

CEN23MA034

OPERATIONAL FACTORS/HUMAN PERFORMANCE

Attachment 14

Aerobatic Competency Evaluation Manual [Excerpt]

November 22, 2023

ACE MANUAL

International Council of Air Shows, Inc.
Aerobatic Competency Evaluation Program
Effective January 1, 2019
Revision 9

International Council of Air Shows, Inc.
741 Miller Drive SE, Suite G1-A
Leesburg, Virginia 20175
Tel: [REDACTED]
Fax: [REDACTED]
E-mail: [REDACTED]
Web: www.airshows.aero

© 2018

Accepted by the Federal Aviation Administration by:
Sue Gardner, National Aviation Events Specialist
Federal Aviation Administration
General Aviation and Commercial Division

FAA Accepted: SGARDNER Date: 10/12/2018
--

Recognized by Transport Canada Civil Aviation by:
Pierre Ruel, Chief, Flight Standards
Transport Canada Civil Aviation

ICAS SAFETY CREED

ICAS represents our great industry. The founding members set standards that have contributed to an enviable spectator safety record. These standards are dynamic and continuously honed through years of preparation and experience. ICAS membership carries the responsibility of maintaining these safety standards.

As an ICAS member:

- I shall remember first and foremost that spectators place their trust and well-being in my mature judgment and professional actions. I shall continuously strive to be deserving of this trust.
- I shall not knowingly violate or stand idly by if others violate the spirit of the rules and standards set forth by ICAS or regulatory authorities.
- I shall work to create an environment that does not invite or promote unsafe actions and do my best to instill these values in my fellow ICAS members.
- I shall not think in terms of my event or my performance. Any adverse safety circumstances at one event may bring irrevocable consequences to the entire industry. It is our industry and our responsibility.

6. Lack of completed continuation training as required by the SOC.
 7. Lack of attendance at the ACE Meeting and the Performer Safety Meeting.
 8. Failure to abide by the ACE Standards and Code of Ethics in the ACE Manual.
- B. Once initiated, the ACE Committee has thirty (30) days to complete the review.
1. The ACE will be notified of the review.
 2. The ACE may submit a written statement.
 3. The ACE will not conduct any ACE responsibilities or activities during the review.
 4. A two-thirds majority vote by the full ACE Committee is required to recommend the revocation of an ACE's status.
- C. At the conclusion of the review, the ACE Committee will provide a written statement to the SOC and to the ACE in question outlining the status of the ACE.

4.7 ACE Observations

- A. At the request of the National Aviation Events Specialist (NAES) or TC liaison, a request for observation of an evaluation will be coordinated through ICAS on a case by case basis.

CHAPTER 5 QUALIFICATION, PROFICIENCY, CURRENCY AND REINSTATEMENT

5.1 General

In order to exercise the privileges of a Statement of Aerobatic Competency, a pilot must be qualified, proficient and current in the aircraft and endorsements being flown. The aircraft category, level and endorsements in which a performer is qualified and proficient may be found on the performer's SAC card authorization.

5.2 Qualification

- A. Upon successful completion of an evaluation in an aircraft, a pilot is considered qualified to fly that aircraft for a period of thirty-six (36) months. A performer maintains this qualification by completing a valid renewal evaluation in the aircraft being flown or an aircraft of the same category.
1. A renewal or addition of aircraft will further the qualification period for thirty-six (36) calendar months from the date of renewal or addition of aircraft.
 2. A renewal for performers who are not currently qualified for the aircraft may not take place in airspace waived for an air show. In this case, renewals must be performed in an aerobatic practice area or in airspace authorized as a practice waiver.
 3. Aircraft in which a pilot has been qualified will not be removed from their authorization if the pilot is no longer qualified.
 4. It is recommended that pilots with multiple aircraft in one category rotate the aircraft type evaluated to maximize familiarity with the category of aircraft in which the pilot is qualified.
- B. Upon successful completion of an evaluation at a specific level, a pilot is considered qualified to fly at that level for a period of thirty-six (36) months. A performer maintains this qualification by completing a valid renewal evaluation at that level.

1. A renewal or change in level will further the qualification period for thirty-six (36) calendar months from the date of renewal or change in level.
 2. A renewal for performers who are not currently qualified for the level may not take place in airspace waived for an air show. In this case, renewals must be performed in an aerobatic practice area or in airspace authorized as a practice waiver.
- C. Upon successful completion of an evaluation for an endorsement, a pilot is considered qualified to execute that endorsement.
1. A renewal for performers who are not currently qualified for the endorsement may not take place in airspace waived for an air show. In this case, renewals must be performed in an aerobatic practice area or in airspace authorized as a practice waiver.

5.3 Proficiency

A pilot is considered proficient if the pilot has a current and valid SAC card for the aircraft category, level and endorsements being flown in accordance with Chapter 2.5 of this manual.

5.4 Currency

A pilot is considered current in the specific aircraft, level and endorsements that will be flown at an air show if the pilot has flown either a practice performance or an air show performance in the same aircraft, level and same endorsements within the previous forty-five (45) days.

5.5 Reinstatement

When a pilot is no longer qualified in an aircraft category, level or endorsement, the pilot will be required to complete a reinstatement evaluation. A reinstatement evaluation must be conducted at an aerobatic practice area outside of the air show environment. A reinstatement evaluation accomplishes the requirements of both proficiency and qualification for the aircraft category, level and endorsement(s) evaluated.

CHAPTER 6 APPLICANT PROCEDURES

6.1 Preparation

The applicant should be familiar with the entire ACE Manual, including: Practical Ground Evaluation Standards, Practical Flight Evaluation Standards, endorsements and currency requirements, prior to the actual evaluation. The ACE Committee will continuously develop and update all processes and evaluation documents, including recommendations, related to an evaluation on the ICAS website. The applicant is responsible for the following items:

- A. Identifying a qualified ACE.
- B. Identifying and securing appropriate authorized/waived airspace.
- C. Identifying proposed date and location of evaluation.
- D. Providing pilot credentials and other relevant paperwork and documentation.
- E. Providing aircraft credentials.

6.2 Initial Applicant

An applicant applying for an initial SAC card shall provide:

- A. The name and contact information of the applicant's trainer or mentor.

1. Recommended aircraft and applicable variants.
2. Unless otherwise restricted by the ACE, a recommendation for a 'Pitts Special' where appropriate is a recommendation for that aircraft and all its variants.
3. A recommendation for a new type of aircraft and variants may be considered by the ACE Committee.
4. The notations in this section will include not just the aircraft in which the applicant performed his/her evaluation, but all aircraft listed on the applicant's previous authorization.

E. The ACE will complete the endorsement type portion of the application:

1. Recommended endorsement type (listed in Appendix E).
2. The notations in this section will include not just the endorsement type in which the applicant performed his/her evaluation, but all endorsement types listed on the applicant's previous authorization. Endorsements that have not been evaluated within the qualification period listed in Appendix E shall require reinstatement in accordance with Chapter 5.5.

F. The ACE will complete the final portion of the application:

1. ACE name
2. ACE electronic signature
3. Date of evaluation (enter last day of events if evaluation required more than one day).

(Note: The application will not be processed without the above final portions being completed.)

G. The ACE will submit the application to ICAS within fifteen (15) calendar days of the evaluation.

1. Although recommended, it is not required that the ground evaluation be conducted prior to the flight evaluation for renewals without change.
2. Whether or not the applicant is recommended for a Statement of Aerobatic Competency, the ACE will submit the completed application to ICAS.
3. Copies of all documents as required by Section 6.2 or 7.5 shall be reviewed and verified by the ACE.

H. After reviewing the application for accuracy and to ensure that it is completed properly, ICAS shall forward copies of the application recommending issuance of a SAC card to the appropriate FAA Flight Standards District Office (FSDO) or TC headquarters for issuance of the Statement of Aerobatic Competency (FAA Form 8710-7 or TC Form 26-0307). ICAS will also forward a copy of the completed application to the ACE for his/her files.

CHAPTER 8 EVALUATION PROCEDURES

8.1 ACE Recommendation Procedures

The role of the recommending ACE is considered to be both training and evaluation. A recommendation is testimony that the ACE has worked with the applicant and believes that they have sufficient training and skills to be successful in the air show industry including knowledge of procedures and rules and professional level of safety.

with their air show flying skills. In addition to covering all areas of an evaluation, the recommending ACE/Aerobatic expert is expected to:

- A. Provide feedback/mentoring for showmanship and safety considerations
- B. Ensure the applicant is knowledgeable of all the pertinent rules for their act type (FAA Order 8900.1, ICAS ACE Manual, Transport Canada)
- C. Ensure the applicant is knowledgeable in the ICAS Safety Creed
- D. Ample coverage with the applicant of relevant accident analysis and emergency procedures
- E. Interrupting the chain of events that lead to accidents and the role of the normalization of deviance
- F. Complete required documentation of requisite experience

8.2 Initial Qualifications

All initial evaluations must include both the ground and flight portions of an evaluation in accordance with the provisions outlined in Appendix C and Appendix D. In addition:

- A. An initial applicant who has not previously held a Statement of Aerobatic Competency from the FAA or TC will be initially issued a Level 4 (800 feet) Statement of Aerobatic Competency.
- B. An initial applicant who has other experience that makes him/her believe they might qualify for a Statement of Aerobatic Competency other than Level 4, may petition the ACE Committee for an exemption to 8.1A of this section.
- C. For all initial or change in level for formation aerobatic, dogfight, or wing walking endorsements, the applicants are also required to complete an evaluation at their level for a solo aerobatic endorsement.
- D. All initial applicants are required to comply with FAA Order 8900.1 Flight Standards Information Management System and/or TC Special Flight Operations Standards and Procedures when applying for a formation aerobatic card.

8.3 Renewal of Qualifications

An existing SAC card holder desiring *no changes* in status (aircraft type, endorsement type, altitude, etc...) must still complete an annual ground evaluation and flight evaluation. Although there is no requirement during an annual renewal for the ground and flight evaluation to be conducted on the same day or in any particular order, the applicant must be in compliance with the following procedures:

- A. Conduct ground evaluation in accordance with the Practical Ground Evaluation Standards as outlined in Appendix C.
- B. Conduct flight evaluation in accordance with the Practical Flight Evaluation Standards as outlined in Appendix D. In addition:
 - 1. The evaluation must be preplanned.
 - 2. The evaluation must be flown in the presence of the selected ACE as an evaluation flight.
 - 3. No portion of the evaluation may be based on the “recollection” of a previous flight.
- C. Annual renewals with ‘no changes’ may be accomplished within the following provisions:
 - 1. The evaluation must be flown in the air show environment or in a duly authorized practice box.

2. At a minimum, the applicant will perform either his/her entire standard air show flight sequence or fly each one of the maneuvers specified in the Practical Flight Evaluation Standards or a combination of both to ensure all required components are met.
3. At the discretion of the ACE, the applicant may be required to perform particular maneuvers from the Practical Flight Evaluation Standards.

8.4 Renewal of Qualifications with Change

A. Altitude Change: An existing SAC card holder desiring a change in status for altitude must complete and provide written documentation that the following prerequisites have been accomplished within 24 months of the required subsequent ground and flight evaluation:

1. For a pilot to change his/her SAC altitude restriction from Level 4 to Level 3, he/she must perform an aerobatic sequence at no fewer than eight (8) public air shows (for purposes of this segment of the Statement of Aerobatic Competency requirements, a practice or rehearsal show that includes spectators may be counted toward the minimum eight (8) required performances) at no fewer than five (5) different air show sites at 800 feet in the same category of aircraft for which a change of status is requested.
2. For a pilot to change his/her SAC altitude restriction from Level 3 to Level 2, he/she must perform an aerobatic sequence at no fewer than twelve (12) public air shows (for purposes of this segment of the Statement of Aerobatic Competency requirements, a practice or rehearsal show that includes spectators may be counted toward the minimum twelve (12) required performances) at no fewer than six (6) different air show sites at 500 feet in the same category of aircraft for which a change of status is requested.
3. For a pilot to change his/her SAC altitude restriction from Level 2 to Level 1, he/she must perform an aerobatic sequence at no fewer than sixteen (16) public air shows (for purposes of this segment of the SAC requirements, a practice or rehearsal show that includes spectators may be counted toward the minimum sixteen (16) required performances) at no fewer than eight (8) different air show sites at 250 feet in the same category of aircraft for which a change of status is requested. The first four (4) air show sites flown at Level 1 will be restricted to a maneuvers contained in the sequence submitted by the pilot and approved by the evaluating ACE and the recommending ACE. The applicant must comply with the requirements of 6.6 (G) of this document as applicable.
4. Dynamic maneuvering experience will not count towards the experience requirements to change levels on any other SAC Card.
5. Applicants seeking to lower the altitude endorsement may count only one performance per day per air show site toward the step down experience requirement unless the applicant flies multiple aircraft or multiple act types per day. In order for performances to count toward a step down evaluation, the applicant must perform their act during publicized days of the air show.

(Note: Prior to accomplishing an evaluation with a change in status for altitude, the selected ACE is required to review the documentation of the qualifying events. Copies of logbooks, contracts, newspaper articles, programs, event waivers or similar documentation are acceptable support evidence of participation.)

B. Aircraft Type and/or Endorsement Type Change: An existing SAC card holder desiring a change in status for aircraft type and/or endorsement type must complete the required ground and flight evaluation for that particular aircraft type and/or endorsement type.

C. General changes. In addition to the above, the following restrictions apply to all qualifications:

1. Multiple performances in a single day in the same aircraft may not be used to meet the performer sequence requirements to move from one altitude restriction to a lower altitude restriction.
2. Air show performances used to qualify for one *change in status* may not be used again for a subsequent change. For example, a performance at air show X on June 30, 2012 may be used to move from Level 3 to Level 2, but that same performance may not be used to move from Level 2 to Level 1.
3. Flight evaluations use to qualify for a *change in status* may not be conducted at a public air show. For example, an evaluation from Level 2 to Level 1 may not take place at a public air show.
4. An additional flight evaluation may be required of a pilot who substantively changes his/her performance sequence.

8.5 Reinstatement of Qualifications

- A. In the event an ACE is asked to evaluate an applicant who had a previous but expired SAC in a specific aircraft category, level or endorsement, he/she may be reinstated to the aircraft category, level and endorsements evaluated. This reinstatement of qualifications applies to all aircraft of the same category previously qualified as well as endorsements and level if the card has expired within the last twelve (12) months. If the pilot's level qualification has been expired for more than twelve (12) months, the ACE must move the applicant up at least one altitude level (for example, from Level 1 to Level 2). No renewing pilot will be moved higher than Level 3. Applicants whose SAC has been expired for more than seven (7) years will be considered new applicants and will carry over no aircraft or endorsements.
- B. In the event that an applicant has had his/her SAC card suspended or revoked by the FAA/TC, or had other enforcement actions that impacted that pilot's flying status, it will be the duty of the applicant to inform ICAS staff of these developments as part of the application and/or renewal status. Under these circumstances, the ACE Committee may, at its discretion, opt to designate a particular ACE to conduct the subsequent evaluation. In the event that an ACE is asked to evaluate an applicant who has had his/her SAC card suspended or revoked by the FAA/TC, the ACE must evaluate the applicant in the category of aircraft, level and endorsement flown by the applicant that gave cause of suspension/revocation. In all cases, the ACE Committee will ensure that the designated ACE is not the ACE who had previously evaluated the applicant. Should circumstances dictate, the ACE Committee may require reevaluation of other aircraft categories, levels or endorsements held by the applicant.
- C. Failure by the pilot to notify ICAS of a SAC card suspension or revocation or any other FAA/TC enforcement action may be cause for ICAS to recommend to the FAA/TC that the pilot's SAC card be suspended or revoked. This may be considered a falsification of application and should be communicated to and coordinated with the FAA/TC.
- D. When the FAA IIC, TC or ICAS requests/recommends a reevaluation of the performer's competency to continue holding their current authorizations, an ACE other than the one who conducted the evaluation for the current SAC card will be assigned the task.

CHAPTER 9 EXEMPTIONS

9.1 Exemption Application

considering the actions before the committee, if one of its members is asked to step down for the matter. All committees may invite outside participation in a deliberation for the purpose of gaining expertise.

- D. The ACE Committee may consider any information provided from any source. The ACE Committee shall determine to what degree such material will be considered. This material shall be available to all parties.
- E. In the event that the concerned Pilot or ACE desires an appeal in person to the Appeals Subcommittee at a time other than the convention, he/she must first agree to pay all expenses for the meeting and deposit funds with ICAS to pay the estimated costs of the appeal. These funds will be used to pay for the appeal process regardless of the outcome of the appeal. The appeal hearing will be scheduled at a time and place agreed upon by all parties.
- F. The decision of the Appeals Subcommittee may be appealed to the SOC. The decision of the Appeals Subcommittee shall be overturned only with overwhelming evidence provided by the applicant. Under extreme circumstances the decision of the SOC may be appealed to the ICAS Board of Directors.
- G. In cases where the ACE Committee believes a clear and present danger to life exists, action may be taken immediately. In this situation, the Pilot or ACE shall be notified promptly of the ACE Committee's decision and action to be taken. Any appeal shall first be made to the ACE Committee. ICAS staff must be notified in all instances in which the ACE Committee believes a clear and present danger to life exists.

10.4 Non-Compliance Process

Allegations of non-compliance of the specific provisions and overall intent of the ACE Manual will be investigated by the ICAS Director of Operations and a summation of the investigation shall be presented to the SOC. With a recorded majority vote of the full SOC, penalties may be assessed based on the severity of the violation. Such penalties may include, but are not limited to, the following:

- A. Formal recommendation to the FAA/TC that the individual's SAC card be suspended or revoked.
- B. Formal recommendation to the ICAS Board of Directors that the individual's membership in ICAS be revoked or suspended.
- C. Formal documentation maintained in the individual's ICAS historical records of the violation and the actions taken by the ACE Committee, ICAS Board of Directors, and/or the FAA/TC.

10.5 Falsifications Process

Evidence of falsification by either an applicant/applicants or an evaluating ACE shall be cause for immediate formal recommendation to the FAA/TC that the individual's SAC card be revoked. Falsification incidences will be investigated by the ICAS Director of Operations and treated as possible Violations per Section 10.4.

Appendix A Terms/Definitions

- 1. All Variants: The summation of aircraft so close in flight characteristics that they warrant inclusion on any qualification given in any one of the aircraft of the group listed in Figure 5.
- 2. Applicant: A pilot seeking a SAC card evaluation.

3. Category: A generic classification of aircraft with similar performance capabilities.
 - Category A: Sport Aerobatics
 - Category B: Jet Warbird Aerobatics
 - Category C: Piston Warbird Aerobatics
 - Category D: Sailplane Aerobatics
 - Category E: Helo Aerobatics
4. Civil twilight: Civil twilight in the evening is the time between sunset and when the center of the sun is less than 6 degrees below the horizon.
5. Dog fighting: Two or more aircraft operating simultaneously in the box in reference to each other for the simulation of air combat maneuvering. Not formation in nature.
6. Endorsement: An additional qualification which an applicant may be authorized to perform in an aircraft at a specific level. Permissible endorsements are listed in Appendix E.
7. Fly-by: A non-aerobatic pass or a series of non-aerobatic passes performed by one or more aircraft at an aviation event while the waiver is in effect.
8. Formation flying: When an aircraft is flown solely with reference to another aircraft and within 500 feet of the referenced aircraft. Air racing and simulated dog fighting are not considered formation flying.
9. Practice Session: Flying a dedicated event with a planned series of maneuvers... no more than three (3) practice sessions may be accomplished in one flight. The series of maneuvers may be or may include part of a performer's actual sequence. Actual performances may qualify as a practice session for currency purposes.
10. Initial applicant: A pilot who has never held a SAC card or had their SAC card revoked.
11. Level: Minimum altitude AGL authorized to start and complete aerobatic maneuvers.
 - Level 4: 800 feet
 - Level 3: 500 feet
 - Level 2: 250 feet
 - Level 1: Unrestricted
12. Night Performance: Night performance means a performance between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time.
13. Performance Class – Sport Aerobatics/Rotorcraft: As used in Appendix D of the ACE Manual, a generic classification of sport aerobatic or rotorcraft aircraft with similar aerobatic characteristics and capabilities for the purpose of establishing Practical Test Standards.
 - Performance Class A – Sport Aerobatics: Aircraft capable of inverted flight maneuvering advanced maneuvers (e.g. torque rolls and inverted flat spins) and gyroscopic maneuvers. Typical aircraft include: Extra, Edge, Pitts, MX-2, Yak 55 and Sukhoi.
 - Performance Class B – Sport Aerobatics: Aircraft capable of basic aerobatics and inverted flight maneuvering but are not typically capable of the advanced maneuvers in performance Class One aircraft, including gyroscopic maneuvers. Typical aircraft include: Modified Stearman, Chipmunk, Decathlon, and Great Lakes.
 - Performance Class C – Sport Aerobatics: Aircraft capable of basic aerobatics, but are usually considered incapable of sustained inverted maneuvering and the advanced maneuvers of

Performance Class One aircraft, including gyroscopic maneuvers. Typical aircraft include: stock Stearman, Citabria, Cub.

14. Spot Evaluation: An evaluation initiated by the ACE Committee to ensure compliance with the Standards and Code of Ethics established within the ACE Manual.
15. Squirrel Cage: Two or more aircraft operating in the aerobatic box coordinating with each other. Not formation in nature.

Appendix B Acronyms

ACE	Aerobatic Competency Evaluator
AGL	Above ground level
CT	Continuation training
FAA	Federal Aviation Administration
ICAS	International Council of Air Shows, Inc.
MSL	Mean sea level
PSOC	Performer Safety and Operations Committee
SAC	Statement of Aerobatic Competency
SOC	Safety and Operations Committee
TC	Transport Canada

Appendix C Practical Ground Evaluation Standards

During the Ground Evaluation phase, the ACE must keep in mind that this portion of the evaluation presents an opportunity to review all of the areas of knowledge unique to air show flying. For some pilots, this session may be the only formal review of air show aerodynamics, density altitude effects, physiology, energy, and other specific issues that impact air show professionals that the pilot may have during the year. The ACE must allow sufficient time and attach sufficient importance to this phase so that each applicant will remember the concepts and principles discussed.

I. Air Show Safety Concepts

This first part of the ground checklist concentrates on aerodynamics, density altitude, and physiology. The applicant should have a working knowledge of the relationship of turn and pull-out radius to true airspeed and radial "G." The applicant must know the indicated airspeed for his/her aircraft at which the tightest turn and highest pull out can be made. The applicant must understand the relationship between kinetic energy and potential energy in air show

Figure 3
Aircraft/Category Reference

This list is current as of 02/16/2018. Categorization of aircraft not included in this list will be answered by the ACE Committee

Sport Aerobatics	Sport Aerobatics
Acro Sport	MX-2/MXS/MXR
Advantage	Nieuport 11/17
Aermacchi/SAI Marchetti SF 260	One Design DR-107
Aeronca 7AC	Panzl S-330/331
ASU Challenger II	Patriot 300
ASU Challenger III	Piper Aerostar
ASW-15 Schleicher Glider	Piper J-3 Cub/Super Cub - All variants
Atlantis	Piper PA-34 Seneca
Baby Great Lakes	Pitts Special - All variants
Beech Bonanza	Quicksilver - All variants
Beechcraft Model 18	Raven - All variants
Beechcraft T-34 Mentor	Rebel Edge
Beechcraft T-6 Texan II	Rihn DR-109
Bellanca Viking/Super Viking	Rocket powered velocity
BF9-2	RV series
Boeing Stearman - All variants	Sbach
Bucker BU-131	Senior Aerosport PJ-260
Bucker BU-133	Showcat
CAP 10, 10B, 10C	Skybolt S/D
CAP 230/231/231EX/232	SNS-7 Hiperbiplane
Cassutt	SPAD - All variants
Cessna 305A Bird Dog	Sportavia RF4D
Cessna 337 Skymaster	SR-300
Cessna/Columbia 400	Stampe SV-4C
Christen Eagle - All variants	Starduster Too SA300/Stolp SA-750 Acroduster
Citabria - All variants	Starjammer
Culp Special	Staudacher S-300
Decathlon - All variants	Staudacher S-600
DeHavilland DHC-1 Chipmunk/Super Chipmunk	Stephens Acro
Demon - 1	Stewart S-51D
Excalibur	Sukhoi SU-26/29/31
Extra 230 - All variants	Taylorcraft - Modified
Extra 300 - All variants	Taylorcraft - Unmodified
Fleet Finch Model 16	Technoavia SP-95
Fokker D-VII	Travel Air 2000
Fokker DR-1	Travelair Mystery Ship
Giles G-200/202	Tucano - All variants
Giles G-750	Turbo Shark
Glasair - All variants	Twin Commander
Globe Swift - All variants	Ultimate - All variants
Great Lakes	Ultra X
Grumman Ag-Cat/Showcat	Velox Revolution 1
Hammond 1	Vultee BT-13/15 Valiant
Harmon Rocket	Waco - All variants
Interavia E3	Wittman Tailwind
Interstate Cadet	Yakovlev Yak 18
Javelin	Yakovlev Yak 50
Lancair/Columbia 350/400	Yakovlev Yak 52 - All variants
Laser 200/230	Yakovlev Yak 54
LoPresti Fury	Yakovlev Yak 55
MAC-145	Zivko Edge 540
Meyer 360	Zlin 526F
Meyer Brian E Super Ace	Zlin Z 142
Meyers Lil Toot	Zlin Z 50
Midget Mustang	Zlin Z 526L
Monocoupe	

Jet Warbird Aerobatics	Piston Powered Warbird Aerobatics
Aero L-29 Delfin	Bell P-39 Airacobra
Aero Vodochody L-39 Albatros	Bell P-63 Kingcobra
BAE FA2 Sea Harrier	Chance-Vought F-4U Corsair
BD5J Microjet	Commonwealth CA-13 Boomerang
Boeing F/A-18 Hornet - All variants	Curtiss P-36 Hawk
British Aircraft Corporation 167 Strikemaster	Curtiss P-40 Warhawk
British Aircraft Corporation Jet Provost	Douglas A-1 Skyraider - All variants
Canadair Tutor - All variants	Douglas SBD Dauntless
Dassault Mirage F1	Grumman F4F/General Motors FM-2 Wildcat
DeHavilland Vampire/Venom	Grumman F6F Hellcat
Dornier Alpha Jet	Grumman F7F Tigercat
Eclipse Concept Jet	Grumman F8F Bearcat
Fairchild-Republic A-10 Thunderbolt	Grumman OV-1D
Fouga CM-170 Magister	Hawker Hurricane - All variants
Grumman EA-6B Prowler	Hawker Sea Fury
Grumman F-14 Tomcat - All variants	IAR 823
Hawker Hunter	Lockheed C-130 Hercules - All variants
Hispano HA-200 Saeta	Lockheed P-38 Lightning
Jet Wing	Messerschmitt BF 109
Learjet - All variants	Milec M-26 Airwolf
Lockheed F-104 Starfighter	Mitsubishi A6M Zero
Lockheed Martin F-16 Fighting Falcon - All variants	Nanchang CJ-6/Yakovlev Yak 18
Lockheed Martin F-22 Raptor	North American P-51 Mustang
McDonnell Douglas A-4 Skyhawk	North American T-28 Trojan
McDonnell Douglas F-15 Eagle - All variants	North American T-6 Texan/SNJ/Harvard
McDonnell Douglas F-4/FG1 Phantom	Polikarpov I-16
Mikoyan-Gurevich MiG-15	Republic P-47 Thunderbolt
Mikoyan-Gurevich MiG-17	Ryan PT-20/21/22 Recruit
Mikoyan-Gurevich MiG-21	Sindlinger Hurricane
Morane-Saulnier MS-760	Supermarine Spitfire
North American F-86 Sabre/FJ-4 Fury	T-51 Titan
North American RI-T2	Yakovlev Yak 11
North American Sabre Liner NA-265	Yakovlev YAK 3/9
Port Orange	
PZL/WSK TS-11 Iskra	
Rocket Racer Prototype	
T-33 - All Variants	
TT-1 Pinto Jet	

Sailplane Aerobatics	Helo Aerobatics
Ali Sport Silent	Agusta 119
ASK 21	Agusta AW139
Grob Systems Sailplane	Enstrom F-28
Pilatus B-4 Glider	Hughes 269 - All variants
Salto	MBB Bo 105
SGS - All Variants	Schweitzer 300C
SOKO G2A Galeb	
Swift S-1	

Figure 4

Statement of Aerobatic Competency Initial Application

The ICAS website at www.airshows.aero will contain the current version of the application process document.