



FAA

# Air Show and Aviation Events Update

Presented to: ICAS Convention Las Vegas NV

By: FAA – Sue Gardner (AFS-800)

Date: December 06 2015





# ICAS 2015

- **200-250 Air Shows and 400+ Aviation Event CoW/As**

## Millions of Spectators

- Safety Planning
- Coordination
- Integration





# ICAS 2015

## ARE AIR SHOWS SAFE?

- Air Shows offer a consistently and historically safe environment for millions of spectators each year. Since current rules were implemented well over 50 years ago, there has not been a single spectator fatality at a North American Air Show – an enviable safety record.





# Aviation Events - 2015

## Accidents / Incidents in 2015

### Air Shows

- Team AeroDynamix – Tuscaloosa Airshow (2nd Mid-air Non-Fatal)
- L-39 – Oneida, TN (Fatal)
- Giles – Stewart Airport NY (Fatal)
- Pitts S2-B – Cameron, MO (Fatal)

### Parachute Demonstrations

- Military – Mid Air Chicago, IL (Fatal)
- Civilian - Round Canopy Houston, TX (Non-Fatal)





# Flight Standards Resources

## National Aviation Events Specialist (NAES)

Sue Gardner (AWA) (630) 880-5834

## Regional Aviation Events Specialist (RAES)

Anthony Mauro (AEA) (718) 553-3236

Eric Stout (ASO) (404) 305-6066

Brian Martin (ASW) (817) 222-5234

Derek Dunmire (ACE) (314) 890-4827

Roy Speeg (ANM) (406) 449-5270 x11

Ken Thomas (AAL) ((907) 271-5368

Bart Angle (AGL) (734) 487-7272

Kevin Raymond (AGL) (847) 294-7155

John Goldfluss (AWP) (310) 725-7249





# FAA Resources - AFS Environmental Environmental Information Documents (EID)

- **AFS-830 General Aviation and Commercial Division**
  - Mike Millard
    - Phone: 513-842-9690
    - Email: [mike.millard@faa.gov](mailto:mike.millard@faa.gov)
  - FSDO will Email all EIDs and FAA Form 7711-2 to a standard FAA mailbox within 10 days of receipt from applicant
  - Updated EID (February 2016) located on FAA Website – <http://www.faa.gov/about/initiatives/airshow/>





# FAA Air Traffic Organization Resources

**RADIO  
FREQUENCYs**



**TFRs**

## OSG Special Events Coordinators

FAA HQTs (202) 385-6194



### ATO Service Centers

- Lynda Otting Eastern Service Center (404) 305-5577
- Joe Ruddy Central Service Center (817) 222-5858
- Dan Rollins Western Service Center (425) 203-4516
  - Bob Gegen ANM/AAL Regions (425) 203-4571
  - Michele Cruz AWP Regions (425) 203-4562

## Aviation Events Website Policy for TFRs and Radio Frequency's

- <http://www.faa.gov/about/initiatives/airshow/>





# FAA Resources - AFS and AIR

## Airworthiness and Aircraft Certification

### Aircraft Maintenance Division - AFS-350

- Kevin Morgan (FLM) - (202) 385-6429
- Jude Sellars – (225) 788-1829

### Aircraft Certification Service - Production and Airworthiness Division – AIR-230

- Brian Cable (FLM) - (202) 385-6453
- Craig Holmes - (202) 385-6353
- Grant Schneeman – (202)-267-1650





# FAA Aviation Events Policy

- **FAA Order 8900.1 Vol 3 Ch 6 and Vol 6 Ch 10**
  - Issue a CoW/A for an aviation event and surveillance.  
V6 - Combine chapter 10 and 11
    - V3C6 and V6C11 - Revision 2<sup>nd</sup> QTR FY16
- **FAA Order 8900.1 Vol 5 Ch 9**
  - Statement of Aerobatic Competency Card (SAC)
    - Revision 2<sup>nd</sup> QTR FY16
  - ACE Manual ICAS/EAA
    - ICAS Ver. 8.0 FY15
    - EAA WoA Ver. 2.0 FY15





# FAA Aviation Events Policy

- **FAA Order 8900.1 Vol 3 Ch 5**
  - Issue a CoW for an Aerobatic Practice Area and Contest Box
    - Revision 2<sup>nd</sup> QTR FY16
- **AC-91-45C - Aviation Events**
  - Revision D – 2<sup>nd</sup> QTR FY16
- **AC 105 – 2E – Parachute Operations**
  - December 2013





# FAA Policy and Guidance

- **New 8900.1, Volume 5, Chapter 9, Section 2**
  - Issue a CoW for Aerobatic Competency Evaluation/Practice (ACE/P) (FY 2016)
- **New 8900.1, Volume 8, Chapter 3, Section 5**
  - Requirements for New Airport Safety Assessment Policy (FY 2016)
- **New Web OPSS paragraphs for aviation events CoW/A and LOAs– Develop/Update (FY16)**
  - 1. J501 CoA Parachute Demo
  - 2. J502 CoW Aviation Event
  - 3. J503 LOA Aviation Events





# ICAS 2015

**FAA Website –**

**<http://www.faa.gov/about/initiatives/airshow/>**

- **Update with 2016 Air Show Season Info  
February – March 2016**





# FAA Industry/Military Partners

- **Industry**

- ICAS - ACE Committee, Safety Committee,
- EAA Warbirds of America, CAF
- FAST, FFI
- IAC
- USPA
- RARA
- BFA
- NAR/Tripoli
- AMA



- **Military- Pentagon**

- U.S. Air Force    U.S. Navy    U.S. Army



# ICAS 2015

- **North American Regulatory Authority Partners -**
  - Transport Canada (TC) – Pierre Ruel and Francis “Frank” Mercier
    - CAR 623
  - Canadian DND – Michel “Spike” Tremblay
    - BGA-100

TC – Transition in progress with new Air Show Coordinator. Wayne Harper retired Nov 2015. FAA and TC goal to align policies in 2<sup>nd</sup> QTR of FY 16





# FY 2016 - What is new?

- Aviation Event Policy
  - UAS Demonstrations
  - Formation – Civilian
  - Performers and Aircraft Inspections
  - Emergency Response
  - Military – Ingress/Egress
- ACE Manual
  - ICAS/EAA
  - New SAC
  - Formation
- ACE/P Operations
- Electronic CoW/A Process
  - Web OPSS
- Charting Project - APAs
- Extend CoW APA - 3 yrs
- FAST/FFI
  - Formation
- Air Boss Certification
- FAA Training - Aviation Events
- Timelines for Processing CoW/A



# Standardization North American Air Show Policy

## OBJECTIVE

Align FAA and TCCA Orders and Regulations for Civilian aircraft.

### Proposed Revisions:

- Sample site diagram amended
- Add to diagrams term "congested area" - inadvertently omitted in Change 86
- Diagrams and language clarify' s positioning of team lead and wingmen for formation flight for each category of aircraft
- Amended language for Night and Civil Twilight
- Amended language for Helicopter Operations
- Parachute Civilian (USPA License/Rating or FAA LOA)
  - WWII/Round Canopy LOA-Standards
  - Expanded language/alignment with USPA for all other civilian parachute demos

# North American Air Show Policy

## Proposed Revisions (cont'd):

- PARTICIPANT AND AIRCRAFT ELIGIBILITY-  
Aerobatic Competency Documentation.
  - Prior to performing at an air show civil aircraft pilots must show evidence of **performing or practicing their performance(s) within the previous 45 days.**

An air show performance conducted under an “Airshow” CoW is **never** counted as a practice even if the event organizer is calling it a “practice” or “media” day.

# North American Air Show Policy (cont'd)

- ICAS ACE Manual (Rev 8)      EAA WoA ACE Manual (Rev 2)
  - Dec 31 2015 - New Qualification, Proficiency, and Currency for Aircraft (Cat)/Level/Endorsements on SAC
  - Dec 31 2015 - New SAC issued by FSDO
- **Updated FAA Order 8900.1 Vol 5 Chapter 9 Sect 1**
  - New FAA Form 8710-7 SAC in lieu 2" x 3" SAC card -
    - Electronic Copy accepted
  - Updated procedures and FSDO Coordination
    - Notification of accidents, incidents, or violations
    - Revocation
  - Updated Aircraft Categories, Levels, Endorsements for EAA WoA and ICAS
  - New Endorsement – Dynamic Maneuvering – Solo and Formation



# FAA Form 8710-1 Statement of Aerobatic Competency (SAC)

- **FAA eForm**
  - Use in electronic format
  - New Qualification, Proficiency, and Currency for Aircraft (Cat)/Level/Endorsements

STATEMENT OF AEROBATIC COMPETENCY (SAC)  
FAA FORM 8710-7

Date: January 15, 2015



US Department of Transportation  
Federal Aviation Administration

Pilot: J.J. Jones  
Certificate Type/No: Commercial 12345678  
Phone: 999-666-0000  
Email: JJJones@aol.com  
SAC Issuance: 01-15-2015  
SAC Proficiency Expiration: 12-31-2016

FAA ASL: J.J. Smith  
FSDQ: DuPage - AGL-23  
Signature:  
Phone: 666-999-0000  
Email: JJSmith@aol.com

ICAS Recommendation Waiver ID 80509

AUTHORIZED AIRCRAFT	AUTHORIZED AIRCRAFT CATEGORY	ALTITUDE LEVEL	SHOW LINE CATEGORY	ENDORSEMENTS: ALL AIRCRAFT CATEGORIES	EXPIRATION DATE-AIRCRAFT CATEGORY/LEVEL/ENDORSEMENT
Boeing Stearman - All Variants MX-2/MXS/MXR	Sport Aerobatics - Category A	Level 2 - 250 feet AGL	Category III - 500 feet	Solo Aerobatics Circle the Jumpers	01-31-2018
Hawker Hunter	Jet Warbird Aerobatic - Category B	Level 1 - Unrestricted	Category I - 1500 feet	Solo Aerobatics	12-31-2014

I understand that this statement of competency does not authorize deviation from 14 CFR Part 91 except as defined in a waiver number and the terms of a Special Provision contained in a Certificate of Waiver (FAA Form 7711-1) for an Airshow.

PILOT SIGNATURE \_\_\_\_\_  
DATE \_\_\_\_\_





# FAA Air Show Policy

## Proposed Revisions (cont'd):

### \*Formation Demonstrations – Civilian

- Recommendation submitted from Industry Dec 2015
  - Implementation 2016 season – FAA Policy/ACE Manuals/FAST/FFI Manuals
    - Grandfathering considerations
- Formation Demonstrations – Civilian
  - Standard Maneuvering (FAST /FFI Card)
  - Dynamic Maneuvering (SAC - ICAS/EAA)
    - Solo (Replaces 90/90 endorsement)
    - Formation (new)
  - Formation Aerobatics (SAC - ICAS)

Note: Military Jet Team approvals – no changes

\* Expanded discussion in ACE and Performer Briefings during ICAS





# FAA Air Show Policy

## Proposed Revisions (cont'd):

### ACE/P Operations

- Implementation 2016 season – FAA Policy/ACE Manual
- ACE/P Operations is a necessary tool for accomplishing FAA requirements for SAC holders (performers) required to be evaluated and practice, by FAA policy (FAA Order 8900.1)
  - (Upon request of the FAA, civil aircraft pilots must show evidence of performing or practicing their performance(s) within the previous 45 days 8900.1, V3, C6, S1, P3-145(a)(4))*
  - Provides greater access and flexibility to evaluations and practice at air show altitude and simulate air show environment for the holder of a SAC or applicant for a SAC.
  - Additional tool for the air show performer in addition to an APA (LT and ST). Provides mobility & easier access to airport environments





# FAA Air Show Policy

## Proposed Revisions (cont'd):

### Military Jet Teams – Ingress and Egress Routes

#### Implementation 2016 season – FAA Policy/Support Manual

- Request from the CO is no longer needed for each Air show site to fly along specified ingress/egress routes within 3 NM from show center, as low as 200 feet above the highest obstacle (within a 500 foot horizontal radius)
  - Language will be added to 2016 LOA for each Military Jet Team
- A representative of the military jet demonstration team, will conduct an onsite survey during the current air show season (**preferably at the preseason meeting**)
- Results will be provided in writing with aerial diagrams and charts to the event organizer and IIC and discussed to ensure all parties have a thorough understanding.
- IIC will state approved in Airshow CoW Special Provision





# FAA Air Show Policy

## Proposed Revisions (cont'd):

### Military Jet Teams – US Navy Blue Angels

– 2016 FAA AFS-800 LOA

- Command Approval to fly personnel aboard NFDS C-130 (Fat Albert) during Flight Demonstrations and Practices
- Blue Angels Pitch-up Break to Land is not an aerobatic maneuver – No CoW required
- Winged Naval Aviator or Naval Flight Officer for the Blue Angels is authorized to attend air show safety briefing





# FAA Air Show Policy

## Proposed Revisions (cont'd):

### Emergency Response Requirements

- ICAS Forum Monday 3:45 p.m. Miranda 7— FAA Industry Military Panel
  - Emergency Response Manual
    - Required with all CoW Applications (FAA Form 7711-2)
  - Performer Extraction Instructions –
    - Required to perform at airshow
  - 1 minute Raid Response Time
  - FAA Airports developing guidance document





# FAA Air Show Policy

## Proposed Revisions (cont'd):

- **New Web OPSS paragraphs for CoW/A and LOAs issued for aviation events**
  - 1. J501 CoA Parachute Demo
    - Blanket CoA – Parachute Team 1 year
  - 2. J502 CoW Aviation Event and APA
    - Airshows and APA – 1<sup>st</sup> Priority
  - 3. J503 LOA Aviation Events
    - AFS-800 approval LOA
      - Military
      - Parachute Demo Teams - Civilian
      - ACE Program and SAC – ACE/P LOA
      - Formation Programs





# FAA Air Show Policy UAS Demonstrations



## Proposed Revisions (cont'd):

### New Policy authorizing a UAS Demo at aviation events

- Coordinated effort with AFS-800 and UAS Office
- Beta Test conducted 2014/15 season
  - 4 sites airshows and 1 air race
  - Developed Draft FAA Policy and AMA Guidelines
- Beta Test Authorized for 2016 – Otherwise Prohibited
  - Coordinate with RAES and UAS Office Regional POC
  - When new policy published – authorized in accordance with policy
- Leave your Drone at Home during airshows
  - Educational materials on FAA UAS Website
    - New app to show where not to fly your drone.



# FAA Air Show Policy

## UAS Demonstrations (Cont'd)

- **3 Types of UAS**
  - Model Aircraft – Hobby or Recreational UAS
  - Civil UAS – Need Special Airworthiness Certificate or Section 333 exemption and CoA from ATO/AFS-80
  - Public UAS – Need CoA from ATO/AFS-80
- **3 Types of UAS Demos at Aviation Events with a CoW**
  - Demonstrations - Inside Flying Display Area/Aerobatic Box
  - Demonstrations – Educational Marketing inside aviation event demonstration area
  - Demonstrations – Inside netted arena or structure

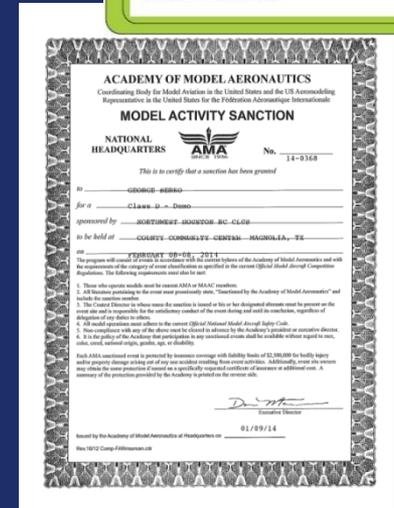
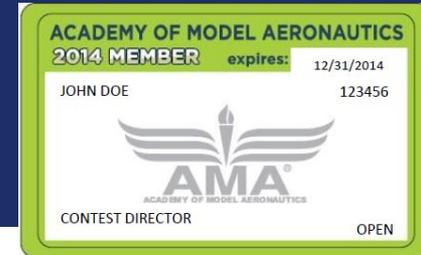
Note: Use of UAS for photography and surveillance in development
- **Civil and Public UAS Demos – Coordinate with RAES and AFS-80 POC early to reissue CoA or Ops Limits**



# FAA Air Show Policy

## UAS Demonstrations (Cont'd)

- **Model Aircraft - New FAA UAS Policy/AMA Guidance**
- Aviation Events require an Academy of Aeronautics (AMA) Sanction letter listing the name of the Contest Director (CD) (provided to the responsible person/Air Boss) part of the CoW and Special Provisions.
  - An AMA (CD) is responsible for the Airworthiness of the aircraft. Knowledgeable of the capabilities of Model Aircraft pilots performing under the CoW.
    - The CD presents credentials to the IIC upon request
    - Liaison between the IIC, Air Boss, and R/C model performers.
    - Familiar with AMA rules pertaining to the minimum show line requirements for model aircraft.
    - Required to attend the airshow safety briefing.
      - AMA authorized Safety Officer is required to be present
      - AMA guidance on FAA Aviation Events Website



Sanctioning body - Academy of Model Aeronautics (AMA), 5161 East Memorial Drive, Muncie, Indiana 47302, Phone: 1-800-435-9262, Website: [www.modelaircraft.org](http://www.modelaircraft.org).





# FAA Air Show Policy Rocket Launches

## Proposed Revisions (cont'd):

- **New Policy authorizing a rocket launch at an aviation event**
  - Coordinated effort with FAA Flight Standards, Air Traffic, and Commercial Space Transportation Office
  - Coordinated with NAR and Tripoli
  - Requirement for a Safety Analysis by AST (surface and airspace) for every launch
  - Class I, II, III Rockets
  - Successful Beta Test Rocky Mountain Air Show





# FAA Air Show Policy

## Proposed Revisions (cont'd): Airworthiness – Aviation Events

- **Surveillance – Update/Merge Policy** (V6 C11 S10/\*11)
  - Job Aid for IIC
  - New Status Sheet - Aircraft
  - Checklist for Event Organizer
    - Performers
    - Aircraft
    - Parachutists

Aircraft Status and Inspection Form

N: \_\_\_\_\_ S/N: \_\_\_\_\_ Make: \_\_\_\_\_ Model: \_\_\_\_\_

Inspection (Check the Inspection that Applies)	Compliance Date & Hours	Next Due
<input type="checkbox"/> Annual		
<input type="checkbox"/> Condition		
<input type="checkbox"/> 100 Hour (If Required)		
<input type="checkbox"/> Progressive		
<input type="checkbox"/> 91.411 (Altimeter/Static)		
<input type="checkbox"/> 91.413 (Transponder)		
<input type="checkbox"/> 91.207 (ELT Inspection)		

Recurring AD's	Description	Compliance Date & Hours	Next Due

I certify this information accurately represents the applicable information documented in the aircraft maintenance records and the records were reviewed on this day to verify the inspection and airworthiness directive status of this aircraft. This form is valid until the next inspection or airworthiness directive is due.

Owner/Operator (Print Name): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Reference Information:**  
 8900.1 Volume 3, Chapter 6, Section 1, Paragraph 3-145 F.  
 8900.1 Volume 6, Chapter 11, Section 10, Paragraph 6-2379 C \*

\* Indicates this guidance is in draft mode and is not available to the public at this time.







# FAA Policy

## Proposed Revisions (cont'd):

### Air Racing



- Closed Course Air Races - Establishes new requirements and clarifying accreditation requirements for Air Racing Classes, Organizations and Pilots for closed course races (RARA – RBAR)
  - Revision V3C6s2 to address lessons learned from RENO 2012/13/14 and RBAR 2014/2015 - Incorporate Notice 231
  - Maintenance and Aircraft modifications
  - Performance Based Rules for Course Design
  - Flight testing certification after modification by PIC
- X-C Air Races – Lead FSDO coordinates with each FSDO along course
  - Standardize Special provisions



# FAA Policy

## Proposed Revisions (cont'd):

### Aerobatic Practice Areas (APA)

- **CoW APA – Extend renewal period 3 years - Approved**
- **Short-Term APA – Issue for 30 days or less**
- **Environmental Assessments (EA) – LT APA**
  - 95% of all long-term waivers will be CATEX for Noise
    - EA - Extraordinary Circumstances must be considered
  - New EID and instructions – FY16 (Jan)
    - [http://www.faa.gov/about/office\\_org/headquarters\\_offices/avs/offices/afs/afs800/programs/media/aerobatic\\_environmental.doc](http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs800/programs/media/aerobatic_environmental.doc)
    - Reissuance – EID only check box and 7711-2 and EID submitted together
- **Charting Project – ATO and AFS-800**
  - AFD and VFR Sectionals – FY16 (04FEB 2016) (Long-term--Nav Database)





# FAA Policy

## Proposed Revisions (cont'd):

### Air Boss Certification Program

- **The FAA continues to support ICAS with development of an Air Boss Certification Program**
  - 2015 Final program in review with FAA
  - 2016 Goal to begin implementation
    - Initial cadre of Air Bosses approved
      - Training new air bosses
      - Develop FAA Policy for Air Boss LOA
      - Beta Test 2016
  - 2017 Certified Air Boss
    - Implementation of certified Air Bosses





## FAA Policy

### Temporary Flight Restriction (TFR)

- Protected airspace to provide safety for the performers
- Highest altitude available: 17,999' MSL
  - TFRs are not published in Class A airspace, but higher protected airspace can be provided by the overlying ATC facility
- Typically 5NM radius from show center
- ATC can still penetrate the TFR with concurrence





# FAA Policy

## Temporary Flight Restriction (TFR)

**Please submit your TFR request at least 45 days in advance to the appropriate Service Center Operations Support Group**

### ATO Service Centers

- Lynda Otting Eastern Service Center (404) 305-5577
- Joe Ruddy Central Service Center (817) 222-5858
- Dan Rollins Western Service Center (425) 203-4516
  - Bob Gegen ANM/AAL Regions (425) 203-4571
  - Michele Cruz AWP Regions (425) 203-4562

- **Graphical TFRs - <http://tfr.faa.gov/tfr2/list.html>**
- **For Guidance on how to apply for an Aviation Event TFR - Go to:**

**Aviation Events Internet Site <http://www.faa.gov/about/initiatives/airshow/>**

**Your 7711-2 waiver request is NOT a TFR request**





# FAA Policy

## Frequency Requests

- Air/ground frequency requests can be sent to the same Service Center contact
- Frequency Management requires a minimum of 60 days to approve some frequency requests
- If the frequencies are used by non-FAA personnel, then a temporary station license must be requested from the FCC. The FAA is not involved with this, and FCC timeframes differ.
- [http://www.faa.gov/about/initiatives/airshow/media/Air\\_Show\\_Freq\\_Request\\_Guidance.pdf](http://www.faa.gov/about/initiatives/airshow/media/Air_Show_Freq_Request_Guidance.pdf)





# FAA Training - Aviation Events

- **FY 15/16 FAA completes training for FAA workforce responsible for Aviation Events**
  - Web based course and 3 day Instructor led course ready 2<sup>nd</sup> QTR FY 2016
- Thank You ICAS for their many years of excellent training for FAA IICs and ASIs with oversight responsibilities for air shows





Sue Gardner National  
Aviation Events Specialist  
(NAES):

[Sue.Gardner@faa.gov](mailto:Sue.Gardner@faa.gov)

**(630) 880-5834 (cell)**

### Regional Aviation Events Specialist (RAES)

Anthony Mauro (AEA)	(718) 553-3236
Eric Stout (ASO)	(404) 305-6066
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