

CHAPTER 50. SURVEILLANCE OF AN AVIATION EVENT

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

- Air Races: 1685
- Aerobatic Airshow: 1686
- Parachute Jumps: 1696
- Balloon Events: 1697
- Aerobatic Competitions: 1698

2. OBJECTIVE. The objective of this task is to determine if the holder of a Certificate of Waiver or Authorization is in compliance with the terms set forth in the waiver or authorization. Successful completion of this task results in the continuation or cancellation of an existing waiver or authorization.

3. GENERAL.

NOTE: As per volume 1, chapter 1, section 2, page 1-7, paragraph 3 of this handbook, no regional supplements to aviation event policy are permitted.

A. Surveillance Policy. Airshows, fly-ins, and other gatherings of general aviation aircraft and airmen are opportunities for the Federal Aviation Administration (FAA) to present a positive image to the aviation community with whom we work and the general public. Many of the aircraft operators attending these aviation events are regular users of our air traffic and flight service facilities, but their contact with Flight Standards personnel may have been rare. Most of the people who fly their airplanes to fly-in events and airshows are aviation enthusiasts and hobbyists and are not employed in the aviation industry as pilots.

(1) The FAA would like this important segment of airspace users to have a very positive image of inspectors and the safety activities inspectors perform. Therefore, the FAA encourages inspectors to establish early contact with sponsors and organizers of aviation events so that informational and Aviation Safety Program activities can be planned to serve attendees.

(2) Under no circumstances should these gatherings be targeted for a blanket sweep inspection of spectator airmen and aircraft.

(3) The scope of surveillance conducted on aviation event performers and their aircraft will be determined by the Flight Standards District Office (FSDO) manager.

(4) Inspectors assigned work functions at aviation events should strive to earn the confidence of the attending and participating airmen. This can be accomplished by displaying expert technical knowledge as an aviation safety professional.

(5) The guidance in this chapter does not preclude inspectors from taking appropriate action to resolve situations they observe that require immediate corrective action.

B. Aviation Event Surveillance. This chapter provides the surveillance procedures for evaluating an aviation event.

(1) The procedures ensure that current programs, with an emphasis on safety, systems, and intended methods of compliance are thoroughly reviewed, evaluated, and tested.

(2) The surveillance steps in section 2 encompass all types of aviation events. Portions can be eliminated when they are not applicable; for example, inspection of a balloon competition site is not required when no balloon events are scheduled at an airshow location.

C. Issuance of Waiver or Authorization. FAA Form 7711-2, Certificate of Waiver or Authorization Application (figure 50-1), is reviewed and approved or disapproved and FAA Form 7711-1 (figure 50-2) issued before the aviation event. (See chapter 49, Issue a Certificate of Waiver or Authorization for an Aviation Event.) Unless unusual circumstances warrant, the office manager assigns the surveillance of the aviation event to the same inspector who approved the Certificate of Waiver or Authorization.

D. Compliance with Waiver or Authorization. The performers and the holder of the Certificate of Waiver or Authorization are responsible for compliance with the terms of the waiver or authorization.

E. Weather Considerations. Often because of deteriorating weather conditions, participants cannot perform their normal routine. The inspector should cooperate with team leaders when they have to make alterations to their acts. Before canceling an act, the inspector should explain the reasons to the person in charge of the airshow. Rather than canceling an entire act, it might be possible to eliminate certain maneuvers and still allow the demonstration in a modified form. The final decision to conduct a modified act is the responsibility of the performer. Performers must not feel pressured to conduct an act if they are not completely sure it can be performed safely.

F. Military Team Considerations. See volume 2, chapter 49, section 1, paragraph 9.

4. AVIATION SAFETY INSPECTOR RESPONSIBILITIES. The inspector-in-charge (IIC), or other inspectors assisting the IIC, is *not responsible for the management, control, or direction of the aviation event*. Other inspectors may be assigned to assist in the surveillance; however, all coordination and communication with the waiver or authorization holder should be through the inspector who is primarily responsible for the surveillance, the IIC.

A. Surveillance Responsibilities. The inspector's responsibility is to provide adequate safety oversight of the aviation event and to ensure compliance with the provisions of the waiver or authorization. The inspector is also "on-hand" to provide guidance concerning the waiver or authorization's general and special provisions. Aviation events normally operate on very tight schedules; therefore, the inspector should not interrupt an event except to address safety-related issues requiring immediate attention.

B. Inspector Authority. Although authority is not limited to the following, generally, the inspector has the authority to:

(1) Change the effective time and date of the waiver or authorization after proper coordination with the appropriate Air Traffic facilities and flight service station;

(2) Add performers to the schedule of events if all terms of the Certificate of Waiver or Authorization can be met;

(3) Change the ceiling, visibility, and wind limitations contained in the special provisions, provided that there is no adverse effect on safety; and

(4) Cancel or delay any or all acts if it is deemed necessary in the interest of safety.

(5) FAA personnel will not manage, control, or direct any portion of the event when acting as IIC.

C. Exercising Inspector Authority.

(1) Every year, FAA inspectors monitor hundreds of aviation events across the country. During that process, it is necessary to weave constantly through complex technicalities and interpersonal situations. In light of this overwhelming and on-going success story, we believe that all of those successful inspectors should be an example in relating to others.

(2) Most FAA inspectors balance and exercise their authority with a demeanor that results in effective accomplishment of FAA safety objectives. When surveying an aviation event, where the inspector is likely to have public contact, the inspector should maintain a positive attitude toward the aviation and general public the inspector encounters. (See paragraph 3A above.)

(a) Inspectors who conduct themselves with confidence will not be perceived as intimidating nor will this positive attitude be perceived as arrogance.

(b) The inspector's job is to assure that the conditions of the waiver or authorization are followed. The sponsor or a representative is responsible for running the show in a safe manner.

(c) Courtesy and respect must be displayed toward participants and attendees. Public criticism or condemnation of individuals degrades the FAA's image.

(d) An expression of sincere empathy toward sponsor problems assures the sponsors cooperation in safety matters. Consider each situation on a case-by-case basis and be sensitive to the situation without overreacting.

(e) Inspectors should adopt an objective and credible philosophy and avoid being overly bureaucratic.

(f) Prosecutorial discretion should be exercised concerning performers who find it difficult to carry their FAA airman and medical certificates on their person or in the aircraft while conducting a performance.

(g) When it is necessary to act on a matter, inspectors must act in an effective, timely, and positive manner without making threats.

(h) Inspectors should always be open and communicative and strive for win/win situations.

(i) Inspectors must obtain the permission of the aircraft owner/operator before entering any aircraft.

5. PRE-SHOW BRIEFING. Waiver and/or authorizations for aerial demonstrations must include the requirement for a pre-show briefing of all performers.

A. Attendance.

(1) For North American military flight teams, it is permissible for the team leader, or a team's representative, to attend in lieu of every member and assume the responsibility for briefing each member of the team.

(2) If civil pilots' certificates are checked at some other time, only the team leader need attend the briefing.

B. Briefing Content. It is imperative that the briefing cover every aspect of the event. Figure 50-3 contains a general briefing outline.

C. Role of IIC. The IIC is not responsible for conducting the briefing, but he/she must be available at the briefing for any questions concerning the Certificate of Waiver or Authorization and its provisions.

D. Non-Airport Sites. If the event is to be conducted at a non-airport location, special procedures for the briefing of the performers must be established.

E. Remote Location. Performers who arrive from a remote location must be briefed by telephone.

6. AEROBATIC COMPETENCY. In order for any pilot (other than pilots of military aircraft or operators of uncertificated ultralight vehicles) to perform aerobatic maneuvers at aviation events authorized by a Certificate of Waiver or Authorization, the pilot must have in his/her possession a valid FAA Form 8710-7, Statement of Acrobatic Competency (figure 50-4). (See chapter 31, Issue/Renew a Statement of Acrobatic Competency.)

A. Issue Date. The Statement of Acrobatic Competency must have been issued in accordance with industry programs or as directed by AFS-800. This authority is no longer valid after the expiration date annotated on the SAC.

B. Aerobatic Contests, Air Races, and Aerobatic Practice Areas. Pilots who are competing in an aerobatic contest (not associated with an airshow), flying in an air race, or practicing in a prescribed aerobatic practice area (authorized by FAA Form 7711-1 for that specific purpose) do not have to have FAA Form 8710-7.

7. OBSERVANCE OF AIRSHOWS, AIR RACES, AND AEROBATIC CONTESTS. Each district office manager who issues a Certificate of Waiver or

Authorization for aviation events, such as airshows, air races, or aerobatic competitions, must determine the amount of surveillance that is required to ensure compliance with the terms of the waiver or authorization. District office managers should consider the extent of surveillance necessary with respect to the number of aircraft, type of activity, number of spectators, and the potential impact on aviation safety.

A. Surveillance Team. As a minimum, the district office manager should assign at least one qualified operations inspector to observe each airshow and air race. Airworthiness, avionics, or other operations inspectors may be assigned as part of a team depending upon the size and complexity of the event. The IIC may also be responsible for providing on-the-job training (OJT) to another operations inspector in aviation event surveillance.

B. Surveillance Responsibilities. Although the agency recognizes the growth and maturity of the airshow industry and applauds its conscientious effort to improve safety, the responsibility for assuring compliance with the regulations, and the terms and limitations of a Certificate of Waiver or Authorization, rests with the FAA.

C. Control Point. Experienced, successful sponsors have learned the value of establishing a control point where the sponsor or a designated representative, i.e., show manager, can control the event. Before the event, a control point site should be established, and the inspector should be familiar with the location of the control point. Since the control point is an ideal location for conducting a portion of the surveillance, the inspector shall be allowed full, easy access to and from the control point.

D. Showline Surveillance. If inspector resources allow, an inspector other than the IIC could monitor the adherence to showline restrictions by observing the showline(s) from a vantage point that will permit observation down the showline and that is well off the end of the showline toward the end of the aerobatic maneuver area. If this type of surveillance is to be conducted, performers should be advised in the pre-show briefing.

E. Sponsor Responsibilities. The sponsor's responsibilities include, but are not limited to:

(1) Assuring the event sponsor and participants comply with all terms and limitations of the waiver or authorization;

(2) Familiarity with the waiver or authorization, as well as being aware of other individuals

assigned the responsibilities of crowd control, emergency facilities, transient aircraft lookouts, etc.;

(3) In the event the crowd gets out of control, discontinuance of the aerial demonstrations until control is regained;

(4) If unauthorized transient aircraft enter the local area, advising pilots performing aerial demonstrations to discontinue their routines until the transient aircraft is clear; and

(5) If spectators inadvertently enter unauthorized areas, stopping operations until the spectators are under control.

F. Effect of Weather on Aviation Events. To preclude cloud penetration during an aerial demonstration, it is important to point out that certain sections of the regulations are NOT waived for an airshow.

(1) Title 14 of the Code of Federal Regulations (14 CFR) part 91, § 91.155, prescribes the minimum visibility and distances from clouds necessary to maintain visual flight rules (VFR) conditions.

(2) Section 91.173 requires an instrument flight rules (IFR) flight plan and an appropriate air traffic control (ATC) clearance in order to operate under IFR.

(3) NEITHER OF THESE RULES ARE WAIVED, and it cannot be assumed that a performer has an IFR clearance simply because a Notice to Airman (NOTAM) has been issued for the affected airspace. A NOTAM does not, in itself, necessarily exclude other aircraft from transiting the area. For this reason, the FAA is concerned about an aerobatic operation that would first penetrate a cloud layer (perhaps vertically) and come in proximity to another aircraft operating over-the-top, then descend back through the clouds without visual reference to the showline.

G. Unauthorized Military Demonstrations. When military aircraft conduct unauthorized aerobatic maneuvers--before, during, or after the waiver period--the inspector shall forward all pertinent information, including the call sign and type of aircraft, to the region at the earliest opportunity. The region shall transmit this information directly to AFS-800. AFS-800 will immediately notify the Pentagon of the occurrence. The district office should commence normal investigative procedures.

8. OBSERVANCE OF PARACHUTE JUMPS.

A. Location of Surveillance. The inspector has a choice of conducting the parachute demonstration jump surveillance at either the airport from which the aircraft departs, the landing area, or both, if they are in

proximity. This applies only to those events where the parachute demonstration jump is the only event. If the surveillance is conducted at the airport, the inspector should inspect both the aircraft and the parachutists' equipment.

B. Aircraft Used in Parachute Operations. Aircraft engaged in sport parachuting operations must be operated in accordance with the rules prescribed in part 91. In some cases, a large aircraft may be subject to the applicability of 14 CFR part 125. The operators of these aircraft must hold an operating certificate under part 125 or a letter of deviation authority permitting operation under part 91 for the purpose of intentional parachute jumping. (See chapter 73, Evaluate an Application for Deviation or Special Flight Authorization under FAR Part 125).

(1) Many aircraft involved in parachute jumping operations have been modified to accommodate the jumpers. These modifications may involve seatbelt attachments and arrangements, attachments to the structure, emergency exits, or the removal of the exit door. All of these alterations not authorized by the FAA-approved airplane flight manual require documentation of field approval by the FAA or a Supplemental Type Certificate (STC).

(2) Changes in the configuration of the aircraft must be reflected in the weight and balance documents.

C. Special Considerations.

(1) Inspector contact with skydiving activities is generally limited to monitoring aviation events where skydiving is involved, issuing authorizations for jumps into congested areas, and, when requested by ATC, providing input as to the safety of jumps into controlled airspace. The FAA policies with respect to skydiving have, in the past, been to regulate where necessary for the safety of persons not participating in the sport and to encourage self-regulation as necessary for the safety of the participants.

(2) It is important for inspectors to ensure that the actual jump reflects what has been authorized. Past accidents have brought to light incidents where events not enumerated in the authorization were a part of an approved jump. Because an authorization had been issued, tacit FAA approval was implied for areas that were not actually authorized.

(3) Further, there is concern that some of the skydiving activities that are taking place involve the operation of aircraft in a manner not provided for in the aircraft type certification and with no evaluation of the possible ramifications.

(4) Since the regulations involving aircraft modification are generally handled as airworthiness functions, and the majority of contacts with the skydiving community are made by operations inspectors, airworthiness inspectors should be involved where the proposed operations appear questionable.

(5) Inspectors, when conducting surveillance of an aviation event involving skydiving, should review the regulatory requirements and authorizations associated with skydiving activities, including the following:

(a) Aircraft modifications necessary to accommodate skydiving;

(b) Proper documentation of these modifications;

(c) Determination of approved number of occupants of a given model by type certificate or STC;

(d) Seatbelts and emergency exits; and

(e) Aircraft loading and weight and balance requirements.

9. ALTIMETER SETTINGS.

A. "Zero" Altitude Reference. Pilots performing aerobatics generally set the aircraft's altimeter to zero before takeoff. This eliminates the need for the pilot to account for terrain altitude in determining the aircraft's height above the ground.

B. Section 91.121. In many cases, inspectors have erroneously informed airshow performers that they must comply with § 91.121 (Altimeter Settings) while performing aerobatic routines.

(1) Section 91.121 is designed to provide a standard altitude reference for the purpose of maintaining a flight level or cruising altitude.

(2) Since aerobatic routines normally do not involve maintaining a flight level or a cruising altitude, operational safety is not compromised if local aerobatic flight is conducted under visual flight rules (VFR) using other than the altimeter references specified by § 91.121. However, the aircraft must depart from and land at the same airport.

C. Local Aerobatic Flights. Local aerobatic flights, as discussed above, should not be required to comply with the altimeter setting requirements for aircraft maintaining "flight levels" or "cruising altitudes" as per § 91.121.

10. AIRCRAFT MARKINGS. Title 14 CFR part 45, § 45.22(b), permits small antique aircraft (with any type of airworthiness certificate), large antique aircraft (with an experimental certificate based on the amateur-

built or exhibition nature of the aircraft), and all antique replicas (with experimental/exhibition or experimental/amateur-built certificates) to carry two-inch N-numbers instead of 12-inch numbers. Section 45.22 also states that the N-numbers must be located on both sides of the fuselage or vertical tail surface. Section 45.25 requires placement of N-numbers on both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer.

A. Owner's Petition. Aircraft owners, who are seeking to preserve the authentic, antique, or military paint schemes by locating the N-numbers beneath the horizontal stabilizer, have petitioned to determine the applicability of § 45.25 to such aircraft.

(1) The FAA Chief Counsel's office has reviewed the issue and has determined that the location requirements of § 45.25 do not apply to aircraft marked in accordance with § 45.22(b). That section specifically states that the aircraft described above do not have to comply with §§ 45.21 and 45.23 through 45.33.

(2) Under this interpretation, therefore, antique and antique replica aircraft which qualify to use two-inch numbers under § 45.22(b) may locate them anywhere on either side of the fuselage, including under the horizontal stabilizer.

(3) This interpretation does not affect the requirement in § 45.22(c) that these aircraft must carry 12-inch numbers located in accordance with § 45.25 when in an Air Defense Identification Zone (ADIZ) or Distant Early Warning Identification Zone (DEWIZ).

B. Section 45.23 Requirement. Section 45.23 requires limited or restricted category aircraft or experimental certificated aircraft to display on the aircraft near each entrance to the cabin or cockpit, in letters not less than two inches or more than six inches in height, the words "limited," "restricted," or "experimental," as the case may be.

11. U.S. REGISTERED CIVIL AIRCRAFT.

A. To perform in an airshow, a U.S. registered civil aircraft must hold an appropriate Certificate of Airworthiness issued by the FAA, be maintained in accordance with 14 CFR parts 21, 43, and 91, as required, and meet original type design or an approved altered condition that is safe for flight.

(1) Additionally, in accordance with § 91.1, all maneuvers performed at airshows shall be conducted in accordance with any operating or special limitations issued as part of the aircraft's Certificate of Airworthi-

ness, type certificate data sheet (TCDS), STC flight manual (FM), and/or letter of authorization (LOA).

(2) Most of these limitations are developed during the type certification (TC) process and in many cases can be found in the FM.

(3) Regarding some vintage, unique, replica, or foreign manufactured aircraft, information normally found in the FM may be minimal or nonexistent.

(4) IT IS INCUMBENT UPON AIRCRAFT OWNERS AND OPERATORS WHO CONDUCT AEROBATIC FLIGHT OPERATIONS TO BE KNOWLEDGEABLE ABOUT THE CERTIFICATION BASIS OF THEIR AIRCRAFT, AND HOW THE CERTIFICATION BASIS DEFINES WHICH FLIGHT OPERATIONS ARE AUTHORIZED. In some cases, this aircraft-specific information may only be available from the aircraft manufacturer. Aircraft type clubs and related organizations may be another source of this information, but their level of expertise may vary.

(5) The Experimental Aircraft Association (EAA) maintains a list of these organizations. Their address is Antique/Classic Type Clubs, EAA Aviation Center, P.O. Box 3086, Oshkosh, WI 54903-3086; phone number (414) 426-4800; e-mail address Vintage@eaa.org; web site <http://www.eaa.org>.

(6) Another source of information on airplane certification regulatory requirements is the FAA's Small Airplane Directorate, 1201 Walnut, Suite 900, Kansas City, MO 64106; phone number (816) 426-6937.

B. Airplanes.

(1) For the purpose of issuing a Certificate of Waiver or Authorization for an airshow, the following aircraft attitudes will be considered aerobatic flight:

(a) For civil turbojet/turbofan powered (primary power unit) airplanes, when the pitch angle exceeds a positive or negative 60° angle from the horizon, and/or when the bank angle diverges from level flight in excess of 60°.

(b) For all other aircraft, when the pitch angle exceeds a positive or negative 90° angle from the horizon, and/or when the bank diverges from level flight in excess of 90°.

(2) The regulations that set forth the certification basis for aircraft issued a standard U.S. Certificate of Airworthiness in the Normal, Utility, or Acrobatic Category have continually evolved and changed substantially from 1926 to today. Therefore, the need

for aircraft owners and operators to understand the certification basis of their aircraft cannot be overstressed.

(3) For vintage airplanes, Civil Air Regulations (CAR) used as the certification basis for airplanes certificated by the Department of Commerce, Bureau of Air Commerce, were written in a different manner than the generally restrictive nature of the current 14 CFR.

(a) CAR part 04 is the certification basis for airplanes receiving type-certification from November 7, 1937 to November 13, 1945.

(b) Before November 1, 1937, the certification basis for airplanes was Aeronautical Bulletin 7A which was even less definitive than the CAR.

(c) Certain vintage airplanes were type-certificated using CAR part 04 as the certification basis. At the time, the normal class was all that was available for airplanes over 1,000 pounds maximum weight. The classes in CAR part 04 are not comparable to categories described in 14 CFR part 23 today. These airplanes certificated in the normal class as defined in CAR § 04.01 may be authorized to conduct aerobatic flight operations. Airplanes certificated in the normal class under CAR part 04 were certificated to very nearly the same structural loads as Acrobatic Category aircraft type certificated under 14 CFR part 23 today.

(d) CAR § 04.2, Structural Loading Conditions, found in the initial version of CAR part 04 dated November 11, 1937 provided all of the loading conditions for the airplane structure. As an example, CAR part 04, § 04.2131, Condition I (positive high angle of attack), states that the factors given in table 04-1 and figure 04-3 shall be used. For this condition, the limit load factor is 5.33. This load factor corresponds to the current limit load factor of 6 for Acrobatic Category aircraft as stated in 14 CFR § 23.337(a). These structural loading conditions found in the first version of CAR part 04 remained unchanged in all subsequent revisions until CAR part 04 was recodified into CAR part 03 on November 13, 1945.

(e) Based on the above discussion, it would appear that unless specifically prohibited as indicated in the Aircraft Specification Sheet, TCDS, or STC the authorization to conduct aerobatic flight operations with airplanes certificated using Bulletin 7A or CAR part 04 as the certification basis is implied.

(4) Currently, small present day airplanes that are issued a Standard U.S. Certificate of Airworthiness in the Normal, Utility, or Acrobatic Category are

certificated in accordance with 14 CFR part 23 or CAR part 03, depending on the certification basis.

(a) Airplanes in the Normal Category are limited to maneuvers that do not exceed 60° of bank.

(b) Utility Category airplanes are authorized to conduct maneuvers that exceed 60° of bank, but may be approved to conduct spins.

(c) Acrobatic Category aircraft are authorized to conduct maneuvers without any restrictions, except those shown necessary as a result of certification flight testing.

(d) The FM of contemporary airplanes should contain sufficient information concerning authorized maneuvers and any limitations.

(5) Currently, aircraft that are issued a Primary Category Certificate of Airworthiness must conform to an approved primary, normal, utility, or acrobatic aircraft type design, or conform to sport plane certification standards which are similar to Utility Category standards.

(a) The certification basis for Primary Category aircraft can be 14 CFR part 23, CAR part 03, JAR/VLA, Sportplane, or any other custom-developed certification basis accepted by the FAA under Primary Category. Therefore, operators who perform inverted flight or spin maneuvers in airplanes that are issued a special Certificate of Airworthiness in the Primary Category must determine the ability of the airplane to safely perform the intended flight operation and ensure that the operation is conducted in accordance with any operating limitations issued by the FAA as part of the Certificate of Airworthiness.

(b) Additionally, any flight maneuver that exceeds the flight envelope demonstrated during TC flight testing may require the issuance of a special Certificate of Airworthiness in the Experimental Category or the issuance of an STC in accordance with part 21, subpart E. If these flight envelope limitations are not available in the FM or TCDS, information on these maneuver limitations can be obtained from the aircraft manufacturer.

(6) A Restricted Category Certificate of Airworthiness is issued for certain special purpose operations as described in § 21.25. Generally, participating in public, sporting aviation events such as airshows or air races are not one of the special purpose operations authorized by this rule. However, there have been some performing helicopters that have been issued a Restricted Category Certificate of Airworthiness.

(7) Generally, a Limited Category Certificate of Airworthiness is issued to a surplus aircraft of the

Armed Forces of the United States from the World War II era and certificated in accordance with § 21.189.

(a) The FAA may include operating limitations as part of the certificate in addition to any operating limitations described in the original military FM. For example, the P-51 Army Technical Orders AN-01-60JD-1 and AN-01-60JE-1 prohibit the aircraft from performing aerobatic maneuvers with fuel in the fuselage fuel tank.

(b) It is incumbent upon the owner/operator of the airplane to determine the ability of the airplane to safely perform any intended flight operation, to ensure the flight operation is conducted in accordance with any operating limitations described in the original military FM, and in accordance with any operating limitations issued by the FAA as part of the Certificate of Airworthiness.

(8) Experimental Category Certificates of Airworthiness are issued for certain purposes as described in § 21.191.

(a) To perform at airshows, an experimental Certificate of Airworthiness should be issued for the purpose of exhibition.

(b) To participate in closed course air racing, an experimental Certificate of Airworthiness should be issued for the purpose of air racing.

(c) The FAA may include operating limitations as part of the Certificate of Airworthiness in addition to any operating limitations described in the original military FM for surplus aircraft of the Armed Forces of the United States, if appropriate. For example, the P-51 Army Technical Orders AN-01-60JD-1 and AN-01-60JE-1 prohibit the aircraft from performing aerobatic maneuvers with fuel in the fuselage fuel tank.

(d) It is incumbent upon the owner/operator of the airplane to determine the ability of the airplane to safely perform any intended flight operation, and to ensure the flight operation is consistent with the purpose for which the certificate was issued, and conducted in accordance with any operating limitations issued by the FAA as part of the Certificate of Airworthiness, and if appropriate, any operating limitation described in the original military FM.

C. Gliders.

(1) For the purpose of issuing a Certificate of Waiver or Authorization for an airshow, any inverted flight maneuver or pitch and/or bank angle greater than 90° conducted by a civil glider is considered aerobatic flight and must be addressed in the Certificate of

Waiver or Authorization with appropriate special provisions.

(2) In accordance with § 21.17 (b), for special classes of aircraft for which airworthiness standards have not been issued in 14 CFR, the applicable TC requirements will be other airworthiness criteria as the FAA may find applicable to provide an equivalent level of safety.

(a) The current edition of AC 21.17-2, Type Certification-Fixed Wing Gliders (Sailplanes) Including Powered Gliders (current edition), defines gliders as just such an example of a special class of aircraft.

(b) The FAA has determined that the criteria of Joint Airworthiness Requirements (JAR)-22 for Sailplanes and Powered Sailplanes (current edition) provides an acceptable level of safety and is appropriate for use as the certification basis for gliders.

(c) JAR 22.3 sets forth two categories for gliders, Utility and Aerobatic. Gliders certificated in either category in accordance with JAR-22 will have information in the FM and cockpit placards that prescribe certain “permitted maneuvers” that were demonstrated during TC flight testing.

(d) After TC, to conduct any maneuver that exceeds the flight envelope of these “permitted maneuvers” may require the issuance of a special Certificate of Airworthiness in the Experimental Category or the issuance of an STC in accordance with part 21, subpart E.

(e) If these “permitted maneuvers” and/or other limitations on maneuvers are not available in the FM, cockpit placards, or TCDS, information on these maneuver limitations can be obtained from the aircraft manufacturer.

D. Small Agricultural Airplanes.

(1) For the purpose of issuing a Certificate of Waiver or Authorization for an airshow, any inverted flight maneuver or pitch and/or bank angle greater than 90° conducted by an agricultural aircraft is considered aerobatic flight and must be addressed in the Certificate of Waiver or Authorization with appropriate special provisions.

(2) In accordance with § 21.25 (a) (1), small agricultural airplanes are subject to the same TC requirements as a part 23 Normal Category airplane, except for those requirements that are found to be inappropriate for the special purpose operation. As an

example, spin testing may not be required for certification of a small agricultural airplane.

(a) Additionally, no U.S. registered small agricultural airplane with a Certificate of Airworthiness issued in the Restricted Category is authorized to conduct inverted flight. Therefore, small agricultural airplane operators who perform inverted flight or spin maneuvers shall ensure that the aircraft has a valid special Certificate of Airworthiness issued in the Experimental Category for the purpose of exhibition or an appropriate STC.

(b) Additionally, any flight maneuver that exceeds the flight envelope demonstrated during TC flight testing may require the issuance of a special Certificate of Airworthiness in the Experimental Category or the issuance of an STC in accordance with part 21, subpart E.

(c) If these flight envelope limitations are not available in the FM or TCDS, information on these maneuver limitations can be obtained from the aircraft manufacturer.

E. *Rotorcraft.* The following guidance is applicable to both helicopters and gyrocopters.

(1) For the purpose of issuing a Certificate of Waiver or Authorization for an airshow, any inverted flight maneuver or pitch and/or bank angle greater than 90° conducted by a rotorcraft is considered aerobatic flight and must be addressed in the Certificate of Waiver or Authorization with appropriate special provisions.

(a) Agility maneuvers (less than 90° of pitch and/or bank) performed by helicopters at airshows also require consideration in the Certificate of Waiver or Authorization.

(b) Any civil rotorcraft act that includes a rotorcraft external-load as defined in 14 CFR part 1 will require certification in accordance with, and must meet the operating requirements of, part 133.

(2) No U.S. registered civil rotorcraft with a Certificate of Airworthiness in the Standard Category is authorized to conduct inverted flight. Therefore, rotorcraft operators who perform inverted flight maneuvers shall ensure that the aircraft has a valid special Certificate of Airworthiness issued in the Experimental Category for the purpose of exhibition or an appropriate STC.

(a) To conduct any flight maneuver that exceeds the flight envelope demonstrated during TC flight testing may require the issuance of a special Certificate of Airworthiness in the Experimental

Category or the issuance of an STC in accordance with part 21, subpart E.

(b) Some rotorcraft may have an FM that prescribes limitations on aircraft attitude. If these limitations are not available in the FM or TCDS, information on these maneuver limitations can be obtained from the aircraft manufacturer.

F. Foreign Registered Civil Aircraft.

(1) In accordance with 14 CFR part 375, subpart D, a foreign aircraft permit is not required for foreign aircraft entering the United States for the purpose of performing in an airshow.

(2) For the purpose of issuing a Certificate of Waiver or Authorization for an airshow, any inverted flight maneuver or pitch and/or bank angle greater than 90°, 60° for jet powered airplanes, conducted by a foreign registered aircraft is considered aerobatic flight and must be addressed in the Certificate of Waiver or Authorization with appropriate special provisions.

(3) In accordance with Chapter V of the Convention on International Civil Aviation, part 375, subpart B, and § 91.203(a)(1), no person may operate a civil aircraft of foreign registry unless it contains current certificates of registry and airworthiness (standard) issued or rendered valid by the country of registry, or a special flight authorization issued in accordance with § 91.715.

(4) In accordance with § 91.9, all maneuvers performed at airshows shall be conducted in accordance with any operating or special limitations issued as part of the aircraft's Certificate of Airworthiness, or

other certification and/or airworthiness documents issued or rendered valid by the country of registry.

G. Military Aircraft. State (military) aircraft from foreign countries that perform in airshows in the United States receive a diplomatic clearance from the U.S. Department of State to operate in the National Airspace System (NAS).

(1) This clearance is obtained by applying to the appropriate military attache in the U.S. Embassy in the country of origin. Generally, these authorizations are not subject to review by FAA personnel.

(2) The airworthiness standards and operating limitations for both U.S. and foreign military aircraft are determined by the appropriate military command in the country of origin and generally are not subject to review by civil aviation authorities.

H. Ultralight Vehicles.

(1) For the purpose of issuing a Certificate of Waiver or Authorization for an airshow, any inverted flight maneuver or pitch and/or bank angle greater than 90° conducted by an ultralight vehicle that meets the applicability section of § 103.1 is considered aerobatic flight and be should addressed in the Certificate of Waiver or Authorization with appropriate special provisions. There are no certification or airworthiness standards for ultralight vehicles.

(2) In accordance with FAA policy, the operator of the vehicle should provide the FAA with a statement of determination that the vehicle and operator are able to conduct the proposed demonstration without creating a hazard to persons and property on the surface. This statement should contain a summary of how the determination was made.

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[PAGES 50-11 THRU 50-14 RESERVED]

SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites. This task requires knowledge of regulatory requirements in Title 14 of the Code of Federal Regulations (14 CFR) parts 91 and 105, and Federal Aviation Administration (FAA) policies and qualification as an aviation safety inspector (operations).

(1) The inspector-in-charge (IIC) of surveillance must have completed OJT and participated in the issuance of a certificate of waiver or authorization and the surveillance of three aviation events with a senior inspector.

(2) For aviation events where a military jet aerobatic demonstration team will perform, the inspector must have satisfactorily completed OJT in the issuance of the waiver or authorization (including the site feasibility study and the pre-season evaluation meeting) and surveillance of an airshow in which a North American military jet aerobatic team performed.

B. Coordination. This task requires coordination with the airworthiness unit and air traffic.

2. REFERENCES, FORMS, AND JOB AIDS.

A. References.

- 14 CFR parts 1, 61, 91, 103, 105, and 125
- Advisory Circular (AC) 91-45, Waivers: Aviation Events (current edition)
- AC 103-7, The Ultralight Vehicle
- AC 105-2, Sport Parachute Jumping (current edition)
- AC 125-1, Operations of Large Airplanes Subject to Federal Aviation Regulations Part 125
- Order 8700.1, chapter 49, Issue a Certificate of Waiver or Authorization for an Aviation Event

B. Forms.

- FAA Form 7711-1, Certificate of Waiver or Authorization
- FAA Form 7711-2, Certificate of Waiver or Authorization Application
- FAA Form 8000-36, PTRS Transmittal Form

C. Job Aids.

- Sample letters and figures

3. PROCEDURES.

A. IIC Pre-Surveillance Activities.

(1) Review FAA Form 7711-1. Become familiar with the General and Special Provisions, the Schedule of Events, and the regulations that were waived. For balloon competitions, review the event manual.

(2) Assemble at least the following information to bring along on surveillance:

(a) FAA Form 7711-1 issued for this aviation event.

(b) Information and documents for accident or incident investigation.

(c) Appropriate sections of the regulations.

(d) Any other equipment or information considered necessary.

(3) Determine the equipment required to conduct the surveillance; for example, VHF radio, FM radio, camera, etc.

(4) If an FAA team is assigned for surveillance, brief each inspector on his/her duties and responsibilities. Emphasize that all contacts with the sponsor, problems with performers, etc., must be coordinated with the IIC.

(5) No sooner than 48 hours before the event, contact the appropriate Flight Service Station to ensure that a NOTAM, if required by the Certificate of Waiver or Authorization, has been issued.

B. PTRS. Open PTRS file.

C. FAA Introduction. At the site of the aviation event, introduce all members of the FAA team to the holder of the waiver or authorization, his/her representatives, and other key personnel.

D. Preshow Briefing. Attend and observe (all FAA surveillance personnel) the preshow briefing (see Figure 50-3).

(1) Ensure that all performers sign the waiver or authorization on the sign-in sheet, attesting that they will comply with all the provisions of the waiver or authorization. (North American military team leaders/representatives may sign for the entire team.) (See Figure 50-5.)

(2) If performers list credentials and aircraft information on a sign-in sheet, spot-check a sampling for accuracy, as required. Obtain the original copy of the sign-in sheet for the file.

NOTE: To facilitate the gathering of information, the event sponsor may send a copy of the sign-in sheet to performers in advance of the event.

E. Inspect Airman Certificates. As a minimum, ensure that the participating pilots have in their possession:

(1) A valid Pilot Certificate, except operators of ultralight vehicles.

(2) If required, a valid letter of authorization in lieu of type rating.

(3) A current medical certificate, except glider and balloon pilots and operators of ultralight vehicles.

(4) A current Statement of Acrobatic Competency, as required (see Figure 50-4).

(5) A valid letter of authorization to conduct maneuvers at the crowd, if required.

(6) Formation flying credentials, as required.

NOTE: Possession of such credentials does not require being carried on the persons during the performance.

F. Parachutist Qualifications. If last minute substitutions are made to the list of qualified parachutists provided in the application for the authorization, check the parachutists' qualifications.

G. Inspect Participating Aircraft. (See section 1, paragraph 4C(2)(i)). Inspect the following:

(1) The aircraft's general condition.

(2) The aircraft airworthiness and registration certificates.

(3) The operating limitations associated with Special Airworthiness Certificates.

(4) The Operating Certificate or Letter of Deviation Authority for large aircraft used in sport parachuting.

(5) The modifications to aircraft that accommodate sport parachutists and documentation of field approval by the FAA, or an STC.

(6) Emergency parachute repack date, if installed within the previous 120 days (§ 91.307).

H. Inspect Parachutists' Equipment. Inspect parachutists' equipment for the following:

(1) Determine if the main parachute has been packed, usually by the jumper, within the previous 120 days (§ 105.43(a)).

(2) Determine that the auxiliary parachute was packed and sealed by a certificated and appropriately rated rigger (§ 105.43(b) and 14 CFR part 65, subpart F).

(3) Determine that the equipment has been manufactured under a type certificate or technical standard order or is a personnel-carrying military parachute (§ 91.307(e)).

I. Balloon Competitions.

(1) Determine that the designated spectator area for balloon events is maintained at a minimum of a 200-foot radius away from the designated or declared goal or target.

(2) Ensure that the sponsor can keep the target area clear of all except designated event personnel.

(3) Ensure all required participants attend pre-event briefing.

J. Ensure Compliance with Terms of Waiver or Authorization. Inspect the event site for compliance with the special provisions of the waiver or authorization.

(1) Include, but do not limit the inspection to, the showline, physical barriers, policing of the spectator area(s), and areas where any aircraft operate.

(2) Inspect the control point.

(3) Ensure communications capability with participating aircraft, security, emergency equipment, and a public address system for spectators. Also ensure that inspectors have continuous access to the control point.

(4) If a discrepancy is noted, immediately bring it to the attention of the holder of the Certificate of Waiver or Authorization or their designated representative.

K. Observe Aviation Event. Ensure that all provisions of the waiver or authorization and special provisions are adhered to in all cases.

(1) If a minor problem is noted, discuss the problem with the appropriate individual during the debriefing. For example:

(a) Personnel for policing were inadequate to keep spectators from intruding too close to the showline. Spectators were immediately escorted from the area, and more security personnel were assigned to the area.

(b) Insufficient time between performances.

(2) If you observe an incident that is in noncompliance with the terms of the waiver or authorization or the regulations, advise the waiver or authorization holder and, if necessary, the performer of the actions necessary to regain compliance. For example:

(a) Performing aerobatics inside the showline.

(b) Performing maneuvers not provided for in the waiver or authorization.

(3) If a serious safety problem is noted, immediately bring it to the attention of the holder of the Certificate of Waiver or Authorization or a designated representative.

(a) Observe actions taken by the holder of the waiver or the representative to correct the safety problem.

(b) If the problem is not or cannot be corrected, cancel or delete any or all events that affect the safety of persons on the ground or in the air.

(4) Note any discrepancies and the action taken in the comment portion of the PTRS transmittal form.

L. Debrief. After conclusion of the aviation event, discuss with the holder of the Certificate of Waiver or Authorization, or a representative, and the performers:

- (1) Areas of noncompliance.
- (2) Safety-related problems.
- (3) Aerobatic competency.
- (4) Opportunities for improvement.

(5) If a similar event is planned for next year, follow up with a letter outlining areas that need improvement.

(6) If no problems were encountered, apprise the sponsor that the show went well.

M. Office File. Prepare an office file consisting of the following:

(1) FAA Form 7711-1.

(2) Record of meetings and telephone conversations.

(3) The aviation event job aid.

(4) Performer sign-in sheet.

N. PTRS. Make appropriate PTRS entry.

4. TASK OUTCOMES. The completion of this task results in a record for the district office file on the outcome of the surveillance.

5. FUTURE ACTIVITIES.

A. Future surveillance of recurring or annual aviation events.

B. Site feasibility evaluation for future or recurring aviation events.

C. Enforcement investigation if areas of noncompliance with the waiver or authorization or the regulations are noted and enforcement action is required to achieve future compliance.

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[PAGES 50-19 THRU 50-22 RESERVED]

FIGURE 50-1 FAA FORM 7711-2, CERTIFICATE OF WAIVER OR AUTHORIZATION APPLICATION

No certificate may be issued unless a completed application form has been received (14 C.F.R. 91.101 and 105).

US Department of Transportation Federal Aviation Administration APPLICATION FOR CERTIFICATE OF WAIVER OR AUTHORIZATION		<i>Form Approved: O.M.B. No. 2120-0027</i> APPLICANTS - DO NOT USE THESE SPACES	
		Region GREAT LAKES	Date MARCH 13, 1996
		Action As Per 7711-1 <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved - Explain under "Remarks"	
		Signature of authorized FAA representative James E. Hightower	
INSTRUCTIONS			
Submit this application in triplicate (3) to any FAA Flight Standards district office. Applicants requesting a Certificate of Waiver or Authorization for an aviation event must complete all the applicable items on this form and attach a properly marked 7.5 series Topographic Quadrangle Map(s), published by the U.S. Geological Survey (scale 1:24,000), of the proposed operating area. The map(s) must include scale depictions of the flightlines, showlines, race courses, and the location of the air event control point, Police dispatch, ambulance, and fire fighting equipment. The applicant may also wish to submit photographs and scale diagrams as supplemental material to assist in the FAA's evaluation of a particular site. Application for a Certificate of Waiver or Authorization must be submitted 45 days prior to the requested date of the event. Applicants requesting a Certificate of Waiver or Authorization for activities other than an aviation event will complete items 1 through 8 only and the certification, item 15, on the reverse.			
1. Name of organization		2. Name of responsible person	
HIGH ON KALAMAZOO, INC.		JOHN M. ELLIS	
3. Permanent mailing address	House number and street or route number	City	State and ZIP code Telephone No.
	5605 PORTAGE ROAD	KALAMAZOO	MI 49002
4. FAR section and number to be waived			
91.117 (a & b), 91.303 (c, d & e), 91.119 (b & c), 91.127, 91.129, 105.15			
5. Detailed description of proposed operation (Attach supplement if needed)			
6. Area of operation (Location, altitudes, etc.)			
KALAMAZOO COUNTY AIRPORT 10,000" AND BELOW, RADIUS OF TEN (10) NAUTICAL MILES.			
7a. Beginning (Date and hour)		7b. Ending (Date and hour)	
APPLICANT MAY USE ATTACHMENT		APPLICANT MAY USE ATTACHMENT	
8. Aircraft make and model (a)	Pilot's Name (b)	Certificate number and rating (c)	Home address (Street, City, State) (d)
APPLICANT MAY USE ATTACHMENT			

FAA Form 7711-2 (6-88) Supersedes Previous Edition

FIGURE 50-2
FAA FORM 7711-1, CERTIFICATE OF WAIVER OR AUTHORIZATION

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF WAIVER OR AUTHORIZATION	
ISSUED TO	HIGH ON KALAMAZOO, INC. JOHN M. ELLIS
ADDRESS	5605 PORTAGE ROAD KALAMAZOO, MICHIGAN 49002
This certificate is issued for the operations specifically described hereinafter. No person shall conduct any operation pursuant to the authority of this certificate except in accordance with the standard and special provisions contained in this certificate, and such other requirements of the Federal Aviation Regulations not specifically waived by this certificate.	
OPERATIONS AUTHORIZED AEROBATIC DEMONSTRATIONS AT THE KALAMAZOO COUNTY AIRPORT, KALAMAZOO, MICHIGAN, WITHIN A FIVE (5) NAUTICAL MILE RADIUS OF THE CENTER OF THE AIRPORT FROM THE SURFACE TO 15,000 MSL, EXCLUDING THE AIRSPACE ABOVE SPECTATORS OR CONGESTED AREAS. PARACHUTE JUMPING AT THE KALAMAZOO COUNTY AIRPORT, KALAMAZOO, MICHIGAN, WITHIN A TWO (2) NAUTICAL MILE RADIUS OF THE CENTER OF THE AIRPORT FROM THE SURFACE TO 15,000 FEET MSL, JUMPS OVER OR INTO CONGESTED AREAS OR OPEN AIR ASSEMBLY OF PERSONS ARE AUTHORIZED.	
LIST OF WAIVED REGULATIONS BY SECTION AND TITLE SEE ATTACHMENT A	
STANDARD PROVISIONS	
1. A copy of the application made for this certificate shall be attached to and become a part hereof. 2. This certificate shall be presented for inspection upon the request of any authorized representative of the Administrator of the Federal Aviation Administration, or of any State or municipal official charged with the duty of enforcing local laws or regulations. 3. The holder of this certificate shall be responsible for the strict observance of the terms and provisions contained herein. 4. This certificate is nontransferable.	
NOTE.--This certificate constitutes a waiver of those Federal rules or regulations specifically referred to above. It does not constitute a waiver of any State law or local ordinance.	
SPECIAL PROVISIONS	
PARACHUTE SPECIAL PROVISIONS NOS. 1 THRU 13. "See Attached" <input checked="" type="checkbox"/> Special Provisions Nos. <u>1</u> to <u>26</u> inclusive, are set forth on the reverse side hereof.	
This certificate is effective from <u>1145EDT 06/09/96</u> <u>1245EDT 06/10&11/96</u> to <u>1600EDT 06/09/96</u> <u>1730EDT 06/10&11/96</u> , inclusive, and is subject to cancellation at any time upon notice by the Administrator or his authorized representative.	
BY DIRECTION OF THE ADMINISTRATOR	
_____ Great Lakes (Region)	_____  (Signature)
_____ March 28, 1996 (Date)	_____ Principal Operations Inspector (Title)

FAA Form 7711-1 (7-74)

**FIGURE 50-3
PRESHOW BRIEFING GUIDE**

AVIATION EVENT PRESHOW BRIEFING GUIDE

WHO SHOULD ATTEND:

ALL PERFORMERS:

Airshow Pilots
 Tow / Jump Aircraft Pilots
 Skydivers
 Military Flight Demo Pilots
 Air & Ground Pyrotechnic Technicians
 Jet Vehicle Drivers
 Narrator(s)
 Remotely Deployed Aircraft Pilots (via telecon)
 At least one (1) representative for each military team

KEY OPS / SUPPORT PERSONNEL:

Air Boss
 Air Traffic Control
 Fire Chief / CRS
 EMS Helicopter
 Smoke Oil / Refueling Chief
 Aircraft Marshalls Chief
 Maintenance Chief
 Crowd Control

FAA (Or Assigned) MONITOR:

WEATHER BRIEFER:

AIRSHOW DIRECTOR / EVENT SPONSOR: (Including that person named on the Waiver as being "responsible to ensure safety of the event")

WHO SHOULD NOT ATTEND:

Pets
 Individual Sponsors
 Media Representatives
 Spouses
 Children
 Relatives / Friends
 Anyone not directly associated with the performance

FIGURE 50-3
PRESHOW BRIEFING GUIDE - Continued

AVIATION EVENT PRESHOW BRIEFING GUIDE - Continued

BRIEFING:

ROLL CALL: Those not attending the briefing MAY NOT participate in this performance!

INTRODUCE KEY OFFICIALS:

TIME HACK:

CURRENT WEATHER AND FORECAST: (Include regional and national weather by quadrants on the last day, for departing aircraft)

REVIEW NOTAM(S):

REVIEW WAIVER AND SPECIAL PROVISIONS:

REVIEW AREA MAP:	<ul style="list-style-type: none"> Hold Points / Turn Directions Altitudes Noise Abatement Procedures Sensitive Areas Special Use Airspace Remote Recovery Airports Obstructions Controlled / Emergency Bail Out / Ditching Procedures
------------------	---

AIRPORT STATUS:	<ul style="list-style-type: none"> Airspace Runways In Use Facilities Arresting Cables Traffic Patterns
-----------------	--

AIRSHOW LAYOUT:	<ul style="list-style-type: none"> Showlines Spectator Areas (Primary / Secondary) Ground Based Pyro Hazards Aircraft Parking Taxi Routes CRS Runway Watch Locations Unique Local Items / Conditions
-----------------	--

FIGURE 50-3
PRESHOW BRIEFING GUIDE - Continued

AVIATION EVENT PRESHOW BRIEFING GUIDE - Continued

COMMUNICATIONS: Primary / Backup / Discrete
Tower / UNICOM
Any Aircraft W/O Radios? - Procedures
Transponders

SPECIALTY BRIEFINGS: Warbird Formation
Fuel / Smoke Oil
Marshalls
CRS Runway Watch
Maintenance
Pyro
Announcer(s)

EMERGENCY PROCEDURES: Comm. Failure (Aircraft / Ground)
Stuck Mike Procedures
NORDO Procedures
Ground / In-flight Emergencies
Runway Closures
Hold / Divert Locations
Recall / Stop Show / Divert Procedures
Aircraft in Pyro Area
Deteriorating Weather Procedures

PERFORMANCE SAFETY: Stall Speeds vs. "G" Load vs. Density Altitude
Personal Physical Condition (Rest, Mental State, Dehydration, etc.)
Minimum Altitude(s) = Hard Deck
Showline = Do Not Cross

DISTRIBUTE / REVIEW FLYING SCHEDULE: Act-by-Act

ADMINISTRATIVE NOTICES:

QUESTIONS? - COMMENTS?

RESOLVE ALL CONFLICTS!

ALL PERFORMERS MUST SIGN THE WAIVER AND/OR PARTICIPANTS BRIEFING SIGNATURE DOCUMENT!

(Note: This guide is general in nature and should be tailored for each event as necessary.)

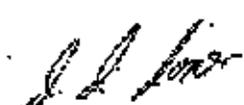
**FIGURE 50-4
FAA FORM 8710-7, STATEMENT OF AEROBATIC COMPETENCY**

FRONT

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION STATEMENT OF ACROBATIC COMPETENCY	
PILOT J. J. JONES	
TYPE CERTIFICATE/NUMBER COMMERCIAL 1234567	
ISSUANCE DATE 03-30-96	EXPIRATION DATE 03-31-97
GENERAL AVIATION OPERATIONS INSPECTOR (Signature)  J. J. SMITH ANE-BED-FSDO	

FAA Form 8710-7 (5-78)

BACK

MANEUVER LIMITATIONS NONE	
ALTITUDE LIMITATIONS LEVEL II	AUTHORIZED AIRCRAFT PITTS SPECIAL
I understand that this statement of competency does not authorize deviation from FAR 91 except as defined by waiver thereto, or to the terms of Special Provisions contained in any waiver to FAR 91.	
PILOT (Signature) 	

**FIGURE 50-5
SAMPLE BRIEFING SIGNATURE PAGE**

**I have read and/or been briefed on the Certificate of Waiver or Authorization
and all its special provisions and fully understand
the procedures, requirements and limitations of this document.**

PARTICIPANTS: (Pilots)*

SIGNATURE: CERT. # & TYPE:	MEDICAL CLASS: DATE: / /	BFR DATE: / /	PLEASE <i>PRINT</i> NAME: PLEASE <i>PRINT</i> "TEAM" NAME:	ACFT. TYPE: REG. #: CERT. OF AIRWORTH. TYPE:
ADDITIONAL INFORMATION: Do you have any of the following: 1. LOA in lieu of type rating: Yes - No 2. LOA for maneuvers at the crowd: Yes - No 3. Non-aerobatic formation card: Yes - No	DATE OF LAST PERFORMANCE OR PRACTICE: / /	DO YOU HAVE: Drop tanks? Y - N Ejection Seats? Y - N	ACE CARD DATE: / / LIMITATIONS / AUTHORIZATIONS:	EMERGENCY PARACHUTE REPACK DATE: / /

SIGNATURE: CERT. # & TYPE:	MEDICAL CLASS: DATE: / /	BFR DATE: / /	PLEASE <i>PRINT</i> NAME: PLEASE <i>PRINT</i> "TEAM" NAME:	ACFT. TYPE: REG. #: CERT. OF AIRWORTH. TYPE:
ADDITIONAL INFORMATION: Do you have any of the following: 1. LOA in lieu of type rating: Yes - No 2. LOA for maneuvers at the crowd: Yes - No 3. Non-aerobatic formation card: Yes - No	DATE OF LAST PERFORMANCE OR PRACTICE: / /	DO YOU HAVE: Drop tanks? Y - N Ejection Seats? Y - N	ACE CARD DATE: / / LIMITATIONS / AUTHORIZATIONS:	EMERGENCY PARACHUTE REPACK DATE: / /

SIGNATURE: CERT. # & TYPE:	MEDICAL CLASS: DATE: / /	BFR DATE: / /	PLEASE <i>PRINT</i> NAME: PLEASE <i>PRINT</i> "TEAM" NAME:	ACFT. TYPE: REG. #: CERT. OF AIRWORTH. TYPE:
ADDITIONAL INFORMATION: Do you have any of the following: 1. LOA in lieu of type rating: Yes - No 2. LOA for maneuvers at the crowd: Yes - No 3. Non-aerobatic formation card: Yes - No	DATE OF LAST PERFORMANCE OR PRACTICE: / /	DO YOU HAVE: Drop tanks? Y - N Ejection Seats? Y - N	ACE CARD DATE: / / LIMITATIONS / AUTHORIZATIONS:	EMERGENCY PARACHUTE REPACK DATE: / /

**FIGURE 50-5
SAMPLE BRIEFING SIGNATURE PAGE - Continued**

SIGNATURE: CERT. # & TYPE:	MEDICAL CLASS: DATE: / /	BFR DATE: / /	PLEASE PRINT NAME: PLEASE PRINT "TEAM" NAME:	ACFT. TYPE: REG. #: CERT. OF AIRWORTH. TYPE:
ADDITIONAL INFORMATION: Do you have any of the following: 1. LOA in lieu of type rating: Yes - No 2. LOA for maneuvers at the crowd: Yes - No 3. Non-aerobatic formation card: Yes - No	DATE OF LAST PERFORMANCE OR PRACTICE: / /	DO YOU HAVE: Drop tanks? Y - N Ejection Seats? Y - N	ACE CARD DATE: / / LIMITATIONS / AUTHORIZATIONS:	EMERGENCY PARACHUTE REPACK DATE: / /

SIGNATURE: CERT. # & TYPE:	MEDICAL CLASS: DATE: / /	BFR DATE: / /	PLEASE PRINT NAME: PLEASE PRINT "TEAM" NAME:	ACFT. TYPE: REG. #: CERT. OF AIRWORTH. TYPE:
ADDITIONAL INFORMATION: Do you have any of the following: 1. LOA in lieu of type rating: Yes - No 2. LOA for maneuvers at the crowd: Yes - No 3. Non-aerobatic formation card: Yes - No	DATE OF LAST PERFORMANCE OR PRACTICE: / /	DO YOU HAVE: Drop tanks? Y - N Ejection Seats? Y - N	ACE CARD DATE: / / LIMITATIONS / AUTHORIZATIONS:	EMERGENCY PARACHUTE REPACK DATE: / /

SIGNATURE: CERT. # & TYPE:	MEDICAL CLASS: DATE: / /	BFR DATE: / /	PLEASE PRINT NAME: PLEASE PRINT "TEAM" NAME:	ACFT. TYPE: REG. #: CERT. OF AIRWORTH. TYPE:
ADDITIONAL INFORMATION: Do you have any of the following: 1. LOA in lieu of type rating: Yes - No 2. LOA for maneuvers at the crowd: Yes - No 3. Non-aerobatic formation card: Yes - No	DATE OF LAST PERFORMANCE OR PRACTICE: / /	DO YOU HAVE: Drop tanks? Y - N Ejection Seats? Y - N	ACE CARD DATE: / / LIMITATIONS / AUTHORIZATIONS:	EMERGENCY PARACHUTE REPACK DATE: / /

SIGNATURE: CERT. # & TYPE:	MEDICAL CLASS: DATE: / /	BFR DATE: / /	PLEASE PRINT NAME: PLEASE PRINT "TEAM" NAME:	ACFT. TYPE: REG. #: CERT. OF AIRWORTH. TYPE:
ADDITIONAL INFORMATION: Do you have any of the following: 1. LOA in lieu of type rating: Yes - No 2. LOA for maneuvers at the crowd: Yes - No 3. Non-aerobatic formation card: Yes - No	DATE OF LAST PERFORMANCE OR PRACTICE: / /	DO YOU HAVE: Drop tanks? Y - N Ejection Seats? Y - N	ACE CARD DATE: / / LIMITATIONS / AUTHORIZATIONS:	EMERGENCY PARACHUTE REPACK DATE: / /

**FIGURE 50-5
SAMPLE BRIEFING SIGNATURE PAGE - Continued**

**I have read and/or been briefed on the Certificate of Waiver or Authorization
and all its special provisions and fully understand
the procedures, requirements and limitations of this document.**

PARTICIPANTS: (Skydivers)*

SIGNATURE: _____ FULL NAME (PRINTED): _____	USPA RATING: (Circle One) C D PRO-RATING DATE: / /	MAIN PARACHUTE REPACK DATE: / / TYPE: _____	AUXILIARY PARACHUTE REPACK DATE: / / TYPE: _____
SIGNATURE: _____ FULL NAME (PRINTED): _____	USPA RATING: (Circle One) C D PRO-RATING DATE: / /	MAIN PARACHUTE REPACK DATE: / / TYPE: _____	AUXILIARY PARACHUTE REPACK DATE: / / TYPE: _____
SIGNATURE: _____ FULL NAME (PRINTED): _____	USPA RATING: (Circle One) C D PRO-RATING DATE: / /	MAIN PARACHUTE REPACK DATE: / / TYPE: _____	AUXILIARY PARACHUTE REPACK DATE: / / TYPE: _____
SIGNATURE: _____ FULL NAME (PRINTED): _____	USPA RATING: (Circle One) C D PRO-RATING DATE: / /	MAIN PARACHUTE REPACK DATE: / / TYPE: _____	AUXILIARY PARACHUTE REPACK DATE: / / TYPE: _____
SIGNATURE: _____ FULL NAME (PRINTED): _____	USPA RATING: (Circle One) C D PRO-RATING DATE: / /	MAIN PARACHUTE REPACK DATE: / / TYPE: _____	AUXILIARY PARACHUTE REPACK DATE: / / TYPE: _____
SIGNATURE: _____ FULL NAME (PRINTED): _____	USPA RATING: (Circle One) C D PRO-RATING DATE: / /	MAIN PARACHUTE REPACK DATE: / / TYPE: _____	AUXILIARY PARACHUTE REPACK DATE: / / TYPE: _____

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