, an operator does not need to be a member of a CBO to fly under its safety guidelines" from the top of page 2-2.</p> <p>The FAA should initiate a process to update the operational parameters under paragraph (1) and consider those recreational</p>		

Company & Group	Page & Para	Reviewer's Comment	Reviewer's Rationale for Comment	Reviewer's Recommendation	OPR Accept (A) Reject (R)	OPR Disposition
		<p>injury or property damage. (AMA membership benefits provide up to \$2,500,000 in liability coverage for each member. This coverage is in excess to any other applicable liability coverage such as a homeowner's policy.)</p> <p>3. Provide personal contact information through which the AMA can distribute relevant safety information such as FAA TFR notices, and by which members can provide input and feedback to the AMA on safety related issues.</p> <p>The term "CBO member" can be found 12 times throughout AC 91-57C, especially concentrated in the suggested safety guidelines section. This suggests that the included information, specifically the recommended safety guidelines, is indeed intended for the membership of the CBO recognized organizations.</p>	<p>"operations outside the membership, guidelines, and programming of a community-based organization"</p> <p>Congress's intent is visible in 44809 when they distinguish between two classes of recreational operations.</p> <p>Class 1: CBO members who are operating within CBO programming and safety guidelines.</p> <p>Congress uses the word "and" in this section, meaning that membership, programming, and safety guidelines work in conjunction with each other. Attempting to separate the CBO structure contradicts Congress's intent in this section.</p> <p>Class 2: operations outside of CBO membership, guidelines, and programming of a community-based organization.</p>	<p>UAS operators under U.S.C. 44809 that are operating outside of CBO membership, programming, and safety guidelines. This process is outlined in U.S.C. 44809 (d) updates (1)</p>		

Company & Group	Page & Para	Reviewer's Comment	Reviewer's Rationale for Comment	Reviewer's Recommendation	OPR Accept (A) Reject (R)	OPR Disposition
		AMA safety guidelines cannot be satisfied without specific user affirmation.				
Academy of Model Aeronautics (AMA)	Page 2-2 Para 2.2.4	Paragraph 2.2.4 places all situational awareness of the UAS on the recreational flyer, without mention of a visual observer.	FPV operations do not allow the operator the ability to know UAS direction and proximity to other aircraft. This recommended language allows the recreational user the ability to continue FPV operations under the authority given in U.S.C. 44809(a)(3).	Recommend the following change:  Add "and/or visual observer"  "The recreational flyer and/or visual observer of a UA is responsible for knowing, at all times, the position of the aircraft in relation to other aircraft;..."		
Academy of Model Aeronautics (AMA)	Page 2-3 Para 2.2.5.4	It should be noted that many recreational fixed flying sites are not available for use to the general public.	AMA has approximately 2,400 flying sites around the country and most of these sites require both membership in AMA and the local AMA chartered club.	Include language that informs the public that most fixed flying site locations require CBO and CBO chartered club membership prior to flying an aircraft at the location.		
Academy of Model Aeronautics (AMA)	Page 3-3 Para 3.4.3	This paragraph contradicts the requirement found in U.S.C. 44809 (h)(4) for CBOs and their mandate to develop "a comprehensive set of safety guidelines for all aspects of model aviation addressing the assembly and operation of model aircraft and that	The FAA gives leniency regarding CBOs and their requirements outlined in U.S.C. 44809 (h)(4). U.S.C. 44809 (h)(4) clearly states that CBOs will develop a comprehensive set of safety guidelines for all aspects of model aviation. This AC removes this	Properly align AC 91-57C 3.4.3 with U.S.C. 44809 (a)(2) and (h)(4)., requiring that all CBOs must develop and coordinate with the FAA a comprehensive set of safety guidelines for all aspects of model aviation addressing the assembly and operation of model		

Company & Group	Page & Para	Reviewer's Comment	Reviewer's Rationale for Comment	Reviewer's Recommendation	OPR Accept (A) Reject (R)	OPR Disposition
		emphasize safe aeromodelling operations within the national airspace system and the protection and safety of individuals and property on the ground, and may provide a comprehensive set of safety rules and programming for the operation of unmanned aircraft that have the advanced flight capabilities enabling active, sustained, and controlled navigation of the aircraft beyond visual line of sight of the operator”	congressional requirement, thus limiting the effectiveness of the CBO structure and designation status.	aircraft and that emphasize safe aeromodelling operations within the national airspace system and the protection and safety of individuals and property on the ground, and may provide a comprehensive set of safety rules and programming for the operation of unmanned aircraft that have the advanced flight capabilities enabling active, sustained, and controlled navigation of the aircraft beyond visual line of sight of the operator.		
Academy of Model Aeronautics (AMA)	Page 3-4 Para 3.4.3.3.1	This paragraph contradicts the requirement found in U.S.C. 44809 (h)(4) for CBOs and their mandate to develop “a comprehensive set of safety guidelines for all aspects of model aviation addressing the assembly and operation of model aircraft and that emphasize safe aeromodelling operations within the national airspace system and the protection and safety of	First person view operations are an aspect of model aviation, and safety guidelines have been mandated to recognized CBOs in U.S.C. 44809 (h)(4). Both assembly and operation of model aircraft, which includes first person view operations.	Properly align AC 91-57C 3.4.3 with U.S.C. 44809 (h)(4)., requiring that all CBOs must develop a comprehensive set of safety guidelines, which must include first person view operations.		

Company & Group	Page & Para	Reviewer's Comment	Reviewer's Rationale for Comment	Reviewer's Recommendation	OPR Accept (A) Reject (R)	OPR Disposition
		individuals and property on the ground, and may provide a comprehensive set of safety rules and programming for the operation of unmanned aircraft that have the advanced flight capabilities enabling active, sustained, and controlled navigation of the aircraft beyond visual line of sight of the operator”				
Academy of Model Aeronautics (AMA)	Page 3-9 Para 3.5.2	There is no mention of a process to authorize Class G operations over 400’ at fixed flying site locations.	<p>U.S.C 44809 (a) allows a person to operate a small unmanned aircraft without specific certification or operating authority from the FAA if the operation adheres to 8 statutory limitations.</p> <p>AMA interprets this to allow the FAA to grant operating authority to any recreational UAS operation outside of this statutory requirement, including operations above 400’ in Class G airspace.</p> <p>Guidelines on updating the operational parameters of U.S.C. 44809 subsection (a)</p>	<p>Recommend the FAA include that preapproved CBO safety programming can authorize Class G UAS operations above 400’ at fixed flying site locations that are charted on the FAA UAS Data Delivery System.</p> <p>This CBO programming can take into account the safety mitigations outlined in the national SRMP for operations over 400’, as well as mitigations outlined in local SRM fixed flying site LOA panels.</p> <p>This change would allow the FAA to issue blanket</p>		

Company & Group	Page & Para	Reviewer's Comment	Reviewer's Rationale for Comment	Reviewer's Recommendation	OPR Accept (A) Reject (R)	OPR Disposition
			<p>are outlined in U.S.C. 44809 (d)(1).</p> <p>This process for UAS operations over 400' in Class G airspace was initiated on 12/10/19 with the Recreational UAS Operations Above 400' Safety Risk Management Panel.</p>	<p>authorizations as a part of the CBO recognition process for operations above 400' in Class G airspace without the need to issue site by site approvals for every fixed flying site.</p>		
Academy of Model Aeronautics (AMA)	Page 3-3 through 3-9  Chapter 3	<p>AMA does not agree with some of the CBO safety guideline suggestions in chapter 3 and believes some of the overly prescriptive solutions do not meet Congress's directive to the agency.</p>	<p>U.S.C. 44809(h)(4) provides a comprehensive set of safety guidelines for all aspects of model aviation addressing the assembly and operation of model aircraft and that emphasize safe aeromodelling operations within the national airspace system and the protection and safety of individuals and property on the ground, and may provide a comprehensive set of safety rules and programming for the operation of unmanned aircraft that have the advanced flight capabilities enabling active, sustained, and controlled navigation of the aircraft beyond</p>	<p>The FAA should focus their evaluations on whether CBO programming is comprehensive, serves all aspects of model aviation, and the programming is time tested and proven.</p>		

Company & Group	Page & Para	Reviewer's Comment	Reviewer's Rationale for Comment	Reviewer's Recommendation	OPR Accept (A) Reject (R)	OPR Disposition
			visual line of sight of the operator.			
Academy of Model Aeronautics (AMA)	Page 4-1 Para 4.1	Airspace Authorization(s) for Sanctioned Event(s) section has no mention of UAS operations at airshows.	The FAA acknowledges that existing aeromodelling organizations have developed safety guidelines that are helpful to recreational flyers. An example is the AMA safety guidelines, which have previously been reviewed by the FAA as part of the organization's Recognized Industry Organization (RIO) status for participation in the National Aviation Events Program (refer to FAA Order 8900.1, Volume 5, Chapter 9, Section 6, Issue/Renew/Reevaluate/R escind an Air Boss Letter of Authorization).	Recommend including a section with language found in 7.1.2.1 of AC 91-57B. This will clarify that recreational UAS operations can continue at full-scale airshows and events.		
Academy of Model Aeronautics (AMA)	Page 4-1 Para 4.1.1	AMA has concerns about the 90-day advance authorization outlined in 4.1.1. AMA sanctioned events bring in participants and spectators from around the world. Delays resulting from this process	Early Part 107 authorizations were often delayed past 90 days. With the number of recreational operators exceeding Part 107 certificate holders, it is possible we see similar	AMA feels that if the request for preapproved safety programming for fixed flying site operations above 400' in Class G airspace is approved, this would greatly reduce the impact and resources		



Company & Group	Page & Para	Reviewer's Comment	Reviewer's Rationale for Comment	Reviewer's Recommendation	OPR Accept (A) Reject (R)	OPR Disposition
		could result in substantial financial loss for CBO chartered clubs and attendees	delays from the proposed sanctioned event process.	required by the FAA for the sanctioned event authorization process. Please see AMA's Page 3-9 Paragraph 3.5.2 comments above.		