

# **International Council of Air Shows**

## **AEROBATIC COMPETENCY EVALUATION/PRACTICE OPERATIONS MANUAL**



## RECORD OF REVISION

[illegible]

# AEROBATIC COMPETENCY EVALUATION/PRACTICE OPERATIONS MANUAL

## LIST OF EFFECTIVE PAGES

Section	Page	Revision Number	Date
Record of Revision	i	0	09/01/2021
List of Effective Pages	ii	0	09/01/2021
List of Effective Pages	iii	0	09/01/2021
Table of Contents	iv	0	09/01/2021
Table of Contents	v	0	09/01/2021
Table of Contents	vi	0	09/01/2021
Section 0	0-1	0	09/01/2021
Section 0	0-2	0	09/01/2021
Section 0	0-3	0	09/01/2021
Section 1	1-1	0	09/01/2021
Section 1	1-2	0	09/01/2021
Section 2	2-1	0	09/01/2021
Section 3	3-1	0	09/01/2021
Section 3	3-2	0	09/01/2021
Section 4	4-1	0	09/01/2021
Section 4	4-2	0	09/01/2021
Section 5	5-1	0	09/01/2021
Section 5	5-2	0	09/01/2021
Section 5	5-3	0	09/01/2021
Section 5	5-4	0	09/01/2021
Section 5	5-5	0	09/01/2021
Section 6	6-1	0	09/01/2021
Section 6	6-1	0	09/01/2021
Appendix A	A-1	0	09/01/2021
Appendix A	A-2	0	09/01/2021
Appendix A	A-3	0	09/01/2021
Appendix B	B-1	0	09/01/2021
Appendix C	C-1	0	09/01/2021

KEVIN A. RAYMOND  
Digitally signed by  
KEVIN A. RAYMOND  
Date: 2021.08.26  
08:48:38 -05'00'  
FAA ACCEPTED

---

[illegible]

## TABLE OF CONTENTS

Title Page	-
Record of Revision	i
List of Effective Page(s)	ii - iii
Table of Contents	iv - vi

### Section 0 - General Information

0.1 Introduction	0-1
0.2 Facility -- General	0-1
0.3 Facility-- Mailing Address and Phone Numbers	0-2
0.4 Manual Applicability	0-2
0.5 Manual Revisions	0-2
0.6 Manual Distribution	0-2
0.7 Availability of Manual	0-3

### Section 1

1.1 Organization and Management Identity	1-1
1.2 Responsible Person	1-1
1.3 Duties of the Responsible Person	1-1
1.4 Ace	1-2
1.5 Duties of Ace	1-2

### Section 2

2.1 Aircraft Certification	2-1
----------------------------	-----

2.2 Aircraft Inspections	2-1
--------------------------	-----

2.3 Additional Inspections	2-1
----------------------------	-----

## **Section 3**

3.1 Pilot Minimum Requirements	3-1
--------------------------------	-----

3.2 Accident Notification	3-1
---------------------------	-----

3.3 Approved Ace List	3-2
-----------------------	-----

3.4 Required Training for Approved ACE's	3-2
--	-----

## **Section 4**

4.1 Area of Operation - Geographical	4-1
--------------------------------------	-----

4.2 Specific Areas – Evaluation/Practice Operations Sites	4-1
---	-----

4.3 Flights Other Than Evaluation/Practice Operations Sites	4-1
---	-----

4.4 Permission/Coordination	4-1
-----------------------------	-----

4.5 FAA Notification	4-2
----------------------	-----

## **Section 5**

5.1 Initial Briefing	5-1
----------------------	-----

5.2 Air Operations - Crew Notification	5-1
--	-----

5.3 Security	5-1
--------------	-----

5.4 Communications	5-2
--------------------	-----

5.5 Aircraft Movement	5-3
-----------------------	-----

5.6 Suspending Operations	5-3
---------------------------	-----

5.7 Roads and Highways 5-3

5.8 Aircraft Speed 5-3

5.9 Plan of Activities 5-4

### **Section 6 Aerobatic Flight**

6.1 Pilot Requirements 6-1

6.2 Aerobatic Aircraft 6-1

6.3 FAA Notification 6-1

6.4 Flight - Distances and Speeds in Relation to Spectators 6-1

6.5 Minimum Weather Required 6-2

6.6 Special Provisions 6-2

Appendix A - Accident Reporting A-1

Appendix B – Statement of Compliance B-1

Appendix C - Approved Ace's C-1

## SECTION 0 - GENERAL INFORMATION

### **0.1 INTRODUCTION**

The Aerobatic Competency Evaluation (ACE) program administered by the International Council of Air Shows provides the North American air show community with a tool for periodically evaluating the aerobatic competence of air show pilots who perform aerobatics at U.S. and Canadian air shows. In a unique partnership between ICAS, Transport Canada and the Federal Aviation Administration, the ACE program prescribes minimum standards, the rules and regulations by which evaluations are conducted, and the necessary qualifications for both evaluators and air show pilots.

Upon being recommended by an individual ACE, pilots who successfully complete the Statement of Aerobatic Competency application and evaluation process are issued a Statement of Aerobatic Competency by either the FAA or Transport Canada. Aerobatic Competency Evaluators (ACEs) are selected from among the air show industry's most senior and accomplished pilots. All ACEs receive training from ICAS on how to conduct effective, consistent evaluations, and identify potential problems among applicants. The program is administered by a seven-member ACE Committee. The evaluation process and a wide range of related administrative issues are addressed in a 100-page ACE Manual, published by ICAS, accepted by the FAA and Transport Canada, and updated periodically.

The ACEs are the heart of the program and the source of its success since the FAA delegated evaluation authority to them in the winter of 1991. The air show accident rate has dropped dramatically since aerobatic experts – the ICAS ACEs – began conducting evaluations. They are the most qualified individuals to conduct these evaluations, and – for more than two decades now – they have handled this delegated authority and responsibility with an appropriate level of professionalism and gravity.

### **0.2 FACILITY – GENERAL**

ICAS headquarters is in Leesburg, VA. The administration, filing and record keeping for operations covered by this manual are maintained and stored at these facilities.

205 Van Buren Street Suite 120  
Herndon, VA 20170



## **0.3 FACILITIES-- MAILING ADDRESS, EMAIL AND PHONE NUMBERS OF RESPONSIBLE PERSON**

Dan Hollowell  
Vice President of Safety and Operations  
205 Van Buren Street Suite 120  
Herndon, VA 20170  
703-779-8510 (office)  
hollowell@airshows.aero

## **0.4 MANUAL APPLICABILITY**

The required manual prescribes rules, policies and procedures for the guidance of responsible persons, ACEs and pilots listed as approved users of the aerobatic competency evaluation/practice operations approved waiver. The manual is required to be adhered to during all ACE/P operations. It is a necessary tool for all ACEs, pilots and other personnel, who operate in an air show environment, are required to maintain aerobatic competency and are subject to periodic evaluations through the ACE Program. The ability to conduct aerobatic evaluation and practice operations to maintain competency, significantly increases the level of safety when it is able to be done in a controlled environment. The manual will be incorporated as part of the special provisions and become the standard by which ICAS and the ACE Program conducts all operations pursuant to the FAA Certificate of Waiver. The controls, procedures, and conditions set forth in this operations manual are primary assurance that persons on the surface will not be jeopardized. This is basis for issuance of the waiver. Therefore, failure to comply with provisions of the manual will be considered a violation of terms of the waiver and may constitute justification for cancellation of the waiver and could warrant individual enforcement action or civil penalty. The content of this manual shall not be construed to be contrary to any other applicable government regulation.

## **0.5 MANUAL REVISIONS**

This manual is subject to revisions. Refer to the "Record of Revisions" for a summary of approved Revisions. Revised pages will show a version number in the lower right hand corner of each page. The FAA FSDO office that issued the waiver and approved the manual shall receive all revisions to this manual 15 days before effective date of revision.

## **0.6 MANUAL DISTRIBUTION**

ICAS management and/or the responsible person(s) will be responsible for distributing a copy of this manual to all ACEs and pilots before any flight activities covered by this manual take place. ACEs and pilots will be required to sign the Statement of compliance, located in Appendix B, stating they have read this manual and related FAA Waiver and will comply with all provisions. After reading the manual and signing the

attached statement, all Statements of Compliance will be returned to ICAS management or responsible persons. All users of this manual will verify that the copy of the manual in use for said operations is current.

### **0.7 AVAILABILITY OF MANUAL**

The FAA accepted original manual will be kept on file at the ICAS office. Each ACE named in the manual involved with the Aerobatic Competency Evaluation/Practice operations will be provided a copy of the manual. The ACE will be required to have this manual on his person and available for use by any participant with the evaluation/practice operations, or representative of the FAA, at each Aerobatic Competency Evaluation/Practice operations site.

## SECTION 1

### **1.1 ORGANIZATION AND MANAGEMENT IDENTITY**

A chain of command shall exist in the conduct of operational control. "Operational Control" with respect to a flight, means the exercise of authority over initiating, conducting, or terminating a flight. The ACE on-site, conducting evaluation/practice operations is the first one authorized to exercise operational control. The second level of operational control is the responsible person as defined in Section 1, paragraph 1.1.

The following is a list of the names and titles of those persons authorized to exercise operational control for ICAS:

ACE: See attached list of approved ACEs

Responsible Person: Dan Hollowell, ICAS Director of Operations

### **1.2 RESPONSIBLE PERSON**

The responsible person is the current ICAS Director of Operations.

### **1.3 DUTIES OF THE RESPONSIBLE PERSON**

1. He is the primary supervisor of the pilots.
2. Ensures the safe and efficient conduct of evaluation/practice operations.
3. Ensures compliance with all applicable FAR's.
4. Ensures compliance with the ICAS Aerobatic Competency Evaluation/Practice Operations Manual.
5. Directs the scheduling of ACE/P operations.
6. Assures availability of required publications for pilots and support crew.
7. Initiates evaluation/practice operations specific manual changes.
8. Is authorized to cancel ACE/P operations at a specific site for ICAS.
9. Receives accident notification and ensures appropriate reporting to the responsible agencies.

NOTE: All of the above may be accomplished through oversight, training and designation of authorized ACEs listed in the ICAS ACE/P Operations Manual. The Responsible Party is the final authority and has the ultimate responsibility for ensuring all provisions of CoW are complied with at all times.

## **1.4 ACE**

The ACE is responsible for the direct supervision of pilots and their ground and flight operations. He is first in the line of authority to exercise operational control for the CoW holder. As such, an approved ACE must be in physical attendance prior to commencing, and for the duration of, any and all ACE/P operations.

## **1.5 DUTIES OF ACE**

1. Monitors flights operated during the use of the ACE/P operations COW. Ensures compliance with applicable regulations and this manual.
2. Reviews pilot records to ensure minimum requirements have been met prior to administering evaluations
3. Conducts evaluation of pilots requiring evaluation, and maintains evaluation records.
4. Maintains a current check list for each evaluation/practice flight.
5. Makes any required reports to the FAA regarding incidents/accidents.
6. Must have a thorough working knowledge of the Aerobatic Competency Evaluation/Practice Operations Manual, the ICAS ACE Program, and the FAA regulations.

## SECTION 2

### **2.1 AIRCRAFT CERTIFICATION**

ICAS, the responsible person, or a delegate (ACE/P Operations Manual authorized ACE) will be responsible for checking each aircraft before initial flight activity takes place to ascertain the validity of required documents. Documents include all of the following:

1. Certificate of Airworthiness: This certificate may be in any category including experimental or restricted, provided the requirements of FAR 91.203 and 91.7 are met.
2. Operations Limitations
3. Registration Certificate
4. Radio Station License, if applicable.
5. Airframe and Engine Log Books: Log books need not be carried in the aircraft but copies of entries attesting to required inspections, AD lists, etc., must be available for review by ICAS, the responsible persons, or a delegate, prior to participating in activities covered by this manual.

### **2.2 AIRCRAFT INSPECTIONS**

All aircraft used for operations covered by this manual must have current inspections in accordance with the provisions of Title 14 Code of Federal Regulations (CFRs). If an event covered by this manual requires modification or alterations to the structure of the aircraft that would affect the structural integrity and or flight characteristics of the aircraft, ICAS, or the responsible person, will ascertain that those modifications have been approved and documented by the FAA aircraft certification branch.

### **2.3 ADDITIONAL INSPECTIONS**

There exists the possibility of abnormal or unusual stress imposed on aircraft airframes due to the nature of some air show operations. It is the responsibility of all pilots to notify ICAS, the ACE or the responsible person if he feels a condition of abnormal stress has occurred. The pilot then has the responsibility to ensure the aircraft is properly inspected, and any flight critical damage is properly repaired before return to service.

## SECTION 3

### **3.1 PILOT MINIMUM REQUIREMENTS**

ICAS, responsible person, or ACE/P Operations Manual authorized ACE s are responsible for checking the documents, certificates and logbooks of pilots who are engaged in operations covered by this manual.

Pilots are responsible for, and must present evidence that they meet the following minimum requirements:

1. Hold at least a current commercial pilot certificate with ratings appropriate to the category and class of the aircraft to be used.
2. Hold at least a current second-class airman medical certificate.
3. Must be a designated Aerobatic Competency Evaluator (ACE); OR hold a FAA Form 8710-7, Statement of Aerobatic Competency (SAC); OR must have initiated the application process on the ICAS website to obtain an initial SAC. Alternatively, must hold, or be in the process of being evaluated for, the Transport Canada Form 26-0307, equivalent to the FAA Form 8710-7.

### **3.2 ACCIDENT NOTIFICATION**

ICAS, the responsible person or designated ACE will be required to notify the NTSB, the National Aviation Events Specialist and Regional Aviation Events Specialist if an accident / incident occurs that is serious enough to come under the provisions of NTSB 14 CFR Part 830. Guidance for such notification shall be obtained from the following: o Part 830.5 – Immediate Notification

- ☐ Notification shall be made immediately to the nearest NTSB Field Office.
- o Part 830.6 – Information to be given in notification
  - This section provides a list of the required information.
- o Part 830.10 – Preservation of aircraft wreckage
  - Local officials or an ICAS representative shall maintain control of and preserve any aircraft wreckage until the NTSB takes custody.
- o Part 830.15 – Reports and statements to be filed
  - When requested by the NTSB ICAS shall file the required reports, along with any crewmember statements within the required time.
  -

## **3.3 APPROVED ACE LIST**

A list of approved ACEs will be maintained as Appendix C of this manual on the FAA Aviation Events website.

## **3.4 REQUIRED TRAINING FOR APPROVED ACES**

ICAS will require annual completion of training for all ACEs approved for ACE/P Operations. Training will be completed prior to January 1<sup>st</sup> of each calendar year and a report of the completed training will be sent to the National Aviation Events Specialist by January 15<sup>th</sup>. Training will include (but not limited to):

- Annual participation in ICAS ACE training
- Annual completion of ACE/P specific training

The report to the NAES will include a review of all ACE/P Operations conducted by each ACE.

## SECTION 4

### **4.1 AREA OF OPERATION - GEOGRAPHICAL**

This manual must be used by all pilots, ACE/P Operations Manual authorized ACE s and responsible persons conducting or supervising operations requiring a waiver of any regulation(s) listed in 14 CFR 91.905, List of regulations that can be waived, and all evaluation/practice operations must be in accordance with that manual to exercise the privileges of this CoW within the Continental United States, including Alaska and Hawaii.

### **4.2 SPECIFIC AREAS – EVALUATION/PRACTICE OPERATIONS SITES**

This manual is required to be used at all specific evaluation/practice operations sites requiring a waiver of the 14 CFR regulations listed in 14 CFR 91.905. Prior to any flight activity performed in accordance with the Aerobatic Competency Evaluation/Practice Operations Manual, ICAS, the responsible person, or an ACE/P Operations Manual authorized ACE listed in the Aerobatic Competency Evaluation/Practice Operations Manual will contact the nearest FAA Flight Standards District Office (FSDO) and advise them of proposed activities. A map of evaluation/practice operations site(s) indicating the proposed routes to be flown will be provided. In addition, a Plan of Activities, dates, and times will be provided to that FSDO.

### **4.3 FLIGHTS OTHER THAN EVALUATION/PRACTICE OPERATIONS SITES**

Personnel are to be aware that only those approved operations conducted at the location sites are waived relative to compliance with the regulations waived. All other flights to, from, and in the vicinity of the approved evaluation/practice operations site(s) must be conducted in a normal fashion complying with existing regulations.

### **4.4 PERMISSION/COORDINATION**

It is the responsibility of ICAS, the responsible person, the delegated ACE, or combination thereof, to coordinate and/or gain the permission of the following entities, as required, prior to the beginning of evaluation/practice operations.

1. Property Owners
  2. Neighboring Subdivisions
  3. Law Enforcement Agencies
  4. Fire Protection Agencies
  5. State and Federal Government
  6. FAA Flight Service, Air Traffic Control
  7. FAA FSDO (see next section)
- ### **4.5 FAA NOTIFICATION**



## **4.5 FAA NOTIFICATION**

10 days before scheduled operations ICAS, via the ACE/P Operations Manual authorized ACE, or responsible person, must submit a written Plan of Activities to the local FSDO having jurisdiction over the site of proposed evaluation/practice operations. The 10-day notification may be waived with the concurrence of the FSDO having geographic jurisdiction over the proposed site of ACE/P operations, but no less than 3 days. Justification of the exception to the 10-day requirement is required. See section 5.9.

## SECTION 5

### **5.1 INITIAL BRIEFING**

Prior to any activities detailed in this manual ICAS, an ACE/P Operations Manual authorized ACE or responsible person will meet and brief the aerial sequences with pilots, crew and all persons involved with the evaluation/practice operations. At this meeting, the following will be briefed:

1. Authorization for Aerobatic Competency Evaluation/Practice Operations Certificate of Waiver and the attached special provisions
2. ACE/P Operations Manual
3. Plan of Activities
4. Aircraft parking and starting
5. Taxi procedures
6. Radio communications
7. Takeoff procedures
8. Aviation activities to be conducted during the evaluation/practice operations
9. Approach and landing procedures
10. Recall procedures
11. Emergency procedures
12. Risks to participating personnel
13. How to control nonparticipating persons

### **5.2 AIR OPERATIONS - CREW NOTIFICATION**

All crew members and essential personnel with responsibilities during the evaluation/practice operations are required to attend the initial briefing. These individuals include, but are not limited to, the following: Pole holders, vehicle operators required for transfers and/or car top landings, wing walkers, ground elements of comedy routines, etc.

### **5.3 SECURITY**

91.119(c) may be waived only with respect to those participating persons, vehicles, and structures directly involved in the performance of the evaluation/practice operations. No persons are permitted within 500 feet of the evaluation/practice area except those essential to the evaluation/practice operations, e.g., inverted ribbon cut pole holders. These persons must be briefed as required in Sections 5.1 and 5.2. A plan for securing the evaluation/practice areas against unauthorized persons, vehicles, and outside air traffic, must be in place. This responsible person or ACE/P Operations Manual authorized ACE must ensure that access to the evaluation/practice area is secure and

that two-way radio communication to the pilot are available in the event that an unauthorized person, vehicle or aircraft enters the ACE/P operations location. Should an unauthorized person, vehicle or aircraft enter the ACE/P operations location, a knock it off will be called to the pilot and operations will cease until the area is secured again. This plan must also be included in the Plan of Activities (Section 5.8).

The Plan of Activities will include the Air Traffic Coordination requirements listed in FAA Order 8900.1, Volume 3, Chapter 9, Section 1, Paragraph 3-223(E) and communication response system between pilot(s) and ground personnel that would facilitate an immediate halt to air activities should unauthorized persons, vehicles, or other aircraft, inadvertently enter the ACE/P operations site.

### **5.4 COMMUNICATIONS**

ICAS or responsible person and/or delegated ACE will design and implement a plan for communications between principal participants in the air, and on the ground. This plan, ideally, will incorporate the following:

#### Controlled Airports

- Pilot must have a two-way radio and be in contact with the tower, or other controlling agency (e.g., ARTCC), on its frequency, monitoring the separate discrete frequency.
- Observer will be in contact with the tower, or other controlling agency (e.g., ARTCC), on its frequency, and the pilot on the discrete frequency.
  - ACE will predetermine with the tower, or other controlling agency, a location for the pilot to loiter when, and if, non-participating aircraft approach the ACE/P Operations site, until the traffic is no longer a factor to the ACE/P Operations. If necessary, the pilot may land until traffic conflicts are negotiated.

#### Uncontrolled Airports

- Pilot must have a two-way radio and be in contact with the observer, or other controlling agency (e.g., ARTCC), on its frequency, monitoring the separate discrete frequency.
- Observer will be in contact with the pilot and/or other controlling agency (e.g., ARTCC), on its frequency, and the pilot on the discrete frequency.
- ACE will predetermine a location for the pilot to loiter when, and if, nonparticipating aircraft approach the ACE/P Operations site, until the

- traffic is no longer a factor to the ACE/P Operations. If necessary, the pilot may land until traffic conflicts are negotiated.
- In lieu of the above procedure, if radio equipment is not available or unsatisfactory, an oral and/or visual communication system will be worked out between pilot(s), ground crew and evaluators.

### **5.5 AIRCRAFT MOVEMENT**

Pilots will be responsible to coordinate all ground and air activities with crews to ensure safety, while aircraft are on the ground or airborne.

### **5.6 SUSPENDING OPERATIONS**

ICAS, the responsible person or ACE/P Operations Manual authorized ACE will coordinate with appropriate personnel, a method to insure a suspension of operations should unauthorized persons or vehicles enter the evaluation/practice operations area, or if an emergency exists. The method will incorporate a chain of communication and signals between involved personnel. If radio equipment is not being used, proper visual signals will be incorporated to notify pilots to stop activities on an immediate basis. Pilots will be properly briefed on proper frequencies, responsible ground observers, and the exact location and operation of signaling devices.

### **5.7 ROADS AND HIGHWAYS**

Should operations require flights over, or on roads or highways, ICAS, responsible person, or the ACE/P Operations Manual authorized ACE will coordinate with appropriate personnel to assure that proper action has been taken to sterilize the roads or highways from vehicular and pedestrian traffic. Security personnel should establish this assurance and be knowledgeable to the time frames involved.

### **5.8 AIRCRAFT SPEED**

Some aircraft may operate at speeds in excess of 250 knots below 10,000 feet MSL. ICAS, responsible person, or the ACE/P Operations Manual authorized ACE will be responsible for establishing routing, to and from, and at the location site should such speeds be required. The pilot, ACE/P Operations Manual authorized ACE, or responsible person will be required to obtain proper approval from FAA ATC to operate on high speed routes prior to flight operations taking place.

## **5.9 PLAN OF ACTIVITIES**

The following form shall be used by ICAS, responsible person, and the ACE/P Operations Manual authorized ACE to inform applicable FSDO at least ten (10) days prior to the proposed operations. The ten day notice requirement may be waived upon receipt by the applicable FSDO with a proper explanation by waiver holder either by phone or FAX, but no less than three (3) days.

### **PLAN OF ACTIVITIES**

1. DATES & TIMES OF ALL FLIGHT OPERATIONS:
2. NAME & PHONE NUMBER OF PERSON RESPONSIBLE FOR EVALUATION/PRACTICE OPERATIONS (ACE/P Operations Manual authorized ACE):
3. NAME AND PHONE NUMBER OF THE AUTHORIZED ACE RESPONSIBLE FOR THE AIRCRAFT:
4. AIRCRAFT TO BE USED: Make                      Model                      Reg #                      Type  
of Airworthiness                      Category                      List may be attached to POA
5. PILOTS INVOLVED IN EVALUATION/PRACTICE OPERATIONS:  
Name                      Certificate Number  
List may be attached to POA
6. A STATEMENT THAT THE ACE/P COW HOLDER HAS COORDINATED WITH  
PROPERTY OWNERS (IF ACE/P OPERATIONS ARE TO BE CONDUCTED OVER PRIVATE PROPERTY) AND COORDINATED WITH LOCAL OFFICIALS (E.G., AIRPORT MANAGER, POLICE, SHERIFF, FIRE DEPARTMENTS, AND ATC) PLANNED ACTIVITY TO CONDUCT THE ACE/P OPERATIONS; AND DOCUMENTATION, TO INCLUDE CONTACT INFORMATION, FOR PROPERTY OWNERS (IF APPLICABLE), ATC, AIRPORT MANAGEMENT, AND FLIGHT SERVICE STATION (FSS) SHOWING THEY HAVE EACH BEEN COORDINATED WITH, AND NOTICES TO AIRMEN (NOTAM) HAVE BEEN REQUESTED:
7. DESCRIPTION OF FLIGHT ACTIVITY (including maps or diagrams of any area, city, town, county, and/or state over which ACE/P operations will be conducted and the minimum altitudes essential to accomplish the operations):

## AEROBATIC COMPETENCY EVALUATION/PRACTICE OPERATIONS MANUAL

---

8. METHOD OF SECURITY USED TO PROTECT NON-PARTICIPATING PERSONNEL AND SPECTATORS:
9. SUMMARY OF FLIGHT OPERATIONS SCHEDULE:
10. REGULATIONS TO BE WAIVED:
11. LIST OF SPECIFIC SPECIAL PROVISIONS THAT APPLY TO THIS LOCATION:

Signature (ACE/P CoW holder)

---

Print Name and Title

---

Attachments to this form shall include maps and diagram of evaluation/practice operations sites and information about emergency facilities.

## SECTION 6 AEROBATIC FLIGHT

### **6.1 PILOT REQUIREMENTS**

The pilot requirements for those evaluation/practice operations including aerobatic flight are the same as those defined in section 3, of this manual. ICAS, responsible person, or the ACE/P Operations Manual authorized ACE will be responsible for checking pilot's credentials to confirm that they are current and meet the criteria of this manual and those of the ACE Manual for the level of Statement of Aerobatic Competency (SAC) requested.

### **6.2 AEROBATIC AIRCRAFT**

The requirements for aircraft used for aerobatic flight will be the same as those defined in section 2 in this manual. The noted exception is that aircraft used for this activity must be certified in the aerobatic category or in another category which permits aerobatics.

### **6.3 FAA NOTIFICATION**

It will be the responsibility of ICAS, responsible person, or the ACE/P Operations Manual authorized ACE to properly notify (NOTAMS) the local FAA flight service station or other controlling air traffic facility before aerobatic maneuvers are performed.

### **6.4 FLIGHT -DISTANCES AND SPEEDS IN RELATION TO SPECTATORS**

Evaluation of the proposed ACE/P Operations site will determine separation requirements for spectators other than those personnel required for actual ACE/P Operations. The following minimum distances and standard limitations are applicable to all airshow and ACE/P Operations events and must be observed.

"Showline" - Separation from Spectator Area: For aerobatic and certain other flight demonstrations, references called "showlines" must be established. These "showlines" prescribe the nearest point that flight demonstrations may be conducted with reference to the designated spectator area and should be clearly visible from the air. River, roads, and runways all make excellent "showline" references that enhance pilot orientation during aerobatic routines. Snow fences spread flat on the ground may make acceptable references depending on the visual contrast. Lines of parked buses, cars or boats, although less desirable, may be the only alternative when natural "showlines" are not available. Pilots who are performing aerobatic maneuvers at ACE/P Operation locations or airshow events must maintain the following minimum "showline" distances from

the spectator area. These distances are predicated on aircraft cruise speeds (demonstrated at 75% power in straight and level flight) and are divided into the following categories:

CATEGORY	CRUISE SPEED	DISTANCE
I	More than 245 knots	1500 feet
II	156 to 245 knots	1000 feet
III	Less than 156 knots	500 feet

Exceptions to this requirement may be the approval of aerobatic maneuvers initiated immediately after takeoff, over the runway, and beyond a point abeam the spectator area provided that the takeoff runway is located 500 feet from the spectators. Authorization is predicated on the trajectory of the maneuvers being away from the spectators, and lifts off speeds are less than 156 knots. Approval may also be granted for categories I and II aircraft to conduct straight and level (non-aerobatic) flight parallel to the showline at a distance of not less than 500 feet from any designated spectator area.

### **6.5 MINIMUM WEATHER REQUIREMENTS**

Unless operating within the lateral boundaries of Class D airspace, Section 91.155 is not waivable for ACE/P operations. Minimum ceiling is 1,500 feet above ground level and 3 miles flight visibility. No ACE/P operations are permitted if these weather minimums are not met.

### **6.6 SPECIAL PROVISIONS**

All appropriate special provisions must be included as an attachment to the plan of activities. Only those special provisions listed on the following website may be used:

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



## APPENDIX A – 14 CFR 830 – ACCIDENT REPORTING

### Sec. 830.5 Immediate notification.

The operator of any civil aircraft, or any public aircraft not operated by the Armed Forces or an intelligence agency of the United States, or any foreign aircraft shall immediately, and by the most expeditious means available, notify the nearest National Transportation Safety Board (Board) field office when:

- a) An aircraft accident or any of the following listed incidents occur:
  - 1) Flight control system malfunction or failure;
  - 2) Inability of any required flight crewmember to perform normal flight duties as a result of injury or illness;
  - 3) Failure of structural components of a turbine engine excluding compressor and turbine blades and vanes;
  - 4) In-flight fire; or
  - 5) Aircraft collide in flight.
  - 6) Damage to property, other than the aircraft, estimated to exceed \$25,000 for repair (including materials and labor) or fair market value in the event of total loss, whichever is less.
  - 7) For large multiengine aircraft (more than 12,500 pounds maximum certificated takeoff weight):
    - I. In-flight failure of electrical systems which requires the sustained use of an emergency bus powered by a back-up source such as a battery, auxiliary power unit, or air-driven generator to retain flight control or essential instruments;
    - II. In-flight failure of hydraulic systems that results in sustained reliance on the sole remaining hydraulic or mechanical system for movement of flight control surfaces;
    - III. Sustained loss of the power or thrust produced by two or more engines; and
    - IV. An evacuation of an aircraft in which an emergency egress system is utilized.
- b) An aircraft is overdue and is believed to have been involved in an accident.

### Sec. 830.6 Information to be given in notification.

The notification required in Sec. 830.5 shall contain the following information, if available:

- a) Type, nationality, and registration marks of the aircraft;
- b) Name of owner, and operator of the aircraft;

- c) Name of the pilot-in-command;
- d) Date and time of the accident;
- e) Last point of departure and point of intended landing of the aircraft;
- f) Position of the aircraft with reference to some easily defined geographical point;
- g) Number of persons aboard, number killed, and number seriously injured;
- h) Nature of the accident, the weather and the extent of damage to the aircraft, so far as is known; and
- i) A description of any explosives, radioactive materials, or other dangerous articles carried.

### Sec. 830.10 Preservation of aircraft wreckage, mail, cargo, and records.

- a) The operator of an aircraft involved in an accident or incident for which notification must be given is responsible for preserving to the extent possible any aircraft wreckage, cargo, and mail aboard the aircraft, and all records, including all recording mediums of flight, maintenance, and voice recorders, pertaining to the operation and maintenance of the aircraft and to the airmen until the Board takes custody thereof or a release is granted pursuant to Sec. 831.12(b) of this chapter.
- b) Prior to the time the Board or its authorized representative takes custody of aircraft wreckage, mail, or cargo, such wreckage, mail, or cargo may not be disturbed or moved except to the extent necessary:
  - 1) To remove persons injured or trapped;
  - 2) To protect the wreckage from further damage; or 3) To protect the public from injury.
- c) Where it is necessary to move aircraft wreckage, mail or cargo, sketches, descriptive notes, and photographs shall be made, if possible, of the original positions and condition of the wreckage and any significant impact marks.
- d) The operator of an aircraft involved in an accident or incident shall retain all records, reports, internal documents, and memoranda dealing with the accident or incident, until authorized by the Board to the contrary.

### Sec. 830.15 Reports and statements to be filed.

- a) Reports. The operator of a civil, public (as specified in Sec. 830.5), or foreign aircraft shall file a report on Board Form 6120.1/2 (OMB No. 3147-0001) within 10 days after an accident, or after 7 days if an overdue aircraft is still missing. A report on an incident for which immediate notification is required by Sec. 830.5(a) shall be filed only as requested by an authorized representative of the Board.
- b) Crewmember statement. Each crewmember, if physically able at the time the report is submitted, shall attach a statement setting forth the facts, conditions, and circumstances relating to the accident or incident as they appear to him. If

- c) the crewmember is incapacitated, he shall submit the statement as soon as he is physically able.
- d) Where to file the reports. The operator of an aircraft shall file any report with the field office of the Board nearest the accident or incident.

NOTE: Contacting the FAA Regional Operations Center (ROC) will expedite and ease the notification process. The FAA Regional Operations Centers' current contact numbers are listed below:

### **24 Hour Accident and Incident Response Information:**

E-ROC (East Regions Operations Center) ANE, AEA and ASO. [9-ESA-ROC@faa.gov](mailto:9-ESA-ROC@faa.gov)

ANE Events: 404-305-5156

AEA Events: 404-305-5150

ASO Events: 404-305-5180

C-ROC (Central Regions Operations Center) ACE, AGL and ASW. [9-CSA-ROC@faa.gov](mailto:9-CSA-ROC@faa.gov)

ACE, AGL and ASW Events: 817-222-5006

W-ROC (Western Regions Operations Center) AAL, ANM and AWP.  
[9-WSAOPSCCTR@faa.gov](mailto:9-WSAOPSCCTR@faa.gov)

AAL, ANM and AWP Events: 425-227-1999

WOCC (Washington Operations Command Center)

WOCC Events: 202-267-3333

**APPENDIX - B STATEMENT OF COMPLIANCE**

TO BE SIGNED BY PILOTS

I certify that I have read and understand the ICAS Aerobatic Competency Evaluation/Practice Operations Manual and related CFR'S and will comply with the provisions contained therein.

DATE	NAME	SIGNATURE

**APPENDIX - C APPROVED ACE'S**

The following ACEs are qualified to conduct ACE/P Operations:

Curt Arnspiger	Gary Rower
Randy Ball	Marco Rusconi
Vicky Benzing	Greg Shelton
Jeff Boerboon	Gene Soucy
Kirby Chambliss	Bill Stein
Matt Chapman	Skip Stewart
Kevin Coleman	Sean Tucker
John Collver	Scott Urschel
Dave Dacy	Rick Volker
Dan Dameo	Patty Wagstaff
Stewart Dawson	Michael Wiskus
Bill Finagin	Tony Wood
Michael Goulian	Scott Yoak
Bud Granley	
Ross Granley	
Keoki Gray	
Stephen Gustafson	
Ed Hamill	
Randy Henderson	
Robert Holland	
Charles Jirik	
Michael Kennedy	
Jerry Kerby	
Gregory Koontz	
Lee Lauderback	
Rich Lee	
Bill Leff	
Scott Lesh	
J David Martin	
James Parker	
Carl Pascarell	
Jim Peitz	
Kent Pietsch	
Warren Pietsch	
Renny Price	
Bryan Regan	
Debby Rihn-Harvey	
Buck Roetman	